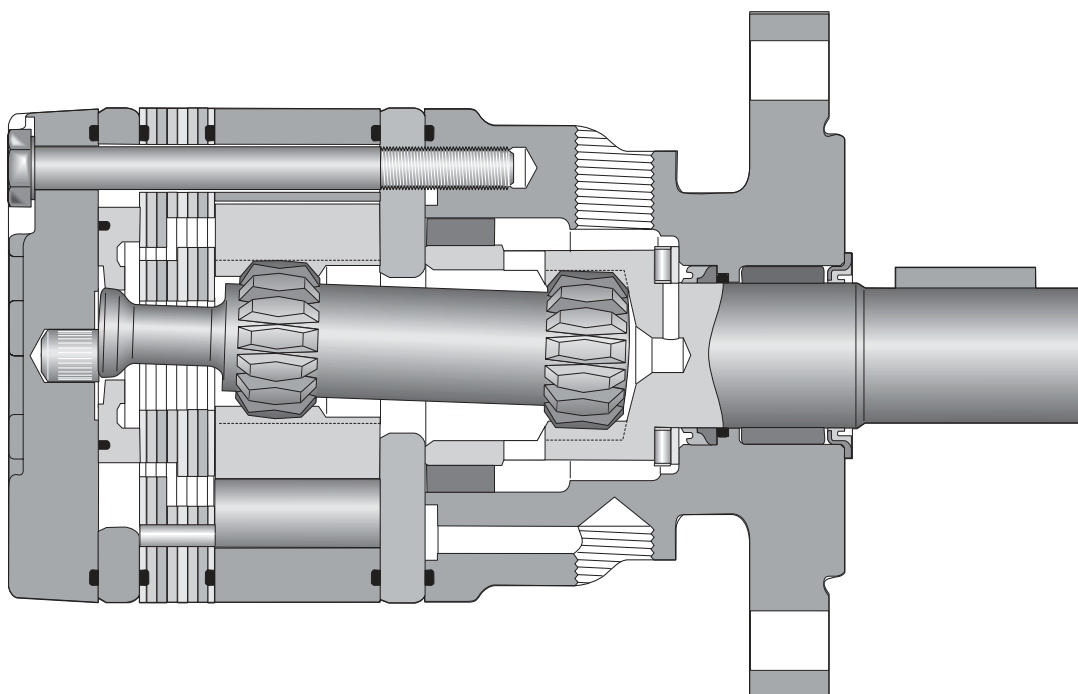
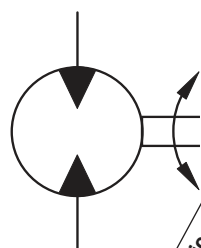


15 Displacements	(2.2 – 24.0 in³/rev)	
15 Schluckvolumen	36 ... 390 cm³/rev	
15 Cylindrée		
15 Desplazamientos		
	Cont	Int
Maximum Pressure	(to 1800 psi)	(to 2400 psi)
Eingangsdruck	... 125 bar	... 165 bar
Chaute de pression max.		
Presion Maxima		
Maximum Oil Flow	(to 15 gpm)	
Schluckstrom	... 57 lpm	
Débit d'huile		
Caudal Maximo de Aceite		
Maximum Speed	(932 rpm)	
Drehzahl	932 rpm	
Vitesse de rotation		
Velocidad Maxima		
	Cont	Int
Maximum Torque	(3897 lb in)	(4783 lb in)
Max Drehmoment	440 Nm	540 Nm
Couple Maxi		
Torque Maximo		
Maximum Side Load at Key	(to 1100 lb)	
Seitenlast	... 4900 N	
Charges latérales		
Carga Maxima Lateral		

A Light to Medium Duty Low Speed, High Torque Motor

This light to medium duty motor incorporates all the features of heavy duty motors. Design features include a high pressure shaft seal so external drains are never required, roller vane technology for automatic wear compensation, and full flow internal cooling and flushing. This is a very economical motor for most light to medium duty applications.





	Geometric displacement Geom. Schluckvolumen Cylindrée Desplazamientos	Max. speed @ Max. intermittent flow Max. Drehzahl intermittierender Betrieb: Velocidad de rotación máx. Max. Schluckstrom Débit d'huile maxi Caudal Máximo de Aceite	Max. oil flow Max. Schluckstrom Débit d'huile maxi Caudal Máximo de Aceite	Max. Differential Pressure Max. Druckgefälle Presion diferencial maxima Max. supply pressure Max. Eingangsdruck Presion maxima de entrada	Max. torque Max. Drehmoment Couple maxi Torque Maximo	Max. performance Max. Leistungabgabe Puissance de sortie maxi Maximo rendimiento	Min. starting torque Min. Anlaufmoment Couple min. fourni au démarrage Torque minimo de arranque	
Motor Series TB	cm³/rev in³/rev	rev/min	cont / int* l/min g/min	cont / int* bar psi	max bar psi	cont / int* Nm lb-in	max KW HP	cont / int* Nm lb-in
TB 0036	36 2.2	932	34 34 9 9	125 165 1800 2400	190 2750	48 67 427 596	6.6 8.8	44 50 385 440
TB 0045	41 2.5	805	34 34 9 9	125 165 1800 2400	190 2750	64 88 526 731	7.2 9.7	39 52 341 461
TB 0050	49 3.0	678	34 34 9 9	125 165 1800 2400	190 2750	78 107 693 946	7.5 10.1	36 70 319 619
TB 0065	65 4.0	511	34 34 9 9	125 165 1800 2400	190 2750	107 145 946 1284	7.8 10.4	66 99 582 977
TB 0080	82 5.0	409	34 34 9 9	125 165 1800 2400	190 2750	135 184 1193 1624	7.8 10.5	92 139 816 1226
TB 0100	98 6.0	454	45 45 12 12	125 165 1800 2400	190 2750	159 217 1411 1917	10.2 13.8	119 158 1050 1400
TB 0130	130 8.0	430	45 57 12 15	125 165 1800 2400	190 2750	220 297 1951 2632	13.4 18.0	167 229 1482 2024
TB 0165	163 10.0	343	45 57 12 15	125 155 1800 2250	190 2750	273 346 2418 3062	12.4 16.7	199 263 1760 2331
TB 0195	195 11.9	287	45 57 12 15	125 145 1800 2100	190 2750	340 400 3011 3537	12.0 16.1	270 325 2388 2872
TB 0230	228 13.9	246	45 57 12 15	103 138 1500 2000	190 2750	316 427 2797 3782	11.0 14.8	261 353 2354 3121
TB 0260	260 15.9	216	45 57 12 15	100 131 1450 1900	190 2750	350 465 3096 4117	10.5 14.1	291 395 2573 3498
TB 0295	293 17.9	191	45 57 12 15	97 125 1400 1800	190 2750	383 499 3391 4415	10.0 13.4	308 400 2724 3544
TB 0330	328 20.0	171	45 57 12 15	93 114 1350 1650	190 2750	413 509 3657 4505	9.1 12.2	332 406 2942 3590
TB 0365	370 22.6	151	45 57 12 15	86 105 1250 1525	190 2750	440 540 3897 4783	8.7 11.6	372 454 3296 4021
TB 0390	392 24.0	143	45 57 12 15	83 100 1200 1450	190 2750	428 525 3792 4642	7.8 10.5	339 434 3003 3845

Performance data based on testing using 10W40 oil with a viscosity of 43,1 cSt. (200 SUS) at 54° C (130° F.). Performance data is typical. Actual data may vary slightly from one production motor to another.

Les données sur les performances sont basées sur des tests utilisant de l'huile 10W40 d'une viscosité de 200 SUS à 54°C (130°F). Ces données correspondent à des situations typiques. Les données réelles peuvent varier légèrement d'un moteur de production à l'autre.

Leistungsdaten sind gemessen mit SAE 10W40 bei einer Viskosität von 43,1 cSt bei 54°C. Geringfügige Abweichungen von den Katalogdaten sind möglich.

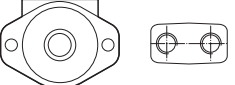
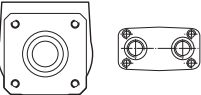
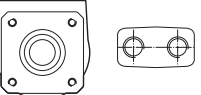
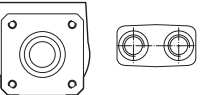
Datos tecnicos obtenidos con aceite 10W40 de 200 SUS de viscosidad a 54°C (130°F). Los datos proporcionados son valores típicos. Los valores exactos reales podrían tener una pequeña variación entre distintos motores.

* Intermittent operation rating applies to 10% of every minute.

Intermittierende Werte maximal 10% von jeder Betriebsminute.

Fonctionnement interm. 10% max. de chaque minute d'utilisation.

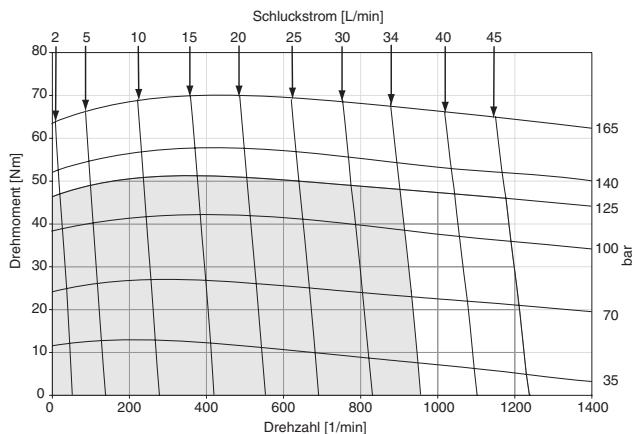
Capacidad de funcionamiento intermitente valida para 10% por cada minuto.

TB		XXXX		XX		XX		0		XXXX	
Series		Displacement Schluckvolumen Cylindrée Desplazamiento		Mounting/Ports Gehäuse/Anschluß Carter/Plan de raccordement Montaje/Lumbreras		Shaft Welle Arbre Eje		Rotation Drehrichtung Direction de rotation Rotacion		Options Opciones	
Code	cm³/U cm³/tr cm³/giro cu in³/rev	Code	Mounting/Ports	Code	Shaft	Code	Rotation	Code	Options		
0036	36 / 2.2	AM	SAE "A" 2 Bolt, 5/16-18 UNC Manifold 	09	1" Straight w/0.38" Crosshole 	0	Standard 	AAAB	No Paint No lackiert		
0045	41 / 2.5	AP	SAE "A" 2 Bolt, 1/2-14 NPTF 	10	1" Keyed 			AAAA	Black Paint Schwarz lackiert		
0050	49 / 3.0	AS	SAE "A" 2 Bolt, 7/8-14 SAE 	11	1" 6B Spline 						
0065	65 / 4.0	FM	4 Bolt, 5/16-18 UNC Manifold 	13	Long 1" Keyed 						
0080	82 / 5.0	FP	4 Bolt, 1/2-14 NPTF 	21	1" Keyed; Corrosion Resistant 						
0100	98 / 6.0	FS	4 Bolt, 7/8-14 SAE 	26	25mm Keyed w/ 8mm Key 						
0130	130 / 8.0			28	7/8" 13 Tooth Spline 						
0165	163 / 10.0										
0195	195 / 11.9										
0230	228 / 13.9										
0260	260 / 15.9										
0295	293 / 17.9										
0330	238 / 20.0										
0365	370 / 22.6										
0390	392 / 24.0										

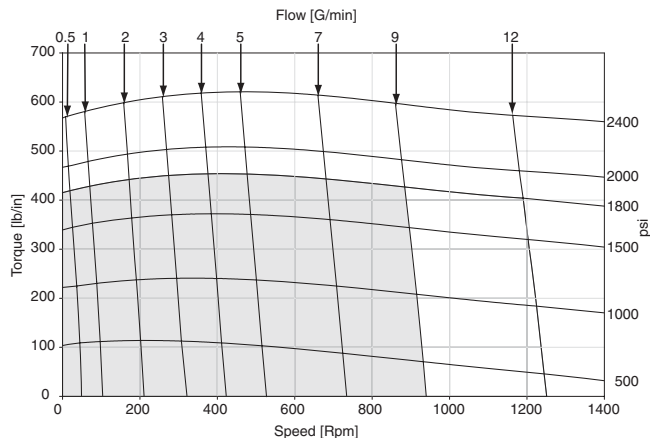
For other available options, see pages 64-69.

TB 0036

EU

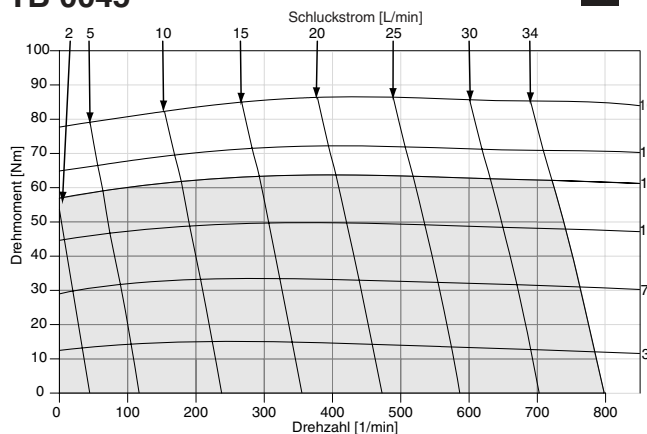


US

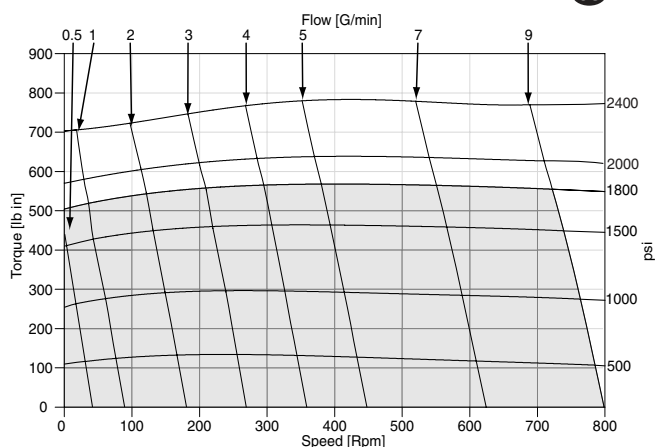


TB 0045

EU

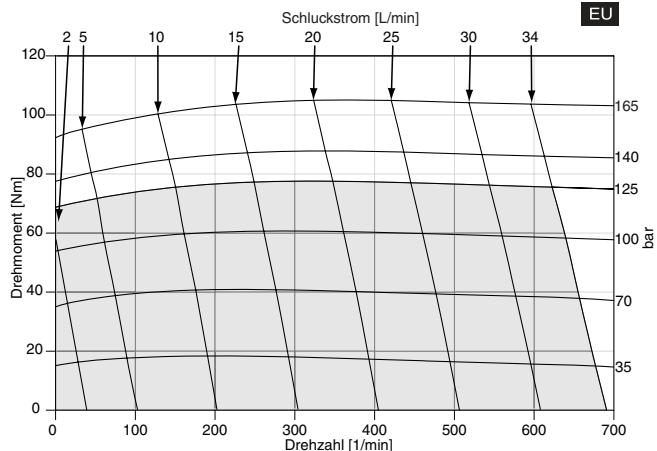


US

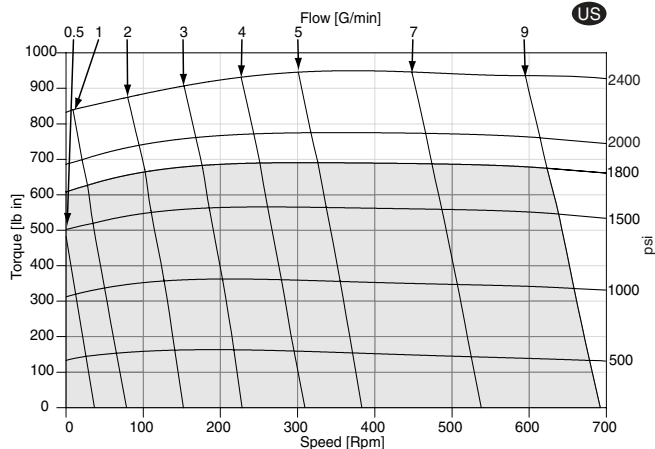


TB 0050

EU



US



Cont.

Int.

Intermittent operation rating applies to 10% of every minute.

Fonctionnement interm. 10% max. de chaque minute d'utilisation.

Intermittierende Werte maximal 10% von jeder Betriebsminute.

Capacidad de funcionamiento intermitente valida para 10% por cada minuto.

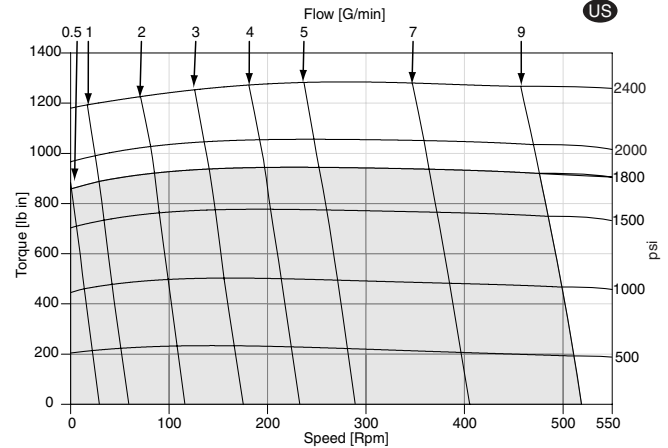
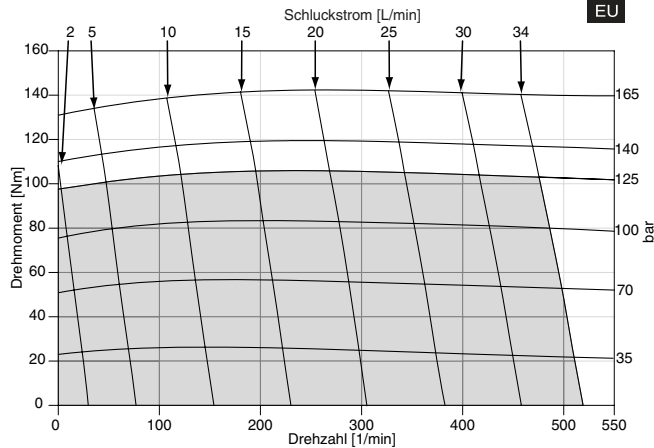
Performance data based on testing using 10W40 oil with a viscosity of 200 SUS at 54° C (130° F). Performance data is typical. Actual data may vary slightly from one production motor to another.

Les données sur les performances sont basées sur des tests utilisant de l'huile 10W40 d'une viscosité de 200 SUS à 54°C (130°F). Ces données correspondent à des situations typiques. Les données réelles peuvent varier légèrement d'un moteur de production à l'autre.

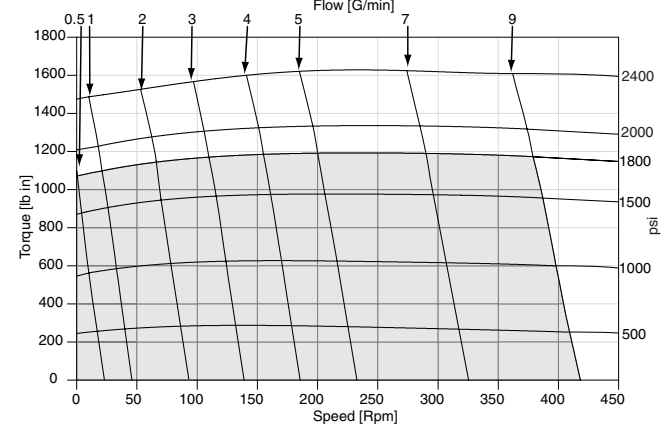
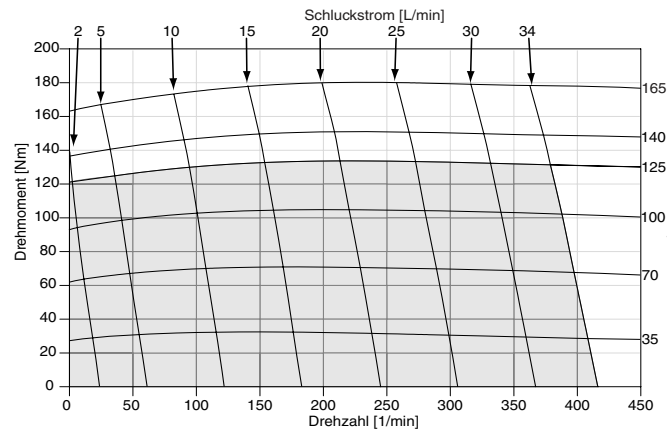
Leistungsdaten sind gemessen mit SAE 10W40 bei einer Viskosität von 43,1 Cst bei 54°C. Geringfügige Abweichungen von den Katalogdaten sind möglich.

Datos tecnicos obtenidos con aceite 10W40 de 200 SUS de viscosidad a 54°C (130°F). Los datos proporcionados son valores tipicos. Los valores exactos reales podrian tener una pequena variacion entre distintos motores.

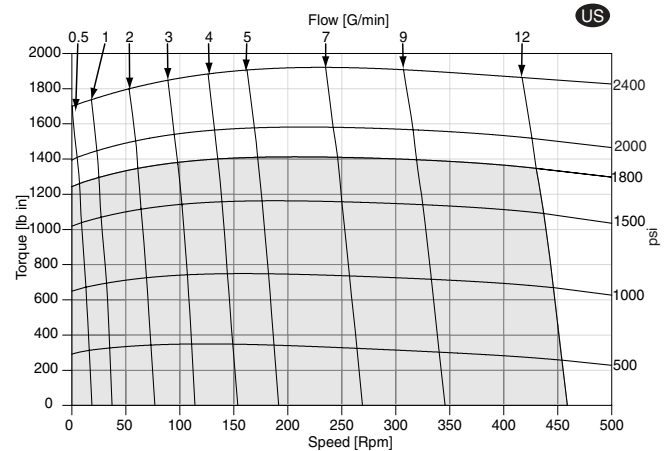
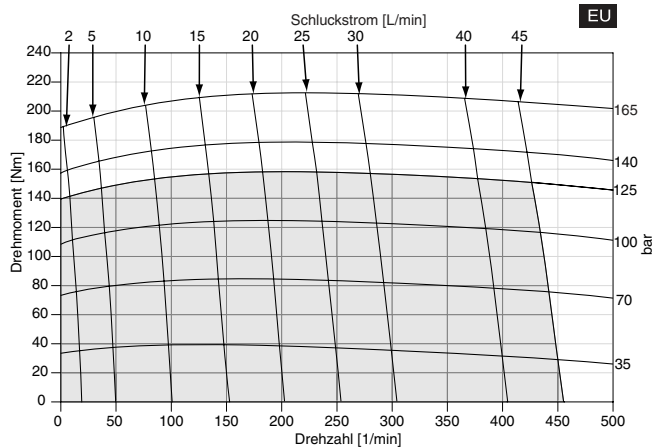
TB 0065



TB 0080



TB 0100



☒ Cont.

☐ Int.

Intermittent operation rating applies to 10% of every minute.

Fonctionnement interm. 10% max. de chaque minute d'utilisation.

Intermittierende Werte maximal 10% von jeder Betriebsminute.

Capacidad de funcionamiento intermitente valida para 10% por cada minuto.

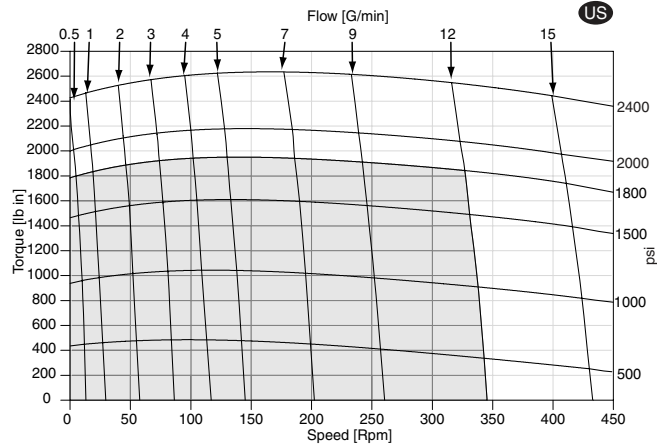
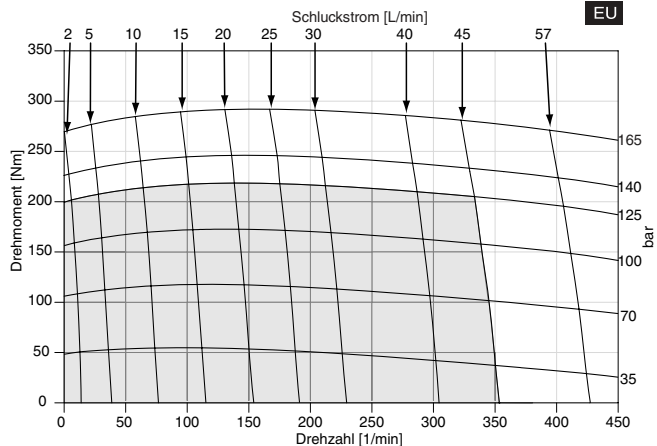
Performance data based on testing using 10W40 oil with a viscosity of 200 SUS at 54° C (130° F). Performance data is typical. Actual data may vary slightly from one production motor to another.

Les données sur les performances sont basées sur des tests utilisant de l'huile 10W40 d'une viscosité de 200 SUS à 54°C (130°F). Ces données correspondent à des situations typiques. Les données réelles peuvent varier légèrement d'un moteur de production à l'autre.

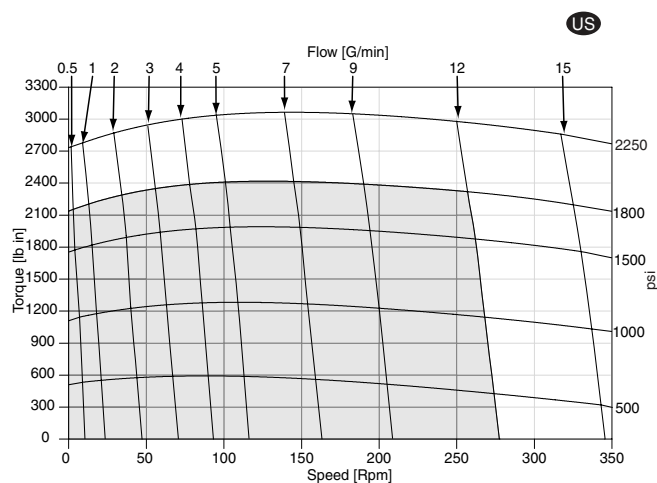
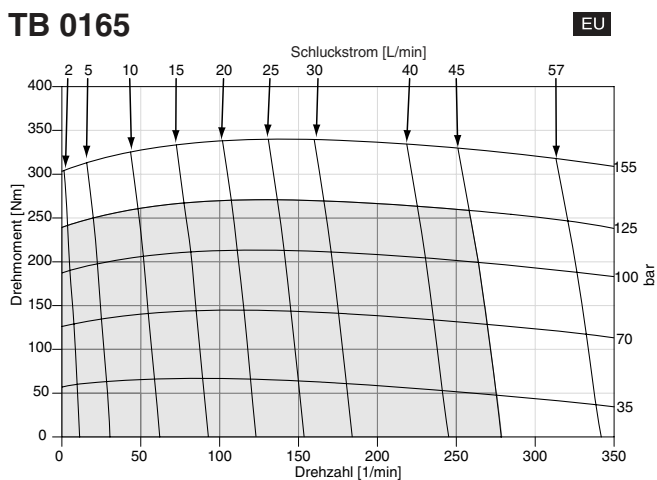
Leistungsdaten sind gemessen mit SAE 10W40 bei einer Viskosität von 43,1 Cst bei 54°C. Geringfügige Abweichungen von den Katalogdaten sind möglich.

Datos tecnicos obtenidos con aceite 10W40 de 200 SUS de viscosidad a 54°C (130°F). Los datos proporcionados son valores tipicos. Los valores exactos reales podrian tener una pequena variacion entre distintos motores.

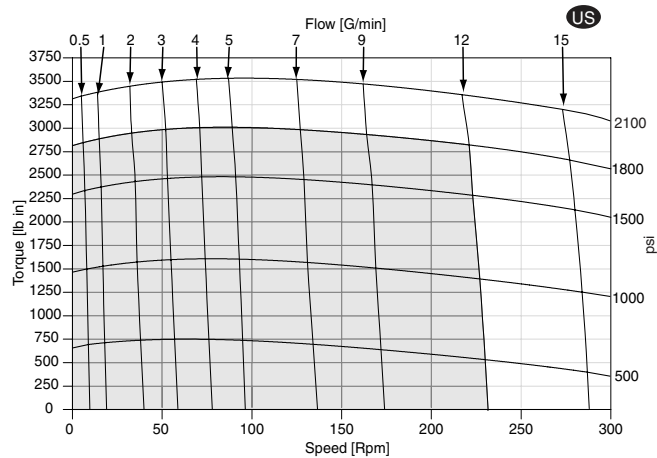
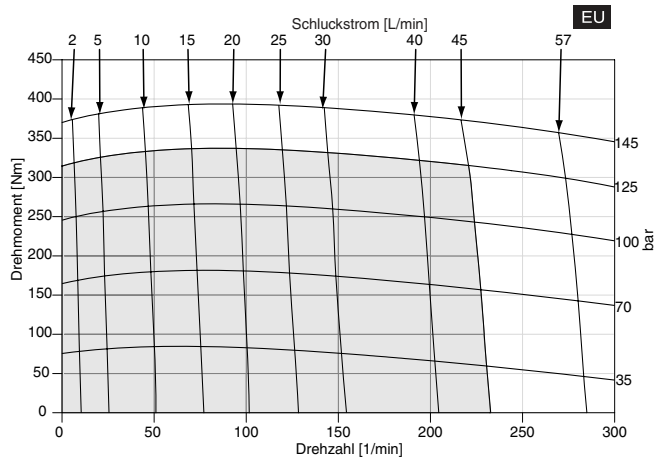
TB 0130



TB 0165



TB 0195



□ Cont.

□ Int.

Intermittent operation rating applies to 10% of every minute.

Fonctionnement interm. 10% max. de chaque minute d'utilisation.

Performance data based on testing using 10W40 oil with a viscosity of 200 SUS at 54° C (130° F). Performance data is typical. Actual data may vary slightly from one production motor to another.

Les données sur les performances sont basées sur des tests utilisant de l'huile 10W40 d'une viscosité de 200 SUS à 54°C (130°F). Ces données correspondent à des situations typiques. Les données réelles peuvent varier légèrement d'un moteur de production à l'autre.

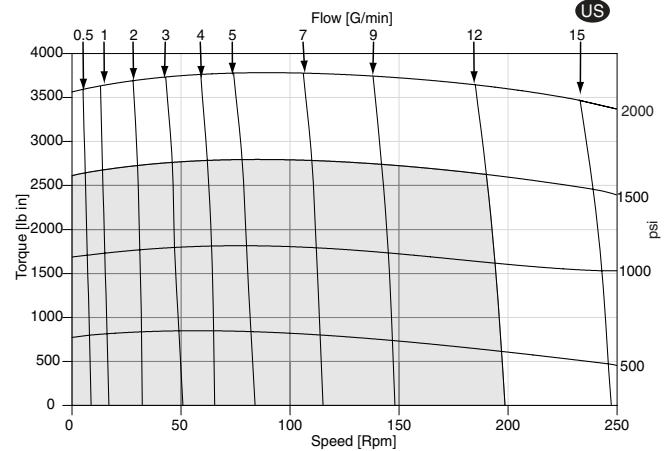
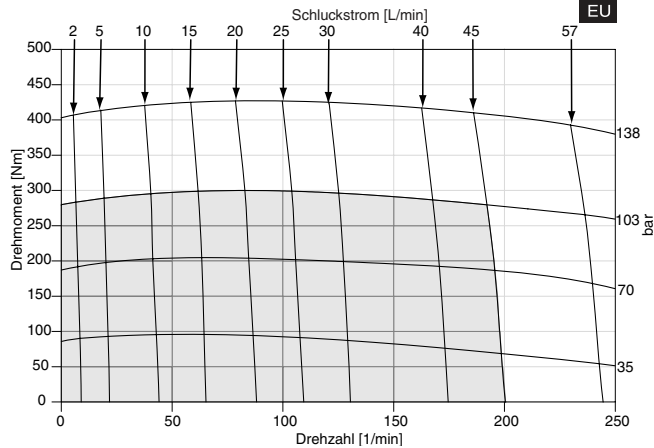
Intermittierende Werte maximal 10% von jeder Betriebsminute.

Capacidad de funcionamiento intermitente valida para 10% por cada minuto.

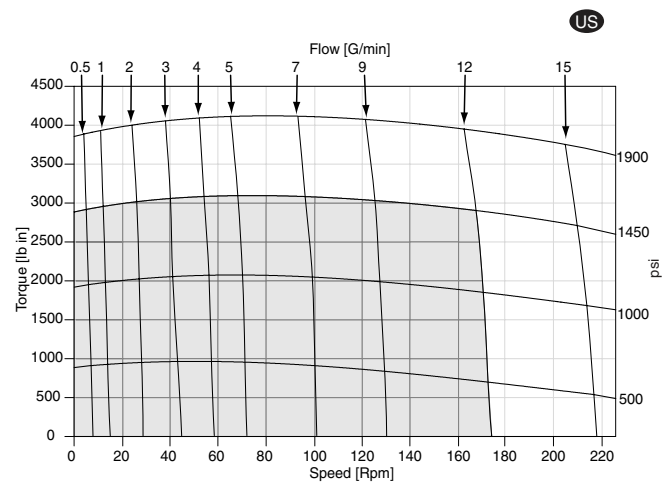
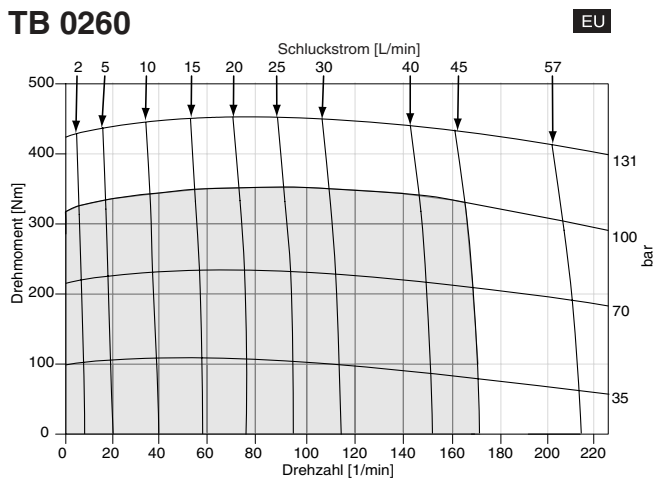
Leistungsdaten sind gemessen mit SAE 10W40 bei einer Viskosität von 43,1 Cst bei 54°C. Geringfügige Abweichungen von den Katalogdaten sind möglich.

Datos tecnicos obtenidos con aceite 10W40 de 200 SUS de viscosidad a 54°C (130°F). Los datos proporcionados son valores tipicos. Los valores exactos reales podrian tener una pequena variacion entre distintos motores.

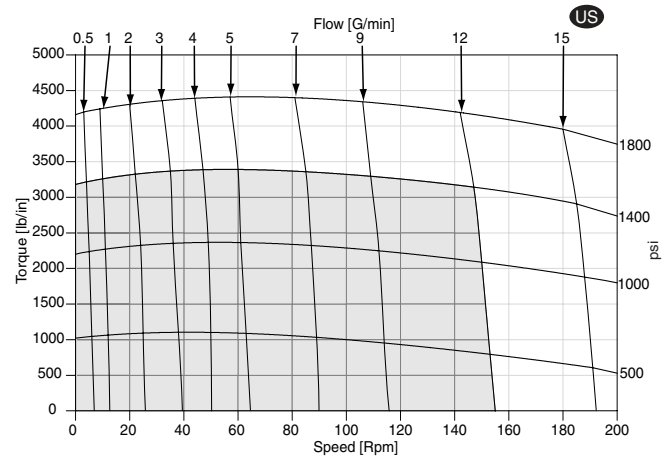
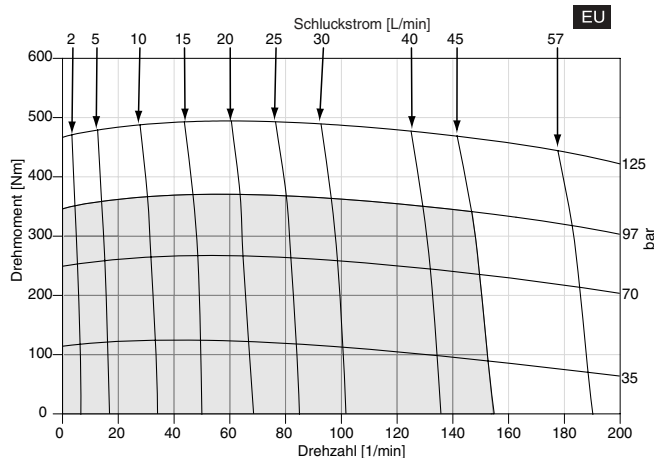
TB 0230



TB 0260



TB 0295



□ Cont.

□ Int.

Intermittent operation rating applies to 10% of every minute.

Fonctionnement interm. 10% max. de chaque minute d'utilisation.

Performance data based on testing using SAE 10W40 oil with a viscosity of 200 SUS at 54° C (130° F). Performance data is typical. Actual data may vary slightly from one production motor to another.

Les données sur les performances sont basées sur des tests utilisant de l'huile 10W40 d'une viscosité de 200 SUS à 54°C (130°F). Ces données correspondent à des situations typiques. Les données réelles peuvent varier légèrement d'un moteur de production à l'autre.

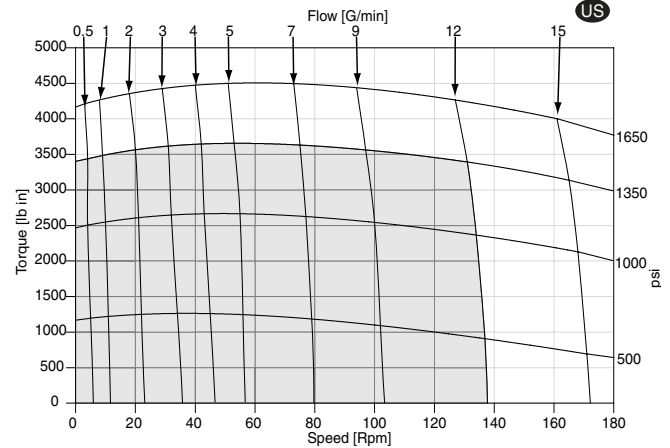
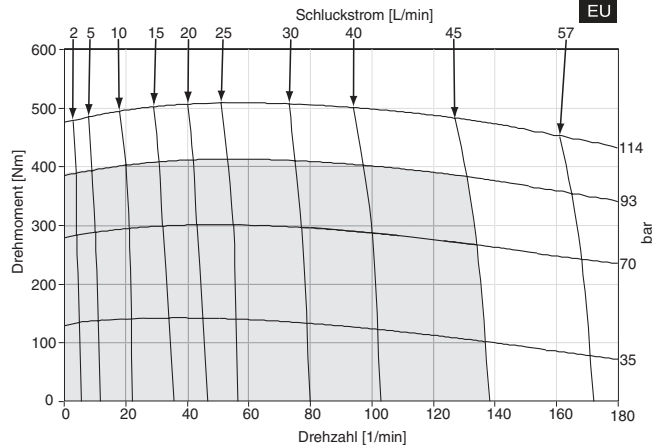
Intermittierende Werte maximal 10% von jeder Betriebsminute.

Capacidad de funcionamiento intermitente valida para 10% por cada minuto.

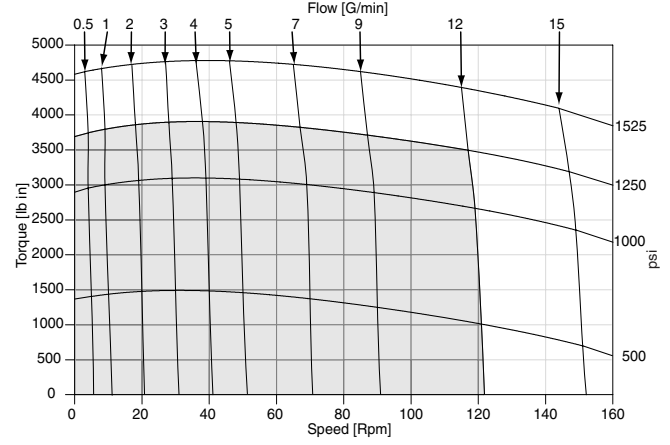
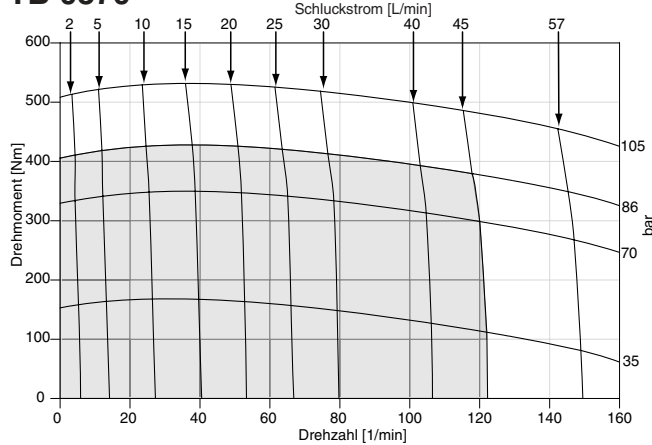
Leistungsdaten sind gemessen mit SAE 10W40 bei einer Viskosität von 43,1 Cst bei 54°C. Geringfügige Abweichungen von den Katalogdaten sind möglich.

Datos tecnicos obtenidos con aceite 10W40 de 200 SUS de viscosidad a 54°C (130°F). Los datos proporcionados son valores tipicos. Los valores exactos reales podrian tener una pequena variacion entre distintos motores.

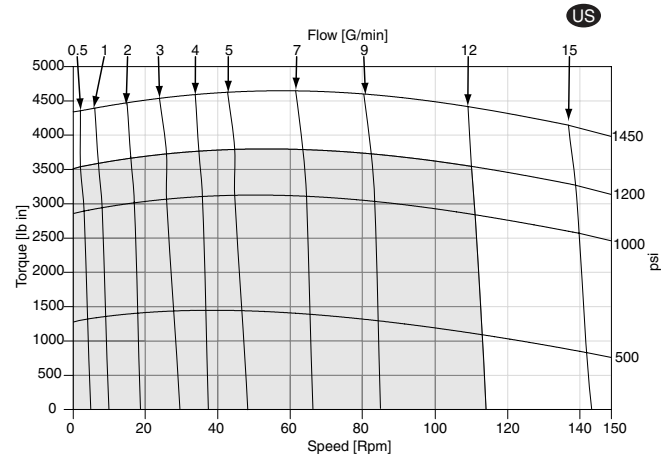
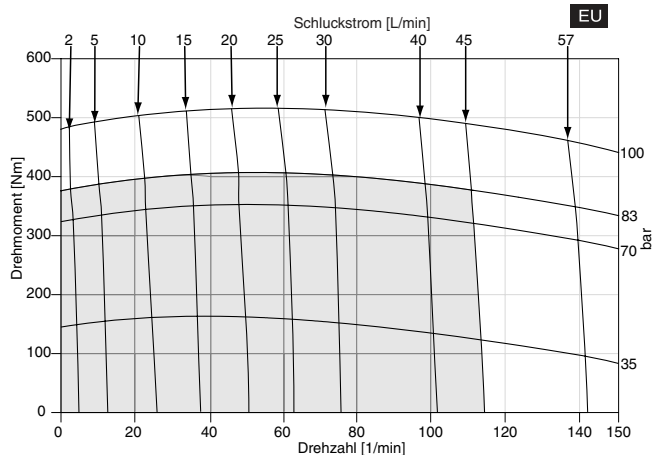
TB 0330



TB 0370



TB 0390



□ Cont.

□ Int.

Intermittent operation rating applies to 10% of every minute.

Fonctionnement interm. 10% max. de chaque minute d'utilisation.

Performance data based on testing using SAE 10W40 oil with a viscosity of 200 SUS at 54° C (130° F). Performance data is typical. Actual data may vary slightly from one production motor to another.

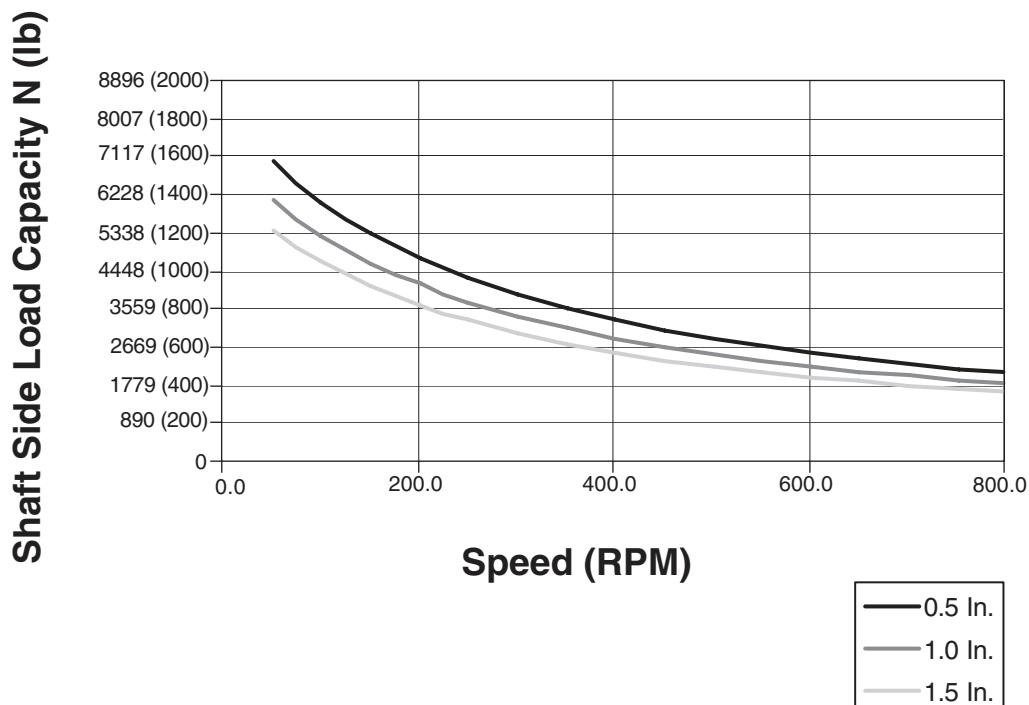
Les données sur les performances sont basées sur des tests utilisant de l'huile 10W40 d'une viscosité de 200 SUS à 54°C (130°F). Ces données correspondent à des situations typiques. Les données réelles peuvent varier légèrement d'un moteur de production à l'autre.

Intermittierende Werte maximal 10% von jeder Betriebsminute.

Capacidad de funcionamiento intermitente valida para 10% por cada minuto.

Leistungsdaten sind gemessen mit SAE 10W40 bei einer Viskosität von 43,1 Cst bei 54°C. Geringfügige Abweichungen von den Katalogdaten sind möglich.

Datos tecnicos obtenidos con aceite 10W40 de 200 SUS de viscosidad a 54°C (130°F). Los datos proporcionados son valores tipicos. Los valores exactos reales podrian tener una pequena variacion entre distintos motores.

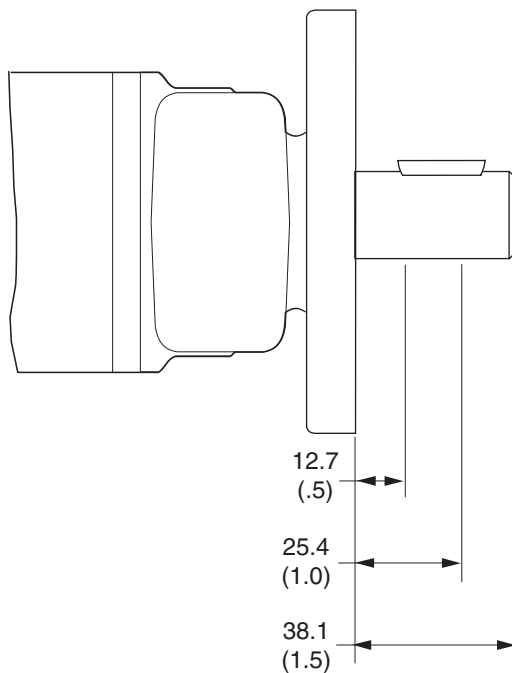


The allowable side load curve is based on bushing life of 2.5×10^6 revolutions.

Die zulaessige radiale Wellenbelastung bezieht sich auf die Lager-Lebensdauer $2,5 \times 10^6$ Umdrehungen.

L'effort radial admissible sur l'arbre depend a une duree de vie $2,5 \times 10^6$ de rotation.

La curva de carga lateral admisible se basa en vida util de cojinete de 2.5×10 revoluciones.

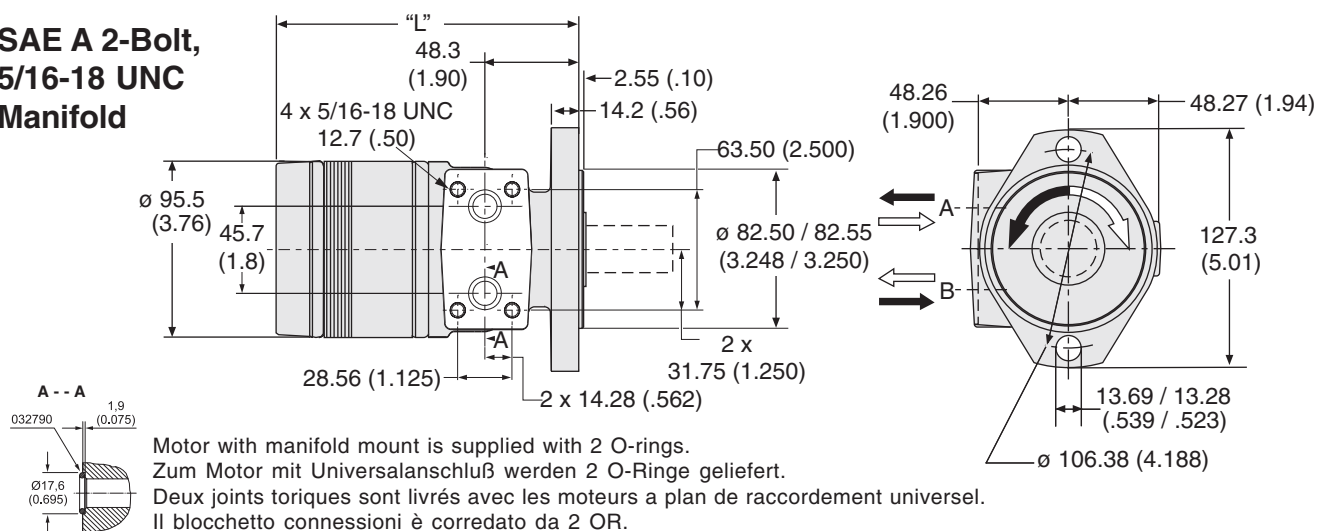


English equivalents for metric specifications are shown in ().

002 TB.indd, js

Code: AM

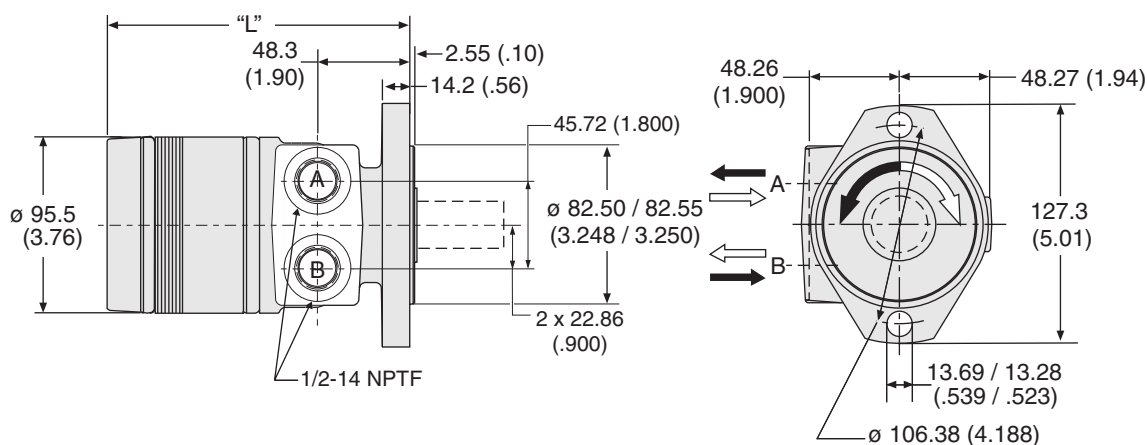
**SAE A 2-Bolt,
5/16-18 UNC
Manifold**



Code AM disp.	0036	0045	0050	0065	0080	0100	0130	0165	0195	0230	0260	0295	0330	0365	0390
Weight/Gewicht kg	5.87	6.03	6.12	6.26	6.35	6.49	6.76	7.03	7.35	7.58	7.80	8.07	8.35	8.66	8.80
Poids/Peso (lb)	(12.9)	(13.3)	(13.5)	(13.8)	(14.0)	(14.3)	(14.9)	(15.5)	(16.2)	(16.7)	(17.2)	(17.8)	(18.4)	(19.1)	(19.4)
Length "L" mm	132.4	136	138	141	144	147	154	160	166	173	179	185	192	200	205
"L" (in)	(5.22)	(5.36)	(5.42)	(5.54)	(5.67)	(5.79)	(6.04)	(6.29)	(6.54)	6.79	7.04	7.29	7.54	7.88	8.04

Code: AP

**SAE A 2-Bolt,
1/2-14 NPTF**

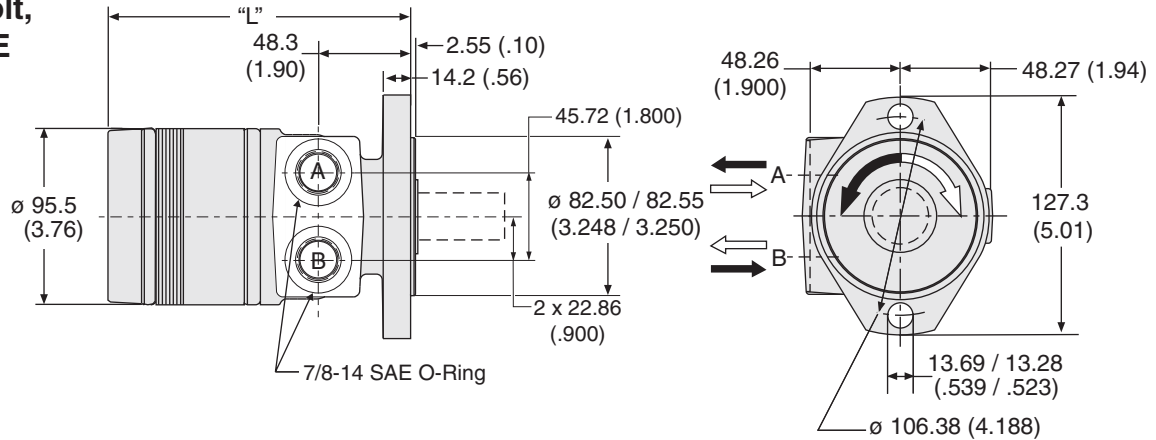


Code AP disp.	0036	0045	0050	0065	0080	0100	0130	0165	0195	0230	0260	0295	0330	0365	0390
Weight/Gewicht kg	5.87	6.03	6.12	6.26	6.35	6.49	6.76	7.03	7.35	7.58	7.80	8.07	8.35	8.66	8.80
Poids/Peso (lb)	(12.9)	(13.3)	(13.5)	(13.8)	(14.0)	(14.3)	(14.9)	(15.5)	(16.2)	(16.7)	(17.2)	(17.8)	(18.4)	(19.1)	(19.4)
Length "L" mm	132.4	136	138	141	144	147	154	160	166	173	179	185	192	200	205
"L" (in)	(5.22)	(5.36)	(5.42)	(5.54)	(5.67)	(5.79)	(6.04)	(6.29)	(6.54)	6.79	7.04	7.29	7.54	7.88	8.04

English equivalents for metric specifications are shown in ().

Code: AS

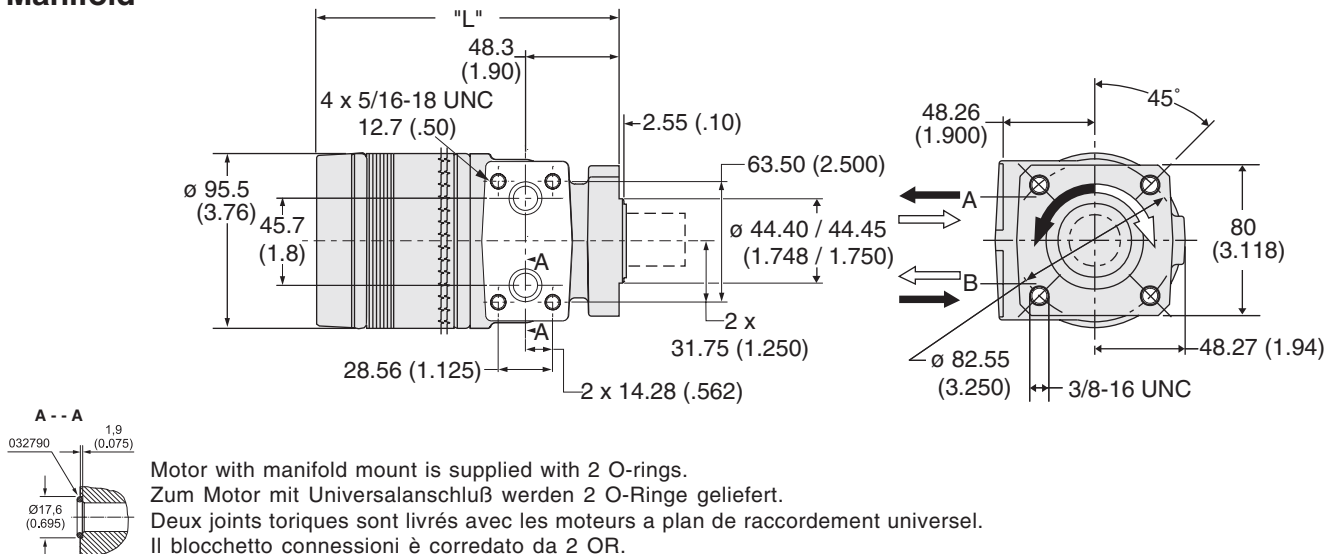
**SAE A 2-Bolt,
7/8"-14 SAE
O-Ring**



Code AS disp.	0036	0045	0050	0065	0080	0100	0130	0165	0195	0230	0260	0295	0330	0365	0390
Weight/Gewicht kg	5.87	6.03	6.12	6.26	6.35	6.49	6.76	7.03	7.35	7.58	7.80	8.07	8.35	8.66	8.80
Poids/Peso (lb)	(12.9)	(13.3)	(13.5)	(13.8)	(14.0)	(14.3)	(14.9)	(15.5)	(16.2)	(16.7)	(17.2)	(17.8)	(18.4)	(19.1)	(19.4)
Length "L" mm	132.4	136	138	141	144	147	154	160	166	173	179	185	192	200	205
"L" (in)	(5.22)	(5.36)	(5.42)	(5.54)	(5.67)	(5.79)	(6.04)	(6.29)	(6.54)	6.79	7.04	7.29	7.54	7.88	8.04

Code: FM

**4-Bolt,
5/16-18 UNC
Manifold**



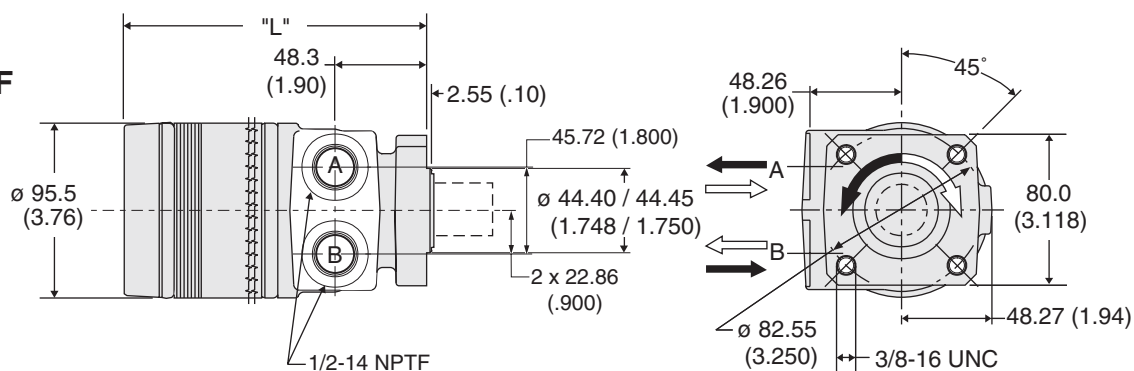
Code FM disp.	0036	0045	0050	0065	0080	0100	0130	0165	0195	0230	0260	0295	0330	0365	0390
Weight/Gewicht kg	5.58	5.62	5.67	5.80	5.94	6.08	6.31	6.62	7.03	7.17	7.39	7.62	7.94	8.26	8.39
Poids/Peso (lb)	(12.3)	(12.4)	(12.5)	(12.8)	(13.1)	(13.4)	(13.9)	(14.6)	(15.5)	(15.8)	(16.3)	(16.8)	(17.5)	(18.2)	(18.5)
Length "L" mm	132.4	136	138	141	144	147	154	160	166	173	179	185	192	200	205
"L" (in)	(5.22)	(5.36)	(5.42)	(5.54)	(5.67)	(5.79)	(6.04)	(6.29)	(6.54)	(6.79)	(7.04)	(7.29)	(7.54)	(7.88)	(8.04)

English equivalents for metric specifications are shown in ().

002 TB.indd, js

Code: FP

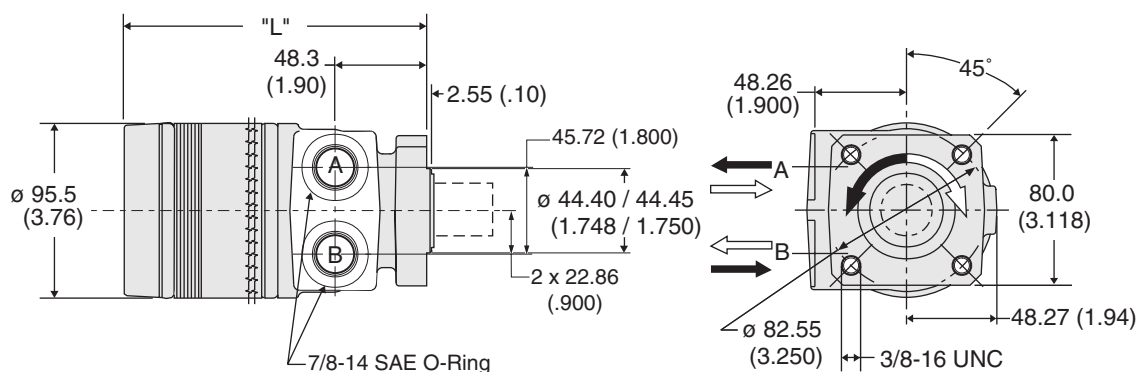
**4 Bolt,
1/2-14 NPTF**



Code FP disp.	0036	0045	0050	0065	0080	0100	0130	0165	0195	0230	0260	0295	0330	0365	0390
Weight/Gewicht kg	5.58	5.62	5.67	5.80	5.94	6.08	6.31	6.62	7.03	7.17	7.39	7.62	7.94	8.26	8.39
Poids/Peso (lb)	(12.3)	(12.4)	(12.5)	(12.8)	(13.1)	(13.4)	(13.9)	(14.6)	(15.5)	(15.8)	(16.3)	(16.8)	(17.5)	(18.2)	(18.5)
Length "L" mm	132.4	136	138	141	144	147	154	160	166	173	179	185	192	200	205
"L" (in)	(5.22)	(5.36)	(5.42)	(5.54)	(5.67)	(5.79)	(6.04)	(6.29)	(6.54)	(6.79)	(7.04)	(7.29)	(7.54)	(7.88)	(8.04)

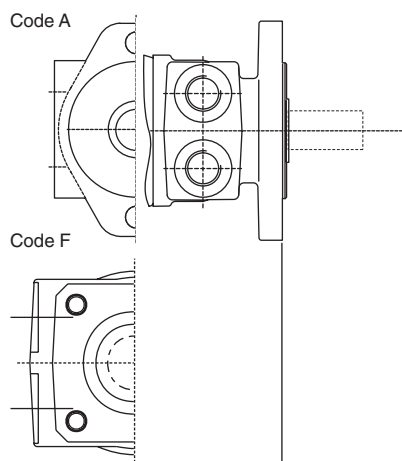
Code: FS

**4 Bolt,
7/8"-14 SAE
O-Ring**



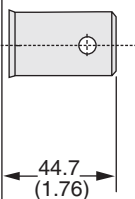
Code FS disp.	0036	0045	0050	0065	0080	0100	0130	0165	0195	0230	0260	0295	0330	0365	0390
Weight/Gewicht kg	5.58	5.62	5.67	5.80	5.94	6.08	6.31	6.62	7.03	7.17	7.39	7.62	7.94	8.26	8.39
Poids/Peso (lb)	(12.3)	(12.4)	(12.5)	(12.8)	(13.1)	(13.4)	(13.9)	(14.6)	(15.5)	(15.8)	(16.3)	(16.8)	(17.5)	(18.2)	(18.5)
Length "L" mm	132.4	136	138	141	144	147	154	160	166	173	179	185	192	200	205
"L" (in)	(5.22)	(5.36)	(5.42)	(5.54)	(5.67)	(5.79)	(6.04)	(6.29)	(6.54)	(6.79)	(7.04)	(7.29)	(7.54)	(7.88)	(8.04)

English equivalents for metric specifications are shown in ().



Code: 09

**1" Straight with
0.38" Crosshole**

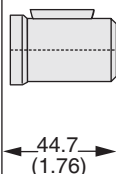


Code: 10

1" Keyed

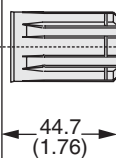
Code: 21

Corrosion Resistant



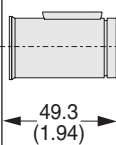
Code: 11

1" 6B Spline



Code: 13

Long 1" Keyed



English equivalents for metric specifications are shown in ().

002 TB.indd, js

Code: 09

1" Straight with
0.38" Crosshole

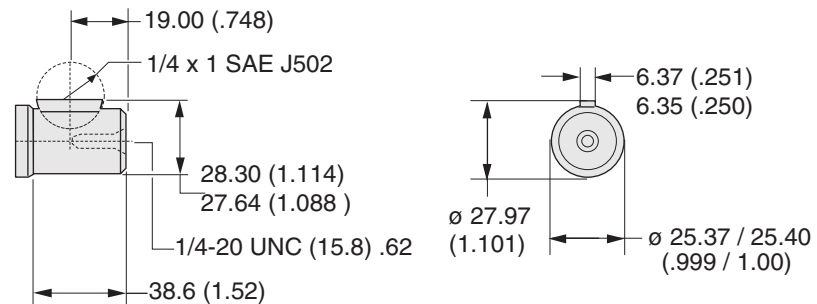


Code: 10

1" Keyed

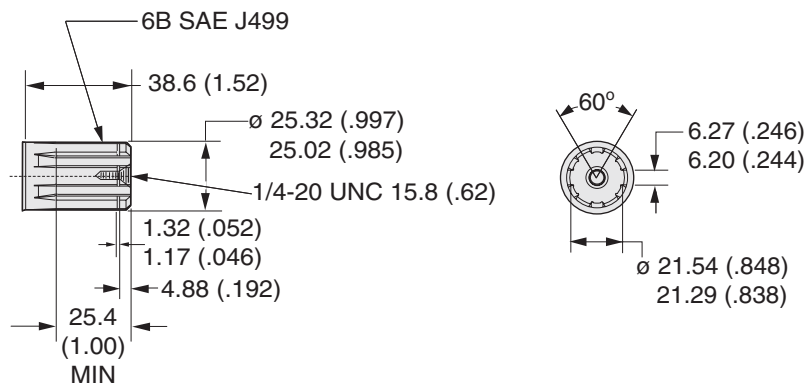
Code: 21

Corrosion Resistant



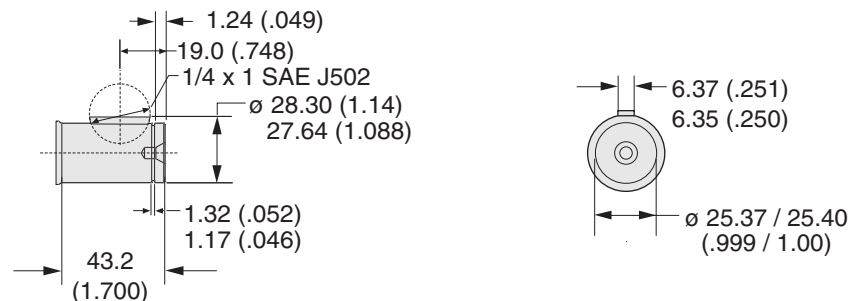
Code: 11

1" 6B Spline

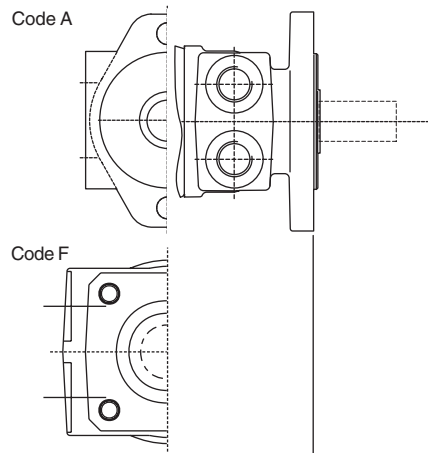


Code: 13

Long 1" Keyed

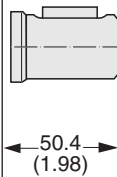


English equivalents for metric specifications are shown in ().



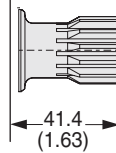
Code: 26

**25mm Keyed
with 8mm Key**



Code: 28

7/8" 13 Tooth Spline

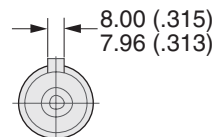
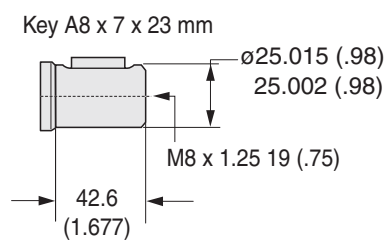


English equivalents for metric specifications are shown in ().

002 TB.indd, js

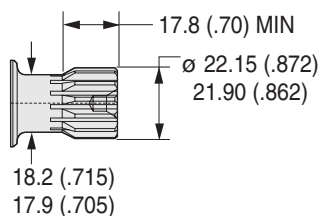
Code: 26

**25mm Keyed
with 8mm Key**



Code: 28

7/8" 13 Tooth Spline



English equivalents for metric specifications are shown in ().

002 TB.indd, js