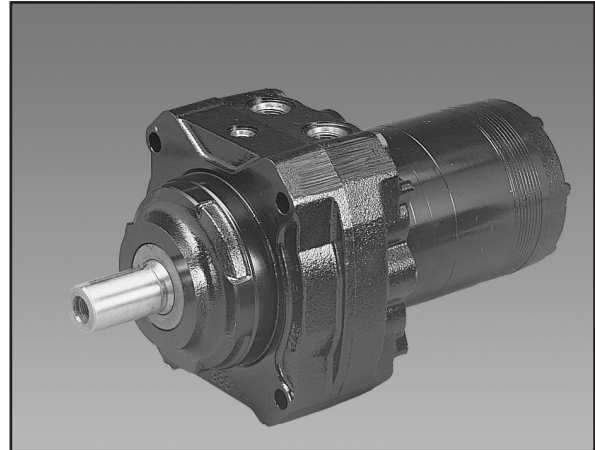


13 Displacements 13 Schluckvolumen 13 Cylindrée 13 Despazamientos	(8.6 to 58.5 in ³ /rev) 140 . . . 959 cm ³ /rev
Maximum Pressure Eingangsdruck Pression entrée Presion Maxima	Cont. (3000 psid) ... 207 bar Int. (4000 psid) ... 276 bar
Maximum Oil Flow Schluckstrom Débit d'huile Caudal Maximo de Aceite	(30 gpm) ... 114 lpm
Maximum Speed Drehzahl Vitesse de rotation Velocidad Maxima	(660 rpm) 660 rpm
Maximum Torque MaxDrehmoment Couple Torque Maximo	Cont. (9,239 lb in) 1044 Nm Int. (12,636 lb in) 1428 Nm
Maximum Side Load at Key Seitenlast Charges latérales Carga Maxima Lateral	(3597 lb) ... 16000 N

Exceptional Strength and Durability in a High Performance Motor/Brake Package

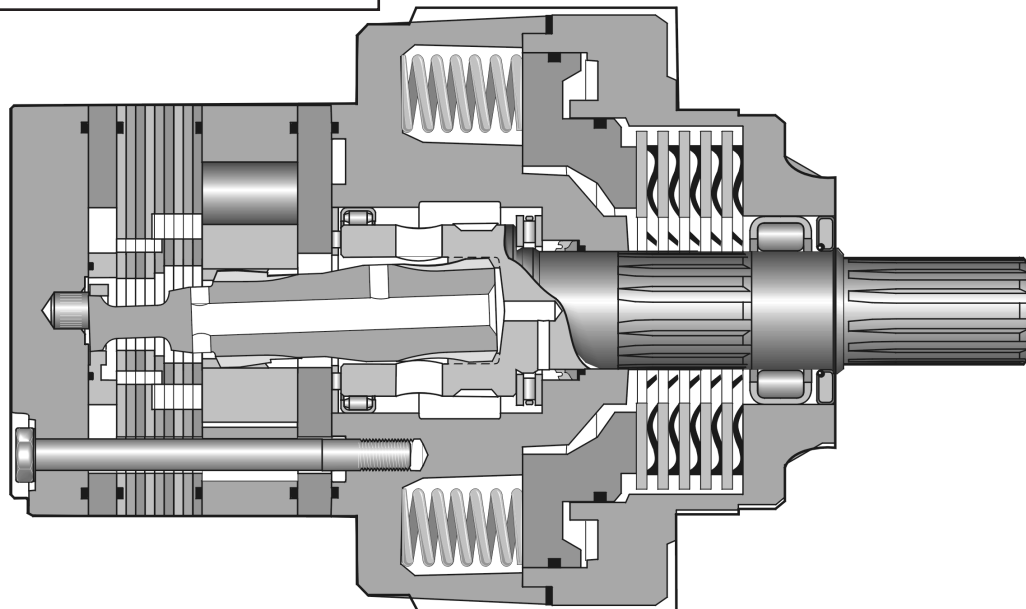
This brake motor consists of a BG Series motor integrated into a wet disc, spring applied, hydraulically released brake. Standard holding capacity is 12,000 lb in of holding torque. The brake is front mounted for reliable operation even in the event of a system failure. The brake release port is capable of pressures to 3000 PSI.



Rated Brake Holding Capacity @ Zero Release Pressure Nm (in-lbs)	Minimum Full Release Pressure bar (PSI)
1350 (12,000)	22 (315)

12,000 in-lbs is standard holding capacity.
For other holding capacities, see page 287.

CAUTION!
See installation/operating instructions for product cautions and proper use.



* With optional spring package.

BG

Series

XXXX

Displacement
 Schluckvolumen
 Cylindrée
 Desplazamiento




X




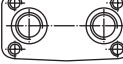
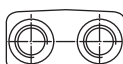
Mounting
 Gehäuse
 Carter
 Montaje

X

Ports
 Anschluß
 Plan de raccordement
 Lumbreras

Code	cm ³ /tr cm ³ /giro	
	cm ³ /U	in ³ /rev
0140	141	8.6
0170	169	10.3
0195	195	11.9
0240	238	14.5
0280	280	17.1
0310	310	18.9
0335	337	20.6
0360	360	22.2
0405	405	24.7
0475	477	29.1
0530	528	32.3
0625	623	38.0
0785	786	48.0
0960	959	58.5

Code	Mounting
A	Front Mtg/Front Bolting 1/2-13 UNC Thd 
B	SAE "B" 2 Bolt 
C	Rear Mtg/Thru Bolting 






Code	Ports
A	7/8-14 SAE O-Ring; Rear Axial 
B	7/8-14 SAE O-Ring; Rear Radial 
E	Manifold; Rear Radial 
M*	5/16-18 UNC Manifold 
S	7/8-14 SAE 

For performance data curves, see TG section.

For other available options, see pages 237–238.



XX

Shaft
Welle
Arbre
Eje

Code	Shaft
03	1 1/4" Keyed 
05	1 1/4" 14 Tooth Spline 
08	1 1/4" Tapered* 
19	1 3/8" J501 Tapered* 
62	SAE 14 Tooth Spline 

0

Rotation
Drehrichtung
Direction de rotation
Rotacion

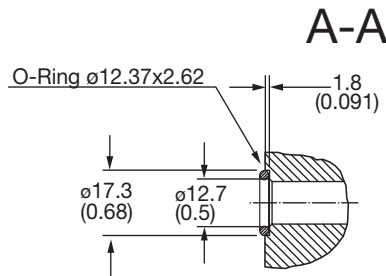
Code	Front Port Rotation
0	Standard 
1	Reverse Timed Manifold 

XXXX

Options
Opciones

Code	Options
AAAA	Standard, Black Paint
AAAB	Standard, No Paint
AAAC	Double Paint
AAAF ¹⁵	Castle Nut, Black Paint
AABP ¹⁵	Castle Nut, No Paint
AAAG	Fluorocarbon Seals, Black Paint
AAAH	Fluorocarbon Seals, No Paint
AAAJ	High Temperature Commutator Seals, Black Paint
AAFG	High Temperature Commutator Seals, No Paint
AAFW	Fluorocarbon seals, High Temperature Commutator Seals, Black paint
AAFA	Fluorocarbon seals, High Temperature Commutator Seals, No paint
AANG ¹⁵	Fluorocarbon seals, High Temperature Commutator Seals, Castle Nut, Black paint
AADD ¹⁵	Fluorocarbon seals, High Temperature Commutator Seals, Castle Nut, No paint
AABJ	Free Running Rotor Set, Black Paint
AABK	Free Running Rotor Set, No Paint
BBBA ¹⁰	1000 PSI/69 Bar Internal Bidirectional Relief, Black Paint
BBBM ¹⁰	1000 PSI/69 Bar Internal Bidirectional Relief, No Paint
BBBG ¹⁰	1500 PSI/103 Bar Internal Bidirectional Relief, Black Paint
BBBJ ¹⁰	1500 PSI/103 Bar Internal Bidirectional Relief, No Paint
BBBB ^{10,16}	2000 PSI/138 Bar Internal Bidirectional Relief, Black Paint
BBBN ^{10,16}	2000 PSI/138 Bar Internal Bidirectional Relief, No Paint
BBDL ^{10,17}	2500 PSI/172 Bar Internal Bidirectional Relief, Black Paint
BBCG ^{10,17}	2500 PSI/172 Bar Internal Bidirectional Relief, No Paint
BBBC ^{10,18}	3000 PSI/207 Bar Internal Bidirectional Relief, Black Paint
BBBF ^{10,18}	3000 PSI/207 Bar Internal Bidirectional Relief, No Paint
BBBD ^{10,19}	4000 PSI/276 Bar Internal Bidirectional Relief, Black Paint
BBBW ^{10,19}	4000 PSI/276 Bar Internal Bidirectional Relief, No Paint
AANB	6000 lb in Brake Holding Capacity, Black Paint
AAXY	9000 lb in Brake Holding Capacity, Black Paint

***Note:**



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.

El motor con montaje de distribuidor se suministra con 2 sellos toroidales.

¹⁵ Available only with shaft codes 08 and 19

¹⁰ Not available with ports code A, B or E

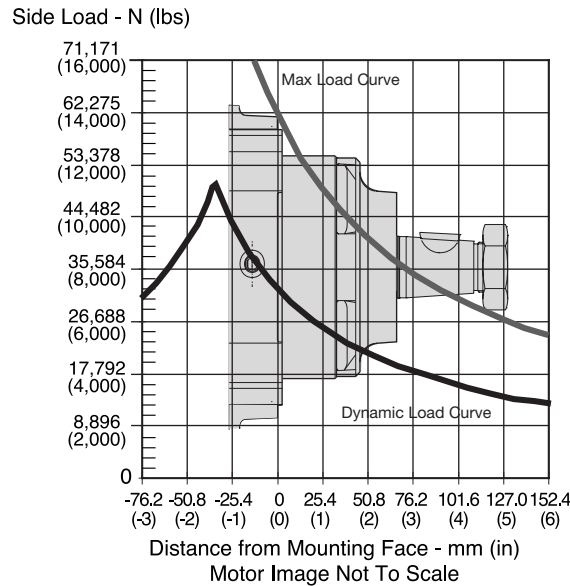
¹⁶ Not available with displacement 0960

¹⁷ Not available with displacements 0625, 0785 or 0960

¹⁸ Not available with displacements 0530, 0625, 0785 or 0960

¹⁹ Not available with displacements 0360, 0405, 0530, 0625, 0785 or 0960

Wheel Mount/Radnabengehause
Monture à roue/ Montaje de rueda



The dynamic side load curve is based on uni-directional steady state loads for L_{10} bearing life at 3×10^6 revolutions.

Die zulässige auslegbare radiale Wellenbelastungskurve ist unter ruhenden, einseitig statisch gerichteten Lastverhältnissen auf eine L_{10} Lebensdauer mit 3×10^6 Umdrehungen kalkuliert.

La courbe de charge latérale permise se base sur des charges unidirectionnelles en régime permanent pour le roulement L_{10} à 3×10^6 révolutions.

La curva de valores admisibles de carga lateral está basada en cargas constantes para cojinetes L_{10} a 3×10^6 revoluciones.

The maximum load curve is defined by bearing static load capacity. This curve should not be exceeded at any time including shock loads.

Die maximale radiale Wellenbelastungskurve ist definiert als maximale statische Last ohne Drehzahl. Sie gilt als Grenze und sollte keinesfalls überschritten werden.

La courbe de charge maximale est définie par la capacité de charge statique portante. Cette courbe ne devrait être dépassée en aucun moment y compris pour les charges par à-coups.

La curva de carga máxima queda definida por la capacidad de carga estática del cojinete. No se deben superar los valores de esta curva, ni siquiera con cargas provisorias de impacto.

Equation to Calculate the Expected Radial Bearing Life
Gleichung zur Ermittlung der Lagerlebensdauer

Equation to calculate the dynamic bearing life for a given load:
Bestimmung der erlaubten radialen Wellenbelastung mit vorgegebener Last

Use F_a , F_b and S in equation to determine hours of L_{10} bearing life.
Die Lebensdauer in Stunden ergibt sich durch einsetzen von F_a , F_b , und S in die nachstehende Formel.

$$L = \frac{3 \times 10^6}{60 \times S} \left\{ \frac{F_a}{F_b} \right\}^{3.33}$$

Where / Mit:

S = Shaft Speed RPM / Abtriebswellendrehzahl in min^{-1}

L = Life In Hours / Lebensdauer in Stunden

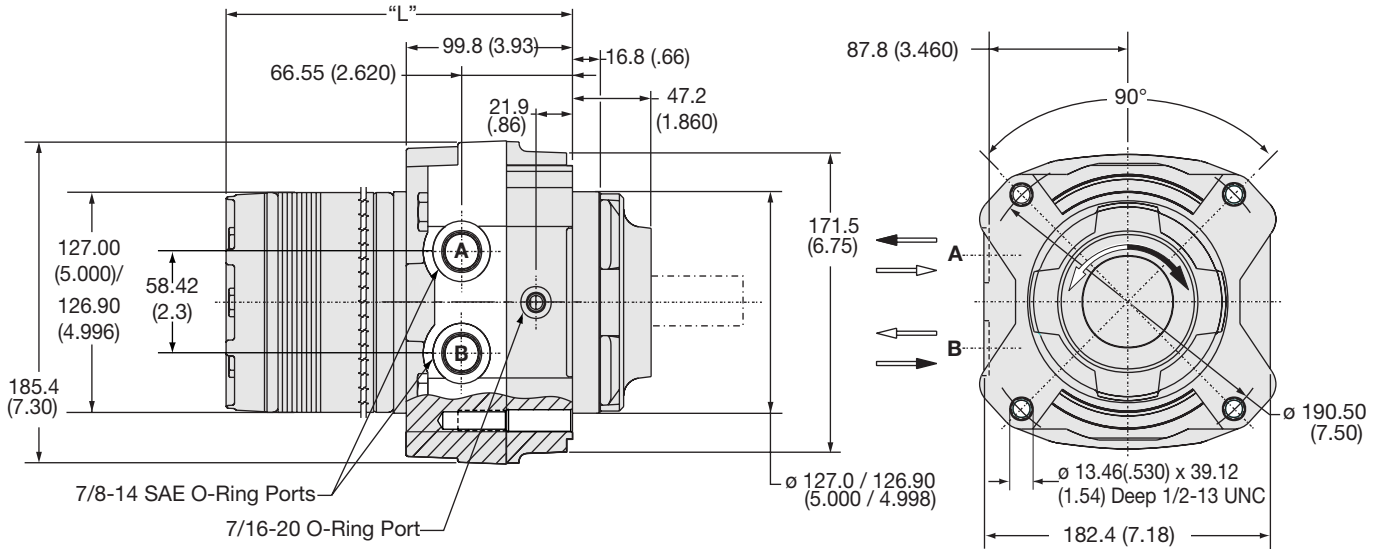
F_a = Dynamic side load defined by above curve at a distance from mounting flange. / Erlaubte radiale Wellenbelastung als Function der Laenge

F_b = Application side load. / Anwendungsseitige Wellenbelastung

Note: Calculations are based on L_{10} bearing life per ISO 281.
Auslegung basiert auf einer L_{10} Lebensdauer nach ISO 281

Code: AS

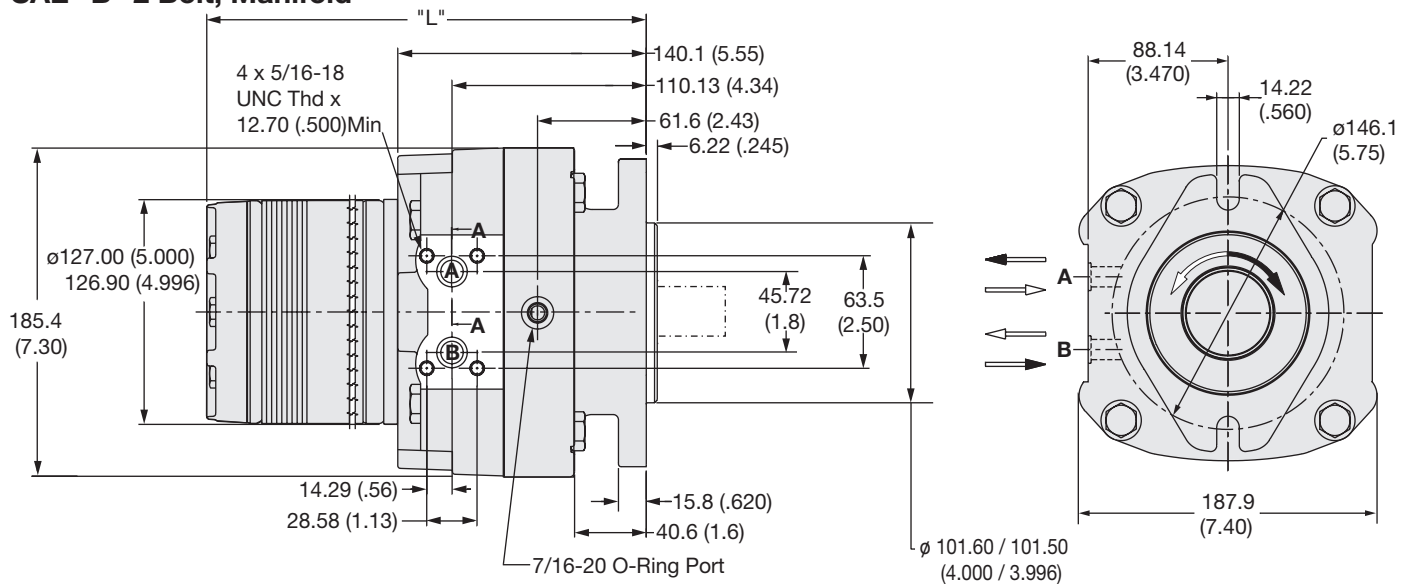
Front Mounting / Front Bolting, 7/8-14 SAE O-Ring



Code AS	0140	0170	0195	0240	0280	0335	0405	0475	0530	0625	0785	0960
Weight / Gewicht kg	27.3	27.5	27.8	28.1	28.5	28.9	29.5	30.2	30.9	31.7	33.2	34.9
Poids/Peso (lb)	(60.2)	(60.8)	(61.3)	(62.1)	(63.0)	(63.9)	(65.2)	(66.7)	(68.3)	(69.9)	(73.3)	(77.1)
Length "L" mm	192.3	195.3	198.6	203.2	208.0	214.4	221.7	230.4	236.7	246.1	265.2	284.2
"L" (in)	(7.57)	(7.69)	(7.82)	(8.00)	(8.19)	(8.44)	(8.73)	(9.07)	(9.32)	(9.69)	(10.44)	(11.19)

Code: BM*

SAE "B" 2 Bolt, Manifold

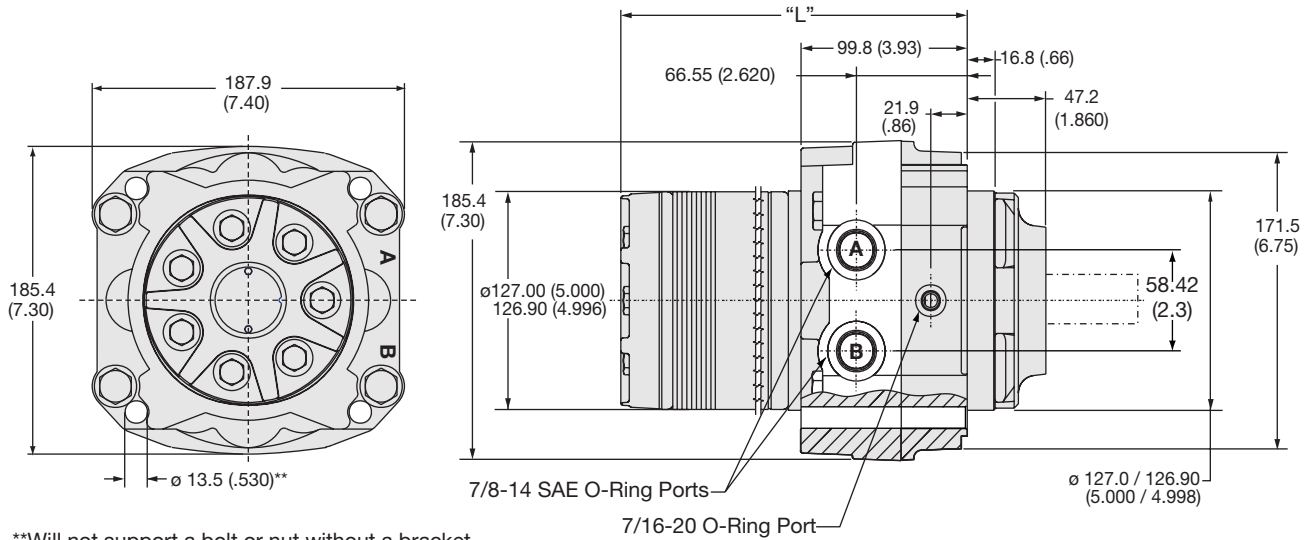


Code BM	0140	0170	0195	0240	0280	0335	0405	0475	0530	0625	0785	0960
Weight / Gewicht kg	28.4	28.7	28.9	29.3	29.7	30.1	30.1	30.7	31.3	32.8	34.3	36.1
Poids/Peso (lb)	(62.6)	(63.2)	(63.7)	(64.5)	(65.4)	(66.3)	(67.6)	(69.1)	(70.7)	(72.3)	(75.7)	(79.5)
Length "L" mm	233.2	236.4	239.6	244.3	249.1	255.4	262.8	271.3	277.7	287.2	306.3	325.3
"L" (in)	(9.18)	(9.31)	(9.43)	(9.62)	(9.81)	(10.06)	(10.35)	(10.68)	(10.93)	(11.31)	(12.06)	(12.81)

English equivalents for metric specifications are shown in ().

Code: CS

Rear Mounting/Thru Bolting, 7/8-14 SAE O-Ring

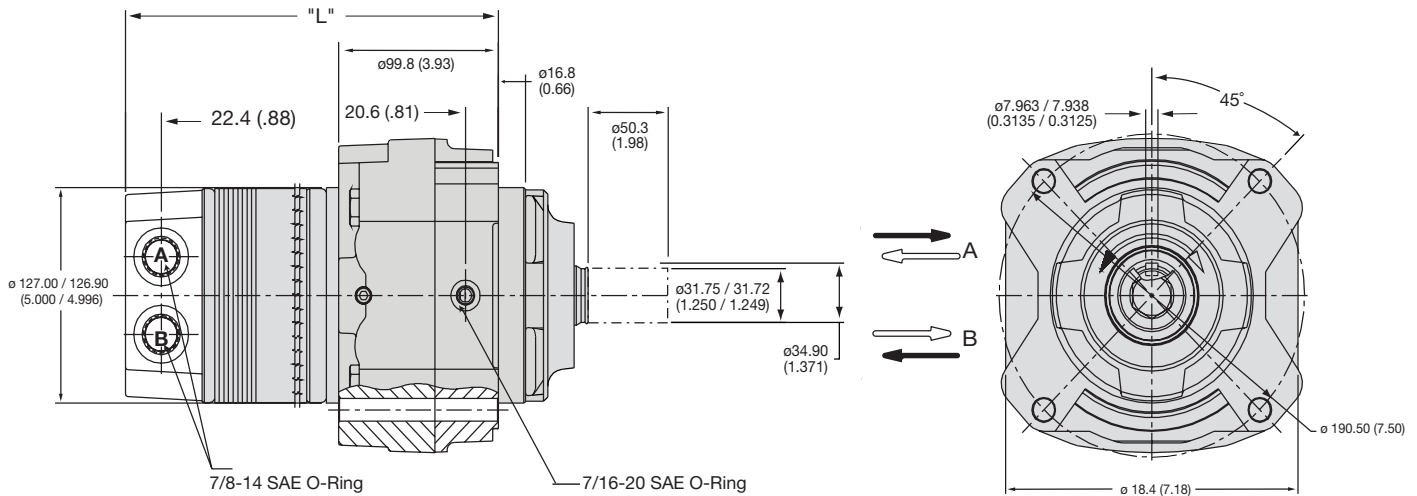


**Will not support a bolt or nut without a bracket.

Code CS		0140	0170	0195	0240	0280	0335	0405	0475	0530	0625	0785	0960
Weight / Gewicht	kg	27.3	27.5	27.8	28.1	28.5	28.9	29.5	30.2	30.9	31.7	33.2	34.9
Poids/Peso	(lb)	(60.2)	(60.8)	(61.3)	(62.1)	(63.0)	(63.9)	(65.2)	(66.7)	(68.3)	(69.9)	(73.3)	(77.1)
Length	"L" mm	192.3	195.3	198.6	203.2	208.0	214.4	221.7	230.4	236.7	246.1	265.2	284.2
	"L" (in)	(7.57)	(7.69)	(7.82)	(8.00)	(8.19)	(8.44)	(8.73)	(9.07)	(9.32)	(9.69)	(10.44)	(11.19)

Code: CB

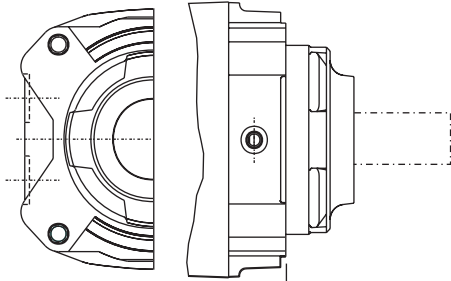
Rear Mounting/Thru-Bolting, 7/8-14 SAE Rear Port



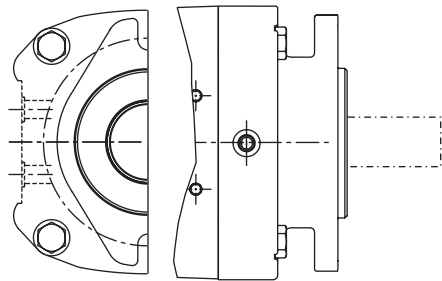
Code CB	disp	0140	0170	0195	0240	0280	0310	0335	0405	0475	0530	0625	0785	0960
Weight/Gewicht	kg	29.6	29.8	30.1	30.4	30.8	31.1	31.3	31.8	32.5	33.2	34.0	35.5	37.2
Poids/Peso	(lb)	(65.2)	(65.8)	(66.3)	(67.1)	(68.0)	(68.5)	(68.9)	(70.2)	(71.7)	(73.3)	(74.9)	(78.3)	(82.1)
Length "L"	mm	216.9	220.0	223.3	228.1	232.7	235.0	239.0	246.4	255.0	261.4	271.0	290.1	309.1
	(in)	(8.54)	(8.66)	(8.79)	(8.98)	(9.16)	(9.25)	(9.41)	(9.70)	(10.04)	(10.29)	(10.67)	(11.42)	(12.17)

English equivalents for metric specifications are shown in ().

Code A & C

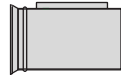


Code B

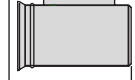


Code: 03

1 1/4" Keyed



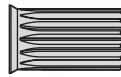
106.7/104.7
(4.20/4.12)



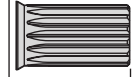
65.5/63.5
(2.58/2.50)

Code: 05

1 1/4" 14 Tooth Spline



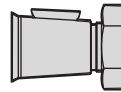
106.7/104.7
(4.20/4.12)



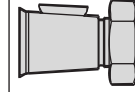
65.5/63.5
(2.58/2.50)

Code: 08

1 1/4" Taper



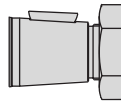
107.9/105.9
(4.25/4.17)



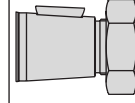
66.7/64.7
(2.63/2.55)

Code: 19

1 3/8" J501 Taper



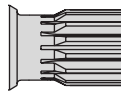
110.5/108.5
(4.35/4.27)



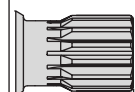
69.3/67.3
(2.73/2.65)

Code: 62

SAE 14 Tooth Spline



97.6/95.6
(3.84/3.76)



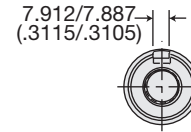
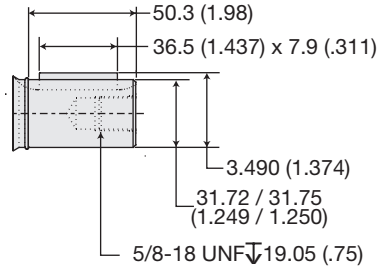
56.4/54.4
(2.22/2.14)

English equivalents for metric specifications are shown in ().

012 BG Brake.indd, js

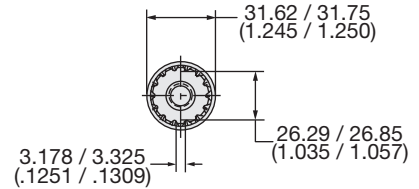
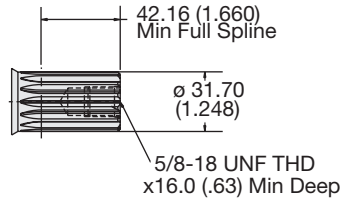
Code: 03

1 1/4" Keyed



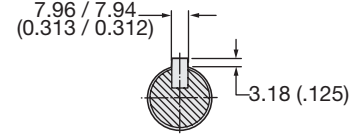
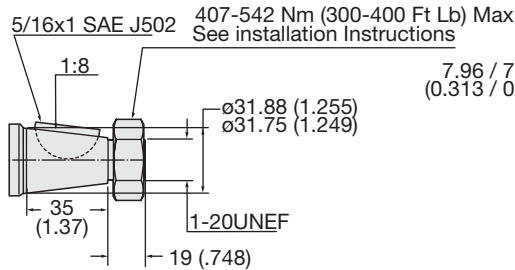
Code: 05

1 1/4" 14 Tooth Spline



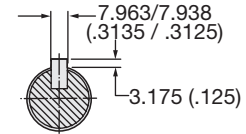
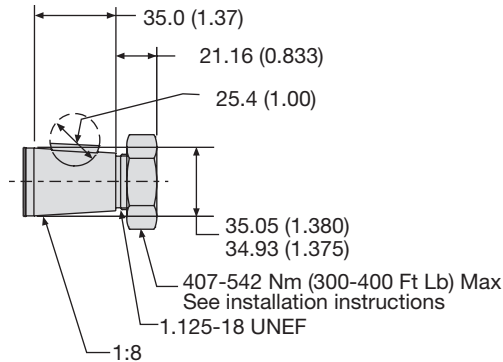
Code: 08

1 1/4" Taper



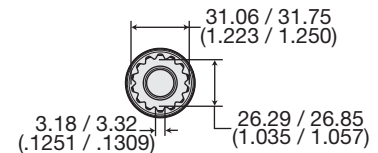
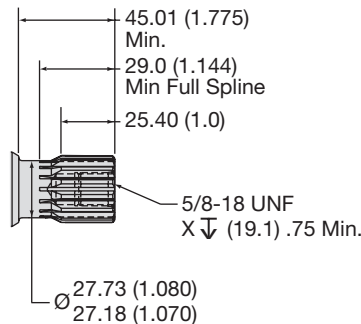
Code: 19

1 3/8" J501 Taper



Code: 62

SAE 14 Tooth Spline



English equivalents for metric specifications are shown in ().

012 BG Brake.indd, js