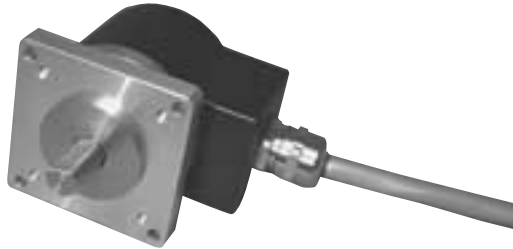




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Bulletin No. RPGD-C
 Drawing No. LP0355
 Revised 4/01

MODEL RPGD - FLANGE MOUNT ROTARY PULSE GENERATOR

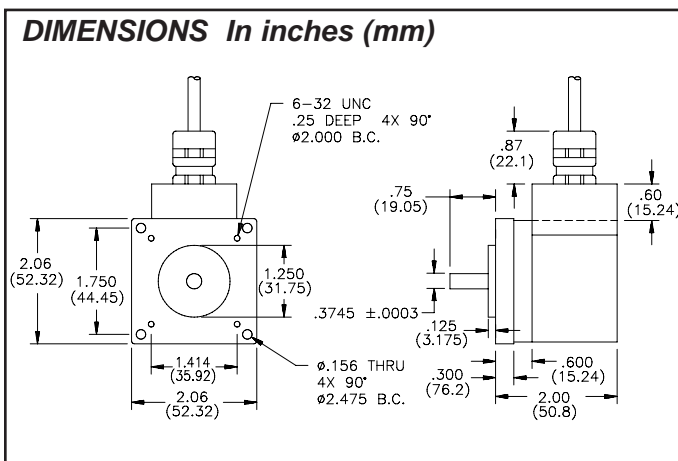


GENERAL DESCRIPTION

The RPGD is a heavy duty, extremely rugged, reliable, yet compact encoder designed for harsh factory and plant floor environments. The RPGD conforms to NEMA 4, 13 and P66 standards. Typical applications include motion control feedback, machine control, process control, elevator controls, conveyors, textile equipment, robotics and food processing.

Open Collector Output Wiring

The RPGD series of sensors have open collector outputs. An open collector output brings the uncommitted collector of the encoder switching device to the external world. Because the collector element is not associated with the sensor supply voltage, the sensor output collector may be "pulled up" to external voltages (40 VDC max.) different than the encoder supply voltage. NPN open collector outputs are current sinking devices. An output signal will not be generated unless a pull-up resistor is connected from the open-collector to the positive side of an external supply. The same supply can be used for powering the unit and for the pull-up resistor.



SPECIFICATIONS

- SUPPLY VOLTAGE:** 5 to 28 VDC, 100 mA max.
- OUTPUTS:** Single channel or quadrature available (See Ordering Information): NPN Open Collector Transistor, $V_{OH} = 40$ VDC max.; 100 mA max. current. For quadrature units, Channel A leads Channel B for clockwise rotation.
- MAX. PULSE RATE:** 100 KHz
- MAXIMUM MECHANICAL SPEED:** 8000 RPM
- SHAFT DIAMETER:** 0.375" (9.5 mm)
- RADIAL SHAFT LOAD:** 80 lbs. max. Rated load of 20 to 40 lbs. for bearing life of 1.5×10^9 revolutions.
- AXIAL SHAFT LOAD:** 80 lbs. max. Rated load of 20 to 40 lbs. for bearing life of 1.5×10^9 revolutions.
- BEARINGS:** Precision ABEC Double shielded ball bearings
- SEALING:** NEMA 4, 13 and IP66 with shaft seal
- STARTING TORQUE:** 3.0 oz-in. (21.18 N mm)

COLOR	FUNCTION	
	SINGLE	QUADRATURE
WHITE	DATA A	DATA A
BLUE	NO CONNECTION	DATA B
RED	+ VOLTS DC	+ VOLTS DC
BLACK	COMMON	COMMON
GREEN	CASE GROUND	CASE GROUND
ORANGE	NO CONNECTION	NO CONNECTION
YELLOW	NO CONNECTION	NO CONNECTION
BROWN	NO CONNECTION	NO CONNECTION
PURPLE	NO CONNECTION	NO CONNECTION

- MOMENT OF INERTIA:** 5.18×10^{-4} oz-in-sec² (3.65×10^{-3} N-mm-sec²)
- CABLE CONNECTIONS:** Cable is 24" (609.6 mm) in length.
- ENVIRONMENTAL CONDITIONS:**
Operating Temperature: 0 to +70°C
Storage Temperature: -25 to +85°C
Humidity: 95% RH non-condensing
- HOUSING:** Black non-corrosive finish
- WEIGHT:** 11 oz. (311.8 g)

ORDERING INFORMATION

MODEL NO.	DESCRIPTION	PPR	PART NUMBER
RPGD	Rotary Pulse Generators, Single Channel Output	60	5000060
		100	5000100
		600	5000600
		1000	5001000
	Rotary Pulse Generators, Quadrature Output	100	5010100
		600	5010600
RPGFC	Flexible Coupling (1" Length) 0.250" - 0.375"	--	RPGFC002
	Flexible Coupling (1" Length) 0.375" - 0.375"	--	RPGFC003