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Wire draw encoders
HighLine

BTF08-N1BM0399

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Model Name > BTF08-N1BM0399
Part No. > 1060976

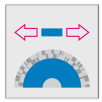

Illustration may differ

At a glance

- Absolute wire draw encoders
- Modular measuring system with a wide selection of interfaces/measuring lengths
- Measuring lengths: 2 m ... 50 m
- Very rugged system (dirt wiper, integrated brushes), highly shock and vibration resistant
- High-quality winding mechanism and wire input
- Interfaces: - ANALOG, SSI, PROFIBUS, CANopen, DeviceNet, HIPERFACE®
- High enclosure rating
- High resolution possible

Your benefits

- Reliable solution in harsh environments
- Long service life due to rugged industrial housing
- Quick and easy installation without the need for precise linear guidance
- Low integration and maintenance costs
- Customization option reduces storage costs
- No reference run necessary thanks to the absolute measuring principle
- Teach-in function enables fast commissioning

Performance

Measuring range:	0 m ... 3 m
Repeatability:	± 0.1 % [1)]
Linearity:	± 0.1 % [2)]
Hysteresis:	± 0.05 % [3)]
Resolution:	0.001 mm

1) 2) 3) Value refers to wire draw mechanism

Mechanical data

Mass (including encoder):	1.7 kg
Mass (mechanics):	1.5 kg
Measuring wire diameter:	1.35 mm
Housing material, wire draw mechanism:	Aluminum (anodised), die-cast zinc
Drum extent:	200 mm
Spring return force:	6 N ... 14 N [1)]
Life of wire draw mechanism:	1 million cycles

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Actual length of cable extension:	3.2 m
Wire acceleration:	40 m/s²
Operating speed:	4 m/s
Mounted encoder:	AFM60 PROFINET
Mounted mechanic:	MRA-F080-103D2
Part number mechanic:	6030125
Part number encoder:	1059040

[1] These values were measred 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::	80 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:	PROFINET
Connection type:	Connector 3 x M12, 4-pin, axial
Address setting:	Via DCP
Protocol:	PROFINET IO/ RT Class B
SET (electronic adjustment):	Via PRESET push button or protocol
Encoder profile:	V4.1 class3

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:	30 g, 10 Hz ... 2,000 Hz (according to EN 60068-2-6)
Working temperature range:	-30 °C ... 70 °C
Relative humidity/Condensation:	90 % (condensation of the optical scanning not permitted)

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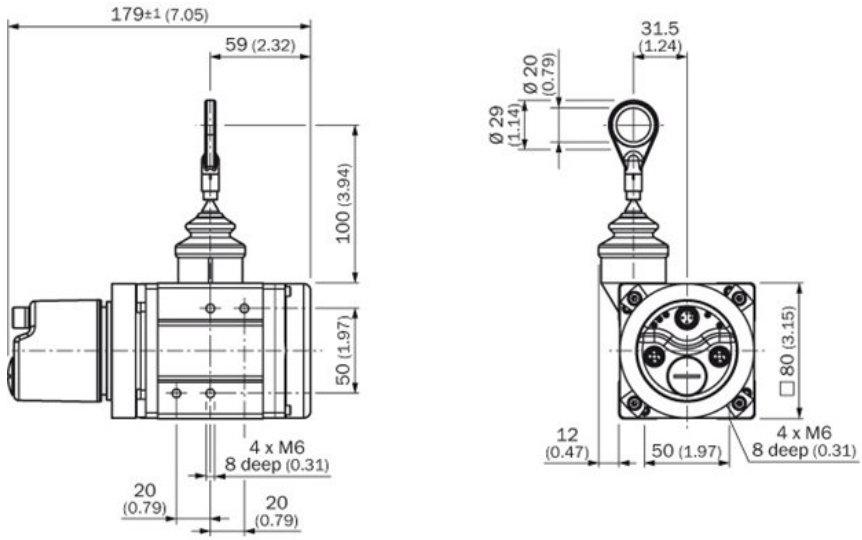
Dimensional drawing



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