Bulletin 842D DeviceNet Absolute Multi-Turn Magnetic Encoder



DeviceNet Encoder

Description

The Bulletin 842D offers direct connection to DeviceNet for advanced functionality with reduced wiring cost. The following is a partial feature list:

Features

- Magnetic design withstands 100 g shock and temperature extremes
- 26 bit multi-turn absolute encoder retains position data if power is lost
- Up to 8192 PPR & 8192 turns
- · Connects via 5-pin micro QD
- Slotted rear cover allows address and baud rate selection
- · Position reset button
- NEMA 4/IP66 housing

Programmable Features

- Current position (0 to 67,108,864)
- Counts per revolution (1 to 8192)
- · Revolutions (1 to 8192)
- Eight programmable cams with high/low limits & hysteresis
- Position change required for COS communication
- · Counting direction (cw/ccw)

Diagnostic Features

- Red and green LEDs
- Cumulative operating time
- Min./max. acceleration & velocity
- Maximum velocity warning flag
- Current velocity (RPM, RPS or STEPS/SEC)

Specifications

Electrical		
Code Format	Natural binary	
Code Direction	CW or CCW (programmable)	
Electrical Interface	DeviceNet specification release 2.0	
Operating Voltage	1125V DC (24V DC recommended)	
Power Requirements	1.8 W	
Max # of Steps/Revolution	8192	
Max # of Revolutions	8192	
Position Forming Time	0.3 ms	
Delay on Power Up	1050 ms	
Preset Position	Via covered rear button or DeviceNet	

Mechanical

Angular Acceleration	5 x 10 ⁵ rad/s ²	
Moment of Inertia	35 gcm² (5.0 x 10 ⁻⁴ oz•in•s²)	
Operating Speed	6000 RPM at max shaft loading	
Starting Torque	2.5 N•cm (3.5 oz•in)	
Shaft Loading	Axial 11 lb (50 N) Radial 67 lb (300 N)	

Environmental

Housing	Aluminum
Operating Temperature [C (F)]	-2085° (-4+185°)
Storage Temperature [C (F)]	-40125° (-40+257°)
Humidity	98% noncondensing
Enclosure Type Rating	NEMA Type 4, 13, IP66 (IEC 529)
Shock	100 g/6 ms
Vibration	20g/102000 Hz
Approximate Weight [kg (lbs)]	0.91 (2)

Accessories

Description	Page Number
Flexible Couplings	6-47
Servo Clamps	6-48
Mating Connectors	8-24 🛈
Mounting Plates	6-52

Indicators

LED	Status
Off	Not connected not on-line
Green Blinking	Active but not allocated by master
Green Steady	Active and allocated by master
Red Blinking	Minor fault and/or connection interrupt
Red Steady	Critical communication fault

• Also see DeviceNet round media cable in the Network Media section of the On-Machine ™ Connectivity catalog.

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9.98/9.99

Product Selection

Electrical Connection	Cat. No.
One 5-pin male micro QD	842D-60131331BDA
Two 5-pin micro QDs (one male & one female)	842D-60131331BXA

Approximate Dimensions [mm (in.)]

ATTENTION



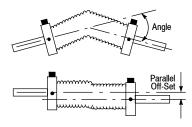
Rigidly coupling the encoder shaft to the machine shaft will cause a failure in either the bearings of the encoder or the bearings of the machine shaft.

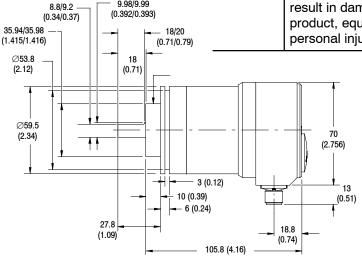
WARNING

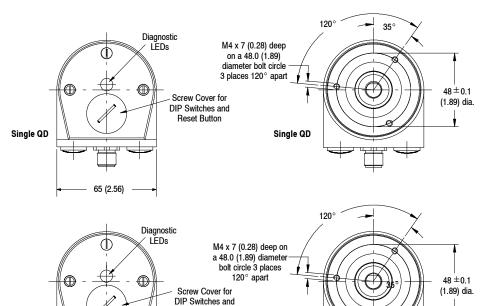


Pressing the preset position button results in a change of position reading. This can cause unexpected motion which could result in damage to the product, equipment, or personal injury.

Flexible Shaft Couplings







Double QD

65 (2.56)

Double QD

Reset Button