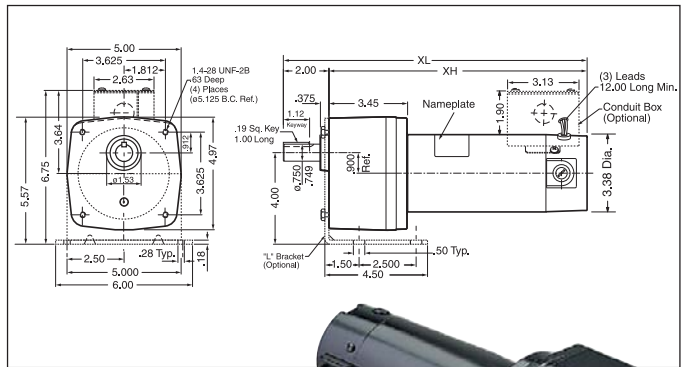


90 and 180VDC Permanent-Magnet Parallel-Shaft Gearmotors



- Enclosure: totally enclosed nonventilated
- Gearcase: die-cast aluminum
- Lubrication: permanent, heavy fluid gear oil
- Gears: hardened steel, AGMA Class 9
- Bearings: ball on motor, needle on gearbox, thrust balls throughout; oversize output bearings for greater overhung load capacity
- Mounting: all-position, except shaft up; for base mount, use optional mounting bracket 6XF03
- Rotation: reversible
- Brushes: externally replaceable
- Ambient: 40°C
- Seals: spring-loaded, heavy-duty industrial



Nameplate RPM	Max. Torque	Overhung Load	Input HP	Gear Ratio	Dim. XL	Dim. XH	Gearmotor Voltage			
							90V DC Full Load Amps	180V DC Full Load Amps		
7 RPM	330 in-lb	565 lb	1/8	336:1	11.31"	9.31"	0.7 A	6ML63	0.35 A	6ML64
14 RPM	341 in-lb	465 lb	1/8	180:1	11.31"	9.31"	1.0 A	6ML65	0.5 A	6ML66
21 RPM	371 in-lb	413 lb	1/8	124:1	13.31"	11.31"	1.1 A	6ML67	0.55 A	6ML68
27 RPM	305 in-lb	374 lb	1/4	91:1	13.31"	11.31"	1.5 A	6ML69	0.75 A	6ML70
42 RPM	280 in-lb	327 lb	1/4	58:1	13.31"	11.31"	2.3 A	6ML71	1.2 A	6ML72
50 RPM	250 in-lb	315 lb	1/4	50:1	13.31"	11.31"	2.3 A	6ML73	1.2 A	6ML74
62 RPM	220 in-lb	303 lb	1/4	43:1	13.31"	11.31"	2.3 A	6ML51	1.2 A	6ML52
83 RPM	155 in-lb	267 lb	1/4	29:1	13.31"	11.31"	2.3 A	6ML53	1.2 A	6ML54
125 RPM	100 in-lb	256 lb	1/4	23:1	13.31"	11.31"	2.0 A	6ML55	1.0 A	6ML56
165 RPM	70 in-lb	232 lb	1/4	15:1	13.31"	11.31"	2.0 A	6ML57	1.0 A	6ML58
250 RPM	45 in-lb	201 lb	1/4	10:1	13.31"	11.31"	2.0 A	6ML59	1.0 A	6ML60
500 RPM	25 in-lb	194 lb	1/4	5:1	13.31"	11.31"	2.0 A	6ML61	1.0 A	6ML62



Description	Item No.
Accessories	
L-Shaped Mounting Bracket	6XF03
Conduit Box	6XF02

Motor-Mounted Speed Control



- IP30 enclosure
 - 4A max.
 - Operating temp: 104°F (40°C)
 - Accepts tach feedback
- For 90VDC permanent magnet motors and gearmotors up to 1/6 HP. SCR controller direct-mounts to motor endbell. Features adjustable current/torque limit and maximum and minimum speed pots. Easy assembly.

Voltage Output	HP	AC Input Voltage	Speed Range	Speed Regulation	Item No.
0 to 90V DC	1/8 to 1/6	120V AC	15:1	10 to 30%	2PUX3

Units Compatible with No. 2PUX3

1LPK5	1LRA8	2H594	4Z381
1LPK6	1LRA9	3XA77	4Z382
1LPK8	1LRB1	3XA78	4Z383
1LPK1	1LRB2	3XA79	4Z528
1LPV9	1LRB3	3XA80	6A193
1LPW1	1LRB4	3XA81	6A194
1LPW2	1R854	3XA82	6Z910
1LPW3	1R856	4Z128	6Z911
1LPW4	2H561	4Z129	6Z912
1LPW5	2H563	4Z130	6Z913
1LPX8	2H565	4Z131	6Z914
1LPX9	2H567	4Z132	6Z915
1LPY1	2H569	4Z133	6Z916
1LPY2	2H588	4Z134	—
1LPW3	2H590	4Z140	—
1LPY4	2H592	4Z141	—



Nameplate RPM	Max. Torque	Overhung Load	Input HP	Gear Ratio	Full Load Amps	Overall Length	Mr. Model	Item No.
720 Series, For Shaft Dia. 3/4"								
8 RPM	442 in-lb	725 lb	1/8	240:1	1.0 A	11 29/32 in	021-720D0240	35TV25
10 RPM	332 in-lb	670 lb	1/8	180:1	1.0 A	11 29/32 in	021-720D0180	35TV24
12 RPM	277 in-lb	635 lb	1/8	150:1	1.0 A	11 29/32 in	021-720D0150	35TV23
15 RPM	415 in-lb	550 lb	1/8	120:1	1.45 A	13 3/64 in	021-720D0120	35TV22
18 RPM	346 in-lb	525 lb	1/8	100:1	1.45 A	13 3/64 in	021-720D0100	35TV21
22 RPM	277 in-lb	490 lb	1/8	80:1	1.45 A	13 3/64 in	021-720D0080	35TV20
30 RPM	208 in-lb	455 lb	1/8	60:1	1.45 A	13 3/64 in	021-720D0060	35TV19
35 RPM	173 in-lb	430 lb	1/8	50:1	1.45 A	13 3/64 in	021-720D0050	35TV18
44 RPM	139 in-lb	400 lb	1/8	40:1	1.45 A	13 3/64 in	021-720D0040	35TV17
59 RPM	104 in-lb	370 lb	1/8	30:1	1.45 A	13 3/64 in	021-720D0030	35TV16
89 RPM	70 in-lb	330 lb	1/8	20:1	1.45 A	13 3/64 in	021-720D0020	35TV15
118 RPM	52 in-lb	305 lb	1/8	15:1	1.45 A	13 3/64 in	021-720D0015	35TV14
177 RPM	35 in-lb	270 lb	1/8	10:1	1.45 A	13 3/64 in	021-720D0010	35TV13
725 Series, For Shaft Dia. 1"								
10 RPM	623 in-lb	870 lb	1/8	180:1	1.6 A	15 21/64 in	021-725D0180	35TV83
12 RPM	519 in-lb	820 lb	1/8	150:1	1.45 A	15 21/64 in	021-725D0150	35TV82
15 RPM	415 in-lb	780 lb	1/8	120:1	1.45 A	15 21/64 in	021-725D0120	35TV81
18 RPM	346 in-lb	740 lb	1/8	100:1	1.45 A	15 21/64 in	021-725D0100	35TV80
22 RPM	443 in-lb	620 lb	1/8	80:1	2.24 A	14 1/64 in	021-725D0080	35TV79
29 RPM	332 in-lb	580 lb	1/8	60:1	2.24 A	14 1/64 in	021-725D0060	35TV78
35 RPM	277 in-lb	550 lb	1/8	50:1	2.24 A	14 1/64 in	021-725D0050	35TV77
43 RPM	222 in-lb	510 lb	1/8	40:1	2.24 A	14 1/64 in	021-725D0040	35TV76
58 RPM	166 in-lb	475 lb	1/8	30:1	2.24 A	14 1/64 in	021-725D0030	35TV75
86 RPM	111 in-lb	430 lb	1/8	20:1	2.24 A	14 1/64 in	021-725D0020	35TV74
115 RPM	83 in-lb	400 lb	1/8	15:1	2.24 A	14 1/64 in	021-725D0015	35TV73
173 RPM	55 in-lb	355 lb	1/8	10:1	2.24 A	14 1/64 in	021-725D0010	35TV72
730 Series, For Shaft Dia. 1-1/4"								
8 RPM	1,638 in-lb	1,120 lb	1/4	240:1	3.0 A	16 13/32 in	021-730D0240	35TV37
11 RPM	1,228 in-lb	1,050 lb	1/4	180:1	3.0 A	16 13/32 in	021-730D0180	35TV36
13 RPM	1,024 in-lb	1,010 lb	1/4	150:1	3.0 A	16 13/32 in	021-730D0150	35TV35
16 RPM	819 in-lb	965 lb	1/4	120:1	3.0 A	16 49/64 in	021-730D0120	35TV34
20 RPM	682 in-lb	910 lb	1/4	100:1	3.0 A	16 13/32 in	021-730D0100	35TV33
25 RPM	546 in-lb	820 lb	1/8	80:1	3.0 A	16 13/32 in	021-730D0080	35TV32
33 RPM	409 in-lb	760 lb	1/8	60:1	3.0 A	16 13/32 in	021-730D0060	35TV31
39 RPM	341 in-lb	720 lb	1/8	50:1	3.0 A	16 13/32 in	021-730D0050	35TV30
49 RPM	273 in-lb	675 lb	1/8	40:1	3.0 A	16 13/32 in	021-730D0040	35TV29
65 RPM	205 in-lb	625 lb	1/8	30:1	3.0 A	16 13/32 in	021-730D0030	35TV28
98 RPM	136 in-lb	565 lb	1/8	20:1	3.0 A	16 13/32 in	021-730D0020	35TV27
131 RPM	102 in-lb	520 lb	1/8	15:1	3.0 A	16 13/32 in	021-730D0015	35TV26
196 RPM	68 in-lb	465 lb	1/8	10:1	3.0 A	16 13/32 in	021-730D0010	35TV25



BISON
PowerSTAR

90VDC Hypoid Hollow-Shaft Right-Angle Gearmotors

- Enclosure: totally enclosed nonventilated
 - Gearcase: die-cast aluminum
 - Lubrication: extreme pressure grease
 - Gears: hardened steel hypoid
 - Bearings: ball
 - Mounting: all position
 - Rotation: reversible
 - Brushes: externally replaceable
 - Max. ambient: 40°C
- PowerSTAR compact design delivers higher torque at improved efficiencies for packaging and light-to medium-duty conveying applications. Lightweight aluminum shell keeps unit running cool, while ground gearing provides quiet, precise, low backlash operation. 12 and 24VDC gearmotors are available on Grainger.com.

Description	720 Series		725 Series		730 Series	
	Mr. Model	Item No.	Mr. Model	Item No.	Mr. Model	Item No.
Accessories						
Output Shaft Cover	P171-720-1000W	24MA51	P171-725-1020W	24MA52	P171-730-1000W	24MA53
Mounting Plate	P125-720-1000W	24MA54	P125-725-1000W	24MA55	P125-730-1000W	24MA56
Torque Arm	P125-720-1030W	24MA57	P125-725-1030W	24MA58	P125-730-1030W	24MA59
Output Shaft Insert	P108-720-5000W	24MA60	P108-725-5000W	24MA61	P108-730-5000W	24MA62