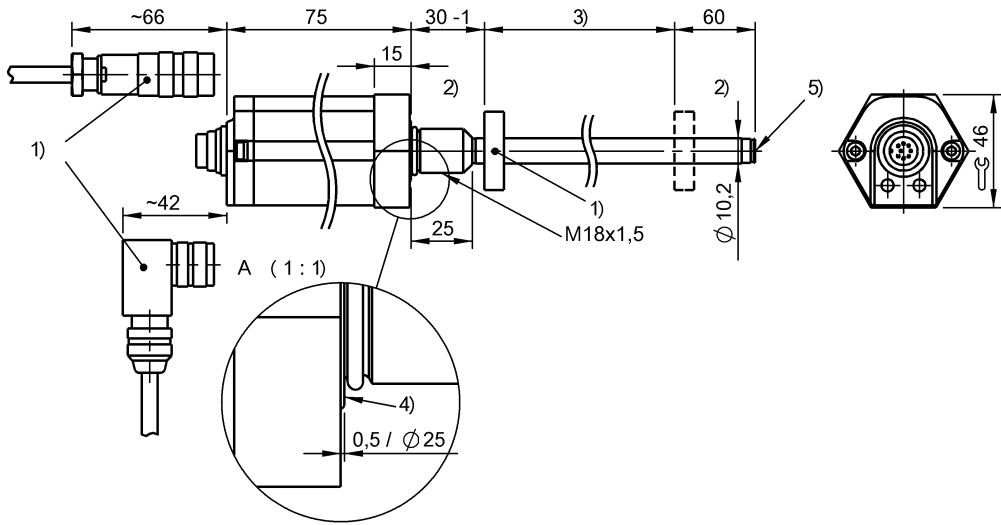




1) not included in scope of delivery, 2) Non-usable area, 3) Nominal length = Measuring length, 4) Mounting surface, 5) Internal threads M4x4/6 deep



Basic features

Approval/Conformity	CE cULus EAC WEEE
Base type	BTL5-S1.-M....-B-S32
Base type deviation	Multi-pack Waveg. assbly. silicone coated Part label on separate sheet with BURN-IN test

Electrical connection

Connection	Connector, M16x0.75, 8-pin
Connection version	axial
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
Overvoltage protection	Ub up to 28 V
Voltage-proof up to (GND to housing)	500 V DC

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

Interface

Bits, number	25 Bit
Count direction	rising
Interface	SSI
Interface coding	Binary

Magnetostrictive Sensors
BTL5-S162-M1150-B-SA299-S32
Order Code: BTL01KL

BALLUFF

Material

Housing material	Aluminium, Anodized
Housing material, surface protection	Anodized
Material flange	1.3952 stainless steel
O-ring material	FKM
Protection tube material	1.4571 stainless steel

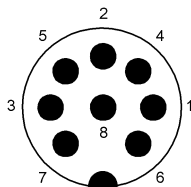
Range/Distance

Non-linearity max.	±30 µm
Repeat accuracy	± 1 LSB
Repeatability	±1 LSB
Resolution	≤ 5 µm
Sampling rate, length-dependent	1 kHz, standard

Mechanical data

Mounting part	Threaded flange M18x1.5
Null point	30.0 mm
Pressure rating max.	600 bar
Protection tube diameter	10.2 mm

Connector Drawings



Wiring Diagrams (Schematic)

Pin	
1	+Clk
2	+Data
3	-Clk
4	NC
5	-Data
6	GND
7	+24 V DC
8	NC