



Basic features

Approval/Conformity	CE cULus EAC WEEE
Magnets, number (factory setting)	1
Magnets, number max.	1

Electrical connection

Connection	Connector, M16x0.75, 8-pin
Connection version	radial
Polarity reversal protected	Ub up to 28 V

Electrical data

Current consumption max. at 24 V DC	90 mA
Galvanic isolation	yes
Inrush current	≤ 3 A/0.5 ms
Operating voltage Ub	20...28 VDC
Output signal adjustable	no
Overvoltage protection	Ub up to 28 V
Synchronous mode	yes
Voltage-proof up to (GND to housing)	500 V DC

Magnetostrictive Sensors
BTL5-S101B-M0200-K-SR32
Order Code: BTL1HYF

BALLUFF

Environmental conditions

Ambient temperature	-40...85 °C
EN 55016-2-3, Radiation	Industrial areas
EN 60068-2-27, Continuous shock	100 g, 2 ms
EN 60068-2-27, Shock	100 g, 6 ms
EN 60068-2-6, Vibration	12 g, 10...2000 Hz
EN 61000-4-2, ESD	Severity Level 3
EN 61000-4-3, RFI	Severity Level 3
EN 61000-4-4, Burst	Severity Level 3
EN 61000-4-5, Surge	Severity Level 2
EN 61000-4-6, High-frequency fields	Severity Level 3
EN 61000-4-8 Magnetic fields	Severity Level 4
IP rating	IP67, with connector
Relative humidity	≤ 90 %, non-condensing
Storage temperature	-40...100 °C
Temperature coefficient typ.	≤ 35 ppm/K at 50% of nominal stroke 500mm

Functional safety

MTTF (40 °C)	63 a
--------------	------

Interface

Bits, number	24 Bit
Count direction	rising
Interface	SSI
Interface coding	Binary

Material

Housing material	Stainless steel (1.4305)
Material flange	Stainless steel (1.4404)
	Stainless steel (1.4429)
	Stainless steel (1.4435)
	Stainless steel (1.4571)
O-ring material	FKM
Protection tube material	Stainless steel (1.4571)

Mechanical data

Housing diameter	79 mm
Installation length from contact surface	300 mm
Mounting part	Flange Ø18h6 plus holes
Null point	40.0 mm
Pressure rating max.	600 bar
Protection tube diameter	10.2 mm
Tightening torque	3.5 Nm

Range/Distance

Measuring length	200 mm
Non-linearity max.	±30 µm
Repeat accuracy	± 1 LSB
Repeatability	±1 LSB
Resolution	≤ 1 µm
Sampling rate max.	3254 Hz