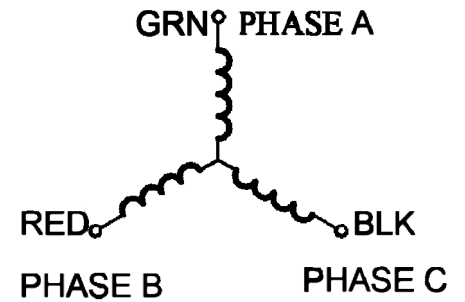


Wire Color	Description
Green	Phase A
Red	Phase B
Black	Phase C

Wire Color	Description
Yellow	Hall Vc
Blue	Hall A
Orange	Hall B
Brown	Hall C
White	Hall Ground

Hall Sensor Specifications
Supply Voltage: 4.5VDC to 28VDC
Current, I_{off} : 10mA max
Current, I_{on} : 11.3mA max
Rated Sinking Current: 20mA
Saturation Voltage: 0.4VDC max @ 25°C
Output Leakage Current: 10µA
Output Switching Time @ 25°C Rise, 10% to 90% 1.5µs Fall, 90% to 10% 1.5µs
Output Type: Open Collector



- Rated Speed of the output shaft (after gear-box) = (Rated Motor Speed)/(Gear Ratio)
- Torque of the output shaft (after gear-box) = (Peak Motor Torque) X (Gear Ratio)
- Rotor Inertia of the output (shaft after gear-box) = (Rotor Motor Inertia) X (Gear Ratio)²
- Create a complete Model Number by selecting a motor from Table 1 and Gear Box from Table 2.

BLWRPG090S-15V-8000-R3.7

Table 1		Output on Shaft of Motor Before Gear-Box											
Model #	FRAME Size	Rated Voltage (V)	Rated Power (W)	Peak Current (A)	Line to Line Resistance (ohms)	Line to Line Inductance (mH)	Back EMF Voltage (V/kRPM)	Weight (lbs)	"L2" Length (mm)	Torque Constant (oz-in/A)	Rated Speed (RPM)	Peak Torque (oz-in)	Rotor Inertia (oz-in-sec ²)
BLWRPG092S-24V-4600	09	24	3.8	1.1	23.0	6.2	3.4	0.28	45	4.27	4600	2.97	9.3x10 ⁻⁶
BLWRPG093S-24V-3500	09	24	8.0	1.7	11.6	4.3	4.0	0.34	68	5.03	3500	8.50	18.7x10 ⁻⁶
BLWRPG092S-12V-4600	09	12	3.8	1.5	4.97	1.6	1.6	0.15	45	1.95	4600	2.83	9.3x10 ⁻⁶
BLWRPG092S-12V-8000	09	12	4.2	1.7	2.8	1.6	1.09	0.20	45	1.25	8000	2.12	9.3x10 ⁻⁶
BLWRPG093S-12V-3500	09	12	7.2	3.4	2.8	1.0	2.0	0.28	68	2.50	3500	8.50	18.7x10 ⁻⁶

Table 2		Output on Shaft of Gear-Box									
Parameters/Gear Box Ratio		3.7	5.2	14	19	27	51	71	100	139	264
Peak Torque (oz-in)		69.44	69.44	138.87	138.87	138.87	416.62	416.62	416.62	416.62	416.62
Number of Gear Trains		1	1	2	2	2	3	3	3	3	4
"L1" (Length of Gear Box In mm)		24.4	24.4	34.4	34.4	34.4	41.5	41.5	41.5	41.5	49.8

Notes: Custom leadwires, cables, connectors, and windings are available upon request.

Winding Type:	Star, 8 Poles	Max. Radial Force:	3.30 lbs @ 10mm from the flange
Hall Effect Angle:	120 Degree Electrical Angle	Max. Axial Force:	1.98 lbs
Shaft Run Out:	0.025mm	Insulation Class:	Class B
Radial Play:	0.02mm @ 0.992in	Dielectric Strength:	500VDC for one minute
End Play:	0.08mm @ 0.992in	Insulation Resistance:	100MOhm, 500VDC