



Wire draw encoders EcoLine

BCG08-D1HM0336



Model Name > **BCG08-D1HM0336**
Part No. > **1061027**



Illustration may differ

At a glance

- Measuring lengths of 1.25 m, 3 m, 5 m, and 10 m.
- Very small dimension (55 ... 190 mm)
- Modular system: encoder type, measuring length, and interface can be selected
- Programmable encoders: Resolution, interface and measuring range
- Light yet shock-proof and temperature-resistant plastic housing (Noryl)
- Space-saving and cost-effective design
- Analog interface with pushbutton teach at the encoder

Your benefits

- Easy to install thanks to pushbutton teach
- Suitable for tight installation spaces as a result of slim, compact design
- High precision due to the elimination of the coupling between the encoder and mechanism
- Wide range of applications thanks to the numerous encoders, interfaces, and measuring lengths
- The absolute analog output allows for the use of a cost-effective interface card
- Options for customization, such as programmability, reduce storage and downtime costs
- Greater vibration resistance thanks to the integration of the spring in the measuring drum



Performance

Measuring range:	0 m ... 3 m
Repeatability:	$\pm 0.005\%$ ¹⁾
Linearity:	$\pm 0.01\%$ ²⁾
Hysteresis:	$\pm 0.1\%$ ³⁾
Resolution:	0.3 mm

^{1) 2) 3)} Value refers to wire draw mechanism

Mechanical data

Mass (including encoder):	840 g
Mass (mechanics):	250 g
Measuring wire diameter:	0.55 mm
Housing material, wire draw mechanism:	Plastic, Noryl
Drum extent:	230 mm
Spring return force:	Ca. 5 N ... ca. 6.3 N ¹⁾

Life of wire draw mechanism:	1 million cycles
Actual length of cable extension:	3.2 m
Wire acceleration:	10 m/s ²
Operating speed:	4 m/s
Mounted encoder:	ATM60 DeviceNet
Mounted mechanic:	MRA-G080-103D3
Part number mechanic:	5322778
Part number encoder:	1030018

¹⁾ These values were measured at an ambient temperature of 25 °C. There may be variations at other temperatures.

Electrical data

Initialization time:	Ca. 12 s ¹⁾
MTTFd: mean time to dangerous failure::	150 a ²⁾ ³⁾

¹⁾ Valid positional data can be read once this time has elapsed. ²⁾ This product is a standard product and does not constitute a safety component as defined in the Machinery Directive.

Calculation based on nominal load of components, average ambient

temperature 40°C, frequency of use 8760 h/a. All

electronic failures are considered hazardous. For more information, see document no. 8015532. ³⁾ The value applies to the mounted encoder

Interfaces

Electrical interface:	DeviceNet
Connection type:	Bus adaptor with cable screw fixings or connector ¹⁾
Address setting:	0 ... 63, DIP-switches or protocol
Protocol:	DeviceNet Specification Release 2.0
Bus termination:	Via DIP switches
SET (electronic adjustment):	Via PRESET push button or protocol
Encoder profile:	Generic Profile

¹⁾ Please order the bus adaptor separately

Ambient data

EMC:	(according to EN 61000-6-2 and EN 61000-6-3)
Enclosure rating encoder:	IP 67
Enclosure rating mechanic:	IP 50
Resistance to shocks:	100 g, 6 ms (according to EN 60068-2-27)
Resistance to vibration:	20 g, 10 Hz ... 2,000 Hz (according to EN 60068-2-6)
Working temperature range:	-20 °C ... 70 °C
Relative humidity/Condensation:	98 % (condensation of the optical scanning not permitted)

Technical drawing of the 1000 Series Servo Motor, showing front and side views with dimensions in mm and inches.

Front View Dimensions:

- Overall width: 80 (3.15)
- Overall height: 108 (4.25)
- Mounting flange diameter: $\varnothing 12$ (0.47)
- Mounting flange thickness: 6 (0.24)
- Mounting flange hole diameter: $\varnothing 6$ (0.24)
- Mounting flange hole offset from center: 36 (1.42)
- Mounting flange hole offset from edge: 6 (0.24)
- Mounting flange hole offset from center (alternative): $\varnothing 9$ (0.35)
- Mounting flange hole offset from center (alternative): $\varnothing 4.2$ (0.17)
- Mounting flange hole offset from center (alternative): 67 (2.64)
- Mounting flange hole offset from center (alternative): 67 (2.64)
- Mounting flange hole offset from center (alternative): 2 x M4 8 deep (0.31)

Side View Dimensions:

- Overall length: 14.5 (0.57)
- Mounting flange thickness: 6 (0.24)
- Mounting flange hole diameter: $\varnothing 6$ (0.24)
- Mounting flange hole offset from center: 36 (1.42)
- Mounting flange hole offset from edge: 6 (0.24)
- Mounting flange hole offset from center (alternative): $\varnothing 9$ (0.35)
- Mounting flange hole offset from center (alternative): $\varnothing 4.2$ (0.17)
- Mounting flange hole offset from center (alternative): 67 (2.64)
- Mounting flange hole offset from center (alternative): 67 (2.64)
- Mounting flange hole offset from center (alternative): 2 x M4 8 deep (0.31)

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