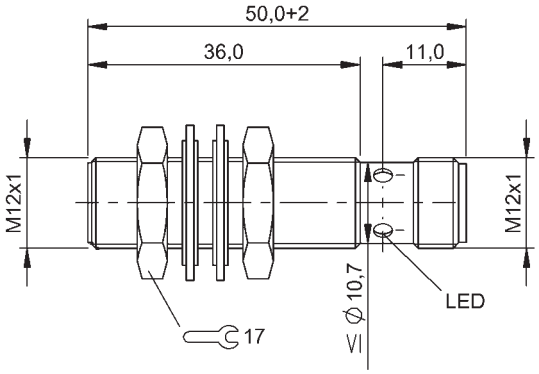
Inductive sensor

BES M12MF1-PSC30A-S04G-W
BES02JZ

BALLUFF
sensors worldwide



- **PNP**
- **Normally open (NO)**
- **3.00 mm**
- **Flush (shielded)**
- **Connector, M12x1-S04**

General attributes

Additional features	Weld-spatter resistant
	Factor 1
Approvals / Conformity	CE
	cULus
	EAC
Basic standard	IEC 60947-5-2
Enclosure Type per IEC 60529	IP67
Function indicator	Yes
Magnetic field immune	immune to magnetic DC and AC fields
Operating distance marking	■■
Polarity reversal protected	Yes
Power indicator	No
Protection Class	II
Short circuit protected	Yes
Trademark	Factor 1

Electrical attributes

Connection type	Connector
Eff. operating current Ie	200 mA
Eff. operating voltage Ue DC	24.0 V
Electrical version	DC, direct current
Load capacitance max. (at Ue)	1.000 µF
Magnetic field strength	100 kA/m
Max. no-load cur. Io undamped	10.0 mA
Minimum operating current Im	0 mA
No-load current Io damped max.	15.0 mA
Operating voltage UB max. DC [V]	30.0 V
Operating voltage UB min. DC [V]	10.0 V
Rated insulation voltage Ui	250 VAC
Rated short circuit current	100 A
Ripple max. (% of Ue)	10 %
Switching freq. f max. (at Ue)	2000 Hz
Switching function	Normally open (NO)
Switching output	PNP
Voltage drop static max.	2.5 V

Mechanical attributes

Ambient temperature Ta max.	70 °C
Ambient temperature Ta min.	-25 °C
Assured operating distance Sa	2.40 mm
Connector type	M12x1-S04
Depth	50.0 mm
Diameter d1	M12x1
Eff. operating distance Sr	3.00 mm
Housing material	CuZn
Mech. installation condition	Flush (shielded)
Mounting length	36.0 mm
Rated operating distance Sn [mm]	3.00 mm
Sensing face material	LCP + PTFE
Surface protection	PTFE coating
Tightening torque	10 Nm

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

