BCG08-D1HM0336

EcoLine

WIRE DRAW ENCODERS

SICK
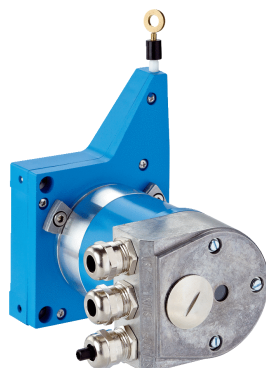Sensor Intelligence.

BCG08-D1HM0336 | EcoLine

WIRE DRAW ENCODERS

Illustration may differ

CE

Ordering information

Type	Part no.
BCG08-D1HM0336	1061027

Included in delivery: ATM60-D1H13x13 (1), MRA-G080-103D3 (1)

Product is supplied fully assembled. See individual components for further technical data

Other models and accessories ➜ www.sick.com/EcoLine

Detailed technical data

Performance

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Measurement range	0 m … 3 m
Encoder	Absolute encoders
Resolution (wire draw + encoder)	0.03 mm [1] [2]
Repeatability	≤ 0.2 mm [3]
Linearity	≤ ± 2 mm [3]
Hysteresis	≤ 0.4 mm [3]

[1] The values shown have been rounded.

[2] Example calculation based on the BCG08 with PROFINET: 230 mm (wire draw length per revolution - see Mechanical data): 262,144 (number of steps per revolution) = 0.001 mm (resolution of wire draw + encoder combination).

[3] Value applies to wire draw mechanism.

Interfaces

BCG

Communication interface	DeviceNet™
Programmable/configurable	✓

Electrical data

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Connection type	Connection adapter for DeviceNet [1]
Supply voltage	10 V … 32 V
Power consumption	≤ 2 W (without load)
MTTFd: mean time to dangerous failure	150 years (EN ISO 13849-1) [2]

[1] Please order the bus adaptor seperately.

[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.

Mechanical data

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Measuring wire material	Highly flexible stranded steel 1,4401 stainless steel V4A
Weight (measuring wire)	1.2 g/m
Housing material, wire draw mechanism	Plastic, Noryl
Spring return force	3.3 N ... 4.4 N [1]
Length of wire pulled out per revolution	230 mm
Life of wire draw mechanism	Typ. 1,000,000 cycles [2] [3]
Actual wire draw length	3.2 m
Wire acceleration	10 m/s²
Operating speed	6 m/s
Mounted encoder	ATM60 DeviceNet, ATM60-D1H13X13, 1030018
Mounted mechanic	MRA-G080-103D3, 5322778

[1] These values were measred at an ambient temperature of 25 °C. There may be variations at other temperatures.

[2] Average values, which depend on the application.

[3] The service life depends on the type of load. This is influenced by environmental conditions, the installation location, the measuring range in use, the traversing speed, and acceleration.

Ambient data

BCG

EMC	According to EN 61000-6-2 and EN 61000-6-3
Enclosure rating	IP50
Operating temperature range	–20 °C ... +70 °C

Classifications

ECl@ss 5.0	27270590
ECl@ss 5.1.4	27270590
ECl@ss 6.0	27270590
ECl@ss 6.2	27270590
ECl@ss 7.0	27270590
ECl@ss 8.0	27270590
ECl@ss 8.1	27270590
ECl@ss 9.0	27270590
ECl@ss 10.0	27270613
ECl@ss 11.0	27270503
ETIM 5.0	EC001486
ETIM 6.0	EC001486
ETIM 7.0	EC001486
UNSPSC 16.0901	41112113

Dimensional drawing (Dimensions in mm (inch))
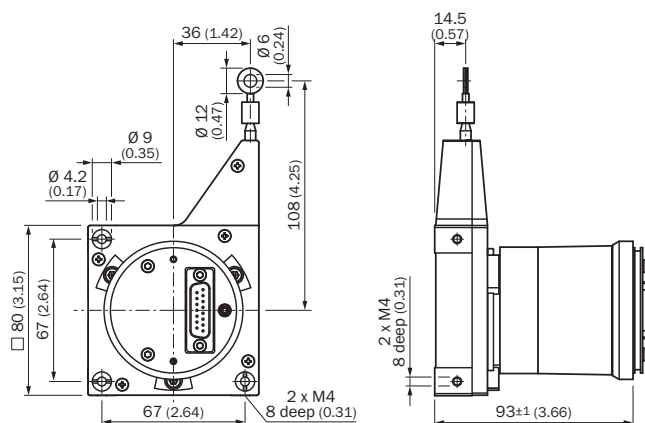
PIN assignment
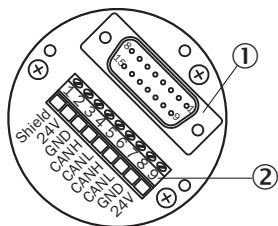
Recommended accessories

Other models and accessories ➔ www.sick.com/EcoLine

	Brief description	Type	Part no.
Flanges			
	Flange adapter for EcoLine wire draw mechanisms, adaption of face mount flange with centering hub 20 mm to 50 mm servo flange, Aluminum, including 3 countersunk screws M4 x 10	BEF-FA-020-050-007	2073774
Adapters and distributors			
	Bus adaptor KR1, 1 x PG	AD-ATM60-KR1DN	2029228
	Bus adaptor KR2, 2 x PG	AD-ATM60-KR2DN	2029229
	Bus adaptor SR1, 1 x M12, 5-pin	AD-ATM60-SR1DN	2029226
	Bus adaptor SR2, 2 x M12, 5-pin	AD-ATM60-SR2DN	2029227
Plug connectors and cables			
	Head A: Flying leads Head B: Flying leads Cable: CANopen, DeviceNet™, shielded Wire shield Al-Pt film, overall shield C-screen tin-plated	LTG-2804-MW	6028328

	Brief description	Type	Part no.
	Head A: female connector, M12, 5-pin, straight Head B: male connector, M12, 5-pin, straight Cable: CANopen, DeviceNet™, PUR, halogen-free, unshielded, 6 m	DSL-1205-G06MK	6028327
	Head A: female connector, M12, 5-pin, straight Cable: CANopen, DeviceNet™, shielded	DOS-1205-GA	6027534
	Head A: male connector, M12, 5-pin, straight, A-coded Cable: CANopen, DeviceNet™, shielded	STE-1205-GA	6027533
Wire draw mechanism			
	EcoLine wire draw mechanism for servo flange with 6 mm shaft, measuring range 0 m … 3 m	MRA-G080-103D3	5322778

SICK AT A GLANCE

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We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

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