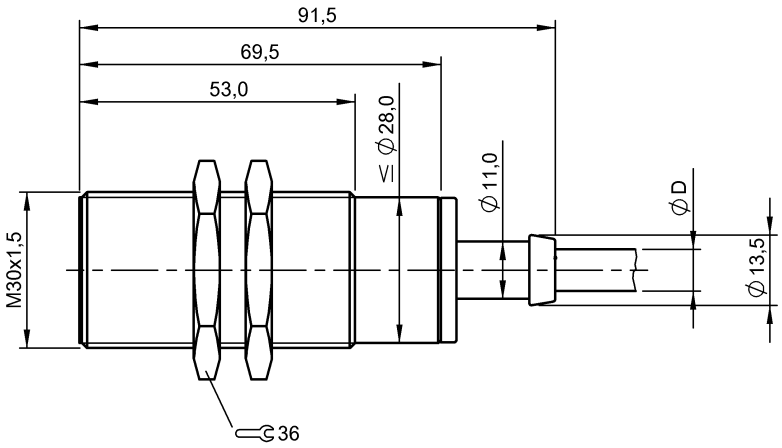
BALLUFF

BES 516-114-SA1-05
BES02H7



CE EAC

Display/Operation

Function indicator	no
Power indicator	no

Electrical connection

Cable diameter D	8.00 mm
Cable length	5 m
Conductor cross-section	0.75 mm²
Connection type	Cable, 5.00 m, Silicone
Number of conductors	4
Polarity reversal protected	yes
Short-circuit protection	no

Electrical data

Hysteresis H max. (% of Sr)	15.0 %
Load capacitance max. at Ue	0.15 µF
MTTF (40 °C)	1255 a
No-load current Io max., undamped	15 mA
Operating voltage Ub	10…30 VDC
Output resistance Ra	6.2 kOhm + D/10.0 kOhm + D
Pollution degree	3
Protected against miswiring	yes
Rated insulation voltage Ui	75 V DC
Rated operating current Ie DC	400 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
Switching frequency	300 Hz
Utilization category	DC -13
Voltage drop static max.	1.5 V

Environmental conditions

Ambient temperature	-25…120 °C
Protection type IEC 60529	IP67 Cable exit IP60

Functional safety

Diagnostic coverage	0 %
Functional safety	no
Mission Time	20 a

General data

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

Material

Housing material	Brass
Material jacket	Silicone
Material sensing surface	PBT
Surface protection	nickel plates

Mechanical data

Dimension	Ø 30 x 91.5 mm
Installation	for flush mounting
Size	M30x1.5
Tightening torque	70 Nm

Output/Interface

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

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Range/Distance

Assured operating distance Sa	8 mm
Range	10 mm
Rated operating distance Sn	10 mm
Ripple max. (% of Ue)	15 %
Temperature drift max. (% of Sr)	5 %

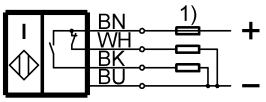
Remarks

Ta ≥ 70 °C… ≤ 120 °C: Ie= 400 - 5x(Ta-70).
Recommendation: After a short circuit check the device for proper function.

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.

Wiring Diagram



1) For SCP see electrical data