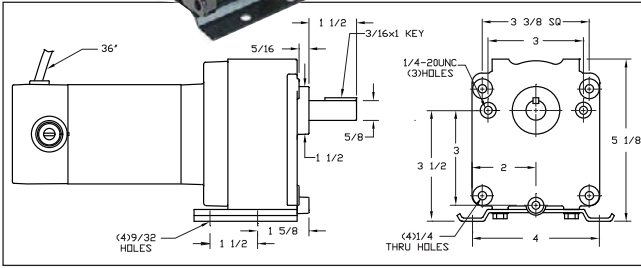


**1Z820**



## 12VDC Permanent-Magnet Parallel-Shaft Gearmotors



- Enclosure: totally enclosed nonventilated
- Gearcase: die-cast aluminum
- Lubrication: permanent heavy fluid gear oil
- Gears: hardened steel
- Bearings: needle roller and thrust balls on case; ball on motor
- Mounting: all-position, face/base
- Rotation: reversible
- Brushes: externally replaceable
- Ambient: 40°C
- Seals: on input and output shafts
- Accept pulse generators 6Z392 or 5JJ65 (sold separately on Grainger.com)

Nameplate RPM	Max. Torque	Overhung Load	Input HP	Gear Ratio	Full Load Amps	Length Less Shaft	Item No.
23 RPM	280 in-lb	150 lb	1/6	82:1	9.75 A	10 1/2 in	<b>1Z820</b> *
31 RPM	278 in-lb	150 lb	1/6	58:1	14.5 A	10 1/2 in	<b>1Z822</b>
50 RPM	183 in-lb	150 lb	1/6	36:1	14.5 A	10 1/2 in	<b>1Z824</b>
64 RPM	150 in-lb	150 lb	1/6	28:1	14.5 A	10 1/2 in	<b>1Z826</b>
94 RPM	102 in-lb	150 lb	1/6	19:1	14.5 A	10 1/2 in	<b>1Z831</b>
170 RPM	57 in-lb	150 lb	1/6	11:1	14.5 A	10 1/2 in	<b>1Z833</b>

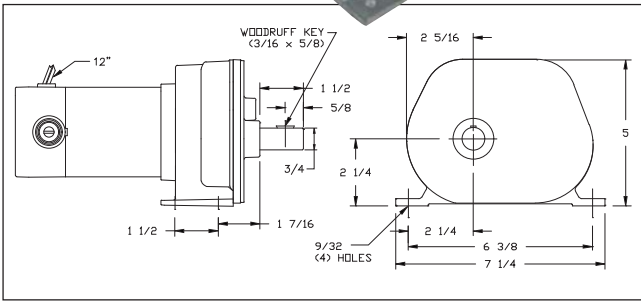
**Replacement Part**

Motor Brush Set	<b>6YHY5</b>
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\* Gear limited.



**1LPK1**



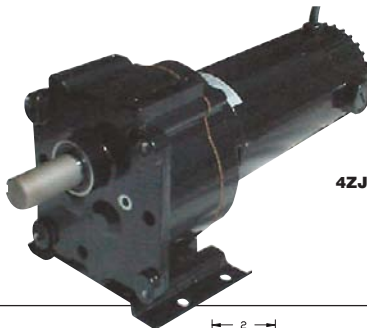
## 12VDC Permanent-Magnet Parallel-Shaft Gearmotors

- Enclosure: totally enclosed nonventilated
- Gearcase: die-cast zinc
- Lubrication: grease-filled
- Gears: phenolic and hardened steel
- Bearings: porous bronze sleeve on case; ball on motor
- Mounting: all-position
- Rotation: reversible
- Brushes: externally replaceable
- Ambient: 40°C
- Seals: O-ring type on output shaft

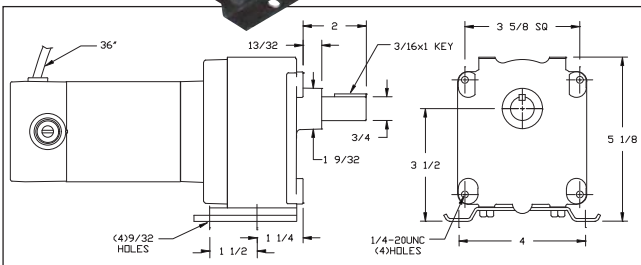
Nameplate RPM	Max. Torque	Overhung Load	Input HP	Gear Ratio	Full Load Amps	Length Less Shaft	Item No.
6 RPM	500 in-lb	250 lb	1/15	267:1	6.2 A	8 1/2 in	<b>1LPK9</b>
12 RPM	250 in-lb	250 lb	1/15	135:1	6.2 A	8 1/2 in	<b>1LPK7</b>
20 RPM	150 in-lb	250 lb	1/15	81:1	6.2 A	8 1/2 in	<b>1LPK4</b>
42 RPM	75 in-lb	250 lb	1/15	38:1	6.2 A	8 1/2 in	<b>1LPK3</b>
58 RPM	75 in-lb	250 lb	1/10	55:1	9.0 A	8 1/2 in	<b>1LPK2</b>
84 RPM	50 in-lb	250 lb	1/10	38:1	9.0 A	8 1/2 in	<b>1LPK1</b>

**Replacement Part**

Motor Brush Set	<b>6YHY5</b>
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**4ZJ45**



## 24VDC Permanent-Magnet Parallel-Shaft Gearmotors

- Enclosure: totally enclosed nonventilated
- Gearcase: die-cast aluminum
- Lubrication: permanent heavy fluid gear oil
- Gears: hardened steel
- Bearings: needle with thrust balls on case; ball on motor
- Mounting: all-position, face/base
- Rotation: reversible
- Brushes: externally replaceable
- Ambient: 40°C
- Seals: spring-loaded lip-type on input and output shafts
- Gear limited
- Accept pulse generators 6Z392 or 5JJ65 (sold separately on Grainger.com)

Nameplate RPM	Max. Torque	Overhung Load	Input HP	Gear Ratio	Full Load Amps	Length Less Shaft	Item No.
8.3 RPM	310 in-lb	695 lb	1/6	216:1	2.5 A	10 3/8 in	<b>4ZJ45</b>
20 RPM	254 in-lb	500 lb	1/6	88:1	4.5 A	10 3/8 in	<b>4ZJ46</b>
30 RPM	254 in-lb	291 lb	1/6	60:1	5.45 A	10 3/8 in	<b>1L848</b>
64 RPM	113 in-lb	291 lb	1/6	28:1	5.45 A	10 3/8 in	<b>4ZJ47</b>
120 RPM	60 in-lb	250 lb	1/6	15:1	5.45 A	10 3/8 in	<b>4ZJ48</b>

**Replacement Part**

Motor Brush Set	<b>6YHY5</b>
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