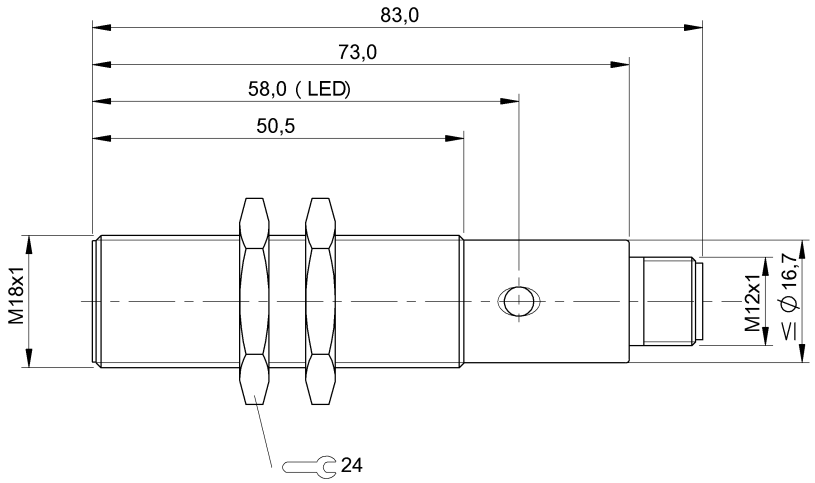
Inductive Sensors

BES 516-105-S4-C
Ordercode: BES015N



Display/Operation

Function indicator	yes
Power indicator	no

Electrical connection

Connection	M12x1-Male, 4-pole, A-coded
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Contamination scale	3
Hysteresis H max. (% of Sr)	15.0 %
Load capacitance max. at Ue	1 µF
No-load current Io undamped max.	20 mA
Operating voltage Ub	10…30 VDC
Output resistance Ra	2.2 kOhm + D + LED/4.7 kOhm + D
Polarity reversal protected	yes
Protection class	II
Rated insulation voltage Ui	250 V AC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	10 ms
Repeat accuracy max. (% of Sr)	5.0 %
Residual current Ir max.	80 µA
Ripple max. (% of Ue)	15 %
Switching frequency	500 Hz
Utilization category	DC-13
Voltage drop static max.	2.5 V

Environmental conditions

Ambient temperature	-25…70 °C
IP rating per IEC 60529	IP68

Functional safety

MTTF (40 °C)	1015 a

General data

Approval/Conformity	CE cULus EAC
Basic standard	IEC 60947-5-2

Material

Housing material	Brass
Material sensing surface	PA 12
Surface protection	nickel plated

Mechanical data

Dimension	Ø 18 x 83 mm
Installation	for flush mounting
Size	M18x1
Tightening torque	35 Nm

Output/Interface

Switching output	PNP Normally open/Normally closed (NO/NC)

Range/Distance

Assured operating distance Sa	4 mm
Effective operating distance Sr	5 mm
Rated operating distance Sn	5 mm
Temperature drift max. (% of Sr)	10 %

Remarks

The sensor is functional again after the overload has been eliminated.

For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.

Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.

Connector view



Wiring Diagram

