CESTARI
REDUTORES

VERTIMAX

Redutores e Motorredutores de Eixos Paralelos

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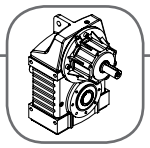

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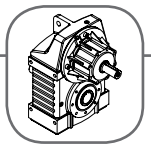


MOTORREDUTORES

Os motorredutores VERTIMAX são de estilo compacto e de construção sólida e estão disponíveis com reduções duplas, triplas, quíntuplas e sextuplas. Nas execuções com eixo oco são montados diretamente no eixo movido oferecendo certas vantagens como: fácil instalação e remoção devido não ser necessário base e fundação para redutores, e permitem versatilidade de montagem podendo ser montados na vertical ou horizontal, eixo para cima ou para baixo.
Podem também ser fornecidos com flange de fixação, pés de fixação e eixo integral. A lubrificação do redutor é por imersão em banho de óleo.
O motor elétrico é de construção compacta, com refrigeração através de ventilador, e acoplado à carcaça do redutor por intermédio de flange e ajuste preciso; o flange do motor é a parede divisória entre o motor e os pares de engrenagens.

REDUTORES

As carcaças são fabricadas em ferro fundido cinzento de alta qualidade, envelhecidos para que se obtenha uma usinagem precisa sem deformações posteriores.
As engrenagens e pinhões são cilíndricas de dentes helicoidais com ângulo de pressão a 20°, fabricadas em aço liga de alta qualidade, que após operação de desbaste sofrem tratamento termoquímico de cementação, e posteriormente, os flancos dos dentes são retificados pelo processo de geração, garantindo um funcionamento silencioso. Os furos e faces das engrenagens, encostos e assentos de rolamentos / retentores são retificados garantindo um engrenamento preciso.
Os eixos são fabricados em aço beneficiado usado na construção de máquina com os encostos e assentos dos rolamentos/retentores retificados.
Os rolamentos utilizados nas unidades são de precisão e resistentes a cargas radiais e axiais dimensionados para uma longa vida.

CONTRA RECUO

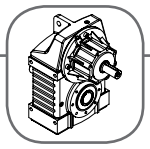
Previnem rotação reversas, instantaneamente e sem folga em transportadores, elevadores e aplicações similares. Projetado como um acessório standard o contra recuo pode ser fornecido nos redutores de tripla, quíntupla e sextupla redução.

MOTORES ELÉTRICOS

Os motores elétricos são trifásicos, assíncronos de indução com rotor de gaiola de esquilo, totalmente fechado com ventilação externa (TFVE).
As carcaças são conforme norma ABNT-NBR 5432, são fornecidas com grau de proteção IP55 (protegidos contra a penetração de poeira e contra projeções d'água de qualquer direção), nas tensões de 220/380 V e frequência de 60 Hz.
Os motores elétricos podem ser fornecidos com diversas modificações envolvendo, tensão, polaridade, frequência, classe de isolação, grau de proteção, etc.

MOTOFREIO

O motofreio consiste de um motor e indução assíncrono trifásico, acoplado a um freio monodisco, formando uma unidade integral compacta e robusta.
O freio possui poucas partes móveis assegurando longa duração com o mínimo de manutenção. A dupla face de encosto com o disco de frenagem forma uma grande superfície de atrito, que proporciona uma pressão específica adequada sobre os elementos de fricção evitando o aquecimento exagerado, mantendo assim o mínimo de desgaste. Além disso, o freio é resfriado pela própria ventilação do motor.
A bobina de acionamento do eletroimã é protegido com resina epoxi, funciona com tensões contínuas obtidas através de uma ponte retificadora, alimentada com tensão alternada de 220, 380 ou 440 V, obtida dos terminais do motor ou de uma fonte independente.
A ponte retificadora é composta por 4 diodos retificadores de silício e 2 varistores que imprimem picos indesejáveis de tensão permitindo um rápido desligamento da corrente.
As pontes podem ser fornecidas em 220, 380 ou 440 V, quando não especificadas são fornecidas em 220 V.



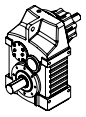
Redutor | Execução | Motor

V	52	2	14	N	W	0	0	D	N	W

Modelo

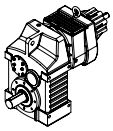
Tamanho
52
54
55
56
58
60
62
64
66
68
72

Redução



Nº de estágios

Simples
- **2** estágios
- **3** estágios



Duplex
- **4** estágios
- **5** estágios
- **6** estágios

Fixação do redutor
- **N** Pés
- **G** Flange e pés
- **B** Braço de torção c/ bucha elástica
- **E** Braço de torção com esticador

Contra Recuo*
- **0** Sem
- **1** Com

Tipo de entrada e saída

		Entradas	Saídas
	B	Eixo integral	Eixo integral
	L	Eixo integral	Eixo vazado com chaveta
	P	Eixo integral	Eixo vazado com disco de contração
	C	Flange lanterna	Eixo integral
	M	Flange lanterna	Eixo vazado com chaveta
	Q	Flange lanterna	Eixo vazado com disco de contração
	W	Flange compacto	Eixo integral
	Z	Flange compacto	Eixo vazado com chaveta
	O	Flange compacto	Eixo vazado com disco de contração
	A	Motor tipo 1 Weg	Eixo integral
	K	Motor tipo 1 Weg	Eixo vazado com chaveta
	N	Motor tipo 1 Weg	Eixo vazado com disco de contração

Flange de saída

0	A	B	C	D	E	F	G	H	J	K	L	M
s/ flange	ø120	ø140	ø160	ø200	ø250	ø300	ø350	ø400	ø450	ø550	ø660	ø720

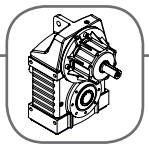
Fabricante do motor
- **0** Sem motor
- **C** Motor do cliente
- **W** Weg

Tipo do motor
- **0** Sem motor
- **1** Motor do cliente
- **A** Motor alto rendimento plus
- **E** Motor especial
- **P** Motor alto rendimento premium

Carcaça do motor

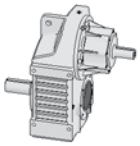
0	sem motor
A	56
B	63
C	71
D	80
E	90S
F	90L
G	100
H	112
J	132S
K	132M
L	160M
M	160L
N	180M
P	180L
Q	200M
R	200L
S	225S/M
U	250
V	280
W	315

* Para motor Weg Tipo 1, carcaças 90 até 250, o contra recuo será instalado na traseira do motor elétrico, exceto 3, 5 e 6 estágios onde é instalado dentro do redutor.
* Para redutores com base para fixação de motor, veja página 174.



3

Fixação por pés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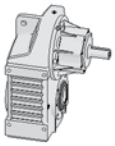
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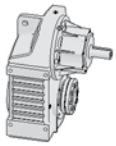
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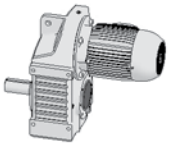
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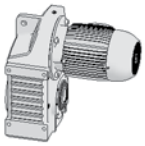
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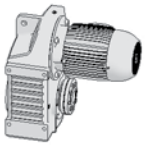
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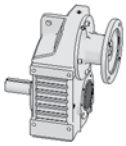
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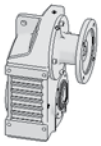
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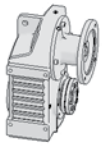
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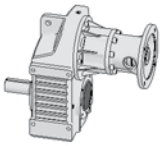
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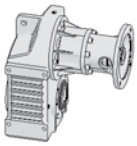
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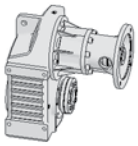
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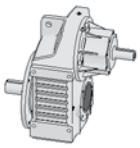
Fixação por flange e pés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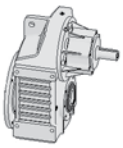
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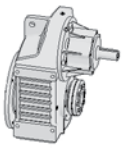
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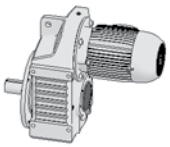
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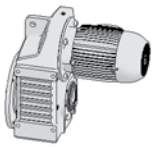
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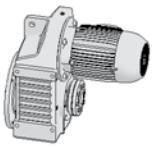
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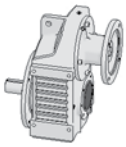
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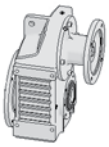
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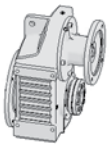
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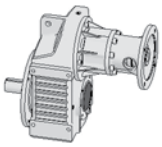
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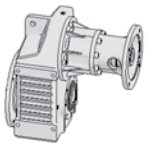
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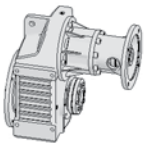
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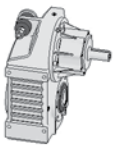
Fixação por braço de torção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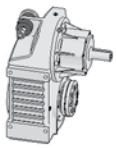
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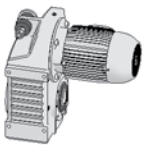
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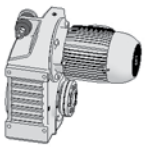
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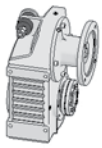
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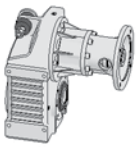
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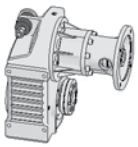
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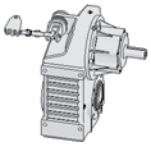
Fixação por esticador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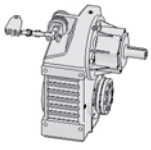
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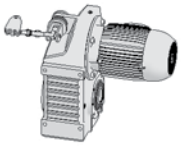
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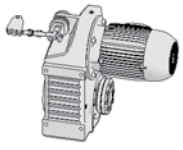
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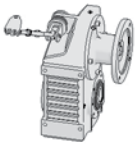
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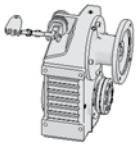
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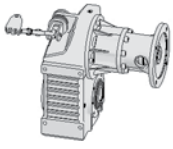
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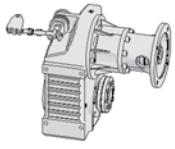
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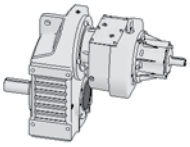
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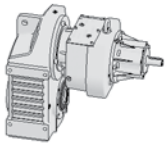
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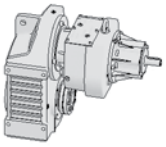
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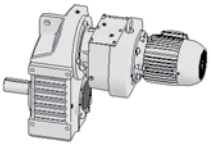
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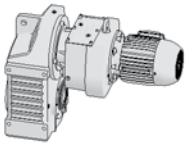
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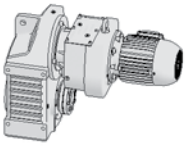
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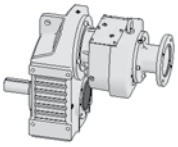
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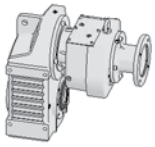
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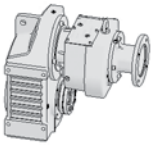
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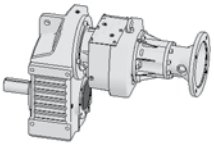
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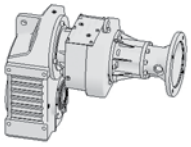
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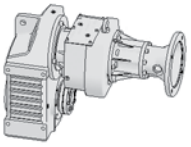
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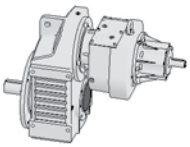
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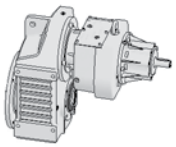
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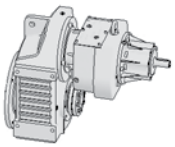
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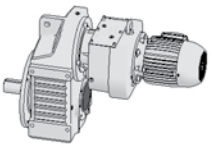
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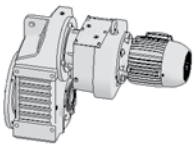
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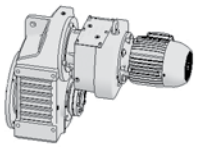
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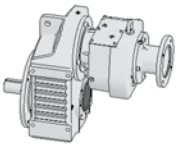
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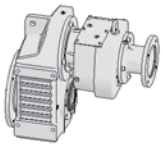
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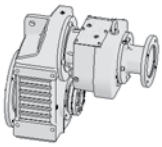
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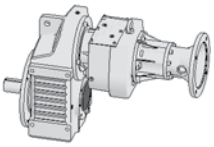
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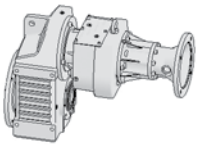
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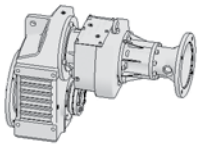
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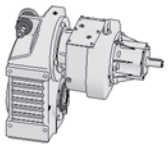
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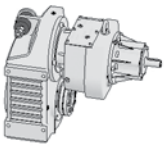
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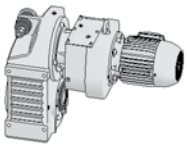
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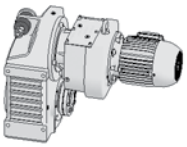
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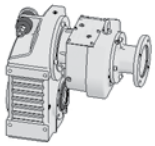
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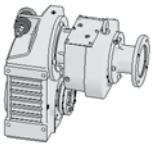
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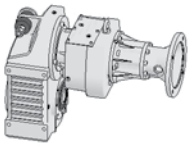
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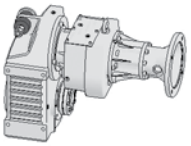
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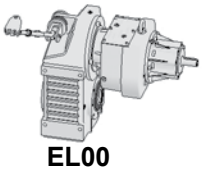
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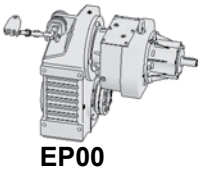
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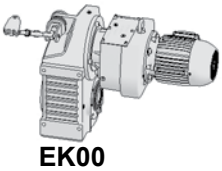
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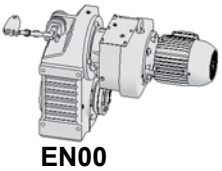
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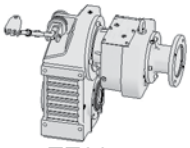
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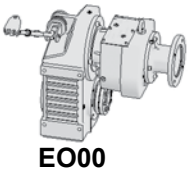
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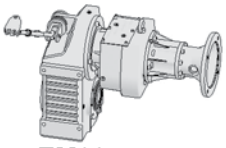
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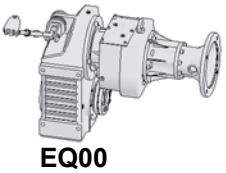
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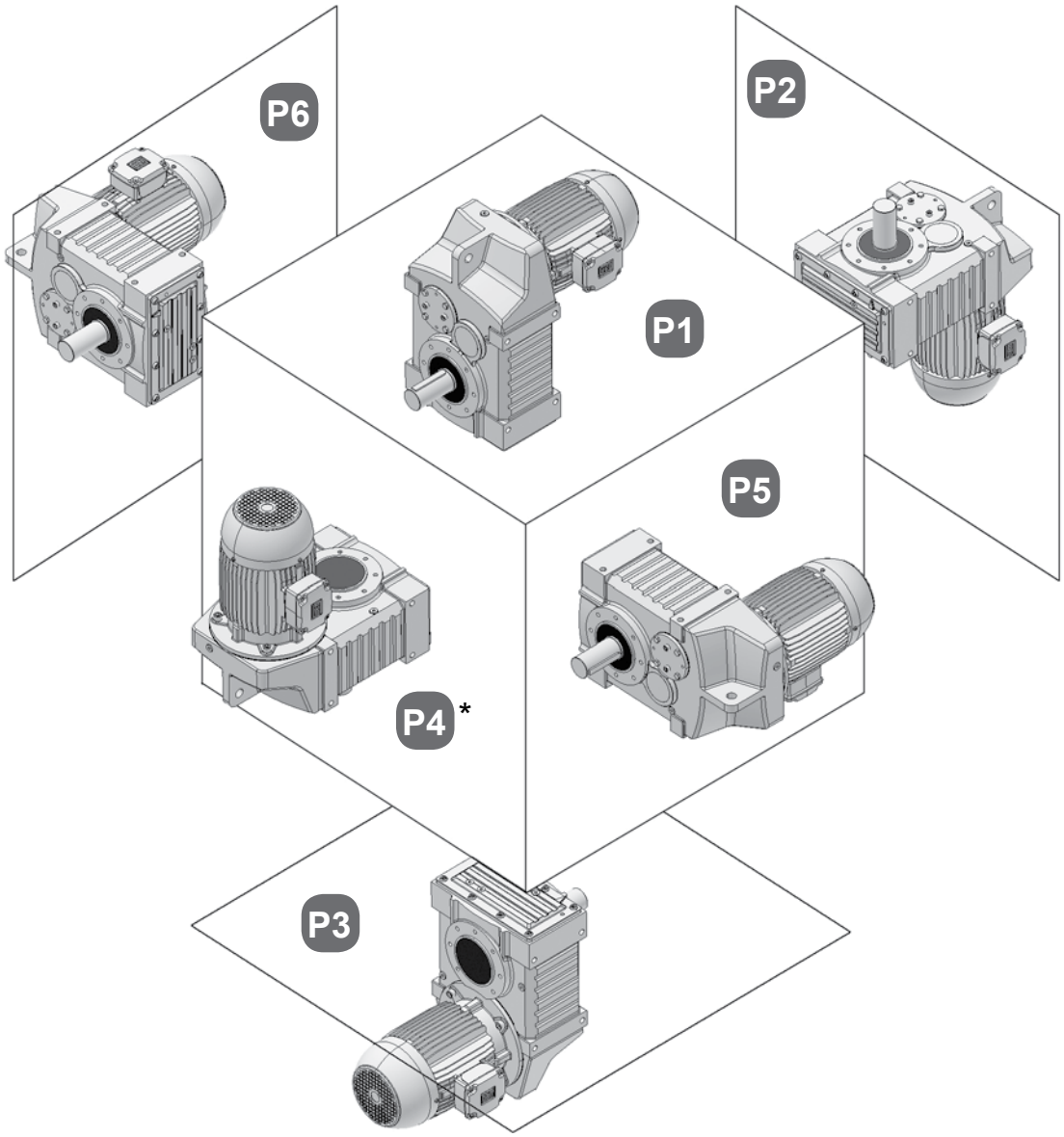
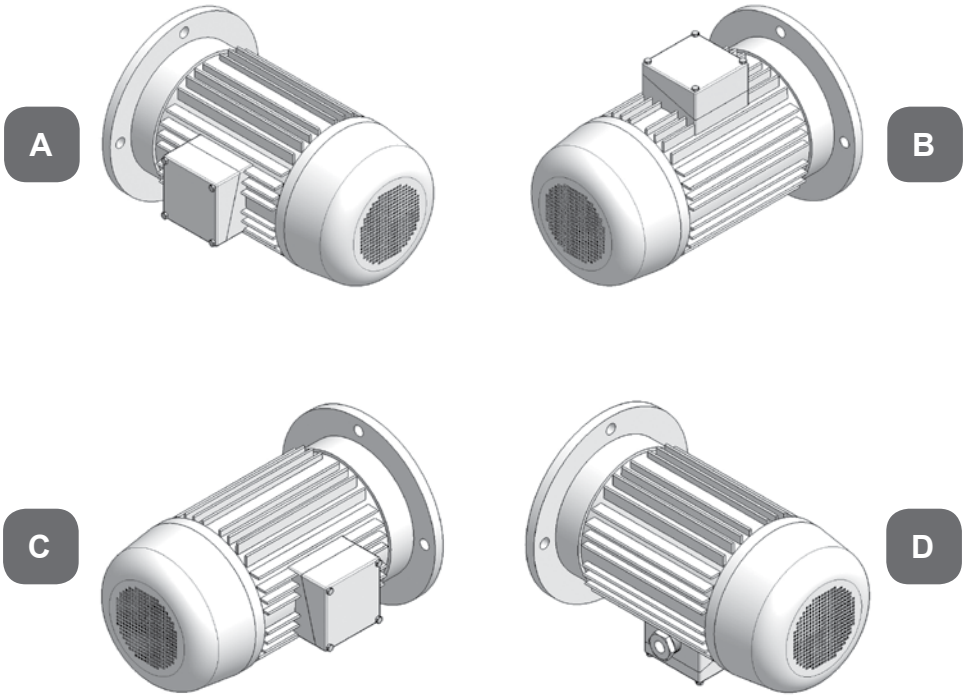


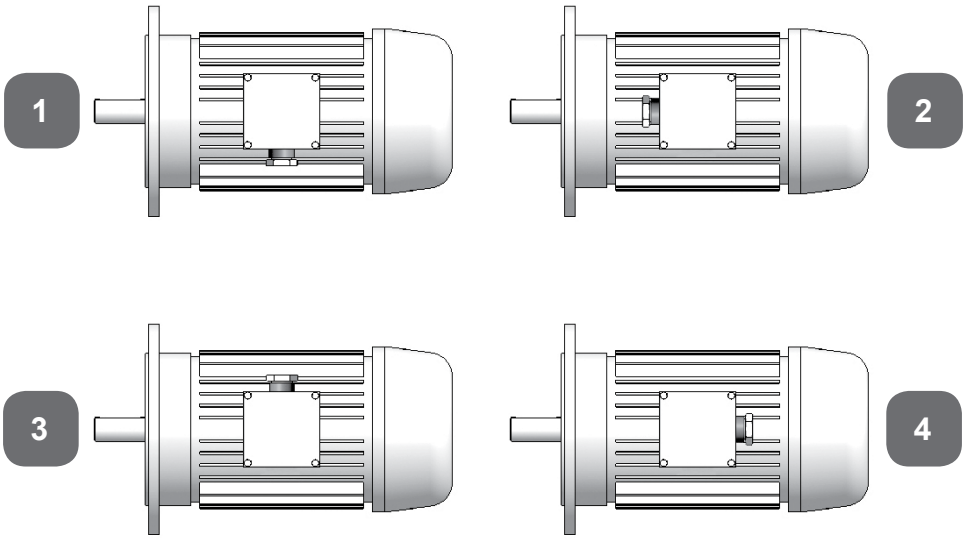
* Para motorredutores na posição de trabalho P4 que utilizam motores forma V1 ou V18, com ponta do eixo para baixo e que fiquem expostos ao tempo, recomendamos a utilização da calota de proteção defletora.

Posição da caixa de ligação

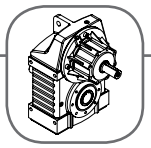


A caixa de ligação poderá ser montada conforme posições **A**, **B**, **C** e **D** olhando pela traseira do motor.
Para a posição da caixa de ligação é considerado como referência a posição de trabalho P1 do redução.

Posição da entrada dos cabos do motor



Os cabos de conexões serão disponíveis nas posições **1**, **2**, **3** e **4**, olhando de frente para a caixa de ligação.
Posição caixa / cabos de ligação preferencial: A1 (itens mantidos em estoque).



A seleção do tipo e a determinação do tamanho do motorredutor ou redutor mais adequado poderá ser feita com segurança, se levadas em consideração todas as influências às quais o motorredutor ou redutor ficará exposto durante seu funcionamento.
A observância das informações que se seguem fará com que se evitem erros e consultas repetidas na escolha, além de assegurar uma alta segurança operacional e uma longa vida útil do acionamento selecionado.
Os motorredutores e redutores **VERTIMAX** são calculados para um fator de serviço igual a 1 (FS=1), isto é, um funcionamento livre de choques e um tempo de funcionamento diário de 10 horas. Para outras condições de trabalho necessitamos do fator de serviço "fa" de acordo com o indicado na tabela 3 da página 10. Estes fatores de serviço são para um acionamento com até 6 partidas/hora. Para partidas superiores a 6, consultar a WEG-CESTARI.
Os valores de rotação de saída n2 dos motorredutores indicados nas tabelas de potências são aproximados, estes dependem do tamanho do motor e da carga relativa que incide sobre o mesmo, bem como a rede elétrica. Variações de até ±4% são admissíveis.

1) Determinação do tamanho do motorredutor ou redutor

I. Escolha do Motorredutor:
Conhecendo-se a potência necessária de acionamento "Pa" (kW) e a rotação de saída do Motorredutor "n2" (rpm) e com o fator de serviço "fa" obtido na tabela 1 da página 9, podemos escolher o Motorredutor diretamente nas tabelas de potência das páginas 13 até 75, cuidando-se para que:

Fator de serviço do redutor = fs ≥ fa

II. Escolha do redutor:
Com a potência necessária de acionamento "Pa" (kW) e a rotação de saída do Redutor "n2" (rpm), determinamos o momento torçor de acionamento "Ma" (Nm) de acordo com a equação:

$$Ma = 9550 \cdot \frac{Pa}{n2} \text{ (Nm)}$$

E de conformidade com a tabela 1 da página 8, aplica-se o fator de serviço "fa", para obtermos o momento torçor equivalente de acionamento "Me" (Nm):

$$Me = Ma \cdot fa$$

Para a seleção do Redutor devemos encontrar nas tabelas de potência das páginas 13 até 75, um tamanho de Redutor que atenda a condição:

Momento torçor máx. admissível do Redutor = Mmax ≥ Me

A rotação de entrada do Redutor "n1" (rpm) é obtida pela equação:

$$n1 = n2 \cdot itot$$

itot = redução total do Redutor

2) Verificação da Potência Térmica

É necessário verificar a Potência Térmica admissível do redutor ou motorredutor, conforme as fórmulas a seguir:

$$PT = PTG.fe.fb.fc.ft.fo$$

Onde:
PT = Potência térmica admissível corrigida
PTG = Potência térmica natural (ver tabela 1)
fe = Fator temperatura ambiente (ver tabela 2)
fb = Fator duração de operação (ver tabela 2)
fc = Fator de ambiente (ver tabela 2)
ft = Fator máxima temperatura do óleo (ver tabela 2)
Fo = Fator de agitação do óleo (ver tabela 2)

Sendo que a potência térmica corrigida (PT) deve ser maior que a potência de acionamento (Pa).

$$Pa <= PT$$

Caso não seja atendida essa condição, deverá ser aplicado sistema de refrigeração complementar por Trocador de Calor (sob consulta).

Tabela 1 - Potência Térmica Natural (PTG) - em kW

	Tamanho						
Estágios	**56**	**58**	**60**	**62**	**64**	**66**	**68**
3	16	23	35	50	66	89	115

Tabela 2 - Fatores para Potência Térmica

fe - Fator para temperatura ambiente							
Temperatura ambiente em ºC	10º	18º	25º	30º	40º	43º	50º
Fator fe	1,15	1,07	1,00	0,93	0,83	0,75	0,67

fb - Fator de duração da operação					
% Tempo de operação/hora	100 (contínuo)	80	70	40	20
Fator fb	1,00	1,05	1,15	1,35	1,80

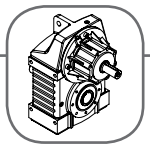
fc - Fator de ambiente	
Tipos de ambiente	**Fator fc**
Área aberta, fluxo de ar > 3,7m/s	1,40
Fechado em área grande, fluxo de ar > 1,4m/s	1,00
Fechado com pouco espaço, fluxo de ar > 0,5m/s	0,75

ft - Fator de máxima temperatura do óleo			
Máxima temperatura do óleo	85º C	95º C	100º C
Fator ft	0,81	1,00	1,13

fo - Fator de agitação do óleo					
	Rotação de entrada do redutor				
Posição de Trabalho	**3500**	**1750**	**1150**	**870**	**500**
P1 / P4	1,00	1,00	1,00	1,00	1,00
P3 / P5 / P6	0,63	0,86	0,95	0,97	1,00
P2	0,50	0,79	0,91	0,95	1,00

Rotações intermediárias, entre 500 e 3500rpm, podem ser obtidas por interpolação simples.

Observações:
1) Para temperatura ambiente acima de 40º C, é recomendado o uso de óleo sintético (ver catálogo)
2) Para temperatura ambiente abaixo de 8º C, é recomendado o uso de óleo sintético (sob consulta)
3) Para temperatura do óleo superior a 95º C, é necessário o uso de óleo sintético (sob consulta)
4) Rotação máxima admissível na entrada do redutor, ver tabelas de características técnicas



3) Escolha da posição de trabalho

De acordo com a página 6.

4) Escolha da execução

De acordo com a coluna execução nas tabelas de dimensões das páginas 95 a 166 para Motorredutores e Redutores.

5) Escolha da posição da caixa de ligação e de entrada dos cabos do motor

De acordo com a página 6.

6) Verificação dos esforços externos

Quando for montado um elemento de transmissão (polias, engrenagens, pinhões de corrente, etc.) no eixo do Motorredutor ou Redutor devemos verificar a máxima carga externa radial e axial admissível. (ver pág. 12 e 13)

7) Denominação do redutor

De acordo com a página 3.

8) Exemplo

MOTORREDUTOR V5224 NA00 CNW P1 A1 (pág. 25)

Redução	52
Tamanho do Redutor	52
Rotação de saída	111 rpm
Fator de serviço	4,23
Código do Motor	CNW (pág. 94)
Potência do Motor	0.55 kW
Execução NW00	Dimensões pág. 95
Posição de trabalho	P1 (página 6)
Posição da caixa de ligação e entrada dos cabos do Motor	A1 (página 7)

---

1) Informações para seleção dos motorredutores e redutores

a. Tipo de máquina a ser acionada
   Potência nominal em kW, Rotação em rpm
   Redução total desejada

b. Momento de inércia "J" a serem acionados
   Tipo de funcionamento (uniforme, com choques moderados ou fortes)

c. Tempo de funcionamento diário em horas
   Ciclos de trabalho

d. Condições ambientais
   Temperatura ambiente, humidade, gases corrosivos, ambientes sujos, etc.

e. Força radial e axial externas (ver páginas 11 e 12)

f. Partidas por horas

g. Posição de trabalho (ver página 6)

h. Execução
   Conforme coluna execução nas tabelas de dimensões

i. Tensão elétrica em volts

j. Posição da caixa de ligação e de entrada dos cabos do Motor (ver página 7)

k. Tipos e dimensões dos elementos montados no eixo do Redutor: polia, engrenagens, pinhões de corrente, etc.

2) Exemplo de cálculo e seleção:

Selecionar um motorredutor **VERTIMAX** para acionamento de um Transportador de Correia para minérios.

Dados conhecidos

- Potência de acionamento	Pa = 9,2kW
- Rotação de saída desejada	n2=50 rpm
- Período de funcionamento	t = 24 horas, serviço contínuo
- Temperatura ambiente	40º C
- Máx. temperatura do óleo desejada	95º C
- Ambiente	Área externa, ventilada
- Posição de trabalho	P1

Solução

Na tabela 3 obtemos o Fator de Serviço:

- Equipamento acionado:	Transportador de Correia
- Classe de carga:	Choques moderados
- Tempo de funcionamento:	24 horas
- Fator de serviço:	fa = 1,5

Conforme a tabela de potência Pa = 9,2kW da pág. 57 selecionamos para a condição fs > fa o motorredutor V60330 _ _ _ _ KNW, que nos fornece:

Tamanho do redutor	60
Rotação de saída	n2 = 53,1 rpm
Potência do motor	Pa = 9,2kW
Código do motor	KNW
Fator de serviço do redutor	fs = 1,81 > fa

É necessário verificar a potência térmica do redutor.

Condição: Pa < PT

Onde: PT = PTG.fe.fb.fc.ft.fo

PA =	9,2kW
PTG =	32kW (vide tabela 1 – pág. 12)
Fe =	0,83 (temperatura ambiente 40º C)
Fb =	1,00 (serviço contínuo)
Fc =	1,40 (ambiente aberto, fluxo de > 3,7 m/s)
Ft =	1,00 (temperatura máxima do óleo 95º C)
Fo =	1,00 (posição de trabalho P1, motor de 1750 rpm)

9,2 < 35 x 0,83 x 1,00 x 1,40 x 1,00 x 1,00
9,2 < 40,67 kW : OK

Portanto, essa aplicação não necessita de sistema de refrigeração complementar.

Para uma seleção completa do Motorredutor deve-se determinar a execução, posição da caixa de ligação e entrada dos cabos do motor.

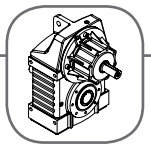
Exemplo de especificação completa

Código:	V60330BK00KNW
Posição de trabalho:	P1
Posição da caixa de ligação:	A
Posição da entrada dos cabos:	1

Fator de serviço (fa)

Tabela 3

U - Cargas uniformes
M - Choques moderados
F - Choques fortes



Aplicação	Classe de carga
Agitadores	
Líquidos puros	U
Líquidos de densidade consistente	M
Líquidos de densidade variável	M
Alimentadores	
Alimentadores de rosca	M
Transportadores (esteira e correia)	M
Ascensores	
Sorilhos de elevação	F
Máquinas de extração	F
Monta - cargas solicitadas normalmente	M
Monta - cargas solicitadas fortemente	F
Monta - cargas inclinadas	F
Bobinadoras	
Metal	M
Papel	M
Têxtil	U
Bombas	
Centrífugas - líq. de baixa viscosidade	U
Centrífugas - líq. de alta viscosidade	M
Dupla ação, multicilindricas	M
Recíprocos de descarga livre	M
Rotativas a engrenagens	U
Pistão submerso	F
Pressão	F
Borracha e Plástico	
Calandras*	*
Equipamentos de laboratório	M
Extrusoras*	*
Laminadores	F
Máquinas de placas	M
Máquinas de tubo e peneiras	M
Moinhos cilíndricos 2 em linha*	*
Moinhos cilíndricos 3 em linha*	*
Refinadores*	*
Trituradores e misturadores*	*
Britadores	
Pedras e minerais	F
Cerâmica	
Amassadores de barro	M
Extrusoras e misturadores	M
Moinhos de barro*	*
Prensas de tijolos e ladrilhos	F
Cimento	
Britadores de mandíbulas	F
Moinhos rotativos*	*
Moinhos de bolas e rolos*	*
Classificadores Rotativos	M
Compressores	
Centrífugos	U
Êmbolo giratório	M
Pistão (um cilindro)	F
Pistão (2 cilindros) coeficiente de irregularidade < 1:100	F
Destilarias	
Cozinhadores - serviço contínuo	U
Tachas de fermentação- serviço contínuo	U
Misturadores	U

Aplicação	Classe de carga
Dragas	
Guinchos, transportadores e bombas	M
Cabeçotes rotativos e peneiras	F
Esteira de translação	F
Elevadores	
Caçambas - cargas uniformes	U
Caçambas - cargas pesadas	F
Elevadores de carga	M
Elevadores de canecas carregadas normalmente	U
Elevadores de canecas muito carregadas	M
Elevadores para pessoas**	**
Engarrafadoras e Enlatadoras	U
Fornos Rotativos	U
Geradores	
Alternadores	U
Conversores de freqüência	F
Guinchos e Guindastes	
Elevação moderada	M
Elevação pesada	F
Giro	M
Translação	F
Indústrias Açucareiras	
Moendas*	*
Facas de cana*	*
Cristalizadores	F
Indústrias Alimentícias	
Cozinhadores de cereais	M
Misturadores de massa, moedores de carne, picadores	M
Centrífugas ligeiras	M
Centrífugas pesadas	F
Indústrias Madeireiras	
Alimentadores de plaina	M
Serras, tambores despalpadores, transportadores de toras	F
Máquinas p/ trabalhar madeira em geral	M
Indústrias Metalúrgicas	
Cortadores de chapa rotativas	M
Cortadores de chapa de faca	F
Viradeiras	F
Trefilas	M
Desempenadeiras a rolos	F
Enroladores de fitas ou bobinadoras de chapas	F
Laminadores	F
Máquinas de soldar tubos	F
Indústrias de óleo	
Prensas - filtros de parafina	M
Bombas de pipe-line	M
Máquinas de refinação	M
Instalações de perfuradores rotativos	F
Indústrias têxteis	
Calandras, cardas, filatórios, retorcedeiras, maçaroqueiras e máquinas de tinturaria	M
Lavanderias	
Secadores rotativos	M
Máquinas de lavar roupa	M
Acionamento de grelhas móveis	F

Aplicação	Classe de carga
Máquinas operatrizes	
Acionamento principal - Cargas pesadas	F
Acionamento principal - Cargas uniformes	M
Acionamento auxiliar	U
Rosqueadoras	F
Misturadores	
Betoneiras	M
Borracha	F
Polpa de papel	M
Fluídos com substâncias sólidas	M
Fluídos limpos	U
Moinhos Rotativos	
De bolas e rolos	F
De martelos	F
Papel	
Agitadores misturadores, alvejadores, batedores, despalpadores, calandras e prensas	M
Supercalandras*	*
Descascadores hidráulicos e mecânicos	M
Tambores descascadores	F
Esticadores de feltro	M
Secadores	F
Peneiras	
Peneiras horizontais	M
Peneiras para filtragem do ar	U
Peneiras rotativas para pedras e areia	M
Pontes rolantes	
Acionamento do carro e da ponte	F
Acionamento do guincho	U
Saneamento	
Aeradores	F
Alimentadores, bombas, decantadores	U
Filtros mexedores e peneiras	M
Clarificadores	U
Secadores e resfriadores rotativos	
Produtos alimentícios, Bagaça	M
Torres de refrigeração**	**
Transportadores	
Caçamba, correia, corrente, esteira, rosca:	
- Cargas uniformes	U
- Cargas pesadas e interminentes	M
Transmissões	
Transmissões ligeiras	U
Transmissões para acionamentos de máquinas ferramentas	M
Ventiladores	
Centrífugas	U
Para minas	F
Para torres de refrigeração	M

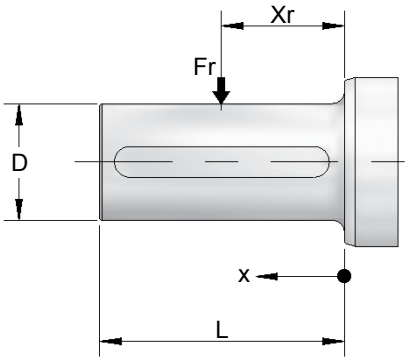
Tempo máximo de funcionamento diário	Classe de carga U	M	F
Até 3 horas	0,8	1,0	1,5
Até 10 horas	1,0	1,25	1,75
24 horas	1,25	1,5	2,0

* Fator de serviço mínimo recomendado: 2,00

** Para torres de refrigeração e elevadores para pessoas deve ser analisado redutor específico

Quando a transmissão de força for através de acoplamento elástico, não ocorrerá força radial e axial no eixo do redutor. Entretanto, se a transmissão for por intermédio de elementos montados no eixo (engrenagens, pinhões de corrente ou polias), será constatado a existência de cargas radiais e/ou axiais.
Usando as tabelas de Potências (motorredutores - página 13 a 75) ou tabelas de Características Técnicas (redutores - página 77 a 93) obtém-se as cargas radiais admissíveis no eixo do redutor. Forças axiais até 50% das forças radiais admissíveis podem se absorvidas simultaneamente com as forças radiais.
Os valores das forças radiais indicado nas tabelas referem-se a carga aplicada no centro do comprimento "L" (figura abaixo). Quando a distância de aplicação "x" for diferente de "Xr" deverá haver um recálculo conforme fórmulas e tabelas abaixo; se a carga radial for aplicada a uma distância "x" menor que "Xr", e o seu valor igual ou menor que o admissível, não haverá necessidade de recálculo.

Determinação da força radial admissível no ponto x: F(x)



a) F1 (x) baseada no tempo de vida do rolamento:

$$F1(x) = \frac{k}{m + x} \cdot Fr \quad [N]$$

b) F2 (x) baseada em flexão máxima do eixo:

$$F2(x) = \frac{1000 \cdot n}{p + x} \quad [N]$$

8

Tabela 4

Carga radial (Fr) em N - Eixo de entrada (2, 3 estágios)

Redução	52	54	55	56	58	60	62	64	66	68
até 4,5	300	400	500	600	700	800	1500	2000	3000	4000
>4,5 a 6,3	400	600	700	800	1000	1200	2000	2500	3500	4400
>6,3 a 9	600	800	900	1200	1500	1800	2200	3000	4200	5000
>9 a 18	900	1000	1100	1600	2200	2500	3500	4000	5000	5400
>18 a 35,5	1100	1200	1400	1800	2400	3000	4000	5200	5800	7000
>35,5 a 90	1400	1500	1600	2000	2600	3500	5000	6300	6500	9000
>90 a 180	1800	1800	1800	2200	2800	4200	6000	7800	8000	15000

Tabela 5

Valores para recálculo de cargas radiais no eixo de saída

Tamanho	k	m	n	p	D	L
52	150	125	180	20	30	50
54	160	130	301,6	22	35	60
55	170	135	477,9	24	40	70
56	180	140	650	25	40	80
58	225	175	1170	28	50	100
60	252	192	2430	30	60	120
62	300	230	4080	32	70	140
64	350	295	8645	48	90	170
66	380	275	12480	55	110	210
68	410	305	16500	60	120	210

Tabela 6

Valores para recálculo de cargas radiais no eixo de entrada

Tamanho	k	m	n	p	D	L
52	130	110	72	20	19	40
54	150	130	75,6	22	19	40
55	160	140	79,2	24	19	40
56	170	140	121	25	28	60
58	210	170	190,4	28	38	80
60	254	205	294	30	42	80
62	280	225	522	32	55	110
64	290	235	702	35	55	110
66	330	260	880	40	70	140
68	370	300	1690	42	70	140

* Força radial na entrada pode ser aumentada considerando mancal reforçado - consultar WEG-CESTARI.
* Para redutor tamanho 72, consultar WEG-CESTARI.

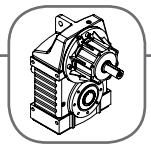


Tabela 7

Carga radial (Fr) em N - Eixo de entrada (4, 5 e 6 estágios)

Estágios	52	54, 55, 56	58, 60	62, 64	66	68	
4	300	400	600	800	2200	3500	V
5	800	900	1000	1600	1200	1800	
6	1400	1800	1800	2200	1800	3000	

Tabela 8

Valores para recálculo de cargas radiais no eixo de entrada para redutores duplex

Tamanho	k	m	n	p	D	L
52	110	90	53,2	18	19	40
54, 55, 56	130	110	72	20	19	40
58, 60	150	130	75,6	22	19	40
62, 64, 665, 666	170	140	121	25	28	60
664	210	170	190,4	28	38	80
685, 686	254	205	294	30	42	80
684	280	225	522	32	55	110

Diâmetro mínimo admissível para o elemento de transmissão montado no eixo:

Em conjunto com a carga radial obtida, o menor diâmetro admissível para o elemento de transmissão (engrenagens, pinhões de corrente ou polias) pode ser calculado usando a seguinte fórmula:

Valores para o fator Kr	
Correia plana com esticador	2,5
Correia plana sem esticador	5
Correia trapezoidal sem esticador	1,75
Corrente de rolos ou corrente silenciosa	1,4
Engrenagens	1,15

$$Dmin = \frac{2.000 \cdot Mc}{Fr} \cdot Kr$$

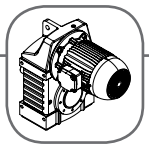
Onde
Dmin = Diâmetro mínimo admissível (mm)
Mc = Momento a ser transmitido (Nm)
Fr = Carga radial admissível no eixo do redutor (N)
Kr = Fator adicional

0,12 kW - 1750 rpm

rpm	i_{tot}	fs	Fr (N)	código	páginas
417	4,19	41,89	1700	V52212	95 a 97
340	5,14	41,87	1750	V52214	95 a 97
298	5,87	41,89	1800	V52215	95 a 97
260	6,74	41,95	1850	V52216	95 a 97
237	7,39	41,32	1900	V52218	95 a 97
193	9,07	33,68	2000	V52219	95 a 97
169	10,3	29,51	2050	V52220	95 a 97
147	11,9	25,72	2050	V52221	95 a 97
137	12,8	23,95	2100	V52222	95 a 97
127	13,8	22,09	2150	V52223	95 a 97
111	15,8	19,37	2200	V52224	95 a 97
98,3	17,8	17,15	2300	V52225	95 a 97
87,6	20	15,28	2400	V52226	95 a 97
76,1	23	13,28	2500	V52227	95 a 97
70,6	24,8	12,32	2600	V52228	95 a 97
64,3	27,2	11,23	2800	V52229	95 a 97
55,6	31,5	9,70	3400	V52330	95 a 97
52,2	33,5	9,10	3500	V52331	95 a 97
43,6	40,1	7,61	3550	V52332	95 a 97
38,7	45,3	6,75	3600	V52333	95 a 97
35,8	48,9	6,24	3700	V52334	95 a 97
32,6	53,7	5,69	3900	V52335	95 a 97
28,2	62	4,93	4000	V52336	95 a 97
24,8	70,6	4,33	4000	V52337	95 a 97
22	79,5	3,84	4000	V52338	95 a 97
19	92,1	3,32	4000	V52339	95 a 97
17,6	99,6	3,07	4000	V52340	95 a 97
15,9	110	2,78	4000	V52341	95 a 97
373	4,7	86,16	2400	V54213	98 a 100
246	7,1	86,01	2600	V54217	98 a 100
14,1	124	5,56	5800	V54342	98 a 100
12,3	142	4,83	5800	V54343	98 a 100
11,4	153	4,48	5800	V54344	98 a 100
10,4	168	4,08	5800	V54345	98 a 100
8,57	204	6,13	10000	V56346	104 a 106

0,12 kW - 1750 rpm

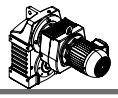
13,3	131	2,33	4000	V52442	128 a 130
12,4	141	2,17	4000	V52443	128 a 130
11,7	149	2,05	4000	V52444	128 a 130
9,56	183	1,67	4000	V52445	128 a 130
8,37	209	1,46	4000	V52446	128 a 130
7,30	239	1,27	4000	V52447	128 a 130
6,80	257	1,19	4000	V52448	128 a 130
6,27	279	1,09	4000	V52449	128 a 130
5,50	318	0,96	4000	V52450	128 a 130
4,87	359	0,85	4000	V52451	128 a 130
4,34	403	0,76	4000	V52452	128 a 130
9,79	179	3,85	5800	V54445	131 a 133
7,98	219	3,13	5800	V54446	131 a 133
6,99	250	2,75	5800	V54447	131 a 133
6,1	287	2,39	5800	V54448	131 a 133
5,68	308	2,23	5800	V54449	131 a 133
5,23	334	2,06	5800	V54450	131 a 133



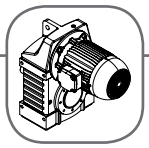
0,12 kW - 1750 rpm

rpm	i_{tot}	fs	Fr (N)	código	páginas
4,59	381	1,80	5800	V54451	131 a 133
4,06	431	1,60	5800	V54452	131 a 133
3,62	483	1,42	5800	V54453	131 a 133
3,15	556	1,24	5800	V54454	131 a 133
2,92	560	1,15	5800	V54455	131 a 133
2,84	616	1,12	5800	V54556	131 a 133
2,74	639	1,07	5800	V54557	131 a 133
2,23	784	0,88	5800	V54558	131 a 133
1,96	895	0,77	5800	V54559	131 a 133
8,97	159	4,69	8100	V55446	134 a 136
7,86	223	4,11	8100	V55447	134 a 136
6,85	256	3,58	8100	V55448	134 a 136
6,38	274	3,34	8100	V55449	134 a 136
5,88	298	3,08	8100	V55450	134 a 136
5,16	339	2,70	8100	V55451	134 a 136
4,56	383	2,39	8100	V55452	134 a 136
4,07	430	2,13	8100	V55453	134 a 136
3,53	495	1,85	8100	V55454	134 a 136
3,07	570	1,61	8100	V55555	134 a 136
2,67	654	1,40	8100	V55556	134 a 136
2,49	703	1,30	8100	V55557	134 a 136
2,4	729	1,26	8100	V55558	134 a 136
1,96	894	1,02	8100	V55559	134 a 136
1,71	1.021	0,90	8100	V55560	134 a 136
1,49	1.171	0,78	8100	V55561	134 a 136
6,59	265	4,72	10000	V56449	137 a 139
5,75	305	4,11	10000	V56450	137 a 139
5,35	327	3,83	10000	V56451	137 a 139
4,93	355	3,53	10000	V56452	137 a 139
4,33	404	3,10	10000	V56453	137 a 139
3,83	457	2,74	10000	V56454	137 a 139
3,41	512	2,44	10000	V56455	137 a 139
2,97	590	2,12	10000	V56456	137 a 139
2,39	734	1,71	10000	V56557	137 a 139
2,22	788	1,59	10000	V56558	137 a 139
2,14	817	1,53	10000	V56559	137 a 139
1,75	1.003	1,25	10000	V56560	137 a 139
1,53	1.144	1,09	10000	V56561	137 a 139
1,33	1.313	0,95	10000	V56562	137 a 139
1,24	1.410	0,89	10000	V56563	137 a 139
1,14	1.529	0,82	10000	V56564	137 a 139
1	1.744	0,72	10000	V56565	137 a 139
3,37	519	4,56	16000	V58454	140 a 142
3,14	558	4,24	16000	V58455	140 a 142
2,79	627	3,78	16000	V58456	140 a 142
2,18	802	2,95	16000	V58558	140 a 142
1,9	921	2,57	16000	V58559	140 a 142
1,7	1.028	2,30	16000	V58560	140 a 142
1,57	1.111	2,13	16000	V58561	140 a 142
1,3	1.343	1,76	16000	V58562	140 a 142
1,13	1.554	1,52	16000	V58563	140 a 142
0,952	1.838	1,29	16000	V58565	140 a 142
0,849	2.061	1,15	16000	V58566	140 a 142
0,716	2.443	0,97	16000	V58567	140 a 142

0,12 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
0,667	2.625	0,90	16000	V58568	140 a 142
0,593	2.949	0,80	16000	V58569	140 a 142
0,49	3.569	0,66	16000	V58671	140 a 142
1,60	1.096	4,18	18000	V60561	143 a 145
1,38	1.267	3,62	18000	V60562	143 a 145
1,17	1.499	3,06	18000	V60563	143 a 145
1,04	1.681	2,73	18000	V60565	143 a 145
0,878	1.992	2,30	18000	V60566	143 a 145
0,817	2.141	2,14	18000	V60567	143 a 145
0,728	2.405	1,91	18000	V60568	143 a 145
0,738	2.373	1,93	18000	V60669	143 a 145
0,601	2.911	1,57	18000	V60670	143 a 145
0,527	3.322	1,38	18000	V60671	143 a 145
0,459	3.812	1,20	18000	V60672	143 a 145
0,428	4.093	1,12	18000	V60673	143 a 145
0,381	4.599	1,00	18000	V60674	143 a 145
0,310	5.641	0,81	18000	V60675	143 a 145
0,272	6.439	0,71	18000	V60676	143 a 145
1,24	1.407	4,88	25000	V62563	146 a 148
1,08	1.625	4,23	25000	V62565	146 a 148
0,943	1.856	3,70	25000	V62566	146 a 148
0,803	2.180	3,15	25000	V62567	146 a 148
0,721	2.427	2,83	25000	V62568	146 a 148
0,613	2.857	2,41	25000	V62569	146 a 148
0,608	2.879	2,39	25000	V62670	146 a 148
0,58	3.016	2,28	25000	V62671	146 a 148
0,465	3.764	1,83	25000	V62672	146 a 148
0,402	4.353	1,58	25000	V62673	146 a 148
0,377	4.645	1,48	25000	V62674	146 a 148
0,338	5.182	1,33	25000	V62675	146 a 148
0,322	5.429	1,27	25000	V62676	146 a 148
0,258	6.774	1,01	25000	V62677	146 a 148
0,223	7.835	0,88	25000	V62678	146 a 148
0,189	9.267	0,74	25000	V62679	146 a 148
0,628	2.786	4,39	45000	V64569	149 a 151
0,589	2.971	4,11	45000	V64569	149 a 151
0,595	2.941	4,15	45000	V64670	149 a 151
0,477	3.670	3,33	45000	V64671	149 a 151
0,412	4.245	2,88	45000	V64672	149 a 151
0,386	4.530	2,70	45000	V64673	149 a 151
0,346	5.053	2,42	45000	V64674	149 a 151
0,331	5.294	2,31	45000	V64675	149 a 151
0,265	6.606	1,85	45000	V64676	149 a 151
0,229	7.640	1,60	45000	V64677	149 a 151
0,194	9.037	1,35	45000	V64679	149 a 151
0,173	10.135	1,21	45000	V64680	149 a 151
0,146	12.014	1,02	45000	V64682	149 a 151
0,121	14.501	0,84	45000	V64683	149 a 151
0,108	16.223	0,75	45000	V64684	149 a 151
0,406	4.308	4,61	70000	V66672	152 a 154
0,351	4.982	3,98	70000	V66674	152 a 154
0,329	5.317	3,73	70000	V66675	152 a 154
0,282	6.214	3,19	70000	V66676	152 a 154
0,226	7.754	2,56	70000	V66678	152 a 154



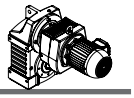
0,12 kW - 1750 rpm

rpm	i_{tot}	fs	Fr (N)	código	páginas
0,195	8.968	2,21	70000	V66679	152 a 157
0,165	10.607	1,87	70000	V66680	152 a 157
0,147	11.896	1,67	70000	V66682	152 a 157
0,124	14.101	1,41	70000	V66683	152 a 157
0,115	15.153	1,31	70000	V66684	152 a 157
0,103	17.020	1,17	70000	V66685	152 a 157
0,092	19.042	1,04	70000	V66686	152 a 157
0,082	21.268	0,93	70000	V66687	152 a 157
0,072	24.265	0,82	70000	V66688	152 a 157
0,067	26.308	0,75	70000	V66689	152 a 157

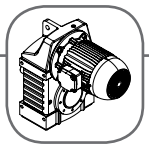
0,18 kW - 1750 rpm

417	4,19	27,92	1700	V52212	95 a 97
340	5,14	27,91	1750	V52214	95 a 97
298	5,87	27,92	1800	V52215	95 a 97
260	6,73	27,97	1850	V52216	95 a 97
237	7,39	27,55	1900	V52218	95 a 97
193	9,07	22,46	2000	V52219	95 a 97
169	10,3	19,68	2050	V52220	95 a 97
147	11,9	17,15	2050	V52221	95 a 97
137	12,8	15,97	2100	V52222	95 a 97
127	13,8	14,73	2150	V52223	95 a 97
111	15,8	12,91	2200	V52224	95 a 97
98,3	17,8	11,43	2300	V52225	95 a 97
87,6	20	10,19	2400	V52226	95 a 97
76,1	23	8,85	2500	V52227	95 a 97
70,6	24,8	8,21	2600	V52228	95 a 97
64,3	27,2	7,49	2800	V52229	95 a 97
52,2	33,5	6,07	3500	V52331	95 a 97
43,6	40,1	5,08	3550	V52332	95 a 97
38,7	45,3	4,50	3600	V52333	95 a 97
35,8	48,9	4,16	3700	V52334	95 a 97
32,6	53,7	3,79	3900	V52335	95 a 97
28,2	62	3,28	4000	V52336	95 a 97
24,8	70,6	2,89	4000	V52337	95 a 97
22	79,5	2,56	4000	V52338	95 a 97
19	92,1	2,21	4000	V52339	95 a 97
17,6	99,6	2,04	4000	V52340	95 a 97
15,9	110	1,85	4000	V52341	95 a 97
373	4,7	57,44	2400	V54213	98 a 100
246	7,1	57,34	2600	V54217	98 a 100
17,9	97,6	4,69	5800	V54340	98 a 100
15,9	110	4,16	5800	V54341	98 a 100
14,1	124	3,70	5800	V54342	98 a 100
12,3	142	3,22	5800	V54343	98 a 100
11,4	153	2,99	5800	V54344	98 a 100
10,4	168	2,72	5800	V54345	98 a 100
14,1	124	4,94	8100	V55342	101 a 103
12,3	142	4,29	8100	V55343	101 a 103
11,4	153	3,98	8100	V55344	101 a 103
10,4	168	3,63	8100	V55345	101 a 103
9,29	188	4,43	10000	V56345	104 a 106
8,57	204	4,09	10000	V56346	104 a 106

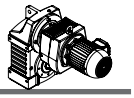
0,18 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
13,3	131	1,55	4000	V52442	128 a 130
12,4	141	1,45	4000	V52443	128 a 130
11,7	149	1,36	4000	V52444	128 a 130
9,56	183	1,11	4000	V52445	128 a 130
8,37	209	0,97	4000	V52446	128 a 130
7,30	240	0,85	4000	V52447	128 a 130
6,80	257	0,79	4000	V52448	128 a 130
9,79	179	2,56	5800	V54445	131 a 133
7,98	219	2,09	5800	V54446	131 a 133
6,99	250	1,83	5800	V54447	131 a 133
6,1	287	1,60	5800	V54448	131 a 133
5,68	308	1,49	5800	V54449	131 a 133
5,23	334	1,37	5800	V54450	131 a 133
4,59	381	1,20	5800	V54451	131 a 133
4,06	431	1,06	5800	V54452	131 a 133
3,62	483	0,95	5800	V54453	131 a 133
3,15	556	0,82	5800	V54454	131 a 133
2,92	560	0,76	5800	V54455	131 a 133
11	159	3,84	8100	V55445	134 a 136
8,97	159	3,13	8100	V55446	134 a 136
7,86	223	2,74	8100	V55447	134 a 136
6,85	256	2,39	8100	V55448	134 a 136
6,38	274	2,23	8100	V55449	134 a 136
5,88	298	2,05	8100	V55450	134 a 136
5,16	339	1,80	8100	V55451	134 a 136
4,56	383	1,59	8100	V55452	134 a 136
4,07	430	1,42	8100	V55453	134 a 136
3,53	495	1,23	8100	V55454	134 a 136
3,07	570	1,07	8100	V55555	134 a 136
2,67	654	0,93	8100	V55556	134 a 136
2,49	703	0,87	8100	V55557	134 a 136
2,4	729	0,84	8100	V55558	134 a 136
1,96	894	0,68	8100	V55559	134 a 136
7,53	233	3,59	10000	V56447	137 a 139
6,59	265	3,15	10000	V56449	137 a 139
5,75	305	2,74	10000	V56450	137 a 139
5,35	327	2,55	10000	V56451	137 a 139
4,93	355	2,35	10000	V56452	137 a 139
4,33	404	2,06	10000	V56453	137 a 139
3,83	457	1,83	10000	V56454	137 a 139
3,41	512	1,63	10000	V56455	137 a 139
2,97	590	1,42	10000	V56456	137 a 139
2,39	734	1,14	10000	V56557	137 a 139
2,22	788	1,06	10000	V56558	137 a 139
2,14	817	1,02	10000	V56559	137 a 139
1,75	1.003	0,83	10000	V56560	137 a 139
1,53	1.144	0,73	10000	V56561	137 a 139
5,3	330	4,78	16000	V58450	140 a 142
4,48	391	4,04	16000	V58451	140 a 142
4	438	3,60	16000	V58452	140 a 142
3,37	519	3,04	16000	V58454	140 a 142
3,14	558	2,83	16000	V58455	140 a 142
2,79	627	2,52	16000	V58456	140 a 142
2,18	802	1,97	16000	V58558	140 a 142
1,9	921	1,71	16000	V58559	140 a 142



0,18 kW - 1750 rpm



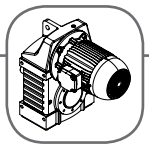
rpm	i_{tot}	fs	Fr (N)	código	páginas
1,7	1.028	1,54	16000	V58560	140 a 142
1,57	1.111	1,42	16000	V58561	140 a 142
1,3	1.343	1,17	16000	V58562	140 a 142
1,13	1.554	1,02	16000	V58563	140 a 142
0,952	1.838	0,86	16000	V58565	140 a 142
0,849	2.061	0,77	16000	V58566	140 a 142
2,67	654	4,67	18000	V60557	143 a 145
2,33	751	4,07	18000	V60558	143 a 145
2,09	838	3,64	18000	V60559	143 a 145
1,93	906	3,37	18000	V60560	143 a 145
1,60	1.096	2,79	18000	V60561	143 a 145
1,38	1.267	2,41	18000	V60562	143 a 145
1,17	1.499	2,04	18000	V60563	143 a 145
1,04	1.681	1,82	18000	V60565	143 a 145
0,878	1.992	1,53	18000	V60566	143 a 145
0,817	2.141	1,43	18000	V60567	143 a 145
0,728	2.405	1,27	18000	V60568	143 a 145
0,738	2.373	1,29	18000	V60669	143 a 145
0,601	2.911	1,05	18000	V60670	143 a 145
0,527	3.322	0,92	18000	V60671	143 a 145
0,459	3.812	0,80	18000	V60672	143 a 145
0,428	4.093	0,75	18000	V60673	143 a 145
1,68	1.043	4,39	25000	V62560	146 a 148
1,53	1.141	4,02	25000	V62561	146 a 148
1,36	1.284	3,57	25000	V62562	146 a 148
1,24	1.407	3,26	25000	V62563	146 a 148
1,08	1.625	2,82	25000	V62565	146 a 148
0,943	1.856	2,47	25000	V62566	146 a 148
0,803	2.180	2,10	25000	V62567	146 a 148
0,721	2.427	1,89	25000	V62568	146 a 148
0,613	2.857	1,60	25000	V62569	146 a 148
0,608	2.879	1,59	25000	V62670	146 a 148
0,58	3.016	1,52	25000	V62671	146 a 148
0,465	3.764	1,22	25000	V62672	146 a 148
0,402	4.353	1,05	25000	V62673	146 a 148
0,377	4.645	0,99	25000	V62674	146 a 148
0,338	5.182	0,88	25000	V62675	146 a 148
0,322	5.429	0,84	25000	V62676	146 a 148
0,258	6.774	0,68	25000	V62677	146 a 148
0,967	1.810	4,50	45000	V64566	149 a 151
0,823	2.126	3,83	45000	V64567	149 a 151
0,739	2.367	3,44	45000	V64568	149 a 151
0,628	2.786	2,92	45000	V64569	149 a 151
0,589	2.971	2,74	45000	V64569	149 a 151
0,595	2.941	2,77	45000	V64670	149 a 151
0,477	3.670	2,22	45000	V64671	149 a 151
0,412	4.245	1,92	45000	V64672	149 a 151
0,386	4.530	1,80	45000	V64673	149 a 151
0,346	5.053	1,61	45000	V64674	149 a 151
0,331	5.294	1,54	45000	V64675	149 a 151
0,265	6.606	1,23	45000	V64676	149 a 151
0,229	7.640	1,07	45000	V64677	149 a 151
0,194	9.037	0,90	45000	V64679	149 a 151
0,173	10.135	0,80	45000	V64680	149 a 151
0,146	12.014	0,68	45000	V64682	149 a 151

0,18 kW - 1750 rpm

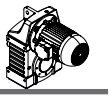
rpm	i_{tot}	fs	Fr (N)	código	páginas
0,630	2.778	4,76	70000	V66569	152 a 157
0,535	3.270	4,05	70000	V66570	152 a 157
0,502	3.488	3,79	70000	V66571	152 a 157
0,406	4.308	3,07	70000	V66672	152 a 157
0,351	4.982	2,66	70000	V66674	152 a 157
0,329	5.317	2,49	70000	V66675	152 a 157
0,282	6.214	2,13	70000	V66676	152 a 157
0,226	7.754	1,71	70000	V66678	152 a 157
0,195	8.968	1,48	70000	V66679	152 a 157
0,165	10.607	1,25	70000	V66680	152 a 157
0,147	11.896	1,11	70000	V66682	152 a 157
0,124	14.101	0,94	70000	V66683	152 a 157
0,115	15.153	0,87	70000	V66684	152 a 157
0,103	17.020	0,78	70000	V66685	152 a 157

0,25 kW - 1750 rpm

417	4,19	20,11	1700	V52212	95 a 97
340	5,14	20,10	1750	V52214	95 a 97
298	5,87	20,11	1800	V52215	95 a 97
260	6,73	20,13	1850	V52216	95 a 97
237	7,39	19,83	1900	V52218	95 a 97
193	9,07	16,17	2000	V52219	95 a 97
169	10,3	14,17	2050	V52220	95 a 97
147	11,9	12,35	2050	V52221	95 a 97
137	12,8	11,50	2100	V52222	95 a 97
127	13,8	10,60	2150	V52223	95 a 97
111	15,8	9,30	2200	V52224	95 a 97
98,3	17,8	8,23	2300	V52225	95 a 97
87,6	20	7,34	2400	V52226	95 a 97
76,1	23	6,37	2500	V52227	95 a 97
70,6	24,8	5,91	2600	V52228	95 a 97
64,3	27,2	5,39	2800	V52229	95 a 97
55,6	31,5	4,65	3400	V52330	95 a 97
52,2	33,5	4,37	3500	V52331	95 a 97
43,6	40,1	3,65	3550	V52332	95 a 97
38,7	45,3	3,24	3600	V52333	95 a 97
35,8	48,9	3,00	3700	V52334	95 a 97
32,6	53,7	2,73	3900	V52335	95 a 97
28,2	62	2,36	4000	V52336	95 a 97
24,8	70,6	2,08	4000	V52337	95 a 97
22	79,5	1,85	4000	V52338	95 a 97
19	92,1	1,59	4000	V52339	95 a 97
17,6	99,6	1,47	4000	V52340	95 a 97
15,9	110	1,33	4000	V52341	95 a 97
373	4,7	41,35	2400	V54213	98 a 100
246	7,1	41,29	2600	V54217	98 a 100
23,8	73,5	4,49	5800	V54337	98 a 100
22,2	78,9	4,18	5800	V54338	98 a 100
20,4	85,6	3,85	5800	V54339	98 a 100
17,9	97,6	3,38	5800	V54340	98 a 100
15,9	110	2,99	5800	V54341	98 a 100
14,1	124	2,67	5800	V54342	98 a 100
12,3	142	2,32	5800	V54343	98 a 100
11,4	153	2,15	5800	V54344	98 a 100
10,4	168	1,96	5800	V54345	98 a 100

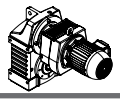


0,25 kW - 1750 rpm



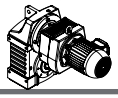
rpm	itot	fs	Fr (N)	código	páginas
17,9	97,6	4,51	8100	V55340	101 a 103
15,9	110	3,99	8100	V55341	101 a 103
14,1	124	3,56	8100	V55342	101 a 103
12,3	142	3,09	8100	V55343	101 a 103
11,4	153	2,87	8100	V55344	101 a 103
10,4	168	2,61	8100	V55345	101 a 103
13,2	132	4,55	10000	V56343	104 a 106
10,6	165	3,64	10000	V56344	104 a 106
9,29	188	3,19	10000	V56345	104 a 106
8,57	204	2,94	10000	V56346	104 a 106

0,25 kW - 1750 rpm

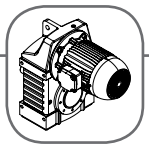


13,3	131	1,12	4000	V52442	128 a 130
12,4	141	1,04	4000	V52443	128 a 130
11,7	149	0,98	4000	V52444	128 a 130
9,56	183	0,80	4000	V52445	128 a 130
8,37	209	0,70	4000	V52446	128 a 130
9,79	179	1,85	5800	V54445	131 a 133
7,98	219	1,50	5800	V54446	131 a 133
6,99	250	1,32	5800	V54447	131 a 133
6,1	287	1,15	5800	V54448	131 a 133
5,68	308	1,07	5800	V54449	131 a 133
5,23	334	0,99	5800	V54450	131 a 133
4,59	381	0,87	5800	V54451	131 a 133
4,06	431	0,77	5800	V54452	131 a 133
11	159	2,76	8100	V55445	134 a 136
8,97	159	2,25	8100	V55446	134 a 136
7,86	223	1,97	8100	V55447	134 a 136
6,85	256	1,72	8100	V55448	134 a 136
6,38	274	1,60	8100	V55449	134 a 136
5,88	298	1,48	8100	V55450	134 a 136
5,16	339	1,30	8100	V55451	134 a 136
4,56	383	1,15	8100	V55452	134 a 136
4,07	430	1,02	8100	V55453	134 a 136
3,53	495	0,89	8100	V55454	134 a 136
3,07	570	0,77	8100	V55555	134 a 136
7,53	233	2,58	10000	V56447	137 a 139
6,59	265	2,26	10000	V56449	137 a 139
5,75	305	1,97	10000	V56450	137 a 139
5,35	327	1,84	10000	V56451	137 a 139
4,93	355	1,69	10000	V56452	137 a 139
4,33	404	1,49	10000	V56453	137 a 139
3,83	457	1,32	10000	V56454	137 a 139
3,41	512	1,17	10000	V56455	137 a 139
2,97	590	1,02	10000	V56456	137 a 139
2,39	734	0,82	10000	V56557	137 a 139
2,22	788	0,76	10000	V56558	137 a 139
7,41	236	4,81	16000	V58448	140 a 142
6,13	285	3,98	16000	V58449	140 a 142
5,3	330	3,44	16000	V58450	140 a 142
4,48	391	2,91	16000	V58451	140 a 142

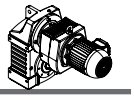
0,25 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
4	438	2,59	16000	V58452	140 a 142
3,37	519	2,19	16000	V58454	140 a 142
3,14	558	2,04	16000	V58455	140 a 142
2,79	627	1,81	16000	V58456	140 a 142
2,18	802	1,42	16000	V58558	140 a 142
1,9	921	1,23	16000	V58559	140 a 142
1,7	1.028	1,11	16000	V58560	140 a 142
1,57	1.111	1,02	16000	V58561	140 a 142
1,3	1.343	0,85	16000	V58562	140 a 142
1,13	1.554	0,73	16000	V58563	140 a 142
3,84	455	4,83	18000	V60452	143 a 145
3,58	489	4,49	18000	V60454	143 a 145
3,18	550	4,00	18000	V60455	143 a 145
2,67	654	3,36	18000	V60557	143 a 145
2,33	751	2,93	18000	V60558	143 a 145
2,09	838	2,62	18000	V60559	143 a 145
1,93	906	2,43	18000	V60560	143 a 145
1,60	1.096	2,01	18000	V60561	143 a 145
1,38	1.267	1,74	18000	V60562	143 a 145
1,17	1.499	1,47	18000	V60563	143 a 145
1,04	1.681	1,31	18000	V60565	143 a 145
0,878	1.992	1,10	18000	V60566	143 a 145
0,817	2.141	1,03	18000	V60567	143 a 145
0,728	2.405	0,91	18000	V60568	143 a 145
0,738	2.373	0,93	18000	V60669	143 a 145
0,601	2.911	0,76	18000	V60670	143 a 145
2,37	740	4,46	25000	V62557	146 a 148
2,16	811	4,07	25000	V62558	146 a 148
2,03	864	3,82	25000	V62559	146 a 148
1,68	1.043	3,16	25000	V62560	146 a 148
1,53	1.141	2,89	25000	V62561	146 a 148
1,36	1.284	2,57	25000	V62562	146 a 148
1,24	1.407	2,34	25000	V62563	146 a 148
1,08	1.625	2,03	25000	V62565	146 a 148
0,943	1.856	1,78	25000	V62566	146 a 148
0,803	2.180	1,51	25000	V62567	146 a 148
0,721	2.427	1,36	25000	V62568	146 a 148
0,613	2.857	1,15	25000	V62569	146 a 148
0,608	2.879	1,15	25000	V62670	146 a 148
0,58	3.016	1,09	25000	V62671	146 a 148
0,465	3.764	0,88	25000	V62672	146 a 148
0,402	4.353	0,76	25000	V62673	146 a 148
1,4	1.252	4,68	45000	V64562	149 a 151
1,28	1.372	4,27	45000	V64563	149 a 151
1,1	1.584	3,70	45000	V64565	149 a 151
0,967	1.810	3,24	45000	V64566	149 a 151
0,823	2.126	2,76	45000	V64567	149 a 151
0,739	2.367	2,48	45000	V64568	149 a 151
0,628	2.786	2,11	45000	V64569	149 a 151
0,589	2.971	1,97	45000	V64569	149 a 151
0,595	2.941	1,99	45000	V64670	149 a 151
0,477	3.670	1,60	45000	V64671	149 a 151
0,412	4.245	1,38	45000	V64672	149 a 151



0,25 kW - 1750 rpm

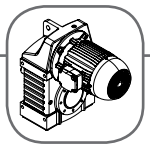


rpm	i_{tot}	fs	Fr (N)	código	páginas
0,386	4.530	1,29	45000	V64673	149 a 151
0,346	5.053	1,16	45000	V64674	149 a 151
0,331	5.294	1,11	45000	V64675	149 a 151
0,265	6.606	0,89	45000	V64676	149 a 151
0,229	7.640	0,77	45000	V64677	149 a 151
0,824	2.124	4,49	70000	V66566	152 a 157
0,701	2.495	3,82	70000	V66568	152 a 157
0,63	2.778	3,43	70000	V66569	152 a 157
0,535	3.270	2,91	70000	V66570	152 a 157
0,502	3.488	2,73	70000	V66571	152 a 157
0,406	4.308	2,21	70000	V66672	152 a 157
0,351	4.982	1,91	70000	V66674	152 a 157
0,329	5.317	1,79	70000	V66675	152 a 157
0,282	6.214	1,53	70000	V66676	152 a 157
0,226	7.754	1,23	70000	V66678	152 a 157
0,195	8.968	1,06	70000	V66679	152 a 157
0,165	10.607	0,90	70000	V66680	152 a 157
0,147	11.896	0,80	70000	V66682	152 a 157
0,124	14.101	0,68	70000	V66683	152 a 157

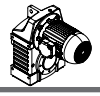
9

0,37 kW - 1750 rpm

417	4,19	13,58	1700	V52212	95 a 97
340	5,14	13,58	1750	V52214	95 a 97
298	5,87	13,58	1800	V52215	95 a 97
260	6,73	13,60	1850	V52216	95 a 97
237	7,39	13,40	1900	V52218	95 a 97
193	9,07	10,92	2000	V52219	95 a 97
169	10,3	9,57	2050	V52220	95 a 97
147	11,9	8,34	2050	V52221	95 a 97
137	12,8	7,77	2100	V52222	95 a 97
127	13,8	7,16	2150	V52223	95 a 97
111	15,8	6,28	2200	V52224	95 a 97
98,3	17,8	5,56	2300	V52225	95 a 97
87,6	20	4,96	2400	V52226	95 a 97
76,1	23	4,31	2500	V52227	95 a 97
70,6	24,8	4,00	2600	V52228	95 a 97
64,3	27,2	3,64	2800	V52229	95 a 97
81	21,6	4,59	2900	V52327	95 a 97
67,8	25,8	3,84	3000	V52328	95 a 97
60	29,1	3,40	3200	V52329	95 a 97
55,6	31,5	3,14	3400	V52330	95 a 97
52,2	33,5	2,95	3500	V52331	95 a 97
43,6	40,1	2,47	3550	V52332	95 a 97
38,7	45,3	2,19	3600	V52333	95 a 97
35,8	48,9	2,02	3700	V52334	95 a 97
32,6	53,7	1,85	3900	V52335	95 a 97
28,2	62	1,60	4000	V52336	95 a 97
24,8	70,6	1,40	4000	V52337	95 a 97
22	79,5	1,25	4000	V52338	95 a 97
19	92,1	1,08	4000	V52339	95 a 97
17,6	99,6	0,99	4000	V52340	95 a 97
15,9	110	0,90	4000	V52341	95 a 97
373	4,7	27,94	2400	V54213	98 a 100
246	7,1	27,90	2600	V54217	98 a 100

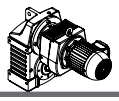


0,37 kW - 1750 rpm

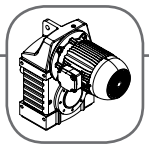


rpm	i_{tot}	fs	Fr (N)	código	páginas
38,2	45,8	4,87	5800	V54334	98 a 100
31,2	56,1	3,97	5800	V54335	98 a 100
27,3	64,1	3,48	5800	V54336	98 a 100
23,8	73,5	3,03	5800	V54337	98 a 100
22,2	78,9	2,82	5800	V54338	98 a 100
20,4	85,6	2,60	5800	V54339	98 a 100
17,9	97,6	2,28	5800	V54340	98 a 100
15,9	110	2,02	5800	V54341	98 a 100
14,1	124	1,80	5800	V54342	98 a 100
12,3	142	1,57	5800	V54343	98 a 100
11,4	153	1,45	5800	V54344	98 a 100
10,4	168	1,32	5800	V54345	98 a 100
27,3	64,1	4,64	7500	V55336	101 a 103
23,8	73,5	4,04	7800	V55337	101 a 103
22,2	78,9	3,77	8000	V55338	101 a 103
20,4	85,6	3,47	8100	V55339	101 a 103
17,9	97,6	3,04	8100	V55340	101 a 103
15,9	110	2,70	8100	V55341	101 a 103
14,1	124	2,40	8100	V55342	101 a 103
12,3	142	2,09	8100	V55343	101 a 103
11,4	153	1,94	8100	V55344	101 a 103
10,4	168	1,76	8100	V55345	101 a 103
21,3	82,3	4,93	10000	V56338	104 a 106
19	92,3	4,40	10000	V56339	104 a 106
16	109	3,71	10000	V56341	104 a 106
14,9	118	3,45	10000	V56342	104 a 106
13,2	132	3,07	10000	V56343	104 a 106
10,6	165	2,46	10000	V56344	104 a 106
9,29	188	2,16	10000	V56345	104 a 106
8,57	204	1,99	10000	V56346	104 a 106

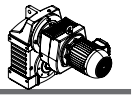
0,37 kW - 1750 rpm



9,79	179	1,25	5800	V54445	131 a 133
7,98	219	1,02	5800	V54446	131 a 133
6,99	250	0,89	5800	V54447	131 a 133
6,1	287	0,78	5800	V54448	131 a 133
11	159	1,87	8100	V55445	134 a 136
8,97	159	1,52	8100	V55446	134 a 136
7,86	223	1,33	8100	V55447	134 a 136
6,85	256	1,16	8100	V55448	134 a 136
6,38	274	1,08	8100	V55449	134 a 136
5,88	298	1,00	8100	V55450	134 a 136
5,16	339	0,88	8100	V55451	134 a 136
4,56	383	0,78	8100	V55452	134 a 136
7,53	233	1,75	10000	V56447	137 a 139
6,59	265	1,53	10000	V56449	137 a 139
5,75	305	1,33	10000	V56450	137 a 139
5,35	327	1,24	10000	V56451	137 a 139
4,93	355	1,15	10000	V56452	137 a 139
4,33	404	1,00	10000	V56453	137 a 139
3,83	457	0,89	10000	V56454	137 a 139
3,41	512	0,79	10000	V56455	137 a 139
9,00	218	3,52	16000	V58447	128 a 130



0,37 kW - 1750 rpm



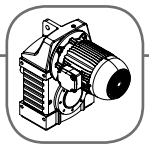
rpm	i_{tot}	fs	Fr (N)	código	páginas
7,41	236	3,25	16000	V58448	140 a 142
6,13	285	2,69	16000	V58449	140 a 142
5,3	330	2,33	16000	V58450	140 a 142
4,48	391	1,97	16000	V58451	140 a 142
4	438	1,75	16000	V58452	140 a 142
3,37	519	1,48	16000	V58454	140 a 142
3,14	558	1,38	16000	V58455	140 a 142
2,79	627	1,22	16000	V58456	140 a 142
2,18	802	0,96	16000	V58558	140 a 142
1,9	921	0,83	16000	V58559	140 a 142
1,7	1.028	0,75	16000	V58560	140 a 142
5,11	342	4,34	18000	V60450	143 a 145
4,56	384	3,87	18000	V60451	143 a 145
3,84	455	3,26	18000	V60452	143 a 145
3,58	489	3,04	18000	V60454	143 a 145
3,18	550	2,70	18000	V60455	143 a 145
2,67	654	2,27	18000	V60557	143 a 145
2,33	751	1,98	18000	V60558	143 a 145
2,09	838	1,77	18000	V60559	143 a 145
1,93	906	1,64	18000	V60560	143 a 145
1,60	1.096	1,36	18000	V60561	143 a 145
1,38	1.267	1,17	18000	V60562	143 a 145
1,17	1.499	0,99	18000	V60563	143 a 145
1,04	1.681	0,88	18000	V60565	143 a 145
0,878	1.992	0,75	18000	V60566	143 a 145
3,66	478	4,67	25000	V62454	146 a 148
3,11	562	3,96	25000	V62455	146 a 148
2,92	600	3,72	25000	V62456	146 a 148
2,37	740	3,01	25000	V62557	146 a 148
2,16	811	2,75	25000	V62558	146 a 148
2,03	864	2,58	25000	V62559	146 a 148
1,68	1.043	2,14	25000	V62560	146 a 148
1,53	1.141	1,95	25000	V62561	146 a 148
1,36	1.284	1,74	25000	V62562	146 a 148
1,24	1.407	1,58	25000	V62563	146 a 148
1,08	1.625	1,37	25000	V62565	146 a 148
0,943	1.856	1,20	25000	V62566	146 a 148
0,803	2.180	1,02	25000	V62567	146 a 148
0,721	2.427	0,92	25000	V62568	146 a 148
0,613	2.857	0,78	25000	V62569	146 a 148
2,08	843	4,70	45000	V64559	149 a 151
1,72	1.017	3,90	45000	V64560	149 a 151
1,57	1.112	3,56	45000	V64561	149 a 151
1,4	1.252	3,17	45000	V64562	149 a 151
1,28	1.372	2,89	45000	V64563	149 a 151
1,1	1.584	2,50	45000	V64565	149 a 151
0,967	1.810	2,19	45000	V64566	149 a 151
0,823	2.126	1,86	45000	V64567	149 a 151
0,739	2.367	1,67	45000	V64568	149 a 151
0,628	2.786	1,42	45000	V64569	149 a 151
0,589	2.971	1,33	45000	V64569	149 a 151
0,595	2.941	1,35	45000	V64670	149 a 151
0,477	3.670	1,08	45000	V64671	149 a 151

0,37 kW - 1750 rpm

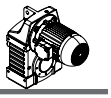
rpm	i_{tot}	fs	Fr (N)	código	páginas
0,412	4.245	0,93	45000	V64672	149 a 151
0,386	4.530	0,87	45000	V64673	149 a 151
0,346	5.053	0,78	45000	V64674	149 a 151
1,34	1.306	4,93	70000	V66562	152 a 157
1,19	1.469	4,38	70000	V66563	152 a 157
1,09	1.611	4,00	70000	V66564	152 a 157
0,941	1.859	3,46	70000	V66565	152 a 157
0,824	2.124	3,03	70000	V66566	152 a 157
0,701	2.495	2,58	70000	V66568	152 a 157
0,63	2.778	2,32	70000	V66569	152 a 157
0,535	3.270	1,97	70000	V66570	152 a 157
0,502	3.488	1,85	70000	V66571	152 a 157
0,406	4.308	1,49	70000	V66672	152 a 157
0,351	4.982	1,29	70000	V66674	152 a 157
0,329	5.317	1,21	70000	V66675	152 a 157
0,282	6.214	1,04	70000	V66676	152 a 157
0,226	7.754	0,83	70000	V66678	152 a 157
0,195	8.968	0,72	70000	V66679	152 a 157

0,55 kW - 1750 rpm

417	4,19	9,14	1700	V52212	95 a 97
340	5,14	9,13	1750	V52214	95 a 97
298	5,87	9,14	1800	V52215	95 a 97
260	6,73	9,15	1850	V52216	95 a 97
237	7,39	9,02	1900	V52218	95 a 97
193	9,07	7,35	2000	V52219	95 a 97
169	10,3	6,44	2050	V52220	95 a 97
147	11,9	5,61	2050	V52221	95 a 97
137	12,8	5,23	2100	V52222	95 a 97
127	13,8	4,82	2150	V52223	95 a 97
111	15,8	4,23	2200	V52224	95 a 97
98,3	17,8	3,74	2300	V52225	95 a 97
87,6	20	3,33	2400	V52226	95 a 97
76,1	23	2,90	2500	V52227	95 a 97
70,6	24,8	2,69	2600	V52228	95 a 97
64,3	27,2	2,45	2800	V52229	95 a 97
81	21,6	3,08	2900	V52327	95 a 97
67,8	25,8	2,58	3000	V52328	95 a 97
60	29,1	2,29	3200	V52329	95 a 97
55,6	31,5	2,12	3400	V52330	95 a 97
52,2	33,5	1,99	3500	V52331	95 a 97
43,6	40,1	1,66	3550	V52332	95 a 97
38,7	45,3	1,47	3600	V52333	95 a 97
35,8	48,9	1,36	3700	V52334	95 a 97
32,6	53,7	1,24	3900	V52335	95 a 97
28,2	62	1,07	4000	V52336	95 a 97
24,8	70,6	0,94	4000	V52337	95 a 97
22	79,5	0,84	4000	V52338	95 a 97
19	92,1	0,72	4000	V52339	95 a 97
373	4,7	18,80	2400	V54213	98 a 100
246	7,1	18,77	2600	V54217	98 a 100
53	33	4,54	5300	V54330	98 a 100
46,2	37,9	3,95	5400	V54331	98 a 100

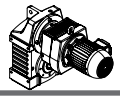


0,55 kW - 1750 rpm



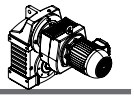
rpm	i_{tot}	fs	Fr (N)	código	páginas
43	40,7	3,68	5500	V54332	98 a 100
39,6	44,2	3,40	5600	V54333	98 a 100
38,2	45,8	3,28	5800	V54334	98 a 100
31,2	56,1	2,67	5800	V54335	98 a 100
27,3	64,1	2,34	5800	V54336	98 a 100
23,8	73,5	2,04	5800	V54337	98 a 100
22,2	78,9	1,90	5800	V54338	98 a 100
20,4	85,6	1,75	5800	V54339	98 a 100
17,9	97,6	1,54	5800	V54340	98 a 100
15,9	110	1,36	5800	V54341	98 a 100
14,1	124	1,21	5800	V54342	98 a 100
12,3	142	1,05	5800	V54343	98 a 100
11,4	153	0,98	5800	V54344	98 a 100
10,4	168	0,89	5800	V54345	98 a 100
43	40,7	4,91	5800	V55332	101 a 103
39,6	44,2	4,53	6000	V55333	101 a 103
38,2	45,8	4,37	6500	V55334	101 a 103
31,2	56,1	3,56	7000	V55335	101 a 103
27,3	64,1	3,12	7500	V55336	101 a 103
23,8	73,5	2,72	7800	V55337	101 a 103
22,2	78,9	2,53	8000	V55338	101 a 103
20,4	85,6	2,34	8100	V55339	101 a 103
17,9	97,6	2,05	8100	V55340	101 a 103
15,9	110	1,81	8100	V55341	101 a 103
14,1	124	1,62	8100	V55342	101 a 103
12,3	142	1,40	8100	V55343	101 a 103
11,4	153	1,30	8100	V55344	101 a 103
10,4	168	1,19	8100	V55345	101 a 103
29,1	60,2	4,54	10000	V56336	104 a 106
25,1	69,6	3,93	10000	V56337	104 a 106
21,3	82,3	3,32	10000	V56338	104 a 106
19	92,3	2,96	10000	V56339	104 a 106
16	109	2,50	10000	V56341	104 a 106
14,9	118	2,32	10000	V56342	104 a 106
13,2	132	2,07	10000	V56343	104 a 106
10,6	165	1,66	10000	V56344	104 a 106
9,29	188	1,45	10000	V56345	104 a 106
8,57	204	1,34	10000	V56346	104 a 106

0,55 kW - 1750 rpm

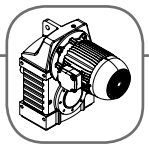


9,79	179	0,84	5800	V54445	131 a 133
7,98	219	0,68	5800	V54446	131 a 133
11	159	1,26	8100	V55445	134 a 136
8,97	159	1,02	8100	V55446	134 a 136
7,86	223	0,90	8100	V55447	134 a 136
6,85	256	0,78	8100	V55448	134 a 136
7,53	233	1,17	10000	V56447	137 a 139
6,59	265	1,03	10000	V56449	137 a 139
5,75	305	0,90	10000	V56450	137 a 139
5,35	327	0,84	10000	V56451	137 a 139
4,93	355	0,77	10000	V56452	137 a 139
9,00	218	2,36	16000	V58447	140 a 142
7,41	236	2,19	16000	V58448	140 a 142
6,13	285	1,81	16000	V58449	140 a 142

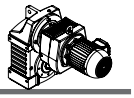
0,55 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
5,3	330	1,56	16000	V58450	140 a 142
4,48	391	1,32	16000	V58451	140 a 142
4	438	1,18	16000	V58452	140 a 142
3,37	519	0,99	16000	V58454	140 a 142
3,14	558	0,93	16000	V58455	140 a 142
2,79	627	0,82	16000	V58456	140 a 142
2,18	802	0,64	16000	V58558	140 a 142
8,45	207	4,83	18000	V60447	143 a 145
6,99	250	3,99	18000	V60448	143 a 145
6,04	290	3,45	18000	V60449	143 a 145
5,11	342	2,92	18000	V60450	143 a 145
4,56	384	2,60	18000	V60451	143 a 145
3,84	455	2,20	18000	V60452	143 a 145
3,58	489	2,04	18000	V60454	143 a 145
3,18	550	1,82	18000	V60455	143 a 145
2,67	654	1,53	18000	V60557	143 a 145
2,33	751	1,33	18000	V60558	143 a 145
2,09	838	1,19	18000	V60559	143 a 145
1,93	906	1,10	18000	V60560	143 a 145
1,60	1.096	0,91	18000	V60561	143 a 145
1,38	1.267	0,79	18000	V60562	143 a 145
5,47	320	4,69	25000	V62450	146 a 148
4,79	365	4,11	25000	V62451	146 a 148
4,08	429	3,49	25000	V62453	146 a 148
3,66	478	3,14	25000	V62454	146 a 148
3,11	562	2,67	25000	V62455	146 a 148
2,92	600	2,50	25000	V62456	146 a 148
2,37	740	2,03	25000	V62557	146 a 148
2,16	811	1,85	25000	V62558	146 a 148
2,03	864	1,74	25000	V62559	146 a 148
1,68	1.043	1,44	25000	V62560	146 a 148
1,53	1.141	1,31	25000	V62561	146 a 148
1,36	1.284	1,17	25000	V62562	146 a 148
1,24	1.407	1,07	25000	V62563	146 a 148
1,08	1.625	0,92	25000	V62565	146 a 148
0,943	1.856	0,81	25000	V62566	146 a 148
0,803	2.180	0,69	25000	V62567	146 a 148
2,84	617	4,32	45000	V64456	149 a 151
2,66	658	4,05	45000	V64457	149 a 151
2,21	791	3,37	45000	V64558	149 a 151
2,08	843	3,16	45000	V64559	149 a 151
1,72	1.017	2,62	45000	V64560	149 a 151
1,57	1.112	2,40	45000	V64561	149 a 151
1,4	1.252	2,13	45000	V64562	149 a 151
1,28	1.372	1,94	45000	V64563	149 a 151
1,1	1.584	1,68	45000	V64565	149 a 151
0,967	1.810	1,47	45000	V64566	149 a 151
0,823	2.126	1,25	45000	V64567	149 a 151
0,739	2.367	1,13	45000	V64568	149 a 151
0,628	2.786	0,96	45000	V64569	149 a 151
0,589	2.971	0,90	45000	V64569	149 a 151
0,595	2.941	0,91	45000	V64670	149 a 151
0,477	3.670	0,73	45000	V64671	149 a 151



0,55 kW - 1750 rpm

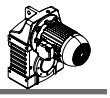


rpm	i_{tot}	fs	Fr (N)	código	páginas
1,88	929	4,66	70000	V66559	152 a 157
1,77	989	4,38	70000	V66560	152 a 157
1,47	1.194	3,63	70000	V66561	152 a 157
1,34	1.306	3,32	70000	V66562	152 a 157
1,19	1.469	2,95	70000	V66563	152 a 157
1,09	1.611	2,69	70000	V66564	152 a 157
0,941	1.859	2,33	70000	V66565	152 a 157
0,824	2.124	2,04	70000	V66566	152 a 157
0,701	2.495	1,74	70000	V66568	152 a 157
0,63	2.778	1,56	70000	V66569	152 a 157
0,535	3.270	1,32	70000	V66570	152 a 157
0,502	3.488	1,24	70000	V66571	152 a 157
0,406	4.308	1,01	70000	V66672	152 a 157
0,351	4.982	0,87	70000	V66674	152 a 157
0,329	5.317	0,81	70000	V66675	152 a 157
0,282	6.214	0,70	70000	V66676	152 a 157

0,75 kW - 1750 rpm

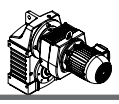
417	4,19	6,70	1700	V52212	95 a 97
340	5,14	6,70	1750	V52214	95 a 97
298	5,87	6,70	1800	V52215	95 a 97
260	6,73	6,71	1850	V52216	95 a 97
237	7,39	6,61	1900	V52218	95 a 97
193	9,07	5,39	2000	V52219	95 a 97
169	10,3	4,72	2050	V52220	95 a 97
147	11,9	4,12	2050	V52221	95 a 97
137	12,8	3,83	2100	V52222	95 a 97
127	13,8	3,53	2150	V52223	95 a 97
111	15,8	3,10	2200	V52224	95 a 97
98,3	17,8	2,74	2300	V52225	95 a 97
87,6	20	2,45	2400	V52226	95 a 97
81	21,6	2,26	2900	V52327	95 a 97
67,8	25,8	1,89	3000	V52328	95 a 97
60	29,1	1,68	3200	V52329	95 a 97
55,6	31,5	1,55	3400	V52330	95 a 97
52,2	33,5	1,46	3500	V52331	95 a 97
43,6	40,1	1,22	3550	V52332	95 a 97
38,7	45,3	1,08	3600	V52333	95 a 97
35,8	48,9	1,00	3700	V52334	95 a 97
32,6	53,7	0,91	3900	V52335	95 a 97
28,2	62	0,79	4000	V52336	95 a 97
373	4,7	13,78	2400	V54213	98 a 100
246	7,1	13,76	2600	V54217	98 a 100
73,1	23,9	4,60	4300	V54228	98 a 100
74,1	23,6	4,66	4800	V54328	98 a 100
60,4	29	3,80	5200	V54329	98 a 100
53	33	3,33	5300	V54330	98 a 100
46,2	37,9	2,90	5400	V54331	98 a 100
43	40,7	2,70	5500	V54332	98 a 100
39,6	44,2	2,49	5600	V54333	98 a 100
38,2	45,8	2,40	5800	V54334	98 a 100
31,2	56,1	1,96	5800	V54335	98 a 100
27,3	64,1	1,72	5800	V54336	98 a 100
23,8	73,5	1,50	5800	V54337	98 a 100

0,75 kW - 1750 rpm

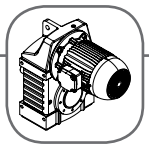


rpm	i_{tot}	fs	Fr (N)	código	páginas
22,2	78,9	1,39	5800	V54338	98 a 100
20,4	85,6	1,28	5800	V54339	98 a 100
17,9	97,6	1,13	5800	V54340	98 a 100
15,9	110	1,00	5800	V54341	98 a 100
14,1	124	0,89	5800	V54342	98 a 100
65,4	26,8	4,84	4500	V55228	101 a 103
58,5	29,9	4,50	4900	V55229	101 a 103
53	33	4,44	5400	V55330	101 a 103
46,2	37,9	3,87	5500	V55331	101 a 103
43	40,7	3,60	5800	V55332	101 a 103
39,6	44,2	3,32	6000	V55333	101 a 103
38,2	45,8	3,20	6500	V55334	101 a 103
31,2	56,1	2,61	7000	V55335	101 a 103
27,3	64,1	2,29	7500	V55336	101 a 103
23,8	73,5	1,99	7800	V55337	101 a 103
22,2	78,9	1,86	8000	V55338	101 a 103
20,4	85,6	1,71	8100	V55339	101 a 103
17,9	97,6	1,50	8100	V55340	101 a 103
15,9	110	1,33	8100	V55341	101 a 103
14,1	124	1,19	8100	V55342	101 a 103
38	46	4,35	10000	V56333	104 a 106
35,2	49,8	4,02	10000	V56334	104 a 106
29,1	60,2	3,33	10000	V56336	104 a 106
25,1	69,6	2,88	10000	V56337	104 a 106
21,3	82,3	2,43	10000	V56338	104 a 106
19	92,3	2,17	10000	V56339	104 a 106
16	109	1,83	10000	V56341	104 a 106
14,9	118	1,70	10000	V56342	104 a 106
13,2	132	1,52	10000	V56343	104 a 106
10,6	165	1,21	10000	V56344	104 a 106
22,9	76,4	4,96	16000	V58338	107 a 109
19,9	88,1	4,30	16000	V58339	107 a 109
17,4	101	3,76	16000	V58340	107 a 109
14,8	118	3,20	16000	V58341	107 a 109
13,3	132	2,88	16000	V58342	107 a 109
11,3	155	2,44	16000	V58344	107 a 109
9,49	184	2,05	16000	V58345	107 a 109
8,52	205	1,84	16000	V58346	107 a 109
7,59	231	1,64	16000	V58347	107 a 109
11	160	4,59	18000	V60344	110 a 112
9,92	176	4,15	18000	V60345	110 a 112
8,41	208	3,52	18000	V60346	110 a 112
7,93	221	3,32	18000	V60347	110 a 112

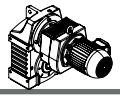
0,75 kW - 1750 rpm



11	159	0,92	8100	V55445	134 a 136
8,97	159	0,75	8100	V55446	134 a 136
7,53	233	0,86	10000	V56447	137 a 139
6,59	265	0,75	10000	V56449	137 a 139
9,00	218	1,73	16000	V58447	140 a 142
7,41	236	1,60	16000	V58448	140 a 142



0,75 kW - 1750 rpm



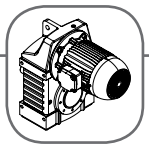
rpm	i_{tot}	fs	Fr (N)	código	páginas
6,13	285	1,33	16000	V58449	140 a 142
5,3	330	1,15	16000	V58450	140 a 142
4,48	391	0,97	16000	V58451	140 a 142
4	438	0,86	16000	V58452	140 a 142
3,37	519	0,73	16000	V58454	140 a 142
8,45	207	3,54	18000	V60447	143 a 145
6,99	250	2,93	18000	V60448	143 a 145
6,04	290	2,53	18000	V60449	143 a 145
5,11	342	2,14	18000	V60450	143 a 145
4,56	384	1,91	18000	V60451	143 a 145
3,84	455	1,61	18000	V60452	143 a 145
3,58	489	1,50	18000	V60454	143 a 145
3,18	550	1,33	18000	V60455	143 a 145
2,67	654	1,12	18000	V60557	143 a 145
2,33	751	0,98	18000	V60558	143 a 145
2,09	838	0,87	18000	V60559	143 a 145
1,93	906	0,81	18000	V60560	143 a 145
1,60	1.096	0,67	18000	V60561	143 a 145
7,8	224	4,90	25000	V62447	146 a 148
6,93	253	4,35	25000	V62448	146 a 148
6,32	277	3,97	25000	V62449	146 a 148
5,47	320	3,44	25000	V62450	146 a 148
4,79	365	3,01	25000	V62451	146 a 148
4,08	429	2,56	25000	V62453	146 a 148
3,66	478	2,30	25000	V62454	146 a 148
3,11	562	1,96	25000	V62455	146 a 148
2,92	600	1,83	25000	V62456	146 a 148
2,37	740	1,49	25000	V62557	146 a 148
2,16	811	1,36	25000	V62558	146 a 148
2,03	864	1,27	25000	V62559	146 a 148
1,68	1.043	1,05	25000	V62560	146 a 148
1,53	1.141	0,96	25000	V62561	146 a 148
1,36	1.284	0,86	25000	V62562	146 a 148
1,24	1.407	0,78	25000	V62563	146 a 148
4,37	401	4,88	45000	V64452	149 a 151
3,72	471	4,15	45000	V64453	149 a 151
3,34	524	3,73	45000	V64455	149 a 151
2,84	617	3,17	45000	V64456	149 a 151
2,66	658	2,97	45000	V64457	149 a 151
2,21	791	2,47	45000	V64558	149 a 151
2,08	843	2,32	45000	V64559	149 a 151
1,72	1.017	1,92	45000	V64560	149 a 151
1,57	1.112	1,76	45000	V64561	149 a 151
1,4	1.252	1,56	45000	V64562	149 a 151
1,28	1.372	1,42	45000	V64563	149 a 151
1,1	1.584	1,23	45000	V64565	149 a 151
0,967	1.810	1,08	45000	V64566	149 a 151
0,823	2.126	0,92	45000	V64567	149 a 151
0,739	2.367	0,83	45000	V64568	149 a 151
0,628	2.786	0,70	45000	V64569	149 a 151
2,57	682	4,66	70000	V66456	152 a 157
2,32	754	4,21	70000	V66457	152 a 157
2,07	847	3,75	70000	V66558	152 a 157
1,88	929	3,42	70000	V66559	152 a 157

0,75 kW - 1750 rpm

rpm	i_{tot}	fs	Fr (N)	código	páginas
1,77	989	3,21	70000	V66560	152 a 157
1,47	1.194	2,66	70000	V66561	152 a 157
1,34	1.306	2,43	70000	V66562	152 a 157
1,19	1.469	2,16	70000	V66563	152 a 157
1,09	1.611	1,97	70000	V66564	152 a 157
0,941	1.859	1,71	70000	V66565	152 a 157
0,824	2.124	1,50	70000	V66566	152 a 157
0,701	2.495	1,27	70000	V66568	152 a 157
0,63	2.778	1,14	70000	V66569	152 a 157
0,535	3.270	0,97	70000	V66570	152 a 157
0,502	3.488	0,91	70000	V66571	152 a 157
0,406	4.308	0,74	70000	V66672	152 a 157
1,85	945	4,65	100000	V68559	158 a 163
1,81	965	4,56	100000	V68560	158 a 163
1,68	1.042	4,22	100000	V68561	158 a 163
1,43	1.221	3,60	100000	V68562	158 a 163
1,24	1.409	3,12	100000	V68563	158 a 163
1,07	1.635	2,69	100000	V68564	158 a 163
0,99	1.767	2,49	100000	V68565	158 a 163
0,864	2.025	2,17	100000	V68566	158 a 163
0,745	2.350	1,87	100000	V68567	158 a 163
0,681	2.570	1,71	100000	V68568	158 a 163
0,612	2.858	1,54	100000	V68569	158 a 163
0,571	3.065	1,43	100000	V68570	158 a 163
0,511	3.426	1,28	100000	V68571	158 a 163
0,503	3.478	1,26	100000	V68671	158 a 163
0,425	4.119	1,07	100000	V68672	158 a 163
0,39	4.493	0,98	100000	V68673	158 a 163
0,335	5.218	0,84	100000	V68674	158 a 163
0,303	5.778	0,76	100000	V68675	158 a 163

1,10 kW - 1750 rpm

417	4,19	4,57	1700	V52212	95 a 97
340	5,14	4,57	1750	V52214	95 a 97
298	5,87	4,57	1800	V52215	95 a 97
260	6,73	4,58	1850	V52216	95 a 97
237	7,39	4,51	1900	V52218	95 a 97
193	9,07	3,67	2000	V52219	95 a 97
169	10,3	3,22	2050	V52220	95 a 97
147	11,9	2,81	2050	V52221	95 a 97
137	12,8	2,61	2100	V52222	95 a 97
127	13,8	2,41	2150	V52223	95 a 97
111	15,8	2,11	2200	V52224	95 a 97
98,3	17,8	1,87	2300	V52225	95 a 97
87,6	20	1,67	2400	V52226	95 a 97
81	21,6	1,54	2900	V52327	95 a 97
67,8	25,8	1,29	3000	V52328	95 a 97
60	29,1	1,14	3200	V52329	95 a 97
55,6	31,5	1,06	3400	V52330	95 a 97
52,2	33,5	0,99	3500	V52331	95 a 97
43,6	40,1	0,83	3550	V52332	95 a 97
38,7	45,3	0,74	3600	V52333	95 a 97
373	4,7	9,40	2400	V54213	98 a 100



1,10 kW - 1750 rpm

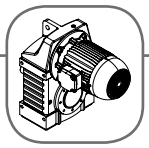
rpm	i_{tot}	fs	Fr (N)	código	páginas
246	7,1	9,38	2600	V54217	98 a 100
105	16,7	4,48	3600	V54224	98 a 100
88,3	19,8	3,78	3800	V54226	98 a 100
82,2	21,3	3,52	4000	V54227	98 a 100
73,1	23,9	3,13	4300	V54228	98 a 100
74,1	23,6	3,18	4800	V54328	98 a 100
60,4	29	2,59	5200	V54329	98 a 100
53	33	2,27	5300	V54330	98 a 100
46,2	37,9	1,98	5400	V54331	98 a 100
43	40,7	1,84	5500	V54332	98 a 100
39,6	44,2	1,70	5600	V54333	98 a 100
38,2	45,8	1,64	5800	V54334	98 a 100
31,2	56,1	1,34	5800	V54335	98 a 100
27,3	64,1	1,17	5800	V54336	98 a 100
23,8	73,5	1,02	5800	V54337	98 a 100
22,2	78,9	0,95	5800	V54338	98 a 100
20,4	85,6	0,88	5800	V54339	98 a 100
17,9	97,6	0,77	5800	V54340	98 a 100
82,2	21,3	4,69	4400	V55226	101 a 103
65,4	26,8	3,30	4500	V55228	101 a 103
58,5	29,9	3,06	4900	V55229	101 a 103
74,1	23,6	4,23	5200	V55327	101 a 103
60,4	29	3,45	5300	V55329	101 a 103
53	33	3,02	5400	V55330	101 a 103
46,2	37,9	2,64	5500	V55331	101 a 103
43	40,7	2,45	5800	V55332	101 a 103
39,6	44,2	2,26	6000	V55333	101 a 103
38,2	45,8	2,18	6500	V55334	101 a 103
31,2	56,1	1,78	7000	V55335	101 a 103
27,3	64,1	1,56	7500	V55336	101 a 103
23,8	73,5	1,36	7800	V55337	101 a 103
22,2	78,9	1,27	8000	V55338	101 a 103
20,4	85,6	1,17	8100	V55339	101 a 103
17,9	97,6	1,02	8100	V55340	101 a 103
15,9	110	0,91	8100	V55341	101 a 103
14,1	124	0,81	8100	V55342	101 a 103
63,3	27,7	4,94	10000	V56329	104 a 106
52,3	33,4	4,09	10000	V56331	104 a 106
45,3	38,7	3,53	10000	V56332	104 a 106
38	46	2,97	10000	V56333	104 a 106
35,2	49,8	2,74	10000	V56334	104 a 106
29,1	60,2	2,27	10000	V56336	104 a 106
25,1	69,6	1,96	10000	V56337	104 a 106
21,3	82,3	1,66	10000	V56338	104 a 106
19	92,3	1,48	10000	V56339	104 a 106
16	109	1,25	10000	V56341	104 a 106
14,9	118	1,16	10000	V56342	104 a 106
13,2	132	1,03	10000	V56343	104 a 106
10,6	165	0,83	10000	V56344	104 a 106
30,9	56,6	4,56	16000	V58335	107 a 109
28,3	61,9	4,17	16000	V58336	107 a 109
25,1	69,6	3,71	16000	V58337	107 a 109
22,9	76,4	3,38	16000	V58338	107 a 109
19,9	88,1	2,93	16000	V58339	107 a 109
17,4	101	2,56	16000	V58340	107 a 109
14,8	118	2,18	16000	V58341	107 a 109

1,10 kW - 1750 rpm

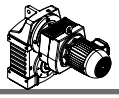
rpm	i_{tot}	fs	Fr (N)	código	páginas
13,3	132	1,96	16000	V58342	107 a 109
11,3	155	1,67	16000	V58344	107 a 109
9,49	184	1,40	16000	V58345	107 a 109
8,52	205	1,26	16000	V58346	107 a 109
7,59	231	1,12	16000	V58347	107 a 109
16,3	107	4,65	17000	V60341	110 a 112
14,3	122	4,09	17500	V60342	110 a 112
12,7	137	3,64	17900	V60343	110 a 112
11	160	3,13	18000	V60344	110 a 112
9,92	176	2,83	18000	V60345	110 a 112
8,41	208	2,40	18000	V60346	110 a 112
7,93	221	2,27	18000	V60347	110 a 112

1,10 kW - 1750 rpm

9,00	218	1,18	16000	V58447	140 a 142
7,41	236	1,09	16000	V58448	140 a 142
6,13	285	0,90	16000	V58449	140 a 142
5,3	330	0,78	16000	V58450	140 a 142
8,45	207	2,41	18000	V60447	143 a 145
6,99	250	2,00	18000	V60448	143 a 145
6,04	290	1,73	18000	V60449	143 a 145
5,11	342	1,46	18000	V60450	143 a 145
4,56	384	1,30	18000	V60451	143 a 145
3,84	455	1,10	18000	V60452	143 a 145
3,58	489	1,02	18000	V60454	143 a 145
3,18	550	0,91	18000	V60455	143 a 145
2,67	654	0,76	18000	V60557	143 a 145
7,8	224	3,34	25000	V62447	146 a 148
6,93	253	2,97	25000	V62448	146 a 148
6,32	277	2,71	25000	V62449	146 a 148
5,47	320	2,34	25000	V62450	146 a 148
4,79	365	2,05	25000	V62451	146 a 148
4,08	429	1,75	25000	V62453	146 a 148
3,66	478	1,57	25000	V62454	146 a 148
3,11	562	1,33	25000	V62455	146 a 148
2,92	600	1,25	25000	V62456	146 a 148
2,37	740	1,01	25000	V62557	146 a 148
2,16	811	0,92	25000	V62558	146 a 148
2,03	864	0,87	25000	V62559	146 a 148
1,68	1.043	0,72	25000	V62560	146 a 148
6,31	277	4,81	45000	V64449	149 a 151
5,76	304	4,38	45000	V64450	149 a 151
4,99	351	3,80	45000	V64451	149 a 151
4,37	401	3,32	45000	V64452	149 a 151
3,72	471	2,83	45000	V64453	149 a 151
3,34	524	2,54	45000	V64455	149 a 151
2,84	617	2,16	45000	V64456	149 a 151
2,66	658	2,03	45000	V64457	149 a 151
2,21	791	1,68	45000	V64558	149 a 151
2,08	843	1,58	45000	V64559	149 a 151
1,72	1.017	1,31	45000	V64560	149 a 151

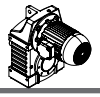


1,10 kW - 1750 rpm



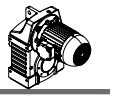
rpm	i_{tot}	fs	Fr (N)	código	páginas
1,57	1.112	1,20	45000	V64561	149 a 151
1,4	1.252	1,06	45000	V64562	149 a 151
1,28	1.372	0,97	45000	V64563	149 a 151
1,1	1.584	0,84	45000	V64565	149 a 151
0,967	1.810	0,74	45000	V64566	149 a 151
3,81	459	4,72	70000	V66453	152 a 157
3,35	523	4,14	70000	V66454	152 a 157
2,98	587	3,69	70000	V66455	152 a 157
2,57	682	3,17	70000	V66456	152 a 157
2,32	754	2,87	70000	V66457	152 a 157
2,07	847	2,56	70000	V66558	152 a 157
1,88	929	2,33	70000	V66559	152 a 157
1,77	989	2,19	70000	V66560	152 a 157
1,47	1.194	1,81	70000	V66561	152 a 157
1,34	1.306	1,66	70000	V66562	152 a 157
1,19	1.469	1,47	70000	V66563	152 a 157
1,09	1.611	1,34	70000	V66564	152 a 157
0,941	1.859	1,16	70000	V66565	152 a 157
0,824	2.124	1,02	70000	V66566	152 a 157
0,701	2.495	0,87	70000	V66568	152 a 157
0,63	2.778	0,78	70000	V66569	152 a 157
2,15	814	3,68	100000	V68558	158 a 163
1,85	945	3,17	100000	V68559	158 a 163
1,81	965	3,11	100000	V68560	158 a 163
1,68	1.042	2,88	100000	V68561	158 a 163
1,43	1.221	2,46	100000	V68562	158 a 163
1,24	1.409	2,13	100000	V68563	158 a 163
1,07	1.635	1,83	100000	V68564	158 a 163
0,99	1.767	1,70	100000	V68565	158 a 163
0,864	2.025	1,48	100000	V68566	158 a 163
0,745	2.350	1,28	100000	V68567	158 a 163
0,681	2.570	1,17	100000	V68568	158 a 163
0,612	2.858	1,05	100000	V68569	158 a 163
0,571	3.065	0,98	100000	V68570	158 a 163
0,511	3.426	0,88	100000	V68571	158 a 163
0,503	3.478	0,86	100000	V68671	158 a 163
0,425	4.119	0,73	100000	V68672	158 a 163

1,50 kW - 1750 rpm

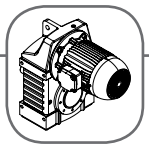


417	4,19	3,35	1700	V52212	95 a 97
340	5,14	3,35	1750	V52214	95 a 97
298	5,87	3,35	1800	V52215	95 a 97
260	6,73	3,36	1850	V52216	95 a 97
237	7,39	3,31	1900	V52218	95 a 97
193	9,07	2,69	2000	V52219	95 a 97
169	10,3	2,36	2050	V52220	95 a 97
147	11,9	2,06	2050	V52221	95 a 97
137	12,8	1,92	2100	V52222	95 a 97
127	13,8	1,77	2150	V52223	95 a 97
111	15,8	1,55	2200	V52224	95 a 97
81	21,6	1,13	2900	V52327	95 a 97
67,8	25,8	0,95	3000	V52328	95 a 97
60	29,1	0,84	3200	V52329	95 a 97

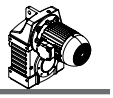
1,50 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
55,6	31,5	0,78	3400	V52330	95 a 97
373	4,7	6,89	2400	V54213	98 a 100
246	7,1	6,88	2600	V54217	98 a 100
139	12,6	4,36	3200	V54222	98 a 100
117	14,9	3,69	3500	V54223	98 a 100
105	16,7	3,29	3600	V54224	98 a 100
88,3	19,8	2,77	3800	V54226	98 a 100
82,2	21,3	2,58	4000	V54227	98 a 100
73,1	23,9	2,30	4300	V54228	98 a 100
74,1	23,6	2,33	4800	V54328	98 a 100
60,4	29	1,90	5200	V54329	98 a 100
53	33	1,66	5300	V54330	98 a 100
46,2	37,9	1,45	5400	V54331	98 a 100
43	40,7	1,35	5500	V54332	98 a 100
39,6	44,2	1,24	5600	V54333	98 a 100
38,2	45,8	1,20	5800	V54334	98 a 100
31,2	56,1	0,98	5800	V54335	98 a 100
27,3	64,1	0,86	5800	V54336	98 a 100
23,8	73,5	0,75	5800	V54337	98 a 100
117	14,9	4,92	4100	V55223	101 a 103
105	16,7	4,38	4200	V55224	101 a 103
88,3	19,8	3,70	4300	V55225	101 a 103
82,2	21,3	3,44	4400	V55226	101 a 103
74,1	23,6	3,11	5200	V55327	101 a 103
60,4	29	2,53	5300	V55329	101 a 103
53	33	2,22	5400	V55330	101 a 103
46,2	37,9	1,93	5500	V55331	101 a 103
43	40,7	1,80	5800	V55332	101 a 103
39,6	44,2	1,66	6000	V55333	101 a 103
38,2	45,8	1,60	6500	V55334	101 a 103
31,2	56,1	1,31	7000	V55335	101 a 103
27,3	64,1	1,14	7500	V55336	101 a 103
23,8	73,5	1,00	7800	V55337	101 a 103
22,2	78,9	0,93	8000	V55338	101 a 103
20,4	85,6	0,86	8100	V55339	101 a 103
17,9	97,6	0,75	8100	V55340	101 a 103
81,2	21,6	4,65	9200	V56227	104 a 106
69	25,4	3,95	9300	V56228	104 a 106
64,7	27,1	3,70	9500	V56229	104 a 106
76,3	22,9	4,37	9700	V56327	104 a 106
68,4	25,6	3,92	9800	V56328	104 a 106
63,3	27,7	3,62	10000	V56329	104 a 106
52,3	33,4	3,00	10000	V56331	104 a 106
45,3	38,7	2,59	10000	V56332	104 a 106
38	46	2,18	10000	V56333	104 a 106

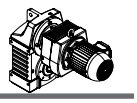


1,50 kW - 1750 rpm

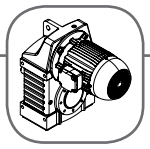


rpm	i_{tot}	fs	Fr (N)	código	páginas
35,2	49,8	2,01	10000	V56334	104 a 106
29,1	60,2	1,66	10000	V56336	104 a 106
25,1	69,6	1,44	10000	V56337	104 a 106
21,3	82,3	1,22	10000	V56338	104 a 106
19	92,3	1,09	10000	V56339	104 a 106
16	109	0,92	10000	V56341	104 a 106
14,9	118	0,85	10000	V56342	104 a 106
13,2	132	0,76	10000	V56343	104 a 106
44,9	39	4,86	16000	V58332	107 a 109
41	42,7	4,43	16000	V58333	107 a 109
37,3	46,9	4,04	16000	V58334	107 a 109
30,9	56,6	3,35	16000	V58335	107 a 109
28,3	61,9	3,06	16000	V58336	107 a 109
25,1	69,6	2,72	16000	V58337	107 a 109
22,9	76,4	2,48	16000	V58338	107 a 109
19,9	88,1	2,15	16000	V58339	107 a 109
17,4	101	1,88	16000	V58340	107 a 109
14,8	118	1,60	16000	V58341	107 a 109
13,3	132	1,44	16000	V58342	107 a 109
11,3	155	1,22	16000	V58344	107 a 109
9,49	184	1,03	16000	V58345	107 a 109
21,4	81,6	4,49	16000	V60338	110 a 112
19,6	89,5	4,10	16500	V60339	110 a 112
17,6	99,3	3,69	16800	V60340	110 a 112
16,3	107	3,41	17000	V60341	110 a 112
14,3	122	3,00	17500	V60342	110 a 112
12,7	137	2,67	17900	V60343	110 a 112
11	160	2,30	18000	V60344	110 a 112
9,92	176	2,08	18000	V60345	110 a 112
8,41	208	1,76	18000	V60346	110 a 112
7,93	221	1,66	18000	V60347	110 a 112

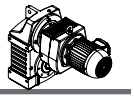
1,50 kW - 1750 rpm



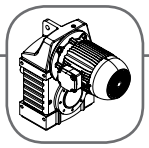
9,00	218	0,87	16000	V58447	140 a 142
7,41	236	0,80	16000	V58448	140 a 142
6,13	285	0,66	16000	V58449	140 a 142
8,45	207	1,77	18000	V60447	143 a 145
6,99	250	1,46	18000	V60448	143 a 145
6,04	290	1,27	18000	V60449	143 a 145
5,11	342	1,07	18000	V60450	143 a 145
4,56	384	0,95	18000	V60451	143 a 145
3,84	455	0,80	18000	V60452	143 a 145
3,58	489	0,75	18000	V60454	143 a 145



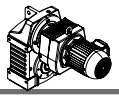
1,50 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
7,8	224	2,45	25000	V62447	146 a 148
6,93	253	2,18	25000	V62448	146 a 148
6,32	277	1,99	25000	V62449	146 a 148
5,47	320	1,72	25000	V62450	146 a 148
4,79	365	1,51	25000	V62451	146 a 148
4,08	429	1,28	25000	V62453	146 a 148
3,66	478	1,15	25000	V62454	146 a 148
3,11	562	0,98	25000	V62455	146 a 148
2,92	600	0,92	25000	V62456	146 a 148
2,37	740	0,74	25000	V62557	146 a 148
7,1	246	3,97	45000	V64448	149 a 151
6,31	277	3,53	45000	V64449	149 a 151
5,76	304	3,22	45000	V64450	149 a 151
4,99	351	2,79	45000	V64451	149 a 151
4,37	401	2,44	45000	V64452	149 a 151
3,72	471	2,08	45000	V64453	149 a 151
3,34	524	1,86	45000	V64455	149 a 151
2,84	617	1,58	45000	V64456	149 a 151
2,66	658	1,49	45000	V64457	149 a 151
2,21	791	1,24	45000	V64558	149 a 151
2,08	843	1,16	45000	V64559	149 a 151
1,72	1.017	0,96	45000	V64560	149 a 151
1,57	1.112	0,88	45000	V64561	149 a 151
1,4	1.252	0,78	45000	V64562	149 a 151
5,02	349	4,55	70000	V66450	152 a 157
4,58	382	4,15	70000	V66451	152 a 157
4,12	425	3,74	70000	V66452	152 a 157
3,81	459	3,46	70000	V66453	152 a 157
3,35	523	3,04	70000	V66454	152 a 157
2,98	587	2,71	70000	V66455	152 a 157
2,57	682	2,33	70000	V66456	152 a 157
2,32	754	2,11	70000	V66457	152 a 157
2,07	847	1,88	70000	V66558	152 a 157
1,88	929	1,71	70000	V66559	152 a 157
1,77	989	1,61	70000	V66560	152 a 157
1,47	1.194	1,33	70000	V66561	152 a 157
1,34	1.306	1,22	70000	V66562	152 a 157
1,19	1.469	1,08	70000	V66563	152 a 157
1,09	1.611	0,99	70000	V66564	152 a 157
0,941	1.859	0,85	70000	V66565	152 a 157
0,824	2.124	0,75	70000	V66566	152 a 157
2,15	814	2,70	100000	V68558	158 a 163
1,85	945	2,33	100000	V68559	158 a 163
1,81	965	2,28	100000	V68560	158 a 163
1,68	1.042	2,11	100000	V68561	158 a 163



1,50 kW - 1750 rpm

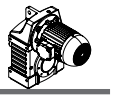


rpm	i_{tot}	fs	Fr (N)	código	páginas
1,43	1.221	1,80	100000	V68562	158 a 163
1,24	1.409	1,56	100000	V68563	158 a 163
1,07	1.635	1,34	100000	V68564	158 a 163
0,99	1.767	1,24	100000	V68565	158 a 163
0,864	2.025	1,09	100000	V68566	158 a 163
0,745	2.350	0,94	100000	V68567	158 a 163
0,681	2.570	0,86	100000	V68568	158 a 163
0,612	2.858	0,77	100000	V68569	158 a 163
2,24	780	5,01	200000	V72558	164 a 166
2,09	838	4,67	200000	V72559	164 a 166
1,80	970	4,03	200000	V72560	164 a 166
1,58	1109	3,53	200000	V72561	164 a 166
1,40	1251	3,13	200000	V72562	164 a 166
1,30	1347	2,90	200000	V72563	164 a 166
1,12	1557	2,51	200000	V72564	164 a 166
0,97	1797	2,18	200000	V72565	164 a 166
0,89	1965	1,99	200000	V72566	164 a 166
0,71	2463	1,59	200000	V72568	164 a 166
0,60	2939	1,33	200000	V72569	164 a 166
0,53	3290	1,19	200000	V72570	164 a 166
0,47	3745	1,04	200000	V72571	164 a 166

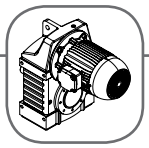
2,20 kW - 1750 rpm

417	4,19	2,28	1700	V52212	95 a 97
340	5,14	2,28	1750	V52214	95 a 97
298	5,87	2,28	1800	V52215	95 a 97
260	6,73	2,29	1850	V52216	95 a 97
237	7,39	2,25	1900	V52218	95 a 97
193	9,07	1,84	2000	V52219	95 a 97
169	10,3	1,61	2050	V52220	95 a 97
147	11,9	1,40	2050	V52221	95 a 97
137	12,8	1,31	2100	V52222	95 a 97
127	13,8	1,20	2150	V52223	95 a 97
111	15,8	1,06	2200	V52224	95 a 97
81	21,6	0,77	2900	V52327	95 a 97
416	4,21	4,72	2300	V54212	98 a 100
373	4,7	4,70	2400	V54213	98 a 100
345	5,08	4,58	2480	V54214	98 a 100
285	6,14	5,10	2550	V54216	98 a 100
246	7,1	4,69	2600	V54217	98 a 100
210	8,34	4,50	2700	V54218	98 a 100
194	9,02	4,16	3000	V54219	98 a 100
161	10,9	3,44	3100	V54221	98 a 100
139	12,6	2,97	3200	V54222	98 a 100
117	14,9	2,51	3500	V54223	98 a 100
105	16,7	2,24	3600	V54224	98 a 100
88,3	19,8	1,89	3800	V54226	98 a 100
82,2	21,3	1,76	4000	V54227	98 a 100
73,1	23,9	1,57	4300	V54228	98 a 100

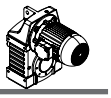
2,20 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
74,1	23,6	1,59	4800	V54328	98 a 100
60,4	29	1,29	5200	V54329	98 a 100
53	33	1,13	5300	V54330	98 a 100
46,2	37,9	0,99	5400	V54331	98 a 100
43	40,7	0,92	5500	V54332	98 a 100
39,6	44,2	0,85	5600	V54333	98 a 100
38,2	45,8	0,82	5800	V54334	98 a 100
31,2	56,1	0,67	5800	V54335	98 a 100
416	4,21	5,54	2800	V55213	101 a 103
345	5,08	5,58	3000	V55214	101 a 103
285	6,14	5,56	3200	V55216	101 a 103
246	7,1	5,51	3400	V55217	101 a 103
210	8,34	5,49	3800	V55218	101 a 103
194	9,02	5,54	3900	V55219	101 a 103
161	10,9	4,59	4000	V55221	101 a 103
139	12,6	3,96	4050	V55222	101 a 103
117	14,9	3,35	4100	V55223	101 a 103
105	16,7	2,99	4200	V55224	101 a 103
88,3	19,8	2,52	4300	V55225	101 a 103
82,2	21,3	2,35	4400	V55226	101 a 103
74,1	23,6	2,12	5200	V55327	101 a 103
60,4	29	1,73	5300	V55329	101 a 103
53	33	1,51	5400	V55330	101 a 103
46,2	37,9	1,32	5500	V55331	101 a 103
43	40,7	1,23	5800	V55332	101 a 103
39,6	44,2	1,13	6000	V55333	101 a 103
38,2	45,8	1,09	6500	V55334	101 a 103
31,2	56,1	0,89	7000	V55335	101 a 103
27,3	64,1	0,78	7500	V55336	101 a 103
121	14,4	4,73	8500	V56223	104 a 106
106	16,5	4,14	8600	V56224	104 a 106
90,4	19,4	3,53	9000	V56226	104 a 106
81,2	21,6	3,17	9200	V56227	104 a 106
69	25,4	2,69	9300	V56228	104 a 106
64,7	27,1	2,52	9500	V56229	104 a 106
76,3	22,9	2,98	9700	V56327	104 a 106
68,4	25,6	2,67	9800	V56328	104 a 106
63,3	27,7	2,47	10000	V56329	104 a 106
52,3	33,4	2,04	10000	V56331	104 a 106
45,3	38,7	1,77	10000	V56332	104 a 106
38	46	1,48	10000	V56333	104 a 106
35,2	49,8	1,37	10000	V56334	104 a 106
29,1	60,2	1,14	10000	V56336	104 a 106
25,1	69,6	0,98	10000	V56337	104 a 106
21,3	82,3	0,83	10000	V56338	104 a 106
19	92,3	0,74	10000	V56339	104 a 106
62,5	28	4,61	15000	V58229	107 a 109
56,6	30,9	4,17	15500	V58230	107 a 109
69,5	25,2	5,13	16000	V58328	107 a 109
66,7	26,2	4,92	16000	V58329	107 a 109
55,3	31,7	4,08	16000	V58330	107 a 109
50,5	34,6	3,73	16000	V58331	107 a 109
44,9	39	3,31	16000	V58332	107 a 109
41	42,7	3,02	16000	V58333	107 a 109
37,3	46,9	2,75	16000	V58334	107 a 109

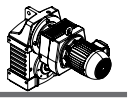


2,20 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
30,9	56,6	2,28	16000	V58335	107 a 109
28,3	61,9	2,09	16000	V58336	107 a 109
25,1	69,6	1,85	16000	V58337	107 a 109
22,9	76,4	1,69	16000	V58338	107 a 109
19,9	88,1	1,46	16000	V58339	107 a 109
17,4	101	1,28	16000	V58340	107 a 109
14,8	118	1,09	16000	V58341	107 a 109
13,3	132	0,98	16000	V58342	107 a 109
11,3	155	0,83	16000	V58344	107 a 109
9,49	184	0,70	16000	V58345	107 a 109
31,9	54,8	4,56	14500	V60335	110 a 112
29,3	59,7	4,18	15000	V60336	110 a 112
25,2	69,4	3,60	15800	V60337	110 a 112
21,4	81,6	3,06	16000	V60338	110 a 112
19,6	89,5	2,79	16500	V60339	110 a 112
17,6	99,3	2,52	16800	V60340	110 a 112
16,3	107	2,33	17000	V60341	110 a 112
14,3	122	2,04	17500	V60342	110 a 112
12,7	137	1,82	17900	V60343	110 a 112
11	160	1,57	18000	V60344	110 a 112
9,92	176	1,42	18000	V60345	110 a 112
8,41	208	1,20	18000	V60346	110 a 112
7,93	221	1,13	18000	V60347	110 a 112

2,20 kW - 1750 rpm



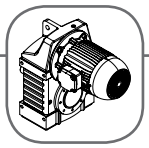
8,45	207	1,21	18000	V60447	143 a 145
6,99	250	1,00	18000	V60448	143 a 145
6,04	290	0,86	18000	V60449	143 a 145
5,11	342	0,73	18000	V60450	143 a 145
7,8	224	1,67	25000	V62447	146 a 148
6,93	253	1,48	25000	V62448	146 a 148
6,32	277	1,35	25000	V62449	146 a 148
5,47	320	1,17	25000	V62450	146 a 148
4,79	365	1,03	25000	V62451	146 a 148
4,08	429	0,87	25000	V62453	146 a 148
3,66	478	0,78	25000	V62454	146 a 148
7,1	246	2,71	45000	V64448	149 a 151
6,31	277	2,40	45000	V64449	149 a 151
5,76	304	2,19	45000	V64450	149 a 151
4,99	351	1,90	45000	V64451	149 a 151
4,37	401	1,66	45000	V64452	149 a 151
3,72	471	1,42	45000	V64453	149 a 151
3,34	524	1,27	45000	V64455	149 a 151
2,84	617	1,08	45000	V64456	149 a 151
2,66	658	1,01	45000	V64457	149 a 151
2,21	791	0,84	45000	V64558	149 a 151
2,08	843	0,79	45000	V64559	149 a 151
6,85	255	4,24	68000	V66448	152 a 157
5,9	297	3,65	70000	V66449	152 a 157
5,02	349	3,10	70000	V66450	152 a 157
4,58	382	2,83	70000	V66451	152 a 157
4,12	425	2,55	70000	V66452	152 a 157

2,20 kW - 1750 rpm

rpm	i_{tot}	fs	Fr (N)	código	páginas
3,81	459	2,36	70000	V66453	152 a 157
3,35	523	2,07	70000	V66454	152 a 157
2,98	587	1,85	70000	V66455	152 a 157
2,57	682	1,59	70000	V66456	152 a 157
2,32	754	1,44	70000	V66457	152 a 157
2,07	847	1,28	70000	V66558	152 a 157
1,88	929	1,17	70000	V66559	152 a 157
1,77	989	1,09	70000	V66560	152 a 157
1,47	1.194	0,91	70000	V66561	152 a 157
1,34	1.306	0,83	70000	V66562	152 a 157
1,19	1.469	0,74	70000	V66563	152 a 157
2,15	814	1,84	100000	V68558	158 a 163
1,85	945	1,59	100000	V68559	158 a 163
1,81	965	1,55	100000	V68560	158 a 163
1,68	1.042	1,44	100000	V68561	158 a 163
1,43	1.221	1,23	100000	V68562	158 a 163
1,24	1.409	1,06	100000	V68563	158 a 163
1,07	1.635	0,92	100000	V68564	158 a 163
0,99	1.767	0,85	100000	V68565	158 a 163
0,864	2.025	0,74	100000	V68566	158 a 163
3,77	464	5,75	200000	V72553	164 a 166
3,26	537	4,96	200000	V72555	164 a 166
2,85	614	4,34	200000	V72556	164 a 166
2,58	679	3,93	200000	V72557	164 a 166
2,24	780	3,42	200000	V72558	164 a 166
2,09	838	3,18	200000	V72559	164 a 166
1,80	970	2,75	200000	V72560	164 a 166
1,58	1109	2,40	200000	V72561	164 a 166
1,40	1251	2,13	200000	V72562	164 a 166
1,30	1347	1,98	200000	V72563	164 a 166
1,12	1557	1,71	200000	V72564	164 a 166
0,97	1797	1,48	200000	V72565	164 a 166
0,89	1965	1,36	200000	V72566	164 a 166
0,71	2463	1,08	200000	V72568	164 a 166

3,00 kW - 1750 rpm

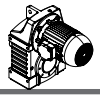
417	4,19	1,68	1700	V52212	95 a 97
340	5,14	1,67	1750	V52214	95 a 97
298	5,87	1,68	1800	V52215	95 a 97
260	6,73	1,68	1850	V52216	95 a 97
237	7,39	1,65	1900	V52218	95 a 97
193	9,07	1,35	2000	V52219	95 a 97
169	10,3	1,18	2050	V52220	95 a 97
147	11,9	1,03	2050	V52221	95 a 97
137	12,8	0,96	2100	V52222	95 a 97
127	13,8	0,88	2150	V52223	95 a 97
416	4,21	3,46	2300	V54212	98 a 100
373	4,7	3,45	2400	V54213	98 a 100
345	5,08	3,36	2480	V54214	98 a 100
285	6,14	3,74	2550	V54216	98 a 100
246	7,1	3,44	2600	V54217	98 a 100
210	8,34	3,30	2700	V54218	98 a 100
194	9,02	3,05	3000	V54219	98 a 100



3,00 kW - 1750 rpm

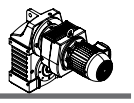
rpm	i_{tot}	fs	Fr (N)	código	páginas
161	10,9	2,52	3100	V54221	98 a 100
139	12,6	2,18	3200	V54222	98 a 100
117	14,9	1,84	3500	V54223	98 a 100
105	16,7	1,64	3600	V54224	98 a 100
88,3	19,8	1,39	3800	V54226	98 a 100
82,2	21,3	1,29	4000	V54227	98 a 100
74,1	23,6	1,16	4800	V54328	98 a 100
60,4	29	0,95	5200	V54329	98 a 100
53	33	0,83	5300	V54330	98 a 100
46,2	37,9	0,72	5400	V54331	98 a 100
416	4,21	4,06	2800	V55213	101 a 103
345	5,08	4,09	3000	V55214	101 a 103
285	6,14	4,08	3200	V55216	101 a 103
246	7,1	4,04	3400	V55217	101 a 103
210	8,34	4,03	3800	V55218	101 a 103
194	9,02	4,06	3900	V55219	101 a 103
161	10,9	3,36	4000	V55221	101 a 103
139	12,6	2,91	4050	V55222	101 a 103
117	14,9	2,46	4100	V55223	101 a 103
105	16,7	2,19	4200	V55224	101 a 103
88,3	19,8	1,85	4300	V55225	101 a 103
82,2	21,3	1,72	4400	V55226	101 a 103
74,1	23,6	1,55	5200	V55327	101 a 103
60,4	29	1,27	5300	V55329	101 a 103
53	33	1,11	5400	V55330	101 a 103
46,2	37,9	0,97	5500	V55331	101 a 103
43	40,7	0,90	5800	V55332	101 a 103
39,6	44,2	0,83	6000	V55333	101 a 103
38,2	45,8	0,80	6500	V55334	101 a 103
31,2	56,1	0,65	7000	V55335	101 a 103
173	10,1	4,94	7600	V56220	104 a 106
153	11,4	4,39	7900	V56221	104 a 106
140	12,5	4,01	8100	V56222	104 a 106
121	14,4	3,47	8500	V56223	104 a 106
106	16,5	3,04	8600	V56224	104 a 106
90,4	19,4	2,59	9000	V56226	104 a 106
81,2	21,6	2,32	9200	V56227	104 a 106
69	25,4	1,97	9300	V56228	104 a 106
64,7	27,1	1,85	9500	V56229	104 a 106
76,3	22,9	2,18	9700	V56327	104 a 106
68,4	25,6	1,96	9800	V56328	104 a 106
63,3	27,7	1,81	10000	V56329	104 a 106
52,3	33,4	1,50	10000	V56331	104 a 106
45,3	38,7	1,30	10000	V56332	104 a 106
38	46	1,09	10000	V56333	104 a 106
35,2	49,8	1,01	10000	V56334	104 a 106
29,1	60,2	0,83	10000	V56336	104 a 106
25,1	69,6	0,72	10000	V56337	104 a 106
81,6	21,5	4,41	14000	V58227	107 a 109
72,7	24,1	3,93	14500	V58228	107 a 109
62,5	28	3,38	15000	V58229	107 a 109
56,6	30,9	3,06	15500	V58230	107 a 109
69,5	25,2	3,76	16000	V58328	107 a 109
66,7	26,2	3,61	16000	V58329	107 a 109

3,00 kW - 1750 rpm

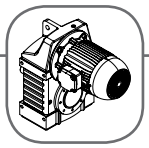


rpm	i_{tot}	fs	Fr (N)	código	páginas
55,3	31,7	2,99	16000	V58330	107 a 109
50,5	34,6	2,73	16000	V58331	107 a 109
44,9	39	2,43	16000	V58332	107 a 109
41	42,7	2,22	16000	V58333	107 a 109
37,3	46,9	2,02	16000	V58334	107 a 109
30,9	56,6	1,67	16000	V58335	107 a 109
28,3	61,9	1,53	16000	V58336	107 a 109
25,1	69,6	1,36	16000	V58337	107 a 109
22,9	76,4	1,24	16000	V58338	107 a 109
19,9	88,1	1,07	16000	V58339	107 a 109
17,4	101	0,94	16000	V58340	107 a 109
14,8	118	0,80	16000	V58341	107 a 109
13,3	132	0,72	16000	V58342	107 a 109
41,9	41,8	4,39	13000	V60332	110 a 112
37,8	46,3	3,96	14000	V60333	110 a 112
31,9	54,8	3,35	14500	V60335	110 a 112
29,3	59,7	3,07	15000	V60336	110 a 112
25,2	69,4	2,64	15800	V60337	110 a 112
21,4	81,6	2,24	16000	V60338	110 a 112
19,6	89,5	2,05	16500	V60339	110 a 112
17,6	99,3	1,84	16800	V60340	110 a 112
16,3	107	1,71	17000	V60341	110 a 112
14,3	122	1,50	17500	V60342	110 a 112
12,7	137	1,34	17900	V60343	110 a 112
11	160	1,15	18000	V60344	110 a 112
9,92	176	1,04	18000	V60345	110 a 112
8,41	208	0,88	18000	V60346	110 a 112
7,93	221	0,83	18000	V60347	110 a 112
30,1	58,1	4,73	22000	V62335	113 a 115
25,9	67,4	4,08	22500	V62336	113 a 115
25,2	69,5	3,96	23000	V62337	113 a 115
21,7	80,6	3,41	23500	V62338	113 a 115
20,1	87,2	3,15	24000	V62339	113 a 115
17,5	99,8	2,75	24200	V62340	113 a 115
15,1	116	2,37	24400	V62341	113 a 115
13,8	127	2,17	24600	V62342	113 a 115
12,4	141	1,95	25000	V62343	113 a 115
11,6	151	1,82	25000	V62344	113 a 115
10,4	169	1,63	25000	V62345	113 a 115
9,19	190	1,44	25000	V62346	113 a 115
7,99	219	1,26	25000	V62347	113 a 115
7,21	243	1,13	25000	V62348	113 a 115

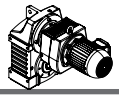
3,00 kW - 1750 rpm



8,45	207	0,88	18000	V60447	143 a 145
6,99	250	0,73	18000	V60448	143 a 145
7,8	224	1,22	25000	V62447	146 a 148
6,93	253	1,09	25000	V62448	146 a 148
6,32	277	0,99	25000	V62449	146 a 148
5,47	320	0,86	25000	V62450	146 a 148
4,79	365	0,75	25000	V62451	146 a 148
7,1	246	1,98	45000	V64448	149 a 151
6,31	277	1,76	45000	V64449	149 a 151
5,76	304	1,61	45000	V64450	149 a 151



3,00 kW - 1750 rpm

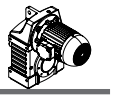


rpm	i_{tot}	fs	Fr (N)	código	páginas
4,99	351	1,39	45000	V64451	149 a 151
4,37	401	1,22	45000	V64452	149 a 151
3,72	471	1,04	45000	V64453	149 a 151
3,34	524	0,93	45000	V64455	149 a 151
2,84	617	0,79	45000	V64456	149 a 151
6,85	255	3,11	68000	V66448	152 a 157
5,9	297	2,68	70000	V66449	152 a 157
5,02	349	2,28	70000	V66450	152 a 157
4,58	382	2,08	70000	V66451	152 a 157
4,12	425	1,87	70000	V66452	152 a 157
3,81	459	1,73	70000	V66453	152 a 157
3,35	523	1,52	70000	V66454	152 a 157
2,98	587	1,35	70000	V66455	152 a 157
2,57	682	1,16	70000	V66456	152 a 157
2,32	754	1,05	70000	V66457	152 a 157
2,07	847	0,94	70000	V66558	152 a 157
1,88	929	0,86	70000	V66559	152 a 157
1,77	989	0,80	70000	V66560	152 a 157
1,47	1.194	0,67	70000	V66561	152 a 157
7,59	231	4,77	100000	V68448	158 a 163
6,55	267	4,12	100000	V68449	158 a 163
5,73	305	3,60	100000	V68450	158 a 163
5,08	344	3,19	100000	V68451	158 a 163
4,72	371	2,96	100000	V68452	158 a 163
4,08	429	2,57	100000	V68453	158 a 163
3,54	495	2,22	100000	V68454	158 a 163
3,23	541	2,03	100000	V68455	158 a 163
2,94	595	1,85	100000	V68456	158 a 163
2,47	710	1,55	100000	V68457	158 a 163
2,15	814	1,35	100000	V68558	158 a 163
1,85	945	1,16	100000	V68559	158 a 163
1,81	965	1,14	100000	V68560	158 a 163
1,68	1.042	1,05	100000	V68561	158 a 163
1,43	1.221	0,90	100000	V68562	158 a 163
1,24	1.409	0,78	100000	V68563	158 a 163
4,65	376	5,20	200000	V72551	164 a 166
4,05	432	4,52	200000	V72552	164 a 166
3,77	464	4,21	200000	V72553	164 a 166
3,26	537	3,64	200000	V72555	164 a 166
2,85	614	3,18	200000	V72556	164 a 166
2,58	679	2,88	200000	V72557	164 a 166
2,24	780	2,51	200000	V72558	164 a 166
2,09	838	2,33	200000	V72559	164 a 166
1,80	970	2,02	200000	V72560	164 a 166
1,58	1109	1,76	200000	V72561	164 a 166
1,40	1251	1,56	200000	V72562	164 a 166
1,30	1347	1,45	200000	V72563	164 a 166
1,12	1557	1,26	200000	V72564	164 a 166
0,97	1797	1,09	200000	V72565	164 a 166

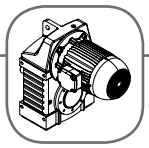
3,70 kW - 1750 rpm

417	4,19	1,36	1700	V52212	95 a 97
340	5,14	1,36	1750	V52214	95 a 97

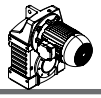
3,70 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
298	5,87	1,36	1800	V52215	95 a 97
260	6,73	1,36	1850	V52216	95 a 97
237	7,39	1,34	1900	V52218	95 a 97
193	9,07	1,09	2000	V52219	95 a 97
169	10,3	0,96	2050	V52220	95 a 97
147	11,9	0,83	2050	V52221	95 a 97
137	12,8	0,78	2100	V52222	95 a 97
416	4,21	2,81	2300	V54212	98 a 100
373	4,7	2,79	2400	V54213	98 a 100
345	5,08	2,72	2480	V54214	98 a 100
285	6,14	3,03	2550	V54216	98 a 100
246	7,1	2,79	2600	V54217	98 a 100
210	8,34	2,67	2700	V54218	98 a 100
194	9,02	2,47	3000	V54219	98 a 100
161	10,9	2,04	3100	V54221	98 a 100
139	12,6	1,77	3200	V54222	98 a 100
117	14,9	1,49	3500	V54223	98 a 100
105	16,7	1,33	3600	V54224	98 a 100
88,3	19,8	1,12	3800	V54226	98 a 100
82,2	21,3	1,05	4000	V54227	98 a 100
74,1	23,6	0,94	4800	V54328	98 a 100
60,4	29	0,77	5200	V54329	98 a 100
416	4,21	3,29	2800	V55213	101 a 103
345	5,08	3,32	3000	V55214	101 a 103
285	6,14	3,31	3200	V55216	101 a 103
246	7,1	3,28	3400	V55217	101 a 103
210	8,34	3,27	3800	V55218	101 a 103
194	9,02	3,30	3900	V55219	101 a 103
161	10,9	2,73	4000	V55221	101 a 103
139	12,6	2,36	4050	V55222	101 a 103
117	14,9	1,99	4100	V55223	101 a 103
105	16,7	1,78	4200	V55224	101 a 103
88,3	19,8	1,50	4300	V55225	101 a 103
82,2	21,3	1,40	4400	V55226	101 a 103
74,1	23,6	1,26	5200	V55327	101 a 103
60,4	29	1,03	5300	V55329	101 a 103
53	33	0,90	5400	V55330	101 a 103
46,2	37,9	0,78	5500	V55331	101 a 103
200	8,74	4,65	7100	V56219	104 a 106
173	10,1	4,01	7600	V56220	104 a 106
153	11,4	3,56	7900	V56221	104 a 106
140	12,5	3,25	8100	V56222	104 a 106
121	14,4	2,81	8500	V56223	104 a 106
106	16,5	2,46	8600	V56224	104 a 106
90,4	19,4	2,10	9000	V56226	104 a 106
81,2	21,6	1,88	9200	V56227	104 a 106
69	25,4	1,60	9300	V56228	104 a 106
64,7	27,1	1,50	9500	V56229	104 a 106
76,3	22,9	1,77	9700	V56327	104 a 106
68,4	25,6	1,59	9800	V56328	104 a 106
63,3	27,7	1,47	10000	V56329	104 a 106
52,3	33,4	1,21	10000	V56331	104 a 106
45,3	38,7	1,05	10000	V56332	104 a 106
38	46	0,88	10000	V56333	104 a 106
35,2	49,8	0,82	10000	V56334	104 a 106
29,1	60,2	0,67	10000	V56336	104 a 106

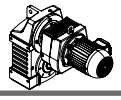


3,70 kW - 1750 rpm



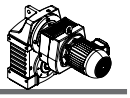
rpm	i_{tot}	fs	Fr (N)	código	páginas
112	15,7	4,89	12000	V58224	107 a 109
100	17,4	4,41	13000	V58225	107 a 109
92,9	18,8	4,08	13500	V58226	107 a 109
81,6	21,5	3,58	14000	V58227	107 a 109
72,7	24,1	3,19	14500	V58228	107 a 109
62,5	28	2,74	15000	V58229	107 a 109
56,6	30,9	2,48	15500	V58230	107 a 109
69,5	25,2	3,05	16000	V58328	107 a 109
66,7	26,2	2,93	16000	V58329	107 a 109
55,3	31,7	2,42	16000	V58330	107 a 109
50,5	34,6	2,22	16000	V58331	107 a 109
44,9	39	1,97	16000	V58332	107 a 109
41	42,7	1,80	16000	V58333	107 a 109
37,3	46,9	1,64	16000	V58334	107 a 109
30,9	56,6	1,36	16000	V58335	107 a 109
28,3	61,9	1,24	16000	V58336	107 a 109
25,1	69,6	1,10	16000	V58337	107 a 109
22,9	76,4	1,01	16000	V58338	107 a 109
19,9	88,1	0,87	16000	V58339	107 a 109
17,4	101	0,76	16000	V58340	107 a 109
53,1	33	4,51	12000	V60330	110 a 112
48,6	36	4,13	12500	V60331	110 a 112
41,9	41,8	3,56	13000	V60332	110 a 112
37,8	46,3	3,21	14000	V60333	110 a 112
31,9	54,8	2,71	14500	V60335	110 a 112
29,3	59,7	2,49	15000	V60336	110 a 112
25,2	69,4	2,14	15800	V60337	110 a 112
21,4	81,6	1,82	16000	V60338	110 a 112
19,6	89,5	1,66	16500	V60339	110 a 112
17,6	99,3	1,50	16800	V60340	110 a 112
16,3	107	1,38	17000	V60341	110 a 112
14,3	122	1,21	17500	V60342	110 a 112
12,7	137	1,08	17900	V60343	110 a 112
11	160	0,93	18000	V60344	110 a 112
9,92	176	0,84	18000	V60345	110 a 112
8,41	208	0,71	18000	V60346	110 a 112
37,3	46,9	4,75	21600	V62333	113 a 115
34,5	50,7	4,39	21700	V62334	113 a 115
30,1	58,1	3,84	22000	V62335	113 a 115
25,9	67,4	3,30	22500	V62336	113 a 115
25,2	69,5	3,21	23000	V62337	113 a 115
21,7	80,6	2,76	23500	V62338	113 a 115
20,1	87,2	2,56	24000	V62339	113 a 115
17,5	99,8	2,23	24200	V62340	113 a 115
15,1	116	1,92	24400	V62341	113 a 115
13,8	127	1,76	24600	V62342	113 a 115
12,4	141	1,58	25000	V62343	113 a 115
11,6	151	1,47	25000	V62344	113 a 115
10,4	169	1,32	25000	V62345	113 a 115
9,19	190	1,17	25000	V62346	113 a 115
7,99	219	1,02	25000	V62347	113 a 115
7,21	243	0,92	25000	V62348	113 a 115

3,70 kW - 1750 rpm



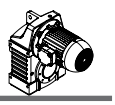
7,8	224	0,99	25000	V62447	143 a 145
6,93	253	0,88	25000	V62448	143 a 145

3,70 kW - 1750 rpm

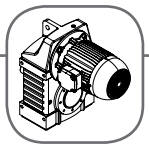


rpm	i_{tot}	fs	Fr (N)	código	páginas
6,32	277	0,80	25000	V62449	143 a 145
5,47	320	0,70	25000	V62450	143 a 145
7,1	246	1,61	45000	V64448	146 a 148
6,31	277	1,43	45000	V64449	146 a 148
5,76	304	1,30	45000	V64450	146 a 148
4,99	351	1,13	45000	V64451	146 a 148
4,37	401	0,99	45000	V64452	146 a 148
3,72	471	0,84	45000	V64453	146 a 148
3,34	524	0,76	45000	V64455	146 a 148
6,85	255	2,52	68000	V66448	152 a 157
5,9	297	2,17	70000	V66449	152 a 157
5,02	349	1,85	70000	V66450	152 a 157
4,58	382	1,68	70000	V66451	152 a 157
4,12	425	1,52	70000	V66452	152 a 157
3,81	459	1,40	70000	V66453	152 a 157
3,35	523	1,23	70000	V66454	152 a 157
2,98	587	1,10	70000	V66455	152 a 157
2,57	682	0,94	70000	V66456	152 a 157
2,32	754	0,85	70000	V66457	152 a 157
2,07	847	0,76	70000	V66558	152 a 157
7,59	231	3,87	100000	V68448	158 a 163
6,55	267	3,34	100000	V68449	158 a 163
5,73	305	2,92	100000	V68450	158 a 163
5,08	344	2,59	100000	V68451	158 a 163
4,72	371	2,40	100000	V68452	158 a 163
4,08	429	2,08	100000	V68453	158 a 163
3,54	495	1,80	100000	V68454	158 a 163
3,23	541	1,65	100000	V68455	158 a 163
2,94	595	1,50	100000	V68456	158 a 163
2,47	710	1,26	100000	V68457	158 a 163
2,15	814	1,09	100000	V68558	158 a 163
1,85	945	0,94	100000	V68559	158 a 163
1,81	965	0,92	100000	V68560	158 a 163
1,68	1.042	0,86	100000	V68561	158 a 163
1,43	1.221	0,73	100000	V68562	158 a 163
5,93	295	5,37	195000	V72549	164 a 166
5,19	337	4,70	200000	V72550	164 a 166
4,65	376	4,21	200000	V72551	164 a 166
4,05	432	3,67	200000	V72552	164 a 166
3,77	464	3,42	200000	V72553	164 a 166
3,26	537	2,95	200000	V72555	164 a 166
2,85	614	2,58	200000	V72556	164 a 166
2,58	679	2,33	200000	V72557	164 a 166
2,24	780	2,03	200000	V72558	164 a 166
2,09	838	1,89	200000	V72559	164 a 166
1,80	970	1,63	200000	V72560	164 a 166
1,58	1109	1,43	200000	V72561	164 a 166
1,40	1251	1,27	200000	V72562	164 a 166
1,30	1347	1,18	200000	V72563	164 a 166
1,12	1557	1,02	200000	V72564	164 a 166

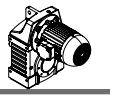
4,50 kW - 1750 rpm



416	4,21	2,31	2300	V54212	98 a 100
373	4,7	2,30	2400	V54213	98 a 100

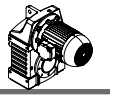


4,50 kW - 1750 rpm



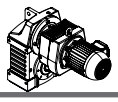
rpm	i_{tot}	fs	Fr (N)	código	páginas
345	5,08	2,24	2480	V54214	98 a 100
285	6,14	2,49	2550	V54216	98 a 100
246	7,1	2,29	2600	V54217	98 a 100
210	8,34	2,20	2700	V54218	98 a 100
194	9,02	2,03	3000	V54219	98 a 100
161	10,9	1,68	3100	V54221	98 a 100
139	12,6	1,45	3200	V54222	98 a 100
117	14,9	1,23	3500	V54223	98 a 100
105	16,7	1,10	3600	V54224	98 a 100
74,1	23,6	0,78	4800	V54328	98 a 100
416	4,21	2,71	2800	V55213	101 a 103
345	5,08	2,73	3000	V55214	101 a 103
285	6,14	2,72	3200	V55216	101 a 103
246	7,1	2,70	3400	V55217	101 a 103
210	8,34	2,69	3800	V55218	101 a 103
194	9,02	2,71	3900	V55219	101 a 103
161	10,9	2,24	4000	V55221	101 a 103
139	12,6	1,94	4050	V55222	101 a 103
117	14,9	1,64	4100	V55223	101 a 103
105	16,7	1,46	4200	V55224	101 a 103
74,1	23,6	1,04	5200	V55327	101 a 103
60,4	29	0,84	5300	V55329	101 a 103
53	33	0,74	5400	V55330	101 a 103
392	4,46	4,56	6000	V56213	104 a 106
376	4,65	4,47	6500	V56214	104 a 106
312	5,61	4,50	6700	V56215	104 a 106
285	6,14	4,51	6800	V56216	104 a 106
253	6,91	4,48	6900	V56217	104 a 106
231	7,57	4,41	7000	V56218	104 a 106
200	8,74	3,82	7100	V56219	104 a 106
173	10,1	3,30	7600	V56220	104 a 106
153	11,4	2,93	7900	V56221	104 a 106
140	12,5	2,67	8100	V56222	104 a 106
121	14,4	2,31	8500	V56223	104 a 106
106	16,5	2,03	8600	V56224	104 a 106
90,4	19,4	1,72	9000	V56226	104 a 106
81,2	21,6	1,55	9200	V56227	104 a 106
76,3	22,9	1,46	9700	V56327	104 a 106
68,4	25,6	1,31	9800	V56328	104 a 106
63,3	27,7	1,21	10000	V56329	104 a 106
52,3	33,4	1,00	10000	V56331	104 a 106
45,3	38,7	0,86	10000	V56332	104 a 106
38	46	0,73	10000	V56333	104 a 106
122	14,3	4,41	11500	V58223	107 a 109
112	15,7	4,02	12000	V58224	107 a 109
100	17,4	3,62	13000	V58225	107 a 109
92,9	18,8	3,35	13500	V58226	107 a 109
81,6	21,5	2,94	14000	V58227	107 a 109
72,7	24,1	2,62	14500	V58228	107 a 109
62,5	28	2,26	15000	V58229	107 a 109
56,6	30,9	2,04	15500	V58230	107 a 109
69,5	25,2	2,51	16000	V58328	107 a 109
66,7	26,2	2,41	16000	V58329	107 a 109
55,3	31,7	1,99	16000	V58330	107 a 109
50,5	34,6	1,82	16000	V58331	107 a 109

4,50 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
44,9	39	1,62	16000	V58332	107 a 109
41	42,7	1,48	16000	V58333	107 a 109
37,3	46,9	1,35	16000	V58334	107 a 109
30,9	56,6	1,12	16000	V58335	107 a 109
28,3	61,9	1,02	16000	V58336	107 a 109
25,1	69,6	0,91	16000	V58337	107 a 109
22,9	76,4	0,83	16000	V58338	107 a 109
19,9	88,1	0,72	16000	V58339	107 a 109
71,3	24,5	4,98	10200	V60228	110 a 112
63,8	27,4	4,45	10400	V60229	110 a 112
65,2	26,9	4,55	11000	V60328	110 a 112
62,8	27,8	4,39	11500	V60329	110 a 112
53,1	33	3,70	12000	V60330	110 a 112
48,6	36	3,40	12500	V60331	110 a 112
41,9	41,8	2,92	13000	V60332	110 a 112
37,8	46,3	2,64	14000	V60333	110 a 112
31,9	54,8	2,23	14500	V60335	110 a 112
29,3	59,7	2,04	15000	V60336	110 a 112
25,2	69,4	1,76	15800	V60337	110 a 112
21,4	81,6	1,50	16000	V60338	110 a 112
19,6	89,5	1,37	16500	V60339	110 a 112
17,6	99,3	1,23	16800	V60340	110 a 112
16,3	107	1,14	17000	V60341	110 a 112
14,3	122	1,00	17500	V60342	110 a 112
12,7	137	0,89	17900	V60343	110 a 112
11	160	0,77	18000	V60344	110 a 112
43,3	40,4	4,53	21500	V62332	113 a 115
37,3	46,9	3,90	21600	V62333	113 a 115
34,5	50,7	3,61	21700	V62334	113 a 115
30,1	58,1	3,15	22000	V62335	113 a 115
25,9	67,4	2,72	22500	V62336	113 a 115
25,2	69,5	2,64	23000	V62337	113 a 115
21,7	80,6	2,27	23500	V62338	113 a 115
20,1	87,2	2,10	24000	V62339	113 a 115
17,5	99,8	1,84	24200	V62340	113 a 115
15,1	116	1,58	24400	V62341	113 a 115
13,8	127	1,45	24600	V62342	113 a 115
12,4	141	1,30	25000	V62343	113 a 115
11,6	151	1,21	25000	V62344	113 a 115
10,4	169	1,08	25000	V62345	113 a 115
9,19	190	0,96	25000	V62346	113 a 115
7,99	219	0,84	25000	V62347	113 a 115
7,21	243	0,76	25000	V62348	113 a 115

4,50 kW - 1750 rpm



7,8	224	0,82	25000	V62447	146 a 148
6,93	253	0,73	25000	V62448	146 a 148
7,1	246	1,32	45000	V64448	149 a 151
6,31	277	1,18	45000	V64449	149 a 151
5,76	304	1,07	45000	V64450	149 a 151
4,99	351	0,93	45000	V64451	149 a 151
4,37	401	0,81	45000	V64452	149 a 151
3,72	471	0,69	45000	V64453	149 a 151
6,85	255	2,07	68000	V66448	152 a 157

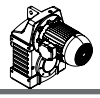
4,50 kW - 1750 rpm

rpm	i_{tot}	fs	Fr (N)	código	páginas
5,9	297	1,78	70000	V66449	152 a 157
5,02	349	1,52	70000	V66450	152 a 157
4,58	382	1,38	70000	V66451	152 a 157
4,12	425	1,25	70000	V66452	152 a 157
3,81	459	1,15	70000	V66453	152 a 157
3,35	523	1,01	70000	V66454	152 a 157
2,98	587	0,90	70000	V66455	152 a 157
2,57	682	0,78	70000	V66456	152 a 157
7,59	231	3,18	100000	V68448	158 a 163
6,55	267	2,75	100000	V68449	158 a 163
5,73	305	2,40	100000	V68450	158 a 163
5,08	344	2,13	100000	V68451	158 a 163
4,72	371	1,98	100000	V68452	158 a 163
4,08	429	1,71	100000	V68453	158 a 163
3,54	495	1,48	100000	V68454	158 a 163
3,23	541	1,35	100000	V68455	158 a 163
2,94	595	1,23	100000	V68456	158 a 163
2,47	710	1,03	100000	V68457	158 a 163
2,15	814	0,90	100000	V68558	158 a 163
1,85	945	0,78	100000	V68559	158 a 163
6,87	255	5,11	190000	V72548	164 a 166
5,93	295	4,42	195000	V72549	164 a 166
5,19	337	3,86	200000	V72550	164 a 166
4,65	376	3,47	200000	V72551	164 a 166
4,05	432	3,02	200000	V72552	164 a 166
3,77	464	2,81	200000	V72553	164 a 166
3,26	537	2,43	200000	V72555	164 a 166
2,85	614	2,12	200000	V72556	164 a 166
2,58	679	1,92	200000	V72557	164 a 166
2,24	780	1,67	200000	V72558	164 a 166
2,09	838	1,56	200000	V72559	164 a 166
1,80	970	1,34	200000	V72560	164 a 166
1,58	1109	1,18	200000	V72561	164 a 166
1,40	1251	1,04	200000	V72562	164 a 166

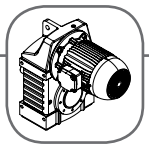
5,50 kW - 1750 rpm

416	4,21	1,89	2300	V54212	98 a 100
373	4,7	1,88	2400	V54213	98 a 100
345	5,08	1,83	2480	V54214	98 a 100
285	6,14	2,04	2550	V54216	98 a 100
246	7,1	1,88	2600	V54217	98 a 100
210	8,34	1,80	2700	V54218	98 a 100
194	9,02	1,66	3000	V54219	98 a 100
161	10,9	1,38	3100	V54221	98 a 100
139	12,6	1,19	3200	V54222	98 a 100
117	14,9	1,01	3500	V54223	98 a 100
105	16,7	0,90	3600	V54224	98 a 100
74,1	23,6	0,64	4800	V54328	98 a 100
416	4,21	2,22	2800	V55213	101 a 103
345	5,08	2,23	3000	V55214	101 a 103
285	6,14	2,22	3200	V55216	101 a 103
246	7,1	2,21	3400	V55217	101 a 103
210	8,34	2,20	3800	V55218	101 a 103

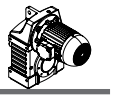
5,50 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
194	9,02	2,22	3900	V55219	101 a 103
161	10,9	1,83	4000	V55221	101 a 103
139	12,6	1,59	4050	V55222	101 a 103
117	14,9	1,34	4100	V55223	101 a 103
105	16,7	1,20	4200	V55224	101 a 103
74,1	23,6	0,85	5200	V55327	101 a 103
60,4	29	0,69	5300	V55329	101 a 103
392	4,46	3,73	6000	V56213	104 a 106
376	4,65	3,65	6500	V56214	104 a 106
312	5,61	3,68	6700	V56215	104 a 106
285	6,14	3,69	6800	V56216	104 a 106
253	6,91	3,67	6900	V56217	104 a 106
231	7,57	3,61	7000	V56218	104 a 106
200	8,74	3,13	7100	V56219	104 a 106
173	10,1	2,70	7600	V56220	104 a 106
153	11,4	2,40	7900	V56221	104 a 106
140	12,5	2,19	8100	V56222	104 a 106
121	14,4	1,89	8500	V56223	104 a 106
106	16,5	1,66	8600	V56224	104 a 106
90,4	19,4	1,41	9000	V56226	104 a 106
81,2	21,6	1,27	9200	V56227	104 a 106
76,3	22,9	1,19	9700	V56327	104 a 106
68,4	25,6	1,07	9800	V56328	104 a 106
63,3	27,7	0,99	10000	V56329	104 a 106
52,3	33,4	0,82	10000	V56331	104 a 106
45,3	38,7	0,71	10000	V56332	104 a 106
167	10,5	4,93	10500	V58220	107 a 109
144	12,2	4,24	11000	V58222	107 a 109
122	14,3	3,61	11500	V58223	107 a 109
112	15,7	3,29	12000	V58224	107 a 109
100	17,4	2,96	13000	V58225	107 a 109
92,9	18,8	2,74	13500	V58226	107 a 109
81,6	21,5	2,41	14000	V58227	107 a 109
72,7	24,1	2,15	14500	V58228	107 a 109
62,5	28	1,85	15000	V58229	107 a 109
56,6	30,9	1,67	15500	V58230	107 a 109
69,5	25,2	2,05	16000	V58328	107 a 109
66,7	26,2	1,97	16000	V58329	107 a 109
55,3	31,7	1,63	16000	V58330	107 a 109
50,5	34,6	1,49	16000	V58331	107 a 109
44,9	39	1,33	16000	V58332	107 a 109
41	42,7	1,21	16000	V58333	107 a 109
37,3	46,9	1,10	16000	V58334	107 a 109
30,9	56,6	0,91	16000	V58335	107 a 109
28,3	61,9	0,83	16000	V58336	107 a 109
25,1	69,6	0,74	16000	V58337	107 a 109
85,1	20,6	4,86	10000	V60226	110 a 112
76,5	22,9	4,37	10100	V60227	110 a 112
71,3	24,5	4,07	10200	V60228	110 a 112
63,8	27,4	3,64	10400	V60229	110 a 112
65,2	26,9	3,72	11000	V60328	110 a 112
62,8	27,8	3,59	11500	V60329	110 a 112
53,1	33	3,03	12000	V60330	110 a 112
48,6	36	2,78	12500	V60331	110 a 112
41,9	41,8	2,39	13000	V60332	110 a 112

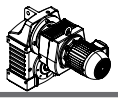


5,50 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
37,8	46,3	2,16	14000	V60333	110 a 112
31,9	54,8	1,82	14500	V60335	110 a 112
29,3	59,7	1,67	15000	V60336	110 a 112
25,2	69,4	1,44	15800	V60337	110 a 112
21,4	81,6	1,22	16000	V60338	110 a 112
19,6	89,5	1,12	16500	V60339	110 a 112
17,6	99,3	1,01	16800	V60340	110 a 112
16,3	107	0,93	17000	V60341	110 a 112
14,3	122	0,82	17500	V60342	110 a 112
12,7	137	0,73	17900	V60343	110 a 112
53,5	32,7	4,58	19000	V62230	113 a 115
50	35	4,28	21000	V62331	113 a 115
43,3	40,4	3,71	21500	V62332	113 a 115
37,3	46,9	3,19	21600	V62333	113 a 115
34,5	50,7	2,96	21700	V62334	113 a 115
30,1	58,1	2,58	22000	V62335	113 a 115
25,9	67,4	2,22	22500	V62336	113 a 115
25,2	69,5	2,16	23000	V62337	113 a 115
21,7	80,6	1,86	23500	V62338	113 a 115
20,1	87,2	1,72	24000	V62339	113 a 115
17,5	99,8	1,50	24200	V62340	113 a 115
15,1	116	1,29	24400	V62341	113 a 115
13,8	127	1,18	24600	V62342	113 a 115
12,4	141	1,06	25000	V62343	113 a 115
11,6	151	0,99	25000	V62344	113 a 115
10,4	169	0,89	25000	V62345	113 a 115
9,19	190	0,79	25000	V62346	113 a 115

5,50 kW - 1750 rpm



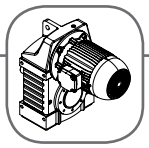
7,1	246	1,08	45000	V64448	149 a 151
6,31	277	0,96	45000	V64449	149 a 151
5,76	304	0,88	45000	V64450	149 a 151
4,99	351	0,76	45000	V64451	149 a 151
6,85	255	1,70	68000	V66448	152 a 157
5,9	297	1,46	70000	V66449	152 a 157
5,02	349	1,24	70000	V66450	152 a 157
4,58	382	1,13	70000	V66451	152 a 157
4,12	425	1,02	70000	V66452	152 a 157
3,81	459	0,94	70000	V66453	152 a 157
3,35	523	0,83	70000	V66454	152 a 157
2,98	587	0,74	70000	V66455	152 a 157
7,59	231	2,60	100000	V68448	158 a 163
6,55	267	2,25	100000	V68449	158 a 163
5,73	305	1,97	100000	V68450	158 a 163
5,08	344	1,74	100000	V68451	158 a 163
4,72	371	1,62	100000	V68452	158 a 163
4,08	429	1,40	100000	V68453	158 a 163
3,54	495	1,21	100000	V68454	158 a 163
3,23	541	1,11	100000	V68455	158 a 163
2,94	595	1,01	100000	V68456	158 a 163
2,47	710	0,85	100000	V68457	158 a 163
2,15	814	0,74	100000	V68558	158 a 163

5,50 kW - 1750 rpm

rpm	i_{tot}	fs	Fr (N)	código	páginas
8,47	207	5,16	185000	V72546	164 a 166
7,37	237	4,49	187000	V72547	164 a 166
6,87	255	4,18	190000	V72548	164 a 166
5,93	295	3,61	195000	V72549	164 a 166
5,19	337	3,16	200000	V72550	164 a 166
4,65	376	2,84	200000	V72551	164 a 166
4,05	432	2,47	200000	V72552	164 a 166
3,77	464	2,30	200000	V72553	164 a 166
3,26	537	1,98	200000	V72555	164 a 166
2,85	614	1,74	200000	V72556	164 a 166
2,58	679	1,57	200000	V72557	164 a 166
2,24	780	1,37	200000	V72558	164 a 166
2,09	838	1,27	200000	V72559	164 a 166
1,80	970	1,10	200000	V72560	164 a 166

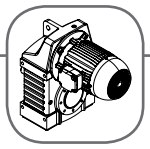
7,50 kW - 1750 rpm

416	4,21	1,38	2300	V54212	98 a 100
373	4,7	1,38	2400	V54213	98 a 100
345	5,08	1,34	2480	V54214	98 a 100
285	6,14	1,50	2550	V54216	98 a 100
246	7,1	1,38	2600	V54217	98 a 100
210	8,34	1,32	2700	V54218	98 a 100
194	9,02	1,22	3000	V54219	98 a 100
161	10,9	1,01	3100	V54221	98 a 100
139	12,6	0,87	3200	V54222	98 a 100
117	14,9	0,74	3500	V54223	98 a 100
416	4,21	1,62	2800	V55213	101 a 103
345	5,08	1,64	3000	V55214	101 a 103
285	6,14	1,63	3200	V55216	101 a 103
246	7,1	1,62	3400	V55217	101 a 103
210	8,34	1,61	3800	V55218	101 a 103
194	9,02	1,63	3900	V55219	101 a 103
161	10,9	1,35	4000	V55221	101 a 103
139	12,6	1,16	4050	V55222	101 a 103
117	14,9	0,98	4100	V55223	101 a 103
105	16,7	0,88	4200	V55224	101 a 103
74,1	23,6	0,62	5200	V55327	101 a 103
392	4,46	2,74	6000	V56213	104 a 106
376	4,65	2,68	6500	V56214	104 a 106
312	5,61	2,70	6700	V56215	104 a 106
285	6,14	2,71	6800	V56216	104 a 106
253	6,91	2,69	6900	V56217	104 a 106
231	7,57	2,65	7000	V56218	104 a 106
200	8,74	2,29	7100	V56219	104 a 106
173	10,1	1,98	7600	V56220	104 a 106
153	11,4	1,76	7900	V56221	104 a 106
140	12,5	1,60	8100	V56222	104 a 106
121	14,4	1,39	8500	V56223	104 a 106
106	16,5	1,22	8600	V56224	104 a 106
90,4	19,4	1,03	9000	V56226	104 a 106
81,2	21,6	0,93	9200	V56227	104 a 106
76,3	22,9	0,87	9700	V56327	104 a 106
68,4	25,6	0,78	9800	V56328	104 a 106



7,50 kW - 1750 rpm

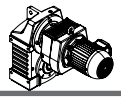
rpm	i_{tot}	fs	Fr (N)	código	páginas
425	4,11	4,94	9000	V58212	107 a 109
410	4,27	4,98	9100	V58213	107 a 109
346	5,05	4,98	9500	V58214	107 a 109
318	5,51	4,97	9600	V58215	107 a 109
273	6,4	4,96	9700	V58216	107 a 109
232	7,53	5,03	9800	V58217	107 a 109
216	8,11	4,67	10100	V58218	107 a 109
182	9,61	3,94	10200	V58219	107 a 109
167	10,5	3,61	10500	V58220	107 a 109
144	12,2	3,11	11000	V58222	107 a 109
122	14,3	2,65	11500	V58223	107 a 109
112	15,7	2,41	12000	V58224	107 a 109
100	17,4	2,17	13000	V58225	107 a 109
92,9	18,8	2,01	13500	V58226	107 a 109
81,6	21,5	1,77	14000	V58227	107 a 109
72,7	24,1	1,57	14500	V58228	107 a 109
62,5	28	1,35	15000	V58229	107 a 109
56,6	30,9	1,22	15500	V58230	107 a 109
69,5	25,2	1,50	16000	V58328	107 a 109
66,7	26,2	1,44	16000	V58329	107 a 109
55,3	31,7	1,20	16000	V58330	107 a 109
50,5	34,6	1,09	16000	V58331	107 a 109
44,9	39	0,97	16000	V58332	107 a 109
41	42,7	0,89	16000	V58333	107 a 109
37,3	46,9	0,81	16000	V58334	107 a 109
30,9	56,6	0,67	16000	V58335	107 a 109
108	16,2	4,52	9800	V60224	110 a 112
93	18,8	3,90	9900	V60225	110 a 112
85,1	20,6	3,56	10000	V60226	110 a 112
76,5	22,9	3,20	10100	V60227	110 a 112
71,3	24,5	2,99	10200	V60228	110 a 112
63,8	27,4	2,67	10400	V60229	110 a 112
65,2	26,9	2,73	11000	V60328	110 a 112
62,8	27,8	2,63	11500	V60329	110 a 112
53,1	33	2,22	12000	V60330	110 a 112
48,6	36	2,04	12500	V60331	110 a 112
41,9	41,8	1,75	13000	V60332	110 a 112
37,8	46,3	1,58	14000	V60333	110 a 112
31,9	54,8	1,34	14500	V60335	110 a 112
29,3	59,7	1,23	15000	V60336	110 a 112
25,2	69,4	1,06	15800	V60337	110 a 112
21,4	81,6	0,90	16000	V60338	110 a 112
19,6	89,5	0,82	16500	V60339	110 a 112
17,6	99,3	0,74	16800	V60340	110 a 112
76,7	22,8	4,82	17000	V62227	113 a 115
70,2	24,9	4,41	17500	V62228	113 a 115
63,8	27,4	4,01	18000	V62229	113 a 115
53,5	32,7	3,36	19000	V62230	113 a 115
63,2	27,7	3,97	19500	V62329	113 a 115
58,5	29,9	3,68	20000	V62330	113 a 115
50	35	3,14	21000	V62331	113 a 115
43,3	40,4	2,72	21500	V62332	113 a 115
37,3	46,9	2,34	21600	V62333	113 a 115
34,5	50,7	2,17	21700	V62334	113 a 115
30,1	58,1	1,89	22000	V62335	113 a 115
25,9	67,4	1,63	22500	V62336	113 a 115
25,2	69,5	1,58	23000	V62337	113 a 115



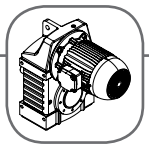
7,50 kW - 1750 rpm

rpm	i_{tot}	fs	Fr (N)	código	páginas
21,7	80,6	1,36	23500	V62338	113 a 115
20,1	87,2	1,26	24000	V62339	113 a 115
17,5	99,8	1,10	24200	V62340	113 a 115
15,1	116	0,95	24400	V62341	113 a 115
13,8	127	0,87	24600	V62342	113 a 115
12,4	141	0,78	25000	V62343	113 a 115
39	44,9	4,35	42000	V64333	116 a 118
34,9	50,1	3,90	42500	V64334	116 a 118
29,8	58,7	3,33	43000	V64335	116 a 118
25,8	67,8	2,88	43900	V64337	116 a 118
22,3	78,6	2,49	44000	V64338	116 a 118
20,6	85	2,30	44500	V64339	116 a 118
18	97,4	2,01	45000	V64340	116 a 118
15,5	113	1,73	45000	V64341	116 a 118
14,2	124	1,58	45000	V64342	116 a 118
12,7	137	1,42	45000	V64343	116 a 118
10,6	165	1,19	45000	V64344	116 a 118
9,43	186	1,05	45000	V64345	116 a 118
9,43	213	0,92	45000	V64346	116 a 118
9,43	237	0,83	45000	V64347	116 a 118
26,7	65,5	4,85	48900	V66336	119 a 121
23,4	74,8	4,25	49000	V66337	119 a 121
20,7	84,4	3,76	51000	V66338	119 a 121
19,2	90,9	3,49	51600	V66339	119 a 121
16,7	105	3,02	53000	V66340	119 a 121
14,4	121	2,62	54000	V66342	119 a 121
13,2	133	2,39	59000	V66343	119 a 121
12	146	2,18	60000	V66344	119 a 121
10,1	174	1,83	61600	V66345	119 a 121
8,98	195	1,63	64000	V66346	119 a 121
7,82	224	1,42	65000	V66347	119 a 121

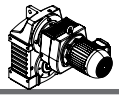
7,50 kW - 1750 rpm



6,85	255	1,24	68000	V66448	152 a 157
5,9	297	1,07	70000	V66449	152 a 157
5,02	349	0,91	70000	V66450	152 a 157
4,58	382	0,83	70000	V66451	152 a 157
4,12	425	0,75	70000	V66452	152 a 157
7,59	231	1,91	97000	V68448	158 a 163
6,55	267	1,65	99000	V68449	158 a 163
5,73	305	1,44	99500	V68450	158 a 163
5,08	344	1,28	99800	V68451	158 a 163
4,72	371	1,19	100000	V68452	158 a 163
4,08	429	1,03	100000	V68453	158 a 163
3,54	495	0,89	100000	V68454	158 a 163
3,23	541	0,81	100000	V68455	158 a 163
2,94	595	0,74	100000	V68456	158 a 163
8,47	207	3,78	185000	V72546	164 a 166
7,37	237	3,29	187000	V72547	164 a 166
6,87	255	3,07	190000	V72548	164 a 166
5,93	295	2,65	195000	V72549	164 a 166
5,19	337	2,32	200000	V72550	164 a 166
4,65	376	2,08	200000	V72551	164 a 166
4,05	432	1,81	200000	V72552	164 a 166



7,50 kW - 1750 rpm

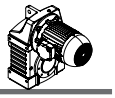


rpm	i_{tot}	fs	Fr (N)	código	páginas
3,77	464	1,69	200000	V72553	164 a 166
3,26	537	1,46	200000	V72555	164 a 166
2,85	614	1,27	200000	V72556	164 a 166
2,58	679	1,15	200000	V72557	164 a 166
2,24	780	1,00	200000	V72558	164 a 166

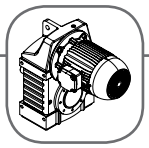
9,20 kW - 1750 rpm

416	4,21	1,13	2300	V54212	98 a 100
373	4,7	1,12	2400	V54213	98 a 100
345	5,08	1,09	2480	V54214	98 a 100
285	6,14	1,22	2550	V54216	98 a 100
246	7,1	1,12	2600	V54217	98 a 100
210	8,34	1,08	2700	V54218	98 a 100
194	9,02	0,99	3000	V54219	98 a 100
161	10,9	0,82	3100	V54221	98 a 100
139	12,6	0,71	3200	V54222	98 a 100
416	4,21	1,32	2800	V55213	101 a 103
345	5,08	1,33	3000	V55214	101 a 103
285	6,14	1,33	3200	V55216	101 a 103
246	7,1	1,32	3400	V55217	101 a 103
210	8,34	1,31	3800	V55218	101 a 103
194	9,02	1,33	3900	V55219	101 a 103
161	10,9	1,10	4000	V55221	101 a 103
139	12,6	0,95	4050	V55222	101 a 103
117	14,9	0,80	4100	V55223	101 a 103
105	16,7	0,71	4200	V55224	101 a 103
392	4,46	2,23	6000	V56213	104 a 106
376	4,65	2,18	6500	V56214	104 a 106
312	5,61	2,20	6700	V56215	104 a 106
285	6,14	2,21	6800	V56216	104 a 106
253	6,91	2,19	6900	V56217	104 a 106
231	7,57	2,16	7000	V56218	104 a 106
200	8,74	1,87	7100	V56219	104 a 106
173	10,1	1,61	7600	V56220	104 a 106
153	11,4	1,43	7900	V56221	104 a 106
140	12,5	1,31	8100	V56222	104 a 106
121	14,4	1,13	8500	V56223	104 a 106
106	16,5	0,99	8600	V56224	104 a 106
90,4	19,4	0,84	9000	V56226	104 a 106
81,2	21,6	0,76	9200	V56227	104 a 106
425	4,11	4,03	9000	V58212	107 a 109
410	4,27	4,06	9100	V58213	107 a 109
346	5,05	4,06	9500	V58214	107 a 109
318	5,51	4,05	9600	V58215	107 a 109
273	6,4	4,05	9700	V58216	107 a 109
232	7,53	4,10	9800	V58217	107 a 109
216	8,11	3,81	10100	V58218	107 a 109
182	9,61	3,21	10200	V58219	107 a 109
167	10,5	2,95	10500	V58220	107 a 109
144	12,2	2,54	11000	V58222	107 a 109
122	14,3	2,16	11500	V58223	107 a 109
112	15,7	1,97	12000	V58224	107 a 109
100	17,4	1,77	13000	V58225	107 a 109
92,9	18,8	1,64	13500	V58226	107 a 109
81,6	21,5	1,44	14000	V58227	107 a 109

9,20 kW - 1750 rpm



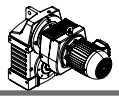
rpm	i_{tot}	fs	Fr (N)	código	páginas
72,7	24,1	1,28	14500	V58228	107 a 109
62,5	28	1,10	15000	V58229	107 a 109
56,6	30,9	1,00	15500	V58230	107 a 109
69,5	25,2	1,23	16000	V58328	107 a 109
66,7	26,2	1,18	16000	V58329	107 a 109
55,3	31,7	0,97	16000	V58330	107 a 109
50,5	34,6	0,89	16000	V58331	107 a 109
44,9	39	0,79	16000	V58332	107 a 109
134	13,1	4,56	9500	V60222	110 a 112
124	14,1	4,22	9700	V60223	110 a 112
108	16,2	3,69	9800	V60224	110 a 112
93	18,8	3,18	9900	V60225	110 a 112
85,1	20,6	2,90	10000	V60226	110 a 112
76,5	22,9	2,61	10100	V60227	110 a 112
71,3	24,5	2,44	10200	V60228	110 a 112
63,8	27,4	2,18	10400	V60229	110 a 112
65,2	26,9	2,23	11000	V60328	110 a 112
62,8	27,8	2,15	11500	V60329	110 a 112
53,1	33	1,81	12000	V60330	110 a 112
48,6	36	1,66	12500	V60331	110 a 112
41,9	41,8	1,43	13000	V60332	110 a 112
37,8	46,3	1,29	14000	V60333	110 a 112
31,9	54,8	1,09	14500	V60335	110 a 112
29,3	59,7	1,00	15000	V60336	110 a 112
25,2	69,4	0,86	15800	V60337	110 a 112
21,4	81,6	0,73	16000	V60338	110 a 112
88,6	19,8	4,54	16000	V62226	113 a 114
76,7	22,8	3,93	17000	V62227	113 a 114
70,2	24,9	3,59	17500	V62228	113 a 114
63,8	27,4	3,27	18000	V62229	113 a 114
53,5	32,7	2,74	19000	V62230	113 a 114
63,2	27,7	3,24	19500	V62329	113 a 114
58,5	29,9	3,00	20000	V62330	113 a 114
50	35	2,56	21000	V62331	113 a 114
43,3	40,4	2,22	21500	V62332	113 a 114
37,3	46,9	1,91	21600	V62333	113 a 114
34,5	50,7	1,77	21700	V62334	113 a 114
30,1	58,1	1,54	22000	V62335	113 a 114
25,9	67,4	1,33	22500	V62336	113 a 114
25,2	69,5	1,29	23000	V62337	113 a 114
21,7	80,6	1,11	23500	V62338	113 a 114
20,1	87,2	1,03	24000	V62339	113 a 114
17,5	99,8	0,90	24200	V62340	113 a 114
15,1	116	0,77	24400	V62341	113 a 114
52,7	33,2	4,80	40000	V64331	116 a 118
45	38,9	4,10	41000	V64332	116 a 118
39	44,9	3,55	42000	V64333	116 a 118
34,9	50,1	3,18	42500	V64334	116 a 118
29,8	58,7	2,71	43000	V64335	116 a 118
25,8	67,8	2,35	43900	V64337	116 a 118
22,3	78,6	2,03	44000	V64338	116 a 118
20,6	85	1,87	44500	V64339	116 a 118
18	97,4	1,64	45000	V64340	116 a 118
15,5	113	1,41	45000	V64341	116 a 118
14,2	124	1,29	45000	V64342	116 a 118



9,20 kW - 1750 rpm

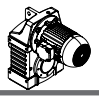
rpm	i_{tot}	fs	Fr (N)	código	páginas
12,7	137	1,16	45000	V64343	116 a 118
10,6	165	0,97	45000	V64344	116 a 118
9,43	186	0,86	45000	V64345	116 a 118
9,43	213	0,75	45000	V64346	116 a 118
33,2	52,7	4,92	47900	V66334	119 a 121
31	56,5	4,58	48000	V66335	119 a 121
26,7	65,5	3,96	48900	V66336	119 a 121
23,4	74,8	3,46	49000	V66337	119 a 121
20,7	84,4	3,07	51000	V66338	119 a 121
19,2	90,9	2,85	51600	V66339	119 a 121
16,7	105	2,46	53000	V66340	119 a 121
14,4	121	2,13	54000	V66342	119 a 121
13,2	133	1,95	59000	V66343	119 a 121
12	146	1,78	60000	V66344	119 a 121
10,1	174	1,49	61600	V66345	119 a 121
8,98	195	1,33	64000	V66346	119 a 121
7,82	224	1,16	65000	V66347	119 a 121

9,20 kW - 1750 rpm



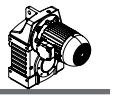
6,85	255	1,01	68000	V66448	152 a 157
5,9	297	0,87	70000	V66449	152 a 157
5,02	349	0,74	70000	V66450	152 a 157
7,59	231	1,55	97000	V68448	158 a 163
6,55	267	1,34	99000	V68449	158 a 163
5,73	305	1,17	99500	V68450	158 a 163
5,08	344	1,04	99800	V68451	158 a 163
4,72	371	0,97	100000	V68452	158 a 163
4,08	429	0,84	100000	V68453	158 a 163
3,54	495	0,72	100000	V68454	158 a 163
8,47	207	3,09	185000	V72546	164 a 166
7,37	237	2,69	187000	V72547	164 a 166
6,87	255	2,50	190000	V72548	164 a 166
5,93	295	2,16	195000	V72549	164 a 166
5,19	337	1,89	200000	V72550	164 a 166
4,65	376	1,69	200000	V72551	164 a 166
4,05	432	1,48	200000	V72552	164 a 166
3,77	464	1,37	200000	V72553	164 a 166
3,26	537	1,19	200000	V72555	164 a 166
2,85	614	1,04	200000	V72556	164 a 166

11,00 kW - 1750 rpm

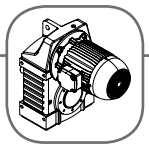


416	4,21	0,94	2300	V54212	98 a 100
373	4,7	0,94	2400	V54213	98 a 100
345	5,08	0,92	2480	V54214	98 a 100
285	6,14	1,02	2550	V54216	98 a 100
246	7,1	0,94	2600	V54217	98 a 100
210	8,34	0,90	2700	V54218	98 a 100
194	9,02	0,83	3000	V54219	98 a 100
161	10,9	0,69	3100	V54221	98 a 100
416	4,21	1,11	2800	V55213	101 a 103
345	5,08	1,12	3000	V55214	101 a 103

11,00 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
285	6,14	1,11	3200	V55216	101 a 103
246	7,1	1,10	3400	V55217	101 a 103
210	8,34	1,10	3800	V55218	101 a 103
194	9,02	1,11	3900	V55219	101 a 103
161	10,9	0,92	4000	V55221	101 a 103
139	12,6	0,79	4050	V55222	101 a 103
392	4,46	1,87	6000	V56213	104 a 106
376	4,65	1,83	6500	V56214	104 a 106
312	5,61	1,84	6700	V56215	104 a 106
285	6,14	1,85	6800	V56216	104 a 106
253	6,91	1,83	6900	V56217	104 a 106
231	7,57	1,80	7000	V56218	104 a 106
200	8,74	1,56	7100	V56219	104 a 106
173	10,1	1,35	7600	V56220	104 a 106
153	11,4	1,20	7900	V56221	104 a 106
140	12,5	1,09	8100	V56222	104 a 106
121	14,4	0,95	8500	V56223	104 a 106
106	16,5	0,83	8600	V56224	104 a 106
90,4	19,4	0,71	9000	V56226	104 a 106
425	4,11	3,37	9000	V58212	107 a 109
410	4,27	3,40	9100	V58213	107 a 109
346	5,05	3,40	9500	V58214	107 a 109
318	5,51	3,39	9600	V58215	107 a 109
273	6,4	3,38	9700	V58216	107 a 109
232	7,53	3,43	9800	V58217	107 a 109
216	8,11	3,18	10100	V58218	107 a 109
182	9,61	2,69	10200	V58219	107 a 109
167	10,5	2,46	10500	V58220	107 a 109
144	12,2	2,12	11000	V58222	107 a 109
122	14,3	1,80	11500	V58223	107 a 109
112	15,7	1,65	12000	V58224	107 a 109
100	17,4	1,48	13000	V58225	107 a 109
92,9	18,8	1,37	13500	V58226	107 a 109
81,6	21,5	1,20	14000	V58227	107 a 109
72,7	24,1	1,07	14500	V58228	107 a 109
62,5	28	0,92	15000	V58229	107 a 109
56,6	30,9	0,83	15500	V58230	107 a 109
69,5	25,2	1,03	16000	V58328	107 a 109
66,7	26,2	0,98	16000	V58329	107 a 109
55,3	31,7	0,82	16000	V58330	107 a 109
50,5	34,6	0,75	16000	V58331	107 a 109
155	11,3	4,43	9000	V60221	110 a 112
134	13,1	3,82	9500	V60222	110 a 112
124	14,1	3,53	9700	V60223	110 a 112
108	16,2	3,08	9800	V60224	110 a 112
93	18,8	2,66	9900	V60225	110 a 112
85,1	20,6	2,43	10000	V60226	110 a 112
76,5	22,9	2,18	10100	V60227	110 a 112
71,3	24,5	2,04	10200	V60228	110 a 112
63,8	27,4	1,82	10400	V60229	110 a 112
65,2	26,9	1,86	11000	V60328	110 a 112
62,8	27,8	1,79	11500	V60329	110 a 112
53,1	33	1,52	12000	V60330	110 a 112
48,6	36	1,39	12500	V60331	110 a 112
41,9	41,8	1,20	13000	V60332	110 a 112
37,8	46,3	1,08	14000	V60333	110 a 112
31,9	54,8	0,91	14500	V60335	110 a 112



11,00 kW - 1750 rpm

rpm	i_{tot}	fs	Fr (N)	código	páginas
29,3	59,7	0,84	15000	V60336	110 a 112
25,2	69,4	0,72	15800	V60337	110 a 112
110	15,9	4,72	13500	V62224	113 a 115
102	17,1	4,19	15000	V62225	113 a 115
88,6	19,8	3,79	16000	V62226	113 a 115
76,7	22,8	3,29	17000	V62227	113 a 115
70,2	24,9	3,01	17500	V62228	113 a 115
63,8	27,4	2,73	18000	V62229	113 a 115
53,5	32,7	2,29	19000	V62230	113 a 115
63,2	27,7	2,71	19500	V62329	113 a 115
58,5	29,9	2,51	20000	V62330	113 a 115
50	35	2,14	21000	V62331	113 a 115
43,3	40,4	1,85	21500	V62332	113 a 115
37,3	46,9	1,60	21600	V62333	113 a 115
34,5	50,7	1,48	21700	V62334	113 a 115
30,1	58,1	1,29	22000	V62335	113 a 115
25,9	67,4	1,11	22500	V62336	113 a 115
25,2	69,5	1,08	23000	V62337	113 a 115
21,7	80,6	0,93	23500	V62338	113 a 115
20,1	87,2	0,86	24000	V62339	113 a 115
17,5	99,8	0,75	24200	V62340	113 a 115
64,2	27,3	4,89	37000	V64229	116 a 118
56,9	30,8	4,23	38000	V64330	116 a 118
52,7	33,2	4,01	40000	V64331	116 a 118
45	38,9	3,43	41000	V64332	116 a 118
39	44,9	2,97	42000	V64333	116 a 118
34,9	50,1	2,66	42500	V64334	116 a 118
29,8	58,7	2,27	43000	V64335	116 a 118
25,8	67,8	1,97	43900	V64337	116 a 118
22,3	78,6	1,69	44000	V64338	116 a 118
20,6	85	1,57	44500	V64339	116 a 118
18	97,4	1,37	45000	V64340	116 a 118
15,5	113	1,18	45000	V64341	116 a 118
14,2	124	1,08	45000	V64342	116 a 118
12,7	137	0,97	45000	V64343	116 a 118
10,6	165	0,81	45000	V64344	116 a 118
9,43	186	0,72	45000	V64345	116 a 118
38,2	45,8	4,73	47000	V66333	119 a 121
33,2	52,7	4,11	47900	V66334	119 a 121
31	56,5	3,83	48000	V66335	119 a 121
26,7	65,5	3,31	48900	V66336	119 a 121
23,4	74,8	2,89	49000	V66337	119 a 121
20,7	84,4	2,57	51000	V66338	119 a 121
19,2	90,9	2,38	51600	V66339	119 a 121
16,7	105	2,06	53000	V66340	119 a 121
14,4	121	1,79	54000	V66342	119 a 121
13,2	133	1,63	59000	V66343	119 a 121
12	146	1,49	60000	V66344	119 a 121
10,1	174	1,24	61600	V66345	119 a 121
8,98	195	1,11	64000	V66346	119 a 121
7,82	224	0,97	65000	V66347	119 a 121

11,00 kW - 1750 rpm

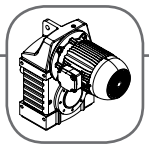
6,85	255	0,85	68000	V66448	152 a 157
5,9	297	0,73	70000	V66449	152 a 157

11,00 kW - 1750 rpm

rpm	i_{tot}	fs	Fr (N)	código	páginas
7,59	231	1,30	97000	V68448	158 a 163
6,55	267	1,12	99000	V68449	158 a 163
5,73	305	0,98	99500	V68450	158 a 163
5,08	344	0,87	99800	V68451	158 a 163
4,72	371	0,81	100000	V68452	158 a 163
4,08	429	0,70	100000	V68453	158 a 163
8,47	207	2,58	185000	V72546	164 a 166
7,37	237	2,25	187000	V72547	164 a 166
6,87	255	2,09	190000	V72548	164 a 166
5,93	295	1,81	195000	V72549	164 a 166
5,19	337	1,58	200000	V72550	164 a 166
4,65	376	1,42	200000	V72551	164 a 166
4,05	432	1,23	200000	V72552	164 a 166
3,77	464	1,15	200000	V72553	164 a 166

15,00 kW - 1750 rpm

392	4,46	1,37	6000	V56213	104 a 106
376	4,65	1,34	6500	V56214	104 a 106
312	5,61	1,35	6700	V56215	104 a 106
285	6,14	1,35	6800	V56216	104 a 106
253	6,91	1,34	6900	V56217	104 a 106
231	7,57	1,32	7000	V56218	104 a 106
200	8,74	1,15	7100	V56219	104 a 106
173	10,1	0,99	7600	V56220	104 a 106
153	11,4	0,88	7900	V56221	104 a 106
140	12,5	0,80	8100	V56222	104 a 106
121	14,4	0,69	8500	V56223	104 a 106
425	4,11	2,47	9000	V58212	107 a 109
410	4,27	2,49	9100	V58213	107 a 109
346	5,05	2,49	9500	V58214	107 a 109
318	5,51	2,48	9600	V58215	107 a 109
273	6,4	2,48	9700	V58216	107 a 109
232	7,53	2,51	9800	V58217	107 a 109
216	8,11	2,33	10100	V58218	107 a 109
182	9,61	1,97	10200	V58219	107 a 109
167	10,5	1,81	10500	V58220	107 a 109
144	12,2	1,56	11000	V58222	107 a 109
122	14,3	1,32	11500	V58223	107 a 109
112	15,7	1,21	12000	V58224	107 a 109
100	17,4	1,09	13000	V58225	107 a 109
92,9	18,8	1,01	13500	V58226	107 a 109
81,6	21,5	0,88	14000	V58227	107 a 109
69,5	25,2	0,75	16000	V58328	107 a 109
375	4,67	4,06	6000	V60213	110 a 112
320	5,47	4,02	6500	V60214	110 a 112
277	6,31	4,07	7000	V60216	110 a 112
239	7,32	4,00	7500	V60217	110 a 112
221	7,91	4,01	7700	V60218	110 a 112
193	9,07	4,04	7800	V60219	110 a 112
179	9,77	3,75	8000	V60220	110 a 112
155	11,3	3,25	9000	V60221	110 a 112
134	13,1	2,80	9500	V60222	110 a 112
124	14,1	2,59	9700	V60223	110 a 112
108	16,2	2,26	9800	V60224	110 a 112



15,00 kW - 1750 rpm

rpm	i_{tot}	fs	Fr (N)	código	páginas
93	18,8	1,95	9900	V60225	110 a 112
85,1	20,6	1,78	10000	V60226	110 a 112
76,5	22,9	1,60	10100	V60227	110 a 112
71,3	24,5	1,49	10200	V60228	110 a 112
63,8	27,4	1,34	10400	V60229	110 a 112
65,2	26,9	1,36	11000	V60328	110 a 112
62,8	27,8	1,32	11500	V60329	110 a 112
53,1	33	1,11	12000	V60330	110 a 112
48,6	36	1,02	12500	V60331	110 a 112
41,9	41,8	0,88	13000	V60332	110 a 112
37,8	46,3	0,79	14000	V60333	110 a 112
142	12,3	4,47	12700	V62222	113 a 115
124	14,1	3,91	13000	V62223	113 a 115
110	15,9	3,46	13500	V62224	113 a 115
102	17,1	3,07	15000	V62225	113 a 115
88,6	19,8	2,78	16000	V62226	113 a 115
76,7	22,8	2,41	17000	V62227	113 a 115
70,2	24,9	2,20	17500	V62228	113 a 115
63,8	27,4	2,01	18000	V62229	113 a 115
53,5	32,7	1,68	19000	V62230	113 a 115
63,2	27,7	1,99	19500	V62329	113 a 115
58,5	29,9	1,84	20000	V62330	113 a 115
50	35	1,57	21000	V62331	113 a 115
43,3	40,4	1,36	21500	V62332	113 a 115
37,3	46,9	1,17	21600	V62333	113 a 115
34,5	50,7	1,08	21700	V62334	113 a 115
30,1	58,1	0,95	22000	V62335	113 a 115
25,9	67,4	0,82	22500	V62336	113 a 115
25,2	69,5	0,79	23000	V62337	113 a 115
80,5	21,7	4,49	33000	V64227	116 a 118
69,9	25	3,90	36000	V64228	116 a 118
64,2	27,3	3,58	37000	V64229	116 a 118
56,9	30,8	3,10	38000	V64330	116 a 118
52,7	33,2	2,94	40000	V64331	116 a 118
45	38,9	2,51	41000	V64332	116 a 118
39	44,9	2,18	42000	V64333	116 a 118
34,9	50,1	1,95	42500	V64334	116 a 118
29,8	58,7	1,66	43000	V64335	116 a 118
25,8	67,8	1,44	43900	V64337	116 a 118
22,3	78,6	1,24	44000	V64338	116 a 118
20,6	85	1,15	44500	V64339	116 a 118
18	97,4	1,00	45000	V64340	116 a 118
15,5	113	0,86	45000	V64341	116 a 118
14,2	124	0,79	45000	V64342	116 a 118
53,7	32,6	4,87	43000	V66330	119 a 121
50	35	4,53	44000	V66331	119 a 121
43,2	40,6	3,92	45000	V66332	119 a 121
38,2	45,8	3,47	47000	V66333	119 a 121
33,2	52,7	3,02	47900	V66334	119 a 121
31	56,5	2,81	48000	V66335	119 a 121
26,7	65,5	2,43	48900	V66336	119 a 121
23,4	74,8	2,12	49000	V66337	119 a 121
20,7	84,4	1,88	51000	V66338	119 a 121
19,2	90,9	1,75	51600	V66339	119 a 121
16,7	105	1,51	53000	V66340	119 a 121

15,00 kW - 1750 rpm

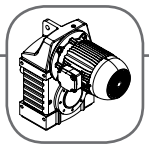
rpm	i_{tot}	fs	Fr (N)	código	páginas
14,4	121	1,31	54000	V66342	119 a 121
13,2	133	1,20	59000	V66343	119 a 121
12	146	1,09	60000	V66344	119 a 121
10,1	174	0,91	61600	V66345	119 a 121
56,3	31,1	4,32	71000	V68230	122 a 124
39,2	44,6	4,93	81000	V68333	122 a 124
34,7	50,4	4,37	82000	V68334	122 a 124
32,3	54,3	4,05	82500	V68335	122 a 124
28,1	62,3	3,53	83000	V68336	122 a 124
24,3	72,1	3,05	84000	V68337	122 a 124
21,2	82,4	2,67	85000	V68338	122 a 124
18,8	93	2,37	86500	V68339	122 a 124
17,5	100	2,20	87000	V68340	122 a 124
15,1	116	1,90	88000	V68341	122 a 124
13,1	134	1,65	89000	V68342	122 a 124
12	146	1,51	90000	V68343	122 a 124
10,9	161	1,37	91500	V68344	122 a 124
9,13	192	1,15	93000	V68346	122 a 124
22,7	77,0	5,08	162000	V72337	125 a 127
21,4	82,0	4,77	168000	V72338	125 a 127
18,7	93,4	4,18	172000	V72339	125 a 127
16,7	104,6	3,74	178000	V72340	125 a 127
14,7	119,1	3,28	186000	V72341	125 a 127
13,5	129,3	3,02	188000	V72342	125 a 127
12,1	145,0	2,70	190000	V72343	125 a 127
10,6	165,9	2,36	195000	V72344	125 a 127
9,7	181,2	1,48	195000	V72345	125 a 127

15,00 kW - 1750 rpm

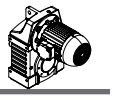
7,59	231	0,95	97000	V68448	158 a 163
6,55	267	0,82	99000	V68449	158 a 163
5,73	305	0,72	99500	V68450	158 a 163
8,47	207	1,89	185000	V72546	164 a 166
7,37	237	1,65	187000	V72547	164 a 166
6,87	255	1,53	190000	V72548	164 a 166
5,93	295	1,32	195000	V72549	164 a 166
5,19	337	1,16	200000	V72550	164 a 166
4,65	376	1,04	200000	V72551	164 a 166

18,50 kW - 1750 rpm

392	4,46	1,11	6000	V56213	104 a 106
376	4,65	1,09	6500	V56214	104 a 106
312	5,61	1,09	6700	V56215	104 a 106
285	6,14	1,10	6800	V56216	104 a 106
253	6,91	1,09	6900	V56217	104 a 106
231	7,57	1,07	7000	V56218	104 a 106
200	8,74	0,93	7100	V56219	104 a 106
173	10,1	0,80	7600	V56220	104 a 106
153	11,4	0,71	7900	V56221	104 a 106

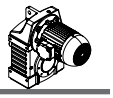


18,50 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
425	4,11	2,00	9000	V58212	107 a 109
410	4,27	2,02	9100	V58213	107 a 109
346	5,05	2,02	9500	V58214	107 a 109
318	5,51	2,01	9600	V58215	107 a 109
273	6,4	2,01	9700	V58216	107 a 109
232	7,53	2,04	9800	V58217	107 a 109
216	8,11	1,89	10100	V58218	107 a 109
182	9,61	1,60	10200	V58219	107 a 109
167	10,5	1,47	10500	V58220	107 a 109
144	12,2	1,26	11000	V58222	107 a 109
122	14,3	1,07	11500	V58223	107 a 109
112	15,7	0,98	12000	V58224	107 a 109
100	17,4	0,88	13000	V58225	107 a 109
92,9	18,8	0,82	13500	V58226	107 a 109
81,6	21,5	0,72	14000	V58227	107 a 109
375	4,67	3,29	6000	V60213	110 a 112
320	5,47	3,26	6500	V60214	110 a 112
277	6,31	3,30	7000	V60216	110 a 112
239	7,32	3,25	7500	V60217	110 a 112
221	7,91	3,25	7700	V60218	110 a 112
193	9,07	3,28	7800	V60219	110 a 112
179	9,77	3,04	8000	V60220	110 a 112
155	11,3	2,63	9000	V60221	110 a 112
134	13,1	2,27	9500	V60222	110 a 112
124	14,1	2,10	9700	V60223	110 a 112
108	16,2	1,83	9800	V60224	110 a 112
93	18,8	1,58	9900	V60225	110 a 112
85,1	20,6	1,44	10000	V60226	110 a 112
76,5	22,9	1,30	10100	V60227	110 a 112
71,3	24,5	1,21	10200	V60228	110 a 112
63,8	27,4	1,08	10400	V60229	110 a 112
65,2	26,9	1,11	11000	V60328	110 a 112
62,8	27,8	1,07	11500	V60329	110 a 112
53,1	33	0,90	12000	V60330	110 a 112
48,6	36	0,83	12500	V60331	110 a 112
41,9	41,8	0,71	13000	V60332	110 a 112
177	9,9	4,50	12500	V62220	113 a 115
165	10,6	4,19	12600	V62221	113 a 115
142	12,3	3,62	12700	V62222	113 a 115
124	14,1	3,17	13000	V62223	113 a 115
110	15,9	2,81	13500	V62224	113 a 115
102	17,1	2,49	15000	V62225	113 a 115
88,6	19,8	2,26	16000	V62226	113 a 115
76,7	22,8	1,95	17000	V62227	113 a 115
70,2	24,9	1,79	17500	V62228	113 a 115
63,8	27,4	1,63	18000	V62229	113 a 115
53,5	32,7	1,36	19000	V62230	113 a 115
63,2	27,7	1,61	19500	V62329	113 a 115
58,5	29,9	1,49	20000	V62330	113 a 115
50	35	1,27	21000	V62331	113 a 115
43,3	40,4	1,10	21500	V62332	113 a 115
37,3	46,9	0,95	21600	V62333	113 a 115
34,5	50,7	0,88	21700	V62334	113 a 115
30,1	58,1	0,77	22000	V62335	113 a 115
98	17,9	4,44	31300	V64225	116 a 118
91,2	19,2	4,13	32000	V64226	116 a 118

18,50 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
80,5	21,7	3,64	33000	V64227	116 a 118
69,9	25	3,17	36000	V64228	116 a 118
64,2	27,3	2,91	37000	V64229	116 a 118
56,9	30,8	2,51	38000	V64330	116 a 118
52,7	33,2	2,39	40000	V64331	116 a 118
45	38,9	2,04	41000	V64332	116 a 118
39	44,9	1,76	42000	V64333	116 a 118
34,9	50,1	1,58	42500	V64334	116 a 118
29,8	58,7	1,35	43000	V64335	116 a 118
25,8	67,8	1,17	43900	V64337	116 a 118
22,3	78,6	1,01	44000	V64338	116 a 118
20,6	85	0,93	44500	V64339	116 a 118
18	97,4	0,81	45000	V64340	116 a 118
15,5	113	0,70	45000	V64341	116 a 118
61,6	28,4	4,54	40500	V66329	119 a 121
53,7	32,6	3,95	43000	V66330	119 a 121
50	35	3,68	44000	V66331	119 a 121
43,2	40,6	3,18	45000	V66332	119 a 121
38,2	45,8	2,81	47000	V66333	119 a 121
33,2	52,7	2,45	47900	V66334	119 a 121
31	56,5	2,28	48000	V66335	119 a 121
26,7	65,5	1,97	48900	V66336	119 a 121
23,4	74,8	1,72	49000	V66337	119 a 121
20,7	84,4	1,53	51000	V66338	119 a 121
19,2	90,9	1,42	51600	V66339	119 a 121
16,7	105	1,23	53000	V66340	119 a 121
14,4	121	1,06	54000	V66342	119 a 121
13,2	133	0,97	59000	V66343	119 a 121
12	146	0,88	60000	V66344	119 a 121
10,1	174	0,74	61600	V66345	119 a 121
56,3	31,1	3,50	71000	V68230	122 a 124
44,8	39,1	4,56	80000	V68332	122 a 124
39,2	44,6	3,99	81000	V68333	122 a 124
34,7	50,4	3,54	82000	V68334	122 a 124
32,3	54,3	3,29	82500	V68335	122 a 124
28,1	62,3	2,86	83000	V68336	122 a 124
24,3	72,1	2,47	84000	V68337	122 a 124
21,2	82,4	2,16	85000	V68338	122 a 124
18,8	93	1,92	86500	V68339	122 a 124
17,5	100	1,78	87000	V68340	122 a 124
15,1	116	1,54	88000	V68341	122 a 124
13,1	134	1,33	89000	V68342	122 a 124
12	146	1,22	90000	V68343	122 a 124
10,9	161	1,11	91500	V68344	122 a 124
9,13	192	0,93	93000	V68346	122 a 124
100,89	58,1	5,45	150000	V72335	125 a 127
87,24	67,2	4,72	158000	V72336	125 a 127
76,18	77,0	4,12	162000	V72337	125 a 127
71,54	82,0	3,87	168000	V72338	125 a 127
62,75	93,4	3,39	172000	V72339	125 a 127
56,06	104,6	3,03	178000	V72340	125 a 127
49,25	119,1	2,66	186000	V72341	125 a 127
45,34	129,3	2,45	188000	V72342	125 a 127
40,45	145,0	2,19	190000	V72343	125 a 127
35,35	165,9	1,91	195000	V72344	125 a 127
22,25	181,2	1,20	195000	V72345	125 a 127

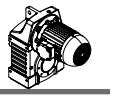
19,00 kW - 1750 rpm

rpm	i_{tot}	fs	Fr (N)	código	páginas
8,47	207	1,53	185000	V72546	164 a 166
7,37	237	1,34	187000	V72547	164 a 166
6,87	255	1,24	190000	V72548	164 a 166
5,93	295	1,07	195000	V72549	164 a 166

22,00 kW - 1750 rpm

425	4,11	1,69	9000	V58212	107 a 109
410	4,27	1,70	9100	V58213	107 a 109
346	5,05	1,70	9500	V58214	107 a 109
318	5,51	1,69	9600	V58215	107 a 109
273	6,4	1,69	9700	V58216	107 a 109
232	7,53	1,71	9800	V58217	107 a 109
216	8,11	1,59	10100	V58218	107 a 109
182	9,61	1,34	10200	V58219	107 a 109
167	10,5	1,23	10500	V58220	107 a 109
144	12,2	1,06	11000	V58222	107 a 109
122	14,3	0,90	11500	V58223	107 a 109
112	15,7	0,82	12000	V58224	107 a 109
375	4,67	2,77	6000	V60213	110 a 112
320	5,47	2,74	6500	V60214	110 a 112
277	6,31	2,77	7000	V60216	110 a 112
239	7,32	2,73	7500	V60217	110 a 112
221	7,91	2,74	7700	V60218	110 a 112
193	9,07	2,76	7800	V60219	110 a 112
179	9,77	2,56	8000	V60220	110 a 112
155	11,3	2,21	9000	V60221	110 a 112
134	13,1	1,91	9500	V60222	110 a 112
124	14,1	1,77	9700	V60223	110 a 112
108	16,2	1,54	9800	V60224	110 a 112
93	18,8	1,33	9900	V60225	110 a 112
85,1	20,6	1,21	10000	V60226	110 a 112
65,2	26,9	0,93	11000	V60328	110 a 112
62,8	27,8	0,90	11500	V60329	110 a 112
53,1	33	0,76	12000	V60330	110 a 112
392	4,46	4,55	9000	V62213	113 a 115
341	5,13	4,55	9500	V62214	113 a 115
318	5,51	4,55	9800	V62215	113 a 115
275	6,38	4,55	9900	V62216	113 a 115
240	7,29	4,55	10000	V62217	113 a 115
213	8,22	4,55	11200	V62218	113 a 115
203	8,62	4,35	12000	V62219	113 a 115
177	9,9	3,79	12500	V62220	113 a 115
165	10,6	3,53	12600	V62221	113 a 115
142	12,3	3,05	12700	V62222	113 a 115
124	14,1	2,66	13000	V62223	113 a 115
110	15,9	2,36	13500	V62224	113 a 115
102	17,1	2,10	15000	V62225	113 a 115
88,6	19,8	1,90	16000	V62226	113 a 115
76,7	22,8	1,64	17000	V62227	113 a 115
70,2	24,9	1,50	17500	V62228	113 a 115
63,2	27,7	1,35	19500	V62329	113 a 115
58,5	29,9	1,25	20000	V62330	113 a 115
50	35	1,07	21000	V62331	113 a 115

22,00 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
43,3	40,4	0,93	21500	V62332	113 a 115
37,3	46,9	0,80	21600	V62333	113 a 115
34,5	50,7	0,74	21700	V62334	113 a 115
129	13,6	4,91	29900	V64223	116 a 118
112	15,6	4,28	31200	V64224	116 a 118
98	17,9	3,73	31300	V64225	116 a 118
91,2	19,2	3,47	32000	V64226	116 a 118
80,5	21,7	3,06	33000	V64227	116 a 118
69,9	25	2,66	36000	V64228	116 a 118
64,2	27,3	2,44	37000	V64229	116 a 118
56,9	30,8	2,11	38000	V64330	116 a 118
52,7	33,2	2,01	40000	V64331	116 a 118
45	38,9	1,71	41000	V64332	116 a 118
39	44,9	1,48	42000	V64333	116 a 118
34,9	50,1	1,33	42500	V64334	116 a 118
29,8	58,7	1,14	43000	V64335	116 a 118
25,8	67,8	0,98	43900	V64337	116 a 118
22,3	78,6	0,85	44000	V64338	116 a 118
20,6	85	0,78	44500	V64339	116 a 118
77,2	22,7	4,77	35000	V66227	119 a 121
68,8	25,4	4,26	39000	V66228	119 a 121
61,6	28,4	3,81	40500	V66329	119 a 121
53,7	32,6	3,32	43000	V66330	119 a 121
50	35	3,09	44000	V66331	119 a 121
43,2	40,6	2,67	45000	V66332	119 a 121
38,2	45,8	2,36	47000	V66333	119 a 121
33,2	52,7	2,06	47900	V66334	119 a 121
31	56,5	1,92	48000	V66335	119 a 121
26,7	65,5	1,65	48900	V66336	119 a 121
23,4	74,8	1,45	49000	V66337	119 a 121
20,7	84,4	1,28	51000	V66338	119 a 121
19,2	90,9	1,19	51600	V66339	119 a 121
16,7	105	1,03	53000	V66340	119 a 121
14,4	121	0,89	54000	V66342	119 a 121
13,2	133	0,82	59000	V66343	119 a 121
56,3	31,1	2,95	71000	V68230	122 a 124
55,7	31,4	4,77	78500	V68330	122 a 124
51,9	33,7	4,44	79000	V68331	122 a 124
44,8	39,1	3,84	80000	V68332	122 a 124
39,2	44,6	3,36	81000	V68333	122 a 124
34,7	50,4	2,98	82000	V68334	122 a 124
32,3	54,3	2,76	82500	V68335	122 a 124
28,1	62,3	2,41	83000	V68336	122 a 124
24,3	72,1	2,08	84000	V68337	122 a 124
21,2	82,4	1,82	85000	V68338	122 a 124
18,8	93	1,61	86500	V68339	122 a 124
17,5	100	1,50	87000	V68340	122 a 124
15,1	116	1,30	88000	V68341	122 a 124
13,1	134	1,12	89000	V68342	122 a 124
12	146	1,03	90000	V68343	122 a 124
112,96	51,9	5,13	140000	V72334	125 a 127
100,89	58,1	4,59	150000	V72335	125 a 127
87,24	67,2	3,97	158000	V72336	125 a 127
76,18	77,0	3,46	162000	V72337	125 a 127

22,00 kW - 1750 rpm

rpm	i_{tot}	fs	Fr (N)	código	páginas
71,54	82,0	3,25	168000	V72338	125 a 127
62,75	93,4	2,85	172000	V72339	125 a 127
56,06	104,6	2,55	178000	V72340	125 a 127
49,25	119,1	2,24	186000	V72341	125 a 127
45,34	129,3	2,06	188000	V72342	125 a 127
40,45	145,0	1,84	190000	V72343	125 a 127
35,35	165,9	1,61	195000	V72344	125 a 127
22,25	181,2	1,01	195000	V72345	125 a 127

22,00 kW - 1750 rpm

8,47	207	1,29	185000	V72546	164 a 166
7,37	237	1,12	187000	V72547	164 a 166
6,87	255	1,05	190000	V72548	164 a 166

30,00 kW - 1750 rpm

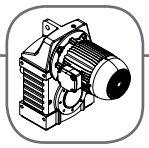
375	4,67	2,03	6000	V60213	101 a 103
320	5,47	2,01	6500	V60214	101 a 103
277	6,31	2,03	7000	V60216	101 a 103
239	7,32	2,00	7500	V60217	101 a 103
221	7,91	2,01	7700	V60218	101 a 103
193	9,07	2,02	7800	V60219	101 a 103
179	9,77	1,88	8000	V60220	101 a 103
155	11,3	1,62	9000	V60221	101 a 103
134	13,1	1,40	9500	V60222	101 a 103
124	14,1	1,30	9700	V60223	101 a 103
108	16,2	1,13	9800	V60224	101 a 103
65,2	26,9	0,68	11000	V60328	101 a 103
392	4,46	3,33	9000	V62213	113 a 115
341	5,13	3,34	9500	V62214	113 a 115
318	5,51	3,33	9800	V62215	113 a 115
275	6,38	3,33	9900	V62216	113 a 115
240	7,29	3,33	10000	V62217	113 a 115
213	8,22	3,34	11200	V62218	113 a 115
203	8,62	3,19	12000	V62219	113 a 115
177	9,9	2,78	12500	V62220	113 a 115
165	10,6	2,59	12600	V62221	113 a 115
142	12,3	2,23	12700	V62222	113 a 115
124	14,1	1,95	13000	V62223	113 a 115
110	15,9	1,73	13500	V62224	113 a 115
102	17,1	1,54	15000	V62225	113 a 115
88,6	19,8	1,39	16000	V62226	113 a 115
63,2	27,7	0,99	19500	V62329	113 a 115
58,5	29,9	0,92	20000	V62330	113 a 115
50	35	0,78	21000	V62331	113 a 115
159	11	4,45	25500	V64221	116 a 118
149	11,8	4,15	29000	V64222	116 a 118
129	13,6	3,60	29900	V64223	116 a 118
112	15,6	3,14	31200	V64224	116 a 118
98	17,9	2,74	31300	V64225	116 a 118
91,2	19,2	2,55	32000	V64226	116 a 118
80,5	21,7	2,25	33000	V64227	116 a 118

30,00 kW - 1750 rpm

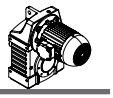
rpm	i_{tot}	fs	Fr (N)	código	páginas
56,9	30,8	1,55	38000	V64330	116 a 118
52,7	33,2	1,47	40000	V64331	116 a 118
45	38,9	1,26	41000	V64332	116 a 118
39	44,9	1,09	42000	V64333	116 a 118
34,9	50,1	0,97	42500	V64334	116 a 118
29,8	58,7	0,83	43000	V64335	116 a 118
25,8	67,8	0,72	43900	V64337	116 a 118
107	16,4	4,85	31000	V66224	119 a 121
95,4	18,3	4,33	33000	V66225	119 a 121
83,8	20,9	3,80	34000	V66226	119 a 121
77,2	22,7	3,50	35000	V66227	119 a 121
68,8	25,4	3,12	39000	V66228	119 a 121
61,6	28,4	2,80	40500	V66329	119 a 121
53,7	32,6	2,43	43000	V66330	119 a 121
50	35	2,27	44000	V66331	119 a 121
43,2	40,6	1,96	45000	V66332	119 a 121
38,2	45,8	1,73	47000	V66333	119 a 121
33,2	52,7	1,51	47900	V66334	119 a 121
31	56,5	1,40	48000	V66335	119 a 121
26,7	65,5	1,21	48900	V66336	119 a 121
23,4	74,8	1,06	49000	V66337	119 a 121
20,7	84,4	0,94	51000	V66338	119 a 121
19,2	90,9	0,87	51600	V66339	119 a 121
16,7	105	0,76	53000	V66340	119 a 121
77,6	22,6	4,87	70100	V68227	122 a 124
68,4	25,6	4,30	70500	V68228	122 a 124
64	27,4	4,02	70900	V68229	122 a 124
56,3	31,1	2,16	71000	V68230	122 a 124
64	27,3	4,02	78000	V68329	122 a 124
55,7	31,4	3,50	78500	V68330	122 a 124
51,9	33,7	3,26	79000	V68331	122 a 124
44,8	39,1	2,81	80000	V68332	122 a 124
39,2	44,6	2,46	81000	V68333	122 a 124
34,7	50,4	2,18	82000	V68334	122 a 124
32,3	54,3	2,03	82500	V68335	122 a 124
28,1	62,3	1,77	83000	V68336	122 a 124
24,3	72,1	1,53	84000	V68337	122 a 124
21,2	82,4	1,33	85000	V68338	122 a 124
18,8	93	1,18	86500	V68339	122 a 124
17,5	100	1,10	87000	V68340	122 a 124
15,1	116	0,95	88000	V68341	122 a 124

37,00 kW - 1750 rpm

375	4,67	1,64	6000	V60213	110 a 112
320	5,47	1,63	6500	V60214	110 a 112
277	6,31	1,65	7000	V60216	110 a 112
239	7,32	1,62	7500	V60217	110 a 112
221	7,91	1,63	7700	V60218	110 a 112
193	9,07	1,64	7800	V60219	110 a 112
179	9,77	1,52	8000	V60220	110 a 112
155	11,3	1,32	9000	V60221	110 a 112
134	13,1	1,13	9500	V60222	110 a 112
124	14,1	1,05	9700	V60223	110 a 112
108	16,2	0,92	9800	V60224	110 a 112



37,00 kW - 1750 rpm



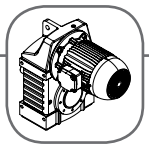
rpm	i_{tot}	fs	Fr (N)	código	páginas
65,2	26,9	0,55	11000	V60328	110 a 112
392	4,46	2,70	9000	V62213	113 a 115
341	5,13	2,70	9500	V62214	113 a 115
318	5,51	2,70	9800	V62215	113 a 115
275	6,38	2,70	9900	V62216	113 a 115
240	7,29	2,70	10000	V62217	113 a 115
213	8,22	2,71	11200	V62218	113 a 115
203	8,62	2,59	12000	V62219	113 a 115
177	9,9	2,25	12500	V62220	113 a 115
165	10,6	2,10	12600	V62221	113 a 115
142	12,3	1,81	12700	V62222	113 a 115
124	14,1	1,58	13000	V62223	113 a 115
110	15,9	1,40	13500	V62224	113 a 115
102	17,1	1,25	15000	V62225	113 a 115
88,6	19,8	1,13	16000	V62226	113 a 115
63,2	27,7	0,80	19500	V62329	113 a 115
58,5	29,9	0,74	20000	V62330	113 a 115
418	4,19	4,60	11000	V64213	116 a 118
355	4,92	4,60	12000	V64214	116 a 118
309	5,66	4,60	13000	V64215	116 a 118
289	6,06	4,60	14500	V64216	116 a 118
250	6,99	4,60	16000	V64217	116 a 118
218	8,02	4,60	18000	V64218	116 a 118
190	9,2	4,31	21000	V64219	116 a 118
183	9,56	4,15	23000	V64220	116 a 118
159	11	3,60	25500	V64221	116 a 118
149	11,8	3,37	29000	V64222	116 a 118
129	13,6	2,92	29900	V64223	116 a 118
112	15,6	2,55	31200	V64224	116 a 118
98	17,9	2,22	31300	V64225	116 a 118
91,2	19,2	2,07	32000	V64226	116 a 118
80,5	21,7	1,82	33000	V64227	116 a 118
56,9	30,8	1,26	38000	V64330	116 a 118
52,7	33,2	1,19	40000	V64331	116 a 118
45	38,9	1,02	41000	V64332	116 a 118
39	44,9	0,88	42000	V64333	116 a 118
34,9	50,1	0,79	42500	V64334	116 a 118
130	13,5	4,77	30000	V66223	119 a 121
107	16,4	3,93	31000	V66224	119 a 121
95,4	18,3	3,51	33000	V66225	119 a 121
83,8	20,9	3,08	34000	V66226	119 a 121
77,2	22,7	2,84	35000	V66227	119 a 121
68,8	25,4	2,53	39000	V66228	119 a 121
61,6	28,4	2,27	40500	V66329	119 a 121
53,7	32,6	1,97	43000	V66330	119 a 121
50	35	1,84	44000	V66331	119 a 121
43,2	40,6	1,59	45000	V66332	119 a 121
38,2	45,8	1,41	47000	V66333	119 a 121
33,2	52,7	1,22	47900	V66334	119 a 121
31	56,5	1,14	48000	V66335	119 a 121
26,7	65,5	0,98	48900	V66336	119 a 121
23,4	74,8	0,86	49000	V66337	119 a 121
20,7	84,4	0,76	51000	V66338	119 a 121
86,2	20,3	4,39	69000	V68226	122 a 124
77,6	22,6	3,95	70100	V68227	122 a 124
68,4	25,6	3,48	70500	V68228	122 a 124

37,00 kW - 1750 rpm

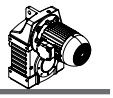
rpm	i_{tot}	fs	Fr (N)	código	páginas
64	27,4	3,26	70900	V68229	122 a 124
56,3	31,1	1,75	71000	V68230	122 a 124
64	27,3	3,26	78000	V68329	122 a 124
55,7	31,4	2,84	78500	V68330	122 a 124
51,9	33,7	2,64	79000	V68331	122 a 124
44,8	39,1	2,28	80000	V68332	122 a 124
39,2	44,6	2,00	81000	V68333	122 a 124
34,7	50,4	1,77	82000	V68334	122 a 124
32,3	54,3	1,64	82500	V68335	122 a 124
28,1	62,3	1,43	83000	V68336	122 a 124
24,3	72,1	1,24	84000	V68337	122 a 124
21,2	82,4	1,08	85000	V68338	122 a 124
18,8	93	0,96	86500	V68339	122 a 124
17,5	100	0,89	87000	V68340	122 a 124
15,1	116	0,77	88000	V68341	122 a 124
217,95	8,0	13,51	70000	V72218	125 a 127
196,92	8,9	13,49	72000	V72219	125 a 127
177,51	9,9	13,49	75000	V72220	125 a 127
159,54	11,0	12,64	80000	V72221	125 a 127
142,86	12,3	11,32	90000	V72222	125 a 127
127,32	13,7	10,09	95000	V72223	125 a 127
112,82	15,5	8,94	98000	V72224	125 a 127
99,26	17,6	7,87	100000	V72225	125 a 127
84,62	20,7	6,71	105000	V72226	125 a 127
75,05	23,3	5,95	110000	V72227	125 a 127
61,37	28,5	5,56	110000	V72329	125 a 127
54,81	31,9	4,96	115000	V72330	125 a 127
47,40	36,9	4,29	120000	V72331	125 a 127
41,39	42,3	3,75	125000	V72332	125 a 127
38,55	45,4	3,49	135000	V72333	125 a 127
33,71	51,9	3,05	140000	V72334	125 a 127
30,11	58,1	2,73	150000	V72335	125 a 127
26,04	67,2	2,36	158000	V72336	125 a 127
22,73	77,0	2,06	162000	V72337	125 a 127
21,35	82,0	1,93	168000	V72338	125 a 127
18,73	93,4	1,70	172000	V72339	125 a 127
16,73	104,6	1,52	178000	V72340	125 a 127
14,70	119,1	1,33	186000	V72341	125 a 127
13,53	129,3	1,23	188000	V72342	125 a 127
12,07	145,0	1,09	190000	V72343	125 a 127

45,00 kW - 1750 rpm

375	4,67	1,35	6000	V60213	110 a 112
320	5,47	1,34	6500	V60214	110 a 112
277	6,31	1,36	7000	V60216	110 a 112
239	7,32	1,33	7500	V60217	110 a 112
221	7,91	1,34	7700	V60218	110 a 112
193	9,07	1,35	7800	V60219	110 a 112
179	9,77	1,25	8000	V60220	110 a 112
155	11,3	1,08	9000	V60221	110 a 112
134	13,1	0,93	9500	V60222	110 a 112
124	14,1	0,86	9700	V60223	110 a 112
108	16,2	0,75	9800	V60224	110 a 112
392	4,46	2,22	9000	V62213	113 a 115

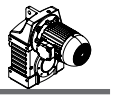


45,00 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
341	5,13	2,22	9500	V62214	113 a 115
318	5,51	2,22	9800	V62215	113 a 115
275	6,38	2,22	9900	V62216	113 a 115
240	7,29	2,22	10000	V62217	113 a 115
213	8,22	2,22	11200	V62218	113 a 115
203	8,62	2,13	12000	V62219	113 a 115
177	9,9	1,85	12500	V62220	113 a 115
165	10,6	1,72	12600	V62221	113 a 115
142	12,3	1,49	12700	V62222	113 a 115
124	14,1	1,30	13000	V62223	113 a 115
110	15,9	1,15	13500	V62224	113 a 115
102	17,1	1,02	15000	V62225	113 a 115
88,6	19,8	0,93	16000	V62226	113 a 115
63,2	27,7	0,66	19500	V62329	113 a 115
418	4,19	3,78	11000	V64213	116 a 118
355	4,92	3,78	12000	V64214	116 a 118
309	5,66	3,78	13000	V64215	116 a 118
289	6,06	3,78	14500	V64216	116 a 118
250	6,99	3,78	16000	V64217	116 a 118
218	8,02	3,78	18000	V64218	116 a 118
190	9,2	3,54	21000	V64219	116 a 118
183	9,56	3,41	23000	V64220	116 a 118
159	11	2,96	25500	V64221	116 a 118
149	11,8	2,77	29000	V64222	116 a 118
129	13,6	2,40	29900	V64223	116 a 118
112	15,6	2,09	31200	V64224	116 a 118
98	17,9	1,82	31300	V64225	116 a 118
91,2	19,2	1,70	32000	V64226	116 a 118
80,5	21,7	1,50	33000	V64227	116 a 118
56,9	30,8	1,03	38000	V64330	116 a 118
52,7	33,2	0,98	40000	V64331	116 a 118
45	38,9	0,84	41000	V64332	116 a 118
39	44,9	0,73	42000	V64333	116 a 118
148	11,8	4,49	29000	V66221	119 a 121
130	13,5	3,92	30000	V66223	119 a 121
107	16,4	3,23	31000	V66224	119 a 121
95,4	18,3	2,89	33000	V66225	119 a 121
83,8	20,9	2,54	34000	V66226	119 a 121
77,2	22,7	2,33	35000	V66227	119 a 121
68,8	25,4	2,08	39000	V66228	119 a 121
61,6	28,4	1,86	40500	V66329	119 a 121
53,7	32,6	1,62	43000	V66330	119 a 121
50	35	1,51	44000	V66331	119 a 121
43,2	40,6	1,31	45000	V66332	119 a 121
38,2	45,8	1,16	47000	V66333	119 a 121
33,2	52,7	1,01	47900	V66334	119 a 121
31	56,5	0,94	48000	V66335	119 a 121
26,7	65,5	0,81	48900	V66336	119 a 121
23,4	74,8	0,71	49000	V66337	119 a 121
118	14,8	4,96	65000	V68223	122 a 124
105	16,6	4,42	66000	V68224	122 a 124
99,3	17,6	4,16	66900	V68225	122 a 124
86,2	20,3	3,61	69000	V68226	122 a 124
77,6	22,6	3,25	70100	V68227	122 a 124
68,4	25,6	2,86	70500	V68228	122 a 124
64	27,4	2,68	70900	V68229	122 a 124

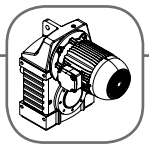
45,00 kW - 1750 rpm



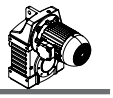
rpm	i_{tot}	fs	Fr (N)	código	páginas
56,3	31,1	1,44	71000	V68230	122 a 124
64	27,3	2,68	78000	V68329	122 a 124
55,7	31,4	2,33	78500	V68330	122 a 124
51,9	33,7	2,17	79000	V68331	122 a 124
44,8	39,1	1,88	80000	V68332	122 a 124
39,2	44,6	1,64	81000	V68333	122 a 124
34,7	50,4	1,46	82000	V68334	122 a 124
32,3	54,3	1,35	82500	V68335	122 a 124
28,1	62,3	1,18	83000	V68336	122 a 124
24,3	72,1	1,02	84000	V68337	122 a 124
21,2	82,4	0,89	85000	V68338	122 a 124
18,8	93	0,79	86500	V68339	122 a 124
217,95	8,03	11,11	70000	V72218	125 a 127
196,92	8,89	11,09	72000	V72219	125 a 127
177,51	9,86	11,09	75000	V72220	125 a 127
159,54	10,97	10,39	80000	V72221	125 a 127
142,86	12,25	9,31	90000	V72222	125 a 127
127,32	13,74	8,30	95000	V72223	125 a 127
112,82	15,51	7,35	98000	V72224	125 a 127
99,26	17,63	6,47	100000	V72225	125 a 127
84,62	20,68	5,51	105000	V72226	125 a 127
75,05	23,32	4,89	110000	V72228	125 a 127
70,18	24,9	5,23	100000	V72328	125 a 127
61,37	28,5	4,57	110000	V72329	125 a 127
54,81	31,9	4,08	115000	V72330	125 a 127
47,40	36,9	3,53	120000	V72331	125 a 127
41,39	42,3	3,08	125000	V72332	125 a 127
38,55	45,4	2,87	135000	V72333	125 a 127
33,71	51,9	2,51	140000	V72334	125 a 127
30,11	58,1	2,24	150000	V72335	125 a 127
26,04	67,2	1,94	158000	V72336	125 a 127
22,73	77,0	1,69	162000	V72337	125 a 127
21,35	82,0	1,59	168000	V72338	125 a 127
18,73	93,4	1,39	172000	V72339	125 a 127
16,73	104,6	1,25	178000	V72340	125 a 127
14,70	119,1	1,09	186000	V72341	125 a 127
13,53	129,3	1,01	188000	V72342	125 a 127

55,00 kW - 1750 rpm

375	4,67	1,11	6000	V60213	110 a 112
320	5,47	1,10	6500	V60214	110 a 112
277	6,31	1,11	7000	V60216	110 a 112
239	7,32	1,09	7500	V60217	110 a 112
221	7,91	1,09	7700	V60218	110 a 112
193	9,07	1,10	7800	V60219	110 a 112
179	9,77	1,02	8000	V60220	110 a 112
155	11,3	0,89	9000	V60221	110 a 112
134	13,1	0,76	9500	V60222	110 a 112
392	4,46	1,82	9000	V62213	113 a 115
341	5,13	1,82	9500	V62214	113 a 115
318	5,51	1,82	9800	V62215	113 a 115
275	6,38	1,82	9900	V62216	113 a 115
240	7,29	1,82	10000	V62217	113 a 115

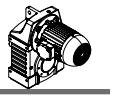


55,00 kW - 1750 rpm



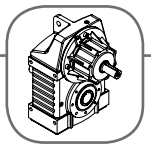
rpm	i_{tot}	fs	Fr (N)	código	páginas
213	8,22	1,82	11200	V62218	113 a 115
203	8,62	1,74	12000	V62219	113 a 115
177	9,9	1,51	12500	V62220	113 a 115
165	10,6	1,41	12600	V62221	113 a 115
142	12,3	1,22	12700	V62222	113 a 115
124	14,1	1,07	13000	V62223	113 a 115
110	15,9	0,94	13500	V62224	113 a 115
102	17,1	0,84	15000	V62225	113 a 115
88,6	19,8	0,76	16000	V62226	113 a 115
418	4,19	3,10	11000	V64213	116 a 118
355	4,92	3,09	12000	V64214	116 a 118
309	5,66	3,09	13000	V64215	116 a 118
289	6,06	3,09	14500	V64216	116 a 118
250	6,99	3,09	16000	V64217	116 a 118
218	8,02	3,09	18000	V64218	116 a 118
190	9,2	2,90	21000	V64219	116 a 118
183	9,56	2,79	23000	V64220	116 a 118
159	11	2,42	25500	V64221	116 a 118
149	11,8	2,26	29000	V64222	116 a 118
129	13,6	1,96	29900	V64223	116 a 118
112	15,6	1,71	31200	V64224	116 a 118
98	17,9	1,49	31300	V64225	116 a 118
91,2	19,2	1,39	32000	V64226	116 a 118
80,5	21,7	1,23	33000	V64227	116 a 118
56,9	30,8	0,85	38000	V64330	116 a 118
52,7	33,2	0,80	40000	V64331	116 a 118
45	38,9	0,69	41000	V64332	116 a 118
192	9,1	4,76	26000	V66219	119 a 121
172	10,2	4,25	27800	V66220	119 a 121
148	11,8	3,67	29000	V66221	119 a 121
130	13,5	3,21	30000	V66223	119 a 121
107	16,4	2,64	31000	V66224	119 a 121
95,4	18,3	2,36	33000	V66225	119 a 121
83,8	20,9	2,07	34000	V66226	119 a 121
77,2	22,7	1,91	35000	V66227	119 a 121
68,8	25,4	1,70	39000	V66228	119 a 121
61,6	28,4	1,53	40500	V66329	119 a 121
53,7	32,6	1,33	43000	V66330	119 a 121
50	35	1,24	44000	V66331	119 a 121
43,2	40,6	1,07	45000	V66332	119 a 121
38,2	45,8	0,95	47000	V66333	119 a 121
33,2	52,7	0,82	47900	V66334	119 a 121
31	56,5	0,77	48000	V66335	119 a 121
136	12,9	4,66	63000	V68222	122 a 124
118	14,8	4,06	65000	V68223	122 a 124
105	16,6	3,62	66000	V68224	122 a 124
99,3	17,6	3,40	66900	V68225	122 a 124
86,2	20,3	2,95	69000	V68226	122 a 124
77,6	22,6	2,66	70100	V68227	122 a 124
68,4	25,6	2,34	70500	V68228	122 a 124
64	27,4	2,19	70900	V68229	122 a 124
56,3	31,1	1,18	71000	V68230	122 a 124
64	27,3	2,19	78000	V68329	122 a 124
55,7	31,4	1,91	78500	V68330	122 a 124
51,9	33,7	1,78	79000	V68331	122 a 124
44,8	39,1	1,54	80000	V68332	122 a 124

55,00 kW - 1750 rpm



rpm	i_{tot}	fs	Fr (N)	código	páginas
39,2	44,6	1,34	81000	V68333	122 a 124
34,7	50,4	1,19	82000	V68334	122 a 124
32,3	54,3	1,11	82500	V68335	122 a 124
28,1	62,3	0,96	83000	V68336	122 a 124
24,3	72,1	0,83	84000	V68337	122 a 124
21,2	82,4	0,73	85000	V68338	122 a 124
217,95	8,03	9,09	70000	V72218	125 a 127
196,92	8,89	9,07	72000	V72219	125 a 127
177,51	9,86	9,07	75000	V72220	125 a 127
159,54	10,97	8,50	80000	V72221	125 a 127
142,86	12,25	7,62	90000	V72222	125 a 127
127,32	13,74	6,79	95000	V72223	125 a 127
112,82	15,51	6,01	98000	V72224	125 a 127
99,26	17,63	5,29	100000	V72225	125 a 127
84,62	20,68	4,51	105000	V72226	125 a 127
75,05	23,32	4,00	110000	V72228	125 a 127
70,18	24,9	3,74	100000	V72328	125 a 127
61,37	28,5	3,34	110000	V72329	125 a 127
54,81	31,9	2,89	115000	V72330	125 a 127
47,40	36,9	2,52	120000	V72331	125 a 127
41,39	42,3	2,35	125000	V72332	125 a 127
38,55	45,4	2,05	135000	V72333	125 a 127
33,71	51,9	1,83	140000	V72334	125 a 127
30,11	58,1	1,59	150000	V72335	125 a 127
26,04	67,2	1,39	158000	V72336	125 a 127
22,73	77,0	1,30	162000	V72337	125 a 127
21,35	82,0	1,14	168000	V72338	125 a 127
18,73	93,4	1,02	172000	V72339	125 a 127
16,73	104,6	0,90	178000	V72340	125 a 127

Recálculo de Potência



Nas tabelas de características técnicas, a rotação máxima é válida para motorredutores.
Para redutores com mancal a rotação máxima é 1800 rpm ou o valor da coluna rpm.max caso este for inferior a 1800 rpm

Para rotações abaixo de 1750 rpm a potência admissível pode ser obtida com uma regra de 3 simples.

Para rotações acima de 1750 rpm até o limite máximo admissível obtido nas tabelas de Características Técnicas (págs. 77 a 93), deve ser utilizado o fator conforme abaixo:

nx	fn
3600	1,54
3200	1,43
3000	1,38
2800	1,32
2500	1,23
2200	1,14
2000	1,08

Exemplo:
Redutor: V52332
Redução: 40,1
Potência: 0,914 kW
Rotação de entrada: 1750
Rotação de saída: 43,6
Rotação desejada: 70

Rotação de entrada: 2800
Redução: 40,1
Rotação de saída (corrigida): 69,83

P2800 = 0,914 x 1,32 = 1,206 kW

P2800 = Potência admissível na rotação de 2800 rpm

Px = Pn.fn

Px= Potência na rotação nx
Pn= Potência nominal a 1750 rpm (Tabelas nas págs. 77 a 93)
fn= Fator da rotação nx

* Para rotação de entrada abaixo de 100 rpm a lubrificação do redutor pode ficar prejudicada, neste caso solicitamos consultar a WEG-CESTARI.

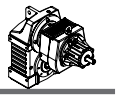
115 - 200 Nm

52

rpm	i_{tot}	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
417	4,19	5,03	115	1700	2871	V52212	63-100
340	5,14	5,02	141	1750	3046	V52214	63-100
298	5,87	5,03	161	1800	3175	V52215	63-100
** 260	6,74	5,03	185	1850	3323	V52216	63-100
237	7,39	4,96	200	1900	2871	V52218	63-100
193	9,07	4,04	200	2000	3046	V52219	63-100
169	10,3	3,54	200	2050	3175	V52220	63-100
147	11,9	3,09	200	2050	3323	V52221	63-100
137	12,8	2,87	200	2100	3405	V52222	63-100
127	13,8	2,65	200	2150	3489	V52223	63-100
111	15,8	2,32	200	2200	3600	V52224	63-90
98,3	17,8	2,06	200	2300	3600	V52225	63-80
87,6	20,0	1,83	200	2400	3600	V52226	63-80
76,1	23,0	1,59	200	2500	3600	V52227	63-71
70,6	24,8	1,48	200	2600	3600	V52228	63-71
64,3	27,2	1,35	200	2800	3600	V52229	63-71
81,0	21,6	1,70	200	2900	3046	V52327	63-100
67,8	25,8	1,42	200	3000	3175	V52328	63-100
60,0	29,1	1,26	200	3200	3323	V52329	63-100
55,6	31,5	1,16	200	3400	3405	V52330	63-100
52,2	33,5	1,09	200	3500	3046	V52331	63-100
43,6	40,1	0,914	200	3550	3175	V52332	63-100
38,7	45,3	0,810	200	3600	3323	V52333	63-100
35,8	48,9	0,749	200	3700	3405	V52334	63-100
32,6	53,7	0,683	200	3900	3489	V52335	63-100
28,2	62,0	0,591	200	4000	3600	V52336	63-90
24,8	70,6	0,519	200	4000	3600	V52337	63-80
22,0	79,5	0,461	200	4000	3600	V52338	63-80
19,0	92,1	0,398	200	4000	3600	V52339	63-71
17,6	99,6	0,368	200	4000	3600	V52340	63-71
15,9	110	0,333	200	4000	3600	V52341	63-71

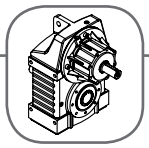
200 Nm

52



13,3	131	0,279	200	4000	1800	V52442	63-100
12,4	141	0,260	200	4000	1800	V52443	63-100
11,7	149	0,246	200	4000	1800	V52444	63-100
9,56	183	0,200	200	4000	1800	V52445	63-100
8,37	209	0,175	200	4000	1800	V52446	63-100
** 7,30	239	0,153	200	4000	1800	V52447	63-100
6,80	257	0,142	200	4000	1800	V52448	63-100
6,27	279	0,131	200	4000	1800	V52449	63-100
5,50	318	0,115	200	4000	1800	V52450	63-90
** 4,87	359	0,102	200	4000	1800	V52451	63-80
** 4,34	403	0,091	200	4000	1800	V52452	63-80
** 3,77	463	0,079	200	4000	1800	V52453	63-71
** 3,50	500	0,073	200	4000	1800	V52454	63-71
** 3,19	548	0,067	200	4000	1800	V52455	63-71
** 2,95	592	0,062	200	4000	1800	V52556	63-100

***** Verificar limites motor / redutor na página 167



200 Nm

52

rpm	itot	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
** 2,40	726	0,050	200	4000	1800	V52557	63-100
** 2,11	829	0,044	200	4000	1800	V52558	63-100
** 1,84	951	0,038	200	4000	1800	V52559	63-100
** 1,71	1.022	0,036	200	4000	1800	V52560	63-100
** 1,58	1.108	0,033	200	4000	1800	V52561	63-100
** 1,38	1.263	0,029	200	4000	1800	V52562	63-90
** 1,22	1.427	0,026	200	4000	1800	V52563	63-80
** 1,09	1.601	0,023	200	4000	1800	V52564	63-80
** 0,948	1.843	0,020	200	4000	1800	V52565	63-71
** 0,879	1.986	0,018	200	4000	1800	V52566	63-71
** 0,801	2.179	0,017	200	4000	1800	V52567	63-71
** 0,692	2.524	0,014	200	4000	1800	V52668	63-100
** 0,650	2.688	0,014	200	4000	1800	V52669	63-100
** 0,543	3.214	0,011	200	4000	1800	V52670	63-100
** 0,481	3.626	0,010	200	4000	1800	V52671	63-100
** 0,445	3.920	0,009	200	4000	1800	V52672	63-100
** 0,406	4.300	0,009	200	4000	1800	V52673	63-100
** 0,352	4.967	0,007	200	4000	1800	V52674	63-90
** 0,309	5.653	0,006	200	4000	1800	V52675	63-80
** 0,274	6.366	0,006	200	4000	1800	V52676	63-80
** 0,237	7.378	0,005	200	4000	1800	V52677	63-71
** 0,219	7.979	0,005	200	4000	1800	V52678	63-71
** 0,198	8.810	0,004	200	4000	1800	V52679	63-71

11

235 - 450 Nm

54

416	4,21	10,4	235	2300	2446	V54212	100-132
373	4,70	10,3	265	2400	2542	V54213	100-132
345	5,08	10,1	279	2480	2602	V54214	100-132
285	6,14	11,2	376	2550	2735	V54216	100-132
246	7,10	10,3	400	2600	2871	V54217	100-132
210	8,34	9,89	450	2700	2542	V54218	100-132
194	9,02	9,15	450	3000	2602	V54219	100-132
161	10,9	7,57	450	3100	2735	V54221	100-132
139	12,6	6,54	450	3200	2871	V54222	63-132
117	14,9	5,53	450	3500	3046	V54223	63-132
105	16,7	4,93	450	3600	3175	V54224	63-132
88,3	19,8	4,16	450	3800	3405	V54226	63-100
82,2	21,3	3,87	450	4000	3489	V54227	63-100
73,1	23,9	3,45	450	4300	3600	V54228	63-90
74,1	23,6	3,49	450	4800	2871	V54328	63-132
60,4	29,0	2,85	450	5200	3046	V54329	63-132
53,0	33,0	2,50	450	5300	3175	V54330	63-132
46,2	37,9	2,17	450	5400	3323	V54331	63-112
43,0	40,7	2,03	450	5500	3405	V54332	63-100
39,6	44,2	1,87	450	5600	3489	V54333	63-100
38,2	45,8	1,80	450	5800	2871	V54334	63-132
31,2	56,1	1,47	450	5800	3046	V54335	63-132
27,3	64,1	1,29	450	5800	3175	V54336	63-132

***** Verificar limites motor / redutor na página 167

235 - 450 Nm

54

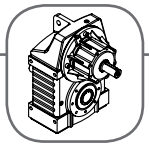
rpm	i_{tot}	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
23,8	73,5	1,12	450	5800	3323	V54337	63-112
22,2	78,9	1,04	450	5800	3405	V54338	63-100
20,4	85,6	0,963	450	5800	3489	V54339	63-100
17,9	97,6	0,845	450	5800	3600	V54340	63-90
15,9	110	0,748	450	5800	3600	V54341	63-80
14,1	124	0,667	450	5800	3600	V54342	63-80
12,3	142	0,579	450	5800	3600	V54343	63-71
11,4	153	0,537	450	5800	3600	V54344	63-71
10,4	168	0,490	450	5800	3600	V54345	63-71

450 Nm

54

** 9,79	180	0,461	450	5800	1800	V54445	63-100
** 7,98	221	0,376	450	5800	1800	V54447	63-100
** 6,99	252	0,330	450	5800	1800	V54448	63-100
** 6,10	289	0,287	450	5800	1800	V54449	63-100
** 5,68	311	0,267	450	5800	1800	V54450	63-100
** 5,23	337	0,247	450	5800	1800	V54451	63-100
** 4,59	384	0,216	450	5800	1800	V54452	63-90
** 4,06	434	0,191	450	5800	1800	V54453	63-80
** 3,62	487	0,171	450	5800	1800	V54454	63-80
** 3,15	560	0,148	450	5800	1800	V54455	63-71
2,84	616	0,134	450	5800	1800	V54556	63-100
** 2,74	644	0,129	450	5800	1800	V54557	63-100
** 2,23	790	0,105	450	5800	1800	V54558	63-100
** 1,96	902	0,092	450	5800	1800	V54559	63-100
** 1,70	1.035	0,080	450	5800	1800	V54560	63-100
** 1,59	1.111	0,075	450	5800	1800	V54561	63-100
** 1,46	1.205	0,069	450	5800	1800	V54562	63-100
** 1,28	1.374	0,060	450	5800	1800	V54563	63-90
** 1,14	1.552	0,054	450	5800	1800	V54564	63-80
** 1,01	1.741	0,048	450	5800	1800	V54565	63-80
** 0,880	2.004	0,041	450	5800	1800	V54566	63-71
** 0,816	2.160	0,038	450	5800	1800	V54567	63-71
** 0,694	2.539	0,033	450	5800	1800	V54668	63-100
** 0,642	2.745	0,030	450	5800	1800	V54669	63-100
** 0,603	2.923	0,028	450	5800	1800	V54670	63-100
** 0,504	3.495	0,024	450	5800	1800	V54671	63-100
** 0,447	3.944	0,021	450	5800	1800	V54672	63-100
** 0,414	4.263	0,019	450	5800	1800	V54673	63-100
** 0,377	4.677	0,018	450	5800	1800	V54674	63-100
** 0,326	5.402	0,015	450	5800	1800	V54675	63-90
** 0,287	6.148	0,014	450	5800	1800	V54676	63-80
** 0,255	6.923	0,012	450	5800	1800	V54677	63-80
** 0,220	8.024	0,010	450	5800	1800	V54678	63-71
** 0,203	8.678	0,010	450	5800	1800	V54679	63-71
** 0,184	9.582	0,009	450	5800	1800	V54680	63-71

***** Verificar limites motor / redutor na página 167



280 - 600 Nm

55

rpm	itot	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
416	4,21	12,2	280	2800	2446	V55213	100-132
345	5,08	12,3	340	3000	2602	V55214	100-132
285	6,14	12,2	410	3200	2735	V55216	100-132
246	7,10	12,1	470	3400	2486	V55217	100-132
210	8,34	12,1	550	3800	2542	V55218	100-132
194	9,02	12,2	600	3900	2602	V55219	100-132
161	10,9	10,1	600	4000	2735	V55221	100-132
139	12,6	8,72	600	4050	2871	V55222	63-132
117	14,9	7,37	600	4100	3046	V55223	63-132
105	16,7	6,58	600	4200	3175	V55224	63-132
88,3	19,8	5,55	600	4300	3405	V55225	63-100
82,2	21,3	5,16	600	4400	3489	V55226	63-100
65,4	26,8	3,63	530	4500	3600	V55228	63-80
58,5	29,9	3,37	550	4900	3600	V55229	63-80
74,1	23,6	4,66	600	5200	2871	V55327	63-132
60,4	29,0	3,80	600	5300	3046	V55329	63-132
53,0	33,0	3,33	600	5400	3175	V55330	63-132
46,2	37,9	2,90	600	5500	3323	V55331	63-112
43,0	40,7	2,70	600	5800	3405	V55332	63-100
39,6	44,2	2,49	600	6000	3489	V55333	63-100
38,2	45,8	2,40	600	6500	2871	V55334	63-132
31,2	56,1	1,96	600	7000	3046	V55335	63-132
27,3	64,1	1,72	600	7500	3175	V55336	63-132
23,8	73,5	1,50	600	7800	3323	V55337	63-112
22,2	78,9	1,39	600	8000	3405	V55338	63-100
20,4	85,6	1,28	600	8100	3489	V55339	63-100
17,9	97,6	1,13	600	8100	3600	V55340	63-90
15,9	110	0,997	600	8100	3600	V55341	63-80
14,1	124	0,889	600	8100	3600	V55342	63-80
12,3	142	0,772	600	8100	3600	V55343	63-71
11,4	153	0,716	600	8100	3600	V55344	63-71
10,4	168	0,653	600	8100	3600	V55345	63-71

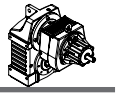
600 Nm

55

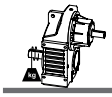
** 11,0	160	0,691	600	8100	1800	V55444	63-100
** 8,97	197	0,563	600	8100	1800	V55446	63-100
** 7,86	224	0,494	600	8100	1800	V55447	63-100
** 6,85	257	0,430	600	8100	1800	V55448	63-100
** 6,38	276	0,401	600	8100	1800	V55449	63-100
** 5,88	300	0,369	600	8100	1800	V55450	63-100
** 5,16	342	0,324	600	8100	1800	V55451	63-90
** 4,56	386	0,287	600	8100	1800	V55452	63-80
** 4,07	433	0,256	600	8100	1800	V55453	63-80
** 3,53	499	0,222	600	8100	1800	V55454	63-71
3,07	570	0,193	600	8100	1800	V55555	63-100
2,67	654	0,168	600	8100	1800	V55556	63-100
2,49	703	0,156	600	8100	1800	V55557	63-100
** 2,40	734	0,151	600	8100	1800	V55558	63-100
** 1,96	901	0,123	600	8100	1800	V55559	63-100

* Verificar limites motor / redutor na página 167

600 Nm

55 

rpm	itot	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
** 1,71	1.028	0,108	600	8100	1800	V55560	63-100
** 1,49	1.180	0,094	600	8100	1800	V55561	63-100
** 1,39	1.267	0,087	600	8100	1800	V55562	63-100
** 1,28	1.374	0,081	600	8100	1800	V55563	63-100
** 1,12	1.567	0,071	600	8100	1800	V55564	63-90
** 0,996	1.770	0,063	600	8100	1800	V55565	63-80
** 0,888	1.986	0,056	600	8100	1800	V55566	63-80
** 0,771	2.286	0,048	600	8100	1800	V55567	63-71
** 0,687	2.566	0,043	600	8100	1800	V55668	63-100
** 0,609	2.896	0,038	600	8100	1800	V55669	63-100
** 0,563	3.130	0,035	600	8100	1800	V55670	63-100
** 0,529	3.334	0,033	600	8100	1800	V55671	63-100
** 0,442	3.986	0,028	600	8100	1800	V55672	63-100
** 0,392	4.498	0,025	600	8100	1800	V55673	63-100
** 0,363	4.862	0,023	600	8100	1800	V55674	63-100
** 0,330	5.334	0,021	600	8100	1800	V55675	63-100
** 0,286	6.160	0,018	600	8100	1800	V55676	63-90
** 0,251	7.011	0,016	600	8100	1800	V55677	63-80
** 0,223	7.895	0,014	600	8100	1800	V55678	63-80
** 0,193	9.151	0,012	600	8100	1800	V55679	63-71
** 0,178	9.897	0,011	600	8100	1800	V55680	63-71
** 0,161	10.927	0,010	600	8100	1800	V55681	63-71

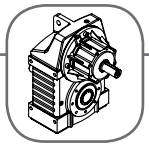


500 - 820 Nm

56

392	4,46	20,5	500	6000	2233	V56213	100-160
376	4,65	20,1	510	6500	2233	V56214	100-160
312	5,61	20,2	620	6700	2361	V56215	63-160
285	6,14	20,3	680	6800	2446	V56216	63-160
253	6,91	20,2	760	6900	2542	V56217	63-160
231	7,57	19,8	820	7000	2602	V56218	63-160
200	8,74	17,2	820	7100	2735	V56219	63-160
173	10,1	14,8	820	7600	2446	V56220	63-160
153	11,4	13,2	820	7900	2542	V56221	63-160
140	12,5	12,0	820	8100	2602	V56222	63-160
121	14,4	10,4	820	8500	2735	V56223	63-160
106	16,5	9,11	820	8600	2871	V56224	63-132
90,4	19,4	7,76	820	9000	3046	V56226	63-132
81,2	21,6	6,97	820	9200	3175	V56227	63-132
69,0	25,4	5,92	820	9300	3405	V56228	63-100
64,7	27,1	5,55	820	9500	3489	V56229	63-100
76,3	22,9	6,55	820	9700	2446	V56327	63-160
68,4	25,6	5,88	820	9800	2542	V56328	63-160
63,3	27,7	5,43	820	10000	2602	V56329	63-160
52,3	33,4	4,49	820	10000	2735	V56331	63-160
** 45,3	38,7	3,89	820	10000	2871	V56332	63-132
38,0	46,0	3,26	820	10000	2542	V56333	63-160
35,2	49,8	3,02	820	10000	2602	V56334	63-160
29,1	60,2	2,50	820	10000	2735	V56336	63-160

***** Verificar limites motor / redutor na página 167



500 - 820 Nm

56

rpm	itot	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
25,1	69,6	2,16	820	10000	2871	V56337	63-132
21,3	82,3	1,83	820	10000	3046	V56338	63-132
19,0	92,3	1,63	820	10000	3175	V56339	63-132
16,0	109	1,37	820	10000	3405	V56341	63-100
14,9	118	1,28	820	10000	3489	V56342	63-100
13,2	132	1,14	820	10000	3600	V56343	63-90
10,6	165	0,910	820	10000	3600	V56344	63-80
9,29	188	0,798	820	10000	3600	V56345	63-71
8,57	204	0,736	820	10000	3600	V56346	63-71

820 Nm

56

** 7,53	234	0,646	820	10000	1800	V56447	63-100
** 6,59	267	0,566	820	10000	1800	V56449	63-100
** 5,75	307	0,493	820	10000	1800	V56450	63-100
** 5,35	329	0,460	820	10000	1800	V56451	63-100
** 4,93	407	0,424	820	10000	1800	V56452	63-90
** 4,33	460	0,372	820	10000	1800	V56453	63-80
** 3,83	516	0,329	820	10000	1800	V56454	63-80
** 3,41	594	0,293	820	10000	1800	V56455	63-71
** 2,97	640	0,255	820	10000	1800	V56456	63-71
2,39	734	0,205	820	10000	1800	V56557	63-100
2,22	788	0,191	820	10000	1800	V56558	63-100
** 2,14	823	0,184	820	10000	1800	V56559	63-100
** 1,75	1.010	0,150	820	10000	1800	V56560	63-100
** 1,53	1.153	0,131	820	10000	1800	V56561	63-100
** 1,33	1.323	0,114	820	10000	1800	V56562	63-100
** 1,24	1.421	0,107	820	10000	1800	V56563	63-100
** 1,14	1.540	0,098	820	10000	1800	V56564	63-100
** 1,00	1.757	0,086	820	10000	1800	V56565	63-90
** 0,888	1.984	0,076	820	10000	1800	V56566	63-80
** 0,792	2.226	0,068	820	10000	1800	V56567	63-80
** 0,688	2.563	0,059	820	10000	1800	V56568	63-71
** 0,613	2.877	0,053	820	10000	1800	V56669	63-100
** 0,543	3.247	0,047	820	10000	1800	V56670	63-100
** 0,502	3.510	0,043	820	10000	1800	V56671	63-100
** 0,472	3.738	0,040	820	10000	1800	V56672	63-100
** 0,394	4.469	0,034	820	10000	1800	V56673	63-100
** 0,350	5.043	0,030	820	10000	1800	V56674	63-100
** 0,323	5.451	0,028	820	10000	1800	V56675	63-100
** 0,295	5.980	0,025	820	10000	1800	V56676	63-100
** 0,255	6.906	0,022	820	10000	1800	V56677	63-90
** 0,224	7.861	0,019	820	10000	1800	V56678	63-80
** 0,199	8.852	0,017	820	10000	1800	V56679	63-80
** 0,172	10.260	0,015	820	10000	1800	V56680	63-71
** 0,159	11.096	0,014	820	10000	1800	V56681	63-71
** 0,144	12.251	0,012	820	10000	1800	V56682	63-71

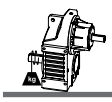
11

* Verificar limites motor / redutor na página 167

820 - 1550 Nm

58

rpm	itot	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
425	4,11	37,1	820	9000	1967	V58212	80-180
410	4,27	37,4	870	9100	1967	V58213	80-180
346	5,05	37,4	1030	9500	2068	V58214	80-180
318	5,51	37,2	1120	9600	2124	V58215	80-180
273	6,40	37,2	1300	9700	2233	V58216	80-180
232	7,53	37,7	1550	9800	2361	V58217	80-180
216	8,11	35,0	1550	10100	1967	V58218	80-180
182	9,61	29,6	1550	10200	2068	V58219	80-180
167	10,5	27,1	1550	10500	2124	V58220	80-180
144	12,2	23,3	1550	11000	2233	V58222	80-180
122	14,3	19,8	1550	11500	2361	V58223	80-180
112	15,7	18,1	1550	12000	2446	V58224	80-180
100	17,4	16,3	1550	13000	2542	V58225	80-160
92,9	18,8	15,1	1550	13500	2602	V58226	80-160
81,6	21,5	13,2	1550	14000	2735	V58227	80-160
72,7	24,1	11,8	1550	14500	2871	V58228	80-132
62,5	28,0	10,2	1550	15000	3046	V58229	80-132
56,6	30,9	9,18	1550	15500	3175	V58230	80-132
69,5	25,2	11,3	1550	16000	2233	V58328	80-180
66,7	26,2	10,8	1550	16000	2233	V58329	80-180
55,3	31,7	8,97	1550	16000	2361	V58330	80-180
50,5	34,6	8,20	1550	16000	2446	V58331	80-180
44,9	39,0	7,29	1550	16000	2542	V58332	80-160
41,0	42,7	6,65	1550	16000	2602	V58333	80-160
37,3	46,9	6,06	1550	16000	2233	V58334	80-180
30,9	56,6	5,02	1550	16000	2361	V58335	80-180
28,3	61,9	4,59	1550	16000	2446	V58336	80-180
25,1	69,6	4,08	1550	16000	2542	V58337	80-160
22,9	76,4	3,72	1550	16000	2602	V58338	80-160
19,9	88,1	3,22	1550	16000	2735	V58339	80-160
17,4	101	2,82	1550	16000	2871	V58340	80-132
14,8	118	2,40	1550	16000	3046	V58341	80-132
13,3	132	2,16	1550	16000	3175	V58342	80-132
11,3	155	1,83	1550	16000	3405	V58344	80-100
9,49	184	1,54	1550	16000	3600	V58345	80-90
8,52	205	1,38	1550	16000	3600	V58346	80
7,59	231	1,23	1550	16000	3600	V58347	80

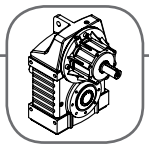


1550 Nm

58

8,01	218	1,30	1550	16000	1800	V58447	63-132
7,41	236	1,20	1550	16000	1800	V58448	63-132
6,13	285	0,995	1550	16000	1800	V58449	63-132
5,30	330	0,860	1550	16000	1800	V58450	63-132
** 4,48	391	0,727	1550	16000	1800	V58452	63-132
** 4,00	438	0,648	1550	16000	1800	V58453	63-132
3,37	519	0,547	1550	16000	1800	V58454	63-100
3,14	558	0,509	1550	16000	1800	V58455	63-100
2,79	627	0,453	1550	16000	1800	V58456	63-90

***** Verificar limites motor / redutor na página 167



1550 Nm

58

rpm	itot	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
2,18	802	0,354	1550	16000	1800	V58558	63-132
1,90	921	0,308	1550	16000	1800	V58559	63-132
1,70	1.028	0,276	1550	16000	1800	V58560	63-132
1,57	1.111	0,256	1550	16000	1800	V58561	63-132
1,30	1.343	0,211	1550	16000	1800	V58562	63-132
** 1,13	1.554	0,183	1550	16000	1800	V58564	63-132
0,952	1.838	0,155	1550	16000	1800	V58565	63-132
0,849	2.061	0,138	1550	16000	1800	V58566	63-132
0,716	2.443	0,116	1550	16000	1800	V58567	63-100
0,667	2.625	0,108	1550	16000	1800	V58568	63-100
0,593	2.949	0,096	1550	16000	1800	V58569	63-90
0,490	3.569	0,080	1550	16000	1800	V58671	63-132
0,430	4.074	0,070	1550	16000	1800	V58672	63-132
0,374	4.674	0,061	1550	16000	1800	V58673	63-112
0,349	5.019	0,057	1550	16000	1800	V58674	63-100
0,310	5.640	0,050	1550	16000	1800	V58675	63-132
** 0,253	6.918	0,041	1550	16000	1800	V58677	63-132
** 0,222	7.895	0,036	1550	16000	1800	V58678	63-132
** 0,193	9.059	0,031	1550	16000	1800	V58679	63-112
** 0,180	9.728	0,029	1550	16000	1800	V58680	63-100
** 0,166	10.550	0,027	1550	16000	1800	V58681	63-100
** 0,145	12.031	0,024	1550	16000	1800	V58682	63-90
** 0,129	13.589	0,021	1550	16000	1800	V58683	63-80
** 0,115	15.247	0,019	1550	16000	1800	V58684	63-80
** 0,093	18.916	0,015	1550	16000	1800	V58685	63-71
** 0,084	20.754	0,014	1550	16000	1800	V58686	63-71

11

1550 - 3000 Nm

60

375	4,67	60,9	1550	6000	1797	V60213	80-225
320	5,47	60,3	1800	6500	1885	V60214	80-225
277	6,31	61,0	2100	7000	1840	V60216	80-225
239	7,32	60,1	2400	7500	2068	V60217	80-225
221	7,91	60,2	2600	7700	2124	V60218	80-225
193	9,07	60,6	3000	7800	2068	V60219	80-225
179	9,77	56,3	3000	8000	1885	V60220	80-225
155	11,3	48,7	3000	9000	1840	V60221	80-225
134	13,1	42,0	3000	9500	2068	V60222	80-225
124	14,1	38,9	3000	9700	2124	V60223	80-225
108	16,2	33,9	3000	9800	2233	V60224	80-225
93,0	18,8	29,2	3000	9900	2361	V60225	80-180
85,1	20,6	26,7	3000	10000	2446	V60226	80-180
76,5	22,9	24,0	3000	10100	2542	V60227	80-160
71,3	24,5	22,4	3000	10200	2602	V60228	80-160
63,8	27,4	20,0	3000	10400	2735	V60229	80-160
65,2	26,9	20,5	3000	11000	1967	V60328	80-225
62,8	27,8	19,7	3000	11500	1967	V60329	80-225
53,1	33,0	16,7	3000	12000	2068	V60330	80-225
48,6	36,0	15,3	3000	12500	2124	V60331	80-225
41,9	41,8	13,2	3000	13000	2233	V60332	80-225

* Verificar limites motor / redutor na página 167

1550 - 3000 Nm

60

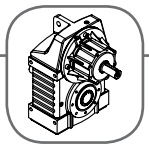
rpm	itot	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
37,8	46,3	11,9	3000	14000	1967	V60333	80-225
31,9	54,8	10,0	3000	14500	2068	V60335	80-225
29,3	59,7	9,20	3000	15000	2124	V60336	80-225
25,2	69,4	7,92	3000	15800	2233	V60337	80-225
21,4	81,6	6,73	3000	16000	2361	V60338	80-180
19,6	89,5	6,14	3000	16500	2446	V60339	80-180
17,6	99,3	5,53	3000	16800	2542	V60340	80-160
16,3	107	5,12	3000	17000	2602	V60341	80-160
14,3	122	4,49	3000	17500	2735	V60342	80-160
12,7	137	4,01	3000	17900	2871	V60343	80-132
11,0	160	3,44	3000	18000	3046	V60344	80-132
9,92	176	3,12	3000	18000	3175	V60345	80-132
8,41	208	2,64	3000	18000	3405	V60346	80-100
7,93	221	2,49	3000	18000	3489	V60347	80-100

3000 Nm

60

8,45	207	2,65	3000	18000	1800	V60447	63-132
6,99	250	2,20	3000	18000	1800	V60448	63-132
6,04	290	1,90	3000	18000	1800	V60449	63-132
** 5,11	342	1,61	3000	18000	1800	V60451	63-132
** 4,56	384	1,43	3000	18000	1800	V60452	63-132
** 3,84	455	1,21	3000	18000	1800	V60453	63-100
3,58	489	1,12	3000	18000	1800	V60454	63-100
3,18	550	1,00	3000	18000	1800	V60455	63-90
** 2,67	654	0,840	3000	18000	1800	V60556	63-132
** 2,33	751	0,732	3000	18000	1800	V60557	63-132
** 2,09	838	0,656	3000	18000	1800	V60558	63-132
** 1,93	906	0,607	3000	18000	1800	V60559	63-132
1,60	1.096	0,502	3000	18000	1800	V60561	63-132
** 1,38	1.267	0,434	3000	18000	1800	V60562	63-132
** 1,17	1.499	0,367	3000	18000	1800	V60563	63-132
** 1,04	1.681	0,327	3000	18000	1800	V60565	63-132
** 0,878	1.992	0,276	3000	18000	1800	V60566	63-100
** 0,817	2.141	0,257	3000	18000	1800	V60567	63-100
** 0,728	2.405	0,229	3000	18000	1800	V60568	63-90
** 0,738	2.373	0,232	3000	18000	1800	V60668	63-132
0,601	2.911	0,189	3000	18000	1800	V60670	63-132
0,527	3.322	0,165	3000	18000	1800	V60671	63-132
0,459	3.812	0,144	3000	18000	1800	V60672	63-112
** 0,381	4.599	0,120	3000	18000	1800	V60673	63-132
0,310	5.641	0,097	3000	18000	1800	V60675	63-132
0,272	6.439	0,085	3000	18000	1800	V60676	63-132
** 0,237	7.388	0,074	3000	18000	1800	V60677	63-112
0,221	7.933	0,069	3000	18000	1800	V60678	63-100
0,203	8.603	0,064	3000	18000	1800	V60679	63-100
0,178	9.811	0,056	3000	18000	1800	V60680	63-90
0,158	11.081	0,050	3000	18000	1800	V60681	63-80
0,141	12.433	0,044	3000	18000	1800	V60682	63-80

***** Verificar limites motor / redutor na página 167



3000 Nm

60

rpm	itot	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
0,122	14.311	0,038	3000	18000	1800	V60683	63-71
0,113	15.426	0,036	3000	18000	1800	V60684	63-71
0,103	16.924	0,032	3000	18000	1800	V60685	63-71

2436 - 4500 Nm

62

** 392	4,46	100	2436	9000	1686	V62213	100-280
341	5,13	100	2800	9500	1758	V62214	100-280
318	5,51	100	3005	9800	1797	V62215	100-280
275	6,38	100	3480	9900	1885	V62216	100-280
240	7,29	100	3976	10000	1967	V62217	100-280
213	8,22	100	4490	11200	2068	V62218	100-280
203	8,62	95,7	4500	12000	1686	V62219	100-280
177	9,90	83,3	4500	12500	1758	V62220	100-280
165	10,6	77,6	4500	12600	1797	V62221	100-280
142	12,3	67,0	4500	12700	1885	V62222	100-280
124	14,1	58,6	4500	13000	1967	V62223	100-280
110	15,9	52,0	4500	13500	2068	V62224	100-280
102	17,1	46,1	4300	15000	2124	V62225	100-225
88,6	19,8	41,7	4500	16000	2233	V62226	100-225
76,7	22,8	36,2	4500	17000	2361	V62227	100-180
70,2	24,9	33,1	4500	17500	2446	V62228	100-180
63,8	27,4	30,1	4500	18000	2542	V62229	100-160
53,5	32,7	25,2	4500	19000	2735	V62230	100-160
63,2	27,7	29,8	4500	19500	1758	V62329	100-280
58,5	29,9	27,6	4500	20000	1797	V62330	100-280
50,0	35,0	23,5	4500	21000	1885	V62331	100-280
43,3	40,4	20,4	4500	21500	1967	V62332	100-280
37,3	46,9	17,6	4500	21600	2068	V62333	100-280
34,5	50,7	16,3	4500	21700	2124	V62334	100-225
30,1	58,1	14,2	4500	22000	2233	V62335	100-225
25,9	67,4	12,2	4500	22500	2361	V62336	100-180
25,2	69,5	11,9	4500	23000	1967	V62337	100-280
21,7	80,6	10,2	4500	23500	2068	V62338	100-280
20,1	87,2	9,46	4500	24000	2124	V62339	100-225
17,5	99,8	8,26	4500	24200	2233	V62340	100-225
15,1	116	7,12	4500	24400	2361	V62341	100-180
13,8	127	6,51	4500	24600	2446	V62342	100-180
12,4	141	5,85	4500	25000	2542	V62343	100-160
11,6	151	5,46	4500	25000	2602	V62344	100-160
10,4	169	4,88	4500	25000	2735	V62345	100-160
9,19	190	4,33	4500	25000	2871	V62346	100-132
7,99	219	3,77	4500	25000	3046	V62347	100-132
7,21	243	3,40	4500	25000	3175	V62348	100-132

4500 Nm

62

7,80	224	3,67	4500	25000	1800	V62447	63-160
6,93	253	3,26	4500	25000	1800	V62448	63-160

***** Verificar limites motor / redutor na página 167

4500 Nm

62

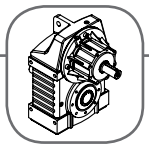
rpm	itot	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
6,32	277	2,98	4500	25000	1800	V62449	63-160
5,47	320	2,58	4500	25000	1800	V62450	63-160
4,79	365	2,26	4500	25000	1800	V62451	63-132
4,08	429	1,92	4500	25000	1800	V62453	63-132
3,66	478	1,73	4500	25000	1800	V62454	63-132
3,11	562	1,47	4500	25000	1800	V62455	63-100
2,92	600	1,38	4500	25000	1800	V62456	63-100
2,37	740	1,11	4500	25000	1800	V62557	63-160
2,16	811	1,02	4500	25000	1800	V62558	63-160
2,03	864	0,954	4500	25000	1800	V62559	63-160
1,68	1.043	0,791	4500	25000	1800	V62560	63-160
1,53	1.141	0,723	4500	25000	1800	V62561	63-160
1,36	1.284	0,642	4500	25000	1800	V62562	63-160
1,24	1.407	0,586	4500	25000	1800	V62563	63-160
** 1,08	1.624	0,508	4500	25000	1800	V62564	63-160
0,943	1.856	0,444	4500	25000	1800	V62566	63-132
0,803	2.180	0,378	4500	25000	1800	V62567	63-132
0,721	2.427	0,340	4500	25000	1800	V62568	63-132
0,613	2.857	0,289	4500	25000	1800	V62569	63-100
** 0,608	2.879	0,286	4500	25000	1800	V62669	63-160
** 0,580	3.113	0,273	4500	25000	1800	V62670	63-160
** 0,465	3.764	0,219	4500	25000	1800	V62671	63-160
** 0,402	4.353	0,189	4500	25000	1800	V62672	63-132
** 0,377	4.645	0,178	4500	25000	1800	V62673	63-160
** 0,338	5.182	0,159	4500	25000	1800	V62674	63-160
** 0,322	5.604	0,152	4500	25000	1800	V62675	63-160
0,258	6.774	0,122	4500	25000	1800	V62677	63-160
0,223	7.835	0,105	4500	25000	1800	V62678	63-132
0,189	9.267	0,089	4500	25000	1800	V62679	63-132
0,168	10.393	0,079	4500	25000	1800	V62680	63-132
** 0,142	12.320	0,067	4500	25000	1800	V62682	63-100
0,132	13.239	0,062	4500	25000	1800	V62683	63-100
0,118	14.870	0,055	4500	25000	1800	V62684	63-90
** 0,105	16.636	0,050	4500	25000	1800	V62685	63-80
0,094	18.581	0,044	4500	25000	1800	V62686	63-80
0,083	21.200	0,039	4500	25000	1800	V62687	63-71
0,076	22.985	0,036	4500	25000	1800	V62688	63-71

3890 - 8000 Nm

64

418	4,19	170	3890	11000	1608	V64213	132-315
355	4,92	170	4570	12000	1686	V64214	132-315
309	5,66	170	5260	13000	1758	V64215	132-315
289	6,06	170	5630	14500	1797	V64216	132-315
250	6,99	170	6490	16000	1885	V64217	132-315
218	8,02	170	7440	18000	1967	V64218	132-315
190	9,20	159	8000	21000	2068	V64219	132-280
183	9,56	153	8000	23000	1686	V64220	132-315
159	11,0	133	8000	25500	1758	V64221	132-315

***** Verificar limites motor / redutor na página 167



3890 - 8000 Nm

64

rpm	itot	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
149	11,8	125	8000	29000	1797	V64222	132-315
129	13,6	108	8000	29900	1885	V64223	132-315
112	15,6	94,2	8000	31200	1967	V64224	132-315
98,0	17,9	82,1	8000	31300	2068	V64225	132-280
91,2	19,2	76,4	8000	32000	2124	V64226	132-225
80,5	21,7	67,4	8000	33000	2233	V64227	132-225
69,9	25,0	58,6	8000	36000	2361	V64228	132-180
64,2	27,3	53,8	8000	37000	2233	V64229	132-180
56,9	30,8	46,5	7800	38000	1758	V64330	132-315
52,7	33,2	44,1	8000	40000	1797	V64331	132-315
45,0	38,9	37,7	8000	41000	1885	V64332	132-315
39,0	44,9	32,6	8000	42000	1967	V64333	132-315
34,9	50,1	29,2	8000	42500	1797	V64334	132-315
29,8	58,7	25,0	8000	43000	1885	V64335	132-315
25,8	67,8	21,6	8000	43900	1967	V64337	132-315
22,3	78,6	18,6	8000	44000	2068	V64338	132-280
20,6	85,0	17,2	8000	44500	2124	V64339	132-225
18,0	97,4	15,1	8000	45000	2233	V64340	132-225
15,5	113	13,0	8000	45000	2361	V64341	132-180
14,2	124	11,9	8000	45000	2446	V64342	132-180
12,7	137	10,7	8000	45000	2542	V64343	132-160
10,6	165	8,90	8000	45000	2735	V64344	132-160
9,43	186	7,90	8000	45000	2871	V64345	132-132
8,00	213	6,87	8000	45000	3046	V64346	132-132
7,00	237	6,19	8000	45000	3175	V64347	132-132

11

8000 Nm

64

7,10	246	5,95	8000	45000	1800	V64448	63-160
6,31	277	5,29	8000	45000	1800	V64449	63-160
5,76	304	4,82	8000	45000	1800	V64450	63-160
4,99	351	4,18	8000	45000	1800	V64451	63-160
4,37	401	3,66	8000	45000	1800	V64452	63-132
3,72	471	3,11	8000	45000	1800	V64453	63-132
3,34	524	2,80	8000	45000	1800	V64455	63-132
2,84	617	2,38	8000	45000	1800	V64456	63-100
2,66	658	2,23	8000	45000	1800	V64457	63-100
2,21	791	1,85	8000	45000	1800	V64558	63-160
2,08	843	1,74	8000	45000	1800	V64559	63-160
1,72	1.017	1,44	8000	45000	1800	V64560	63-160
1,57	1.112	1,32	8000	45000	1800	V64561	63-160
1,40	1.252	1,17	8000	45000	1800	V64562	63-160
1,28	1.372	1,07	8000	45000	1800	V64563	63-160
** 1,10	1.584	0,925	8000	45000	1800	V64564	63-160
** 0,967	1.810	0,810	8000	45000	1800	V64565	63-132
0,823	2.126	0,690	8000	45000	1800	V64567	63-132
0,739	2.367	0,619	8000	45000	1800	V64568	63-132
0,628	2.786	0,526	8000	45000	1800	V64569	63-100

* Verificar limites motor / redutor na página 167

8000 Nm

64

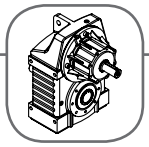
rpm	itot	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
** 0,595	3.036	0,498	8000	45000	1800	V64670	63-160
0,477	3.670	0,399	8000	45000	1800	V64671	63-160
** 0,412	4.244	0,345	8000	45000	1800	V64672	63-132
0,386	4.530	0,324	8000	45000	1800	V64673	63-160
0,346	5.053	0,290	8000	45000	1800	V64674	63-160
** 0,331	5.465	0,277	8000	45000	1800	V64675	63-160
0,265	6.606	0,222	8000	45000	1800	V64676	63-160
0,229	7.640	0,192	8000	45000	1800	V64677	63-132
0,194	9.037	0,162	8000	45000	1800	V64679	63-132
0,173	10.135	0,145	8000	45000	1800	V64680	63-132
0,146	12.014	0,122	8000	45000	1800	V64682	63-100
0,121	14.501	0,101	8000	45000	1800	V64683	63-90
0,108	16.223	0,090	8000	45000	1800	V64684	63-80
0,097	18.120	0,081	8000	45000	1800	V64685	63-80
0,085	20.673	0,071	8000	45000	1800	V64686	63-71
0,078	22.413	0,065	8000	45000	1800	V64687	63-71

7651 - 13000 Nm

66

374	4,67	300	7651	21000	1479	V66213	132-315
327	5,34	300	8750	22000	1539	V66215	132-315
292	5,98	300	9800	23000	1608	V66216	132-315
253	6,92	300	11330	24000	1686	V66217	132-315
221	7,92	301	13000	25000	1572	V66218	132-315
192	9,10	262	13000	26000	1539	V66219	132-315
172	10,2	234	13000	27800	1608	V66220	132-315
148	11,8	202	13000	29000	1686	V66221	132-315
130	13,5	176	13000	30000	1758	V66223	132-315
107	16,4	145	13000	31000	1885	V66224	132-315
95,4	18,3	130	13000	33000	1967	V66225	132-315
83,8	20,9	114	13000	34000	2068	V66226	132-280
77,2	22,7	105	13000	35000	2124	V66227	132-225
68,8	25,4	93,7	13000	39000	2233	V66228	132-225
61,6	28,4	83,9	13000	40500	1686	V66329	132-315
53,7	32,6	73,0	13000	43000	1758	V66330	132-315
50,0	35,0	68,0	13000	44000	1797	V66331	132-315
43,2	40,6	58,7	13000	45000	1885	V66332	132-315
38,2	45,8	52,0	13000	47000	1686	V66333	132-315
33,2	52,7	45,2	13000	47900	1758	V66334	132-315
31,0	56,5	42,1	13000	48000	1797	V66335	132-315
26,7	65,5	36,4	13000	48900	1885	V66336	132-315
23,4	74,8	31,8	13000	49000	1967	V66337	132-315
20,7	84,4	28,2	13000	51000	2068	V66338	132-280
19,2	90,9	26,2	13000	51600	2124	V66339	132-225
16,7	105	22,7	13000	53000	2233	V66340	132-225
14,4	121	19,6	13000	54000	2361	V66342	132-180
13,2	133	18,0	13000	59000	2446	V66343	132-180
12,0	146	16,3	13000	60000	2542	V66344	132-160
10,1	174	13,7	13000	61600	2735	V66345	132-160
8,98	195	12,2	13000	64000	2871	V66346	132-132
7,82	224	10,6	13000	65000	2753	V66347	132-132

***** Verificar limites motor / redutor na página 167



13000 Nm

66

rpm	itot	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
6,85	255	9,33	13000	68000	1800	V66448	80-180
5,90	297	8,03	13000	70000	1800	V66449	80-180
** 5,02	349	6,83	13000	70000	1800	V66451	80-180
4,12	425	5,61	13000	70000	1800	V66452	80-160
3,81	459	5,19	13000	70000	1800	V66453	80-160
3,35	523	4,56	13000	70000	1800	V66454	80-160
2,98	587	4,06	13000	70000	1800	V66455	80-132
2,57	682	3,49	13000	70000	1800	V66456	80-132
2,32	754	3,16	13000	70000	1800	V66457	80-132
2,07	847	2,81	13000	70000	1800	V66558	63-160
1,88	929	2,57	13000	70000	1800	V66559	63-160
1,77	989	2,41	13000	70000	1800	V66560	63-160
1,47	1.194	2,00	13000	70000	1800	V66561	63-160
1,34	1.306	1,82	13000	70000	1800	V66562	63-160
1,19	1.469	1,62	13000	70000	1800	V66563	63-160
1,09	1.611	1,48	13000	70000	1800	V66564	63-160
0,941	1.859	1,28	13000	70000	1800	V66565	63-160
0,824	2.124	1,12	13000	70000	1800	V66566	63-132
** 0,701	2.496	0,955	13000	70000	1800	V66568	63-132
0,630	2.778	0,858	13000	70000	1800	V66569	63-132
0,535	3.270	0,729	13000	70000	1800	V66570	63-100
0,502	3.488	0,683	13000	70000	1800	V66571	63-100
0,406	4.308	0,553	13000	70000	1800	V66672	63-160
0,351	4.982	0,478	13000	70000	1800	V66674	63-132
** 0,329	5.931	0,448	13000	70000	1800	V66675	63-160
** 0,282	6.414	0,383	13000	70000	1800	V66676	63-160
0,226	7.754	0,307	13000	70000	1800	V66678	63-160
0,195	8.968	0,266	13000	70000	1800	V66679	63-132
0,165	10.607	0,225	13000	70000	1800	V66680	63-132
0,147	11.896	0,200	13000	70000	1800	V66682	63-132
0,124	14.101	0,169	13000	70000	1800	V66683	63-100
0,115	15.153	0,157	13000	70000	1800	V66684	63-100
0,103	17.020	0,140	13000	70000	1800	V66685	63-90
0,092	19.042	0,125	13000	70000	1800	V66686	63-80
0,082	21.268	0,112	13000	70000	1800	V66687	63-80
0,072	24.265	0,098	13000	70000	1800	V66688	63-71
0,067	26.308	0,091	13000	70000	1800	V66689	63-71

8720 - 18000 Nm

68

361	4,84	330	8720	45000	1425	V68214	160-315
320	5,47	330	9860	48000	1479	V68215	160-315
** 282	6,21	330	11200	50000	1539	V68216	160-315
** 247	7,09	330	12770	51000	1608	V68217	160-315
** 215	8,13	330	14650	53000	1686	V68218	160-315
** 199	8,79	330	15840	59000	1425	V68219	160-315
** 176	9,94	330	17910	60000	1479	V68220	160-315
155	11,3	292	18000	62000	1539	V68221	160-315
136	12,9	256	18000	63000	1608	V68222	160-315
118	14,8	223	18000	65000	1686	V68223	160-315

* Verificar limites motor / redutor na página 167

8720 - 18000 Nm

68

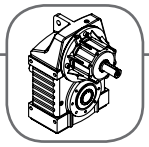
rpm	itot	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
105	16,6	199	18000	66000	1758	V68224	160-315
99,3	17,6	187	18000	66900	1797	V68225	160-315
86,2	20,3	162	18000	69000	1885	V68226	160-315
77,6	22,6	146	18000	70100	1967	V68227	160-315
** 68,4	25,6	115	16000	70500	2068	V68228	160-280
** 64,0	27,4	114	17000	70900	2124	V68229	160-225
56,3	31,1	64,8	11000	71000	2233	V68230	160-225
64,0	27,3	121	18000	78000	1686	V68329	160-315
55,7	31,4	105	18000	78500	1758	V68330	160-315
51,9	33,7	97,8	18000	79000	1797	V68331	160-315
44,8	39,1	84,4	18000	80000	1885	V68332	160-315
39,2	44,6	73,9	18000	81000	1967	V68333	160-315
34,7	50,4	65,5	18000	82000	2068	V68334	160-280
32,3	54,3	60,8	18000	82500	2124	V68335	160-225
28,1	62,3	53,0	18000	83000	1797	V68336	160-315
24,3	72,1	45,8	18000	84000	1885	V68337	160-315
21,2	82,4	40,0	18000	85000	1967	V68338	160-315
18,8	93,0	35,5	18000	86500	2068	V68339	160-280
17,5	100	32,9	18000	87000	2124	V68340	160-225
15,1	116	28,5	18000	88000	2233	V68341	160-225
13,1	134	24,7	18000	89000	2361	V68342	160-180
12,0	146	22,6	18000	90000	2446	V68343	160-180
10,9	161	20,5	18000	91500	2542	V68344	160
9,13	192	17,2	18000	93000	2735	V68346	160
** 8,15	215	15,4	18000	95000	2871	V68347	132-160
** 7,10	247	13,4	18000	96500	2753	V68348	132-160

18000 Nm

68

7,59	231	14,3	18000	97000	1800	V68448	100-280
6,55	267	12,4	18000	99000	1800	V68449	100-280
5,73	305	10,8	18000	99500	1800	V68450	100-280
5,08	344	9,58	18000	99800	1800	V68451	100-280
4,72	371	8,89	18000	100000	1800	V68452	100-225
4,08	429	7,70	18000	100000	1800	V68453	100-225
3,54	495	6,67	18000	100000	1800	V68454	100-180
3,23	541	6,10	18000	100000	1800	V68455	100-180
2,94	595	5,55	18000	100000	1800	V68456	100-160
2,47	710	4,65	18000	100000	1800	V68457	100-160
2,15	814	4,05	18000	100000	1800	V68558	80-225
1,85	945	3,49	18000	100000	1800	V68559	80-225
1,81	965	3,42	18000	100000	1800	V68560	80-225
1,68	1.042	3,16	18000	100000	1800	V68561	80-225
1,43	1.221	2,70	18000	100000	1800	V68562	80-225
1,24	1.409	2,34	18000	100000	1800	V68563	80-225
1,07	1.635	2,02	18000	100000	1800	V68564	80-225
0,990	1.767	1,87	18000	100000	1800	V68565	80-225
0,864	2.025	1,63	18000	100000	1800	V68566	80-225
0,745	2.350	1,40	18000	100000	1800	V68567	80-180
0,681	2.570	1,28	18000	100000	1800	V68568	80-180

***** Verificar limites motor / redutor na página 167



18000 Nm

68

rpm	i tot		Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
0,612	2.858	1,15	18000	100000	1800	V68569	80-180
0,571	3.065	1,08	18000	100000	1800	V68570	80-160
0,511	3.426	0,963	18000	100000	1800	V68571	80-160
0,503	3.478	0,948	18000	100000	1800	V68671	80-225
0,425	4.119	0,801	18000	100000	1800	V68672	80-225
0,390	4.493	0,734	18000	100000	1800	V68673	80-225
0,335	5.218	0,632	18000	100000	1800	V68674	80-225
** 0,303	5.777	0,571	18000	100000	1800	V68675	80-225
0,256	6.842	0,482	18000	100000	1800	V68677	80-225
0,235	7.463	0,442	18000	100000	1800	V68678	80-225
0,202	8.666	0,381	18000	100000	1800	V68679	80-225
0,172	10.196	0,324	18000	100000	1800	V68680	80-180
0,157	11.175	0,295	18000	100000	1800	V68681	80-180
0,141	12.408	0,266	18000	100000	1800	V68682	80-160
0,130	13.412	0,246	18000	100000	1800	V68683	80-160
0,115	15.280	0,216	18000	100000	1800	V68684	80-160
0,102	17.144	0,192	18000	100000	1800	V68685	80-132
0,088	19.932	0,165	18000	100000	1800	V68686	80-132
0,079	22.042	0,150	18000	100000	1800	V68687	80-132
0,067	25.999	0,127	18000	100000	1800	V68688	80-100
** 0,064	27.559	0,120	18000	100000	1800	V68689	80-100

21900 - 32000 Nm

72

218	8,03	500	21900	70000	1300	V72218	225-315
197	8,89	499	24200	72000	1300	V72219	225-315
178	9,86	499	26850	75000	1300	V72220	225-315
160	11,0	468	28000	80000	1400	V72221	225-315
143	12,3	419	28000	90000	1500	V72222	225-315
127	13,7	373	28000	95000	1500	V72223	225-315
113	15,5	331	28000	98000	1600	V72224	225-315
99	17,6	291	28000	100000	1700	V72225	225-315
85	20,7	248	28000	105000	1800	V72226	225-315
75	23,3	220	28000	110000	1800	V72228	225-315
70	24,9	235	32000	100000	1500	V72328	160-315
61	28,5	206	32000	110000	1500	V72329	160-315
55	31,9	184	32000	115000	1600	V72330	160-315
47	36,9	159	32000	120000	1700	V72331	160-315
41	42,3	139	32000	125000	1700	V72332	160-315
39	45,4	129	32000	135000	1500	V72333	160-280
34	51,9	113	32000	140000	1500	V72334	160-280
30	58,1	101	32000	150000	1600	V72335	160-280
26	67,2	87,2	32000	158000	1700	V72336	160-250
23	77,0	76,2	32000	162000	1700	V72337	160-250
21	82,0	71,5	32000	168000	1800	V72338	160-250
19	93,4	62,8	32000	172000	1800	V72339	160-225
17	105	56,1	32000	178000	1800	V72340	160-225
15	119	49,3	32000	186000	1800	V72341	160-225
14	129	45,3	32000	188000	1800	V72342	160-225
12	145	40,5	32000	190000	1800	V72343	160-200

***** Verificar limites motor / redutor na página 167

21900 - 32000 Nm

72

rpm	i_{tot}	kW	Mt (Nm)	Fr (N)	rpm.máx	código	carcaça *
11	166	35,4	32000	195000	1800	V72344	160-180
10	181	22,3	32000	195000	1800	V72345	160-180

32000 Nm

72

8,47	206,6	28,4	32000	185000	1800	V72546	100-280
7,37	237,4	24,7	32000	187000	1800	V72547	100-280
6,87	257,9	23,0	32000	190000	1800	V72548	100-280
5,93	295,1	19,9	32000	195000	1800	V72549	100-280
5,19	337,3	17,4	32000	200000	1800	V72550	100-280
4,65	376,0	15,6	32000	200000	1800	V72551	100-280
4,05	432,1	13,6	32000	200000	1800	V72552	100-280
3,77	464,0	12,6	32000	200000	1800	V72553	100-280
3,26	537,2	10,9	32000	200000	1800	V72555	100-280
2,85	613,9	9,55	32000	200000	1800	V72556	100-280
2,58	678,9	8,64	32000	200000	1800	V72557	100-280
2,24	780,2	7,52	32000	200000	1800	V72558	100-280
2,09	837,7	7,00	32000	200000	1800	V72559	100-280
1,80	969,9	6,05	32000	200000	1800	V72560	100-280
1,58	1109	5,29	32000	200000	1800	V72561	100-280
1,40	1251	4,69	32000	200000	1800	V72562	100-280
1,30	1347	4,35	32000	200000	1800	V72563	100-225
1,12	1557	3,77	32000	200000	1800	V72564	100-225
0,974	1797	3,26	32000	200000	1800	V72565	100-180
0,916	1965	2,98	32000	200000	1800	V72566	100-180
0,711	2463	2,38	32000	200000	1800	V72568	100-160
0,595	2939	2,00	32000	200000	1800	V72569	100-160
0,532	3290	1,78	32000	200000	1800	V72570	100-160
0,436	4010	1,46	32000	200000	1800	V72672	100-280
0,402	4356	1,35	32000	200000	1800	V72673	100-280
0,348	5028	1,17	32000	200000	1800	V72674	100-280
0,296	5917	0,991	32000	200000	1800	V72675	100-280
0,274	6392	0,917	32000	200000	1800	V72676	100-280
0,234	7485	0,783	32000	200000	1800	V72677	100-280
0,203	8641	0,679	32000	200000	1800	V72679	100-280
0,161	10837	0,541	32000	200000	1800	V72681	100-225
0,126	13916	0,421	32000	200000	1800	V72683	100-225
0,108	16151	0,363	32000	200000	1800	V72684	100-180
0,100	17527	0,335	32000	200000	1800	V72685	100-160
0,093	18794	0,312	32000	200000	1800	V72686	100-160
0,083	21011	0,279	32000	200000	1800	V72687	100-160
0,074	23668	0,248	32000	200000	1800	V72688	100-132
0,064	27218	0,215	32000	200000	1800	V72689	100-132
0,058	30177	0,194	32000	200000	1800	V72690	100-132

* Verificar limites motor / redutor na página 167

Weg normal

Weg tipo 1

4 pólos					6 pólos					8 pólos				
Carc.	**CV**	**kW**	**RPM**	**Cód.**	**Carc.**	**CV**	**kW**	**RPM**	**Cód.**	**Carc.**	**CV**	**kW**	**RPM**	**Cód.**
63	0,16	0,12	1720	BNW	63	0,16	0,12	1130	BNW	71	0,16	0,12	805	CNW
63	0,25	0,18	1710	BNW	71	0,25	0,18	1090	CNW	80	0,25	0,18	865	DNW
63	0,33	0,25	1710	BNW	71	0,33	0,25	1100	CNW	80	0,33	0,25	860	DNW
71	0,5	0,37	1720	CNW	80	0,50	0,37	1150	DNW	90S	0,50	0,37	850	ENW
71	0,75	0,55	1705	CNW	80	0,75	0,55	1150	DNW	90L	0,75	0,55	830	FNW
80	1	0,75	1720	DNW	90S	1,0	0,75	1130	ENW	90L	1,0	0,75	820	FNW
80	1,5	1,1	1720	DNW	90S	1,5	1,1	1130	ENW	100L	1,5	1,1	860	GNW
90S	2	1,5	1740	ENW	100L	2,0	1,5	1150	GNW	112M	2,0	1,5	855	HNW
90L	3	2,2	1730	FNW	100L	3,0	2,2	1140	GNW	132S	3,0	2,2	860	JNW
100L	4	3	1725	GNW	112M	4,0	3,0	1145	HNW	132M	4,0	3,0	865	KNW
100L	5	3,7	1715	GNW	132S	5,0	3,7	1160	JNW	132M	5,0	3,7	865	KNW
112M	6	4,5	1720	HNW	132S	6,0	4,5	1160	JNW	132M	5,0	3,7	865	KNW
112M	7,5	5,5	1740	HNW	132M	7,5	5,5	1160	KNW	160M	6,0	4,5	875	LNW
132S	10	7,5	1760	JNW	132M	10	7,5	1160	KNW	160M	7,5	5,5	875	LNW
132M	12,5	9,2	1755	KNW	160M	12,5	9,2	1160	LNW	160L	10	7,5	875	MNW
132M	15	11	1755	KNW	160M	15	11	1170	LNW	180M	12,5	9,2	875	NNW
160M	20	15	1760	LNW	160L	20	15	1170	MNW	180L	15	11	875	PNW
160L	25	18,5	1760	MNW	180L	25	18,5	1165	PNW	180L	20	15	870	PNW
180M	30	22	1765	NNW	200L	30	22	1175	RNW	200L	25	18,5	880	RNW
200M	40	30	1770	QNW	200L	40	30	1175	RNW	225S/M	30	22	880	SNW
200L	50	37	1770	RNW	225S/M	50	37	1180	SNW	225S/M	40	30	880	SNW
225S/M	60	45	1775	SNW	—	—	—	—	—	—	—	—	—	—
225S/M	75	55	1770	SNW	—	—	—	—	—	—	—	—	—	—

Opcionais (sob consulta)

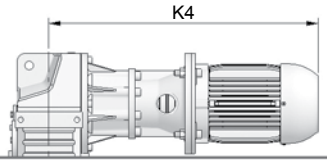
- Frequência de 50 Hz e 50/60Hz
- Classe de Isolação “F”, “H”
- Calota de Proteção
- Ventilação Forçada
- Proteção Térmica
- 2ª Ponta de Eixo
- Tensões (V) de 220, 380, 440, 480, 220/380, 380/660, 440/660, 460, 110/220 (monofásico), 220/380/440/760 (4 tensões)
- Freio de 220 V, 380 V, 440 V, 110 V 1F, 24 VDC
- Grau de Proteção IPW 55 ou IP 56
- Placa de Bornes
- Massa Adicion. Inércia
- Resistência Aquecimento
- Faixa do Protetor
- Polaridade do Motor de 2, 2/4, 2/6, 4/6, 4/8, 6/8, 2/8 pólos
- Motores especiais dedicados a aplicações especiais

*Calota de Proteção - recomendado para motorredutores na posição de trabalho P4

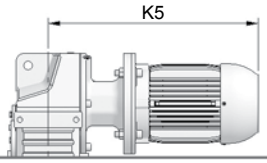
Fixação por pés - N

Simples

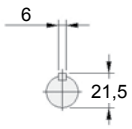
Tipos de Entrada



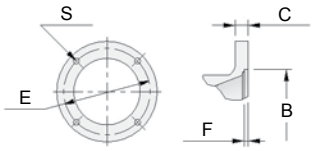
Flange Lanterna com Motor



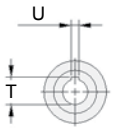
Flange KTR com Motor



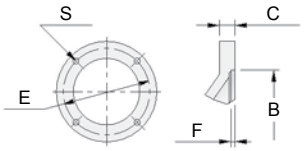
Eixo de Entrada



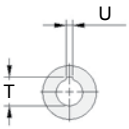
Detalhes Flange Lanterna



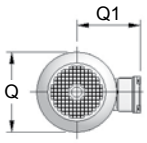
Detalhe "x"



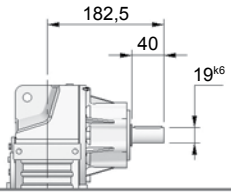
Detalhes Flange KTR



Detalhe "y"



Frente do Motor



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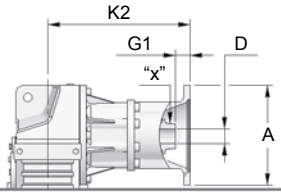

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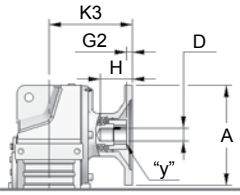
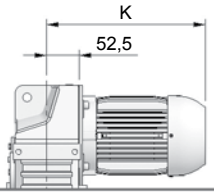
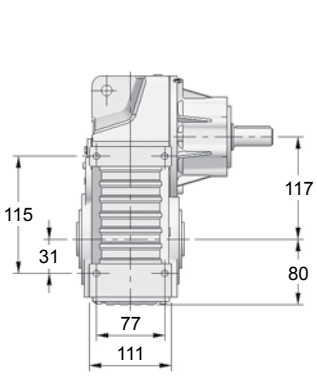


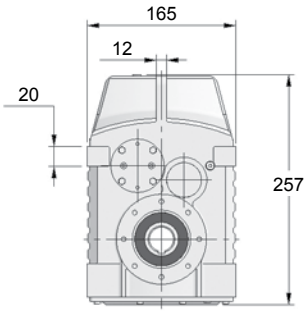
Flange KTR

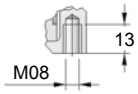


Motor

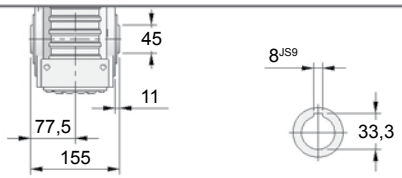
Tipos de Saída



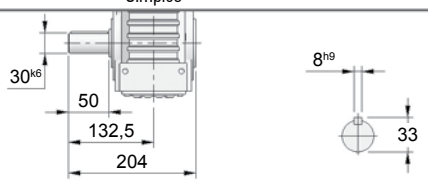




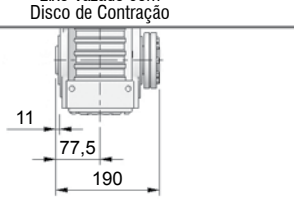
Eixo Vazado com Chaveta



Eixo Integral Simples

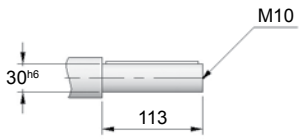


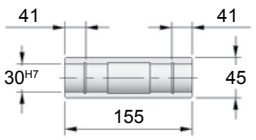
Eixo Vazado com Disco de Contração

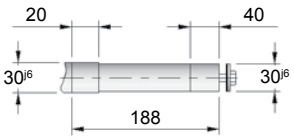


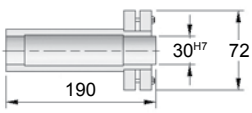
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração







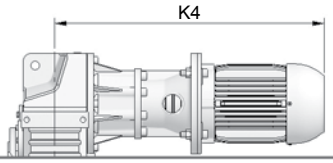


Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
63	140	95H7	13	11	115	4	0	1	25	216,5	137	10	12,8	4	292,5	409,5	330	124	113
71	160	110H7	14	14	130	4	0,5	1	34	217,5	137	10	16,3	5	324,5	435,5	355	139	121
80	200	130H7	15	19	165	4	10	1	44	234,5	175,5	12	21,8	6	351,5	470,5	411,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	234,5	175,5	12	27,3	8	373,5	488,5	429,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	234,5	175,5	12	27,3	8	398,5	513,5	454,5	177	150
100	250	180H7	16	28	215	5	20	—	—	246,5	—	15	31,3	8	450,5	562,5	—	198	160
112	250	180H7	16	28	215	5	20	—	—	246,5	—	15	31,3	8	—	579,5	—	235	180

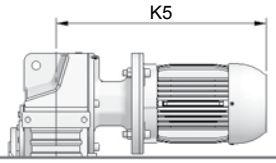
• Dimensões em mm

Fixação por flange e pés - G_C

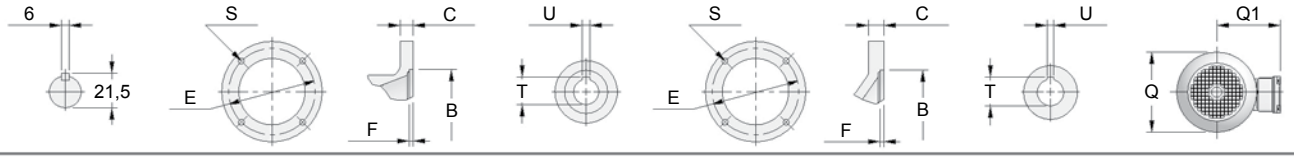
Simples



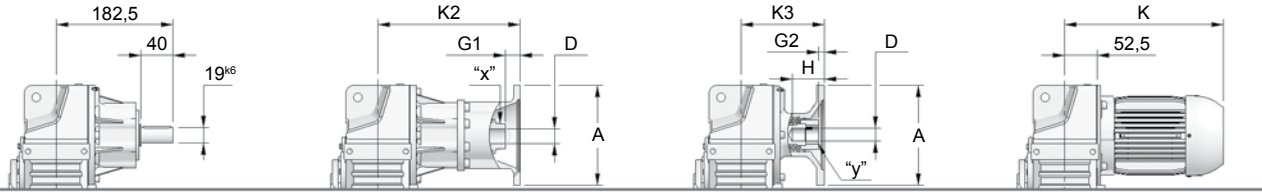
Flange Lanterna com Motor



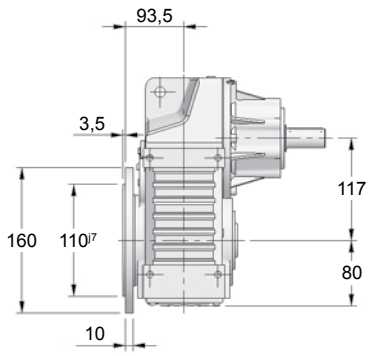
Flange KTR com Motor

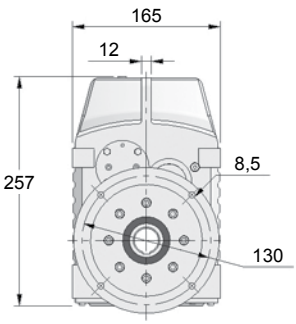


Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor

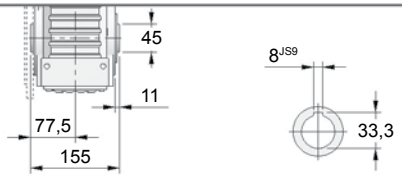


Mancal | Flange Lanterna | Flange KTR | Motor



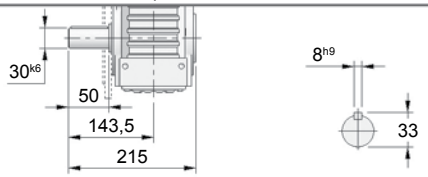


Eixo Vazado com Chaveta

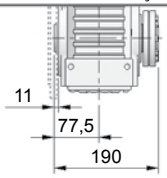


Sugestão de acoplamento no Eixo Vazado

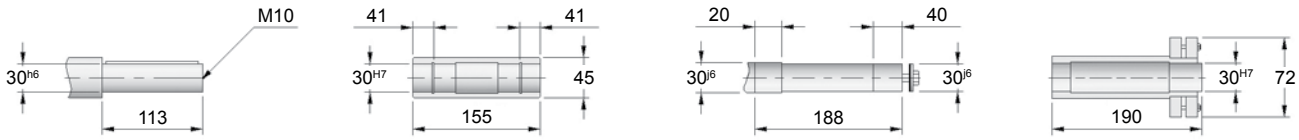
Eixo Integral Simples



Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado com Disco de Contração



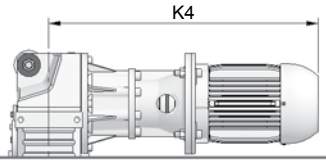
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	216,5	137	10	12,8	4	292,5	409,5	330	124	113
71	160	110H7	14	14	130	4	0,5	1	34	217,5	137	10	16,3	5	324,5	435,5	355	139	121
80	200	130H7	15	19	165	4	10	1	44	234,5	175,5	12	21,8	6	351,5	470,5	411,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	234,5	175,5	12	27,3	8	373,5	488,5	429,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	234,5	175,5	12	27,3	8	398,5	513,5	454,5	177	150
100	250	180H7	16	28	215	5	20	—	—	246,5	—	15	31,3	8	450,5	562,5	—	198	160
112	250	180H7	16	28	215	5	20	—	—	246,5	—	15	31,3	8	—	579,5	—	235	180

• Dimensões em mm

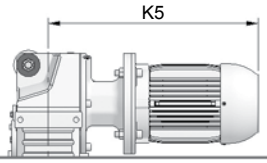
Fixação por braço de torção - B

Simples

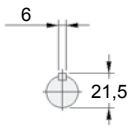
Tipos de Entrada



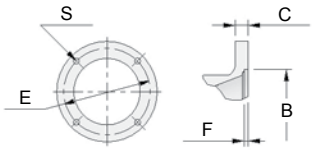
Flange Lanterna com Motor



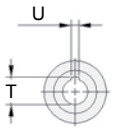
Flange KTR com Motor



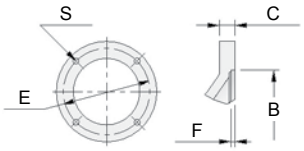
Eixo de Entrada



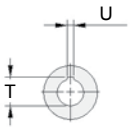
Detalhes Flange Lanterna



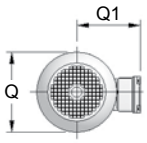
Detalhe "x"



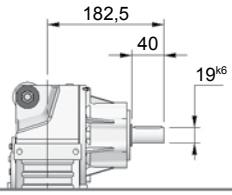
Detalhes Flange KTR



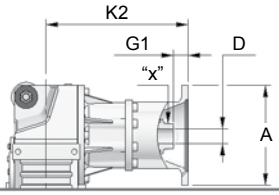
Detalhe "y"



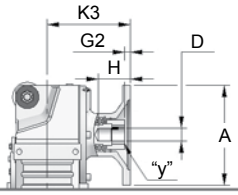
Frente do Motor



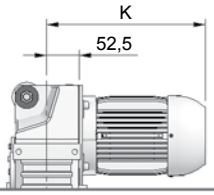
Mancal



Flange Lanterna

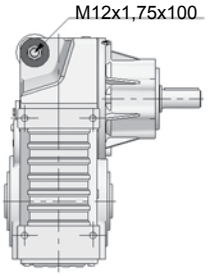


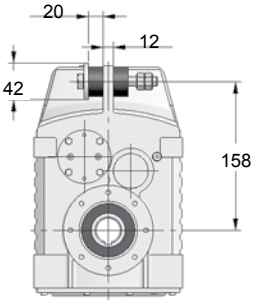
Flange KTR

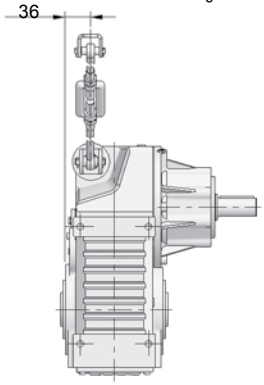


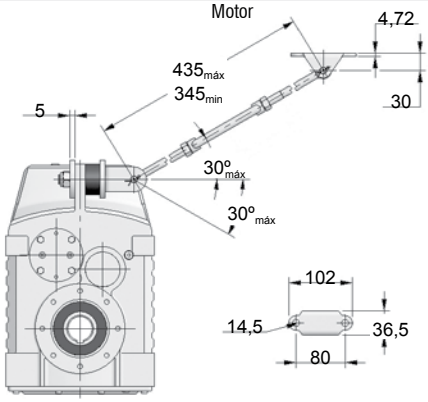
Motor

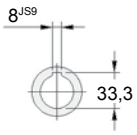
Tipos de Saída





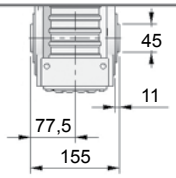




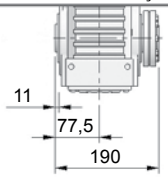


Sugestão de acoplamento no Eixo Vazado

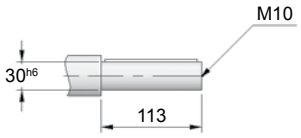
Eixo Vazado com Chaveta

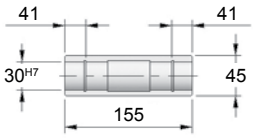


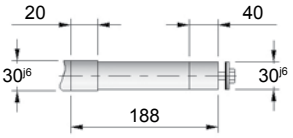
Eixo Vazado com Disco de Contração

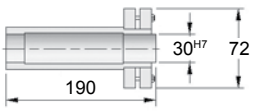


Sugestão de acoplamento no Eixo Vazado com Disco de Contração



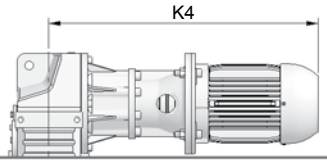




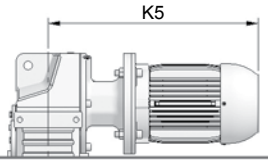


Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
63	140	95H7	13	11	115	4	0	1	25	216,5	137	10	12,8	4	292,5	409,5	330	124	113
71	160	110H7	14	14	130	4	0,5	1	34	217,5	137	10	16,3	5	324,5	435,5	355	139	121
80	200	130H7	15	19	165	4	10	1	44	234,5	175,5	12	21,8	6	351,5	470,5	411,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	234,5	175,5	12	27,3	8	373,5	488,5	429,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	234,5	175,5	12	27,3	8	398,5	513,5	454,5	177	150
100	250	180H7	16	28	215	5	20	—	—	246,5	—	15	31,3	8	450,5	562,5	—	198	160
112	250	180H7	16	28	215	5	20	—	—	246,5	—	15	31,3	8	—	579,5	—	235	180

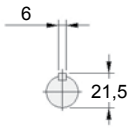
• Dimensões em mm



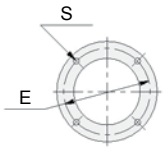
Flange Lanterna com Motor



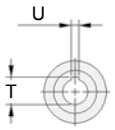
Flange KTR com Motor



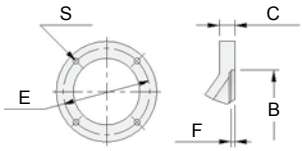
Eixo de Entrada



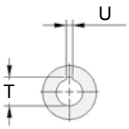
Detalhes Flange Lanterna



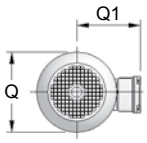
Detalhe “x”



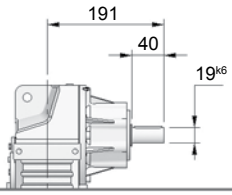
Detalhes Flange KTR



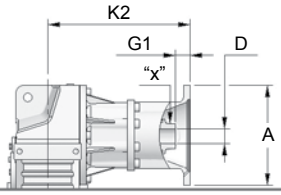
Detalhe “y”



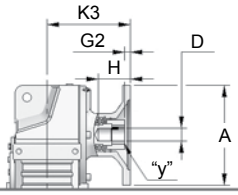
Frente do Motor



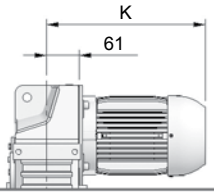
Mancal



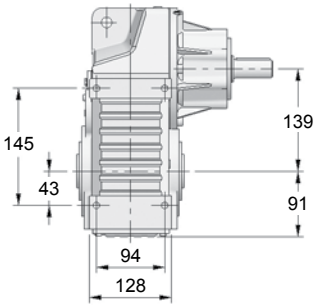
Flange Lanterna

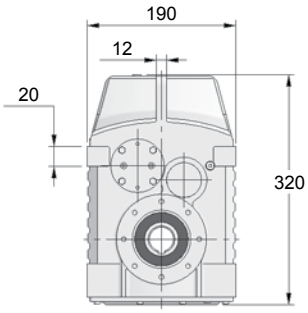


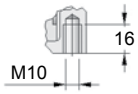
Flange KTR



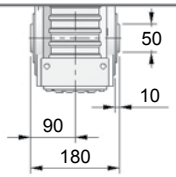
Motor

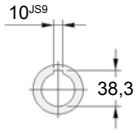






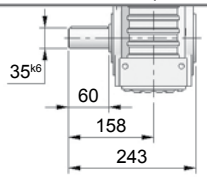
Eixo Vazado com Chaveta

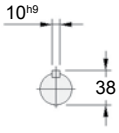




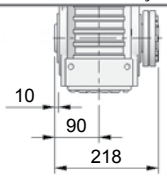
Sugestão de acoplamento no Eixo Vazado

Eixo Integral Simples

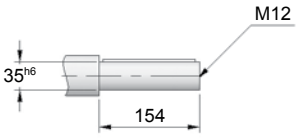


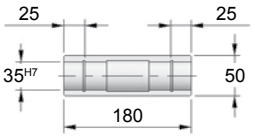


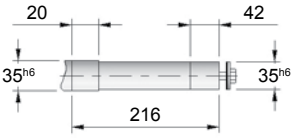
Eixo Vazado com Disco de Contração

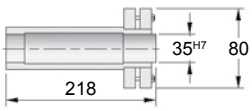


Sugestão de acoplamento no Eixo Vazado com Disco de Contração









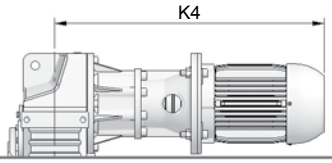
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	225	139	10	12,8	4	294,5	418	332	124	113
71	160	110H7	14	14	130	4	0,5	1	34	226	139	10	16,3	5	326,5	444	357	139	121
80	200	130H7	15	19	165	4	10	1	44	243	177,5	12	21,8	6	353,5	479	413,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	243	177,5	12	27,3	8	375,5	497	431,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	243	177,5	12	27,3	8	400,5	522	456,5	177	150
100	250	180H7	16	28	215	5	20	1	63	255	200	15	31,3	8	450	571	516	198	160
112	250	180H7	16	28	215	5	20	1	63	255	200	15	31,3	8	467	588	533	235	180
132S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	553	—	—	274	207
132M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	591	—	—	274	207

• Dimensões em mm

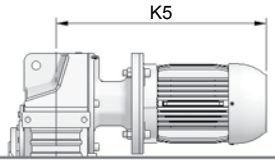
Fixação por flange e pés - G_D

Simples

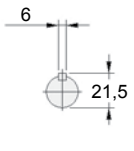
Tipos de Entrada



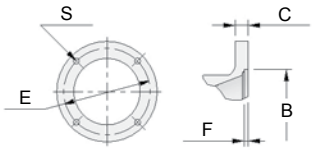
Flange Lanterna com Motor



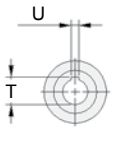
Flange KTR com Motor



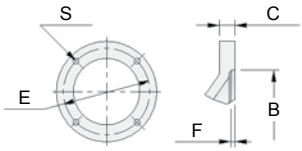
Eixo de Entrada



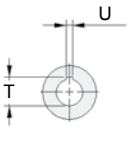
Detalhes Flange Lanterna



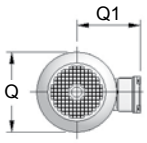
Detalhe “x”



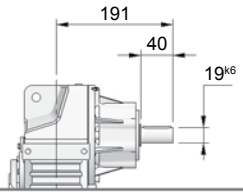
Detalhes Flange KTR



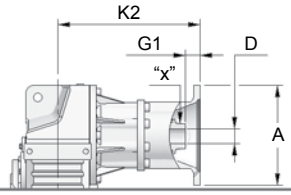
Detalhe “y”



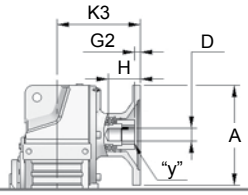
Frente do Motor



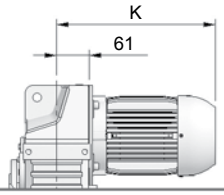
Mancal



Flange Lanterna

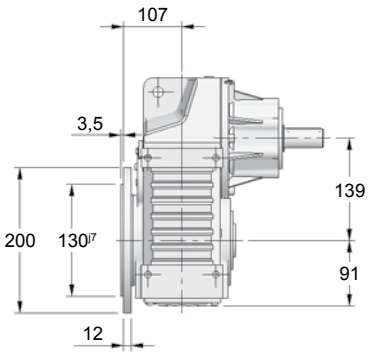


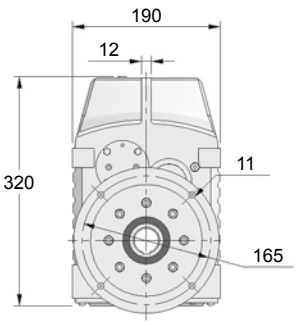
Flange KTR



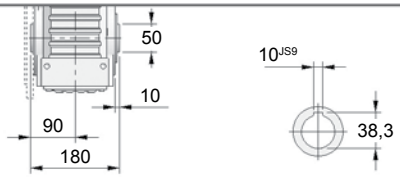
Motor

Tipos de Saída



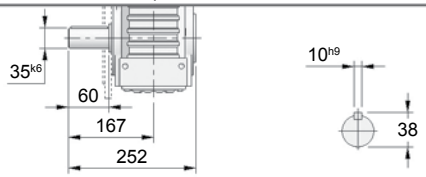


Eixo Vazado com Chaveta

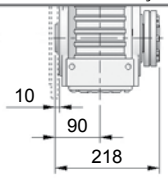


Sugestão de acoplamento no Eixo Vazado

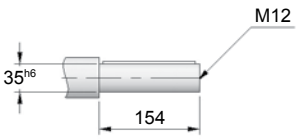
Eixo Integral Simples

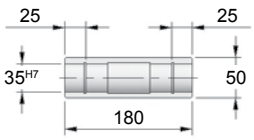


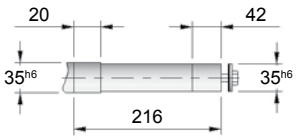
Eixo Vazado com Disco de Contração

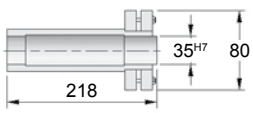


Sugestão de acoplamento no Eixo Vazado com Disco de Contração







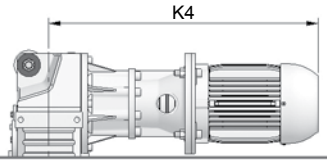


	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	225	139	10	12,8	4	294,5	418	332	124	113
71	160	110H7	14	14	130	4	0,5	1	34	226	139	10	16,3	5	326,5	444	357	139	121
80	200	130H7	15	19	165	4	10	1	44	243	177,5	12	21,8	6	353,5	479	413,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	243	177,5	12	27,3	8	375,5	497	431,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	243	177,5	12	27,3	8	400,5	522	456,5	177	150
100	250	180H7	16	28	215	5	20	1	63	255	200	15	31,3	8	450	571	516	198	160
112	250	180H7	16	28	215	5	20	1	63	255	200	15	31,3	8	467	588	533	235	180
132S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	553	—	—	274	207
132M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	591	—	—	274	207

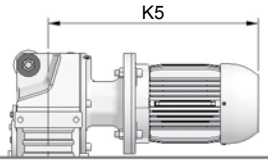
• Dimensões em mm

Fixação por braço de torção - B

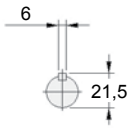
Simples



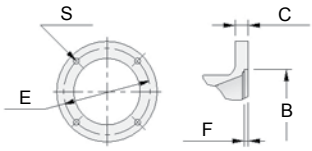
Flange Lanterna com Motor



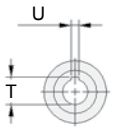
Flange KTR com Motor



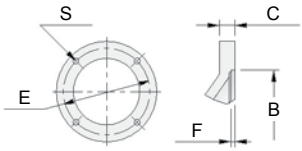
Eixo de Entrada



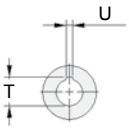
Detalhes Flange Lanterna



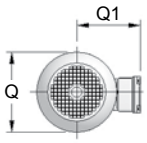
Detalhe “x”



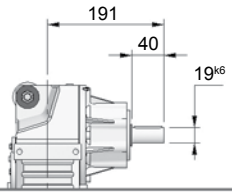
Detalhes Flange KTR



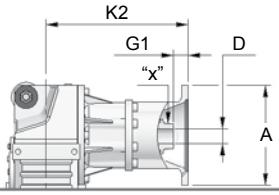
Detalhe “y”



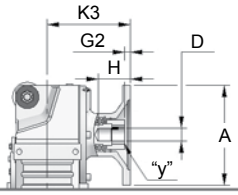
Frente do Motor



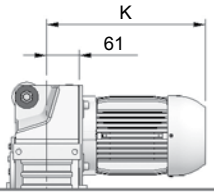
Mancal



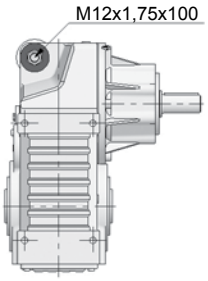
Flange Lanterna

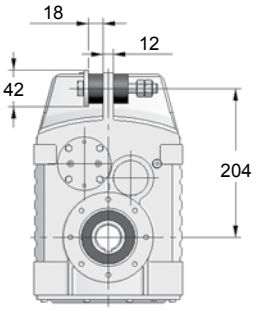


Flange KTR

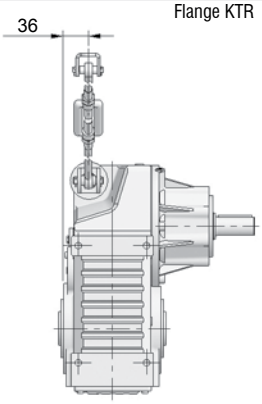


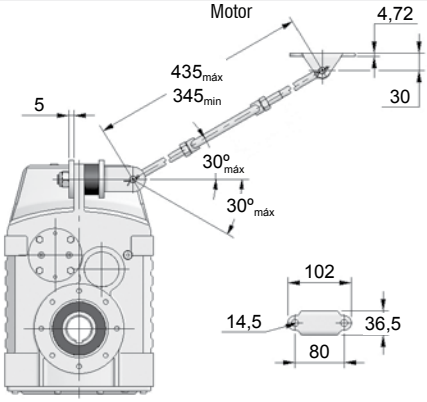
Motor





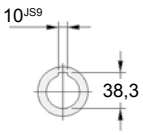
Braço de Torção com Bucha Elástica (B)

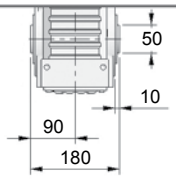




Braço de Torção com Esticador (E)

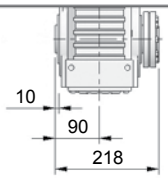
Eixo Vazado com Chaveta



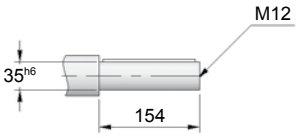


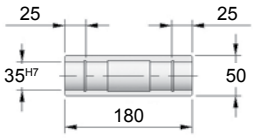
Sugestão de acoplamento no Eixo Vazado

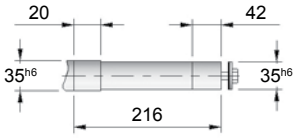
Eixo Vazado com Disco de Contração

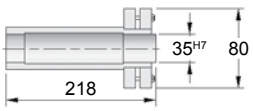


Sugestão de acoplamento no Eixo Vazado com Disco de Contração









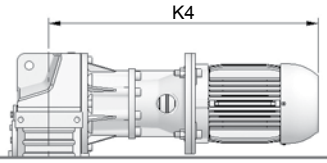
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	225	139	10	12,8	4	294,5	418	332	124	113
71	160	110H7	14	14	130	4	0,5	1	34	226	139	10	16,3	5	326,5	444	357	139	121
80	200	130H7	15	19	165	4	10	1	44	243	177,5	12	21,8	6	353,5	479	413,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	243	177,5	12	27,3	8	375,5	497	431,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	243	177,5	12	27,3	8	400,5	522	456,5	177	150
100	250	180H7	16	28	215	5	20	1	63	255	200	15	31,3	8	450	571	516	198	160
112	250	180H7	16	28	215	5	20	1	63	255	200	15	31,3	8	467	588	533	235	180
132S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	553	—	—	274	207
132M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	591	—	—	274	207

• Dimensões em mm

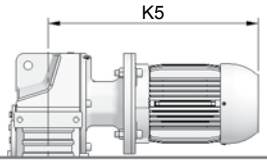
Fixação por pés - N

Simples

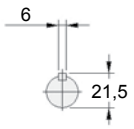
Tipos de Entrada



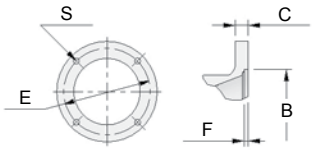
Flange Lanterna com Motor



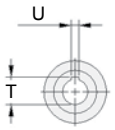
Flange KTR com Motor



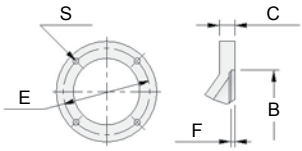
Eixo de Entrada



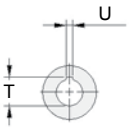
Detalhes Flange Lanterna



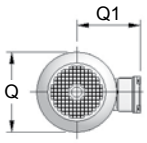
Detalhe “x”



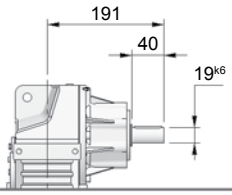
Detalhes Flange KTR



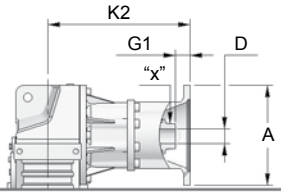
Detalhe “y”



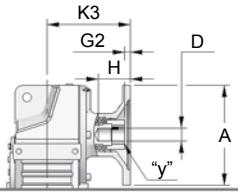
Frente do Motor



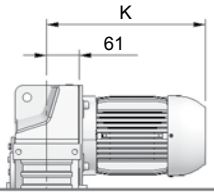
Mancal



Flange Lanterna

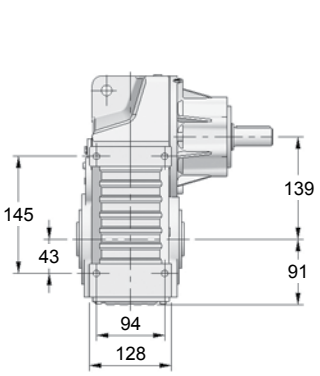


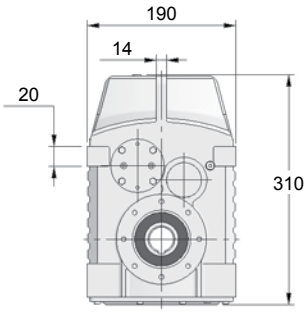
Flange KTR

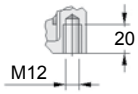


Motor

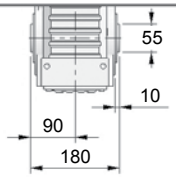
Tipos de Saída

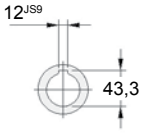






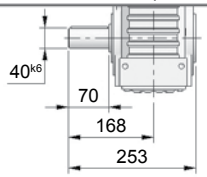
Eixo Vazado com Chaveta

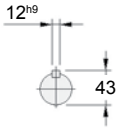




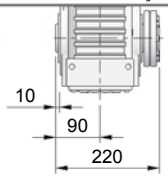
Sugestão de acoplamento no Eixo Vazado

Eixo Integral Simples

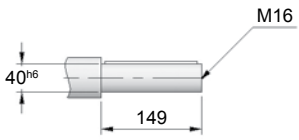


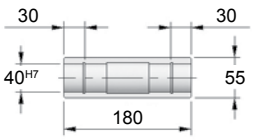


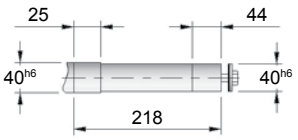
Eixo Vazado com Disco de Contração

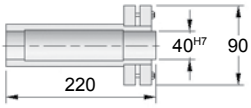


Sugestão de acoplamento no Eixo Vazado com Disco de Contração







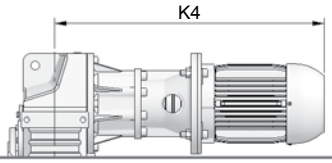


	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	225	139	10	12,8	4	294,5	418	332	124	113
71	160	110H7	14	14	130	4	0,5	1	34	226	139	10	16,3	5	326,5	444	357	139	121
80	200	130H7	15	19	165	4	10	1	44	243	177,5	12	21,8	6	353,5	479	413,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	243	177,5	12	27,3	8	375,5	497	431,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	243	177,5	12	27,3	8	400,5	522	456,5	177	150
100	250	180H7	16	28	215	5	20	1	63	255	200	15	31,3	8	450	571	516	198	160
112	250	180H7	16	28	215	5	20	1	63	255	200	15	31,3	8	467	588	533	235	180
132S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	553	—	—	274	207
132M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	591	—	—	274	207

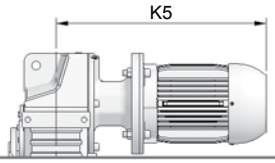
• Dimensões em mm

Fixação por flange e pés - G_E

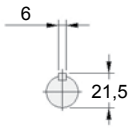
Simples



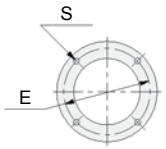
Flange Lanterna com Motor



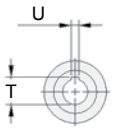
Flange KTR com Motor



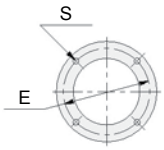
Eixo de Entrada



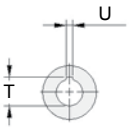
Detalhes Flange Lanterna



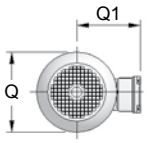
Detalhe "x"



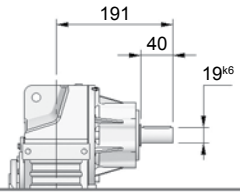
Detalhes Flange KTR



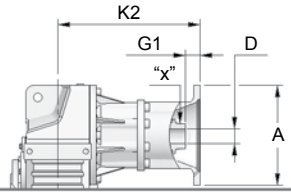
Detalhe "y"



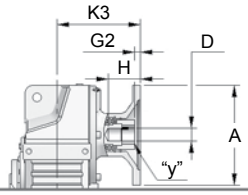
Frente do Motor



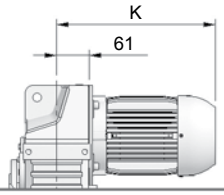
Mancal



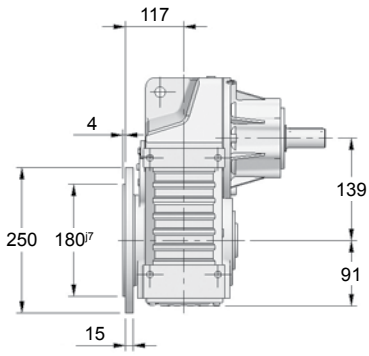
Flange Lanterna

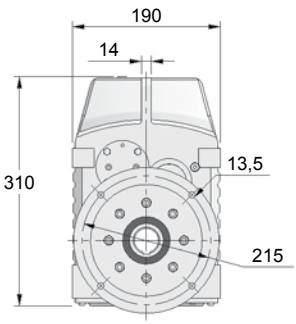


Flange KTR

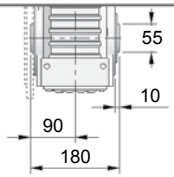


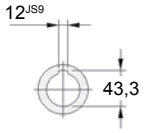
Motor





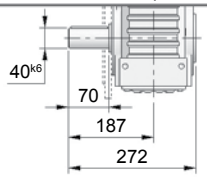
Eixo Vazado com Chaveta

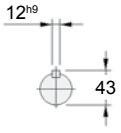




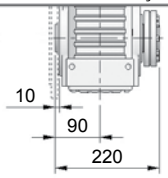
Sugestão de acoplamento no Eixo Vazado

Eixo Integral Simples

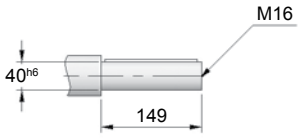


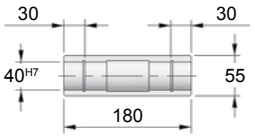


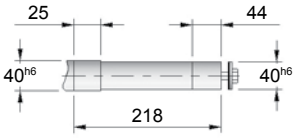
Eixo Vazado com Disco de Contração

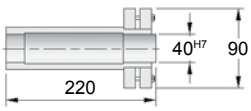


Sugestão de acoplamento no Eixo Vazado com Disco de Contração









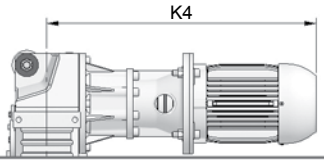
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	225	139	10	12,8	4	294,5	418	332	124	113
71	160	110H7	14	14	130	4	0,5	1	34	226	139	10	16,3	5	326,5	444	357	139	121
80	200	130H7	15	19	165	4	10	1	44	243	177,5	12	21,8	6	353,5	479	413,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	243	177,5	12	27,3	8	375,5	497	431,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	243	177,5	12	27,3	8	400,5	522	456,5	177	150
100	250	180H7	16	28	215	5	20	1	63	255	200	15	31,3	8	450	571	516	198	160
112	250	180H7	16	28	215	5	20	1	63	255	200	15	31,3	8	467	588	533	235	180
132S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	553	—	—	274	207
132M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	591	—	—	274	207

• Dimensões em mm

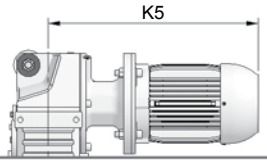
Fixação por braço de torção - B

Simples

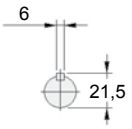
Tipos de Entrada



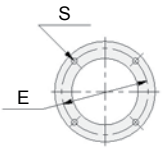
Flange Lanterna com Motor



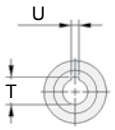
Flange KTR com Motor



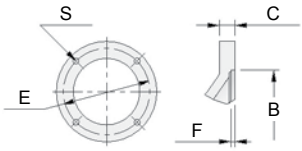
Eixo de Entrada



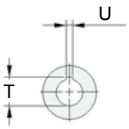
Detalhes Flange Lanterna



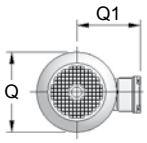
Detalhe "x"



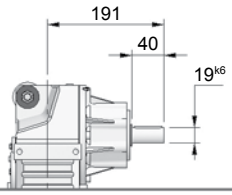
Detalhes Flange KTR



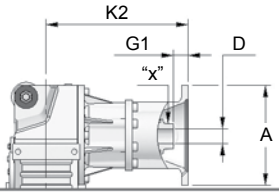
Detalhe "y"



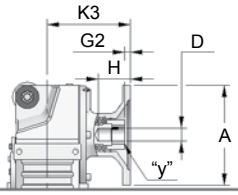
Frente do Motor



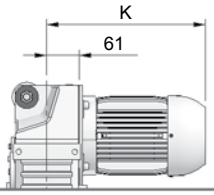
Mancal



Flange Lanterna

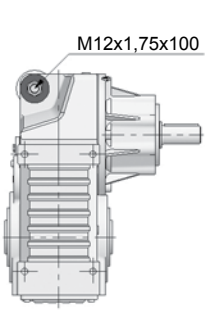


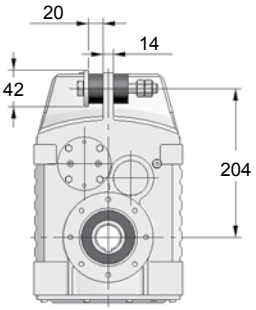
Flange KTR

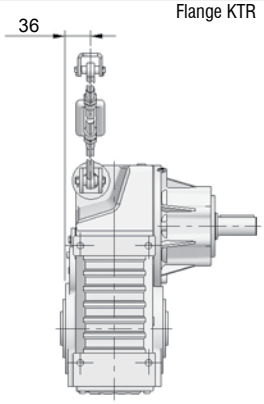


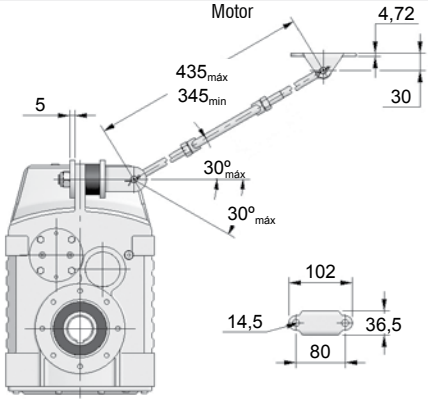
Motor

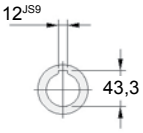
Tipos de Saída





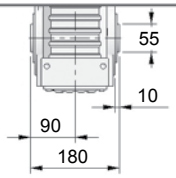




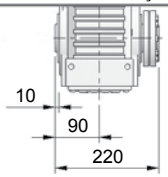


Sugestão de acoplamento no Eixo Vazado

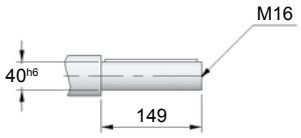
Eixo Vazado com Chaveta

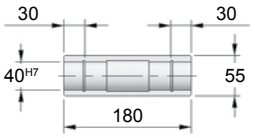


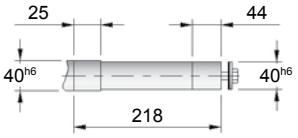
Eixo Vazado com Disco de Contração

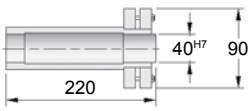


Sugestão de acoplamento no Eixo Vazado com Disco de Contração



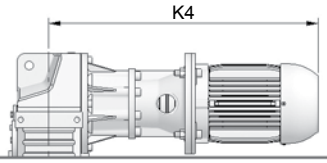




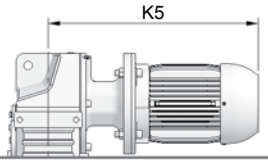


	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	225	139	10	12,8	4	294,5	418	332	124	113
71	160	110H7	14	14	130	4	0,5	1	34	226	139	10	16,3	5	326,5	444	357	139	121
80	200	130H7	15	19	165	4	10	1	44	243	177,5	12	21,8	6	353,5	479	413,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	243	177,5	12	27,3	8	375,5	497	431,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	243	177,5	12	27,3	8	400,5	522	456,5	177	150
100	250	180H7	16	28	215	5	20	1	63	255	200	15	31,3	8	450	571	516	198	160
112	250	180H7	16	28	215	5	20	1	63	255	200	15	31,3	8	467	588	533	235	180
132S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	553	—	—	274	207
132M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	591	—	—	274	207

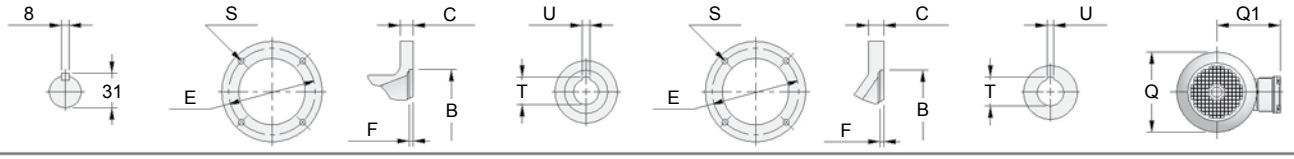
• Dimensões em mm



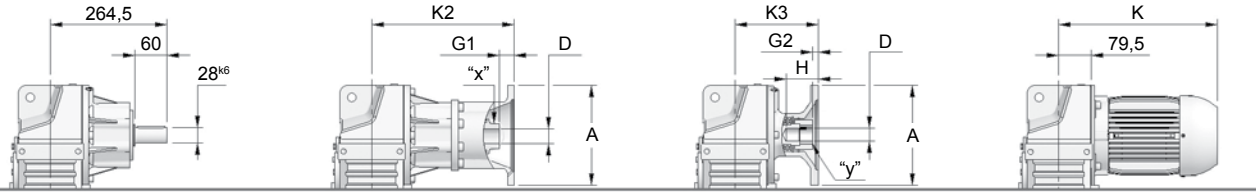
Flange Lanterna com Motor



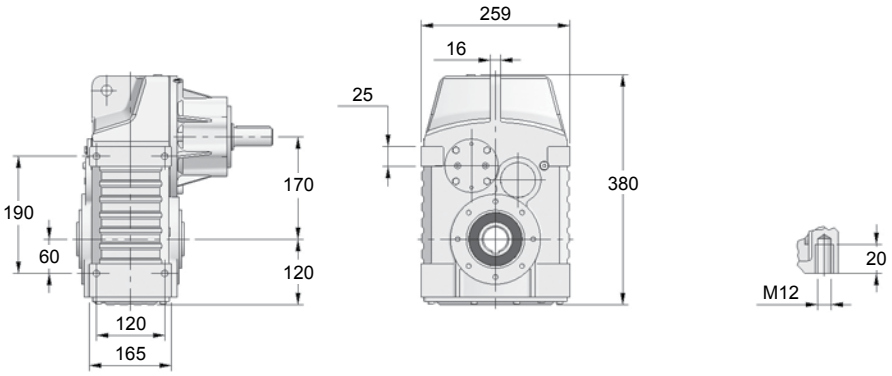
Flange KTR com Motor



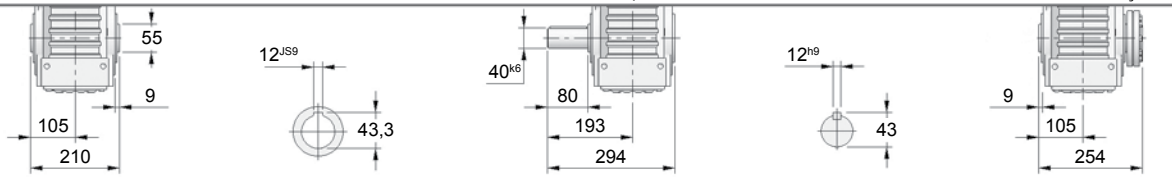
Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor



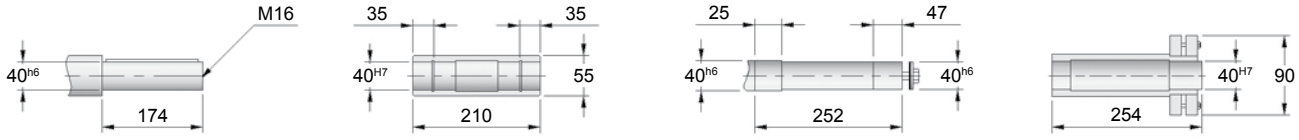
Mancal | Flange Lanterna | Flange KTR | Motor



Eixo Vazado com Chaveta | Eixo Integral Simples | Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado | Sugestão de acoplamento no Eixo Vazado com Disco de Contração



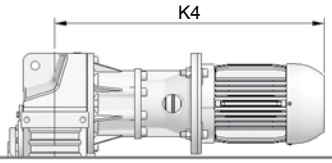
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	—	—	304,5	—	10	12,5	4	307	497,5	—	124	113
71	160	110H7	14	14	130	4	0,5	1	34	304,5	151,5	10	16,3	5	339	522,5	369,5	139	121
80	200	130H7	15	19	165	4	10	1	44	317,5	190	12	21,8	6	366	553,5	426	157	130
90S	200	130H7	15	24	165	4	10	1	52	317,5	190	12	27,3	8	386	571,5	444	177	150
90L	200	130H7	15	24	165	4	10	1	52	317,5	190	12	27,3	8	411	596,5	469	177	150
100	250	180H7	16	28	215	5	20	1	63	327,5	210,5	15	31,3	8	460,5	643,5	526	198	160
112	250	180H7	16	28	215	5	20	1	63	327,5	210,5	15	31,3	8	476,5	660,5	543,5	235	180
132S	300	230H7	17	38	265	5	30	1	83	347,5	265,5	15	41,3	10	559,5	719,5	637,5	274	207
132M	300	230H7	17	38	265	5	30	1	83	347,5	265,5	15	41,3	10	597,5	757,5	675,5	274	207
160M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	610,5	—	—	317	250
160L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	654,5	—	—	317	250

• Dimensões em mm

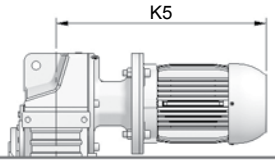
Fixação por flange e pés - G_E

Simples

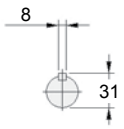
Tipos de Entrada



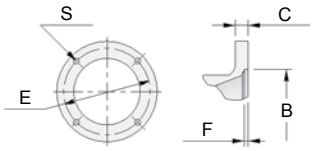
Flange Lanterna com Motor



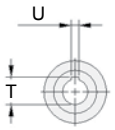
Flange KTR com Motor



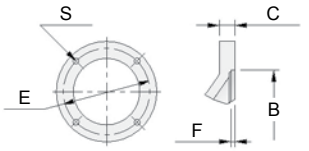
Eixo de Entrada



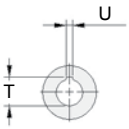
Detalhes Flange Lanterna



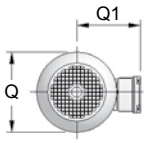
Detalhe "x"



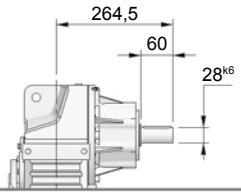
Detalhes Flange KTR



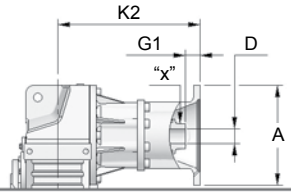
Detalhe "y"



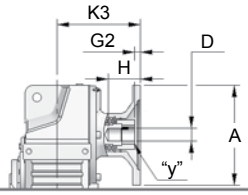
Frente do Motor



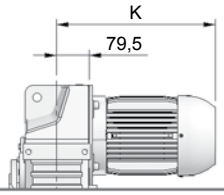
Mancal



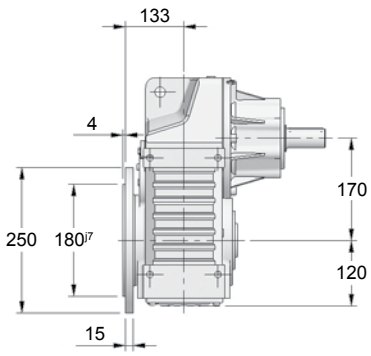
Flange Lanterna

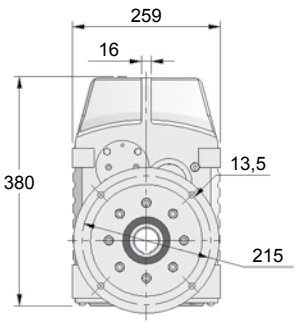


Flange KTR



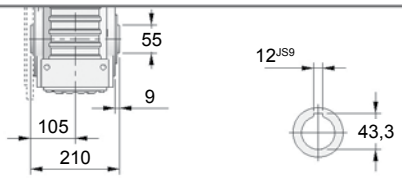
Motor





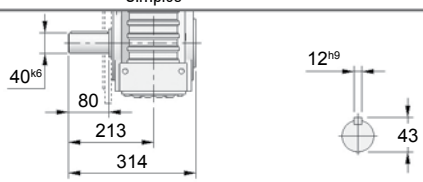
Tipos de Saída

Eixo Vazado com Chaveta

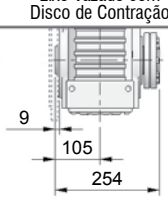


Sugestão de acoplamento no Eixo Vazado

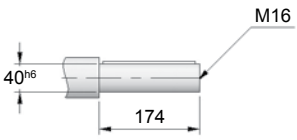
Eixo Integral Simples

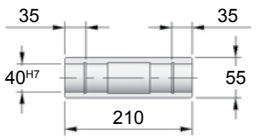


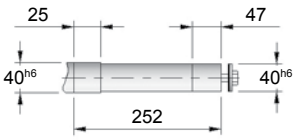
Eixo Vazado com Disco de Contração

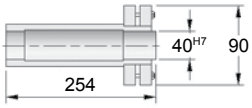


Sugestão de acoplamento no Eixo Vazado com Disco de Contração







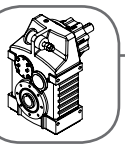


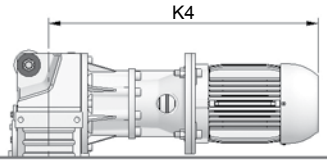
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	—	—	304,5	—	10	12,5	4	307	497,5	—	124	113
71	160	110H7	14	14	130	4	0,5	1	34	304,5	151,5	10	16,3	5	339	522,5	369,5	139	121
80	200	130H7	15	19	165	4	10	1	44	317,5	190	12	21,8	6	366	553,5	426	157	130
90S	200	130H7	15	24	165	4	10	1	52	317,5	190	12	27,3	8	386	571,5	444	177	150
90L	200	130H7	15	24	165	4	10	1	52	317,5	190	12	27,3	8	411	596,5	469	177	150
100	250	180H7	16	28	215	5	20	1	63	327,5	210,5	15	31,3	8	460,5	643,5	526	198	160
112	250	180H7	16	28	215	5	20	1	63	327,5	210,5	15	31,3	8	476,5	660,5	543,5	235	180
132S	300	230H7	17	38	265	5	30	1	83	347,5	265,5	15	41,3	10	559,5	719,5	637,5	274	207
132M	300	230H7	17	38	265	5	30	1	83	347,5	265,5	15	41,3	10	597,5	757,5	675,5	274	207
160M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	610,5	—	—	317	250
160L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	654,5	—	—	317	250

• Dimensões em mm

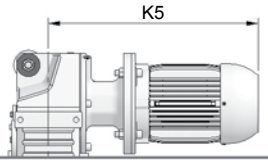
Fixação por braço de torção - B

Simples

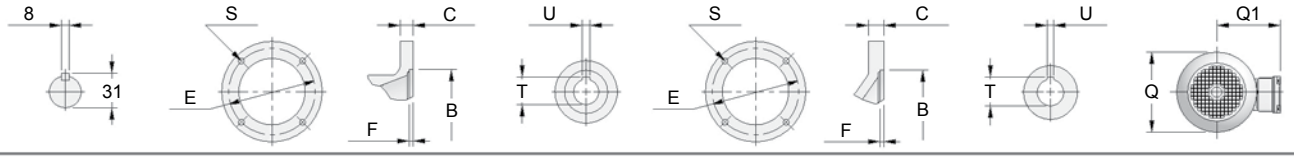




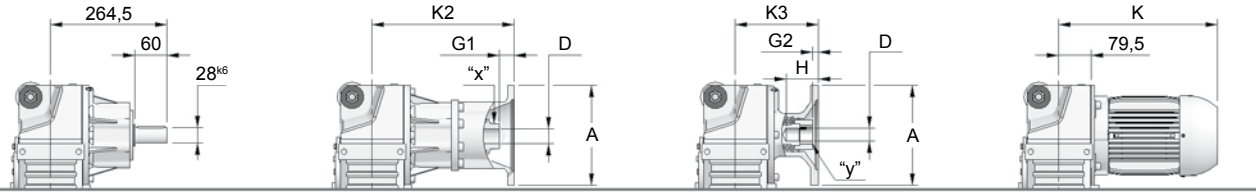
Flange Lanterna com Motor



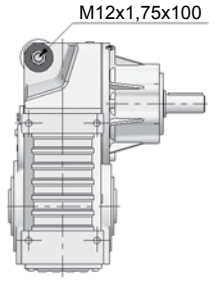
Flange KTR com Motor



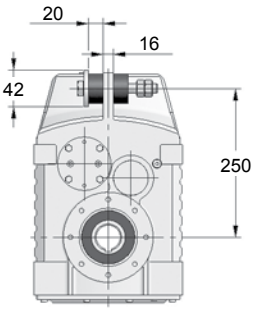
Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor

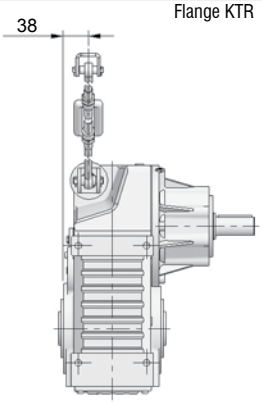


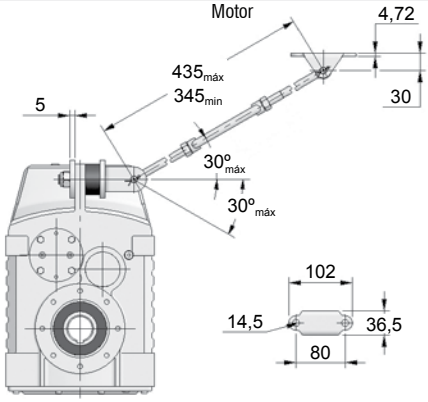
Mancal | Flange Lanterna | Flange KTR | Motor



Braço de Torção com Bucha Elástica (B)

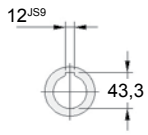


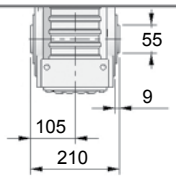




Braço de Torção com Esticador (E)

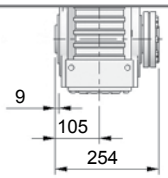
Eixo Vazado com Chaveta



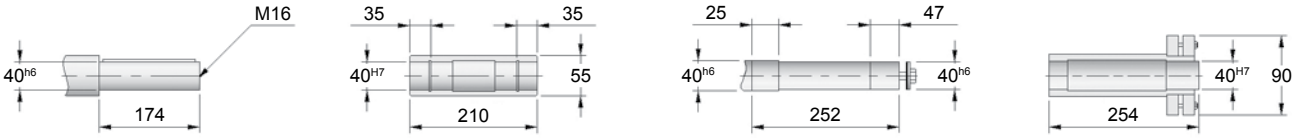


Sugestão de acoplamento no Eixo Vazado

Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado com Disco de Contração



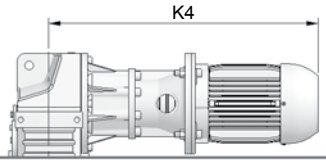
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	—	—	304,5	—	10	12,5	4	307	497,5	—	124	113
71	160	110H7	14	14	130	4	0	1	34	304,5	151,5	10	16,3	5	339	522,5	369,5	139	121
80	200	130H7	15	19	165	4	10	1	44	317,5	190	12	21,8	6	366	553,5	426	157	130
90S	200	130H7	15	24	165	4	10	1	52	317,5	190	12	27,3	8	386	571,5	444	177	150
90L	200	130H7	15	24	165	4	10	1	52	317,5	190	12	27,3	8	411	596,5	469	177	150
100	250	180H7	16	28	215	5	20	1	63	327,5	210,5	15	31,3	8	460,5	643,5	526	198	160
112	250	180H7	16	28	215	5	20	1	63	327,5	210,5	15	31,3	8	476,5	660,5	543,5	235	180
132S	300	230H7	17	38	265	5	30	1	83	347,5	265,5	15	41,3	10	559,5	719,5	637,5	274	207
132M	300	230H7	17	38	265	5	30	1	83	347,5	265,5	15	41,3	10	597,5	757,5	675,5	274	207
160M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	610,5	—	—	317	250
160L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	654,5	—	—	317	250

• Dimensões em mm

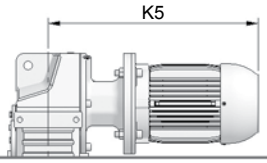
Fixação por pés - N

Simples

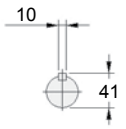
Tipos de Entrada



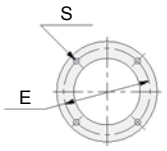
Flange Lanterna com Motor



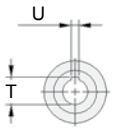
Flange KTR com Motor



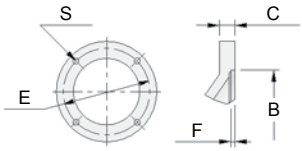
Eixo de Entrada



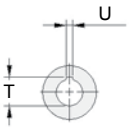
Detalhes Flange Lanterna



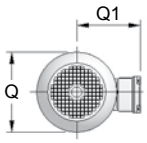
Detalhe “x”



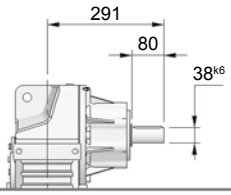
Detalhes Flange KTR



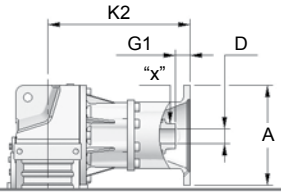
Detalhe “y”



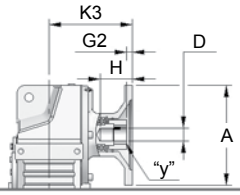
Frente do Motor



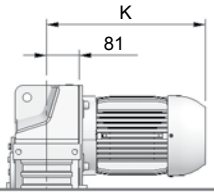
Mancal



Flange Lanterna

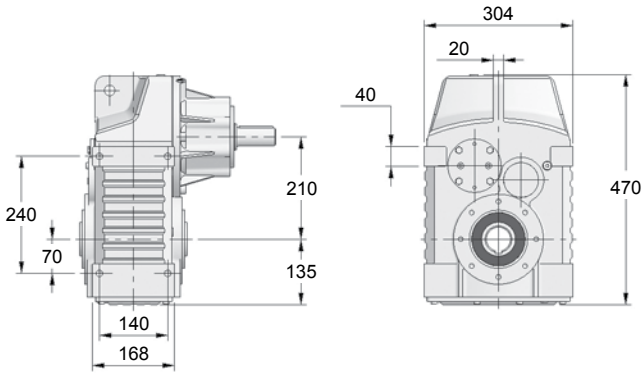


Flange KTR

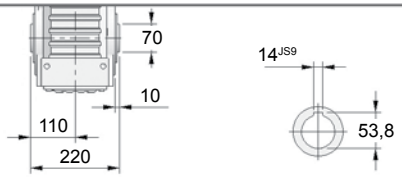


Motor

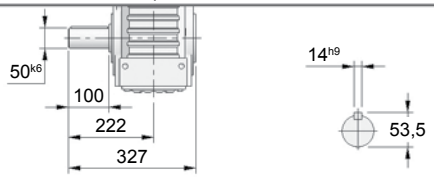
Tipos de Saída



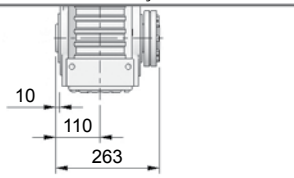
Eixo Vazado com Chaveta



Eixo Integral Simples

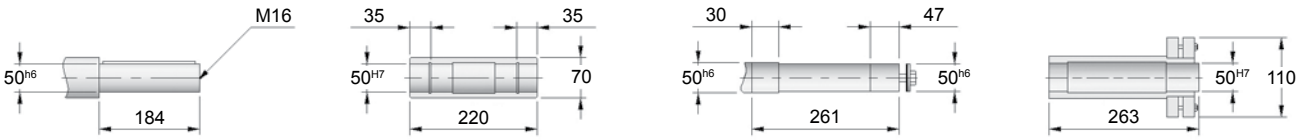


Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração

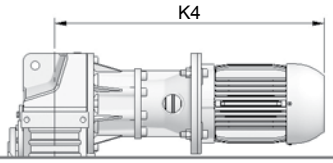


Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
80	200	130H7	15	19	165	4	10	1	44	345	186	12	21,8	6	362,5	581	422	157	130
90S	200	130H7	15	24	165	4	10	1	52	345	186	12	27,3	8	383,5	599	440	177	150
90L	200	130H7	15	24	165	4	10	1	52	345	186	12	27,3	8	408,5	624	465	177	150
100	250	180H7	16	28	215	5	20	1	63	354	209,5	15	31,3	8	458	670	525,5	198	160
112	250	180H7	16	28	215	5	20	1	63	354	209,5	15	31,3	8	473	687	542	235	180
132S	300	230HZ	17	38	265	5	30	1	83	374	262	15	41,3	10	556	746	634	274	207
132M	300	230H7	17	38	265	5	30	1	83	374	262	15	41,3	10	594	784	672	274	207
160M	350	250H7	24	42	300	6	40	1	112	406	310	19	45,3	12	607	894	798	317	250
160L	350	250H7	24	42	300	6	40	1	112	406	310	19	45,3	12	651	938	842	317	250
180M	350	250H7	24	48	300	6	40	1	113	406	310	19	51,8	14	681	960	864	360	270

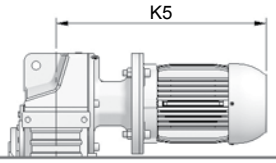
• Dimensões em mm

Fixação por flange e pés - G_F

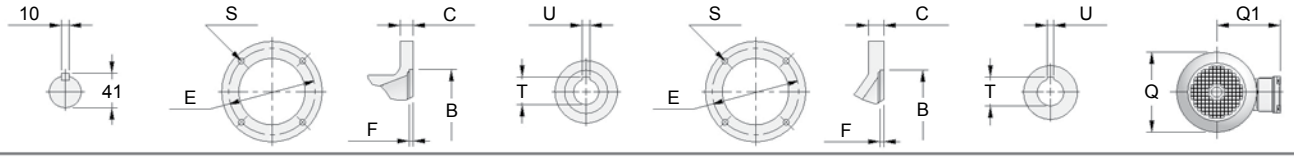
Simples



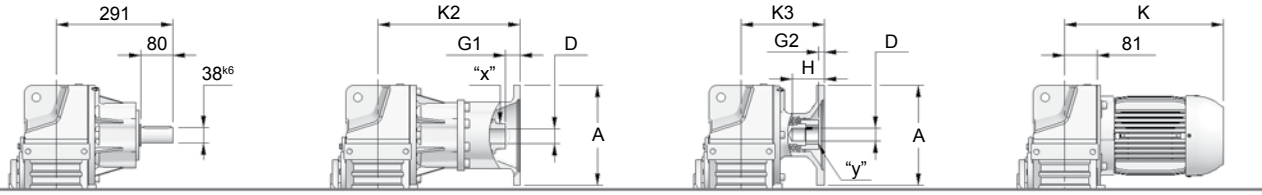
Flange Lanterna com Motor



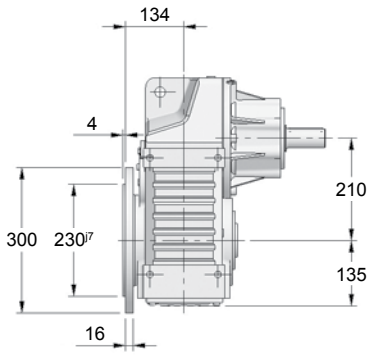
Flange KTR com Motor

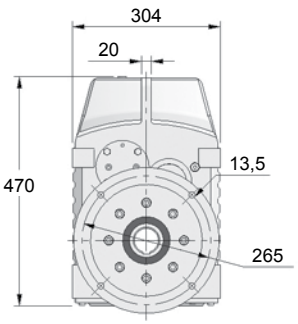


Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor

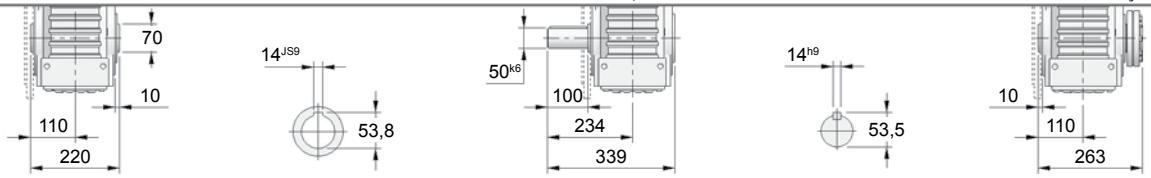


Mancal | Flange Lanterna | Flange KTR | Motor

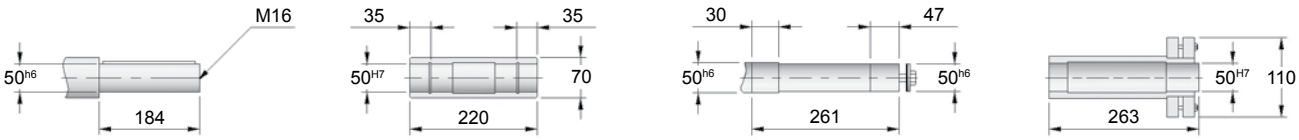




Eixo Vazado com Chaveta | Eixo Integral Simples | Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado | Sugestão de acoplamento no Eixo Vazado com Disco de Contração



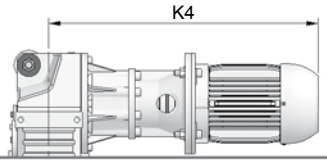
Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
80	200	130H7	15	19	165	4	10	1	44	345	186	12	21,8	6	362,5	581	422	157	130
90S	200	130H7	15	24	165	4	10	1	52	345	186	12	27,3	8	383,5	599	440	177	150
90L	200	130H7	15	24	165	4	10	1	52	345	186	12	27,3	8	408,5	624	465	177	150
100	250	180H7	16	28	215	5	20	1	63	354	209,5	15	31,3	8	458	670	525,5	198	160
112	250	180H7	16	28	215	5	20	1	63	354	209,5	15	31,3	8	473	687	542	235	180
132S	300	230HZ	17	38	265	5	30	1	83	374	262	15	41,3	10	556	746	634	274	207
132M	300	230H7	17	38	265	5	30	1	83	374	262	15	41,3	10	594	784	672	274	207
160M	350	250H7	24	42	300	6	40	1	112	406	310	19	45,3	12	607	894	798	317	250
160L	350	250H7	24	42	300	6	40	1	112	406	310	19	45,3	12	651	938	842	317	250
180M	350	250H7	24	48	300	6	40	1	113	406	310	19	51,8	14	681	960	864	360	270

• Dimensões em mm

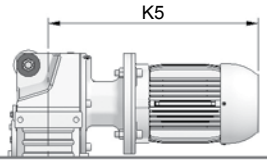
Fixação por braço de torção - B

Simples

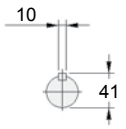
Tipos de Entrada



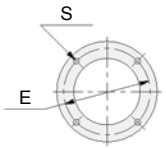
Flange Lanterna com Motor



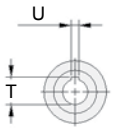
Flange KTR com Motor



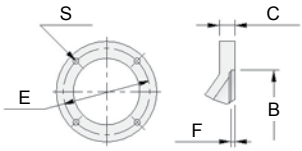
Eixo de Entrada



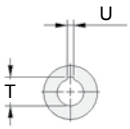
Detalhes Flange Lanterna



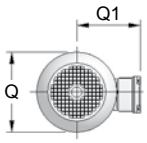
Detalhe "x"



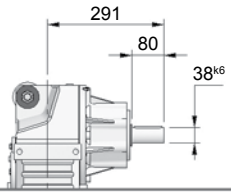
Detalhes Flange KTR



Detalhe "y"



Frente do Motor



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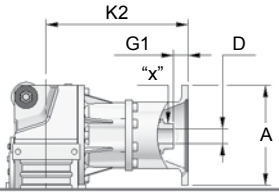
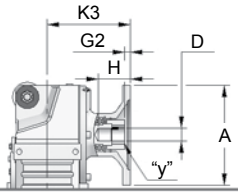
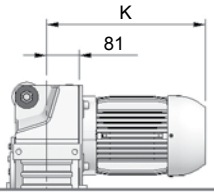


Flange Lanterna

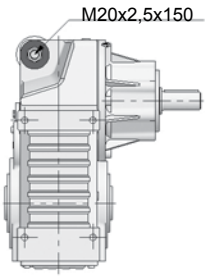


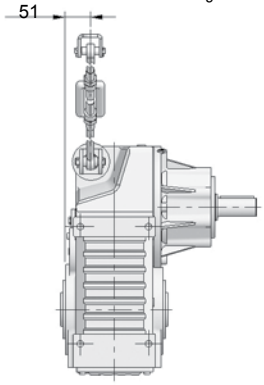
Flange KTR

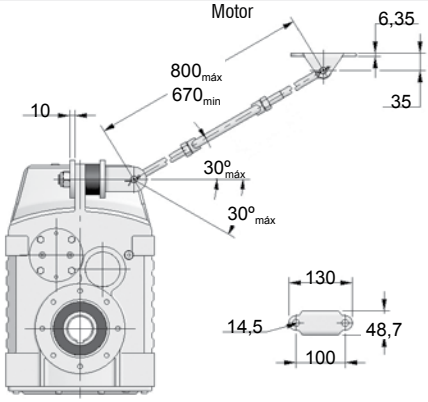


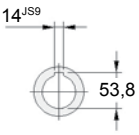
Motor

Tipos de Saída



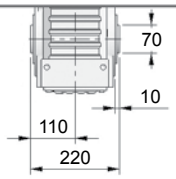




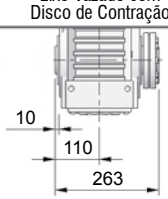


Sugestão de acoplamento no Eixo Vazado

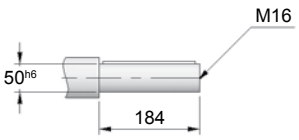
Eixo Vazado com Chaveta

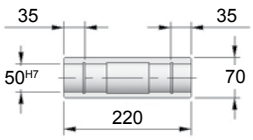


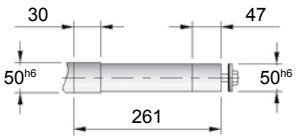
Eixo Vazado com Disco de Contração

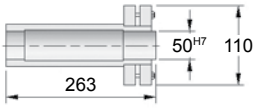


Sugestão de acoplamento no Eixo Vazado com Disco de Contração



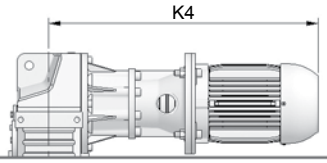




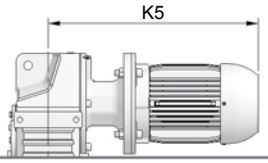


	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
80	200	130H7	15	19	165	4	10	1	44	345	186	12	21,8	6	362,5	581	422	157	130
90S	200	130H7	15	24	165	4	10	1	52	345	186	12	27,3	8	383,5	599	440	177	150
90L	200	130H7	15	24	165	4	10	1	52	345	186	12	27,3	8	408,5	624	465	177	150
100	250	180H7	16	28	215	5	20	1	63	354	209,5	15	31,3	8	458	670	525,5	198	160
112	250	180H7	16	28	215	5	20	1	63	354	209,5	15	31,3	8	473	687	542	235	180
132S	300	230HZ	17	38	265	5	30	1	83	374	262	15	41,3	10	556	746	634	274	207
132M	300	230H7	17	38	265	5	30	1	83	374	262	15	41,3	10	594	784	672	274	207
160M	350	250H7	24	42	300	6	40	1	112	406	310	19	45,3	12	607	894	798	317	250
160L	350	250H7	24	42	300	6	40	1	112	406	310	19	45,3	12	651	938	842	317	250
180M	350	250H7	24	48	300	6	40	1	113	406	310	19	51,8	14	681	960	864	360	270

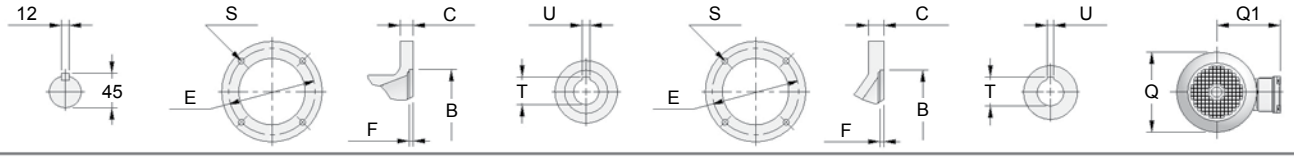
• Dimensões em mm



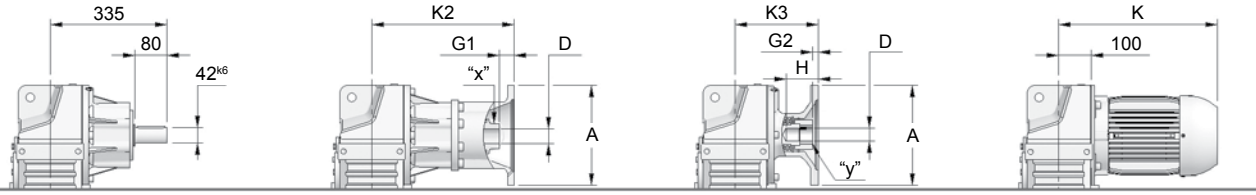
Flange Lanterna com Motor



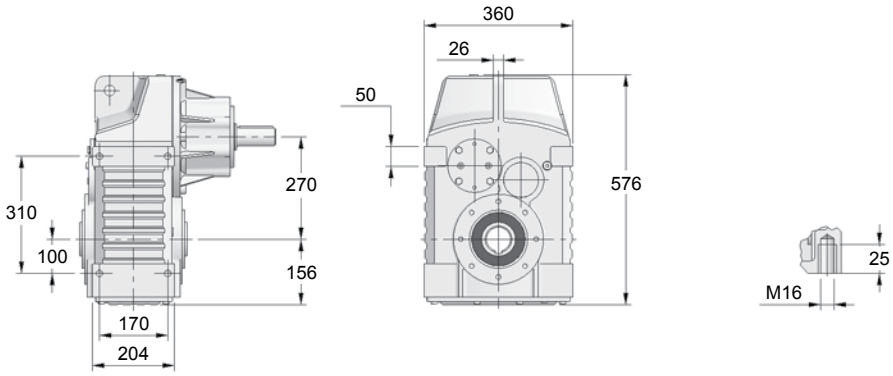
Flange KTR com Motor



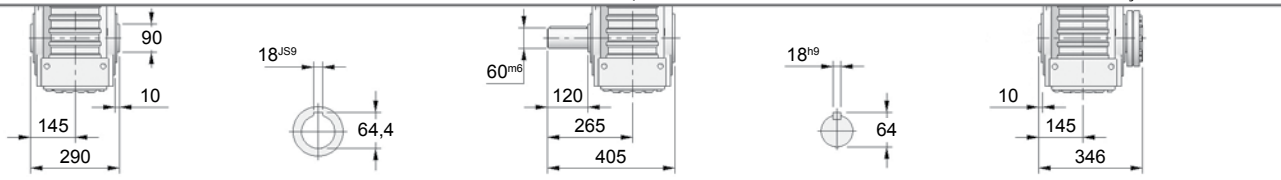
Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor



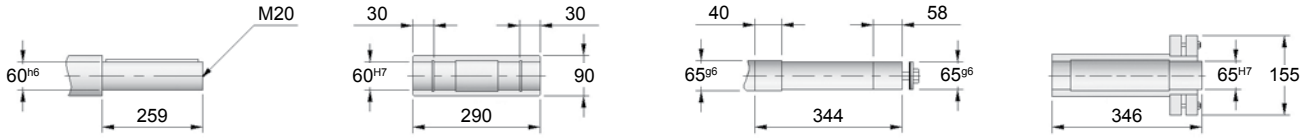
Mancal | Flange Lanterna | Flange KTR | Motor



Eixo Vazado com Chaveta | Eixo Integral Simples | Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado | Sugestão de acoplamento no Eixo Vazado com Disco de Contração



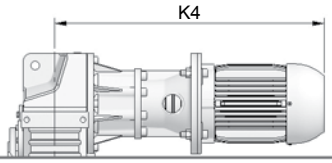
Carcaça	Flange Lanterna / KTR													Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
80	200	130H7	15	19	165	4	10	1	44	389	199	12	21,8	6	375	625	435	157	130
90S	200	130H7	15	24	165	4	10	1	52	389	199	12	27,3	8	397	643	453	177	150
90L	200	130H7	15	24	165	4	10	1	52	389	199	12	27,3	8	422	668	478	177	150
100	250	180H7	16	28	215	5	20	1	63	398	221	15	31,3	8	471	714	537	198	160
112	250	180H7	16	28	215	5	20	1	63	398	221	15	31,3	8	487	731	554	235	180
132S	300	230H7	17	38	265	5	30	1	83	418	276	15	41,3	10	570	790	648	274	207
132M	300	230H7	17	38	265	5	30	1	83	418	276	15	41,3	10	608	828	686	274	207
160M	350	250H7	24	42	300	6	40	1	112	450	324	19	45,3	12	621	938	812	317	250
160L	350	250H7	24	42	300	6	40	1	112	450	324	19	45,3	12	665	982	856	317	250
180M	350	250H7	24	48	300	6	40	1	113	450	324	19	51,8	14	695	1004	878	360	270
200M	400	300H7	24	55	350	6	—	1	114	—	359	19	59,3	16	658	—	988	402	294
200L	400	300H7	24	55	350	6	—	1	114	—	359	19	59,3	16	796	—	1026	402	294
225	450	350H7	24	60	400	6	—	11	124	—	384	19	64,4	18	839	—	1091	466	368

• Dimensões em mm

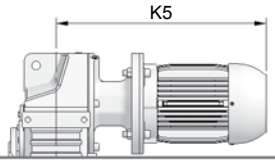
Fixação por flange e pés - G_G

Simples

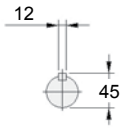
Tipos de Entrada



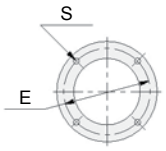
Flange Lanterna com Motor



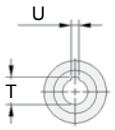
Flange KTR com Motor



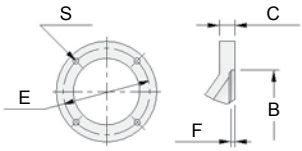
Eixo de Entrada



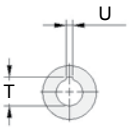
Detalhes Flange Lanterna



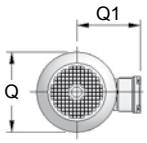
Detalhe "x"



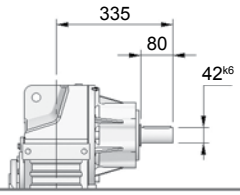
Detalhes Flange KTR



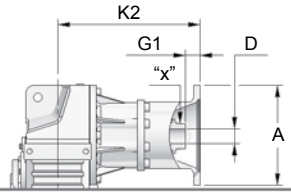
Detalhe "y"



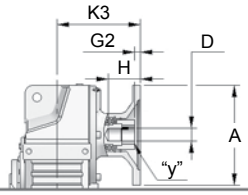
Frente do Motor



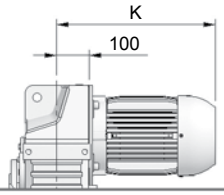
Mancal



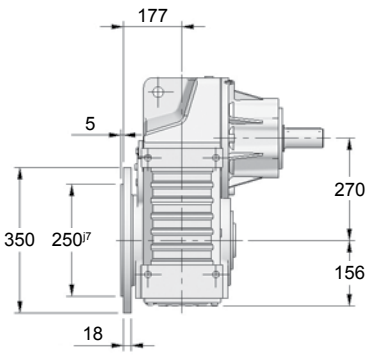
Flange Lanterna

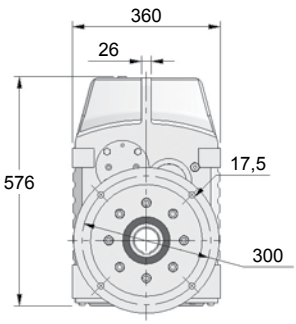


Flange KTR



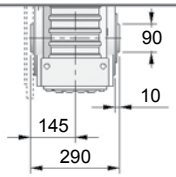
Motor

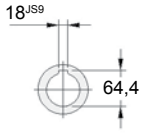




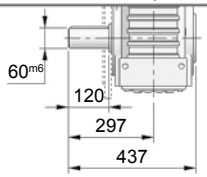
Tipos de Saída

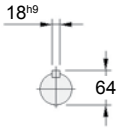
Eixo Vazado com Chaveta



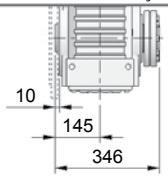


Eixo Integral Simples



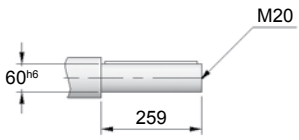


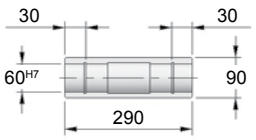
Eixo Vazado com Disco de Contração

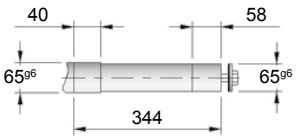


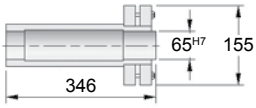
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração







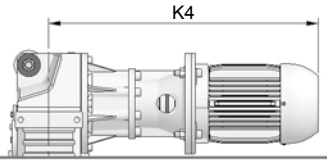


Carcaça	Flange Lanterna / KTR A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	Motor Elétrico K	K4	K5	Q	Q1
80	200	130H7	15	19	165	4	10	1	44	389	199	12	21,8	6	375	625	435	157	130
90S	200	130H7	15	24	165	4	10	1	52	389	199	12	27,3	8	397	643	453	177	150
90L	200	130H7	15	24	165	4	10	1	52	389	199	12	27,3	8	422	668	478	177	150
100	250	180H7	16	28	215	5	20	1	63	398	221	15	31,3	8	471	714	537	198	160
112	250	180H7	16	28	215	5	20	1	63	398	221	15	31,3	8	487	731	554	235	180
132S	300	230H7	17	38	265	5	30	1	83	418	276	15	41,3	10	570	790	648	274	207
132M	300	230H7	17	38	265	5	30	1	83	418	276	15	41,3	10	608	828	686	274	207
160M	350	250H7	24	42	300	6	40	1	112	450	324	19	45,3	12	621	938	812	317	250
160L	350	250H7	24	42	300	6	40	1	112	450	324	19	45,3	12	665	982	856	317	250
180M	350	250H7	24	48	300	6	40	1	113	450	324	19	51,8	14	695	1004	878	360	270
200M	400	300H7	24	55	350	6	—	1	114	—	359	19	59,3	16	658	—	988	402	294
200L	400	300H7	24	55	350	6	—	1	114	—	359	19	59,3	16	796	—	1026	402	294
225	450	350H7	24	60	400	6	—	11	124	—	384	19	64,4	18	839	—	1091	466	368

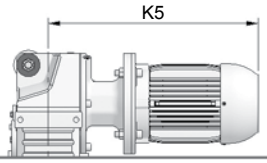
• Dimensões em mm

Fixação por braço de torção - B

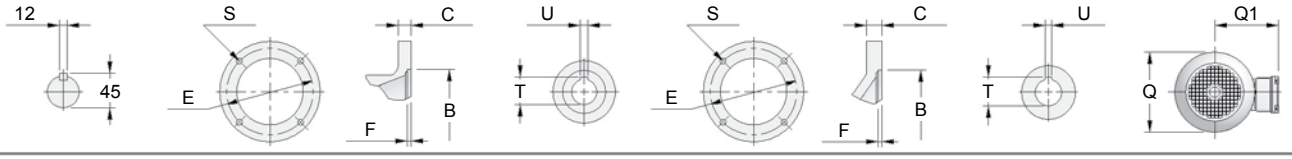
Simples



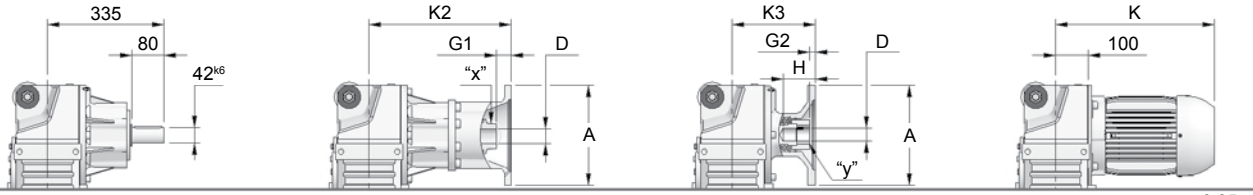
Flange Lanterna com Motor



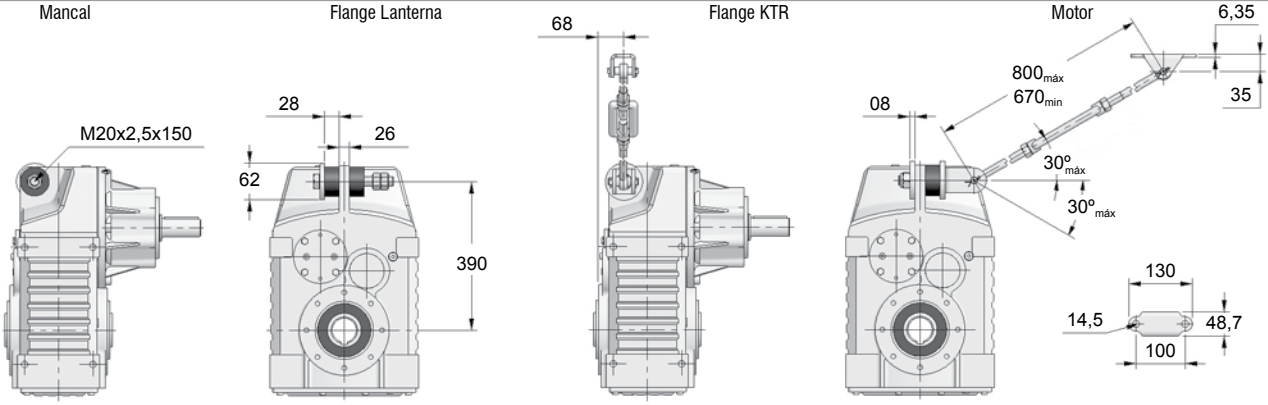
Flange KTR com Motor



Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor



Mancal | Flange Lanterna | Flange KTR | Motor



Braço de Torção com Bucha Elástica (B)

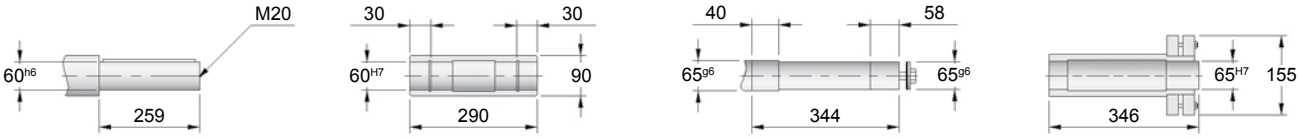
Braço de Torção com Esticador (E)

Eixo Vazado com Chaveta

Eixo Vazado com Disco de Contração

Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração



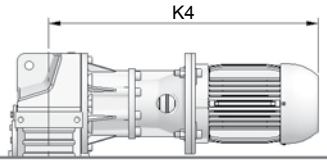
	Flange Lanterna / KTR													Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
80	200	130H7	15	19	165	4	10	1	44	389	199	12	21,8	6	375	625	435	157	130
90S	200	130H7	15	24	165	4	10	1	52	389	199	12	27,3	8	397	643	453	177	150
90L	200	130H7	15	24	165	4	10	1	52	389	199	12	27,3	8	422	668	478	177	150
100	250	180H7	16	28	215	5	20	1	63	398	221	15	31,3	8	471	714	537	198	160
112	250	180H7	16	28	215	5	20	1	63	398	221	15	31,3	8	487	731	554	235	180
132S	300	230H7	17	38	265	5	30	1	83	418	276	15	41,3	10	570	790	648	274	207
132M	300	230H7	17	38	265	5	30	1	83	418	276	15	41,3	10	608	828	686	274	207
160M	350	250H7	24	42	300	6	40	1	112	450	324	19	45,3	12	621	938	812	317	250
160L	350	250H7	24	42	300	6	40	1	112	450	324	19	45,3	12	665	982	856	317	250
180M	350	250H7	24	48	300	6	40	1	113	450	324	19	51,8	14	695	1004	878	360	270
200M	400	300H7	24	55	350	6	—	1	114	—	359	19	59,3	16	658	—	988	402	294
200L	400	300H7	24	55	350	6	—	1	114	—	359	19	59,3	16	796	—	1026	402	294
225	450	350H7	24	60	400	6	—	11	124	—	384	19	64,4	18	839	—	1091	466	368

• Dimensões em mm

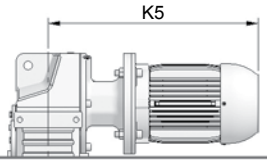
Fixação por pés - N

Simples

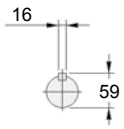
Tipos de Entrada



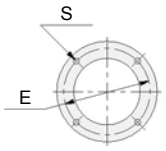
Flange Lanterna com Motor



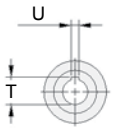
Flange KTR com Motor



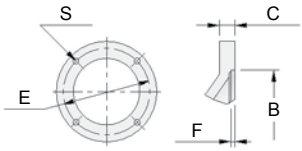
Eixo de Entrada



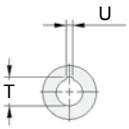
Detalhes Flange Lanterna



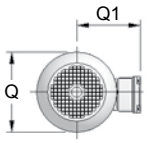
Detalhe "x"



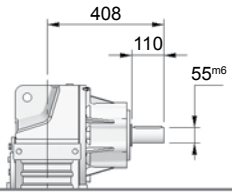
Detalhes Flange KTR



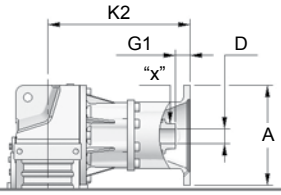
Detalhe "y"



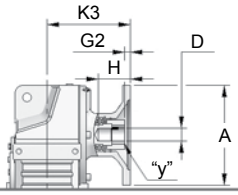
Frente do Motor



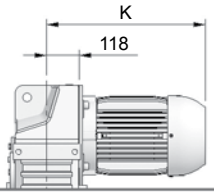
Mancal



Flange Lanterna

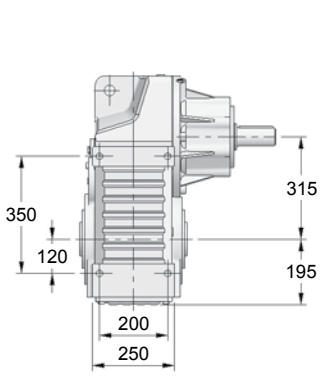


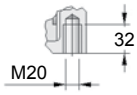
Flange KTR



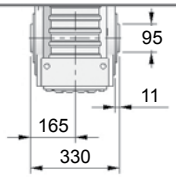
Motor

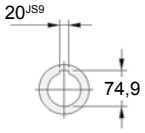
Tipos de Saída





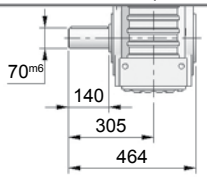
Eixo Vazado com Chaveta

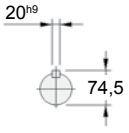




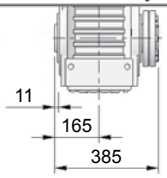
Sugestão de acoplamento no Eixo Vazado

Eixo Integral Simples

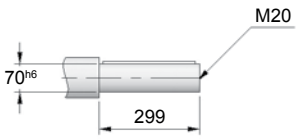


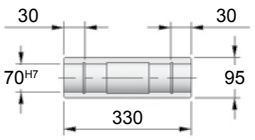


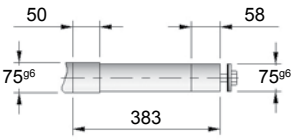
Eixo Vazado com Disco de Contração

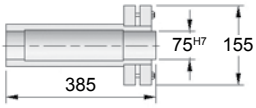


Sugestão de acoplamento no Eixo Vazado com Disco de Contração







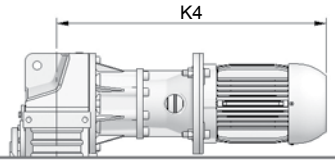


Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	H7	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
100	250	180H7	16	28	215	5	20	1	63	473	233	15	31,3	8	483	789	549	198	160
112	250	180H7	16	28	215	5	20	1	63	473	233	15	31,3	8	499	806	566	235	180
132S	300	230H7	17	38	265	5	30	1	83	493	288	15	41,3	10	582	865	660	274	207
132M	300	230H7	17	38	265	5	30	1	83	493	288	15	41,3	10	620	903	698	274	207
160M	350	250H7	24	42	300	6	40	1	112	523	336	19	45,3	12	633	1011	824	317	250
160L	350	250H7	24	42	300	6	40	1	112	523	336	19	45,3	12	677	1055	868	317	250
180M	350	250H7	24	48	300	6	40	1	113	523	336	19	51,8	14	707	1077	890	360	270
200M	400	300H7	24	55	350	6	30	1	114	523	371	19	59,3	16	670	1142	1000	402	294
200L	400	300H7	24	55	350	6	30	1	114	523	371	19	59,3	16	808	1180	1038	402	294
225	450	350H7	24	60	400	6	60	11	124	553	396	19	64,4	18	857	1260	1103	466	368
250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	933	—	—	491	368
280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1045	—	—	578	463

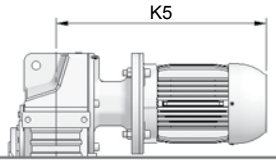
• Dimensões em mm

Fixação por flange e pés - G_J

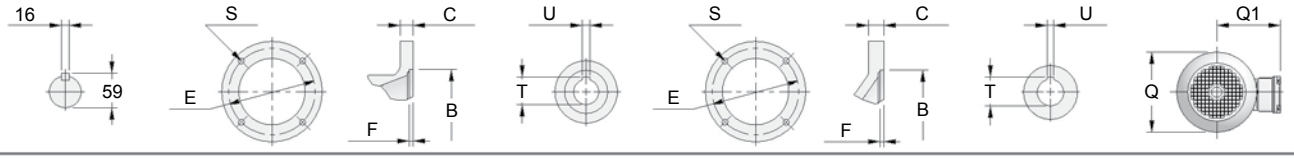
Simples



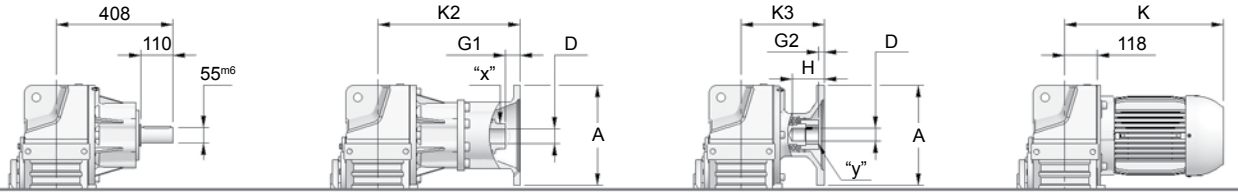
Flange Lanterna com Motor



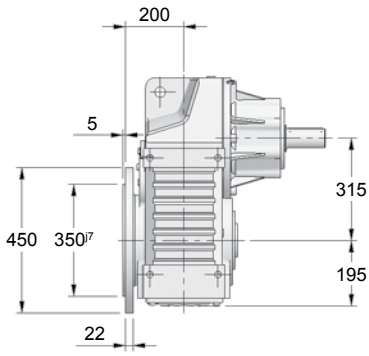
Flange KTR com Motor

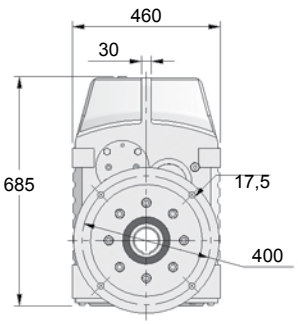


Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor

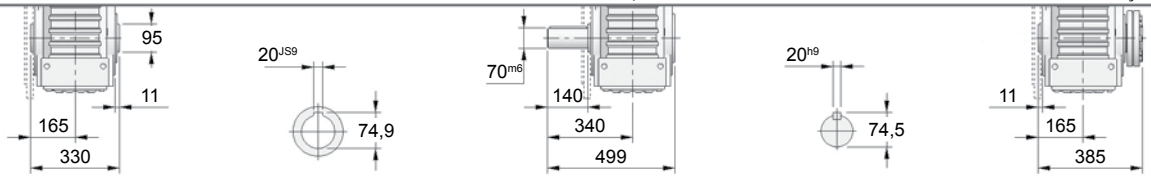


Mancal | Flange Lanterna | Flange KTR | Motor

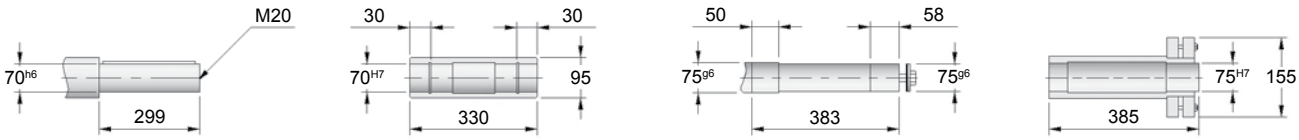




Eixo Vazado com Chaveta | Eixo Integral Simples | Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado | Sugestão de acoplamento no Eixo Vazado com Disco de Contração



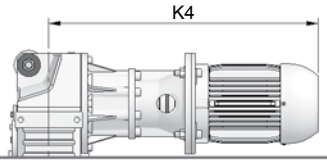
Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
100	250	180H7	16	28	215	5	20	1	63	473	233	15	31,3	8	483	789	549	198	160
112	250	180H7	16	28	215	5	20	1	63	473	233	15	31,3	8	499	806	566	235	180
132S	300	230H7	17	38	265	5	30	1	83	493	288	15	41,3	10	582	865	660	274	207
132M	300	230H7	17	38	265	5	30	1	83	493	288	15	41,3	10	620	903	698	274	207
160M	350	250H7	24	42	300	6	40	1	112	523	336	19	45,3	12	633	1011	824	317	250
160L	350	250H7	24	42	300	6	40	1	112	523	336	19	45,3	12	677	1055	868	317	250
180M	350	250H7	24	48	300	6	40	1	113	523	336	19	51,8	14	707	1077	890	360	270
200M	400	300H7	24	55	350	6	30	1	114	523	371	19	59,3	16	670	1142	1000	402	294
200L	400	300H7	24	55	350	6	30	1	114	523	371	19	59,3	16	808	1180	1038	402	294
225	450	350H7	24	60	400	6	60	11	124	553	396	19	64,4	18	857	1260	1103	466	368
250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	933	—	—	491	368
280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1045	—	—	578	463

• Dimensões em mm

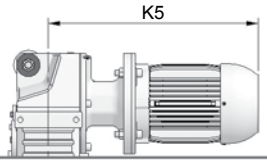
Fixação por braço de torção - B

Simples

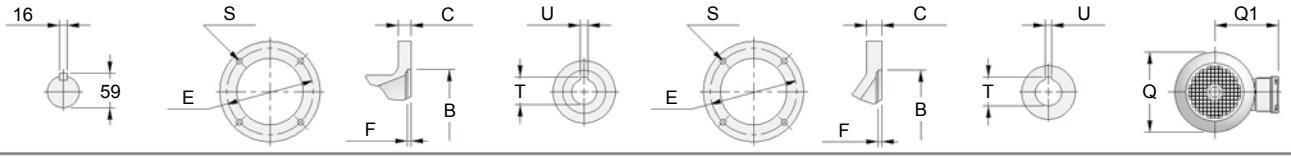
Tipos de Entrada



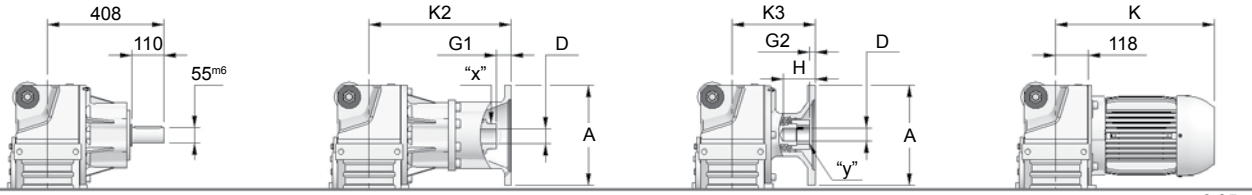
Flange Lanterna com Motor



Flange KTR com Motor

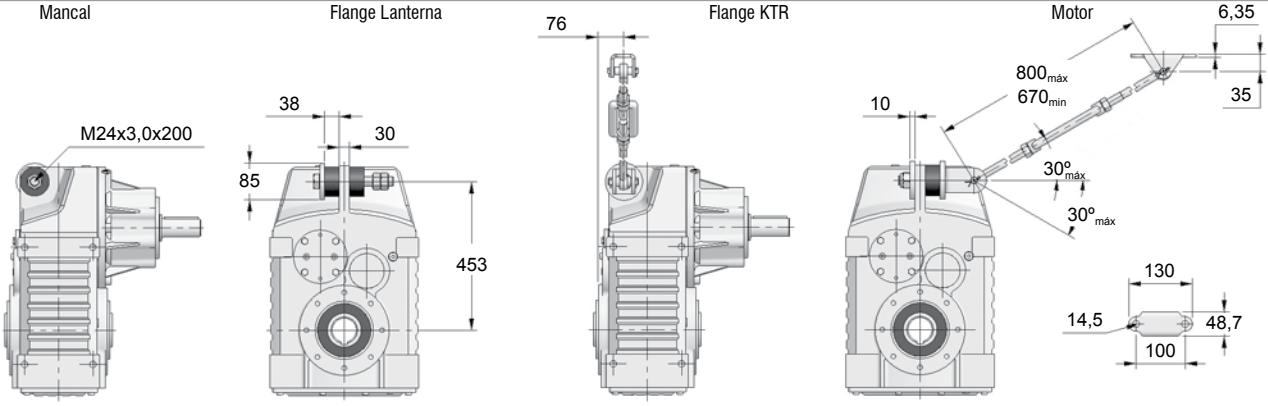


Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor



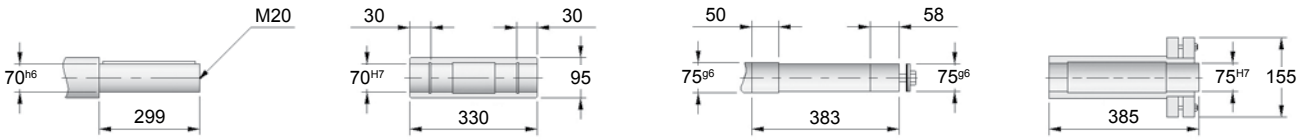
Mancal | Flange Lanterna | Flange KTR | Motor

Tipos de Saída



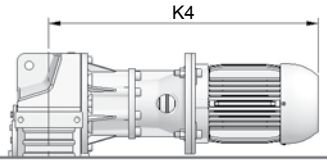
Eixo Vazado com Chaveta | Eixo Vazado com Disco de Contração

Sugestão de acoplamento no Eixo Vazado | Sugestão de acoplamento no Eixo Vazado com Disco de Contração

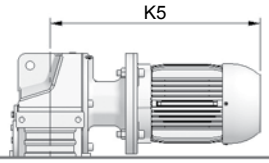


	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
100	250	180H7	16	28	215	5	20	1	63	473	233	15	31,3	8	483	789	549	198	160
112	250	180H7	16	28	215	5	20	1	63	473	233	15	31,3	8	499	806	566	235	180
132S	300	230H7	17	38	265	5	30	1	83	493	288	15	41,3	10	582	865	660	274	207
132M	300	230H7	17	38	265	5	30	1	83	493	288	15	41,3	10	620	903	698	274	207
160M	350	250H7	24	42	300	6	40	1	112	523	336	19	45,3	12	633	1011	824	317	250
160L	350	250H7	24	42	300	6	40	1	112	523	336	19	45,3	12	677	1055	868	317	250
180M	350	250H7	24	48	300	6	40	1	113	523	336	19	51,8	14	707	1077	890	360	270
200M	400	300H7	24	55	350	6	30	1	114	523	371	19	59,3	16	670	1142	1000	402	294
200L	400	300H7	24	55	350	6	30	1	114	523	371	19	59,3	16	808	1180	1038	402	294
225	450	350H7	24	60	400	6	60	11	124	553	396	19	64,4	18	857	1260	1103	466	368
250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	933	—	—	491	368
280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1045	—	—	578	463

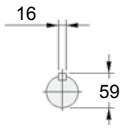
• Dimensões em mm



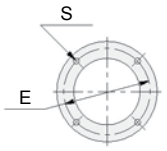
Flange Lanterna com Motor



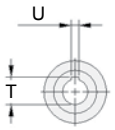
Flange KTR com Motor



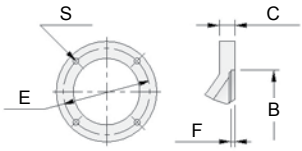
Eixo de Entrada



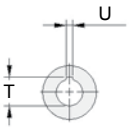
Detalhes Flange Lanterna



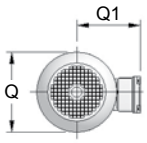
Detalhe "x"



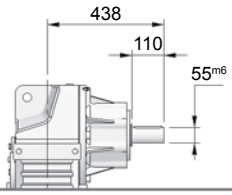
Detalhes Flange KTR



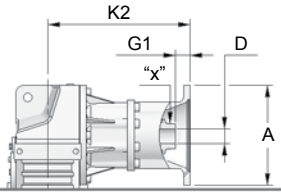
Detalhe "y"



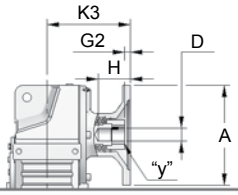
Frente do Motor



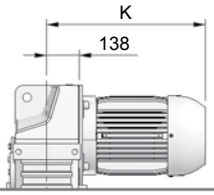
Mancal



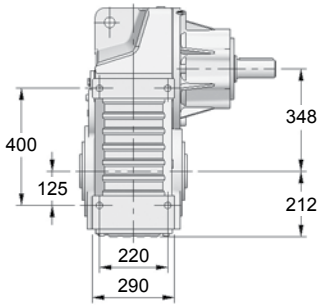
Flange Lanterna

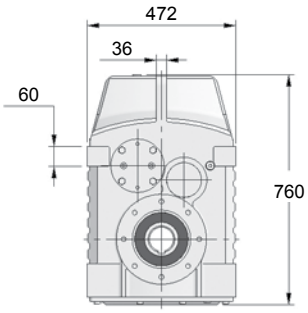


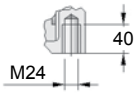
Flange KTR



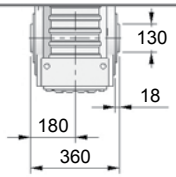
Motor

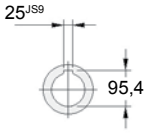




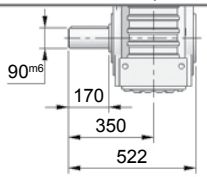


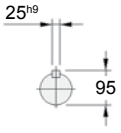
Eixo Vazado com Chaveta



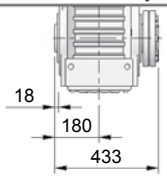


Eixo Integral Simples



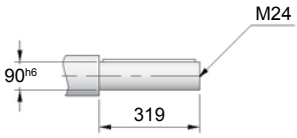


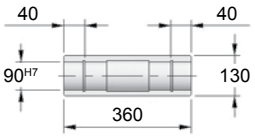
Eixo Vazado com Disco de Contração

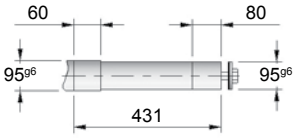


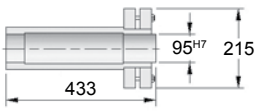
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração









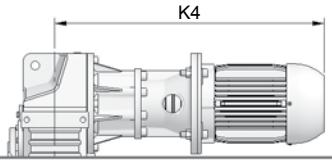
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
100	250	180H7	16	28	215	5	20	—	—	503	—	15	31,3	8	—	819	—	198	160
112	250	180H7	16	28	215	5	20	—	—	503	—	15	31,3	8	—	836	—	235	180
132S	300	230H7	17	38	265	5	30	1	83	523	301	15	41,3	10	595	895	673	274	207
132M	300	230H7	17	38	265	5	30	1	83	523	301	15	41,3	10	633	933	711	274	207
160M	350	250H7	24	42	300	6	40	1	112	553	349	19	45,3	12	646	1041	837	317	250
160L	350	250H7	24	42	300	6	40	1	112	553	349	19	45,3	12	690	1085	881	317	250
180M	350	250H7	24	48	300	6	40	1	113	553	349	19	51,8	14	720	1107	903	360	270
200M	400	300H7	24	55	350	6	30	1	114	553	394	19	59,3	16	683	1172	1013	402	294
200L	400	300H7	24	55	350	6	30	1	114	553	394	19	59,3	16	821	1210	1051	402	294
225	450	350H7	24	60	400	6	60	11	124	583	409	19	64,4	18	877	1290	1116	466	368
250	550	450H7	25	60	400	6	—	2	144	—	528	19	64,4	18	953	—	1311	491	368
280	550	450H7	25	65	500	6	—	2	144	—	528	19	69,4	18	1065	—	1424	578	463
315	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1155	—	—	613	492

• Dimensões em mm

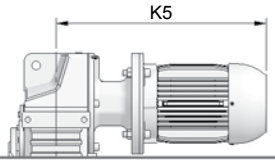
Fixação por flange e pés - G_J

Simples

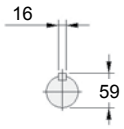
Tipos de Entrada



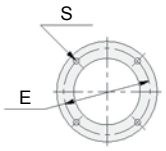
Flange Lanterna com Motor



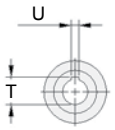
Flange KTR com Motor



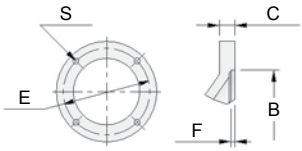
Eixo de Entrada



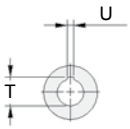
Detalhes Flange Lanterna



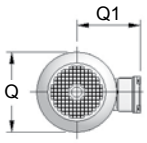
Detalhe "x"



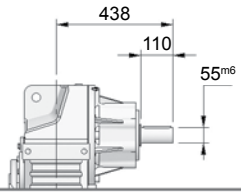
Detalhes Flange KTR



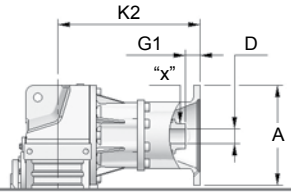
Detalhe "y"



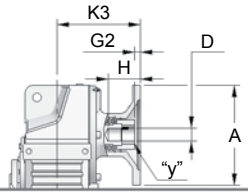
Frente do Motor



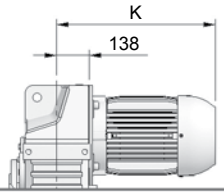
Mancal



Flange Lanterna

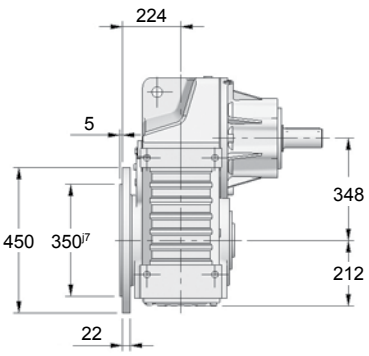


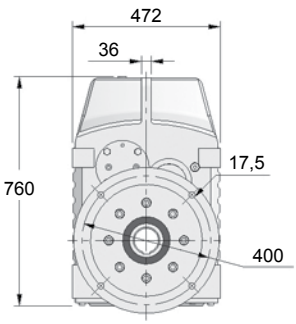
Flange KTR



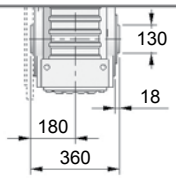
Motor

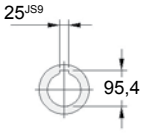
Tipos de Saída





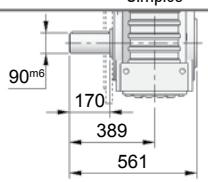
Eixo Vazado com Chaveta

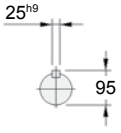




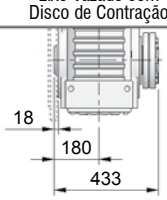
Sugestão de acoplamento no Eixo Vazado

Eixo Integral Simples

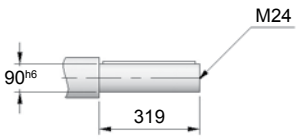


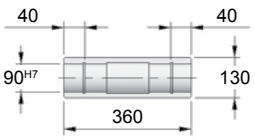


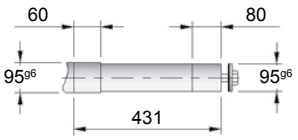
Eixo Vazado com Disco de Contração

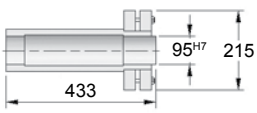


Sugestão de acoplamento no Eixo Vazado com Disco de Contração







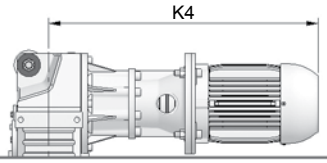


	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
100	250	180H7	16	28	215	5	20	—	—	503	—	15	31,3	8	—	819	—	198	160
112	250	180H7	16	28	215	5	20	—	—	503	—	15	31,3	8	—	836	—	235	180
132S	300	230H7	17	38	265	5	30	1	83	523	301	15	41,3	10	595	895	673	274	207
132M	300	230H7	17	38	265	5	30	1	83	523	301	15	41,3	10	633	933	711	274	207
160M	350	250H7	24	42	300	6	40	1	112	553	349	19	45,3	12	646	1041	837	317	250
160L	350	250H7	24	42	300	6	40	1	112	553	349	19	45,3	12	690	1085	881	317	250
180M	350	250H7	24	48	300	6	40	1	113	553	349	19	51,8	14	720	1107	903	360	270
200M	400	300H7	24	55	350	6	30	1	114	553	394	19	59,3	16	683	1172	1013	402	294
200L	400	300H7	24	55	350	6	30	1	114	553	394	19	59,3	16	821	1210	1051	402	294
225	450	350H7	24	60	400	6	60	11	124	583	409	19	64,4	18	877	1290	1116	466	368
250	550	450H7	25	60	400	6	—	2	144	—	528	19	64,4	18	953	—	1311	491	368
280	550	450H7	25	65	500	6	—	2	144	—	528	19	69,4	18	1065	—	1424	578	463
315	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1155	—	—	613	492

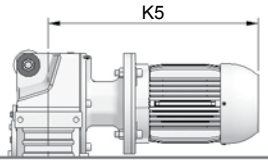
• Dimensões em mm

Fixação por braço de torção - B

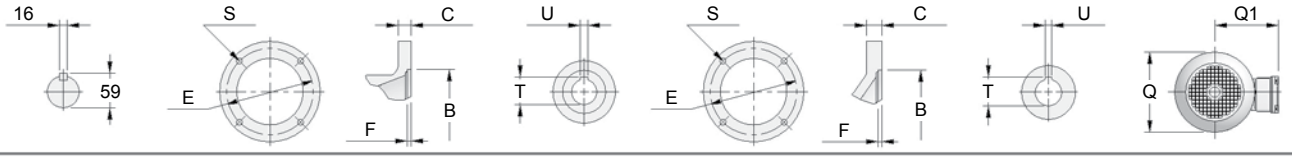
Simples



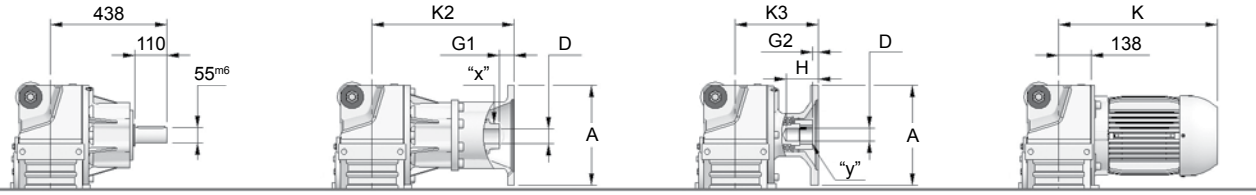
Flange Lanterna com Motor



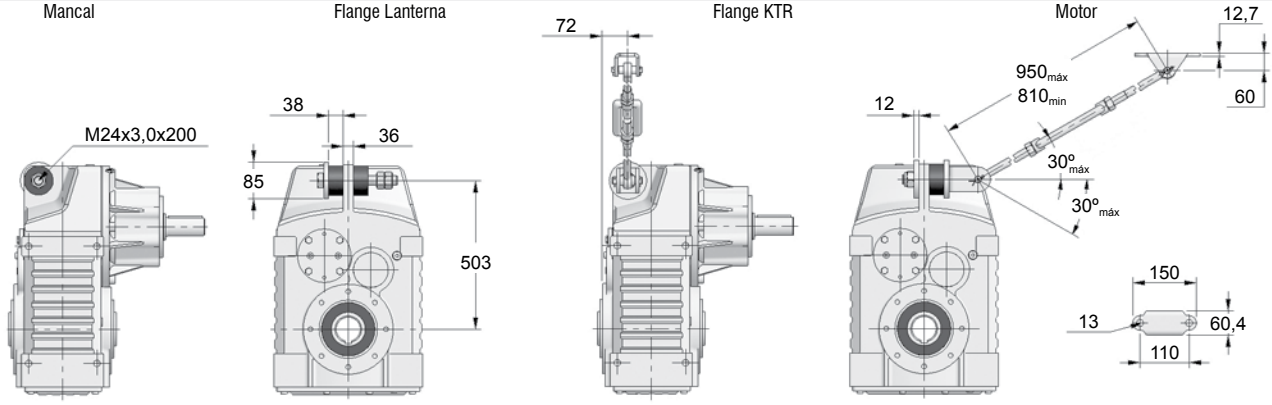
Flange KTR com Motor



Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor



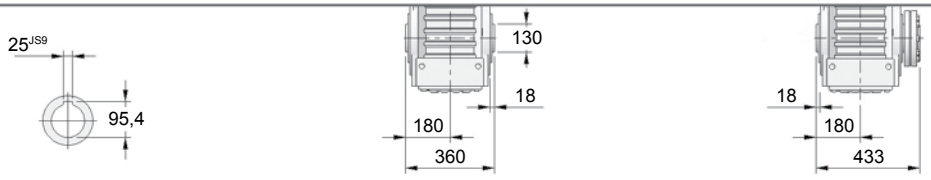
Mancal | Flange Lanterna | Flange KTR | Motor



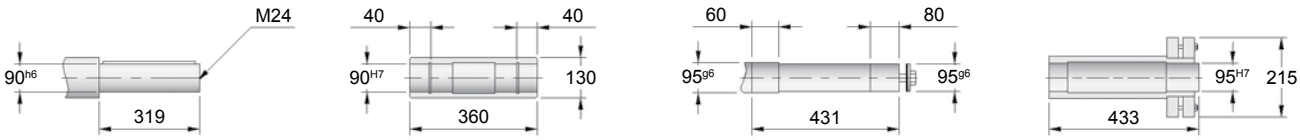
Braço de Torção com Bucha Elástica (B)

Braço de Torção com Esticador (E)

Eixo Vazado com Chaveta | Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado | Sugestão de acoplamento no Eixo Vazado com Disco de Contração



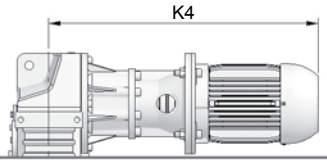
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
100	250	180H7	16	28	215	5	20	—	—	503	—	15	31,3	8	—	819	—	198	160
112	250	180H7	16	28	215	5	20	—	—	503	—	15	31,3	8	—	836	—	235	180
132S	300	230H7	17	38	265	5	30	1	83	523	301	15	41,3	10	595	895	673	274	207
132M	300	230H7	17	38	265	5	30	1	83	523	301	15	41,3	10	633	933	711	274	207
160M	350	250H7	24	42	300	6	40	1	112	553	349	19	45,3	12	646	1041	837	317	250
160L	350	250H7	24	42	300	6	40	1	112	553	349	19	45,3	12	690	1085	881	317	250
180M	350	250H7	24	48	300	6	40	1	113	553	349	19	51,8	14	720	1107	903	360	270
200M	400	300H7	24	55	350	6	30	1	114	553	394	19	59,3	16	683	1172	1013	402	294
200L	400	300H7	24	55	350	6	30	1	114	553	394	19	59,3	16	821	1210	1051	402	294
225	450	350H7	24	60	400	6	60	11	124	583	409	19	64,4	18	877	1290	1116	466	368
250	550	450H7	25	60	400	6	—	2	144	—	528	19	64,4	18	953	—	1311	491	368
280	550	450H7	25	65	500	6	—	2	144	—	528	19	69,4	18	1065	—	1424	578	463
315	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1155	—	—	613	492

• Dimensões em mm

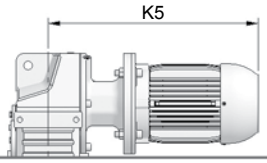
Fixação por pés - N

Simples

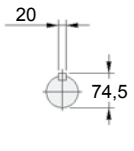
Tipos de Entrada



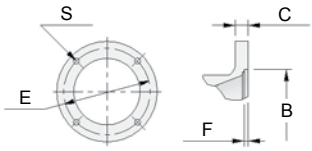
Flange Lanterna com Motor



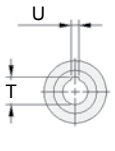
Flange KTR com Motor



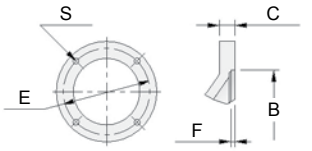
Eixo de Entrada



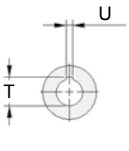
Detalhes Flange Lanterna



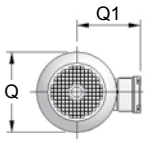
Detalhe “x”



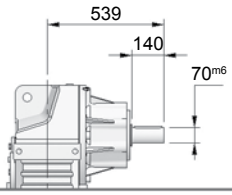
Detalhes Flange KTR



Detalhe “y”



Frente do Motor



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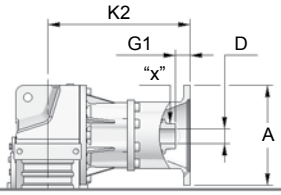
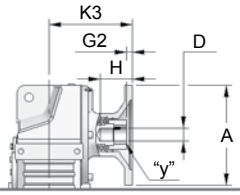
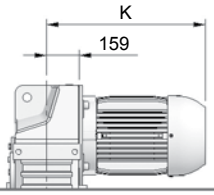


Flange Lanterna

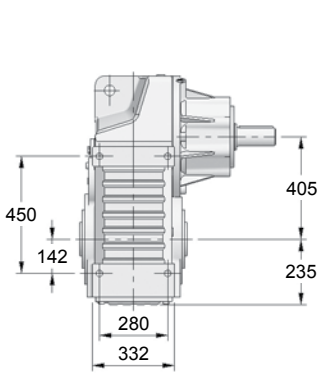


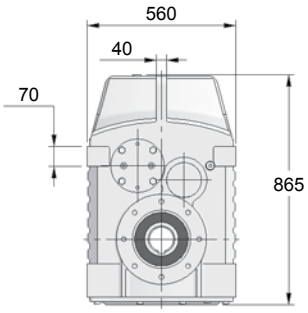
Flange KTR

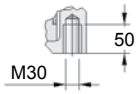


Motor

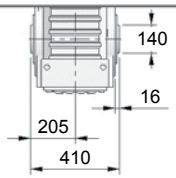
Tipos de Saída

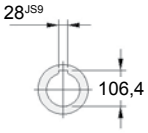






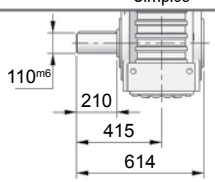
Eixo Vazado com Chaveta

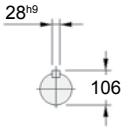




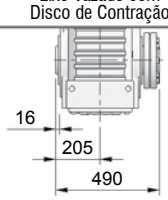
Sugestão de acoplamento no Eixo Vazado

Eixo Integral Simples

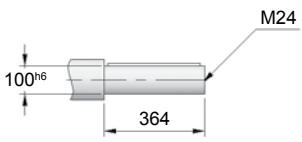


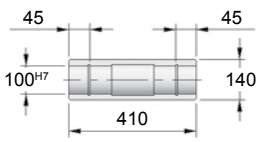


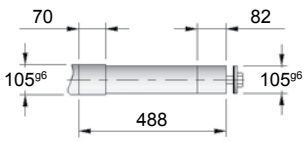
Eixo Vazado com Disco de Contração

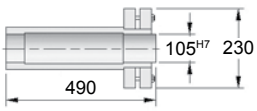


Sugestão de acoplamento no Eixo Vazado com Disco de Contração







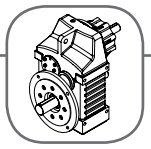


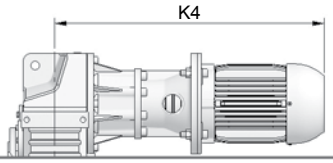
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
132S	300	230H7	17	38	265	5	30	1	83	623	314	15	41,3	10	608	995	686	274	207
132M	300	230H7	17	38	265	5	30	1	83	623	314	15	41,3	10	646	1033	724	274	207
160M	350	250H7	24	42	300	6	40	1	112	653	362	19	45,3	12	659	1141	850	317	250
160L	350	250H7	24	42	300	6	40	1	112	653	362	19	45,3	12	703	1185	894	317	250
180M	350	250H7	24	48	300	6	40	1	113	653	362	19	51,8	14	733	1207	916	360	270
200M	400	300H7	24	55	350	6	30	1	114	653	407	19	59,3	16	696	1272	1026	402	294
200L	400	300H7	24	55	350	6	30	1	114	653	407	19	59,3	16	834	1310	1064	402	294
225	450	350H7	24	60	400	6	60	11	124	683	422	19	64,4	18	898	1390	1129	466	368
250	550	450H7	25	60	400	6	—	2	144	—	540	19	64,4	18	974	—	1323	491	368
280	550	450H7	25	65	500	6	—	2	144	—	540	19	69,4	18	1086	—	1436	578	463
315	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1176	—	—	613	492

• Dimensões em mm

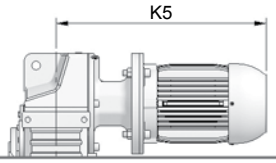
Fixação por flange e pés - G_K

Simples

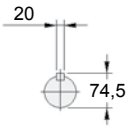




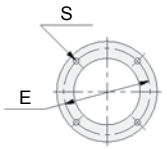
Flange Lanterna com Motor



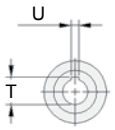
Flange KTR com Motor



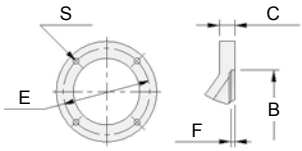
Eixo de Entrada



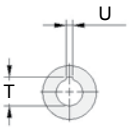
Detalhes Flange Lanterna



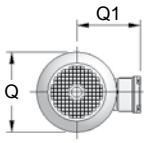
Detalhe “x”



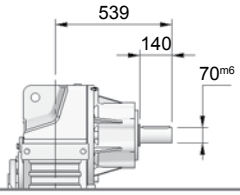
Detalhes Flange KTR



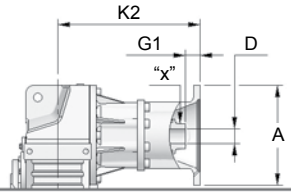
Detalhe “y”



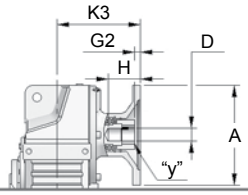
Frente do Motor



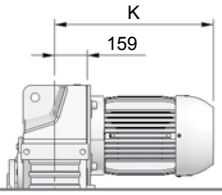
Mancal



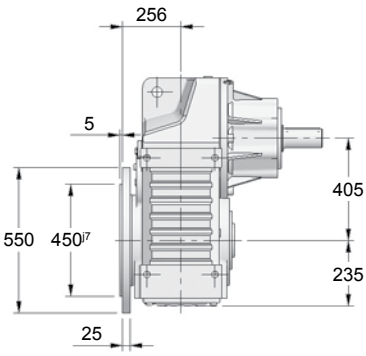
Flange Lanterna

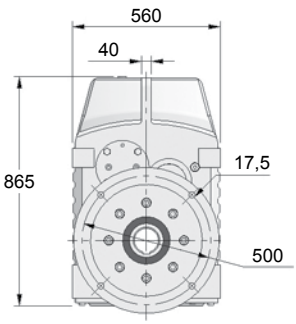


Flange KTR

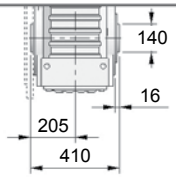


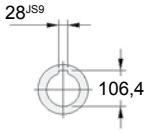
Motor





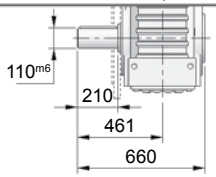
Eixo Vazado com Chaveta

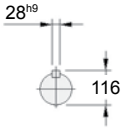




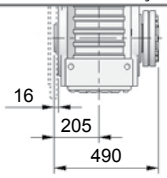
Sugestão de acoplamento no Eixo Vazado

Eixo Integral Simples

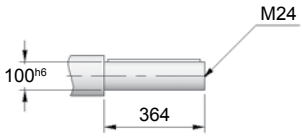


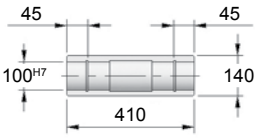


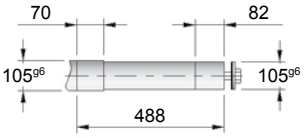
Eixo Vazado com Disco de Contração

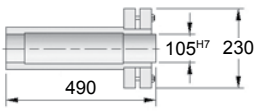


Sugestão de acoplamento no Eixo Vazado com Disco de Contração









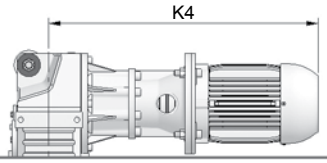
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
132S	300	230H7	17	38	265	5	30	1	83	623	314	15	41,3	10	608	995	686	274	207
132M	300	230H7	17	38	265	5	30	1	83	623	314	15	41,3	10	646	1033	724	274	207
160M	350	250H7	24	42	300	6	40	1	112	653	362	19	45,3	12	659	1141	850	317	250
160L	350	250H7	24	42	300	6	40	1	112	653	362	19	45,3	12	703	1185	894	317	250
180M	350	250H7	24	48	300	6	40	1	113	653	362	19	51,8	14	733	1207	916	360	270
200M	400	300H7	24	55	350	6	30	1	114	653	407	19	59,3	16	696	1272	1026	402	294
200L	400	300H7	24	55	350	6	30	1	114	653	407	19	59,3	16	834	1310	1064	402	294
225	450	350H7	24	60	400	6	60	11	124	683	422	19	64,4	18	898	1390	1129	466	368
250	550	450H7	25	60	400	6	—	2	144	—	540	19	64,4	18	974	—	1323	491	368
280	550	450H7	25	65	500	6	—	2	144	—	540	19	69,4	18	1086	—	1436	578	463
315	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1176	—	—	613	492

• Dimensões em mm

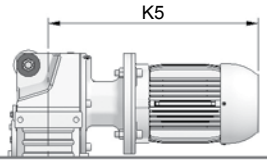
Fixação por braço de torção - B

Simples

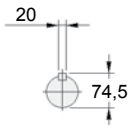
Tipos de Entrada



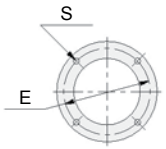
Flange Lanterna com Motor



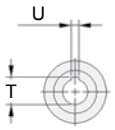
Flange KTR com Motor



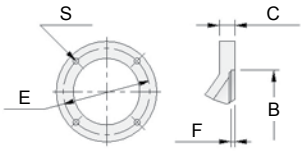
Eixo de Entrada



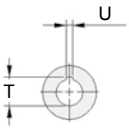
Detalhes Flange Lanterna



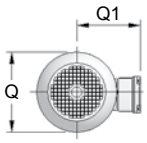
Detalhe "x"



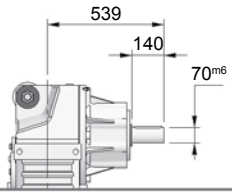
Detalhes Flange KTR



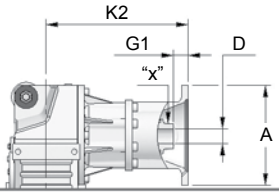
Detalhe "y"



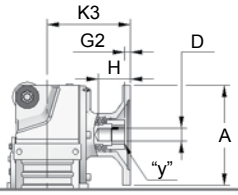
Frente do Motor



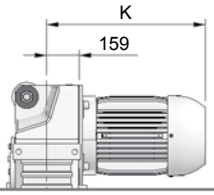
Mancal



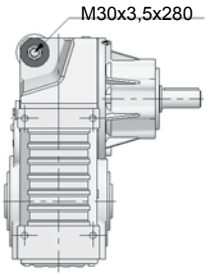
Flange Lanterna

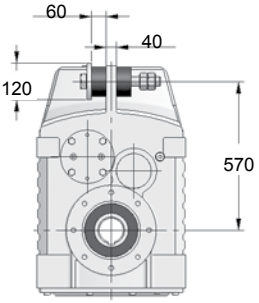


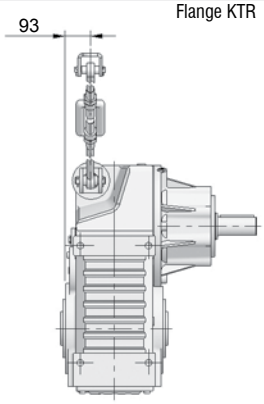
Flange KTR

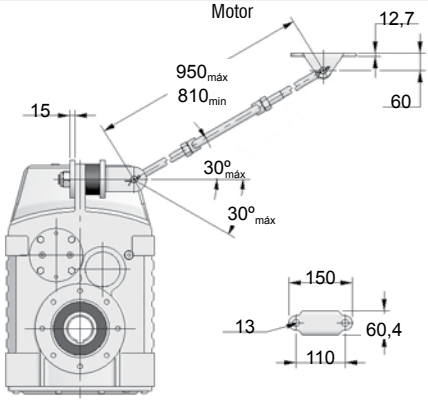


Motor

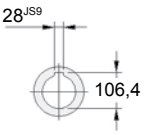


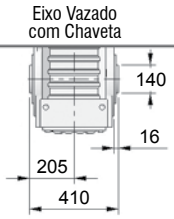




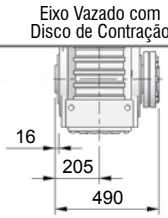


Tipos de Saída

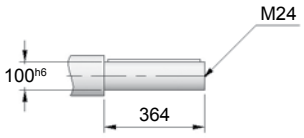


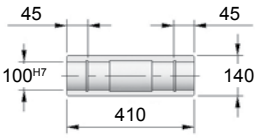


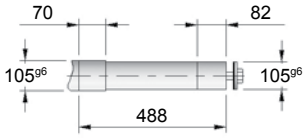
Sugestão de acoplamento no Eixo Vazado

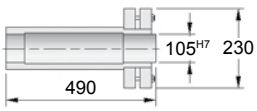


Sugestão de acoplamento no Eixo Vazado com Disco de Contração







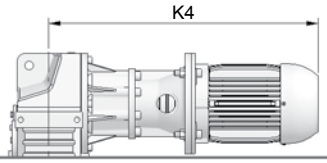


	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
132S	300	230H7	17	38	265	5	30	1	83	623	314	15	41,3	10	608	995	686	274	207
132M	300	230H7	17	38	265	5	30	1	83	623	314	15	41,3	10	646	1033	724	274	207
160M	350	250H7	24	42	300	6	40	1	112	653	362	19	45,3	12	659	1141	850	317	250
160L	350	250H7	24	42	300	6	40	1	112	653	362	19	45,3	12	703	1185	894	317	250
180M	350	250H7	24	48	300	6	40	1	113	653	362	19	51,8	14	733	1207	916	360	270
200M	400	300H7	24	55	350	6	30	1	114	653	407	19	59,3	16	696	1272	1026	402	294
200L	400	300H7	24	55	350	6	30	1	114	653	407	19	59,3	16	834	1310	1064	402	294
225	450	350H7	24	60	400	6	60	11	124	683	422	19	64,4	18	898	1390	1129	466	368
250	550	450H7	25	60	400	6	—	2	144	—	540	19	64,4	18	974	—	1323	491	368
280	550	450H7	25	65	500	6	—	2	144	—	540	19	69,4	18	1086	—	1436	578	463
315	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1176	—	—	613	492

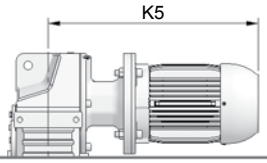
• Dimensões em mm

Fixação por pés - N

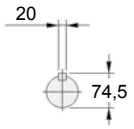
Simples



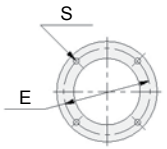
Flange Lanterna com Motor



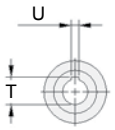
Flange KTR com Motor



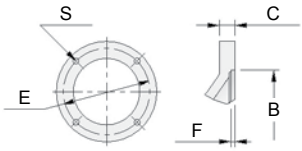
Eixo de Entrada



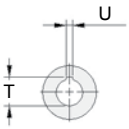
Detalhes Flange Lanterna



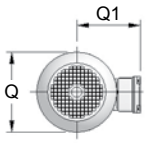
Detalhe “x”



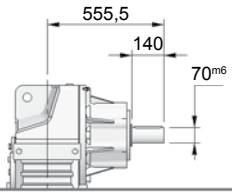
Detalhes Flange KTR



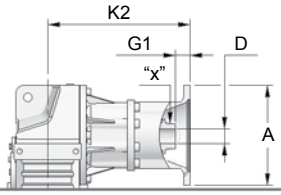
Detalhe “y”



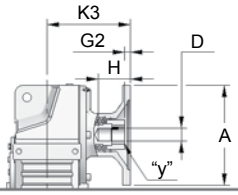
Frente do Motor



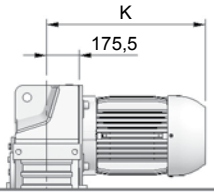
Mancal



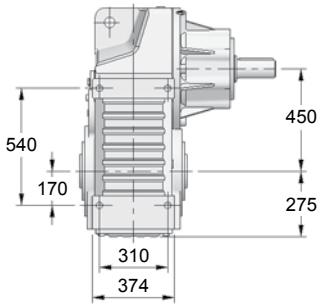
Flange Lanterna

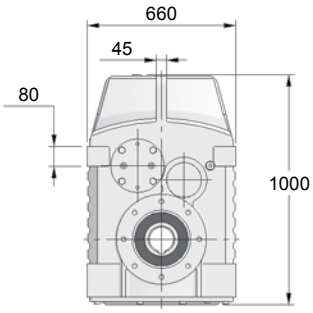


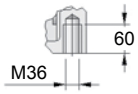
Flange KTR



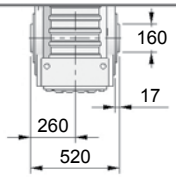
Motor

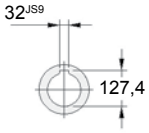




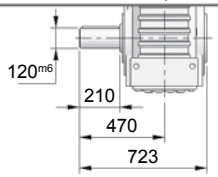


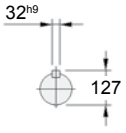
Eixo Vazado com Chaveta



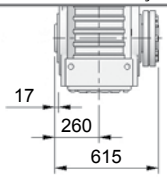


Eixo Integral Simples



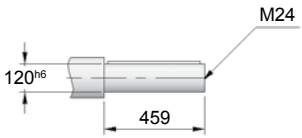


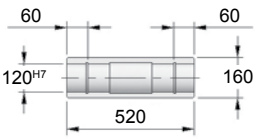
Eixo Vazado com Disco de Contração

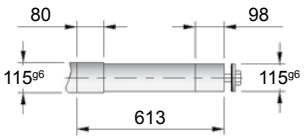


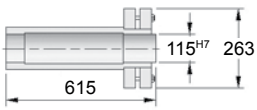
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração









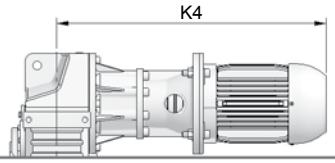
Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
132S	300	230H7	17	38	265	5	30	—	—	639,5	—	15	41,3	10	—	1011,5	—	274	207
132M	300	230H7	17	38	265	5	30	—	—	639,5	—	15	41,3	10	—	1049,5	—	274	207
160M	350	250H7	24	42	300	6	40	1	112	669,5	370,5	19	45,3	12	667,5	1157	858,5	317	250
160L	350	250H7	24	42	300	6	40	1	112	669,5	370,5	19	45,3	12	711,5	1201,5	902,5	317	250
180M	350	250H7	24	48	300	6	40	1	113	669,5	370,5	19	51,8	14	741,5	1223,5	924,5	360	270
200M	400	300H7	24	55	350	6	30	1	114	669,5	415,5	19	59,3	16	704,5	1288,5	1034,5	402	294
200L	400	300H7	24	55	350	6	30	1	114	669,5	415,5	19	59,3	16	842,5	1326,5	1072,5	402	294
225	450	350H7	24	60	400	6	60	11	124	699,5	430,5	19	64,4	18	914,5	1406,5	1137,5	466	368
250	550	450H7	25	60	500	6	—	2	144	—	547,5	19	64,4	18	990,5	—	1330,5	491	368
280	550	450H7	25	65	500	6	—	2	144	—	547,5	19	69,4	18	1102,5	—	1443,5	578	463
315	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1192,5	—	—	613	492

• Dimensões em mm

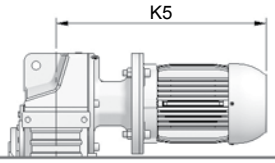
Fixação por flange e pés - G_L

Simples

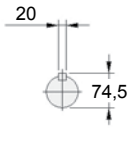
Tipos de Entrada



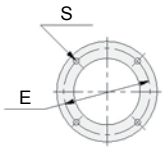
Flange Lanterna com Motor



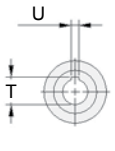
Flange KTR com Motor



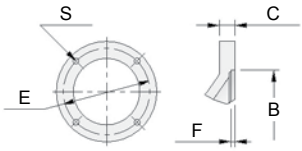
Eixo de Entrada



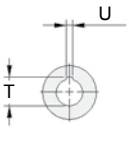
Detalhes Flange Lanterna



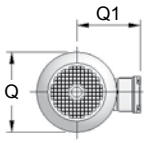
Detalhe “x”



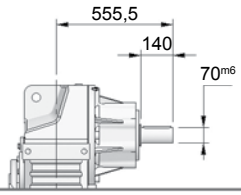
Detalhes Flange KTR



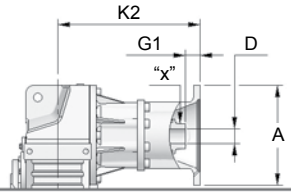
Detalhe “y”



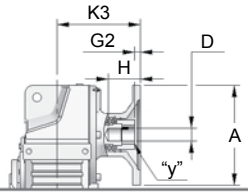
Frente do Motor



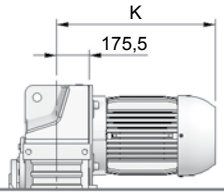
Mancal



Flange Lanterna

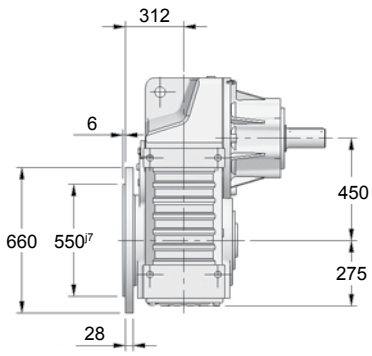


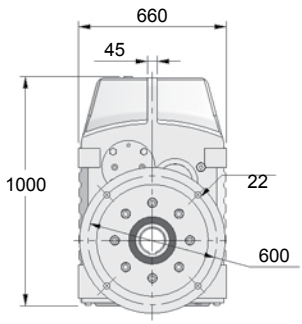
Flange KTR



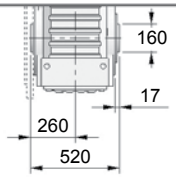
Motor

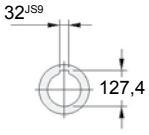
Tipos de Saída





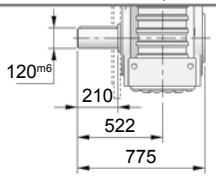
Eixo Vazado com Chaveta

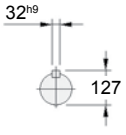




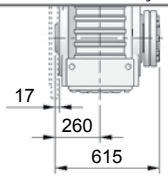
Sugestão de acoplamento no Eixo Vazado

Eixo Integral Simples

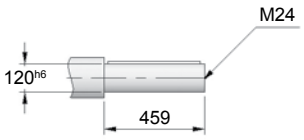


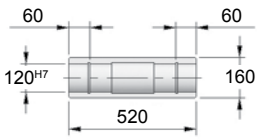


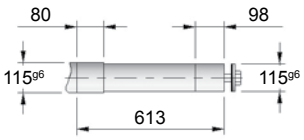
Eixo Vazado com Disco de Contração

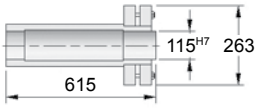


Sugestão de acoplamento no Eixo Vazado com Disco de Contração







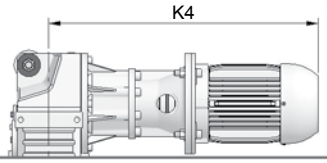


	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
132S	300	230H7	17	38	265	5	30	—	—	639,5	—	15	41,3	10	—	1011,5	—	274	207
132M	300	230H7	17	38	265	5	30	—	—	639,5	—	15	41,3	10	—	1049,5	—	274	207
160M	350	250H7	24	42	300	6	40	1	112	669,5	370,5	19	45,3	12	667,5	1157	858,5	317	250
160L	350	250H7	24	42	300	6	40	1	112	669,5	370,5	19	45,3	12	711,5	1201,5	902,5	317	250
180M	350	250H7	24	48	300	6	40	1	113	669,5	370,5	19	51,8	14	741,5	1223,5	924,5	360	270
200M	400	300H7	24	55	350	6	30	1	114	669,5	415,5	19	59,3	16	704,5	1288,5	1034,5	402	294
200L	400	300H7	24	55	350	6	30	1	114	669,5	415,5	19	59,3	16	842,5	1326,5	1072,5	402	294
225	450	350H7	24	60	400	6	60	11	124	699,5	430,5	19	64,4	18	914,5	1406,5	1137,5	466	368
250	550	450H7	25	60	500	6	—	2	144	—	547,5	19	64,4	18	990,5	—	1330,5	491	368
280	550	450H7	25	65	500	6	—	2	144	—	547,5	19	69,4	18	1102,5	—	1443,5	578	463
315	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1192,5	—	—	613	492

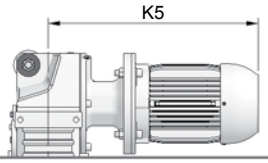
• Dimensões em mm

Fixação por braço de torção - B

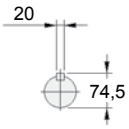
Simples



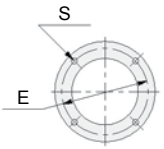
Flange Lanterna com Motor



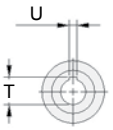
Flange KTR com Motor



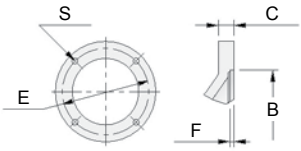
Eixo de Entrada



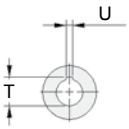
Detalhes Flange Lanterna



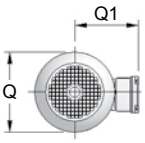
Detalhe "x"



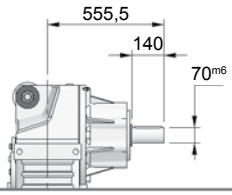
Detalhes Flange KTR



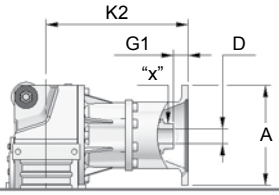
Detalhe "y"



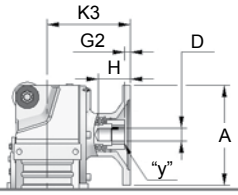
Frente do Motor



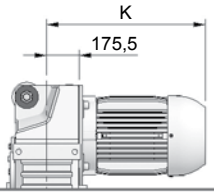
Mancal



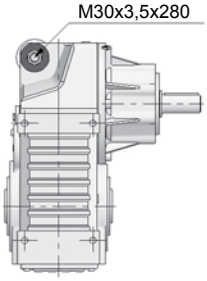
Flange Lanterna

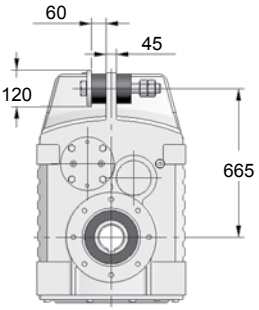


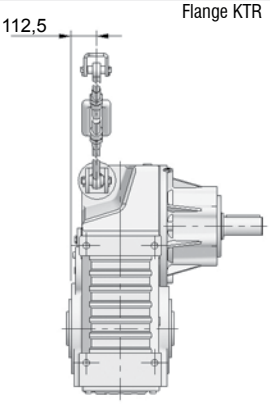
Flange KTR

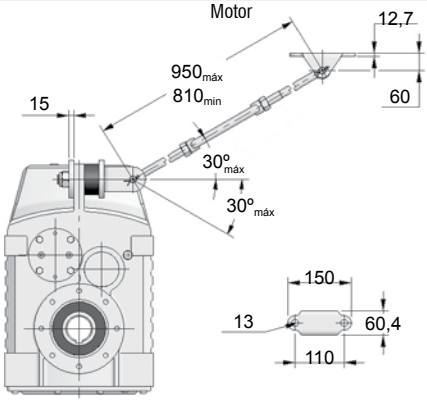


Motor





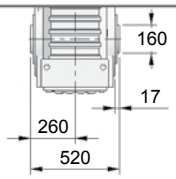




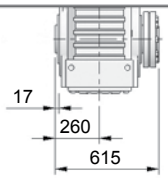
Braço de Torção com Bucha Elástica (B)

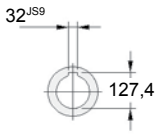
Braço de Torção com Esticador (E)

Eixo Vazado com Chaveta



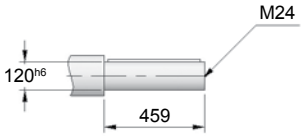
Eixo Vazado com Disco de Contração

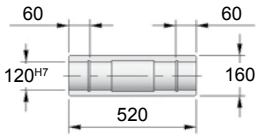


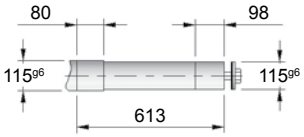


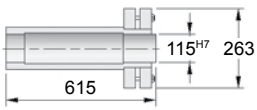
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração





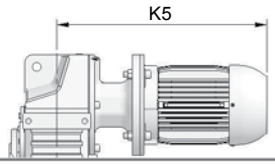




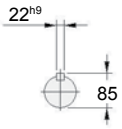
Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
132S	300	230H7	17	38	265	5	30	—	—	639,5	—	15	41,3	10	—	1011,5	—	274	207
132M	300	230H7	17	38	265	5	30	—	—	639,5	—	15	41,3	10	—	1049,5	—	274	207
160M	350	250H7	24	42	300	6	40	1	112	669,5	370,5	19	45,3	12	667,5	1157	858,5	317	250
160L	350	250H7	24	42	300	6	40	1	112	669,5	370,5	19	45,3	12	711,5	1201,5	902,5	317	250
180M	350	250H7	24	48	300	6	40	1	113	669,5	370,5	19	51,8	14	741,5	1223,5	924,5	360	270
200M	400	300H7	24	55	350	6	30	1	114	669,5	415,5	19	59,3	16	704,5	1288,5	1034,5	402	294
200L	400	300H7	24	55	350	6	30	1	114	669,5	415,5	19	59,3	16	842,5	1326,5	1072,5	402	294
225	450	350H7	24	60	400	6	60	11	124	699,5	430,5	19	64,4	18	914,5	1406,5	1137,5	466	368
250	550	450H7	25	60	500	6	—	2	144	—	547,5	19	64,4	18	990,5	—	1330,5	491	368
280	550	450H7	25	65	500	6	—	2	144	—	547,5	19	69,4	18	1102,5	—	1443,5	578	463
315	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1192,5	—	—	613	492

• Dimensões em mm

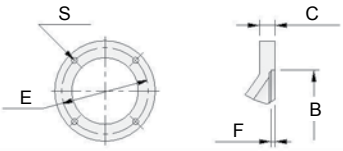
Tipos de Entrada



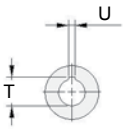
Flange KTR com Motor



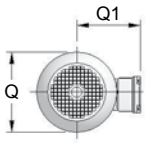
Eixo de Entrada



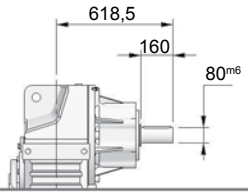
Detalhes Flange KTR



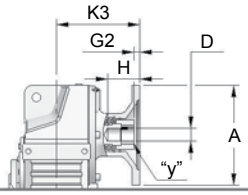
Detalhe “y”



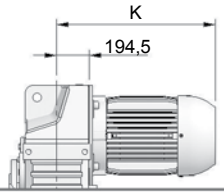
Frente do Motor



Mancal

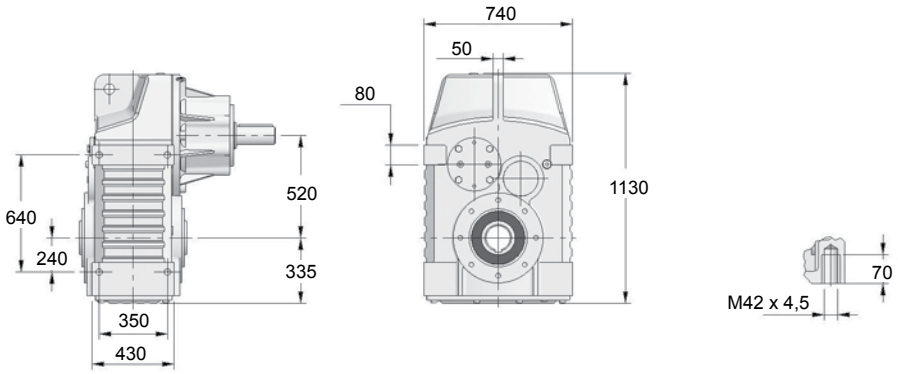


Flange KTR



Motor

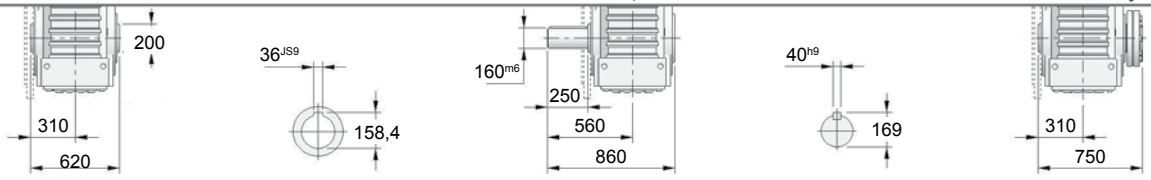
Tipos de Saída



Eixo Vazado com Chaveta

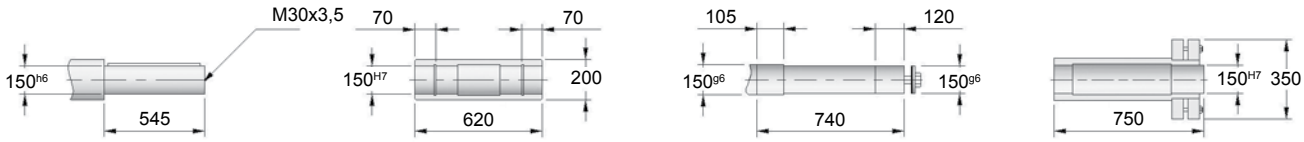
Eixo Integral Simples

Eixo Vazado com Disco de Contração



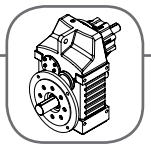
Sugestão de acoplamento no Eixo Vazado

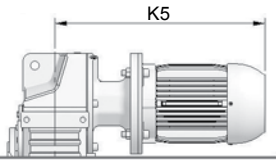
Sugestão de acoplamento no Eixo Vazado com Disco de Contração



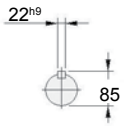
Carcaça	Flange KTR												Motor Elétrico			
	A	B	C	D	E	F	G2	H	K3	S	T	U	K	K5	Q	Q1
160M	350	250H7	24	42	300	6	1	113	389,5	19	45,3	12	686,5	877,5	317	250
160L	350	250H7	24	42	300	6	1	113	389,5	19	45,3	12	730,5	921,5	317	250
180M	350	250H7	24	48	300	6	1	113	389,5	19	51,8	14	760,5	943,5	360	270
180L	350	250H7	24	48	300	6	1	113	389,5	19	51,8	14	799,5	981,5	360	294
200M	400	300H7	24	55	350	6	1	127	434,5	19	59,3	16	823,5	1053,5	402	294
200L	400	300H7	24	55	350	6	1	127	434,5	19	59,3	16	861,5	1091,5	402	368
225	450	350H7	24	60	400	6	16	142	449,5	19	64,3	18	933,5	1156,5	466	368
250	550	450H7	25	65	500	6	---	144	566,5	19	69,4	18	1009,5	1009,5	491	294
280	550	450H7	25	75	500	6	---	144	566,5	19	79,9	20	1121,5	1462,5	578	463
315	---	---	---	---	---	---	---	---	---	---	---	---	1211,5	---	613	492

• Dimensões em mm

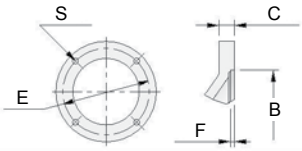




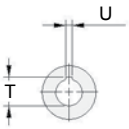
Flange KTR com Motor



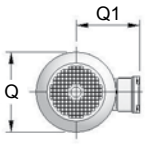
Eixo de Entrada



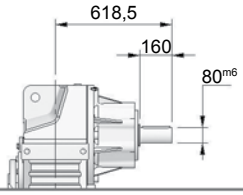
Detalhes Flange KTR



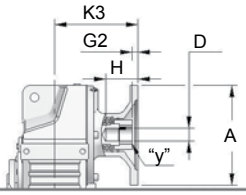
Detalhe “y”



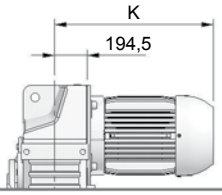
Frente do Motor



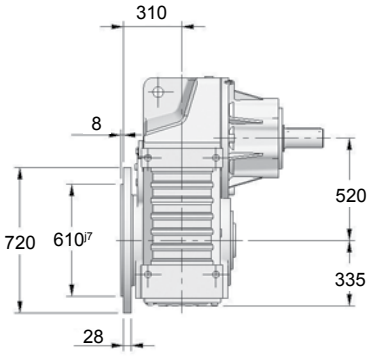
Mancal

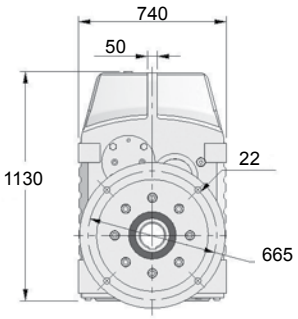


Flange KTR

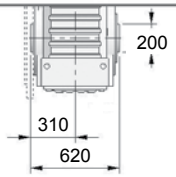


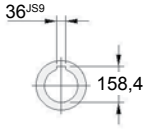
Motor





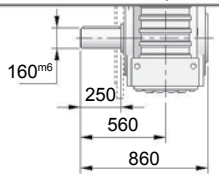
Eixo Vazado com Chaveta

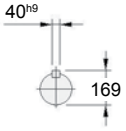




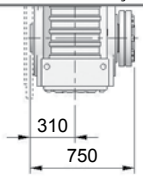
Sugestão de acoplamento no Eixo Vazado

Eixo Integral Simples

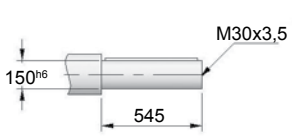


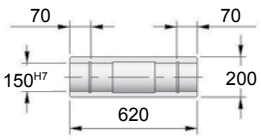


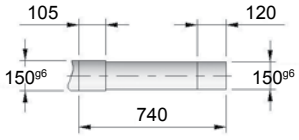
Eixo Vazado com Disco de Contração

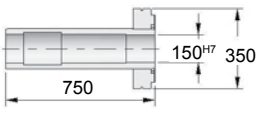


Sugestão de acoplamento no Eixo Vazado com Disco de Contração









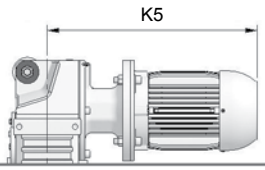
	Flange KTR												Motor Elétrico			
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G2**	**H**	**K3**	**S**	**T**	**U**	**K**	**K5**	**Q**	**Q1**
160M	350	250H7	24	42	300	6	1	113	389,5	19	45,3	12	686,5	877,5	317	250
160L	350	250H7	24	42	300	6	1	113	389,5	19	45,3	12	730,5	921,5	317	250
180M	350	250H7	24	48	300	6	1	113	389,5	19	51,8	14	760,5	943,5	360	270
180L	350	250H7	24	48	300	6	1	113	389,5	19	51,8	14	799,5	981,5	360	294
200M	400	300H7	24	55	350	6	1	127	434,5	19	59,3	16	823,5	1053,5	402	294
200L	400	300H7	24	55	350	6	1	127	434,5	19	59,3	16	861,5	1091,5	402	368
225	450	350H7	24	60	400	6	16	142	449,5	19	64,3	18	933,5	1156,5	466	368
250	550	450H7	25	65	500	6	---	144	566,5	19	69,4	18	1009,5	1009,5	491	294
280	550	450H7	25	75	500	6	---	144	566,5	19	79,9	20	1121,5	1462,5	578	463
315	---	---	---	---	---	---	---	---	---	---	---	---	1211,5	---	613	492

• Dimensões em mm

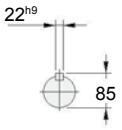
Fixação por braço de torção - B

Simples

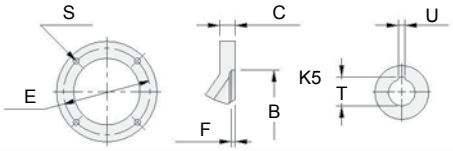
Tipos de Entrada



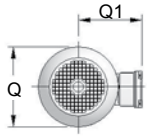
Flange KTR com Motor



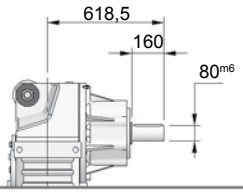
Eixo de Entrada



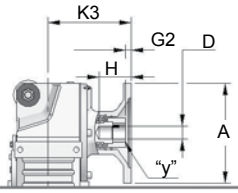
Detalhes Flange KTR / Detalhe "y"



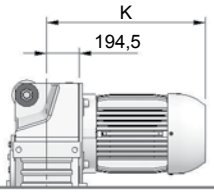
Frente do Motor



Mancal

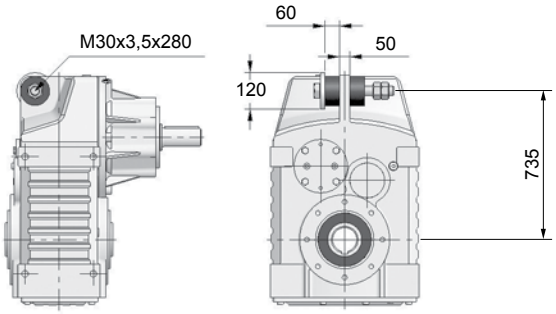


Flange KTR

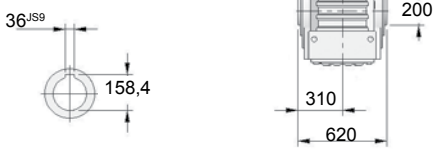


Motor

Tipos de Saída

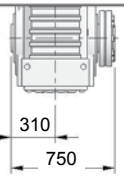


Eixo Vazado com Chaveta

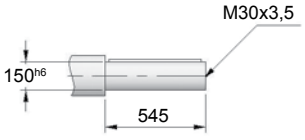


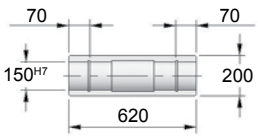
Sugestão de acoplamento no Eixo Vazado

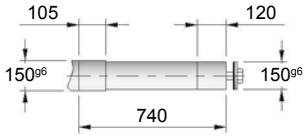
Eixo Vazado com Disco de Contração

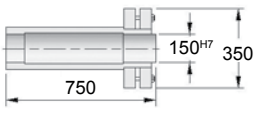


Sugestão de acoplamento no Eixo Vazado com Disco de Contração



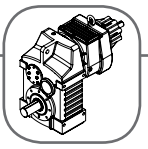


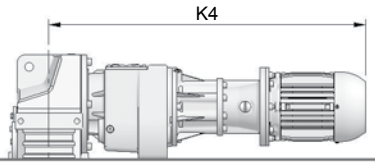


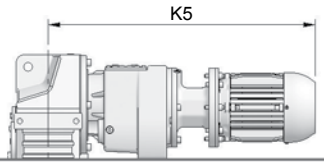


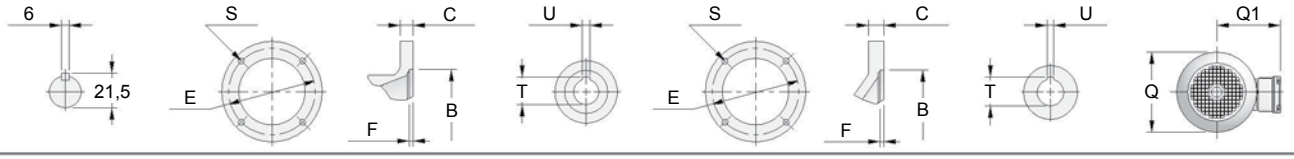
Carcaça	Flange KTR A	B	C	D	E	F	G2	H	K3	S	T	U	Motor Elétrico K	K5	Q	Q1
160M	350	250H7	24	42	300	6	1	113	389,5	19	45,3	12	686,5	877,5	317	250
160L	350	250H7	24	42	300	6	1	113	389,5	19	45,3	12	730,5	921,5	317	250
180M	350	250H7	24	48	300	6	1	113	389,5	19	51,8	14	760,5	943,5	360	270
180L	350	250H7	24	48	300	6	1	113	389,5	19	51,8	14	799,5	981,5	360	294
200M	400	300H7	24	55	350	6	1	127	434,5	19	59,3	16	823,5	1053,5	402	294
200L	400	300H7	24	55	350	6	1	127	434,5	19	59,3	16	861,5	1091,5	402	368
225	450	350H7	24	60	400	6	16	142	449,5	19	64,3	18	933,5	1156,5	466	368
250	550	450H7	25	65	500	6	---	144	566,5	19	69,4	18	1009,5	1009,5	491	294
280	550	450H7	25	75	500	6	---	144	566,5	19	79,9	20	1121,5	1462,5	578	463
315	---	---	---	---	---	---	---	---	---	---	---	---	1211,5	---	613	492

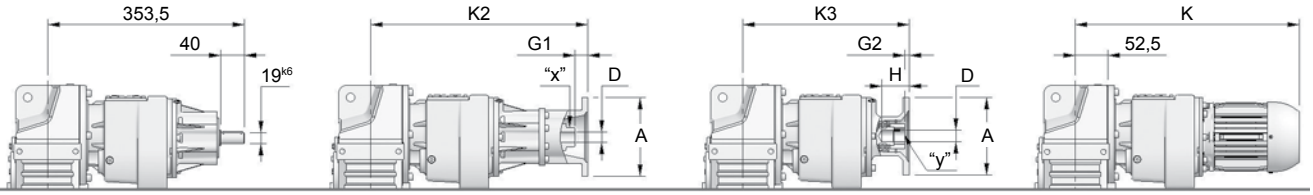
• Dimensões em mm

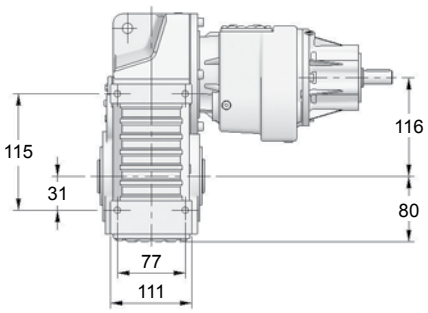


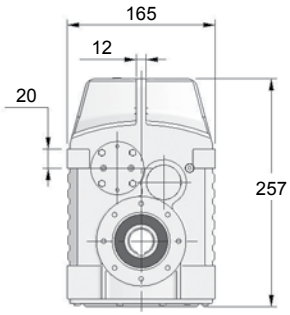


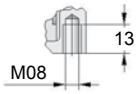




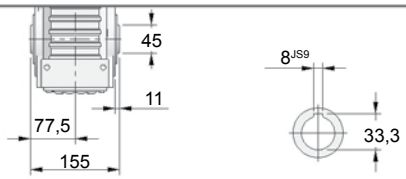




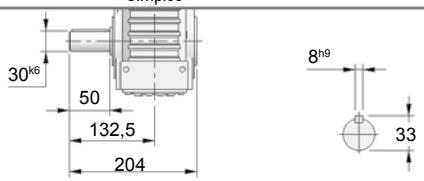




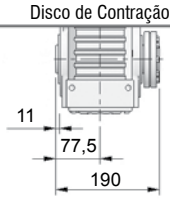
Eixo Vazado com Chaveta



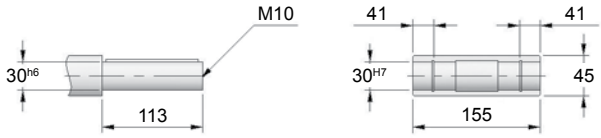
Eixo Integral Simples



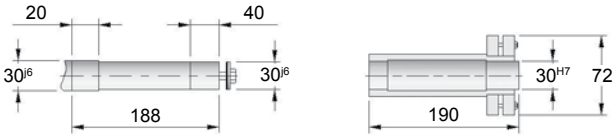
Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado



Sugestão de acoplamento no Eixo Vazado com Disco de Contração



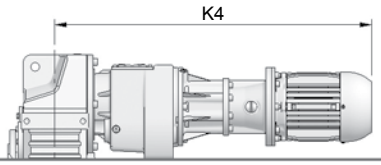
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	387,5	308	10	12,8	4	463,5	580,5	501	124	113
71	160	110H7	14	14	130	4	0,5	1	34	388,5	308	10	16,3	5	495,5	606,5	526	139	121
80	200	130H7	15	19	165	4	10	1	44	405,5	346,5	12	21,8	6	522,5	641,5	582,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	405,5	346,5	12	27,3	8	544,5	659,5	600,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	405,5	346,5	12	27,3	8	569,5	684,5	625,5	177	150
100	250	180H7	16	28	215	5	20	—	—	417,5	—	15	31,3	8	621,5	733,5	—	198	160
112	250	180H7	16	28	215	5	20	—	—	417,5	—	15	31,3	8	—	750,5	—	235	180

• Dimensões em mm

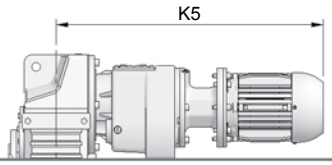
Fixação por flange e pés - G_C

Duplex

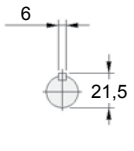
Tipos de Entrada



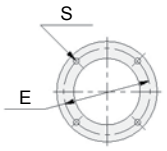
Flange Lanterna com Motor

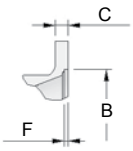


Flange KTR com Motor

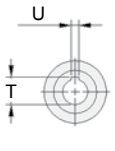


Eixo de Entrada

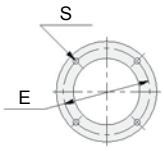


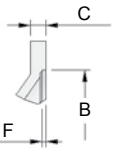


Detalhes Flange Lanterna

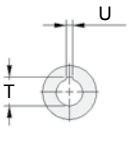


Detalhe “x”

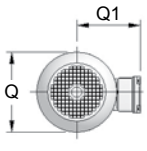




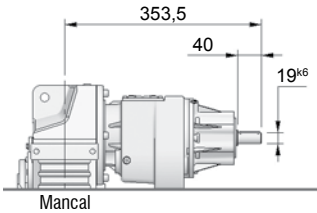
Detalhes Flange KTR



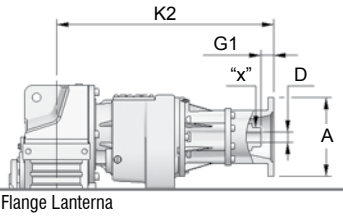
Detalhe “y”



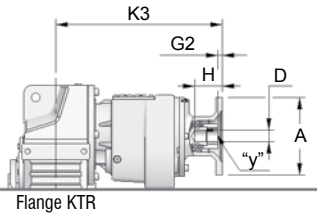
Frente do Motor



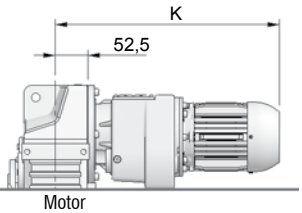
Mancal



Flange Lanterna

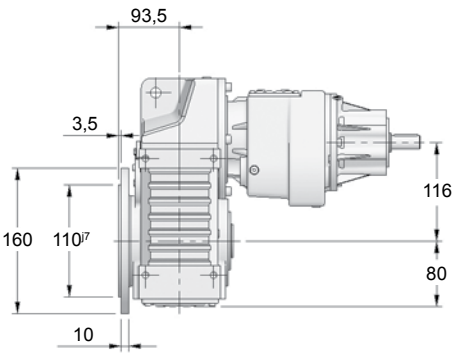


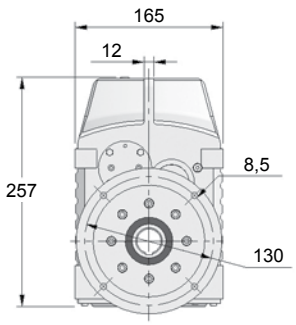
Flange KTR



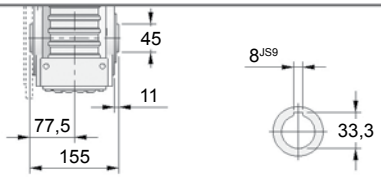
Motor

Tipos de Saída

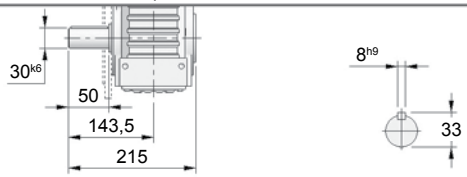




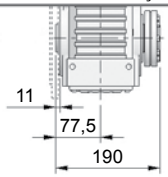
Eixo Vazado com Chaveta



Eixo Integral Simples

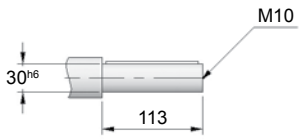


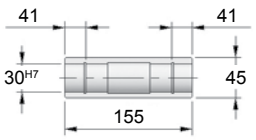
Eixo Vazado com Disco de Contração

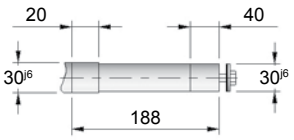


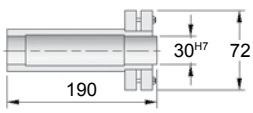
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração







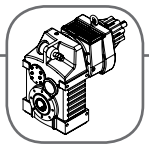


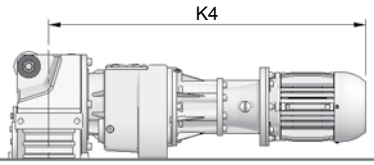
Carcaça	Flange Lanterna / KTR A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	Motor Elétrico K	K4	K5	Q	Q1
63	140	95H7	13	11	115	4	0	1	25	387,5	308	10	12,8	4	463,5	580,5	501	124	113
71	160	110H7	14	14	130	4	0,5	1	34	388,5	308	10	16,3	5	495,5	606,5	526	139	121
80	200	130H7	15	19	165	4	10	1	44	405,5	346,5	12	21,8	6	522,5	641,5	582,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	405,5	346,5	12	27,3	8	544,5	659,5	600,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	405,5	346,5	12	27,3	8	569,5	684,5	625,5	177	150
100	250	180H7	16	28	215	5	20	—	—	417,5	—	15	31,3	8	621,5	733,5	—	198	160
112	250	180H7	16	28	215	5	20	—	—	417,5	—	15	31,3	8	—	750,5	—	235	180

• Dimensões em mm

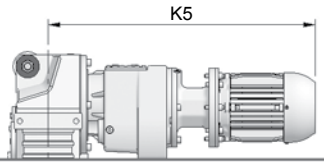
Fixação por braço de torção - B

Duplex

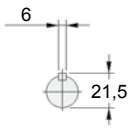




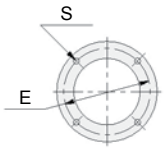
Flange Lanterna com Motor



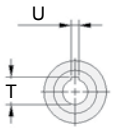
Flange KTR com Motor



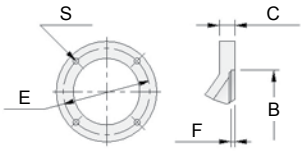
Eixo de Entrada



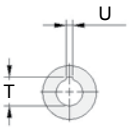
Detalhes Flange Lanterna



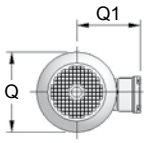
Detalhe "x"



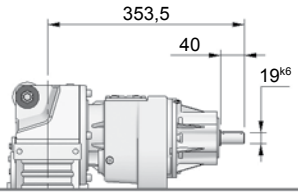
Detalhes Flange KTR



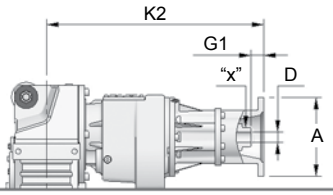
Detalhe "y"



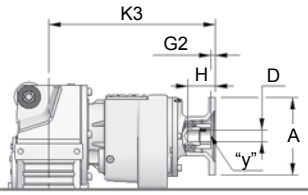
Frente do Motor



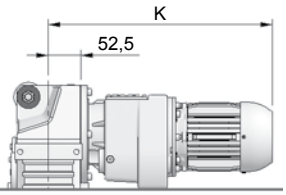
Mancal



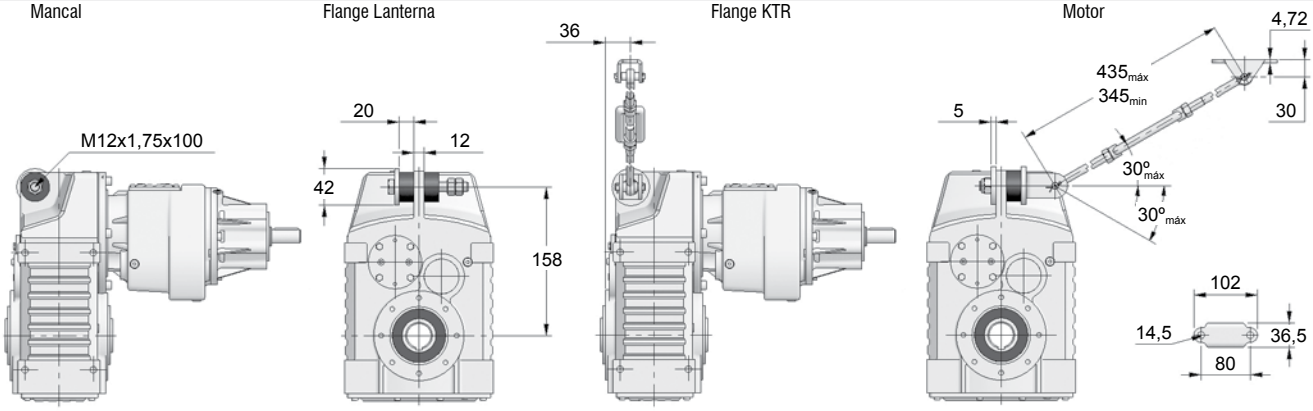
Flange Lanterna



Flange KTR



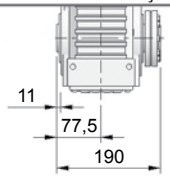
Motor



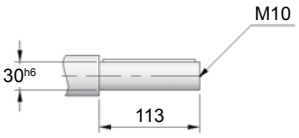
Eixo Vazado com Chaveta

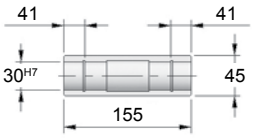
Sugestão de acoplamento no Eixo Vazado

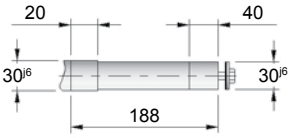
Eixo Vazado com Disco de Contração

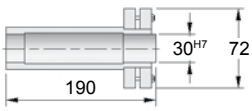


Sugestão de acoplamento no Eixo Vazado com Disco de Contração





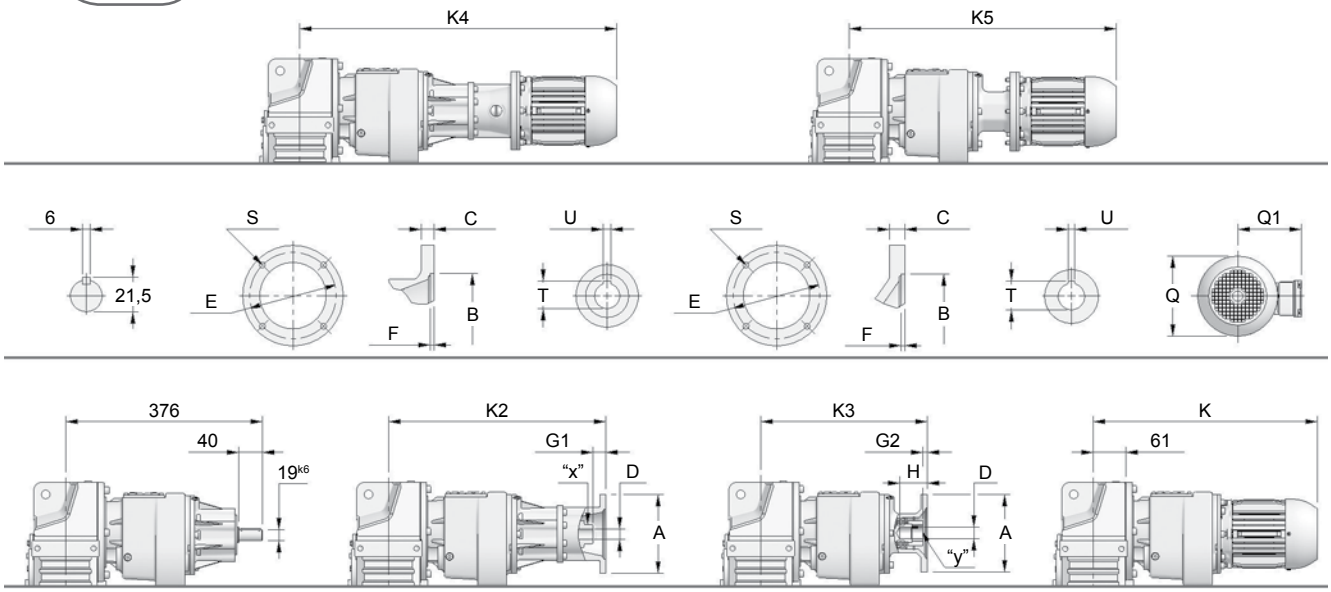




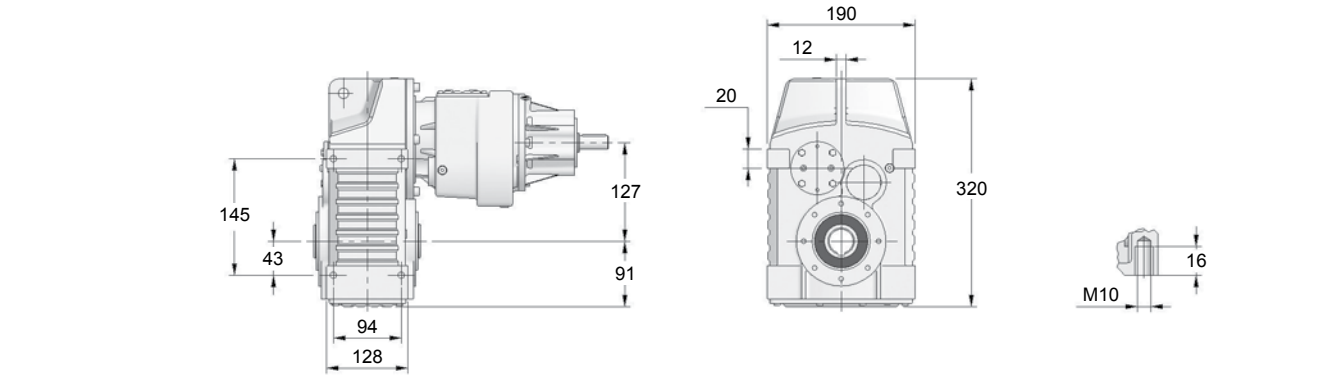
Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
63	140	95H7	13	11	115	4	0	1	25	387,5	308	10	12,8	4	463,5	580,5	501	124	113
71	160	110H7	14	14	130	4	0,5	1	34	388,5	308	10	16,3	5	495,5	606,5	526	139	121
80	200	130H7	15	19	165	4	10	1	44	405,5	346,5	12	21,8	6	522,5	641,5	582,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	405,5	346,5	12	27,3	8	544,5	659,5	600,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	405,5	346,5	12	27,3	8	569,5	684,5	625,5	177	150
100	250	180H7	16	28	215	5	20	—	—	417,5	—	15	31,3	8	621,5	733,5	—	198	160
112	250	180H7	16	28	215	5	20	—	—	417,5	—	15	31,3	8	—	750,5	—	235	180

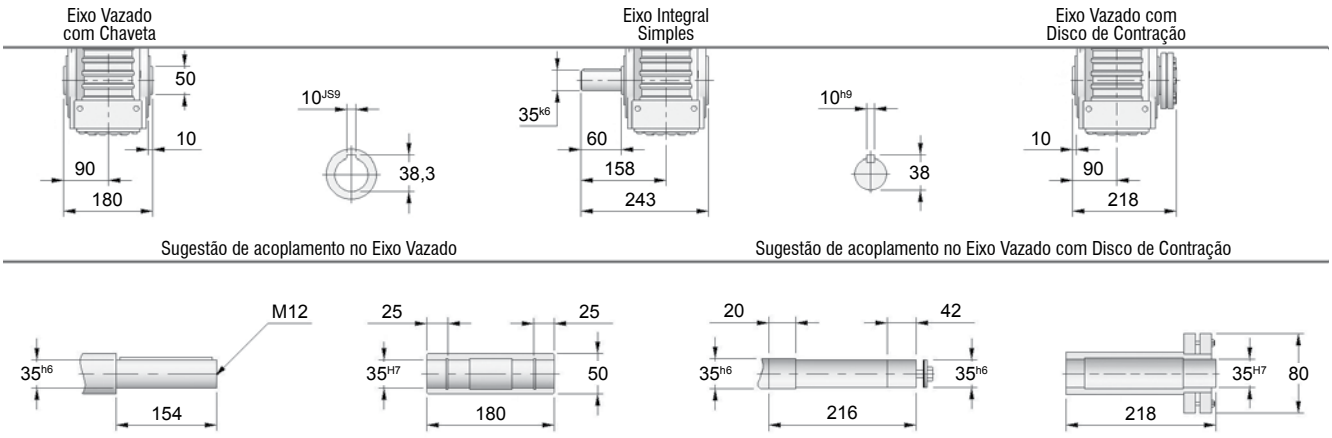
• Dimensões em mm

Tipos de Entrada



Tipos de Saída





Sugestão de acoplamento no Eixo Vazado

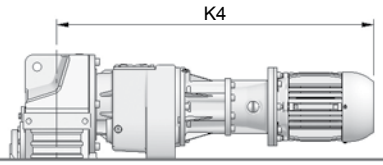
Sugestão de acoplamento no Eixo Vazado com Disco de Contração

Carcaça	Flange Lanterna / KTR													Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
63	140	95H7	13	11	115	4	0	1	25	410	330,5	10	12,8	4	486	603	523,5	124	113
71	160	110H7	14	14	130	4	0,5	1	34	411	330,5	10	16,3	5	518	629	548,5	139	121
80	200	130H7	15	19	165	4	10	1	44	428	369	12	21,8	6	545	664	605	157	130
90S	200	130H7	15	24	165	4	10	1	52	428	369	12	27,3	8	567	682	623	177	150
90L	200	130H7	15	24	165	4	10	1	52	428	369	12	27,3	8	592	707	648	177	150
100	250	180H7	16	28	215	5	20	—	—	440	—	15	31,3	8	644	756	—	198	160
112	250	180H7	16	28	215	5	20	—	—	440	—	15	31,3	8	—	773	—	235	180

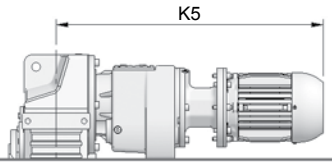
• Dimensões em mm

Fixação por flange e pés - G_D

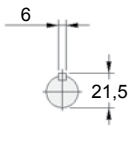
Duplex



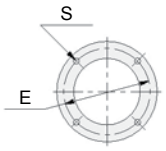
Flange Lanterna com Motor

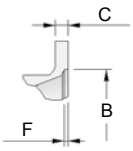


Flange KTR com Motor

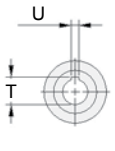


Eixo de Entrada

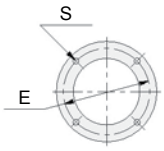


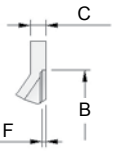


Detalhes Flange Lanterna

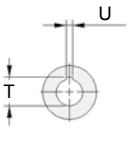


Detalhe “x”

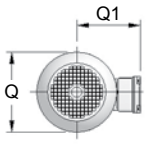




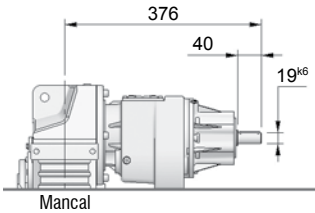
Detalhes Flange KTR



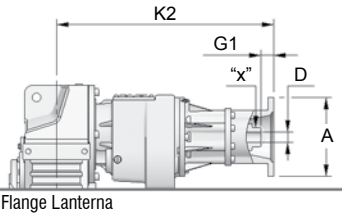
Detalhe “y”



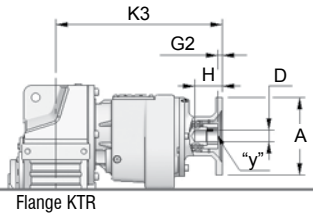
Frente do Motor



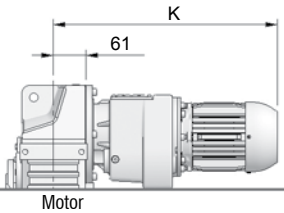
Mancal



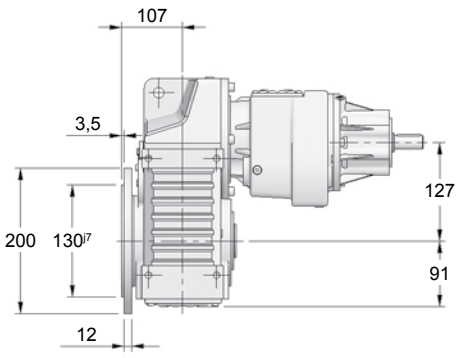
Flange Lanterna

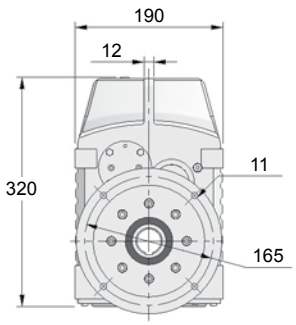


Flange KTR

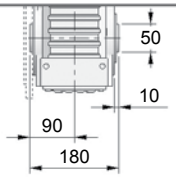


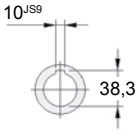
Motor



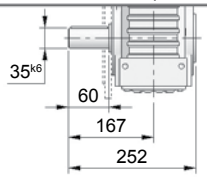


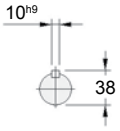
Eixo Vazado com Chaveta



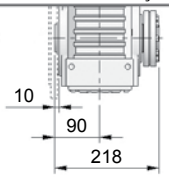


Eixo Integral Simples



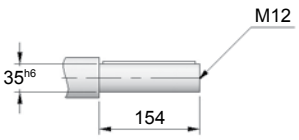


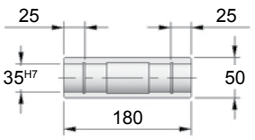
Eixo Vazado com Disco de Contração

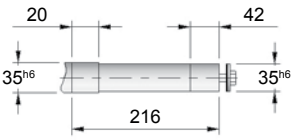


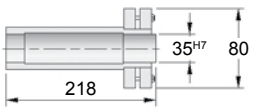
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração



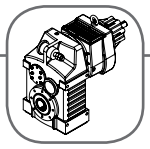






	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	410	330,5	10	12,8	4	486	603	523,5	124	113
71	160	110H7	14	14	130	4	0,5	1	34	411	330,5	10	16,3	5	518	629	548,5	139	121
80	200	130H7	15	19	165	4	10	1	44	428	369	12	21,8	6	545	664	605	157	130
90S	200	130H7	15	24	165	4	10	1	52	428	369	12	27,3	8	567	682	623	177	150
90L	200	130H7	15	24	165	4	10	1	52	428	369	12	27,3	8	592	707	648	177	150
100	250	180H7	16	28	215	5	20	—	—	440	—	15	31,3	8	644	756	—	198	160
112	250	180H7	16	28	215	5	20	—	—	440	—	15	31,3	8	—	773	—	235	180

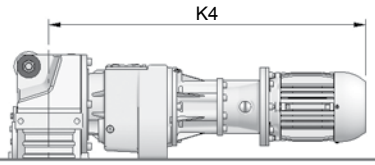
• Dimensões em mm



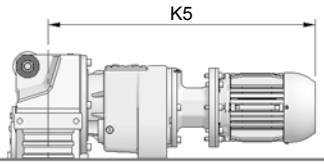
Fixação por braço de torção - B

Duplex

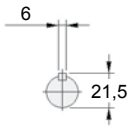
Tipos de Entrada



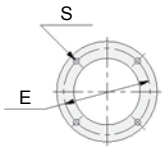
Flange Lanterna com Motor



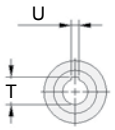
Flange KTR com Motor



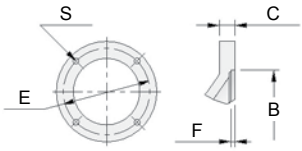
Eixo de Entrada



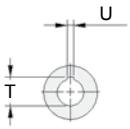
Detalhes Flange Lanterna



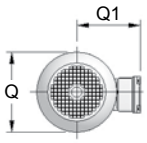
Detalhe "x"



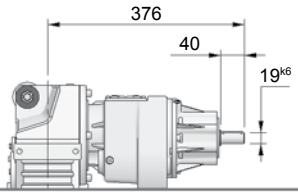
Detalhes Flange KTR



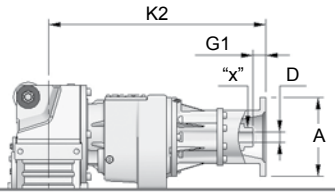
Detalhe "y"



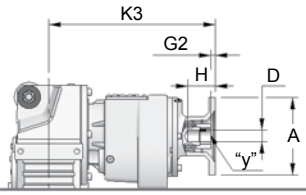
Frente do Motor



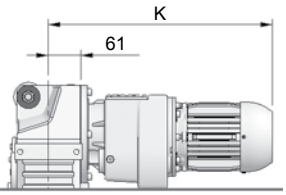
Mancal



Flange Lanterna

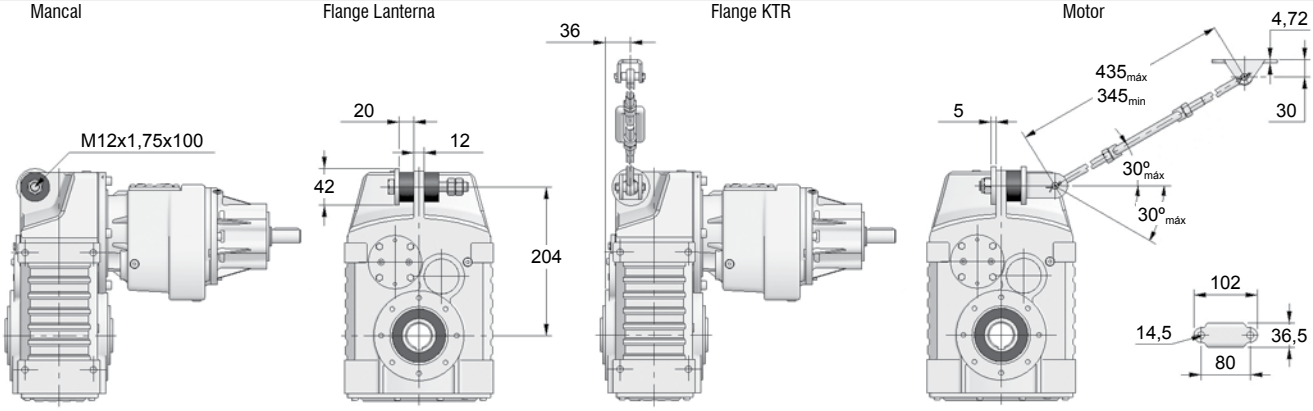


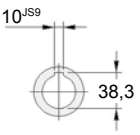
Flange KTR



Motor

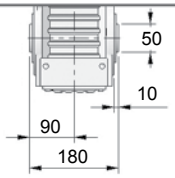
Tipos de Saída



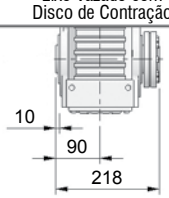


Sugestão de acoplamento no Eixo Vazado

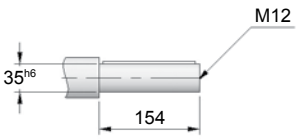
Eixo Vazado com Chaveta

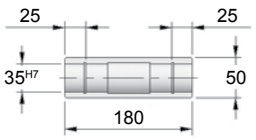


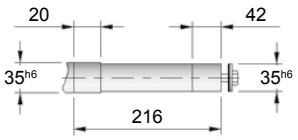
Eixo Vazado com Disco de Contração

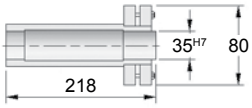


Sugestão de acoplamento no Eixo Vazado com Disco de Contração



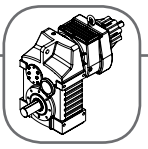


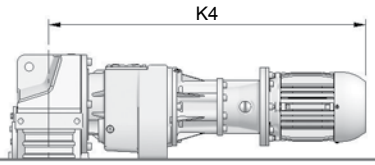


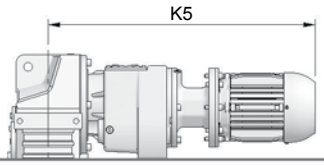


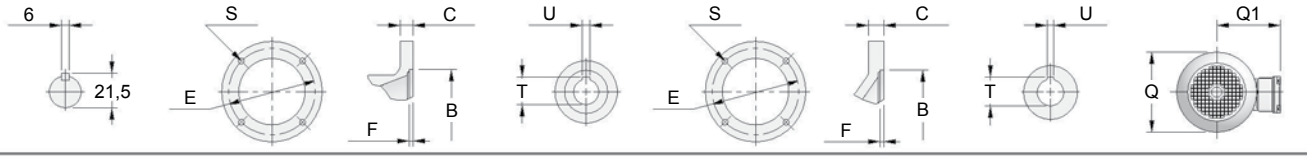
Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
63	140	95H7	13	11	115	4	0	1	25	410	330,5	10	12,8	4	486	603	523,5	124	113
71	160	110H7	14	14	130	4	0,5	1	34	411	330,5	10	16,3	5	518	629	548,5	139	121
80	200	130H7	15	19	165	4	10	1	44	428	369	12	21,8	6	545	664	605	157	130
90S	200	130H7	15	24	165	4	10	1	52	428	369	12	27,3	8	567	682	623	177	150
90L	200	130H7	15	24	165	4	10	1	52	428	369	12	27,3	8	592	707	648	177	150
100	250	180H7	16	28	215	5	20	—	—	440	—	15	31,3	8	644	756	—	198	160
112	250	180H7	16	28	215	5	20	—	—	440	—	15	31,3	8	—	773	—	235	180

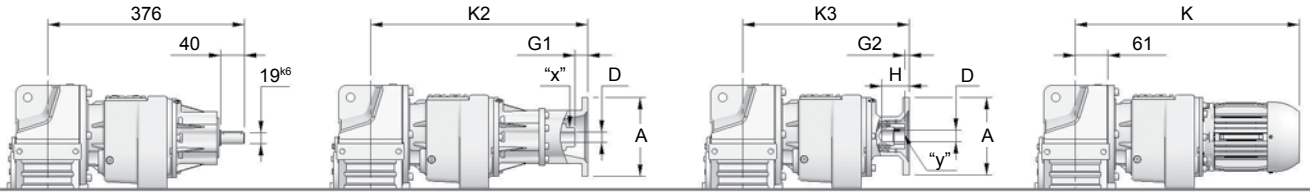
• Dimensões em mm

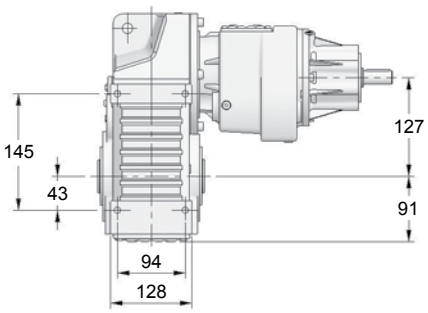


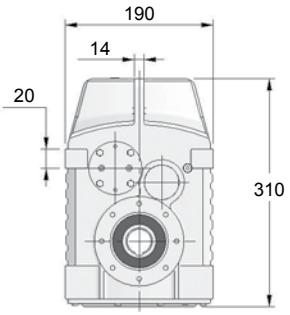


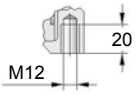




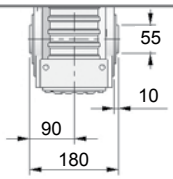


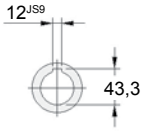




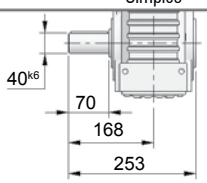


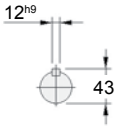
Eixo Vazado com Chaveta



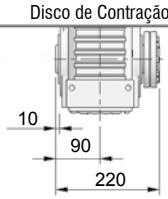


Eixo Integral Simples

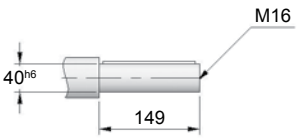


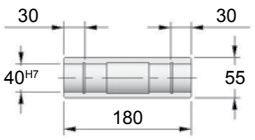


Eixo Vazado com Disco de Contração

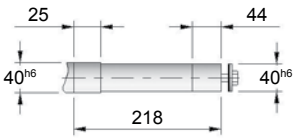


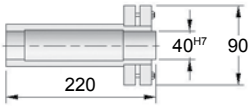
Sugestão de acoplamento no Eixo Vazado





Sugestão de acoplamento no Eixo Vazado com Disco de Contração





	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	410	330,5	10	12,8	4	486	603	523,5	124	113
71	160	110H7	14	14	130	4	0,5	1	34	411	330,5	10	16,3	5	518	629	548,5	139	121
80	200	130H7	15	19	165	4	10	1	44	428	369	12	21,8	6	545	664	605	157	130
90S	200	130H7	15	24	165	4	10	1	52	428	369	12	27,3	8	567	682	623	177	150
90L	200	130H7	15	24	165	4	10	1	52	428	369	12	27,3	8	592	707	648	177	150
100	250	180H7	16	28	215	5	20	—	—	440	—	15	31,3	8	644	756	—	198	160
112	250	180H7	16	28	215	5	20	—	—	440	—	15	31,3	8	—	773	—	235	180

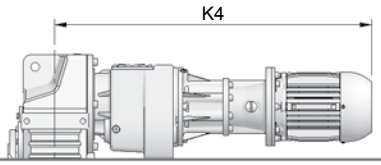
• Dimensões em mm

• Dimensões em mm

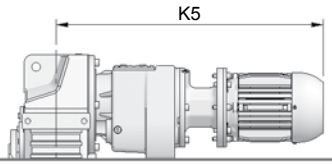
Fixação por flange e pés - G_E

Duplex

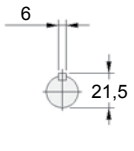
Tipos de Entrada



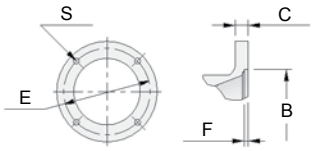
Flange Lanterna com Motor



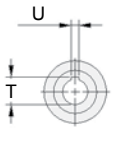
Flange KTR com Motor



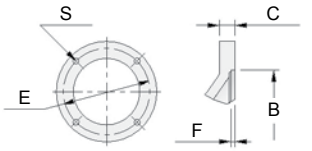
Eixo de Entrada



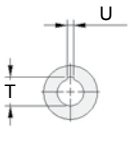
Detalhes Flange Lanterna



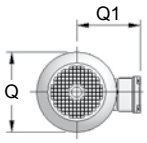
Detalhe "x"



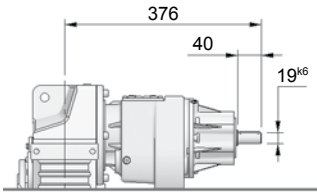
Detalhes Flange KTR



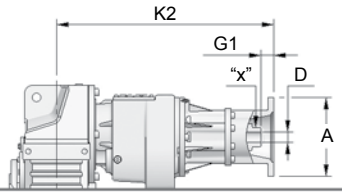
Detalhe "y"



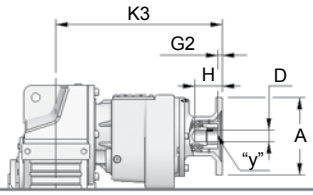
Frente do Motor



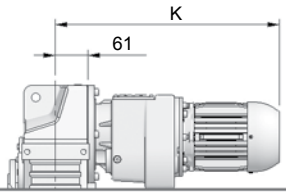
Mancal



Flange Lanterna

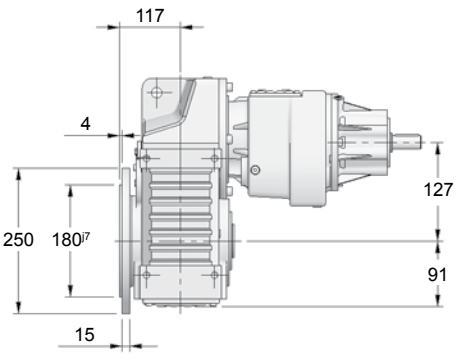


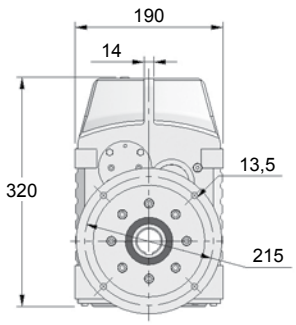
Flange KTR



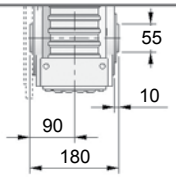
Motor

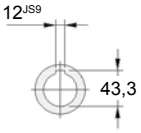
Tipos de Saída



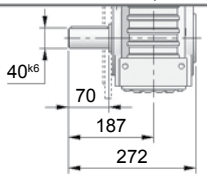


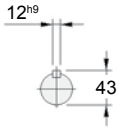
Eixo Vazado com Chaveta



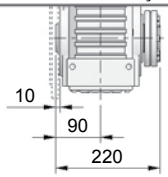


Eixo Integral Simples



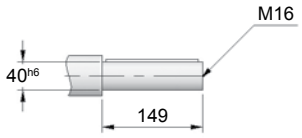


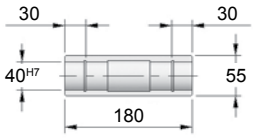
Eixo Vazado com Disco de Contração

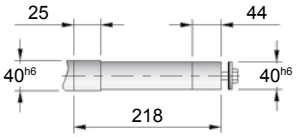


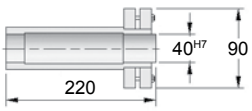
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração







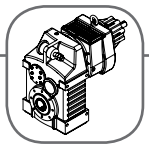


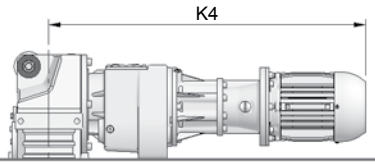
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	410	330,5	10	12,8	4	486	603	523,5	124	113
71	160	110H7	14	14	130	4	0,5	1	34	411	330,5	10	16,3	5	518	629	548,5	139	121
80	200	130H7	15	19	165	4	10	1	44	428	369	12	21,8	6	545	664	605	157	130
90S	200	130H7	15	24	165	4	10	1	52	428	369	12	27,3	8	567	682	623	177	150
90L	200	130H7	15	24	165	4	10	1	52	428	369	12	27,3	8	592	707	648	177	150
100	250	180H7	16	28	215	5	20	—	—	440	—	15	31,3	8	644	756	—	198	160
112	250	180H7	16	28	215	5	20	—	—	440	—	15	31,3	8	—	773	—	235	180

• Dimensões em mm

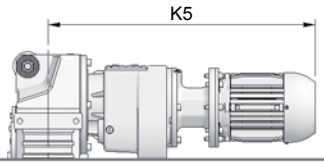
Fixação por braço de torção - B

Duplex

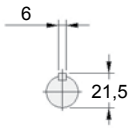




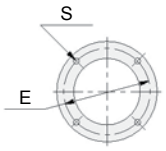
Flange Lanterna com Motor



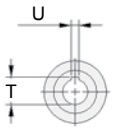
Flange KTR com Motor



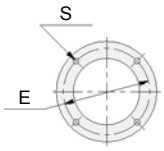
Eixo de Entrada



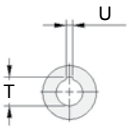
Detalhes Flange Lanterna



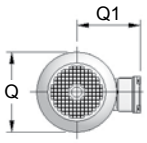
Detalhe "x"



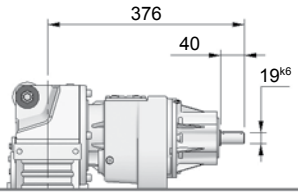
Detalhes Flange KTR



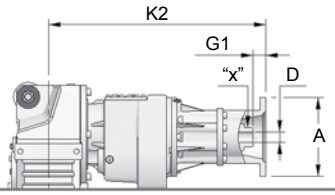
Detalhe "y"



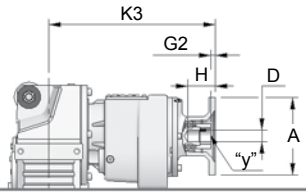
Frente do Motor



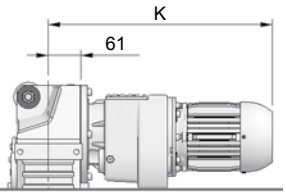
Mancal



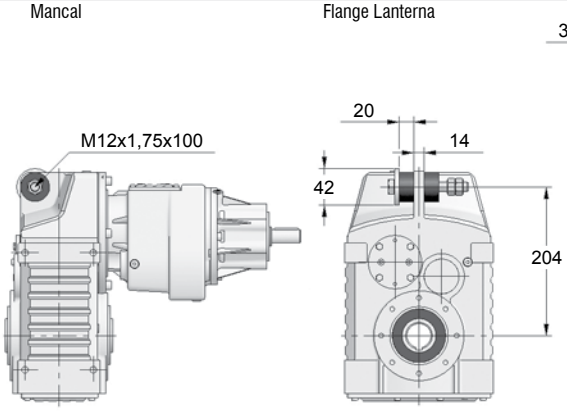
Flange Lanterna

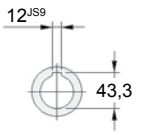


Flange KTR



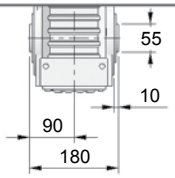
Motor



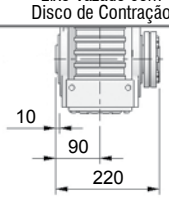


Sugestão de acoplamento no Eixo Vazado

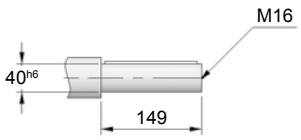
Eixo Vazado com Chaveta

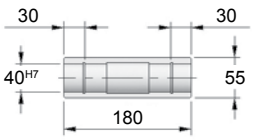


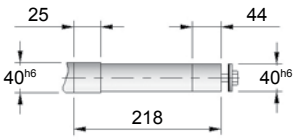
Eixo Vazado com Disco de Contração

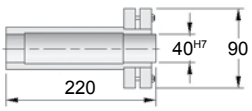


Sugestão de acoplamento no Eixo Vazado com Disco de Contração





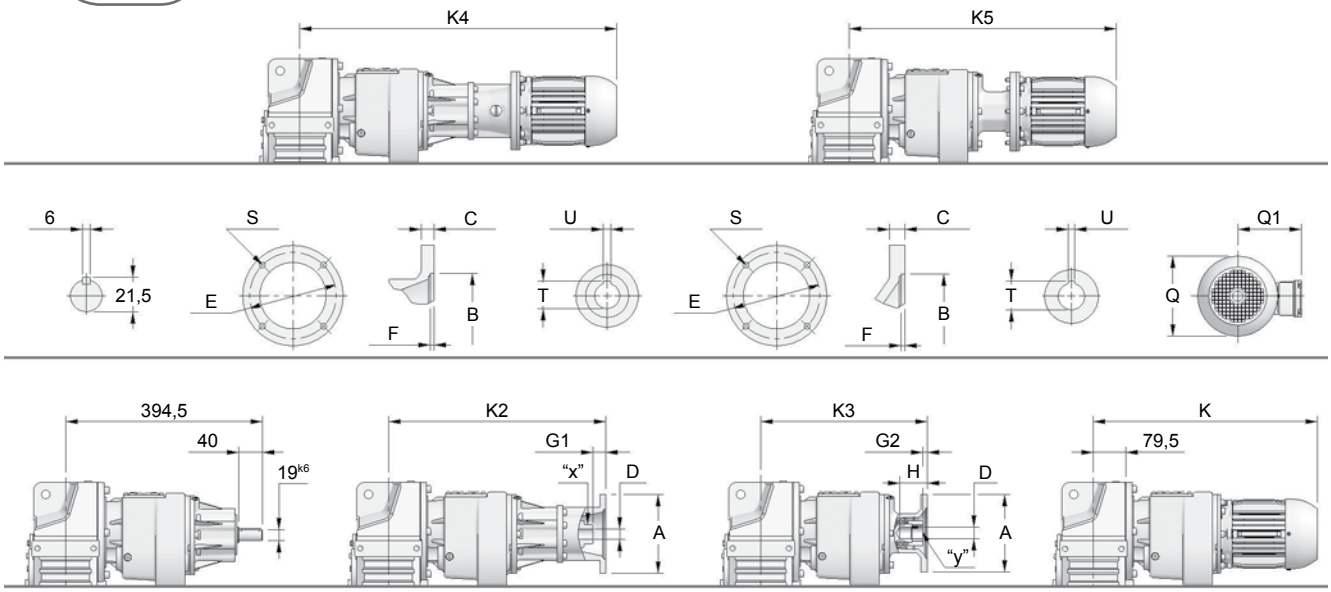




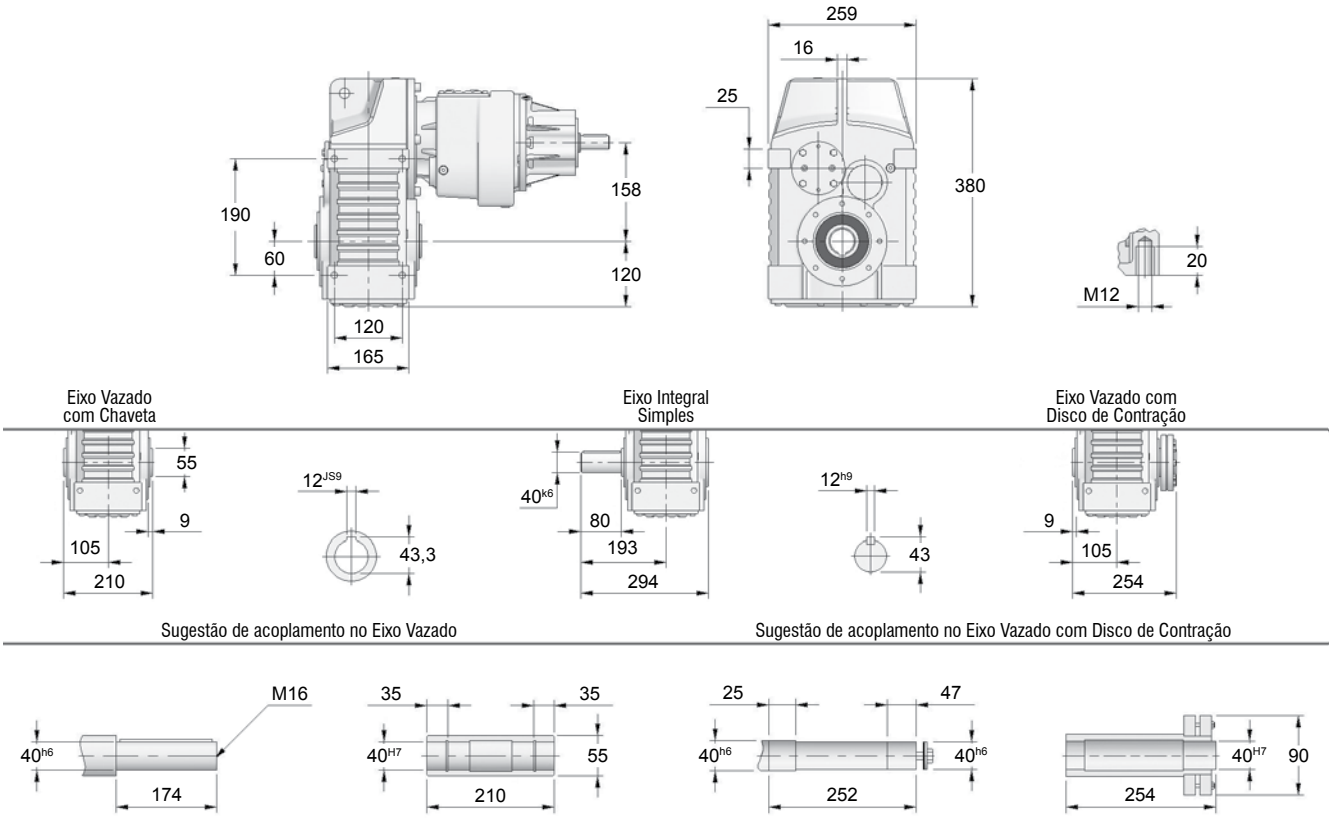
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	410	330,5	10	12,8	4	486	603	523,5	124	113
71	160	110H7	14	14	130	4	0,5	1	34	411	330,5	10	16,3	5	518	629	548,5	139	121
80	200	130H7	15	19	165	4	10	1	44	428	369	12	21,8	6	545	664	605	157	130
90S	200	130H7	15	24	165	4	10	1	52	428	369	12	27,3	8	567	682	623	177	150
90L	200	130H7	15	24	165	4	10	1	52	428	369	12	27,3	8	592	707	648	177	150
100	250	180H7	16	28	215	5	20	—	—	440	—	15	31,3	8	644	756	—	198	160
112	250	180H7	16	28	215	5	20	—	—	440	—	15	31,3	8	—	773	—	235	180

• Dimensões em mm

Tipos de Entrada

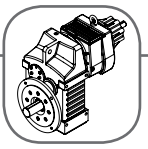


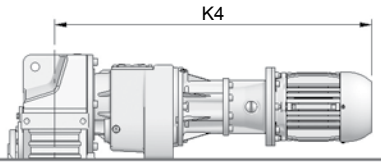
Tipos de Saída



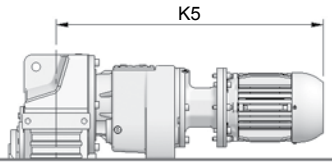
Carcaça	Flange Lanterna / KTR													Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
63	140	95H7	13	11	115	4	0	1	25	428,5	349	10	12,8	4	504,5	621,5	542	124	113
71	160	110H7	14	14	130	4	0,5	1	34	429,5	349	10	16,3	5	536,5	647,5	567	139	121
80	200	130H7	15	19	165	4	10	1	44	446,5	387,5	12	21,8	6	563,5	682,5	623,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	446,5	387,5	12	27,3	8	585,5	700,5	641,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	446,5	387,5	12	27,3	8	610,5	725,5	666,5	177	150
100	250	180H7	16	28	215	5	20	—	—	458,5	—	15	31,3	8	662,5	774,5	—	198	160
112	250	180H7	16	28	215	5	20	—	—	458,5	—	15	31,3	8	—	791,5	—	235	180

• Dimensões em mm

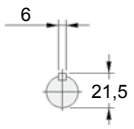




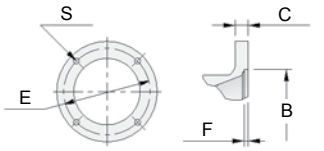
Flange Lanterna com Motor



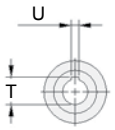
Flange KTR com Motor



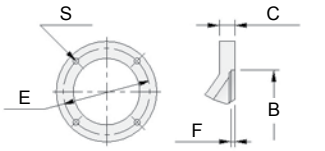
Eixo de Entrada



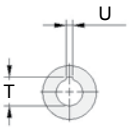
Detalhes Flange Lanterna



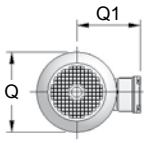
Detalhe "x"



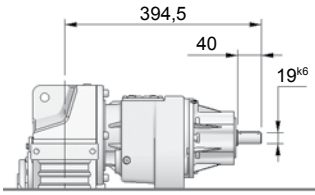
Detalhes Flange KTR



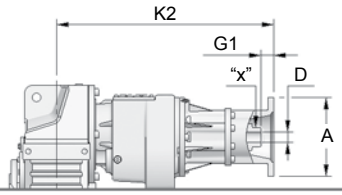
Detalhe "y"



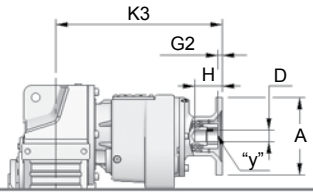
Frente do Motor



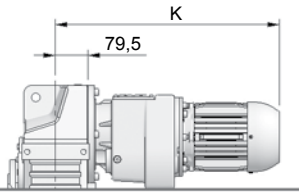
Mancal



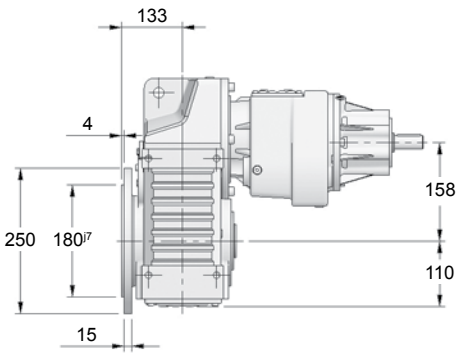
Flange Lanterna

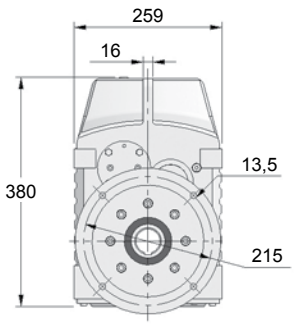


Flange KTR

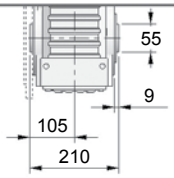


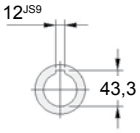
Motor



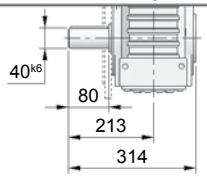


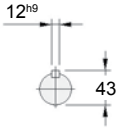
Eixo Vazado com Chaveta



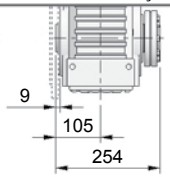


Eixo Integral Simples



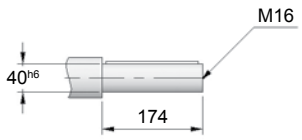


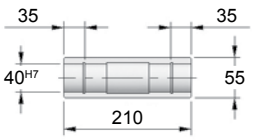
Eixo Vazado com Disco de Contração

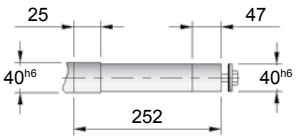


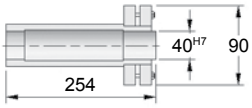
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração



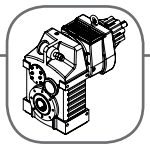






Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
63	140	95H7	13	11	115	4	0	1	25	428,5	349	10	12,8	4	504,5	621,5	542	124	113
71	160	110H7	14	14	130	4	0,5	1	34	429,5	349	10	16,3	5	536,5	647,5	567	139	121
80	200	130H7	15	19	165	4	10	1	44	446,5	387,5	12	21,8	6	563,5	682,5	623,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	446,5	387,5	12	27,3	8	585,5	700,5	641,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	446,5	387,5	12	27,3	8	610,5	725,5	666,5	177	150
100	250	180H7	16	28	215	5	20	—	—	458,5	—	15	31,3	8	662,5	774,5	—	198	160
112	250	180H7	16	28	215	5	20	—	—	458,5	—	15	31,3	8	—	791,5	—	235	180

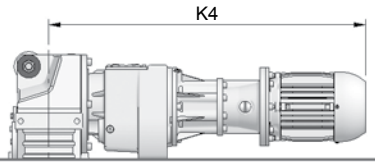
• Dimensões em mm



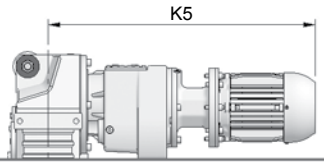
Fixação por braço de torção - B

Duplex

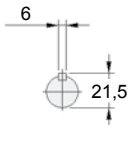
Tipos de Entrada



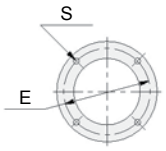
Flange Lanterna com Motor



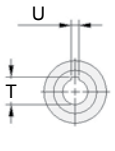
Flange KTR com Motor



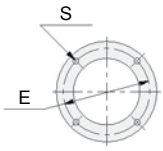
Eixo de Entrada



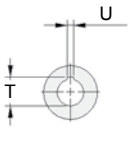
Detalhes Flange Lanterna



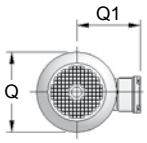
Detalhe "x"



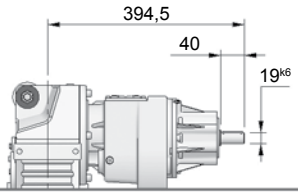
Detalhes Flange KTR



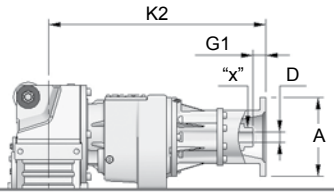
Detalhe "y"



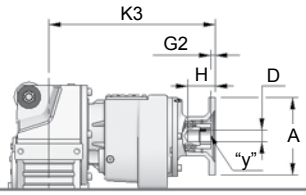
Frente do Motor



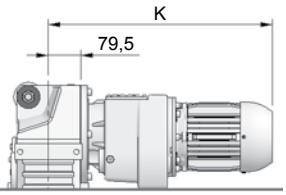
Mancal



Flange Lanterna

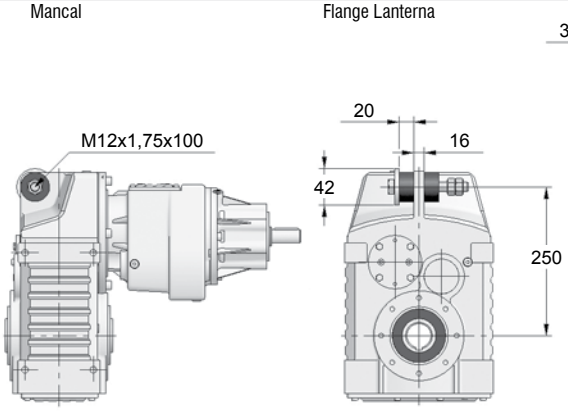


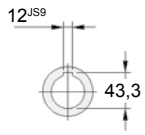
Flange KTR

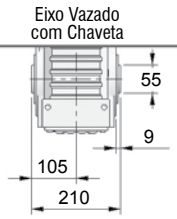


Motor

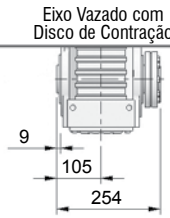
Tipos de Saída



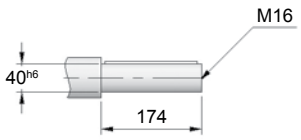


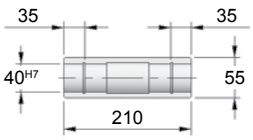


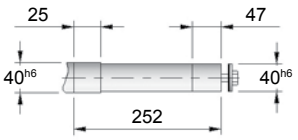
Sugestão de acoplamento no Eixo Vazado

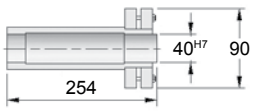


Sugestão de acoplamento no Eixo Vazado com Disco de Contração



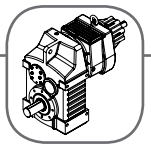


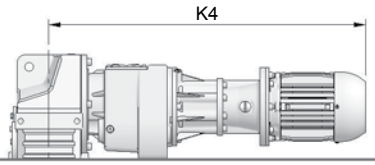


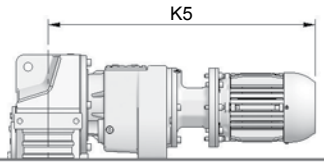


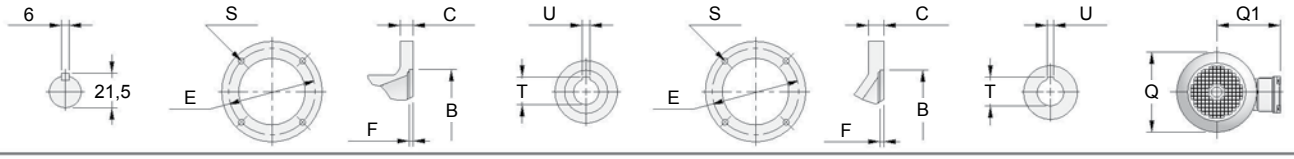
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	428,5	349	10	12,8	4	504,5	621,5	542	124	113
71	160	110H7	14	14	130	4	0,5	1	34	429,5	349	10	16,3	5	536,5	647,5	567	139	121
80	200	130H7	15	19	165	4	10	1	44	446,5	387,5	12	21,8	6	563,5	682,5	623,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	446,5	387,5	12	27,3	8	585,5	700,5	641,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	446,5	387,5	12	27,3	8	610,5	725,5	666,5	177	150
100	250	180H7	16	28	215	5	20	—	—	458,5	—	15	31,3	8	662,5	774,5	—	198	160
112	250	180H7	16	28	215	5	20	—	—	458,5	—	15	31,3	8	—	791,5	—	235	180

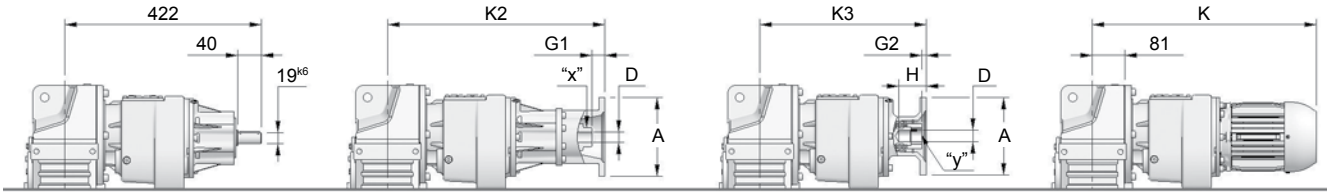
• Dimensões em mm

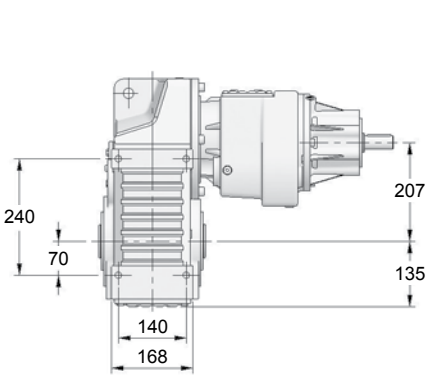


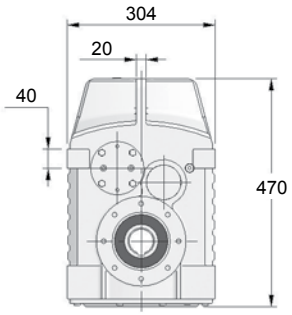


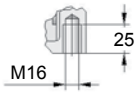




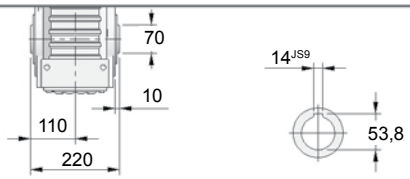




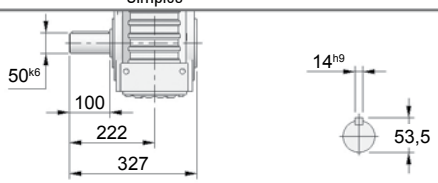




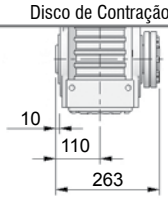
Eixo Vazado com Chaveta



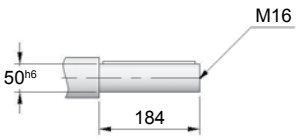
Eixo Integral Simples

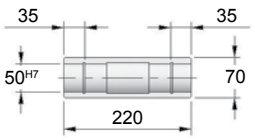


Eixo Vazado com Disco de Contração

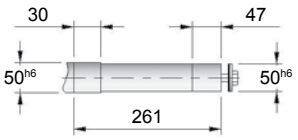


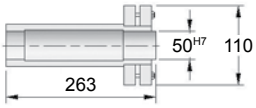
Sugestão de acoplamento no Eixo Vazado





Sugestão de acoplamento no Eixo Vazado com Disco de Contração





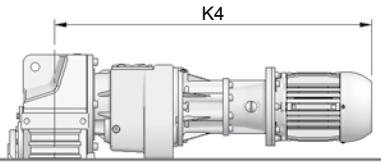
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	456	370	10	12,8	4	525,5	649	563	124	113
71	160	110H7	14	14	130	4	0,5	1	34	457	370	10	16,3	5	557,5	675	588	139	121
80	200	130H7	15	19	165	4	10	1	44	474	408,5	12	21,8	6	584,5	710	644,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	474	408,5	12	27,3	8	606,5	728	662,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	474	408,5	12	27,3	8	631,5	753	687,5	177	150
100	250	180H7	16	28	215	5	20	1	63	486	431	15	31,3	8	681	802	747	198	160
112	250	180H7	16	28	215	5	20	1	63	486	431	15	31,3	8	698	819	764	235	180
132S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	784	—	—	274	207
132M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	822	—	—	274	207

• Dimensões em mm

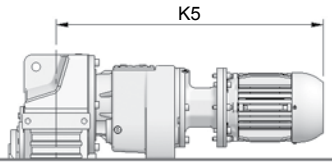
Fixação por flange e pés - G_F

Duplex

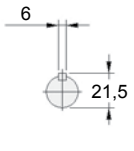
Tipos de Entrada



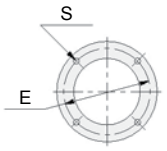
Flange Lanterna com Motor

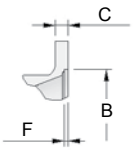


Flange KTR com Motor

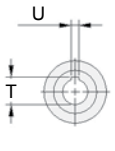


Eixo de Entrada

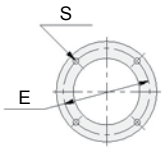


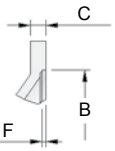


Detalhes Flange Lanterna

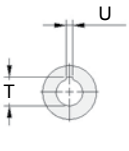


Detalhe “x”

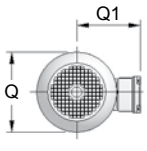




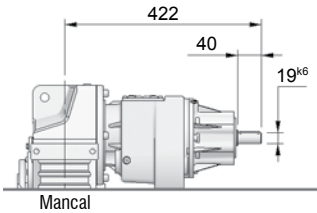
Detalhes Flange KTR



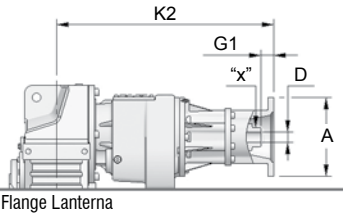
Detalhe “y”



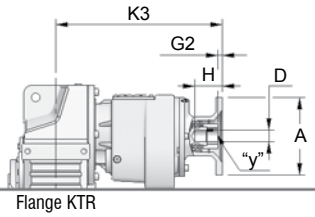
Frente do Motor



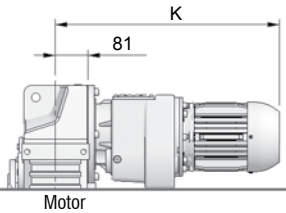
Mancal



Flange Lanterna

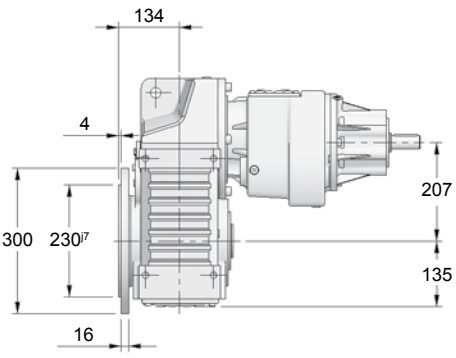


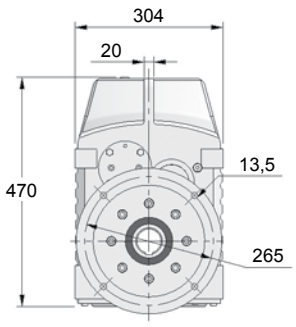
Flange KTR



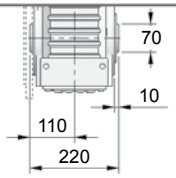
Motor

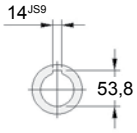
Tipos de Saída



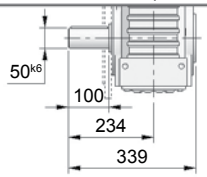


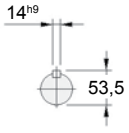
Eixo Vazado com Chaveta



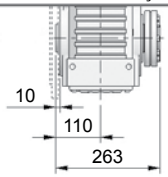


Eixo Integral Simples



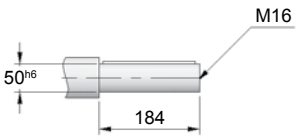


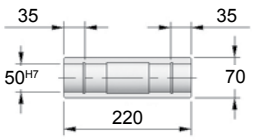
Eixo Vazado com Disco de Contração

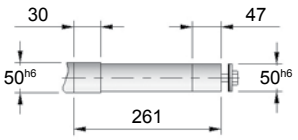


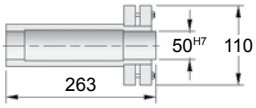
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração







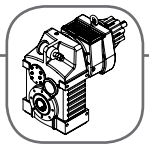


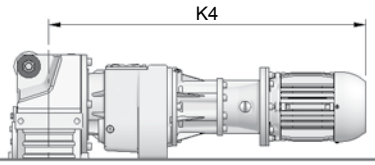
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	456	370	10	12,8	4	525,5	649	563	124	113
71	160	110H7	14	14	130	4	0,5	1	34	457	370	10	16,3	5	557,5	675	588	139	121
80	200	130H7	15	19	165	4	10	1	44	474	408,5	12	21,8	6	584,5	710	644,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	474	408,5	12	27,3	8	606,5	728	662,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	474	408,5	12	27,3	8	631,5	753	687,5	177	150
100	250	180H7	16	28	215	5	20	1	63	486	431	15	31,3	8	681	802	747	198	160
112	250	180H7	16	28	215	5	20	1	63	486	431	15	31,3	8	698	819	764	235	180
132S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	784	—	—	274	207
132M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	822	—	—	274	207

• Dimensões em mm

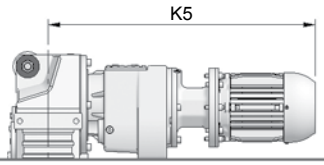
Fixação por braço de torção - B

Duplex

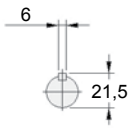




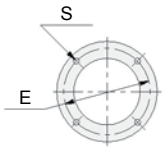
Flange Lanterna com Motor



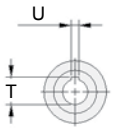
Flange KTR com Motor



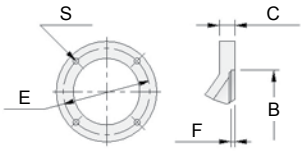
Eixo de Entrada



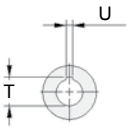
Detalhes Flange Lanterna



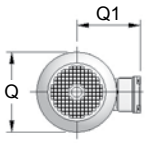
Detalhe "x"



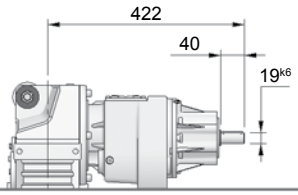
Detalhes Flange KTR



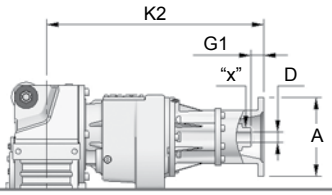
Detalhe "y"



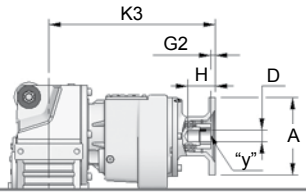
Frente do Motor



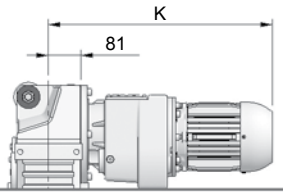
Mancal



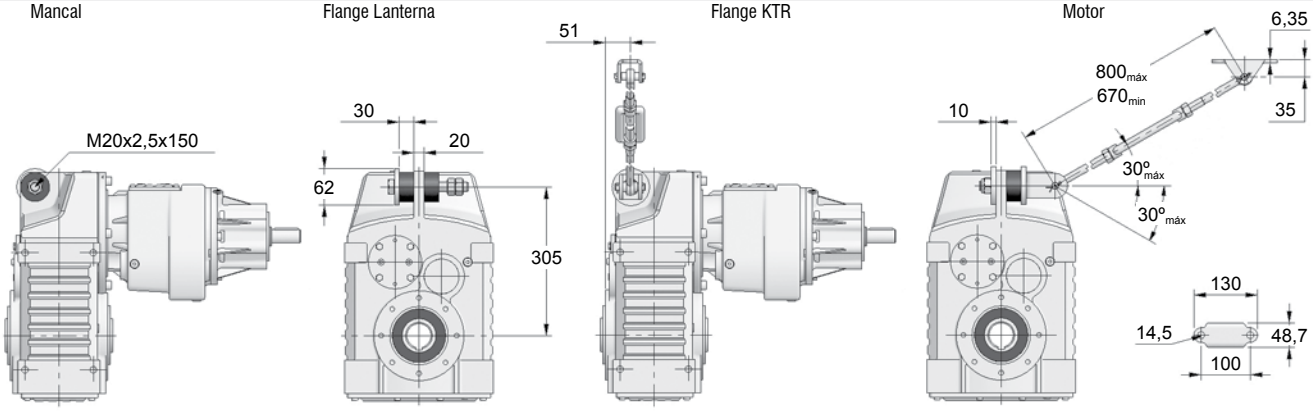
Flange Lanterna



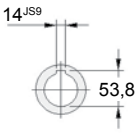
Flange KTR

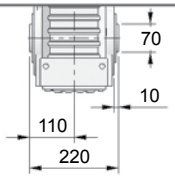


Motor

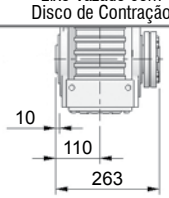


Eixo Vazado com Chaveta



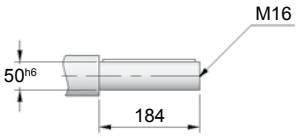


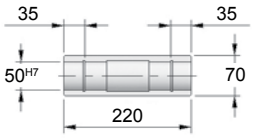
Eixo Vazado com Disco de Contração

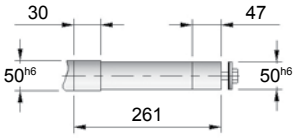


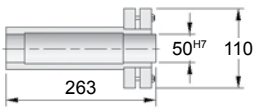
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração









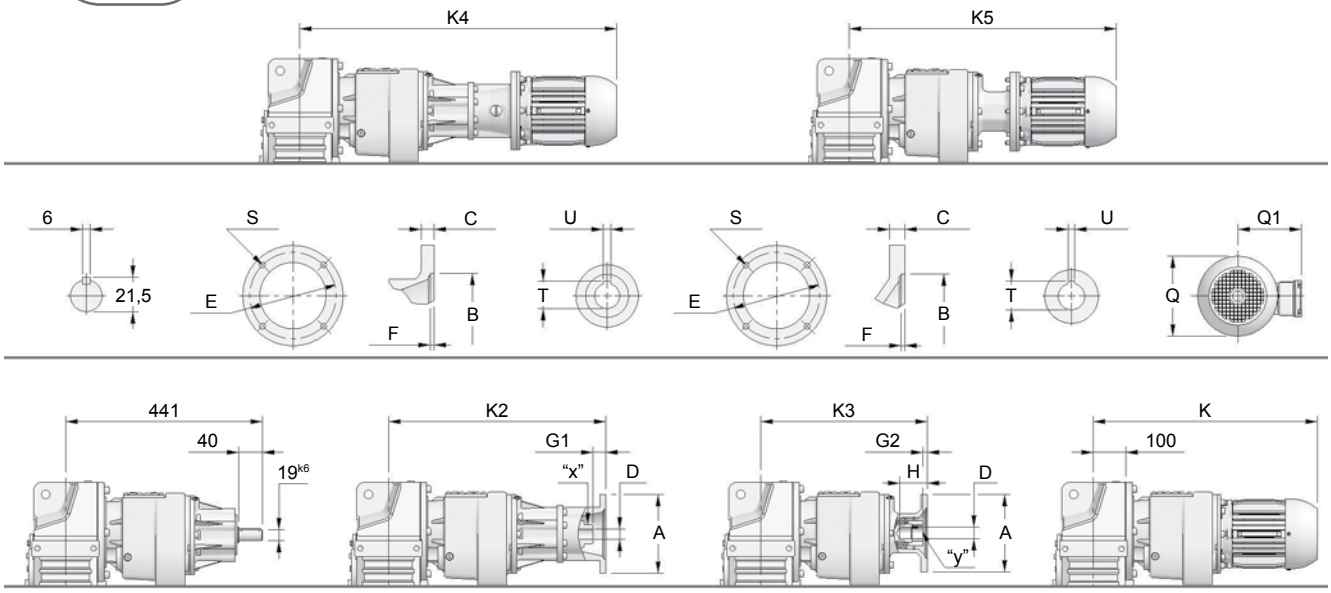
Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
63	140	95H7	13	11	115	4	0	1	25	456	370	10	12,8	4	525,5	649	563	124	113
71	160	110H7	14	14	130	4	0,5	1	34	457	370	10	16,3	5	557,5	675	588	139	121
80	200	130H7	15	19	165	4	10	1	44	474	408,5	12	21,8	6	584,5	710	644,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	474	408,5	12	27,3	8	606,5	728	662,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	474	408,5	12	27,3	8	631,5	753	687,5	177	150
100	250	180H7	16	28	215	5	20	1	63	486	431	15	31,3	8	681	802	747	198	160
112	250	180H7	16	28	215	5	20	1	63	486	431	15	31,3	8	698	819	764	235	180
132S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	784	—	—	274	207
132M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	822	—	—	274	207

• Dimensões em mm

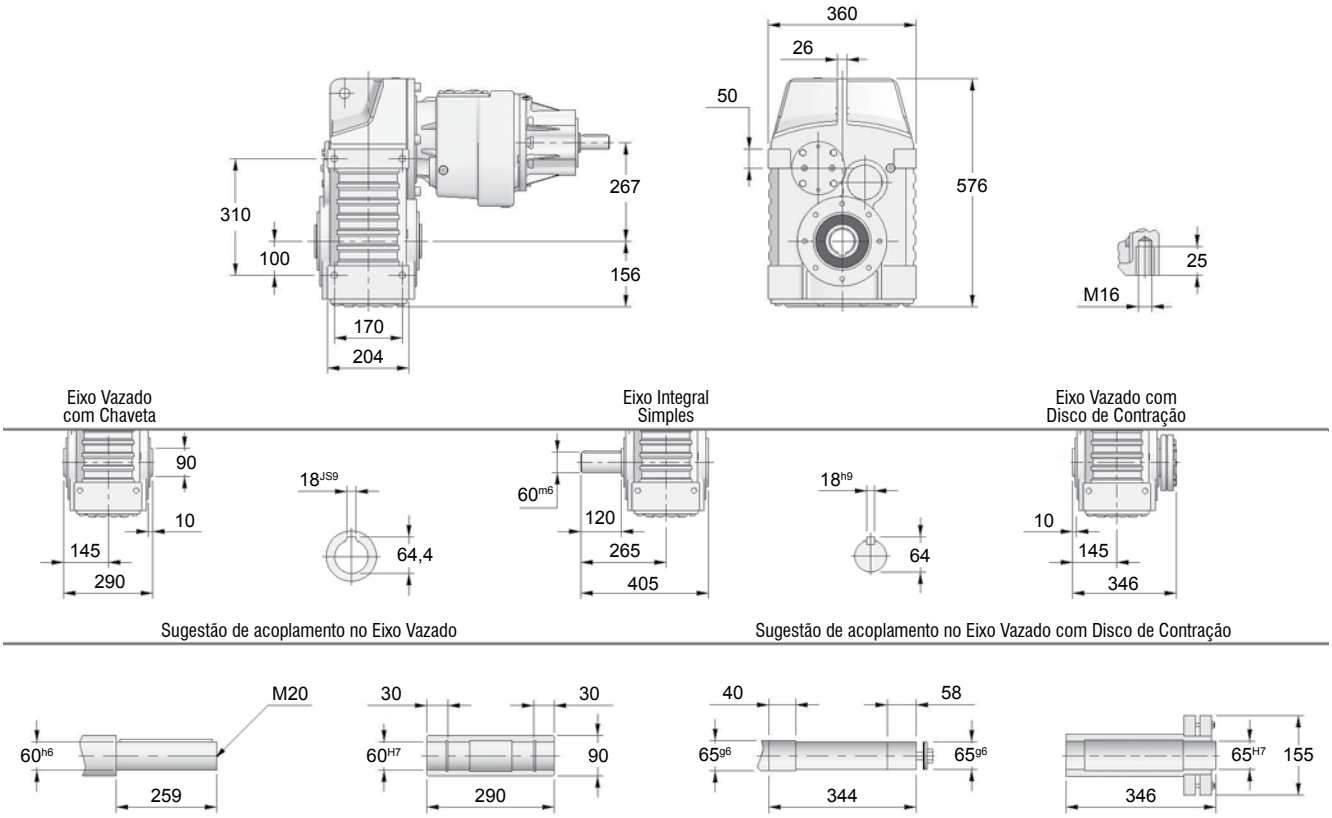
Fixação por pés - N

Duplex

Tipos de Entrada



Tipos de Saída

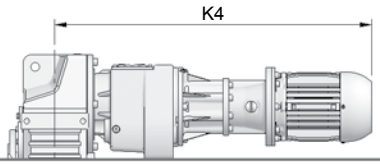


Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
63	140	95H7	13	11	115	4	0	1	25	475	389	10	12,8	4	544,5	668	582	124	113
71	160	110H7	14	14	130	4	0,5	1	34	476	389	10	16,3	5	576,5	694	607	139	121
80	200	130H7	15	19	165	4	10	1	44	493	427,5	12	21,8	6	603,5	729	663,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	493	427,5	12	27,3	8	625,5	747	681,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	493	427,5	12	27,3	8	650,5	772	706,5	177	150
100	250	180H7	16	28	215	5	20	1	63	505	450	15	31,3	8	700	821	766	198	160
112	250	180H7	16	28	215	5	20	1	63	505	450	15	31,3	8	717	838	783	235	180
132S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	803	—	—	274	207
132M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	841	—	—	274	207

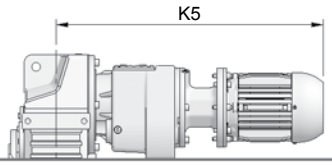
• Dimensões em mm

Fixação por flange e pés - G_G

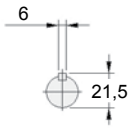
Duplex



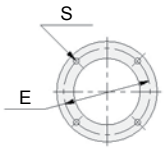
Flange Lanterna com Motor



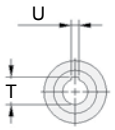
Flange KTR com Motor



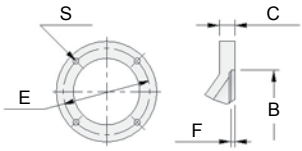
Eixo de Entrada



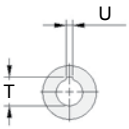
Detalhes Flange Lanterna



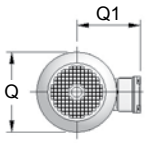
Detalhe “x”



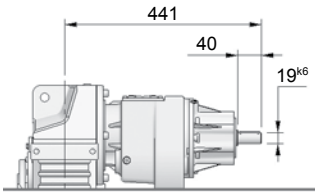
Detalhes Flange KTR



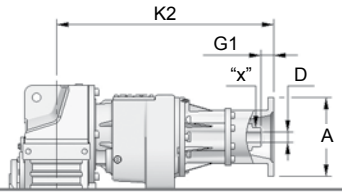
Detalhe “y”



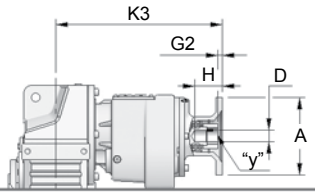
Frente do Motor



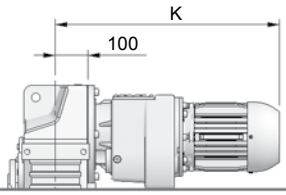
Mancal



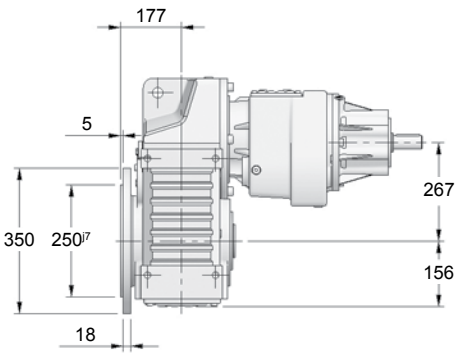
Flange Lanterna

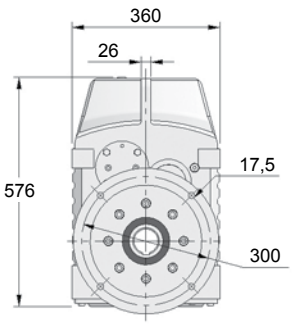


Flange KTR

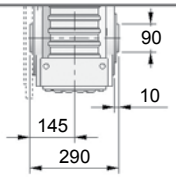


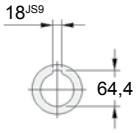
Motor





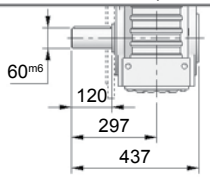
Eixo Vazado com Chaveta

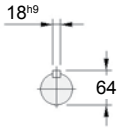




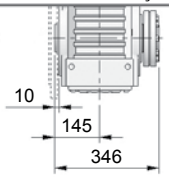
Sugestão de acoplamento no Eixo Vazado

Eixo Integral Simples

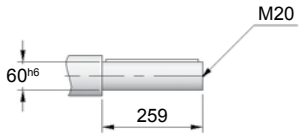


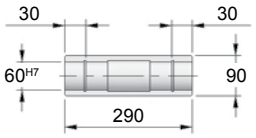


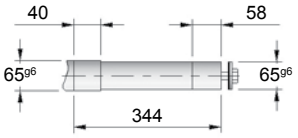
Eixo Vazado com Disco de Contração

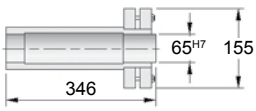


Sugestão de acoplamento no Eixo Vazado com Disco de Contração



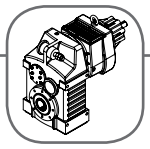






Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
63	140	95H7	13	11	115	4	0	1	25	475	389	10	12,8	4	544,5	668	582	124	113
71	160	110H7	14	14	130	4	0,5	1	34	476	389	10	16,3	5	576,5	694	607	139	121
80	200	130H7	15	19	165	4	10	1	44	493	427,5	12	21,8	6	603,5	729	663,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	493	427,5	12	27,3	8	625,5	747	681,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	493	427,5	12	27,3	8	650,5	772	706,5	177	150
100	250	180H7	16	28	215	5	20	1	63	505	450	15	31,3	8	700	821	766	198	160
112	250	180H7	16	28	215	5	20	1	63	505	450	15	31,3	8	717	838	783	235	180
132S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	803	—	—	274	207
132M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	841	—	—	274	207

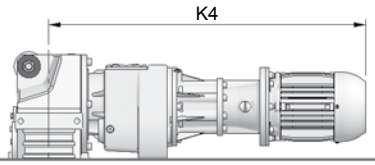
• Dimensões em mm



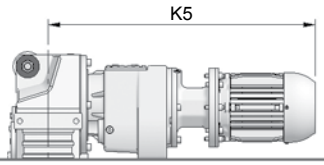
Fixação por braço de torção - B

Duplex

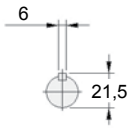
Tipos de Entrada



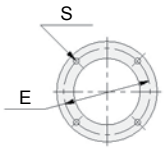
Flange Lanterna com Motor



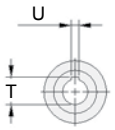
Flange KTR com Motor



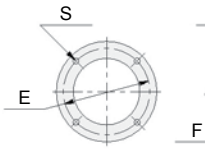
Eixo de Entrada



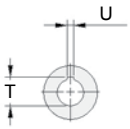
Detalhes Flange Lanterna



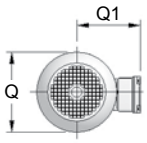
Detalhe "x"



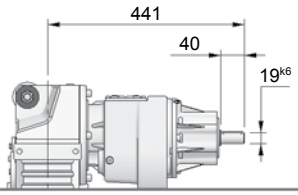
Detalhes Flange KTR



Detalhe "y"



Frente do Motor



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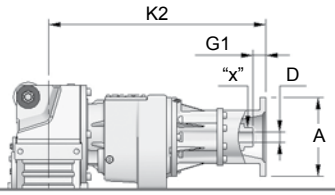
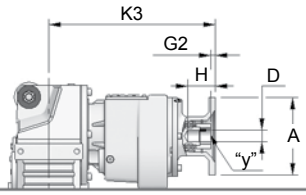
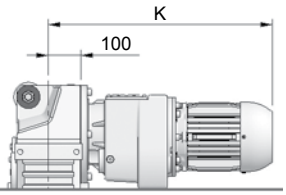


Flange Lanterna

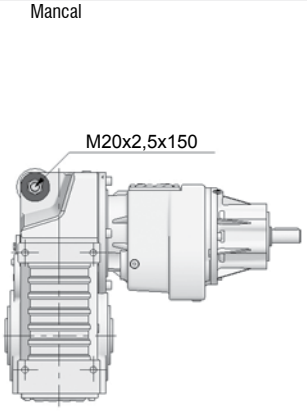


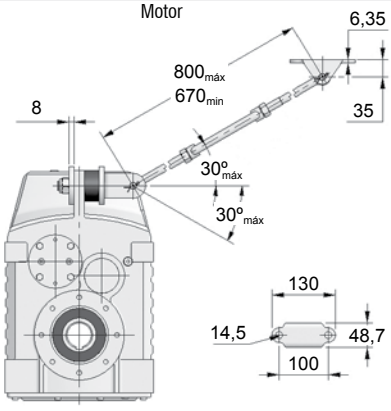
Flange KTR

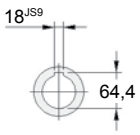


Motor

Tipos de Saída

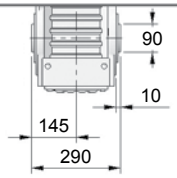




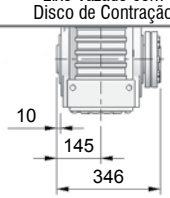


Sugestão de acoplamento no Eixo Vazado

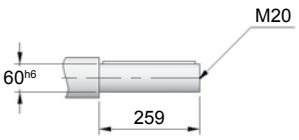
Eixo Vazado com Chaveta

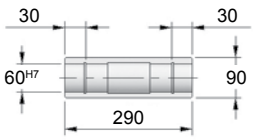


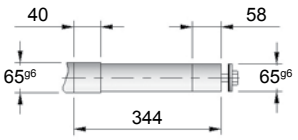
Eixo Vazado com Disco de Contração

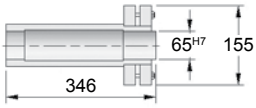


Sugestão de acoplamento no Eixo Vazado com Disco de Contração



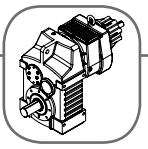


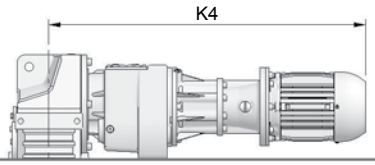


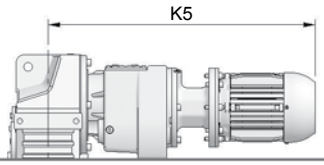


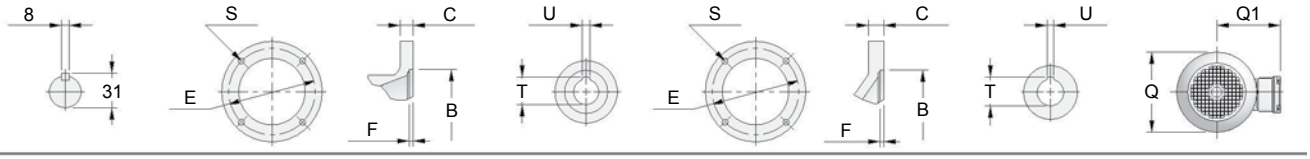
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	1	25	475	389	10	12,8	4	544,5	668	582	124	113
71	160	110H7	14	14	130	4	0,5	1	34	476	389	10	16,3	5	576,5	694	607	139	121
80	200	130H7	15	19	165	4	10	1	44	493	427,5	12	21,8	6	603,5	729	663,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	493	427,5	12	27,3	8	625,5	747	681,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	493	427,5	12	27,3	8	650,5	772	706,5	177	150
100	250	180H7	16	28	215	5	20	1	63	505	450	15	31,3	8	700	821	766	198	160
112	250	180H7	16	28	215	5	20	1	63	505	450	15	31,3	8	717	838	783	235	180
132S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	803	—	—	274	207
132M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	841	—	—	274	207

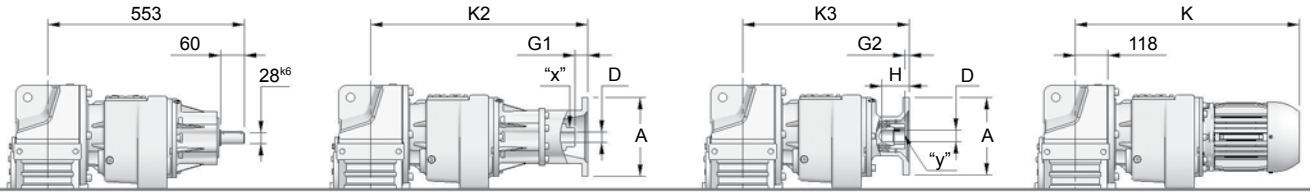
• Dimensões em mm

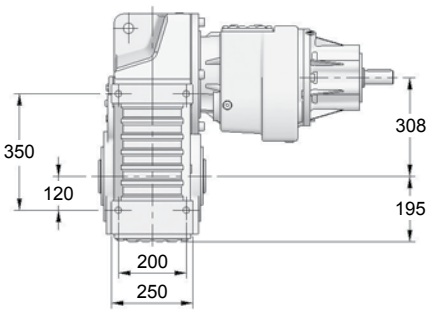


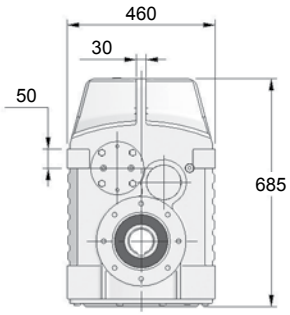


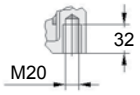




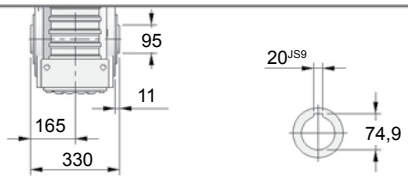




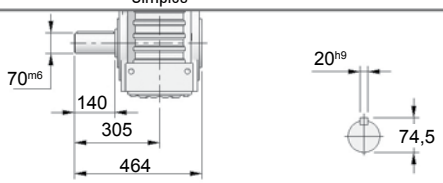




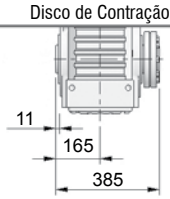
Eixo Vazado com Chaveta



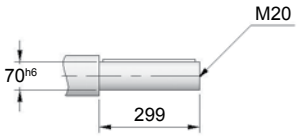
Eixo Integral Simples

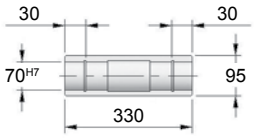


Eixo Vazado com Disco de Contração

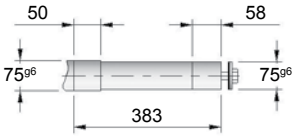


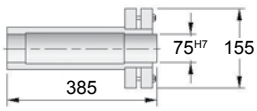
Sugestão de acoplamento no Eixo Vazado





Sugestão de acoplamento no Eixo Vazado com Disco de Contração





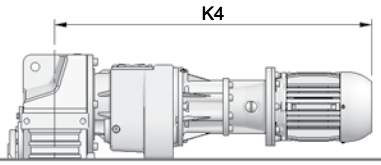
	Flange Lanterna / KTR													Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	—	—	593	—	10	12,5	4	595,5	786	—	124	113
71	160	110H7	14	14	130	4	0	1	34	593	440	10	16,3	5	627,5	811	658	139	121
80	200	130H7	15	19	165	4	10	1	44	606	478,5	12	21,8	6	654,5	842	714,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	606	478,5	12	27,3	8	674,5	860	732,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	606	478,5	12	27,3	8	699,5	885	757,5	177	150
100	250	180H7	16	28	215	5	20	1	63	616	499	15	31,3	8	749	932	815	198	160
112	250	180H7	16	28	215	5	20	1	63	616	499	15	31,3	8	765	949	832	235	180
132S	300	230H7	17	38	265	5	30	1	83	636	554	15	41,3	10	848	1008	926	274	207
132M	300	230H7	17	38	265	5	30	1	83	636	554	15	41,3	10	886	1046	964	274	207
160M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	899	—	—	317	250
160L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	943	—	—	317	250

• Dimensões em mm

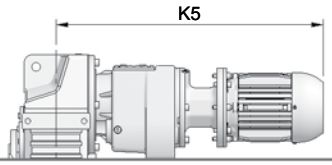
Fixação por flange e pés - G_J

Duplex

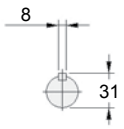
Tipos de Entrada



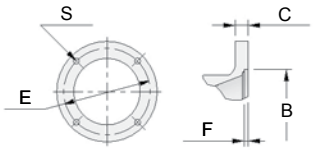
Flange Lanterna com Motor



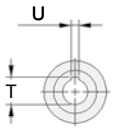
Flange KTR com Motor



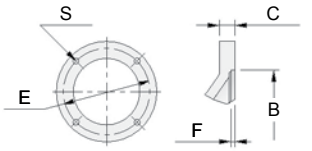
Eixo de Entrada



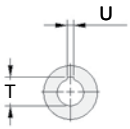
Detalhes Flange Lanterna



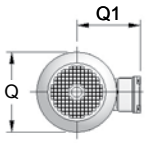
Detalhe “x”



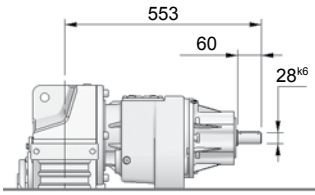
Detalhes Flange KTR



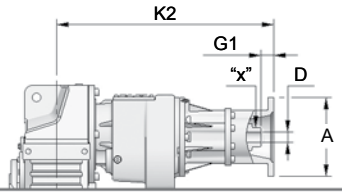
Detalhe “y”



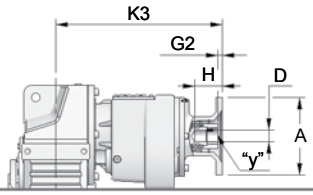
Frente do Motor



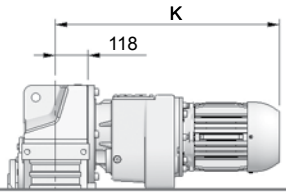
Mancal



Flange Lanterna

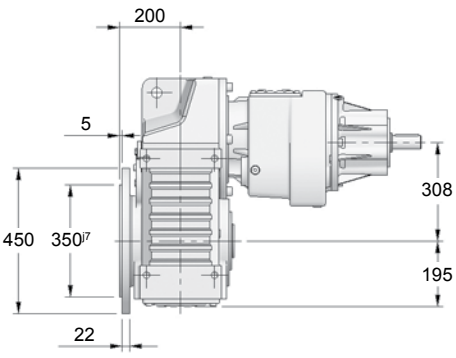


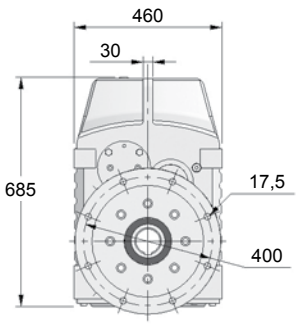
Flange KTR



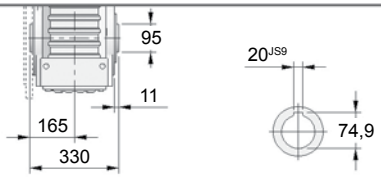
Motor

Tipos de Saída

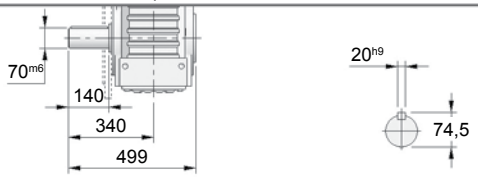




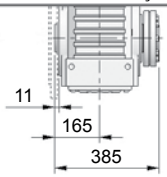
Eixo Vazado com Chaveta



Eixo Integral Simples

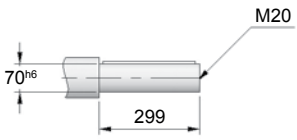


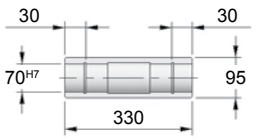
Eixo Vazado com Disco de Contração

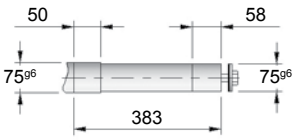


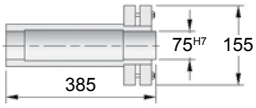
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração







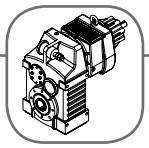


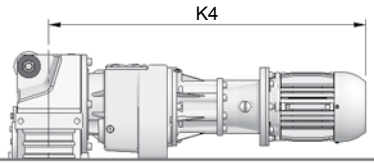
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	—	—	593	—	10	12,5	4	595,5	786	—	124	113
71	160	110H7	14	14	130	4	0	1	34	593	440	10	16,3	5	627,5	811	658	139	121
80	200	130H7	15	19	165	4	10	1	44	606	478,5	12	21,8	6	654,5	842	714,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	606	478,5	12	27,3	8	674,5	860	732,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	606	478,5	12	27,3	8	699,5	885	757,5	177	150
100	250	180H7	16	28	215	5	20	1	63	616	499	15	31,3	8	749	932	815	198	160
112	250	180H7	16	28	215	5	20	1	63	616	499	15	31,3	8	765	949	832	235	180
132S	300	230H7	17	38	265	5	30	1	83	636	554	15	41,3	10	848	1008	926	274	207
132M	300	230H7	17	38	265	5	30	1	83	636	554	15	41,3	10	886	1046	964	274	207
160M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	899	—	—	317	250
160L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	943	—	—	317	250

• Dimensões em mm

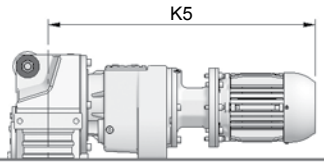
Fixação por braço de torção - B

Duplex

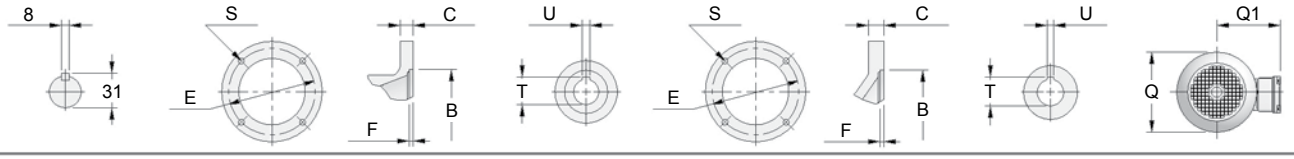




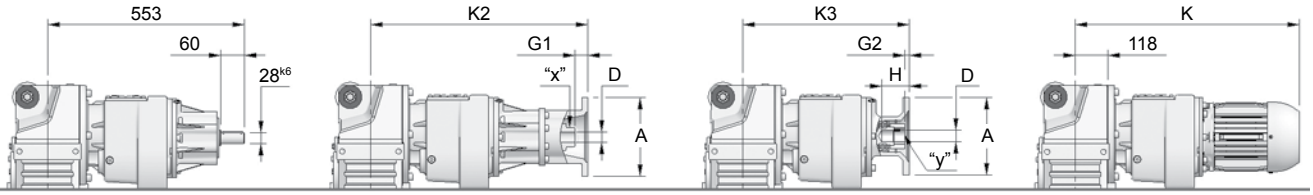
Flange Lanterna com Motor



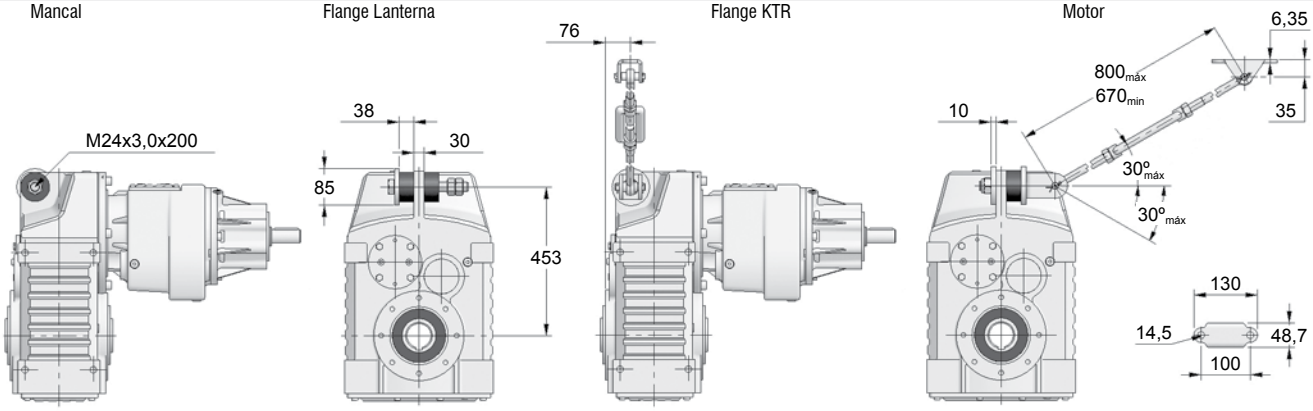
Flange KTR com Motor



Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor

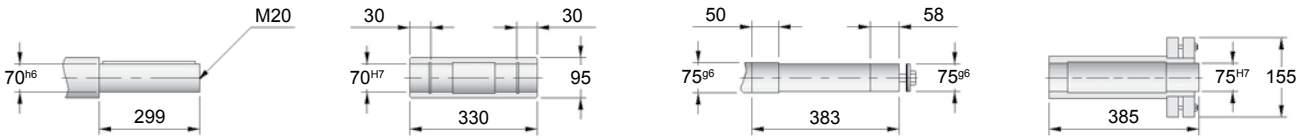


Mancal | Flange Lanterna | Flange KTR | Motor



Eixo Vazado com Chaveta | Eixo Vazado com Disco de Contração

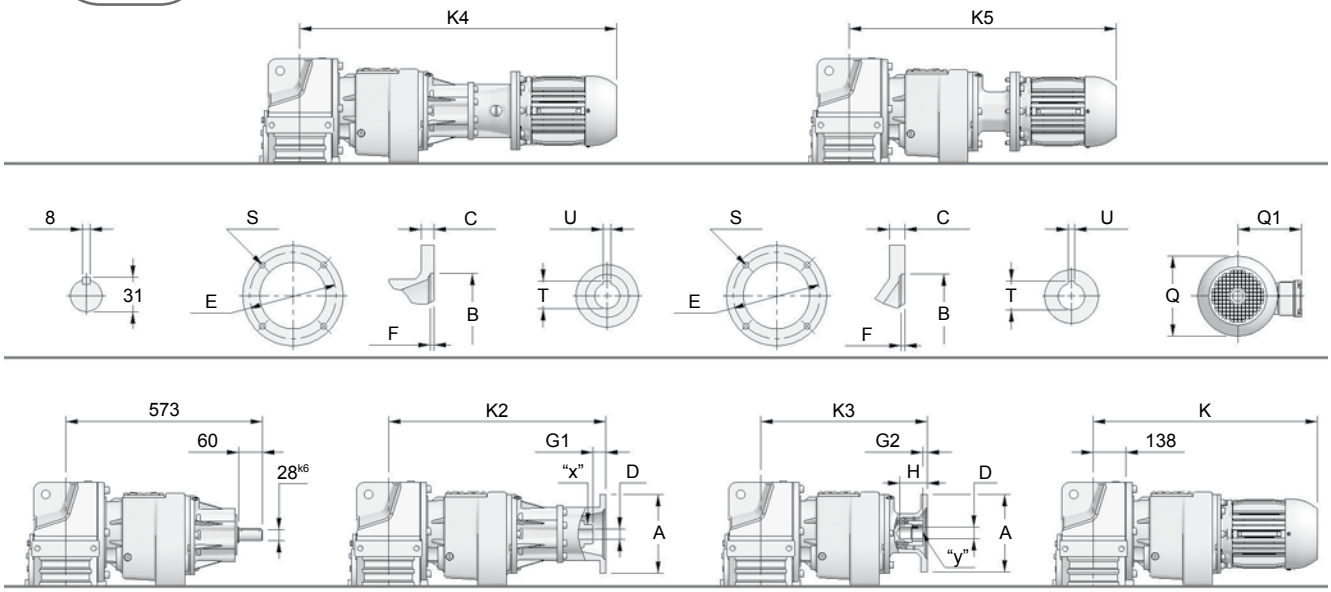
Sugestão de acoplamento no Eixo Vazado | Sugestão de acoplamento no Eixo Vazado com Disco de Contração



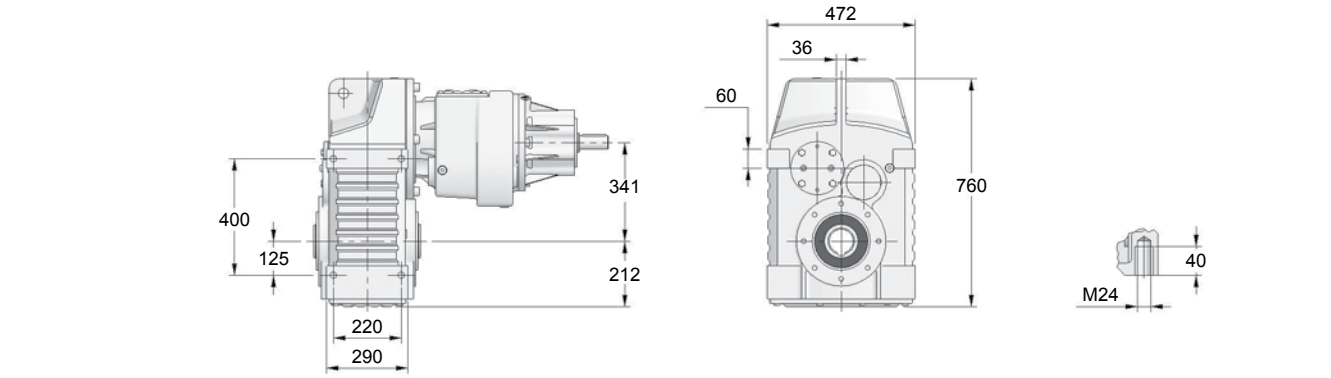
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	—	—	593	—	10	12,5	4	595,5	786	—	124	113
71	160	110H7	14	14	130	4	0	1	34	593	440	10	16,3	5	627,5	811	658	139	121
80	200	130H7	15	19	165	4	10	1	44	606	478,5	12	21,8	6	654,5	842	714,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	606	478,5	12	27,3	8	674,5	860	732,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	606	478,5	12	27,3	8	699,5	885	757,5	177	150
100	250	180H7	16	28	215	5	20	1	63	616	499	15	31,3	8	749	932	815	198	160
112	250	180H7	16	28	215	5	20	1	63	616	499	15	31,3	8	765	949	832	235	180
132S	300	230H7	17	38	265	5	30	1	83	636	554	15	41,3	10	848	1008	926	274	207
132M	300	230H7	17	38	265	5	30	1	83	636	554	15	41,3	10	886	1046	964	274	207
160M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	899	—	—	317	250
160L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	943	—	—	317	250

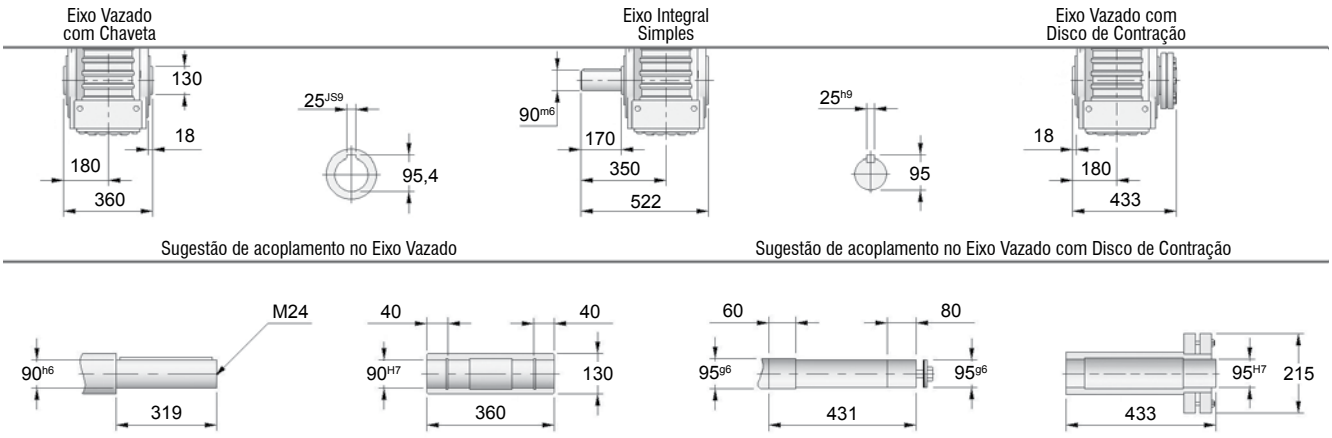
• Dimensões em mm

Tipos de Entrada



Tipos de Saída



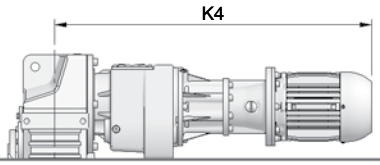


Sugestão de acoplamento no Eixo Vazado

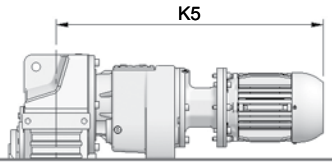
Sugestão de acoplamento no Eixo Vazado com Disco de Contração

Carcaça	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
	Flange Lanterna / KTR														Motor Elétrico				
63	140	95H7	13	11	115	4	0	—	—	613	—	10	12,5	4	615,5	806	—	124	113
71	160	110H7	14	14	130	4	0	1	34	613	460	10	16,3	5	647,5	831	678	139	121
80	200	130H7	15	19	165	4	10	1	44	626	498,5	12	21,8	6	674,5	862	734,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	626	498,5	12	27,3	8	694,5	880	752,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	626	498,5	12	27,3	8	719,5	905	777,5	177	150
100	250	180H7	16	28	215	5	20	1	63	636	519	15	31,3	8	769	952	835	198	160
112	250	180H7	16	28	215	5	20	1	63	636	519	15	31,3	8	785	969	852	235	180
132S	300	230H7	17	38	265	5	30	1	83	656	574	15	41,3	10	868	1028	946	274	207
132M	300	230H7	17	38	265	5	30	1	83	656	574	15	41,3	10	906	1066	984	274	207
160M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	919	—	—	317	250
160L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	963	—	—	317	250

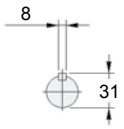
• Dimensões em mm



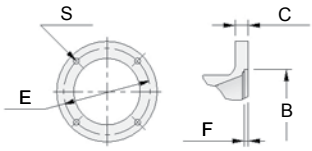
Flange Lanterna com Motor



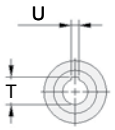
Flange KTR com Motor



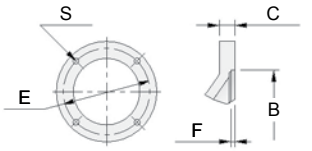
Eixo de Entrada



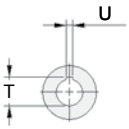
Detalhes Flange Lanterna



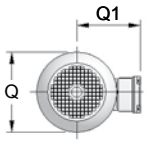
Detalhe "x"



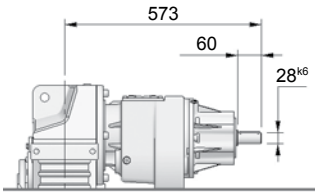
Detalhes Flange KTR



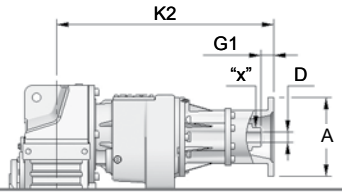
Detalhe "y"



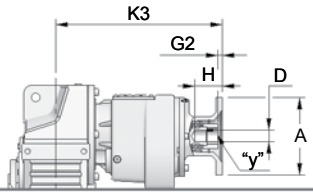
Frente do Motor



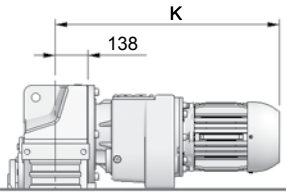
Mancal



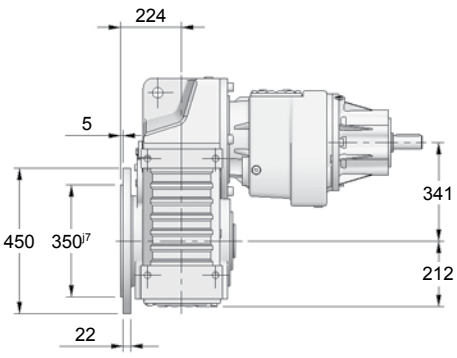
Flange Lanterna

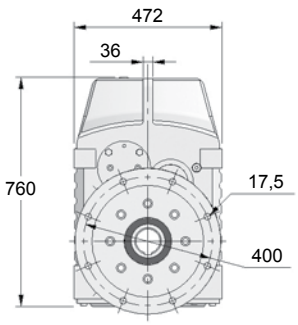


Flange KTR

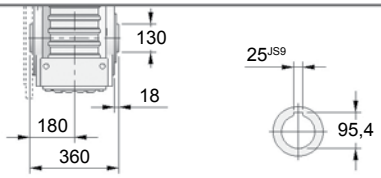


Motor

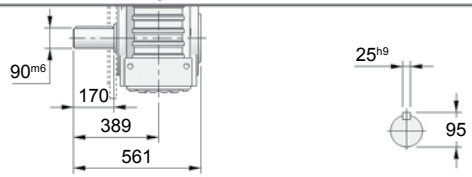




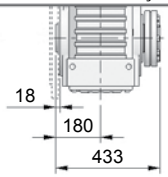
Eixo Vazado com Chaveta



Eixo Integral Simples

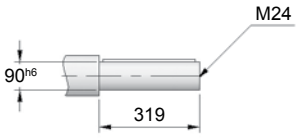


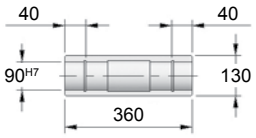
Eixo Vazado com Disco de Contração

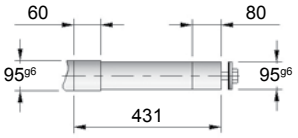


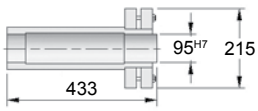
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração



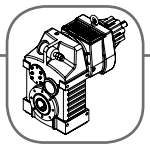






	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	—	—	613	—	10	12,5	4	615,5	806	—	124	113
71	160	110H7	14	14	130	4	0	1	34	613	460	10	16,3	5	647,5	831	678	139	121
80	200	130H7	15	19	165	4	10	1	44	626	498,5	12	21,8	6	674,5	862	734,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	626	498,5	12	27,3	8	694,5	880	752,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	626	498,5	12	27,3	8	719,5	905	777,5	177	150
100	250	180H7	16	28	215	5	20	1	63	636	519	15	31,3	8	769	952	835	198	160
112	250	180H7	16	28	215	5	20	1	63	636	519	15	31,3	8	785	969	852	235	180
132S	300	230H7	17	38	265	5	30	1	83	656	574	15	41,3	10	868	1028	946	274	207
132M	300	230H7	17	38	265	5	30	1	83	656	574	15	41,3	10	906	1066	984	274	207
160M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	919	—	—	317	250
160L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	963	—	—	317	250

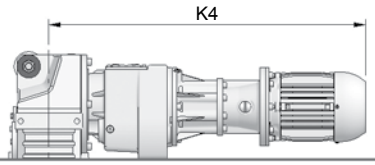
• Dimensões em mm



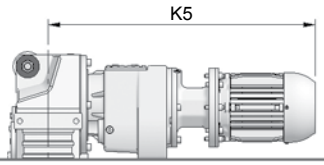
Fixação por braço de torção - B

Duplex

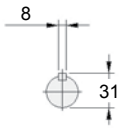
Tipos de Entrada



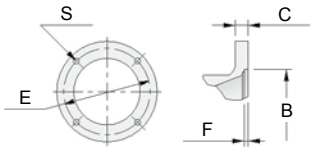
Flange Lanterna com Motor



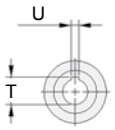
Flange KTR com Motor



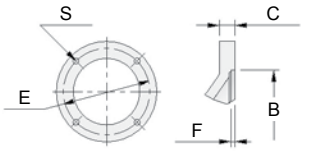
Eixo de Entrada



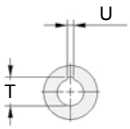
Detalhes Flange Lanterna



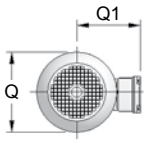
Detalhe "x"



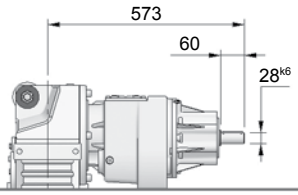
Detalhes Flange KTR



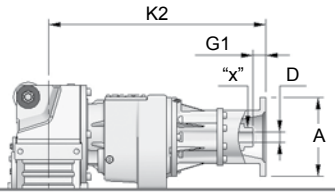
Detalhe "y"



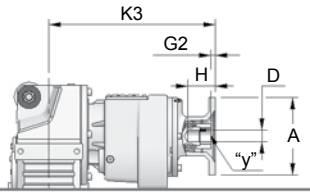
Frente do Motor



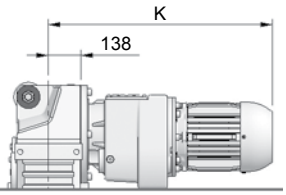
Mancal



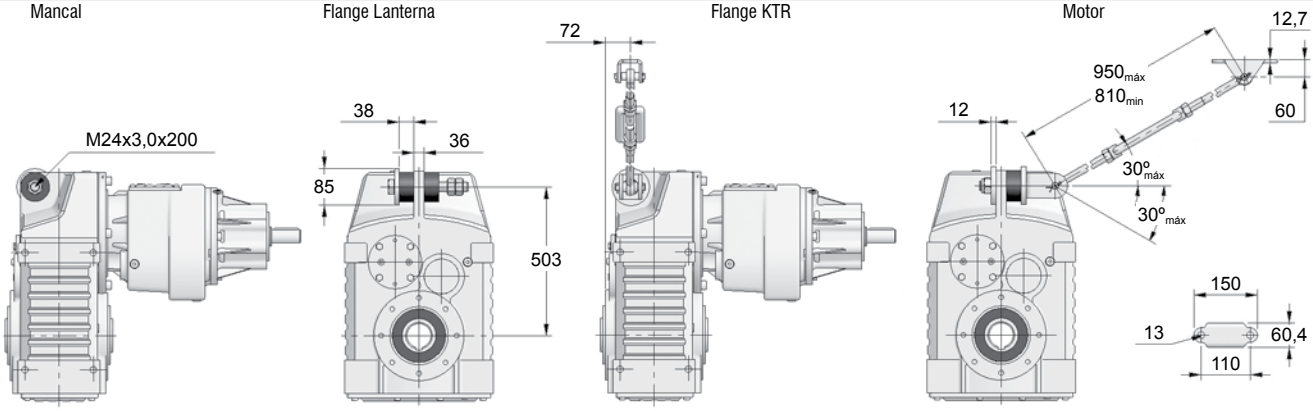
Flange Lanterna



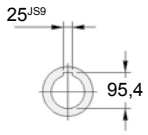
Flange KTR

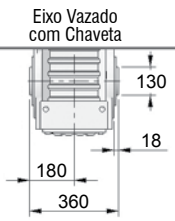


Motor

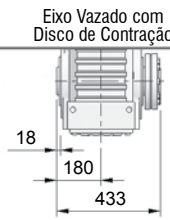


Tipos de Saída

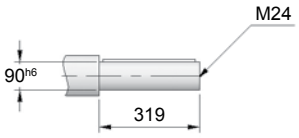


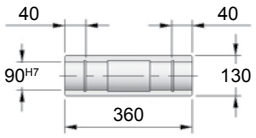


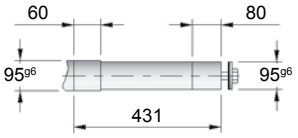
Sugestão de acoplamento no Eixo Vazado

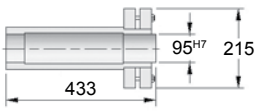


Sugestão de acoplamento no Eixo Vazado com Disco de Contração







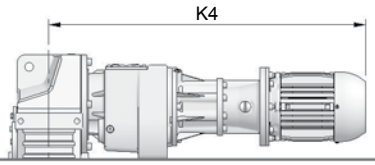


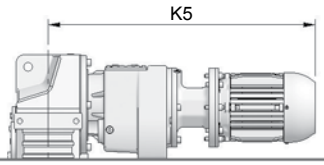
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	—	—	613	—	10	12,5	4	615,5	806	—	124	113
71	160	110H7	14	14	130	4	0	1	34	613	460	10	16,3	5	647,5	831	678	139	121
80	200	130H7	15	19	165	4	10	1	44	626	498,5	12	21,8	6	674,5	862	734,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	626	498,5	12	27,3	8	694,5	880	752,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	626	498,5	12	27,3	8	719,5	905	777,5	177	150
100	250	180H7	16	28	215	5	20	1	63	636	519	15	31,3	8	769	952	835	198	160
112	250	180H7	16	28	215	5	20	1	63	636	519	15	31,3	8	785	969	852	235	180
132S	300	230H7	17	38	265	5	30	1	83	656	574	15	41,3	10	868	1028	946	274	207
132M	300	230H7	17	38	265	5	30	1	83	656	574	15	41,3	10	906	1066	984	274	207
160M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	919	—	—	317	250
160L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	963	—	—	317	250

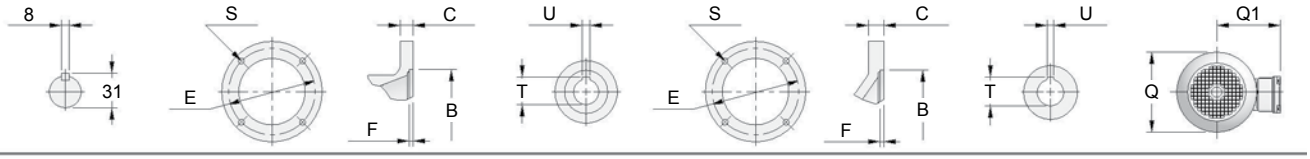
• Dimensões em mm

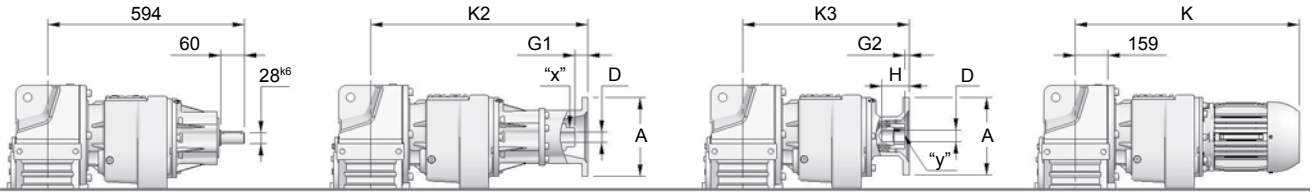
Fixação por pés - N

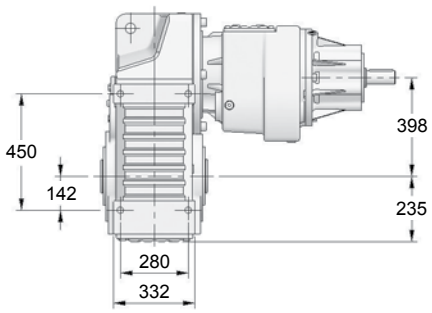
Duplex (5,6 estágios)

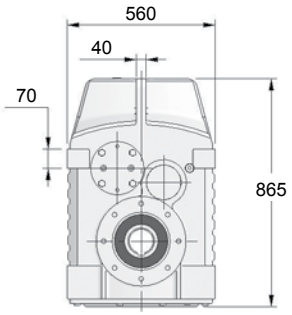


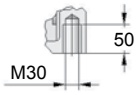




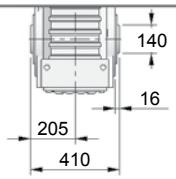


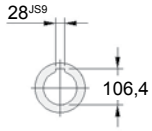




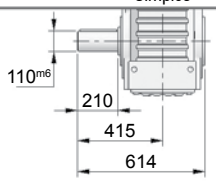


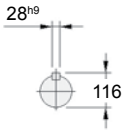
Eixo Vazado com Chaveta



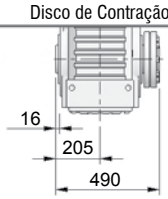


Eixo Integral Simples

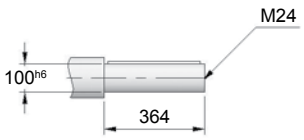


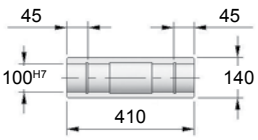


Eixo Vazado com Disco de Contração

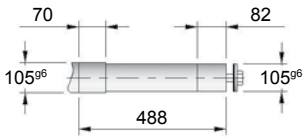


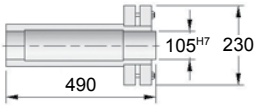
Sugestão de acoplamento no Eixo Vazado





Sugestão de acoplamento no Eixo Vazado com Disco de Contração





	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	—	—	634	—	10	12,5	4	636,5	827	—	124	113
71	160	110H7	14	14	130	4	0	1	34	634	481	10	16,3	5	668,5	852	699	139	121
80	200	130H7	15	19	165	4	10	1	44	647	519,5	12	21,8	6	695,5	883	755,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	647	519,5	12	27,3	8	715,5	901	773,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	647	519,5	12	27,3	8	740,5	926	798,5	177	150
100	250	180H7	16	28	215	5	20	1	63	657	540	15	31,3	8	790	973	856	198	160
112	250	180H7	16	28	215	5	20	1	63	657	540	15	31,3	8	806	990	873	235	180
132S	300	230H7	17	38	265	5	30	1	83	677	595	15	41,3	10	889	1049	967	274	207
132M	300	230H7	17	38	265	5	30	1	83	677	595	15	41,3	10	927	1087	1005	274	207
160M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	940	—	—	317	250
160L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	984	—	—	317	250

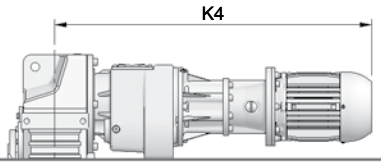
• Dimensões em mm

Fixação por flange e pés - G_K

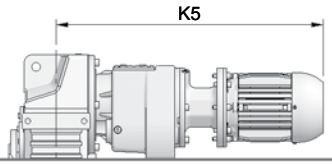
Duplex (5,6 estágios)

Tamanho **66-56**

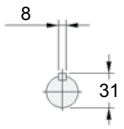
Tipos de Entrada



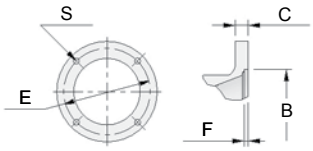
Flange Lanterna com Motor



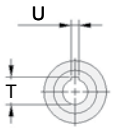
Flange KTR com Motor



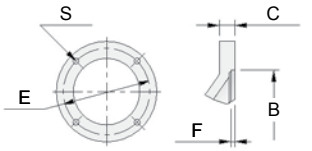
Eixo de Entrada



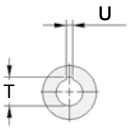
Detalhes Flange Lanterna



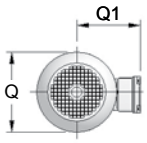
Detalhe "x"



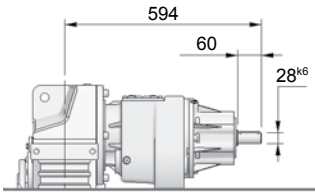
Detalhes Flange KTR



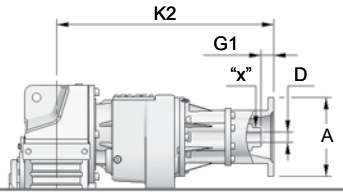
Detalhe "y"



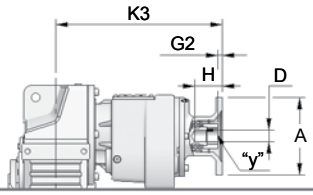
Frente do Motor



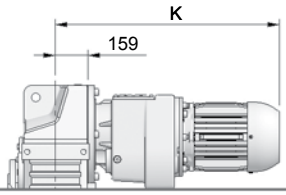
Mancal



Flange Lanterna

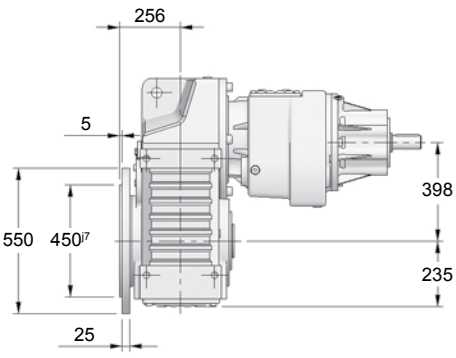


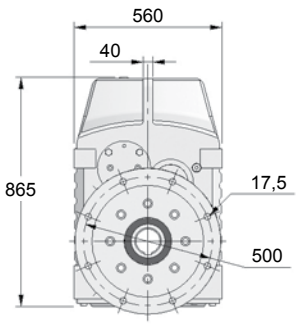
Flange KTR



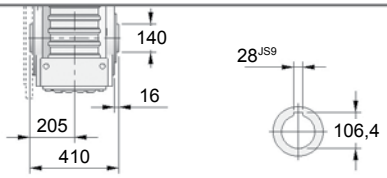
Motor

Tipos de Saída

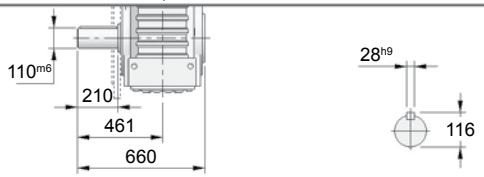




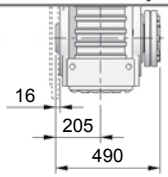
Eixo Vazado com Chaveta



Eixo Integral Simples

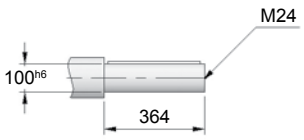


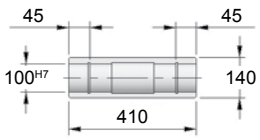
Eixo Vazado com Disco de Contração

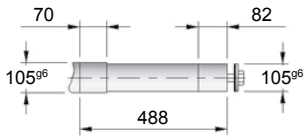


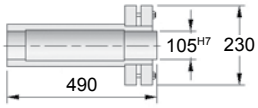
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração







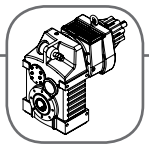


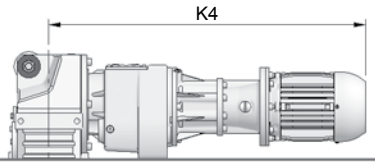
	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	—	—	634	—	10	12,5	4	636,5	827	—	124	113
71	160	110H7	14	14	130	4	0,5	1	34	634	481	10	16,3	5	668,5	852	699	139	121
80	200	130H7	15	19	165	4	10	1	44	647	519,5	12	21,8	6	695,5	883	755,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	647	519,5	12	27,3	8	715,5	901	773,5	177	150
90L	200	130H7	15	24	165	4	10	1	52	647	519,5	12	27,3	8	740,5	926	798,5	177	150
100	250	180H7	16	28	215	5	20	1	63	657	540	15	31,3	8	790	973	856	198	160
112	250	180H7	16	28	215	5	20	1	63	657	540	15	31,3	8	806	990	873	235	180
132S	300	230H7	17	38	265	5	30	1	83	677	595	15	41,3	10	889	1049	967	274	207
132M	300	230H7	17	38	265	5	30	1	83	677	595	15	41,3	10	927	1087	1005	274	207
160M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	940	—	—	317	250
160L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	984	—	—	317	250

• Dimensões em mm

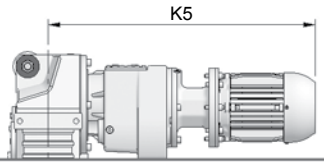
Fixação por braço de torção - B

Duplex (5,6 estágios)

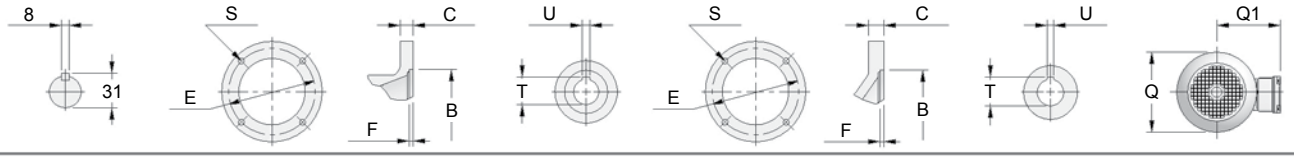




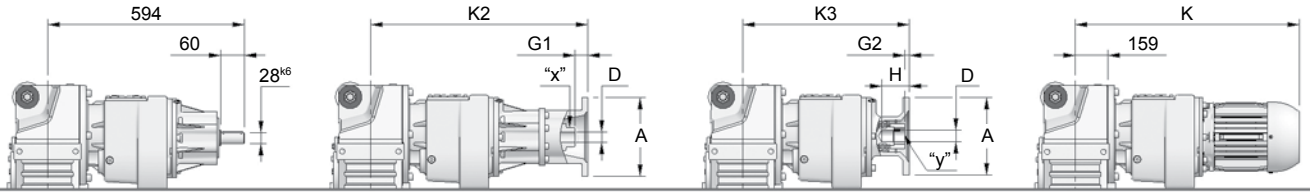
Flange Lanterna com Motor



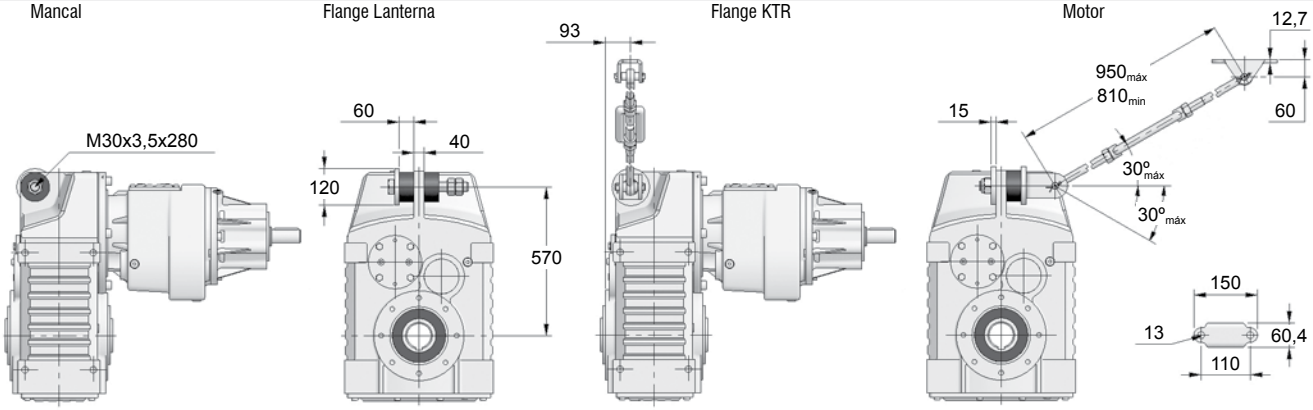
Flange KTR com Motor



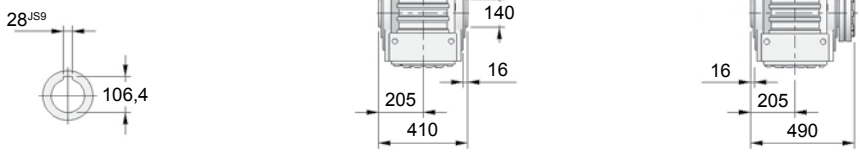
Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor



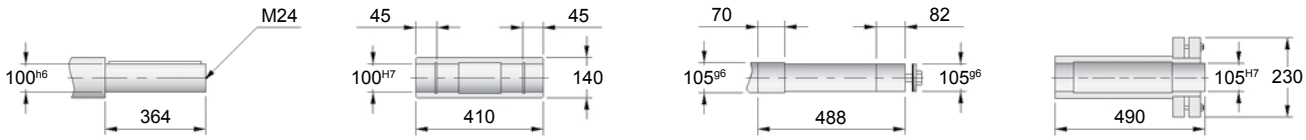
Mancal | Flange Lanterna | Flange KTR | Motor



Eixo Vazado com Chaveta | Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado | Sugestão de acoplamento no Eixo Vazado com Disco de Contração



	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
63	140	95H7	13	11	115	4	0	—	—	634	—	10	12,5	4	636,5	827	—	124	113
71	160	110H7	14	14	130	4	0	1	34	634	481	10	16,3	5	668,5	852	699	139	121
80	200	130H7	15	19	165	4	10	1	44	647	519,5	12	21,8	6	695,5	883	755,5	157	130
90S	200	130H7	15	24	165	4	10	1	52	647	519,5	12	27,3	8	715,5	901	773,5	177	150
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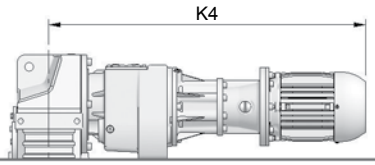
100	250	180H7	16	28	215	5	20	1	63	657	540	15	31,3	8	790	973	856	198	160
112	250	180H7	16	28	215	5	20	1	63	657	540	15	31,3	8	806	990	873	235	180
132S	300	230H7	17	38	265	5	30	1	83	677	595	15	41,3	10	889	1049	967	274	207
132M	300	230H7	17	38	265	5	30	1	83	677	595	15	41,3	10	927	1087	1005	274	207
160M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	940	—	—	317	250
160L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	984	—	—	317	250

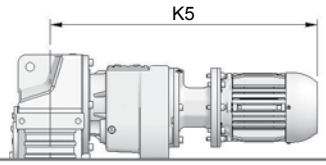
• Dimensões em mm

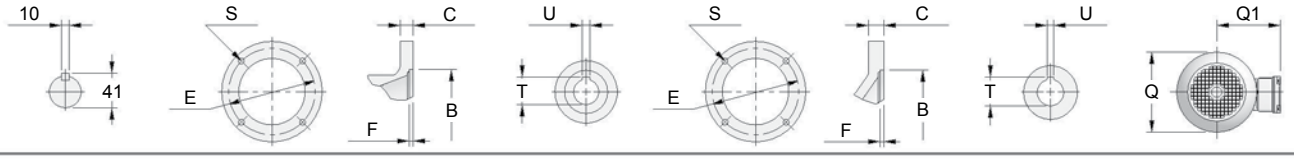
Fixação por pés - N

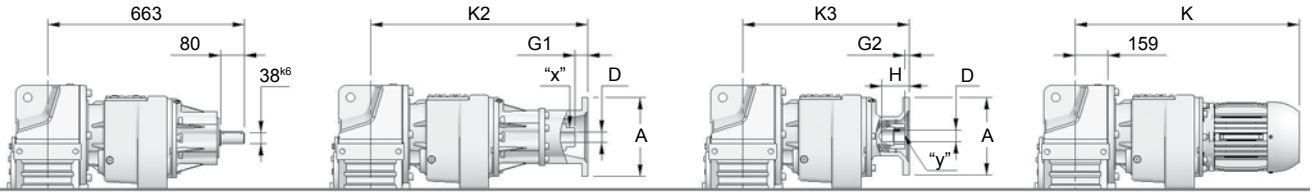
Duplex (4 estágios)

Tipos de Entrada

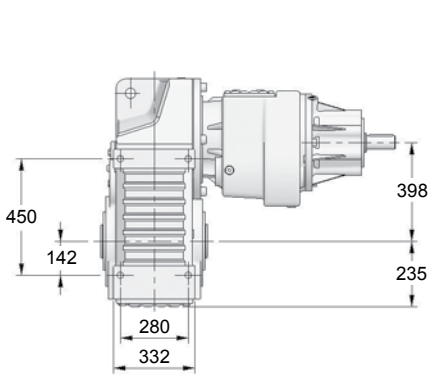


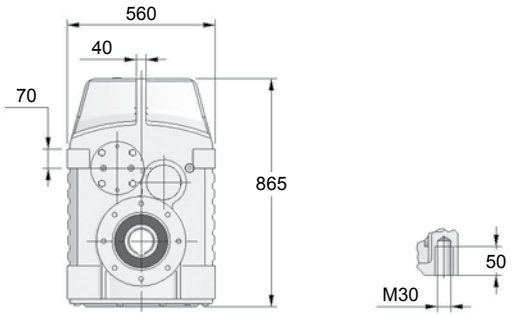




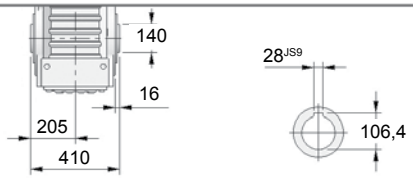


Tipos de Saída

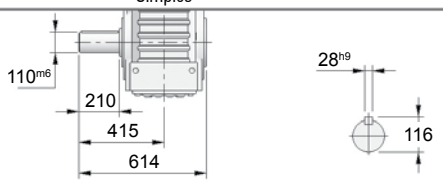




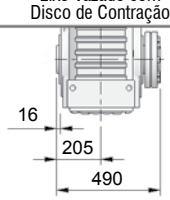
Eixo Vazado com Chaveta



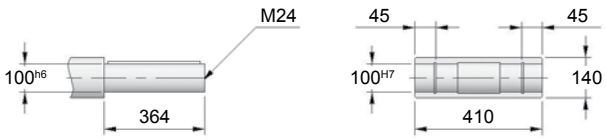
Eixo Integral Simples



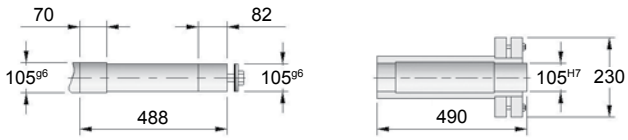
Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado



Sugestão de acoplamento no Eixo Vazado com Disco de Contração

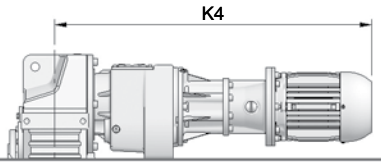


														Flange Lanterna / KTR				Motor Elétrico
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
80	200	130H7	15	19	165	4	10	1	44	717	558	12	21,8	6	734,5	953	794	157	130
90S	200	130H7	15	24	165	4	10	1	52	717	558	12	27,3	8	755,5	971	812	177	150
90L	200	130H7	15	24	165	4	10	1	52	717	558	12	27,3	8	780,5	996	837	177	150
100	250	180H7	16	28	215	5	20	1	63	726	581,5	15	31,3	8	830	1042	897,5	198	160
112	250	180H7	16	28	215	5	20	1	63	726	581,5	15	31,3	8	845	1059	914,5	235	180
132S	300	230HZ	17	38	265	5	30	1	83	746	634	15	41,3	10	928	1118	1006	274	207
132M	300	230H7	17	38	265	5	30	1	83	746	634	15	41,3	10	966	1156	1044	274	207
160M	350	250H7	24	42	300	6	40	1	112	778	682	19	45,3	12	979	1266	1170	317	250
160L	350	250H7	24	42	300	6	40	1	112	778	682	19	45,3	12	1023	1310	1214	317	250
180M	350	250H7	24	48	300	6	40	1	113	778	682	19	51,8	14	1053	1332	1236	360	270

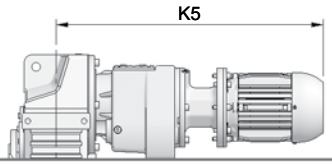
• Dimensões em mm

Fixação por flange e pés - G_K

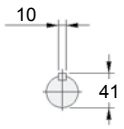
Duplex (4 estágios)



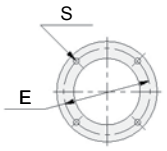
Flange Lanterna com Motor



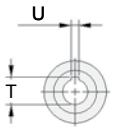
Flange KTR com Motor



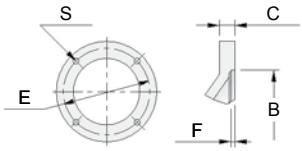
Eixo de Entrada



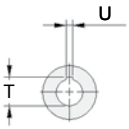
Detalhes Flange Lanterna



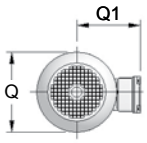
Detalhe "x"



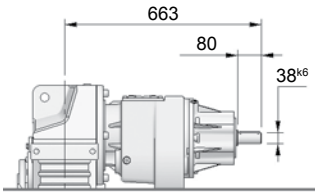
Detalhes Flange KTR



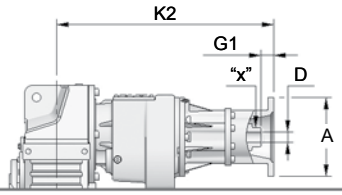
Detalhe "y"



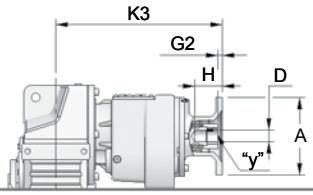
Frente do Motor



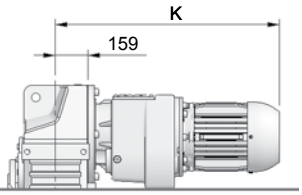
Mancal



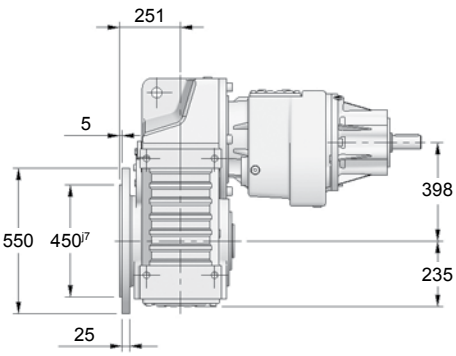
Flange Lanterna

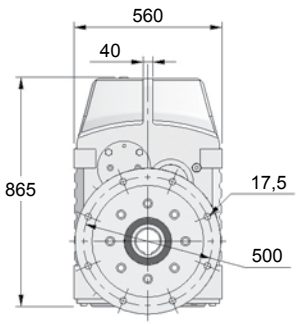


Flange KTR

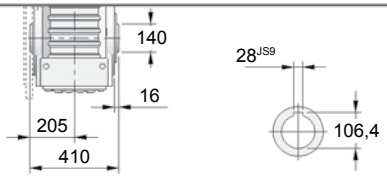


Motor

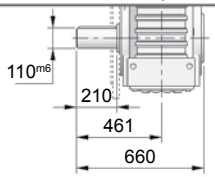


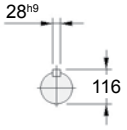


Eixo Vazado com Chaveta

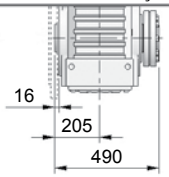


Eixo Integral Simples



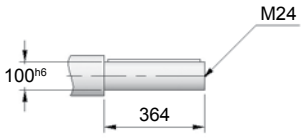


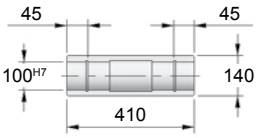
Eixo Vazado com Disco de Contração

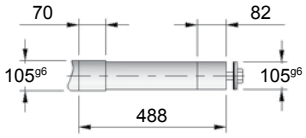


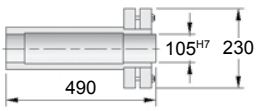
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração









	Flange Lanterna / KTR													Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
80	200	130H7	15	19	165	4	10	1	44	717	558	12	21,8	6	734,5	953	794	157	130
90S	200	130H7	15	24	165	4	10	1	52	717	558	12	27,3	8	755,5	971	812	177	150
90L	200	130H7	15	24	165	4	10	1	52	717	558	12	27,3	8	780,5	996	837	177	150
100	250	180H7	16	28	215	5	20	1	63	726	581,5	15	31,3	8	830	1042	897,5	198	160
112	250	180H7	16	28	215	5	20	1	63	726	581,5	15	31,3	8	845	1059	914,5	235	180
132S	300	230HZ	17	38	265	5	30	1	83	746	634	15	41,3	10	928	1118	1006	274	207
132M	300	230H7	17	38	265	5	30	1	83	746	634	15	41,3	10	966	1156	1044	274	207
160M	350	250H7	24	42	300	6	40	1	112	778	682	19	45,3	12	979	1266	1170	317	250
160L	350	250H7	24	42	300	6	40	1	112	778	682	19	45,3	12	1023	1310	1214	317	250
180M	350	250H7	24	48	300	6	40	1	113	778	682	19	51,8	14	1053	1332	1236	360	270

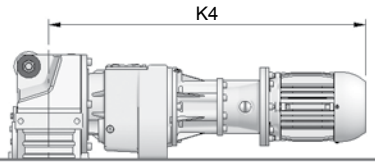
• Dimensões em mm

Fixação por braço de torção - B

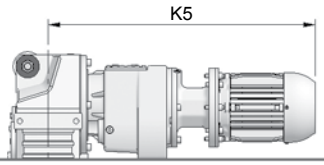
Duplex (4 estágios)

Tamanho **66-58**

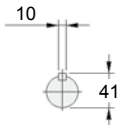
Tipos de Entrada



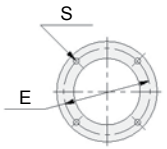
Flange Lanterna com Motor



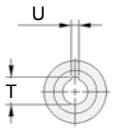
Flange KTR com Motor



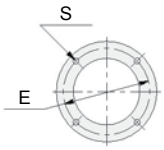
Eixo de Entrada



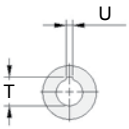
Detalhes Flange Lanterna



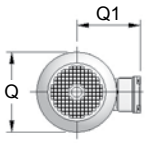
Detalhe "x"



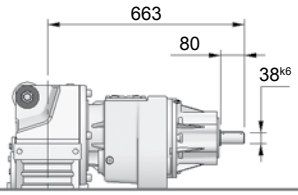
Detalhes Flange KTR



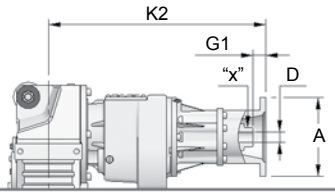
Detalhe "y"



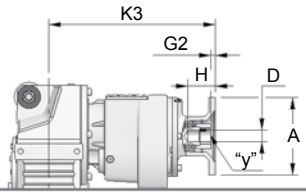
Frente do Motor



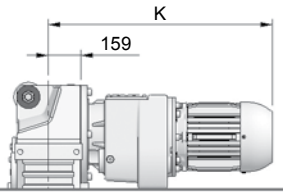
Mancal



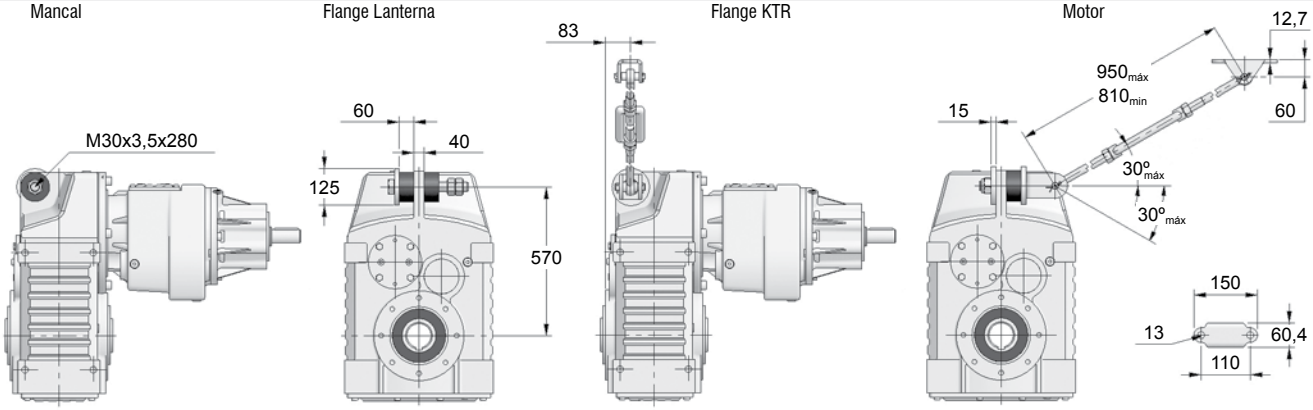
Flange Lanterna



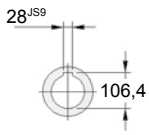
Flange KTR



Motor

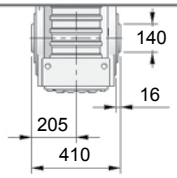


Tipos de Saída

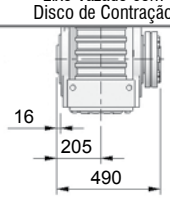


Sugestão de acoplamento no Eixo Vazado

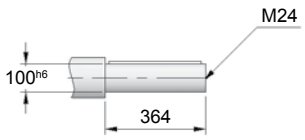
Eixo Vazado com Chaveta

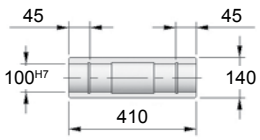


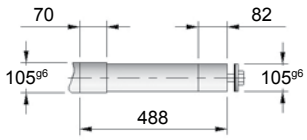
Eixo Vazado com Disco de Contração

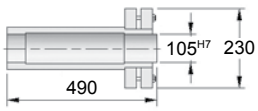


Sugestão de acoplamento no Eixo Vazado com Disco de Contração



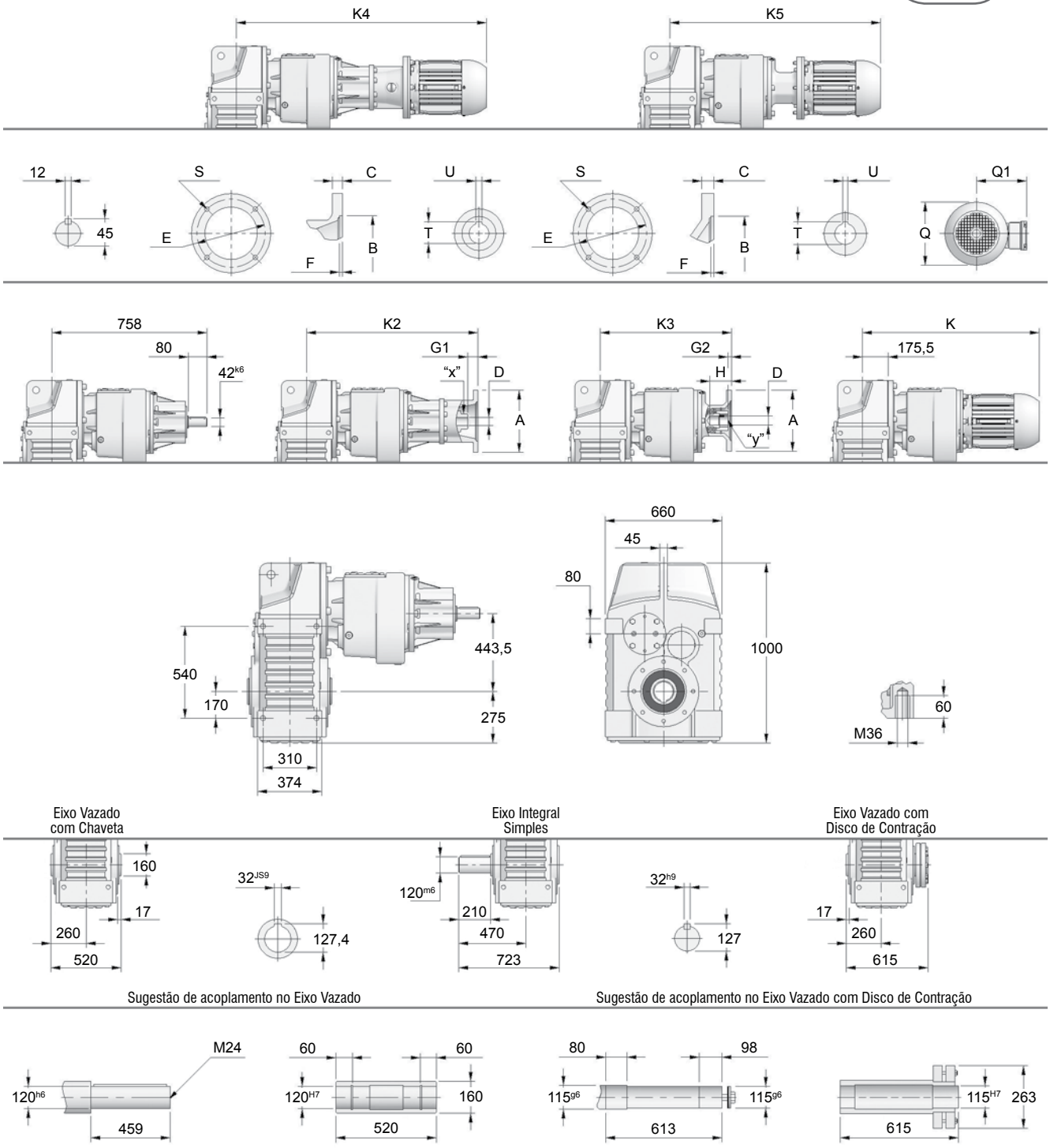






	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
80	200	130H7	15	19	165	4	10	1	44	717	558	12	21,8	6	734,5	953	794	157	130
90S	200	130H7	15	24	165	4	10	1	52	717	558	12	27,3	8	755,5	971	812	177	150
90L	200	130H7	15	24	165	4	10	1	52	717	558	12	27,3	8	780,5	996	837	177	150
100	250	180H7	16	28	215	5	20	1	63	726	581,5	15	31,3	8	830	1042	897,5	198	160
112	250	180H7	16	28	215	5	20	1	63	726	581,5	15	31,3	8	845	1059	914,5	235	180
132S	300	230HZ	17	38	265	5	30	1	83	746	634	15	41,3	10	928	1118	1006	274	207
132M	300	230H7	17	38	265	5	30	1	83	746	634	15	41,3	10	966	1156	1044	274	207
160M	350	250H7	24	42	300	6	40	1	112	778	682	19	45,3	12	979	1266	1170	317	250
160L	350	250H7	24	42	300	6	40	1	112	778	682	19	45,3	12	1023	1310	1214	317	250
180M	350	250H7	24	48	300	6	40	1	113	778	682	19	51,8	14	1053	1332	1236	360	270

• Dimensões em mm



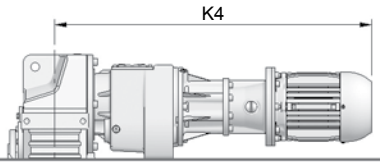
	Flange Lanterna / KTR													Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
80	200	130H7	15	19	165	4	10	1	44	812	622	12	21,8	6	798	1048	858	157	130
90S	200	130H7	15	24	165	4	10	1	52	812	622	12	27,3	8	820	1066	876	177	150
90L	200	130H7	15	24	165	4	10	1	52	812	622	12	27,3	8	845	1091	901	177	150
100	250	180H7	16	28	215	5	20	1	63	821	644	15	31,3	8	894	1137	960	198	160
112	250	180H7	16	28	215	5	20	1	63	821	644	15	31,3	8	910	1154	977	235	180
132S	300	230H7	17	38	265	5	30	1	83	841	699	15	41,3	10	993	1213	1071	274	207
132M	300	230H7	17	38	265	5	30	1	83	841	699	15	41,3	10	1031	1251	1109	274	207
160M	350	250H7	24	42	300	6	40	1	112	873	747	19	45,3	12	1044	1361	1235	317	250
160L	350	250H7	24	42	300	6	40	1	112	873	747	19	45,3	12	1088	1405	1279	317	250
180M	350	250H7	24	48	300	6	40	1	113	873	747	19	51,8	14	1118	1427	1301	360	270
200M	400	300H7	24	55	350	6	—	1	114	—	792	19	59,3	16	1081	—	1411	402	294
200L	400	300H7	24	55	350	6	—	1	114	—	792	19	59,3	16	1219	—	1449	402	294
225	450	350H7	24	60	400	6	—	11	124	—	807	19	64,4	18	1262	—	1514	466	368

• Dimensões em mm

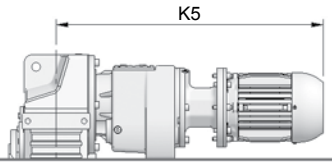
Fixação por flange e pés - G_L

Duplex (5,6 estágios)

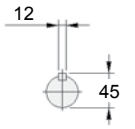
Tipos de Entrada



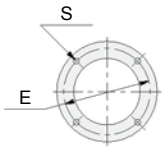
Flange Lanterna com Motor



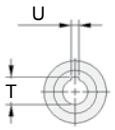
Flange KTR com Motor



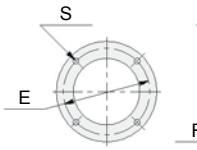
Eixo de Entrada



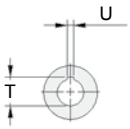
Detalhes Flange Lanterna



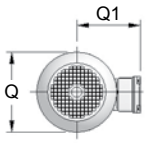
Detalhe "x"



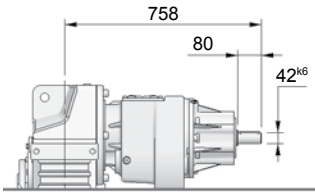
Detalhes Flange KTR



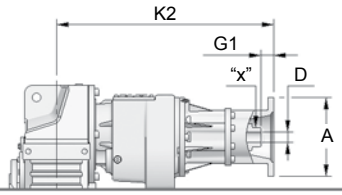
Detalhe "y"



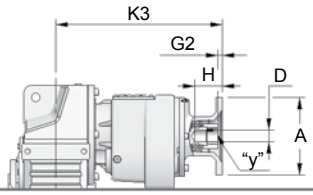
Frente do Motor



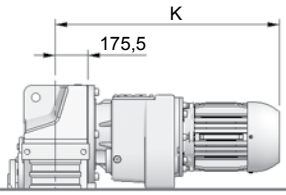
Mancal



Flange Lanterna

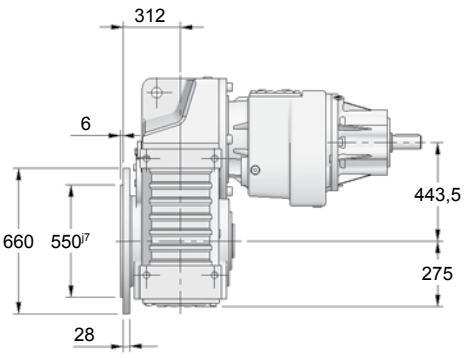


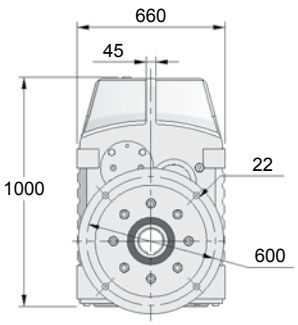
Flange KTR



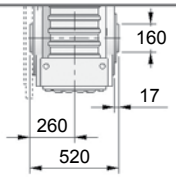
Motor

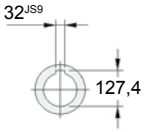
Tipos de Saída



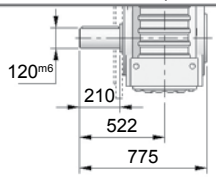


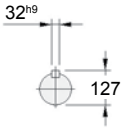
Eixo Vazado com Chaveta



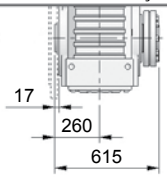


Eixo Integral Simples



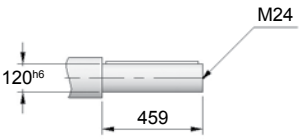


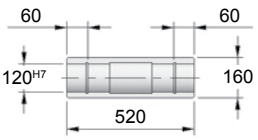
Eixo Vazado com Disco de Contração

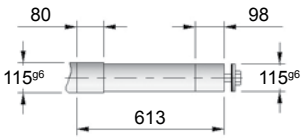


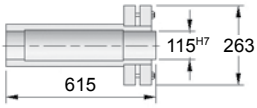
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração



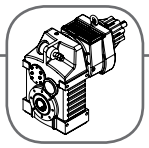


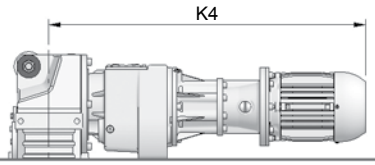




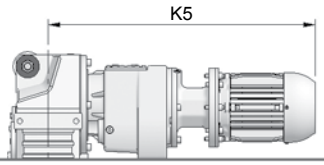
	Flange Lanterna / KTR													Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
80	200	130H7	15	19	165	4	10	1	44	812	622	12	21,8	6	798	1048	858	157	130
90S	200	130H7	15	24	165	4	10	1	52	812	622	12	27,3	8	820	1066	876	177	150
90L	200	130H7	15	24	165	4	10	1	52	812	622	12	27,3	8	845	1091	901	177	150
100	250	180H7	16	28	215	5	20	1	63	821	644	15	31,3	8	894	1137	960	198	160
112	250	180H7	16	28	215	5	20	1	63	821	644	15	31,3	8	910	1154	977	235	180
132S	300	230H7	17	38	265	5	30	1	83	841	699	15	41,3	10	993	1213	1071	274	207
132M	300	230H7	17	38	265	5	30	1	83	841	699	15	41,3	10	1031	1251	1109	274	207
160M	350	250H7	24	42	300	6	40	1	112	873	747	19	45,3	12	1044	1361	1235	317	250
160L	350	250H7	24	42	300	6	40	1	112	873	747	19	45,3	12	1088	1405	1279	317	250
180M	350	250H7	24	48	300	6	40	1	113	873	747	19	51,8	14	1118	1427	1301	360	270
200M	400	300H7	24	55	350	6	—	1	114	—	792	19	59,3	16	1081	—	1411	402	294
200L	400	300H7	24	55	350	6	—	1	114	—	792	19	59,3	16	1219	—	1449	402	294
225	450	350H7	24	60	400	6	—	11	124	—	807	19	64,4	18	1262	—	1514	466	368

• Dimensões em mm

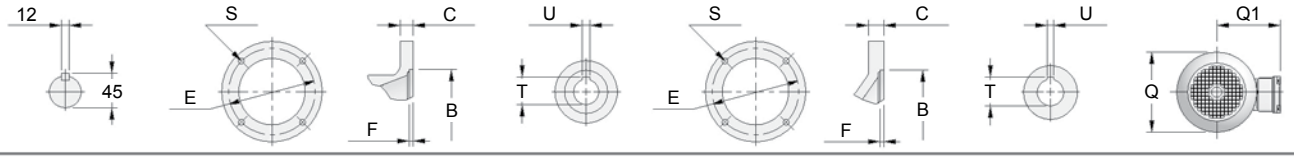




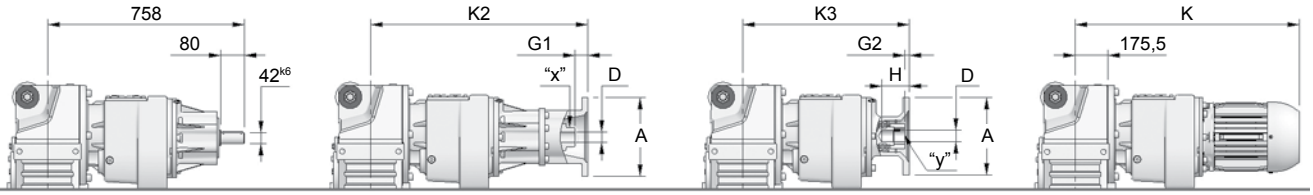
Flange Lanterna com Motor



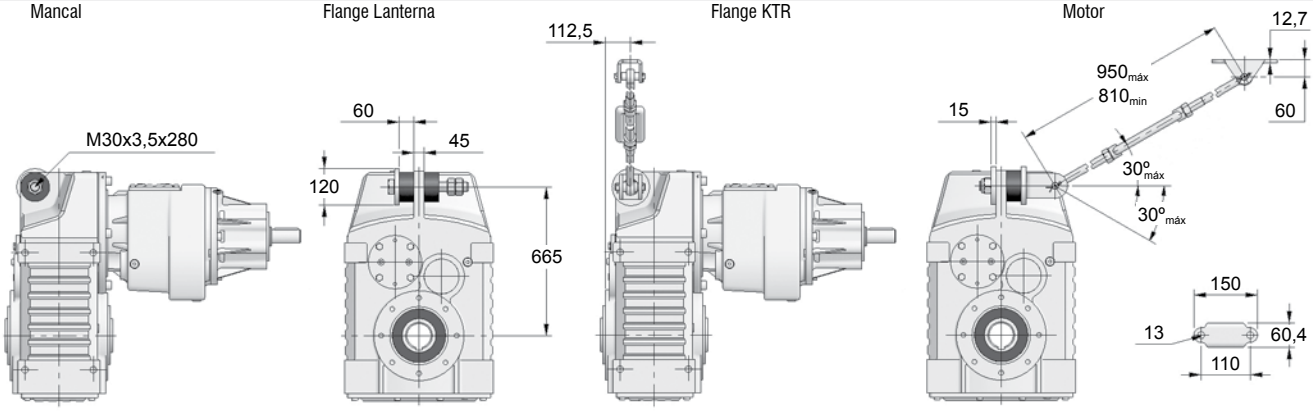
Flange KTR com Motor



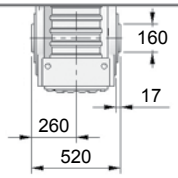
Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor



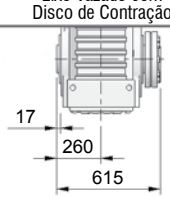
Mancal | Flange Lanterna | Flange KTR | Motor



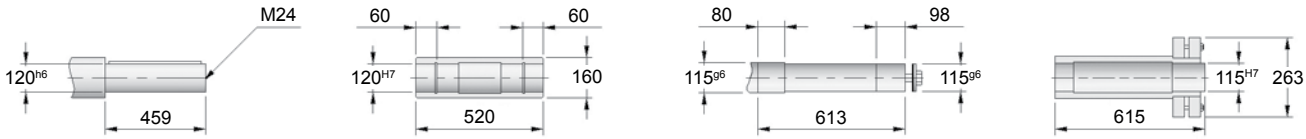
Eixo Vazado com Chaveta



Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado | Sugestão de acoplamento no Eixo Vazado com Disco de Contração



	Flange Lanterna / KTR													Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
80	200	130H7	15	19	165	4	10	1	44	812	622	12	21,8	6	798	1048	858	157	130
90S	200	130H7	15	24	165	4	10	1	52	812	622	12	27,3	8	820	1066	876	177	150
90L	200	130H7	15	24	165	4	10	1	52	812	622	12	27,3	8	845	1091	901	177	150
100	250	180H7	16	28	215	5	20	1	63	821	644	15	31,3	8	894	1137	960	198	160
112	250	180H7	16	28	215	5	20	1	63	821	644	15	31,3	8	910	1154	977	235	180
132S	300	230H7	17	38	265	5	30	1	83	841	699	15	41,3	10	993	1213	1071	274	207
132M	300	230H7	17	38	265	5	30	1	83	841	699	15	41,3	10	1031	1251	1109	274	207
160M	350	250H7	24	42	300	6	40	1	112	873	747	19	45,3	12	1044	1361	1235	317	250
160L	350	250H7	24	42	300	6	40	1	112	873	747	19	45,3	12	1088	1405	1279	317	250
180M	350	250H7	24	48	300	6	40	1	113	873	747	19	51,8	14	1118	1427	1301	360	270
200M	400	300H7	24	55	350	6	—	1	114	—	792	19	59,3	16	1081	—	1411	402	294
200L	400	300H7	24	55	350	6	—	1	114	—	792	19	59,3	16	1219	—	1449	402	294
225	450	350H7	24	60	400	6	—	11	124	—	807	19	64,4	18	1262	—	1514	466	368

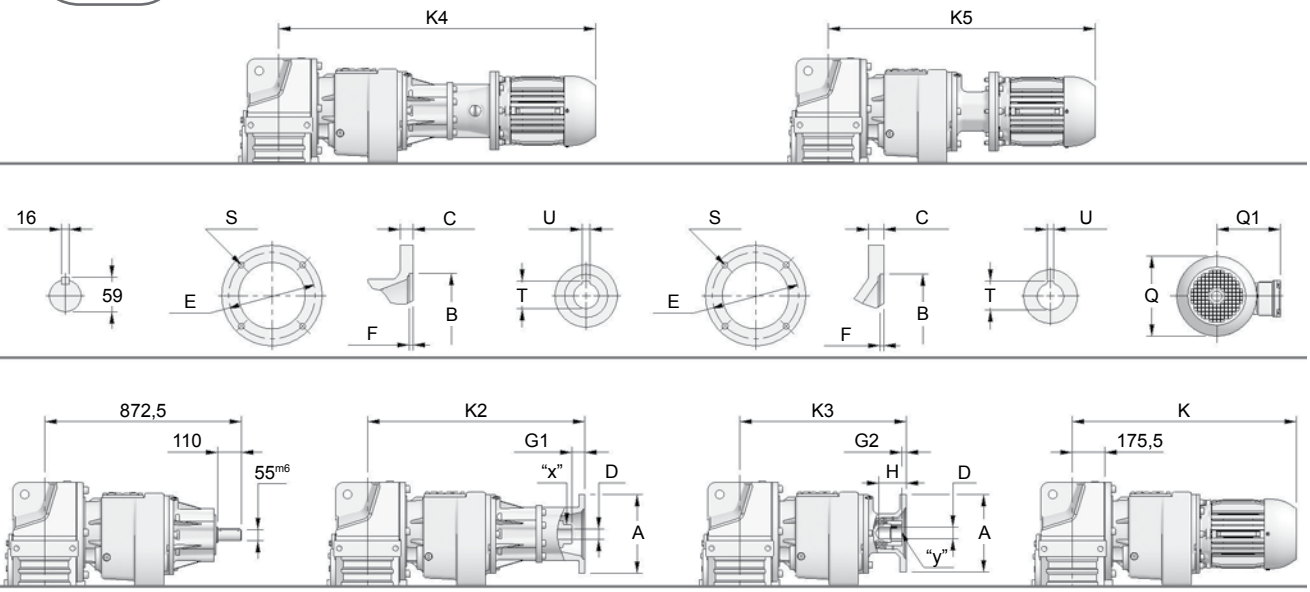
• Dimensões em mm

Fixação por pés - N

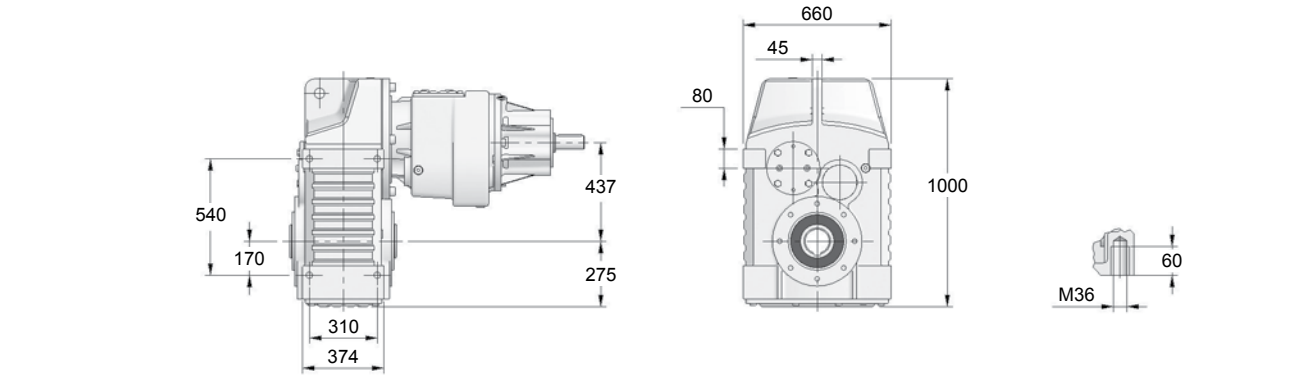
Duplex (4 estágios)

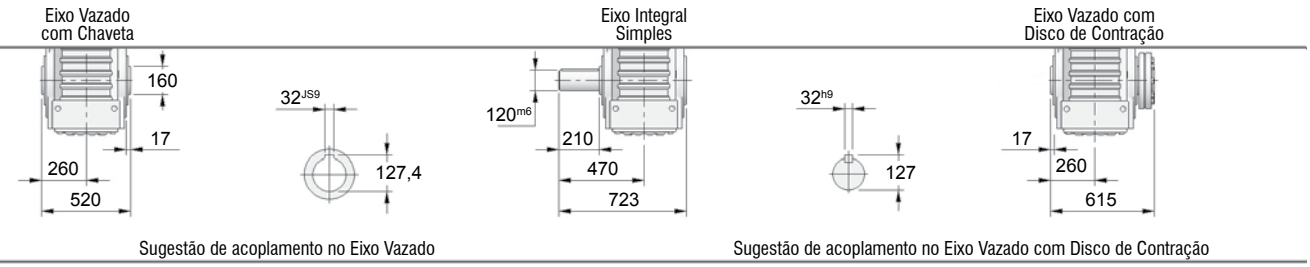
Tamanho **68-62**

Tipos de Entrada



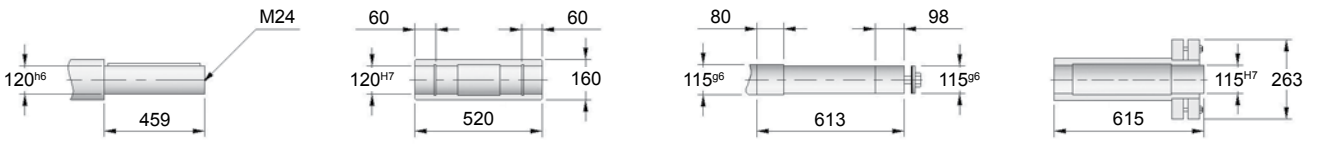
Tipos de Saída





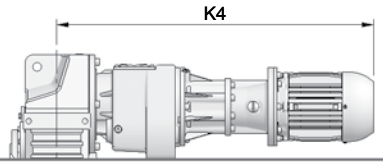
Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração

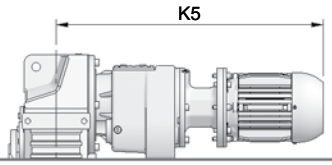


Carcaça	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
	Flange Lanterna / KTR														Motor Elétrico				
100	250	180H7	16	28	215	5	20	1	63	937,5	697,5	15	31,3	8	947,5	1253,5	1013,5	198	160
112	250	180H7	16	28	215	5	20	1	63	937,5	697,5	15	31,3	8	963,5	1270,5	1030,5	235	180
132S	300	230H7	17	38	265	5	30	1	83	957,5	752,5	15	41,3	10	1046,5	1329,5	1124,5	274	207
132M	300	230H7	17	38	265	5	30	1	83	957,5	752,5	15	41,3	10	1084,5	1367,5	1162,5	274	207
160M	350	250H7	24	42	300	6	40	1	112	987,5	800,5	19	45,3	12	1097,5	1475,5	1288,5	317	250
160L	350	250H7	24	42	300	6	40	1	112	987,5	800,5	19	45,3	12	1141,5	1519,5	1332,5	317	250
180M	350	250H7	24	48	300	6	40	1	113	987,5	800,5	19	51,8	14	1171,5	1541,5	1354,5	360	270
200M	400	300H7	24	55	350	6	30	1	114	987,5	845,5	19	59,3	16	1134,5	1606,5	1464,5	402	294
200L	400	300H7	24	55	350	6	30	1	114	987,5	845,5	19	59,3	16	1272,5	1644,5	1502,5	402	294
225	450	350H7	24	60	400	6	60	11	124	1017,5	860,5	19	64,4	18	1321,5	1724,5	1567,5	466	368
250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1397,5	—	—	491	368
280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1509,5	—	—	578	463

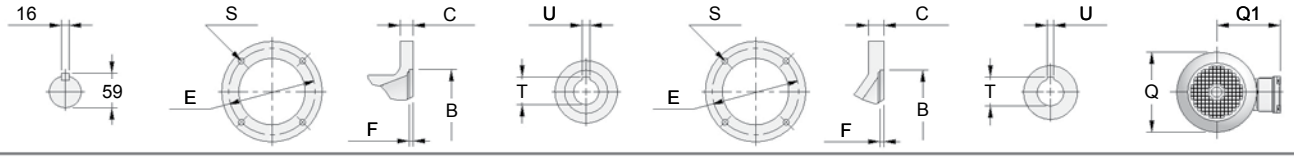
• Dimensões em mm



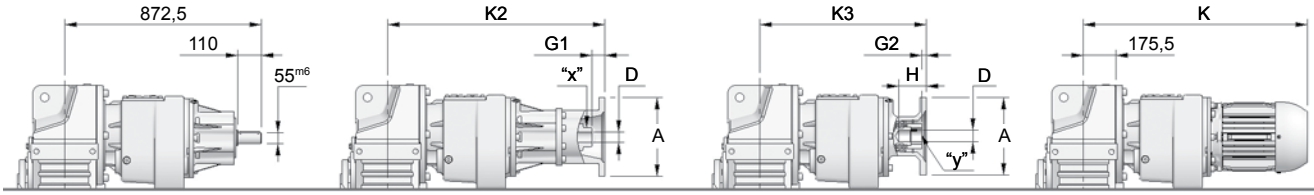
Flange Lanterna com Motor



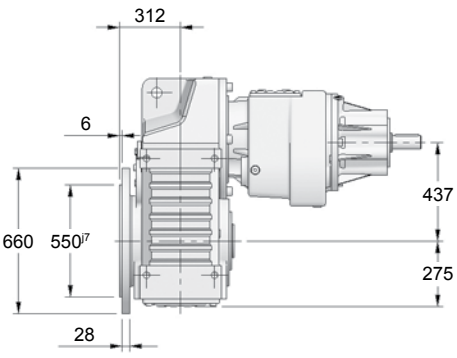
Flange KTR com Motor

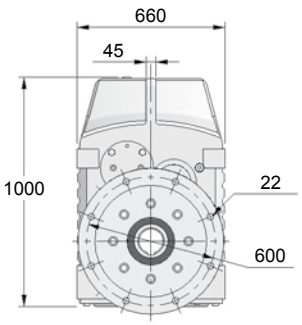


Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor

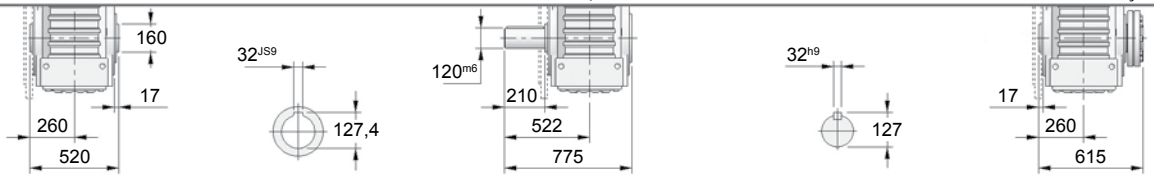


Mancal | Flange Lanterna | Flange KTR | Motor

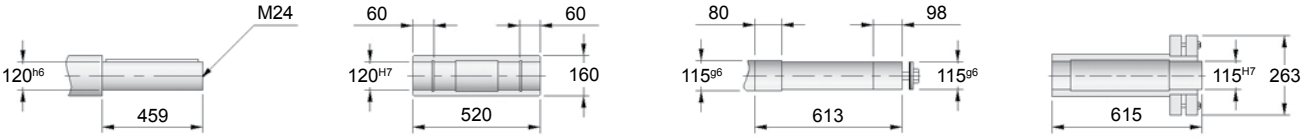




Eixo Vazado com Chaveta | Eixo Integral Simples | Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado | Sugestão de acoplamento no Eixo Vazado com Disco de Contração



Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
100	250	180H7	16	28	215	5	20	1	63	937,5	697,5	15	31,3	8	947,5	1253,5	1013,5	198	160
112	250	180H7	16	28	215	5	20	1	63	937,5	697,5	15	31,3	8	963,5	1270,5	1030,5	235	180
132S	300	230H7	17	38	265	5	30	1	83	957,5	752,5	15	41,3	10	1046,5	1329,5	1124,5	274	207
132M	300	230H7	17	38	265	5	30	1	83	957,5	752,5	15	41,3	10	1084,5	1367,5	1162,5	274	207
160M	350	250H7	24	42	300	6	40	1	112	987,5	800,5	19	45,3	12	1097,5	1475,5	1288,5	317	250
160L	350	250H7	24	42	300	6	40	1	112	987,5	800,5	19	45,3	12	1141,5	1519,5	1332,5	317	250
180M	350	250H7	24	48	300	6	40	1	113	987,5	800,5	19	51,8	14	1171,5	1541,5	1354,5	360	270
200M	400	300H7	24	55	350	6	30	1	114	987,5	845,5	19	59,3	16	1134,5	1606,5	1464,5	402	294
200L	400	300H7	24	55	350	6	30	1	114	987,5	845,5	19	59,3	16	1272,5	1644,5	1502,5	402	294
225	450	350H7	24	60	400	6	60	11	124	1017,5	860,5	19	64,4	18	1321,5	1724,5	1567,5	466	368
250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1397,5	—	—	491	368
280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1509,5	—	—	578	463

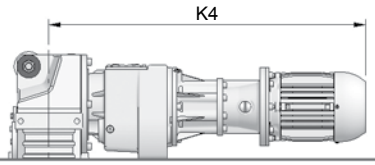
• Dimensões em mm

Fixação por braço de torção - B

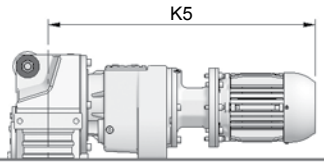
Duplex (4 estágios)

Tamanho **68-62**

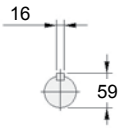
Tipos de Entrada



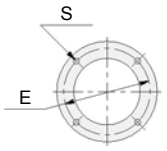
Flange Lanterna com Motor



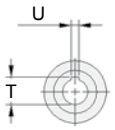
Flange KTR com Motor



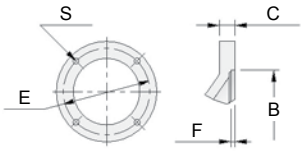
Eixo de Entrada



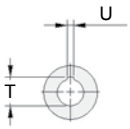
Detalhes Flange Lanterna



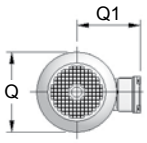
Detalhe "x"



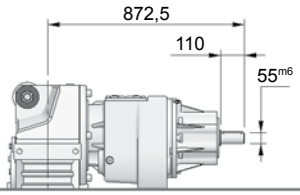
Detalhes Flange KTR



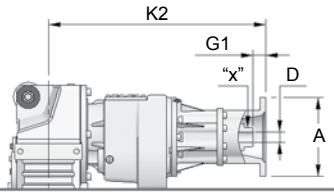
Detalhe "y"



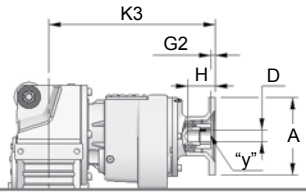
Frente do Motor



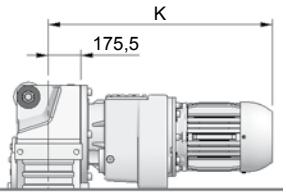
Mancal



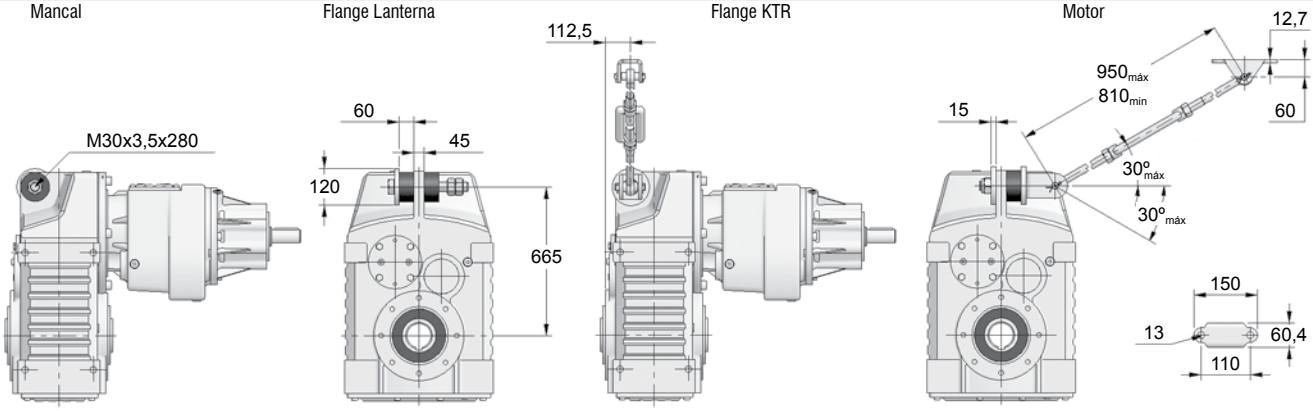
Flange Lanterna



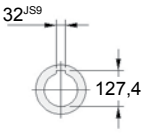
Flange KTR



Motor

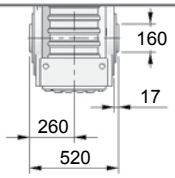


Tipos de Saída

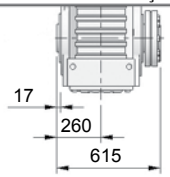


Sugestão de acoplamento no Eixo Vazado

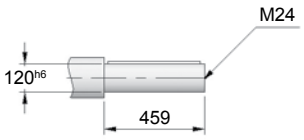
Eixo Vazado com Chaveta

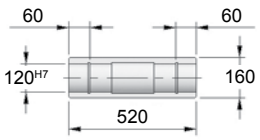


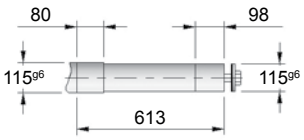
Eixo Vazado com Disco de Contração

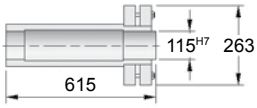


Sugestão de acoplamento no Eixo Vazado com Disco de Contração



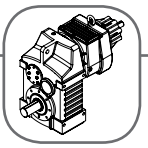


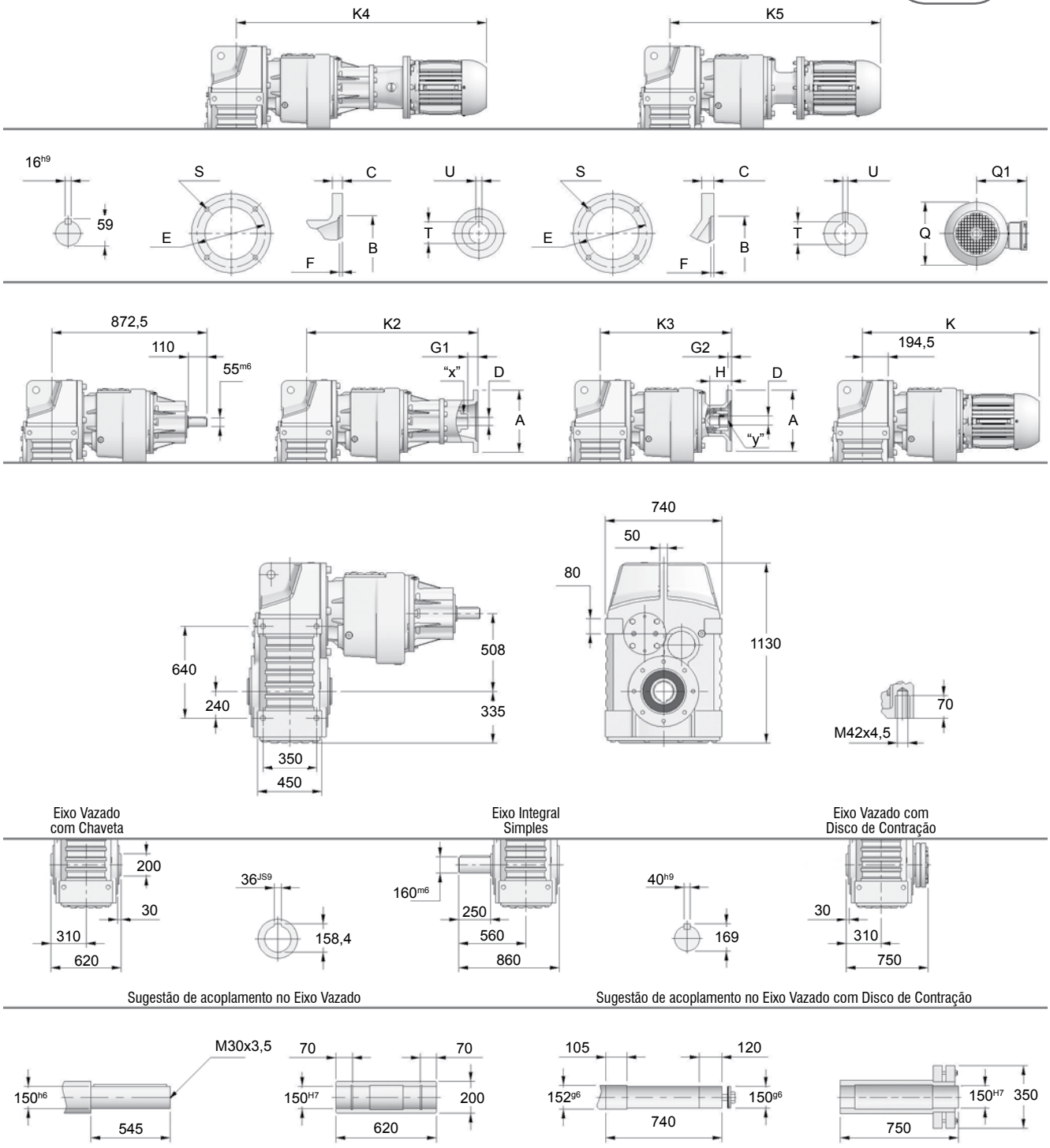




	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
100	250	180H7	16	28	215	5	20	1	63	937,5	697,5	15	31,3	8	947,5	1253,5	1013,5	198	160
112	250	180H7	16	28	215	5	20	1	63	937,5	697,5	15	31,3	8	963,5	1270,5	1030,5	235	180
132S	300	230H7	17	38	265	5	30	1	83	957,5	752,5	15	41,3	10	1046,5	1329,5	1124,5	274	207
132M	300	230H7	17	38	265	5	30	1	83	957,5	752,5	15	41,3	10	1084,5	1367,5	1162,5	274	207
160M	350	250H7	24	42	300	6	40	1	112	987,5	800,5	19	45,3	12	1097,5	1475,5	1288,5	317	250
160L	350	250H7	24	42	300	6	40	1	112	987,5	800,5	19	45,3	12	1141,5	1519,5	1332,5	317	250
180M	350	250H7	24	48	300	6	40	1	113	987,5	800,5	19	51,8	14	1171,5	1541,5	1354,5	360	270
200M	400	300H7	24	55	350	6	30	1	114	987,5	845,5	19	59,3	16	1134,5	1606,5	1464,5	402	294
200L	400	300H7	24	55	350	6	30	1	114	987,5	845,5	19	59,3	16	1272,5	1644,5	1502,5	402	294
225	450	350H7	24	60	400	6	60	11	124	1017,5	860,5	19	64,4	18	1321,5	1724,5	1567,5	466	368
250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1397,5	—	—	491	368
280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1509,5	—	—	578	463

• Dimensões em mm

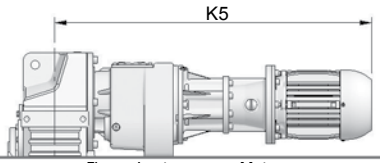




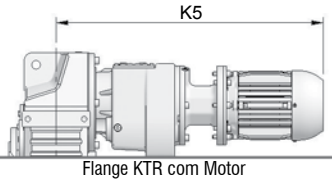
Carcaça	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
	Flange Lanterna / KTR														Motor Elétrico				
100	250	180H7	16	28	215	5	20	1	63	959,5	719,5	15	31,3	8	969,5	1275,5	1035,5	198	160
112	250	180H7	16	28	215	5	20	1	63	959,5	719,5	15	31,3	8	994,5	1292,5	1052,5	235	180
132S	300	230H7	17	38	265	5	30	1	83	979,5	774,5	15	41,3	10	1064,5	13851,5	1146,5	274	207
132M	300	230H7	17	38	265	5	30	1	83	979,5	774,5	15	41,3	10	1102,5	1389,5	1184,5	274	207
160M	350	250H7	24	42	300	6	40	1	112	1009,5	822,5	19	45,3	12	1119,5	1497,5	1310,5	317	250
160L	350	250H7	24	42	300	6	40	1	112	1009,5	822,5	19	45,3	12	1163,5	1541,5	1354,5	317	250
180M	350	250H7	24	48	300	6	40	1	113	1009,5	822,5	19	51,8	14	1193,5	1563,5	1376,5	360	270
180L	350	250H7	24	48	300	6	40	1	113	1009,5	822,5	19	51,8	14	1231,5	1601,5	1414,5	360	270
200M	400	300H7	24	55	350	6	30	1	114	1009,5	867,5	19	59,3	16	1256,5	1628,5	1486,5	402	294
200L	400	300H7	24	55	350	6	30	1	114	987,5	845,5	19	59,3	16	1294,5	1666,5	1524,5	402	294
225	450	350H7	24	60	400	6	60	11	124	1017,5	860,5	19	64,4	18	1343,5	1746,5	1589,5	466	368
250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1419,5	—	—	491	368
280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1544,5	—	—	578	463

• Dimensões em mm

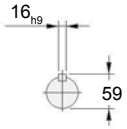
Tipos de Entrada



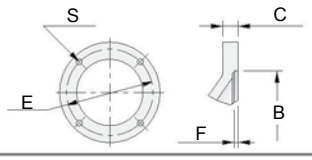
Flange Lanterna com Motor



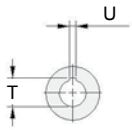
Flange KTR com Motor



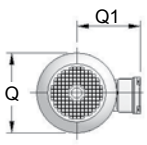
Eixo de Entrada



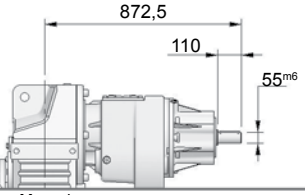
Detalhes Flange Lanterna e Flange KTR



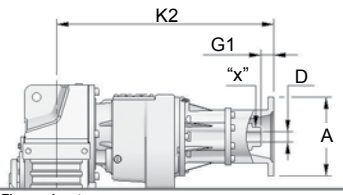
Detalhe “x” e “y”



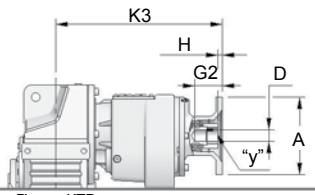
Frente do Motor



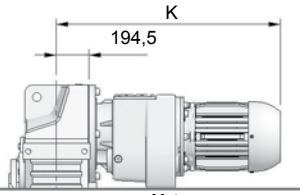
Mancal



Flange Lanterna

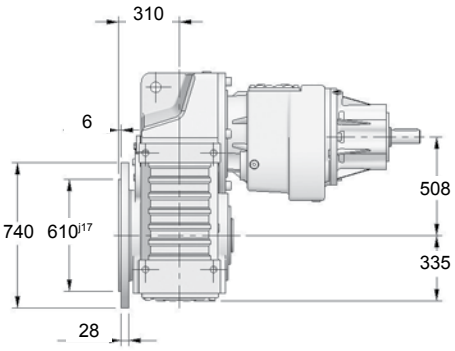


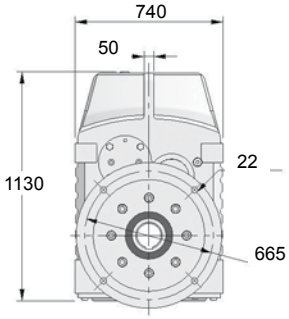
Flange KTR



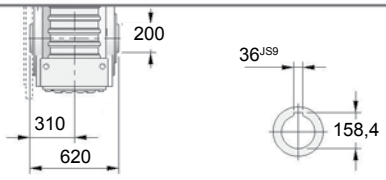
Motor

Tipos de Saída

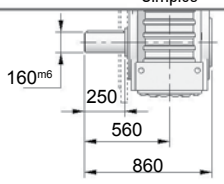




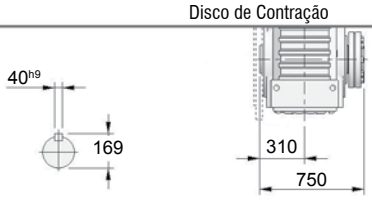
Eixo Vazado com Chaveta



Eixo Integral Simples

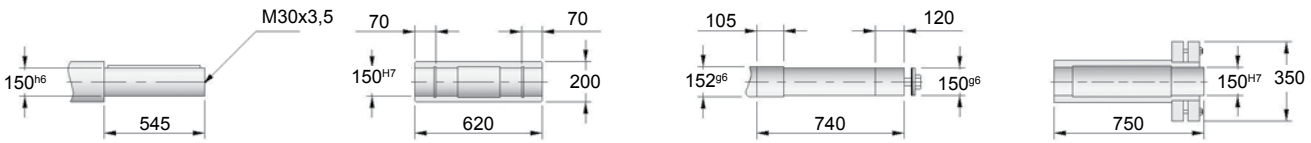


Eixo Vazado com Disco de Contração



Sugestão de acoplamento no Eixo Vazado

Sugestão de acoplamento no Eixo Vazado com Disco de Contração

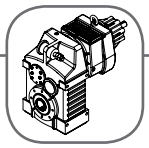


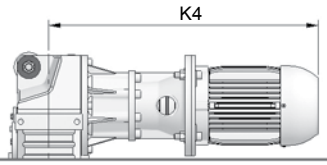
Carcaça	Flange Lanterna / KTR														Motor Elétrico				
	A	B	C	D	E	F	G1	G2	H	K2	K3	S	T	U	K	K4	K5	Q	Q1
100	250	180H7	16	28	215	5	20	1	63	959,5	719,5	15	31,3	8	969,5	1275,5	1035,5	198	160
112	250	180H7	16	28	215	5	20	1	63	959,5	719,5	15	31,3	8	994,5	1292,5	1052,5	235	180
132S	300	230H7	17	38	265	5	30	1	83	979,5	774,5	15	41,3	10	1064,5	13851,5	1146,5	274	207
132M	300	230H7	17	38	265	5	30	1	83	979,5	774,5	15	41,3	10	1102,5	1389,5	1184,5	274	207
160M	350	250H7	24	42	300	6	40	1	112	1009,5	822,5	19	45,3	12	1119,5	1497,5	1310,5	317	250
160L	350	250H7	24	42	300	6	40	1	112	1009,5	822,5	19	45,3	12	1163,5	1541,5	1354,5	317	250
180M	350	250H7	24	48	300	6	40	1	113	1009,5	822,5	19	51,8	14	1193,5	1563,5	1376,5	360	270
180L	350	250H7	24	48	300	6	40	1	113	1009,5	822,5	19	51,8	14	1231,5	1601,5	1414,5	360	270
200M	400	300H7	24	55	350	6	30	1	114	1009,5	867,5	19	59,3	16	1256,5	1628,5	1486,5	402	294
200L	400	300H7	24	55	350	6	30	1	114	987,5	845,5	19	59,3	16	1294,5	1666,5	1524,5	402	294
225	450	350H7	24	60	400	6	60	11	124	1017,5	860,5	19	64,4	18	1343,5	1746,5	1589,5	466	368
250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1419,5	—	—	491	368
280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1544,5	—	—	578	463

• Dimensões em mm

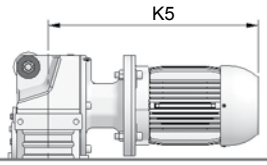
Fixação por braço de torção - B

Duplex

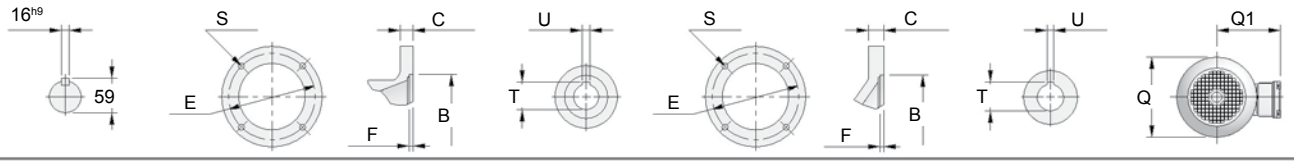




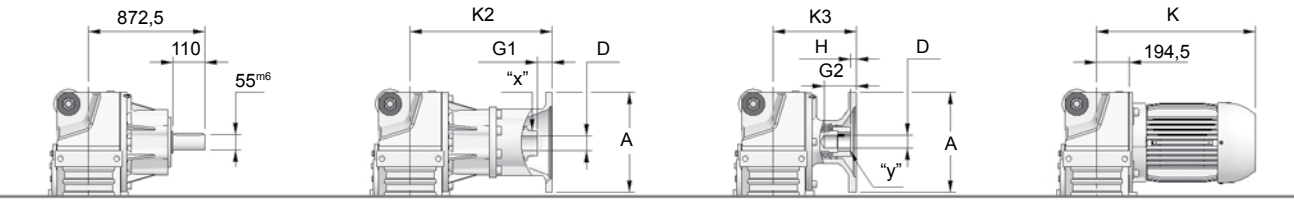
Flange Lanterna com Motor



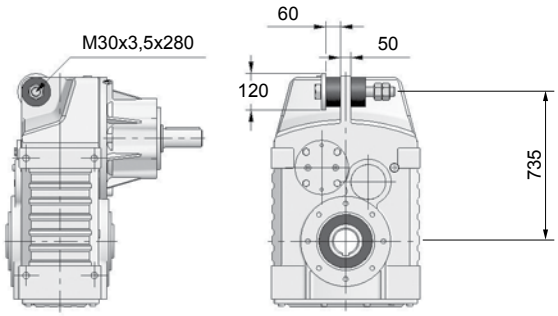
Flange KTR com Motor

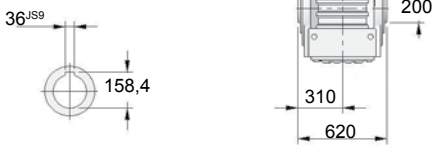


Eixo de Entrada | Detalhes Flange Lanterna | Detalhe "x" | Detalhes Flange KTR | Detalhe "y" | Frente do Motor

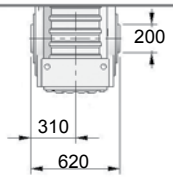


Mancal | Flange Lanterna | Flange KTR | Motor

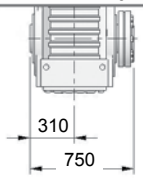




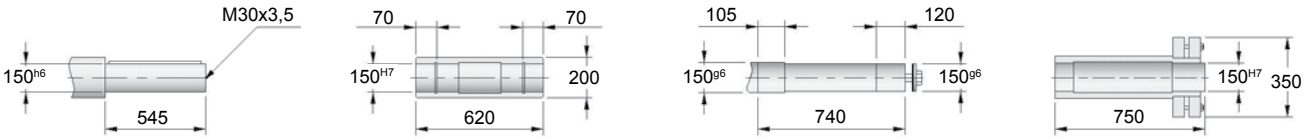
Eixo Vazado com Chaveta



Eixo Vazado com Disco de Contração

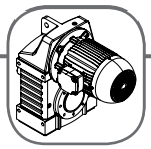


Sugestão de acoplamento no Eixo Vazado | Sugestão de acoplamento no Eixo Vazado com Disco de Contração



	Flange Lanterna / KTR														Motor Elétrico				
Carcaça	**A**	**B**	**C**	**D**	**E**	**F**	**G1**	**G2**	**H**	**K2**	**K3**	**S**	**T**	**U**	**K**	**K4**	**K5**	**Q**	**Q1**
100	250	180H7	16	28	215	5	20	1	63	959,5	719,5	15	31,3	8	969,5	1275,5	1035,5	198	160
112	250	180H7	16	28	215	5	20	1	63	959,5	719,5	15	31,3	8	994,5	1292,5	1052,5	235	180
132S	300	230H7	17	38	265	5	30	1	83	979,5	774,5	15	41,3	10	1064,5	13851,5	1146,5	274	207
132M	300	230H7	17	38	265	5	30	1	83	979,5	774,5	15	41,3	10	1102,5	1389,5	1184,5	274	207
160M	350	250H7	24	42	300	6	40	1	112	1009,5	822,5	19	45,3	12	1119,5	1497,5	1310,5	317	250
160L	350	250H7	24	42	300	6	40	1	112	1009,5	822,5	19	45,3	12	1163,5	1541,5	1354,5	317	250
180M	350	250H7	24	48	300	6	40	1	113	1009,5	822,5	19	51,8	14	1193,5	1563,5	1376,5	360	270
180L	350	250H7	24	48	300	6	40	1	113	1009,5	822,5	19	51,8	14	1231,5	1601,5	1414,5	360	270
200M	400	300H7	24	55	350	6	30	1	114	1009,5	867,5	19	59,3	16	1256,5	1628,5	1486,5	402	294
200L	400	300H7	24	55	350	6	30	1	114	987,5	845,5	19	59,3	16	1294,5	1666,5	1524,5	402	294
225	450	350H7	24	60	400	6	60	11	124	1017,5	860,5	19	64,4	18	1343,5	1746,5	1589,5	466	368
250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1419,5	—	—	491	368
280	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1544,5	—	—	578	463

• Dimensões em mm



Motor Weg Tipo 1

Redutor	52	54,55	56	58	60	62	64	66	68	72
Carcaças										
63										
71										
80										
90										
100										
112										
132										
160										
180										
200										
225										
250										
280										
315										

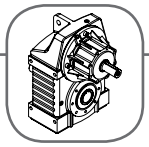
Flange Compacta KTR

Redutor	52	54,55	56	58	60	62	64	66	68	72
Carcaças										
63										
71										
80										
90										
100										
112										
132										
160										
180										
200										
225										
250										
280										

Flange Lanterna

Redutor	52	54,55	56	58	60	62	64	66	68
Carcaças									
63									
71									
80									
90									
100									
112									
132									
160									
180									
200									
225									

* Antes de escolher um redutor com flange, verificar a tabela acima justamente com os limites mencionados na coluna carcaças, nas páginas da caracteristicas técnicas (redutores).



1. Controle de recebimento

Recomendamos que, quando do recebimento de nosso Motorredutor Vertimax, seja verificado se o produto corresponde ao especificado e seu estado. Caso algum dano tenha sido percebido no produto, solicitamos a imediata comunicação do fato à transportadora e à WEG-CESTARI.

2. Armazenamento

O local de armazenamento deverá ser seco, isento de gases, fungos, agentes corrosivos e excesso de poeira. Quanto a forma de armazenamento o produto deverá, preferencialmente, ser guardado na posição de trabalho.

3. Instalação

As pontas dos eixos e superfícies de fixação são protegidas por uma fina camada de verniz anticorrosivo. Este verniz deverá ser removido, quando da instalação, utilizando-se solventes normais.

ATENÇÃO: O solvente não poderá atingir os retentores e jamais use lixa para remoção do verniz.

O Motorredutor deverá ser instalado na posição de trabalho, sobre uma base plana e rígida, permitindo fácil acesso aos dispositivos de lubrificação. Na conexão entre equipamento e Motorredutor é importante um alinhamento preciso.
Quando for acoplada polia, engrenagem ou roda dentada no eixo do Motorredutor, será necessário observar o paralelismo entre os eixos envolvidos, sendo aconselhável que o ponto de aplicação da carga esteja o mais próximo possível da carcaça do redutor.
A montagem do elemento de transmissão deverá ser feita com todo cuidado para evitar danos ao Motorredutor (se necessário utilize o furo de centro rosqueado, na ponta do eixo do redutor, para o travamento axial do elemento de transmissão).
Deverá ser instalado de tal maneira que a carcaça do redutor quando em funcionamento seja pressionada contra a base.

4. Operação

Os Motorredutores Vertimax são fornecidos prontos para operação. Contudo, antes de iniciar a operação é conveniente verificar o nível do lubrificante. Para evitar vazamento de lubrificante durante o transporte é utilizado um bujão normal, que deverá ser substituído pelo bujão com respiro antes do início de operação.

5. Conexão elétrica

A perfeita ligação à rede é fundamental para o bom funcionamento do motor elétrico.
Ao instalar o motor elétrico devem ser observadas as tensões, frequências normais, ambiente (temperatura, ambiente agressivo), altitude e bitola correta dos fios de alimentação.
O esquema de ligação que consta na plaqueta de identificação dos motores deve ser seguido rigorosamente; caso seja necessária a alteração do sentido de rotação, as fases de ligação deverão ser invertidas.
Para maior proteção do usuário, o motor, assim como todo equipamento elétrico, deve possuir uma conexão que o ligue à terra.

6. Manutenção

Os Motorredutores Vertimax requerem um mínimo de manutenção. Ela é limitada ao controle regular do lubrificante, que deverá ser trocado conforme a tabela 09 - Tempo de Troca de Óleo, conforme o óleo que está sendo utilizado, sendo que, para condições normais, o óleo fornecido é o Óleo mineral CLP. Nas primeiras 500 horas de operação, recomenda-se a verificação da qualidade do óleo e, se houver contaminação por partículas, recomenda-se a troca do mesmo e o acompanhamento do redutor.
A temperatura de operação é a temperatura do óleo lubrificante após o período de estabilização da temperatura em plena carga (aproximadamente 3 horas de funcionamento contínuo), sendo que a temperatura externa da carcaça é aproximadamente 15°C menor que a temperatura de operação (temperatura do óleo).
A temperatura de operação para os redutores WEG-CESTARI é de 18°C (mínima) e 90°C (máxima), em condições normais de funcionamento.
Para trocar o óleo é necessário remover o bujão de dreno e o respiro, devendo o óleo ser drenado ainda quente, para facilitar o escoamento e a limpeza. Recomenda-se lavar o redutor com óleo da mesma marca e tipo, porém com viscosidade menor, e verificar a limpeza de funis e bujões utilizados.
Em caso de condições desfavoráveis de ambiente (alta umidade, agressividade, poeira), recomenda-se reduzir o tempo de troca recomendado, devendo ser consultada a WEG-CESTARI para orientação específica.

ATENÇÃO: Não misture óleos de diferentes tipos ou de diferentes marcas.

Em determinadas execuções existem mancais que são lubrificados a graxa. Tais pontos possuem lubrificação permanente ou então niples de relubrificação.

7. Reparos

Os reparos e eventuais desmontagens deverão ser realizados por pessoas qualificadas. Caso isto não seja possível, a unidade deverá ser enviada a WEG-CESTARI para execução do serviço.
Quando for necessária a substituição de algum componente, o cliente deverá contactar a WEG-CESTARI, fornecendo o número de série do Motorredutor (ver plaqueta de identificação), através do qual poderemos identificar mais rapidamente o componente desejado.

8. Lubrificação

A tabela 10 fornece os tipos de lubrificantes recomendados e respectivos fabricantes. A quantidade de lubrificante indicado na plaqueta de identificação e na tabela 11, serve como valor de referência. O volume exato é determinado pelo bujão de nível de óleo.

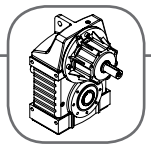


Tabela 9

Tempo de troca do óleo - É definido em função da temperatura de operação - ver tabela abaixo.

Temperatura de operação	Óleo mineral CLP	Óleo sintético CLP HC Hidrocarbons	Óleo sintético CLP PG Polyglycol
80° C	5000 horas	15000 horas	25000 horas
85° C	3500 horas	10000 horas	18000 horas
90° C	2500 horas	7500 horas	13000 horas
95° C	2000 horas	6000 horas	8500 horas
100° C	-- --	3800 horas	6000 horas
105° C	-- --	2500 horas	4000 horas
110° C	-- --	2000 horas	3000 horas

Tabela 10

Óleos lubrificantes

	Óleo para redutores			
Temperatura ambiente	**-10°C + 40°C**	**-10°C + 40°C**	**+40ºC +80ºC**	**-40ºC +10ºC**
Grau de viscosidade ISO VG DIN 51519	**ISO VG 220 CLP* DIN 51517-3**	**ISO VG 220 CLP HC**	**ISO VG 220 CLP PG**	**ISO VG 32 CLP HC**
Fabricantes				
Castrol	Optigear BM-220	—	—	—
Repsol / YPF	transmisión EP-220	—	—	—
Kluber	Kluberoil GEM 1-220N	Klubersynth EG 4-220	Klubersynth GH 6-220	Kluber-Summit HySyn FG-32
Mobil	Mobilgear 630	Mobil SHC 630	Mobil Glygolyle 30	Mobil SHC 624
Petrobras	Lubrax Industrial EGP-220-PS	Lubras Syntesis GEAR-0220	—	—
Shell	Omala 220	Shell Omala 220 HD	Shell Tivela WB	—
Texaco	Meropa 220	Pinnacle EP 220	Synlube CLP 220	Cetus PAO 46
Material do retentor	Nitrilica NBR	NBR / FPM	Viton FPM	Nitrilica NBR

* Óleo padrão

Óleo lubrificante para a indústria alimentícia e farmacêutica com requisitos do registro NSF H1 - sob consulta.

Tabela 11

Quantidade de lubrificante em litros dos redutores simples e redutores do 2º estágio dos redutores Duplex

Posição de trabalho	Tamanho do redutor									
	52	**54**	**55**	**56**	**58**	**60**	**62**	**64**	**66**	**68**
P1	1,2	1,5	2	3	6,5	11	19	34	39	68
P2	1,6	2	2,5	3,8	8	12	24	42	58	103
P3	1,1	1,2	1,8	2,5	4,3	7	12	20	34	62
P4	1,6	2	2,5	3,8	8	12	24	42	58	104
P5	1,5	2	3	4	8	13	25	45	61	85
P6	1,5	2	3	4	8	13	25	45	61	85

Tabela 12

Quantidade de lubrificante em litros dos redutores do 1º estágio dos redutores Duplex

Posição de trabalho	Tamanho do redutor											
	52	**54**	**55**	**56**	**58**	**60**	**62**	**64**	**66/58**	**66/56**	**68/62**	**68/60**
P1	0,3	0,3	0,3	0,3	0,7	0,7	0,7	0,7	0,8	0,7	1,5	0,8
P2	1	1	1	1	2,2	2,2	2,2	2,2	2,3	2,2	3,9	2,3
P3	0,6	0,6	0,6	0,6	1,3	1,3	1,3	1,3	1,4	1,3	2,4	1,4
P4	1	1	1	1	2,2	2,2	2,2	2,2	2,3	2,2	3,8	2,3
P5	0,5	0,5	0,5	0,5	1,8	1,8	1,8	1,8	1,9	1,8	2,4	1,9
P6	0,7	0,7	0,7	0,7	1,7	1,7	1,7	1,7	1,8	1,7	2,6	1,8

* Redutor tamanho 72, consultar WEG-CESTARI.

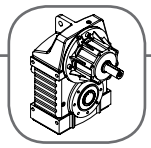


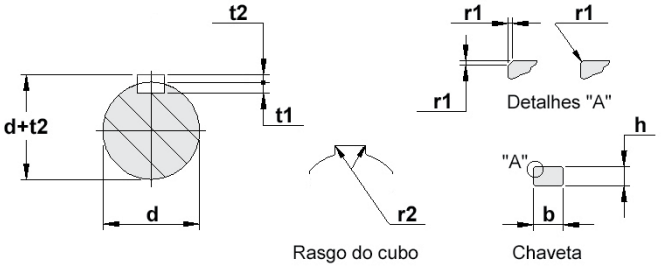
Tabela 13 Unidades - Grandezas e símbolos

Grandezas Físicas	Símbolo	Unidade SI	Abreviatura da unidade
Tempo	t	Segundo	s
Espaço	s	Metro	m
Velocidade Escalar	v	Metro por segundo	m/s
Aceleração Escalar	α	Metro por segundo ao quadrado	m/s^2
Massa	m	Quilograma	kg
Força	F	Newton	N
Trabalho	τ	Joule	J
Energia	E	Joule	J
Potência	Pot	Watt	W
Impulso	I	Newton x segundo	N . s
Quantidade de movimento	Q	Quilograma x metro por segundo	kg . m/s
Pressão	P	Newton por metro quadrado ou pascal	N/m^2 ou Pa
Densidade	d	Quilograma por metro cúbico	kg/m^3

Tabela 14 Conversões de unidades

Multiplique	por	para obter
Atmosfera física (atm) 760 mmHg	101.325	Pa
Bar	100.000	Pa
Cavalo vapor (CV)	0,7355	KW
Dina (dyn)	0,00001	N
Pé (ft)	12	in
Pé (ft)	0,3048	m
Galão (U.S. liquid) (gal)	3,785412	dm^3
Galão (U.K. liquid) (Imp. gal)	4,546087	dm^3
Horsepower (HP)	0,7457	KW
Polegada (in)	0,0254	m
Kilograma força Kgf)	9,80665	N
Kilopond (Kp)	9,80665	N
Kilopound (Kip)	4448,222	N
Metros cúbicos (m3)	1.000	litros (l)
Milha, U.S. statute	1609,343	m
Nó (U.S. Knot)	0,514791	m/s
Onça (avoirdupois) (oz)	28,4131	g
Onça (troy) (oz tr)	31,10348	g
Poise (p)	0,1	$N , s/m^2$
Pound (avoirdupois) (lb)	0,4536	kg
Pound (avoirdupois) (lb)	16	onca (avdp)
Libra-força por poleg. quadr. (psi)	0,070306	kgf/cm^2
Libra-força por poleg. quadr. (psi)	6894,757	Pa
RPM	0,1047	radianos / s
Stoke (St)	0,0001	m^2 / s
Tonelada (t)	1.000	kg
Torr	133,322	Pa
Jarda (yd)	3	ft
Jarda (yd)	0,9144	m

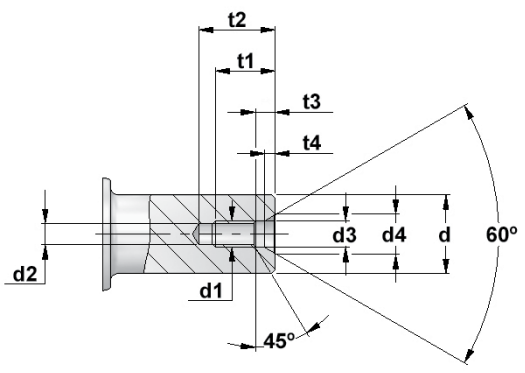
Tabela 15 Chavetas plana - Norma DIN 6885 - Folha 1



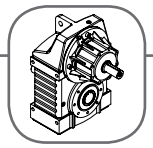
Tolerâncias recomendadas		
Rasgo da chaveta no cubo	Maior pressão	**P9**
	Menor pressão	**JS9**
Rasgo de chaveta no eixo	Maior pressão	**P9**
	Menor pressão	**N9**
Chaveta plana	Altura	**h11**
	Largura	**h9**

Diâmetro do eixo	Largura b	Altura h	Profundidade do rasgo		Tolerância para t1 e t2	Cantos do rasgo do cubo r2		Cantos da chaveta r1	
			Eixo t1	Cubo t2		mínimo	máximo	mínimo	máximo
> 8 a 10	3	3	1,8	1,4	+ 0,1	0,08	0,16	0,16	0,25
> 10 a 12	4	4	2,5	1,8	+ 0,1	0,08	0,16	0,16	0,25
> 12 a 17	5	5	3	2,3	+ 0,1	0,16	0,25	0,25	0,40
>17 a 22	6	6	3,5	2,8	+ 0,1	0,16	0,25	0,25	0,40
> 22 a 30	8	7	4	3,3	+ 0,2	0,16	0,25	0,25	0,40
> 30 a 38	10	8	5	3,3	+ 0,2	0,25	0,40	0,40	0,60
> 38 a 44	12	8	5	3,3	+ 0,2	0,25	0,40	0,40	0,60
> 44 a 50	14	9	5,5	3,8	+ 0,2	0,25	0,40	0,40	0,60
> 50 a 58	16	10	6	4,3	+ 0,2	0,25	0,40	0,40	0,60
> 58 a 65	18	11	7	4,4	+ 0,2	0,25	0,40	0,40	0,60
> 65 a 75	20	12	7,5	4,9	+ 0,2	0,40	0,60	0,60	0,80
> 75 a 85	22	14	9	5,4	+ 0,2	0,40	0,60	0,60	0,80
> 85 a 95	25	14	9	5,4	+ 0,2	0,40	0,60	0,60	0,80
> 95 a 110	28	16	10	6,4	+ 0,2	0,40	0,60	0,60	0,80
> 110 a 130	32	18	11	7,4	+ 0,2	0,40	0,60	0,60	0,80
> 130 a 150	36	20	12	8,4	+ 0,3	0,70	1,00	1,00	1,20
> 150 a 170	40	22	13	9,4	+ 0,3	0,70	1,00	1,00	1,20
> 170 a 200	45	25	15	10,4	+ 0,3	0,70	1,00	1,00	1,20
> 200 a 230	50	28	17	11,4	+ 0,3	0,70	1,00	1,00	1,20
> 230 a 260	56	32	20	12,4	+ 0,3	1,20	1,60	1,60	2,00
> 260 a 290	63	32	20	12,4	+ 0,3	1,20	1,60	1,60	2,00
> 290 a 330	70	36	22	14,4	+ 0,3	1,20	1,60	1,60	2,00
> 330 a 380	80	40	25	15,4	+ 0,3	2,00	2,50	2,50	3,00
> 380 a 440	90	45	28	17,4	+ 0,3	2,00	2,50	2,50	3,00
> 440 a 500	100	50	31	19,5	+ 0,3	2,00	2,50	2,50	3,00

Tabela 16 Furos de centro 60º com rosca métrica - Norma DIN 332 - Folha 2 - Forma B



Eixos d	Diâmetro				Profundidade			
	d1	d2	d3	d4	t1	t2	t3	~t4
> 7 a 10	M3	2,5	3,2	5,3	9	13	2,6	1,8
> 10 a 13	M4	3,3	4,3	6,7	10	14	3,2	2,1
> 13 a 16	M5	4,2	5,3	8,1	12,5	17	4	2,4
> 16 a 21	M6	5	6,4	9,6	16	21	5	2,8
> 21 a 24	M8	6,8	8,4	12,2	19	25	6	3,3
> 24 a 30	M10	8,5	10,5	14,9	22	30	7,5	3,8
> 30 a 38	M12	10,2	13	18,1	28	37,5	9,5	4,4
> 38 a 50	M16	14	17	23	36	45	12	5,2
> 50 a 85	M20	17,5	21	28,4	42	53	15	6,4
> 85 a 130	M24	21	25	34,2	50	63	18	8

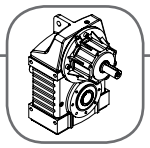


Furos - Afastamentos em μm (0,001 mm)

Dimensões do furo em mm	Campos de tolerância																								
	F7	F8	G6	G7	H6	H7	H8	H9	J6	J7	JS6	JS7	JS8	JS9	K6	K7	M6	M7	N6	N7	N8	N9	P6	P7	P8	P9
>3 até 6	+22	+28	+12	+16	+8	+12	+18	+30	+5	+6	+4	+6	+9	+15	+2	+3	-1	0	-5	-4	-2	0	-9	-8	-12	-12
	+10	+10	+4	+4	0	0	0	0	-3	-6	-4	-6	-9	-15	-6	-9	-9	-12	-13	-16	-20	-30	-17	-20	-30	-42
>6 até 10	+28	+35	+14	+20	+9	+15	+22	+36	+5	+8	+4,5	+7,5	+11	+18	+2	+5	-3	0	-7	-4	-3	0	-12	-9	-15	-15
	+13	+13	+5	+5	0	0	0	0	-4	-7	-4,5	-7,5	-11	-18	-7	-10	-12	-15	-16	-19	-25	-36	-21	-24	-37	-51
>10 até 18	+34	+43	+17	+24	+11	+18	+27	+43	+6	+10	+5,5	+9	+13,5	+21,5	+2	+6	-4	0	-9	-5	-3	0	-15	-11	-18	-18
	+16	+16	+6	+6	0	0	0	0	-5	-8	-5,5	-9	-13,5	-21,5	-9	-12	-15	-18	-20	-23	-30	-43	-26	-29	-45	-61
>18 até 30	+41	+53	+20	+28	+13	+21	+33	+52	+8	+12	+6,5	+10,5	+16,5	+26	+2	+6	-4	0	-11	-7	-3	0	-18	-14	-22	-22
	+20	+20	+7	+7	0	0	0	0	-5	-9	-6,5	-10,5	-16,5	-26	-11	-15	-17	-21	-24	-28	-36	-52	-31	-35	-55	-74
>30 até 50	+50	+64	+25	+34	+16	+25	+39	+62	+10	+14	+8	+12,5	+19,5	+31	+3	+7	-4	0	-12	-8	-3	0	-21	-17	-26	-26
	+25	+25	+9	+9	0	0	0	0	-6	-11	-8	-12,5	-19,5	-31	-13	-18	-20	-25	-28	-33	-42	-62	-37	-42	-65	-88
>50 até 80	+60	+76	+29	+40	+19	+30	+46	+74	+13	+18	+9,5	+15	+23	+37	+4	+9	-5	0	-14	-9	-4	0	-26	-21	-32	-32
	+30	+30	+10	+10	0	0	0	0	-6	-12	-9,5	-15	-23	-37	-15	-21	-24	-30	-33	-39	-50	-74	-45	-51	-78	-106
>80 até 120	+71	+90	+34	+47	+22	+35	+54	+87	+16	+22	+11	+17,5	+27	+43,5	+4	+10	-6	0	-16	-10	-4	0	-30	-24	-37	
	+36	+36	+12	+12	0	0	0	0	-6	-13	-11	-17,5	-27	-43,5	-18	-25	-28	-35	-38	-45	-58	-87	-52	-59	-91	
>120 até 180	+83	+106	+39	+54	+25	+40	+63	+100	+18	+26	+12,5	+20	+31,5	+50	+4	+12	-8	0	-20	-12	-4	0	-36	-28	-43	
	+43	+43	+14	+14	0	0	0	0	-7	-14	-12,5	-20	-31,5	-50	-21	-28	-33	-40	-45	-52	-67	-100	-61	-68	-106	
>180 até 250	+96	+122	+44	+61	+29	+46	+72	+115	+22	+30	+14,5	+23	+36	+57,5	+5	+13	-8	0	-22	-14	-5	0	-41	-33	-50	
	+50	+50	+15	+15	0	0	0	0	-7	-16	-14,5	-23	-36	-57,5	-24	-33	-37	-46	-51	-60	-77	-115	-70	-79	-122	
>250 até 315	+108	+137	+49	+69	+32	+52	+81	+130	+25	+36	+16	+26	+40,5	+65	+5	+16	-9	0	-25	-14	-5	0	-47	-36	-56	
	+56	+56	+17	+17	0	0	0	0	-7	-16	-16	-26	-40,5	-65	-27	-36	-41	-52	-57	-66	-86	-130	-79	-88	-137	

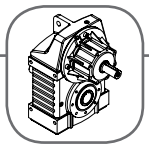
Eixos - Afastamentos em μm (0,001 mm)

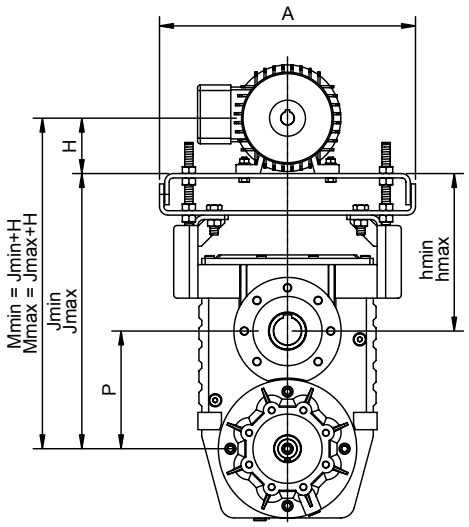
Dimensões do eixo em mm	Campos de tolerância																								
	f6	f7	g5	g6	h5	h6	h7	h8	h9	j5	j6	j7	js5	js6	js7	k5	k6	k7	m5	m6	m7	n5	n6	n7	p5	p6	p7
>3 até 6	-10	-10	-4	-4	0	0	0	0	0	+3	+6	+8	+2,5	+4	+6	+6	+9	+13	+9	+12	+16	+13	+16	+20	+17	+20	+24
	-18	-22	-9	-12	-5	-8	-12	-18	-30	-2	-2	-4	-2,5	-4	-6	+1	+1	+1	+4	+4	+4	+8	+8	+8	+12	+12	+12
>6 até 10	-13	-13	-5	-5	0	0	0	0	0	+4	+7	+10	+3	+4,5	+7,5	+7	+10	+16	+12	+15	+21	+16	+19	+25	+21	+24	+30
	-22	-28	-11	-14	-6	-9	-15	-22	-36	-2	-2	-5	-3	-4,5	-7,5	+1	+1	+1	+6	+6	+6	+10	+10	+10	+15	+15	+21
>10 até 18	-16	-16	-6	-6	0	0	0	0	0	+5	+8	+12	+4	+5,5	+9	+9	+12	+19	+15	+18	+25	+20	+23	+30	+26	+29	+36
	-27	-34	-14	-17	-8	-11	-18	-27	-43	-3	-3	-6	-4	-5,5	-9	+1	+1	+1	+7	+7	+7	+12	+12	+12	+18	+18	+18
>18 até 30	-20	-20	-7	-7	0	0	0	0	0	+5	+9	+13	+4,5	+6,5	+10,5	+11	+15	+23	+17	+21	+29	+24	+28	+36	+31	+35	+43
	-33	-41	-16	-20	-9	-13	-21	-33	-52	-4	-4	-8	-4,5	-6,5	-10,5	+2	+2	+2	+8	+8	+8	+15	+15	+15	+22	+22	+22
>30 até 50	-25	-25	-9	-9	0	0	0	0	0	+6	+11	+15	+5,5	+8	+12,5	+13	+18	+27	+20	+25	+34	+28	+33	+42	+37	+42	+51
	-41	-50	-20	-25	-11	-16	-25	-39	-62	-5	-5	-10	-5,5	-8	-12,5	+2	+2	+2	+9	+9	+9	+17	+17	+17	+26	+26	+26
>50 até 80	-30	-30	-10	-10	0	0	0	0	0	+6	+12	+18	+6,5	+9,5	+15	+15	+21	+32	+24	+30	+41	+33	+39	+50	+45	+51	+62
	-49	-60	-23	-29	-13	-19	-30	-46	-74	-7	-7	-12	-6,5	-9,5	-15	+2	+2	+2	+11	+11	+11	+20	+20	+20	+32	+32	+32
>80 até 120	-36	-36	-12	-12	0	0	0	0	0	+6	+13	+20	+7,5	+11	+17,5	+18	+25	+38	+28	+35	+48	+38	+45	+58	+52	+59	+72
	-58	-71	-27	-34	-15	-22	-35	-54	-87	-9	-9	-15	-7,5	-11	-17,5	+3	+3	+3	+13	+13	+13	+23	+23	+23	+37	+37	+37
>120 até 180	-43	-43	-14	-14	0	0	0	0	0	+7	+14	+22	+9	+12,5	+20	+21	+28	+43	+33	+40	+55	+45	+52	+67	+61	+68	+83
	-68	-83	-32	-39	-18	-25	-40	-63	-100	-11	-11	-18	-9	-12,5	-20	+3	+3	+3	+15	+15	+15	+27	+27	+27	+43	+43	+43
>180 até 250	-50	-50	-15	-15	0	0	0	0	0	+7	+16	+25	+10	+14,5	+23	+24	+33	+50	+37	+46	+63	+51	+60	+77	+70	+79	+96
	-79	-96	-35	-44	-20	-29	-46	-72	-115	-13	-13	-21	-10	-14,5	-23	+4	+4	+4	+17	+17	+17	+31	+27	+27	+50	+50	+50
>250 até 315	-56	-56	-17	-17	0	0	0	0	0	+7	+16	+26	+11,5	+16	+26	+27	+36	+56	+43	+52	+72	+57	+66	+86	+79	+88	+108
	-88	-108	-40	-49	-23	-32	-52	-81	-130	-16	-16	-26	-11,5	-16	-26	+4	+4	+4	+20	+20	+20	+34	+34	+34	+56	+56	+56

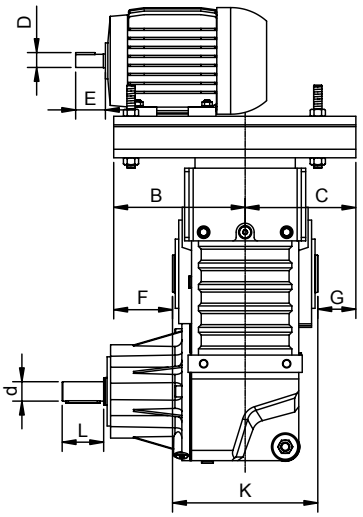


		Motorredutores																	
Simples	Redutores	63 B	71 C	80 D	90S E	90L F	100 G	112 H	132S J	132M K	160M L	160L M	180 N/P	200M Q	200L R	225 S	250 U	280 V	315 W
52	20	28	31	36	41	43	53	—	—	—	—	—	—	—	—	—	—	—	—
54	28	36	39	44	49	51	61	72	90	100	—	—	—	—	—	—	—	—	—
55	33	41	44	49	54	56	66	77	95	105	—	—	—	—	—	—	—	—	—
56	50	58	61	66	71	73	83	94	112	122	164	178	—	—	—	—	—	—	—
58	70	78	81	86	91	93	103	114	132	142	184	198	228	—	—	—	—	—	—
60	150	—	—	166	171	173	183	194	212	222	264	278	308	366	402	—	—	—	—
62	220	—	—	—	—	—	253	264	282	292	334	348	378	436	472	606	—	—	—
64	290	—	—	—	—	—	323	334	352	362	404	418	448	506	542	676	776	—	—
66	450	—	—	—	—	—	—	—	512	522	564	578	608	666	702	836	936	1203	—
68	690	—	—	—	—	—	—	—	—	—	804	818	848	906	942	1076	1176	1443	1700
Duplex																			
52	34	42	45	50	55	57	67	—	—	—	—	—	—	—	—	—	—	—	—
54	44	52	55	60	65	67	77	—	—	—	—	—	—	—	—	—	—	—	—
55	49	57	60	65	70	72	82	—	—	—	—	—	—	—	—	—	—	—	—
56	66	74	77	82	87	89	99	—	—	—	—	—	—	—	—	—	—	—	—
58	95	103	106	111	116	118	128	139	157	167	—	—	—	—	—	—	—	—	—
60	175	183	186	191	196	198	208	219	237	247	—	—	—	—	—	—	—	—	—
62	264	272	275	280	285	287	297	308	326	336	378	392	—	—	—	—	—	—	—
64	334	342	345	350	355	357	367	378	396	406	448	462	—	—	—	—	—	—	—
664	520	528	531	536	541	543	553	564	582	592	634	648	678	—	—	—	—	—	—
665/666	494	502	505	510	515	517	527	538	556	566	608	622	—	—	—	—	—	—	—
684	870	—	—	—	—	—	903	914	932	942	984	998	1028	1086	1122	1256	—	—	—
685-686	810	—	—	826	831	833	843	854	872	882	924	938	968	1026	1062	—	—	—	—

* Redutor tamanho 72, consultar WEG-CESTARI.







		Tam.	52	54	55	56	58	60	62	64	66	68
Carc	**D**	**E**										
63	11	23										
71	14	30										
80	19	40										
90	24	50										
100	28	60										
112	28	60										
132	38	80										
160	42	110										
180	48	110										
200	55	110										
225	60	110										
250	65	140										
280	75	140										
315	80	140										

Tam.	52	54	55	56	58	60	62	64	66	68
d	19	19	19	28	38	42	55	55	70	70
L	40	40	40	60	80	80	110	110	140	140
P	117	139	139	170	210	270	315	348	405	450
hmin	191	208	208	228	260	280	330	345	367	420
hmax	221	238	238	258	310	330	380	435	457	510
A	295	305	330	370	390	455	470	485	570	670
B	135	140	137,5	190	195	232,5	280	290	375	385
C	135	140	197,5	160	225	202,5	250	260	275	385
F	57,5	50	47,5	85	85	87,5	115	110	170	125
G	57,5	50	107,5	55	115	57,5	85	80	70	125
K	155	180	180	210	220	290	330	360	410	520
Jmin	308	347	347	398	470	550	645	693	772	870
Jmax	338	377	377	428	520	600	695	783	862	960

Para redutores com transmissão por polias, devem ser observadas as forças radiais máximas admissíveis, conforme páginas 11 e 12.

* Redutor tamanho 72, consultar WEG-CESTARI.