2000 Series

Model Code

The following 30-digit coding system has been developed to identify all of the configuration options for the 2000 Series motor. Use this model code to specify a motor with the desired features. All 30 digits of the code must be present when ordering. You may want to photocopy the matrix below to ensure that each number is entered in the correct box.

M	0 2	* * *	* *	* *	* *	* *	*	* *	1	*	* *	0 0	* *	* *	A A	F
1	2 3	4 5 6	7 8	9 10	11 12	13 14	15	16 17	18	19	20 21	22 23	24 25	26 27	28 29	30

1 Product
M – 2000 Series Motor

2, 3 Product Series
02 – 2000 Series Motor

4, 5, 6 Displacement
021 - 34 cm^3/r [2.07 in^3/r]
025 - 40.8 cm^3/r [2.49 in^3/r]
040 - 66.5 cm^3/r [4.06 in^3/r]
049 – 80.6 cm^3/r [4.92 in^3/r]
055 – 90.6 cm^3/r [5.53 in^3/r]
062 – 101.6 cm^3/r [6.20 in^3/r]
080 – 130.6 cm^3/r [7.97 in^3/r]
096 – 158.1 cm^3/r [9.65 in^3/r]
119 – 194.8 cm^3/r [11.89 in^3/r]
149 – 244.3 cm^3/r [14.91 in^3/r]
187 – 306.6 cm^3/r [18.71 in^3/r]
240 – 393.8 cm^3/r [24.03 in^3/r
298 – 489.0 cm^3/r [29.84 in^3/r]

7, 8 Mounting Type

AB – Wheel, 4 Bolt: 108.0 [4.25] Pilot Dia. 13.59 [.535] Dia. Holes on 147.6 [5.81] Dia. Bolt Circle. 127.0 [5.00] Dia. Rear Mount Pilot

AC – Standard, 2 Bolt: 82.6 [3.25] Pilot Dia. 13.59 [.535] Dia. Holes on 106.4 [4.19] Dia. Bolt Circle. SAE A

AD – Bearingless (w/ Leakage Slots), 4 Bolt: 101.6 [4.00] Pilot Dia. 13.59 [.535] Dia. Holes on 127.0 [5.00] Dia. Bolt Circle

AF – Standard, 2 Bolt: 101.6 [4.00] Pilot Dia. 14.35 [.565] Dia. Holes on 146.0 [5.75] Dia. Bolt Circle. SAE B

AH – Standard, 4 Bolt: 82.6 [3.25] Pilot Dia. 13.59 [.535] Dia. Holes on 106.4 [4.19] Dia. Bolt Circle

AJ – Standard (Magneto), 4 Bolt: 82.6 [3.25] Pilot Dia. 13.59 [.535] Dia. Holes on 106.4 [4.19] Dia. Bolt Circle. 2.79 [.110] Pilot Length

AL - Wheel (European), 4 Bolt: 125 [4.92] Pilot Dia. 13.79 [.543] Dia. Holes on 159.99 [6.299] Dia. Bolt Circle

AP – Wheel, 4 Bolt: 108.0 [4.25] Pilot Dia. 13.59 [.535] Dia. Holes on 147.6 [5.81] Dia. Bolt Circle. 127.0 [5.00] Dia. Rear Mount Pilot. Spigot Reduced to 88.9 [3.50] Dia. by 25.4 [1.00] Depth.

9, 10 Output Shaft

00 – None (Bearingless)

01 – 25.40 [1.000] Dia. Straight Shaft with 1/4-20UNC-2B Thread in End, 6.35 [.250] Wide x 25.40 [1.000] Dia. Woodruff Key

02 – 31.75 [1.250] Dia. Straight Shaft with .375-16UNC-2B Thread in End, 7.938 [.3125] Sq x 31.75 [1.250] Straight Key

03 – 31.75 [1.250] Dia. .125:1 Tapered Shaft per SAE J501 with/1.000-20 UNEF-2A Threaded Shaft End and Slotted Hex Nut, 7.938 [.3125] Sq x 25.40 [1.0] Straight Key

04 – 31.75 [1.250] Dia. Flat Root Side Fit, 14 Tooth, 12/24 DP 30° Involute Spline w/ .375-16UNC-2B Thread in End, 33.0 [1.30] Min. Full Spline Length

05 – 25.40 [1.000] Dia. 6B Spline per SAE J499 with .250-20UNC-2B Thread in End, 22.76 [.896] Min. Full Spline Length

07 – 22.22 [.875] Dia. Flat Root Side Fit, 13 Tooth, 16/32 DP 30° SAE B Involute Spline, 15.2 [.60] Min. Full Spline Length

16 – 32.00 [1.260] Dia. Straight Shaft with M8 x 1.25-6H Thread in End, 9.982 [.3930] W x 7.995 [.3132] H x 45.00 [1.772] L Key

17 – 31.75 [1.250] Dia. Straight Shaft With 3/8 -16 UNC-2B Thread in End, 7.938 [.3125] Sq x 31.75 [1.250] Straight Key, Corrosion Resistant (Seal area to shaft end)

19 – 25.00 [.984] Dia. Straight Shaft with M8 x 1.25-6h Thread in End, 7.982 [.3142]W x 6.954 [.2738]H x 31.82 [1.254]L Key

41 – 35.00 [1.378] Dia. 10:1 Tapered Shaft Per ISO R775 with M20 x 1.5-6g Threaded Shaft End and Slotted Hex Nut, 6.00 [.236] Sq. X 20.00 [.787] Key

42 – 35.00 [1.378] Dia. Straight Shaft with M8 x 1.25-6h Thread in End, 9.982 [.3930]W x 7.995 [.3132]H x 45.00 [1.772]L Key

11, 12 Ports

AA – .875-14 UNF-2B SAE O-ring Ports - Staggered Ports

AB –12.70 [.500] and 15.88 [.625] Dia. Manifold Ports with 3 x .375-16 UNC-2B Port Block Mounting Holes

AC –.875-14 UNF-2B SAE O-ring Ports - Ports Oriented 180° to each other

AE – 12.70 [.500] And 15.88 [.625] Dia. Manifold Ports with 3 x M10 x 1.5-6H Port Block Mounting Holes

AF – 1.0625-12 UN-2B SAE O-ring Ports - Ports Oriented 180° to each other

AG – G-1/2 BSP Straight THD Ports - Staggered Ports

AN – G-1/2 BSP Straight THD Ports - End Ported

AS – G-1/2 Bsp Straight THD Ports - Staggered Port with 2 x M10 x 1.5-6H Port Block Mounting Holes - European

13, 14 Case Flow Options

Shuttles available with port code AA only)

01 – .4375-20 UNF-2B SAE O-Ring Port

02 – G 1/4 BSP Straight THD Port

09 – Reverse Flow Shuttle Valve w/ G-1/4 BSP Straight THD Port, .062 Dia. Shuttle Flow Orifice

13 – Reverse Flow Shuttle Valve w/ .4375-20 UNF-2B SAE O-Ring Port, .062 Dia. Shuttle Flow Orifice

15 Low Pressure Relief

0 – None
A – Set at 4.5 bar [65 lbf/in^2]
B – Set at 15.2 bar [220 lbf/in^2]
C – Set at 20.7 bar [300 lbf/in^2]
E – Set at 11.03 bar [160 lbf/in^2]

16, 17 Pressure/Flow Option

00 – None
Integral Cross-Over Relief Valve:
30 – Set at 103.4 bar [1500 lbf/in^2]
31 – Set at 120.6 bar [1750 lbf/in^2]
32 – Set at 137.9 bar [2000 lbf/in^2]
33 – Set at 155.1 bar [2250 lbf/in^2]
34 – Set at 172.4 bar [2500 lbf/in^2]
35 – Set at 189.6 bar [2750 lbf/in^2]
36 – Set at 206.8 bar [3000 lbf/in^2]
51 – Set at 234.4 bar [3400 lbf/in^2]

18 Geroler Option

1 – Standard
2 – Free Running
6 – Reduced side clearance, no warranty for galling

19 Seal Options

0 – Standard
1 - Viton
2 - Viton Shaft Seal
3 - High Pressure Shaft Seal
4 - Seal Guard
5 - Extreme Duty Seal Guard
6 - High Pressure Shaft Seal, Seal Guard

20, 21 Accessories

00 – None
AA - Long Body Digital Speed Pickup (30 Pulse) 127 [5.0] Lead Wire With Packard Weather Pac Shroud Connector (A=Power, B=Signal, C=Common)
AD – M 12 Threaded Connector, Digital Speed Pickup (30 Pulse)
AG - M 12 Threaded Connector, Digital Speed And Direction Pickup (One 60 Pulse Per Rev Speed Signal And One Directional Signal (Pin 1=Power, Pin 2=Direction, Pin 3=Common, Pin 4=Speed)

22, 23 Special Features (Hardware)

00 – None

24, 25 Special Features (Assembly)

00 – None
AA – Flange rotated 90 degrees
AB – Reverse Rotation
AE - Flange Rotated 45 Degrees

26, 27 Paint/Packaging

AA – No Paint, Indiv. Box
AB – Low Gloss Black Primer, Indiv. Box
AT – Environmental coated black, individual box
BJ – Nickel plated motor (excluding shaft), individual box

28, 29 Customer ID

AA – None

30 Design Code

F – Sixth

Feature in bold are preferred and allow for shorter lead time