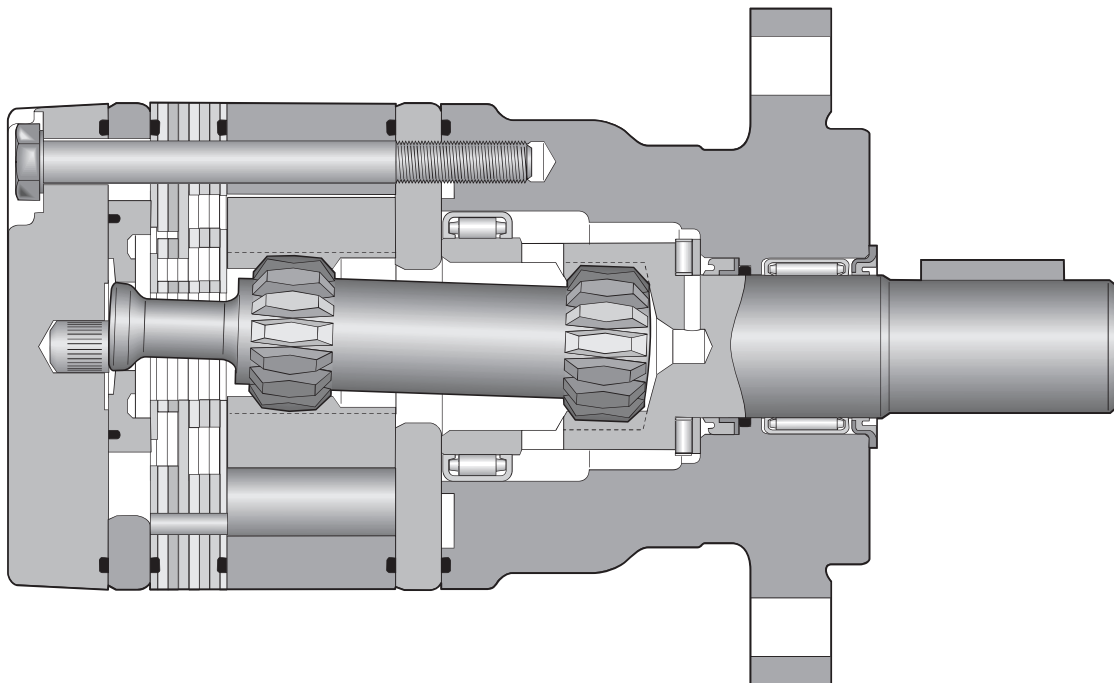
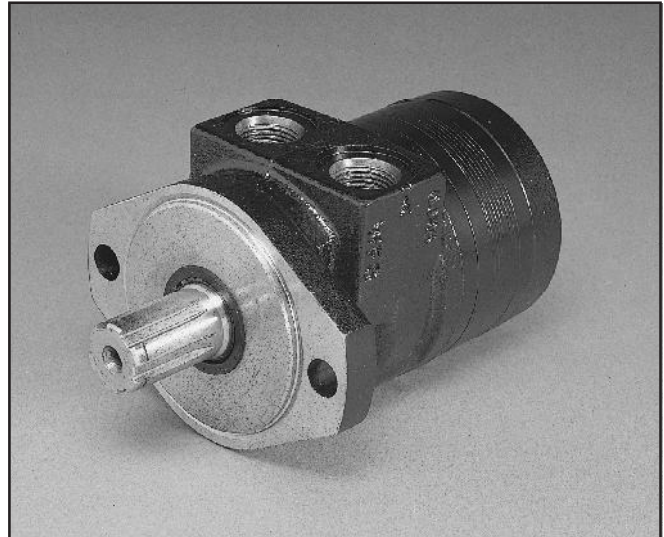


15 Displacements 15 Schluckvolumen 15 Cylindrée 15 Despazamientos	(2.2 – 24.0 in ³ /rev) 36 ... 390 cm ³ /rev	
Maximum Pressure Eingangsdruck Chaute de pression max. Presion Maxima	Cont (2030 psid) ...140 bar	Int (2750 psid) ...190 bar
Maximum Oil Flow Schluckstrom Débit d'huile Caudal Maximo de Aceite	(20 gpm) ... 75 lpm	
Maximum Speed Drehzahl Vitesse de rotation Velocidad Maxima	(1142 rpm) 1142 rpm	
Maximum Torque Max Drehmoment Couple Maxi Torque Maximo	Cont (4139 lb in) 467 Nm	Int (5728 lb in) 648 Nm
Maximum Side Load at Key Seitenlast Charges latérales Carga Maxima Lateral	(1500 lb) ... 6650 N	

An Improved Light Duty Low Speed, High Torque Motor

This light duty motor has higher pressure ratings than the TB motor, for applications requiring higher torque. Robust roller bearings withstand higher side loads and are suitable for chain and sprocket shaft connections. It uses high pressure shaft seals, robust roller bearings and high flow shaft seal cooling.



TE

Series

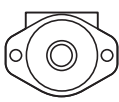
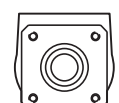






XXXX

Displacement
 Schluckvolumen
 Cylindrée
 Desplazamiento

Code	cm ³ /U cm ³ /tr cm ³ /giro	in ³ /rev
0036	36 / 2.2	
0045	41 / 2.5	
0050	49 / 3.0	
0065	65 / 4.0	
0080	82 / 5.0	
0100	98 / 6.0	
0130	130 / 8.0	
0165	163 / 10.0	
0195	195 / 11.9	
0230	228 / 13.9	
0260	260 / 15.9	
0295	293 / 17.9	
0330	328 / 20.0	
0365	370 / 22.6	
0390	392 / 24.0	






X

Mounting
 Gehäuse
 Carter
 Montaje



Code	Mounting
A	SAE "A" 2 Bolt, 
F	4 Bolt w/3/8-16 UNC 
M	Magneto 
C	SAE "A" 2 Bolt, Long Pilot 
B	SAE "B" 2 Bolt 
L*	Wheel Mount 
N	Midmount 
U*	Wheel Mount 7/8-14 SAE 

X

Ports
 Anschluß
 Plan de raccordement
 Lumberas

Code	Ports
M	5/16-18 UNC Manifold 
P	1/2-14 NPTF 
S	7/8-14 SAE 
W	G 1/2 BSPP 
N	M8 Manifold 

Rear Ports
 Endanschluß
 Alimentazione Laterale
 Orifices arrière

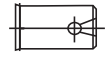












Code	Rear Ports
R	3/4-16 SAE O-ring Axial 
Y	G 1/2 BSPP Axial 

*Not available with port codes M & N

For other available options, see pages 107–108.

XX



Shaft
Welle
Arbre
Eje



Code	Shaft
09	1" Straight w/0.38" Crosshole 
10	1" Keyed, 
11	1" 6B Spline 
12	Short 1" Tapered 
13	Long 1" Keyed 
21	1" Keyed; Corrosion Resistant 
25	1" Tapered 
26	25mm Keyed w/ 8mm Key 
28	7/8" 13 Tooth Spline 
41	Long 6B Spline 
59*	7/8" 13 Tooth Spline SAE 
66	25mm Keyed w/ 8mm Key Corrosion Resistant 
70	1" Keyed; Stainless Steel 

* Conforms to SAE B recommended length

0

Rotation
Drehrichtung
Direction de rotation
Rotacion

Code	Rotation
0	Standard 
1	Reverse Timed Manifold 

Code	Rear Port Rotation
0	Standard 
1	Reverse Timed Manifold 

Rotation viewed from shaft end.

XXXX

Options
Opciones

Code	Options
AAAA	Black Paint
AAAB	No Paint
AAAC	Double Paint
AAAF ⁶	Castle Nut, Black Paint
AABP ⁶	Castle Nut, No Paint
AAAG	Fluorocarbon Seals, Black Paint
AAAH	Fluorocarbon Seals, No Paint
AAAJ	High Temperature Commutator Seal, Black Paint
AAFG	High Temperature Commutator Seal, No Paint
AABJ ¹	Free Running Rotorset, Black Paint
AABK ¹	Free Running Rotorset, No Paint
AAFW	High Temperature Commutator Seals, Fluorocarbon Seals, Black Paint
AAFA	High Temperature Commutator Seals, Fluorocarbon Seals, No Paint
AABL ¹	Free Running Rotor Set, No Commutator Seal, Black Paint
AABM ¹	Free Running Rotor Set, No Commutator Seal, No Paint
BBDF ⁷	761 PSI/53 Bar Int Bidirectional Relief, Black Paint
BBDM ⁷	761 PSI/53 Bar Int Bidirectional Relief, No Paint
BBCV ⁷	921 PSI/64 Bar Int Bidirectional Relief, Black Paint
BBGA ⁷	1200 PSI/83 Bar Int Bidirectional Relief, Black Paint
BBCM ⁷	1200 PSI/83 Bar Int Bidirectional Relief, No Paint
BBCR ⁷	1450 PSI/100 Bar Int Bidirectional Relief, Black Paint
BBCP ⁷	1450 PSI/100 Bar Int Bidirectional Relief, No Paint
BBCT ⁷	1560 PSI/108 Bar Int Bidirectional Relief, No Paint
BBDY ⁷	1740 PSI/120 Bar Int Bidirectional Relief, Black Paint
BBCK ⁷	1740 PSI/120 Bar Int Bidirectional Relief, No Paint
BBFZ ^{2,7}	2030 PSI/140 Bar Bidirectional Relief, Black Paint
BBCN ^{2,7}	2030 PSI/140 Bar Bidirectional Relief, No Paint
HAAA ⁸	Adjustable External Relief Valve, Black Paint
HAAB ⁸	Adjustable External Relief Valve, No Paint
FSAA	Speed Sensor, Black Paint
FSAB	Speed Sensor, No Paint
AAJV ⁷	Bidirectional Shuttle, 3:30, Black Paint
AANC ⁷	Bidirectional Shuttle, 3:30, No Paint
AAUY	Nickel Plated Except Shaft

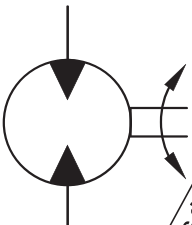
¹ Not applicable to 0365 or 0390 displacements

² Not available with 0330, 0365 or 0390 displacements

⁶ Only available with 25 shaft

⁷ Not available with R or Y ports

⁸ Only available with M ports



Motor Series TE	cm ³ /rev in ³ /rev	Int rev/min	cont / int* l/min g/min	cont / int* bar psid	max bar psig	cont / int* Nm lb-in	max KW HP	cont / int* Nm lb-in
	Geom. displacement Geom. Schluckvolumen Cylindrée Desplazamientos	Max. speed @ Max. intermittent flow Max. Drehzahl Intermitterender Betrieb: Vitesse de rotation maxi Velocidad maxima a caudal intermitente maximo	Max. oil flow Max. Schluckstrom Débit d'huile maxi Caudal Maximo de Aceite	Max. Differential Pressure Max. Druckgefälle Chute de pression max Presion diferencial maxima	Max. supply pressure Max. Eingangsdruck Presion maxi entrada Presion maxima de alimentacion	Max. torque Max. Drehmoment Couple maxi Torque Maximo	Max. performance Max. Leistungabgabe Maximo rendimiento	Min. starting torque Min. Anlaufmoment Couple min fourni au dé manrage Torque minimo de arranque
TE 0036	36 2.2	1141	34 42 9 11	140 190 2030 2750	200 2900	54.6 71.1 483 630	8.5 11.4	44 52 389 460
TE 0045	41 2.5	1024	34 42 9 11	140 190 2030 2750	200 2900	71 99 624 876	10.4 13.9	44 64 411 565
TE 0050	49 3.0	1020	34 50 9 13	140 190 2030 2750	200 2900	90 127 796 1120	12.8 17.2	72 98 637 871
TE 0065	65 4.0	877	45 57 12 15	140 190 2030 2750	200 2900	125 176 1106 1558	14.7 19.8	100 137 885 1211
TE 0080	82 5.0	695	45 57 12 15	140 190 2030 2750	200 2900	160 220 1416 1947	17.3 23.2	128 171 1133 1515
TE 0100	98 6.0	582	45 57 12 15	140 190 2030 2750	200 2900	190 264 1682 2337	17.4 23.4	152 205 1345 1819
TE 0130	130 8.0	438	45 57 12 15	140 190 2030 2750	200 2900	255 352 2257 3116	17.3 23.2	204 274 1806 2423
TE 0165	163 10.0	348	45 57 12 15	140 190 2030 2750	200 2900	310 436 2744 3846	17.0 22.8	248 338 2195 2992
TE 0195	195 11.9	292	45 57 12 15	140 190 2030 2750	200 2900	390 528 3452 4673	17.4 23.4	312 411 2762 3637
TE 0230	228 13.9	328	57 75 15 20	120 165 1740 2400	200 2900	380 514 3363 4554	17.7 23.8	304 411 2691 3637
TE 0260	260 15.9	287	57 75 15 20	110 155 1595 2250	200 2900	400 550 3540 4870	16.7 22.4	320 449 2832 3977
TE 0295	293 17.9	256	57 75 15 20	100 145 1450 2100	200 2900	428 582 3784 5180	15.7 21.0	328 445 2903 3939
TE 0330	328 20.0	228	57 75 15 20	100 135 1450 1950	200 2900	443 600 3926 5312	14.8 19.8	344 453 3045 4014
TE 0365	370 22.6	203	57 75 15 20	95 125 1378 1825	200 2900	467 648 4133 5728	13.6 18.2	373 477 3301 4223
TE 0390	392 24.0	191	57 75 15 20	85 120 1233 1740	200 2900	445 628 3935 5562	12.5 16.8	348 462 3080 4090

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 técnicos 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.

TE 0195 11.9 cu in / rev PRESSURE (PSID)

	500	1000	1500	2000	2750
.5	710 8	1519 7	2344 5	3182 3	
1	736 18	1558 16	2387 14	3221 12	4457 6
2	758 37	1596 35	2445 33	3302 30	4558 22
3	758 56	1604 54	2459 51	3315 48	4576 39
4	757 75	1618 73	2482 70	3346 67	4619 56
5	747 95	1615 92	2488 89	3360 85	4643 74
7	705 133	1586 130	2467 127	3343 122	4631 111
9	646 172	1528 169	2415 165	3300 160	4590 147
12	530 230	1408 226	2303 221	3197 215	4494 201
15	394 288	1273 283	2147 278	3027 272	4308 256

TORQUE (LB IN) 4631
SPEED (RPM) 111

Flow (GPM)

TE 0230 13.9 cu in / rev PRESSURE (PSID)

	500	1000	1500	1750	2000	2400
.5	761 7	1673 6	2614 5	3094 4	3584 3	4331 3
1	791 15	1712 14	2650 13	3128 12	3615 11	4366 9
2	819 32	1764 30	2726 29	3208 28	3692 26	4448 24
3	819 48	1771 47	2737 45	3226 44	3718 42	4482 41
4	821 65	1787 63	2765 61	3256 60	3750 58	4520 56
5	808 81	1786 79	2777 77	3277 76	3778 74	4554 73
7	770 114	1756 112	2755 109	3255 108	3760 106	4535 104
9	705 147	1699 145	2710 142	3216 140	3724 138	4496 137
12	581 197	1582 194	2595 191	3103 189	3617 186	4382 183
15	400 247	1409 243	2437 239	2949 237	3466 235	4216 230
20	64 329	1052 325	2067 321	2580 319	3100 316	3814 311

TORQUE (LB IN) 1894
SPEED (RPM) 198

Flow (GPM)

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 6 segundos por cada minuto.

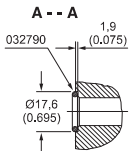
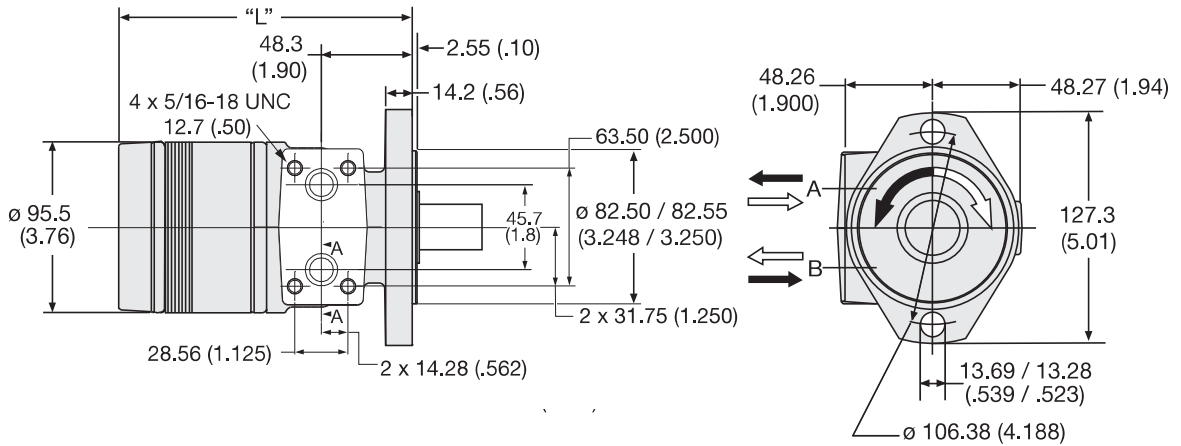
Performance data based on testing using 10W40 oil with a viscosity of 200 SUS at 54° C (130° F). Performance data is typical. Actual data may vary slightly from one production motor to another.

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

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.

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.

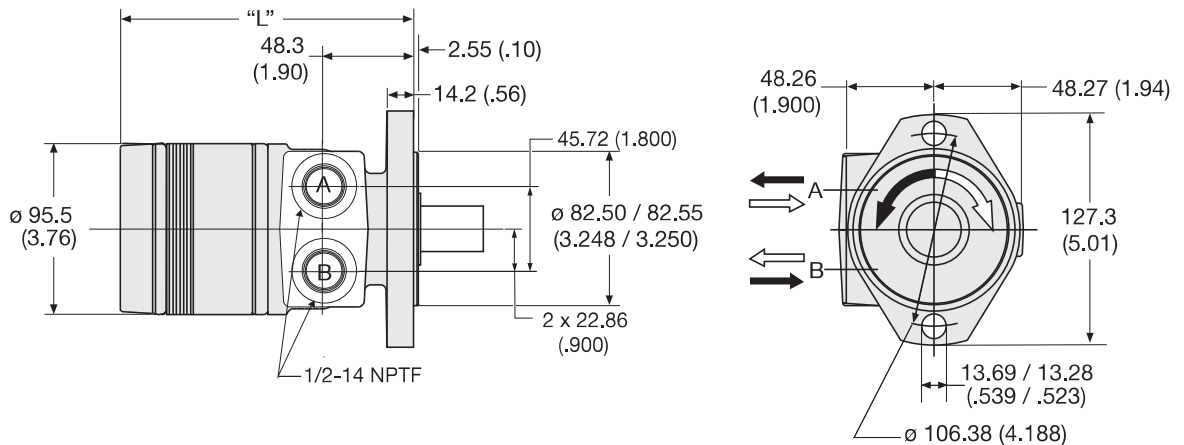
Code: AM
SAE A 2-Bolt, Manifold



Motor with manifold mount is supplied with 2 O-rings.
 Zum Motor mit Universalanschluß werden 2 O-Ringe geliefert.
 Deux joints toriques sont livrés avec les moteurs a plan de raccordement universel.
 Il blocchetto connessioni è corredato da 2 OR.

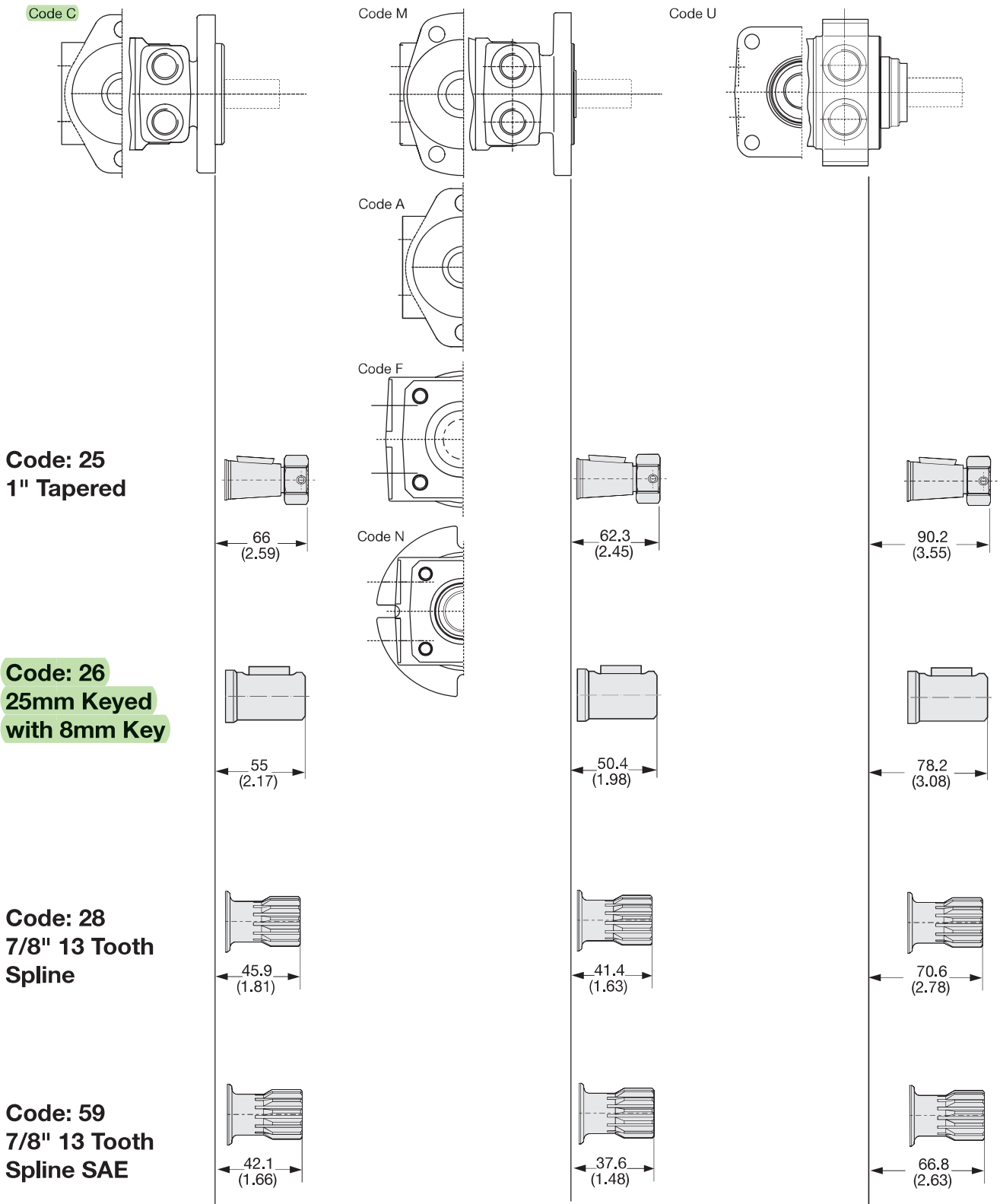
Code AM disp.	0036	0045	0050	0065	0080	0100	0130	0165	0195	0230	0260	0295	0330	0365	0390
Weight/Gewicht kg	5.87	6.03	6.12	6.26	6.35	6.49	6.76	7.03	7.35	7.58	7.80	8.07	8.35	8.66	8.80
Poids/Peso (lb)	(12.9)	(13.3)	(13.5)	(13.8)	(14.0)	(14.3)	(14.9)	(15.5)	(16.2)	(16.7)	(17.2)	(17.8)	(18.4)	(19.1)	(19.4)
Length "L" mm	132.6	136.1	137.7	140.7	144.0	147.1	153.4	159.8	166.1	172.5	178.8	185.1	191.5	200.2	202.2
"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 Pipe



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	132.6	136.1	137.7	140.7	144.0	147.1	153.4	159.8	166.1	172.5	178.8	185.1	191.5	200.2	202.2
"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)

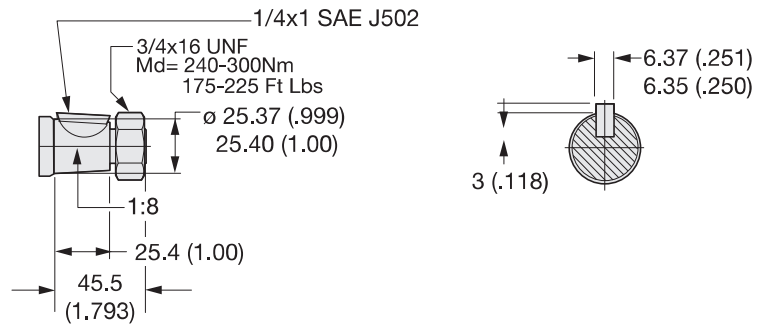
English equivalents for metric specifications are shown in ().



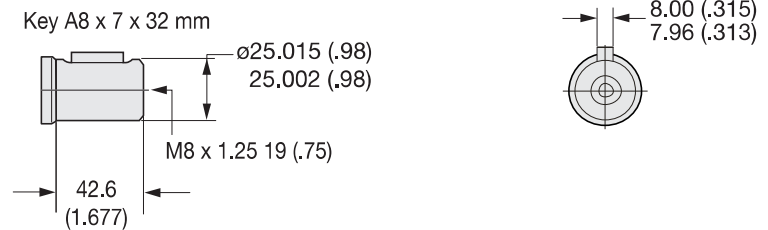
English equivalents for metric specifications are shown in ().

004 TE.indd.js

Code: 25
1" Tapered



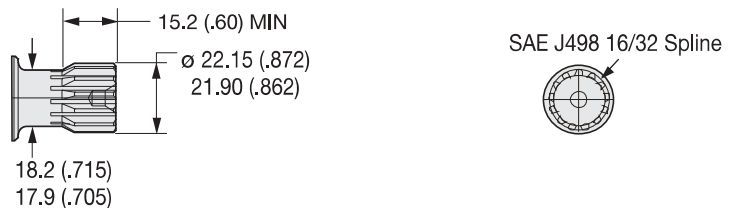
Code: 26
25mm Keyed
with 8mm Key



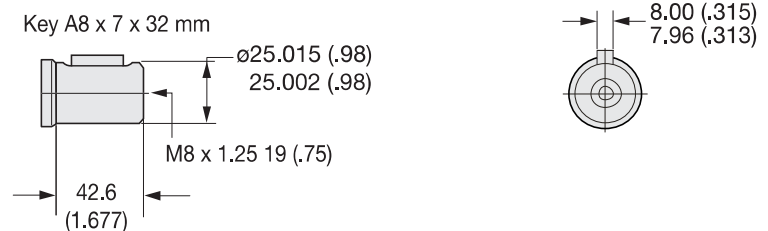
Code: 28
7/8" 13 Tooth
Spline



Code: 59
7/8" 13 Tooth
Spline SAE



Code: 66
25mm Keyed with
8mm Key, Corrosion
Resistant



English equivalents for metric specifications are shown in ().

004 TE.indd.js