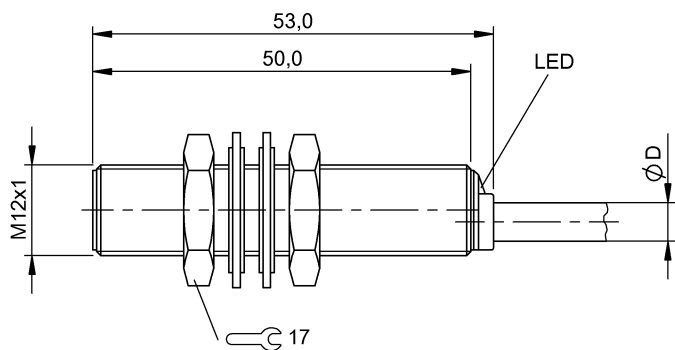


**BES M12MI-PSC40B-BV03**  
**Ordering code: BES0001**

**Inductive sensor**  
**M12x53 mm**  
**GlobalProx**

**DC, direct current**  
**PNP/Normally open (NO)**  
**Sn = 4 mm**  
**Flush (shielded)**

**BALLUFF**  
*sensors worldwide*



**Characteristic data**

Eff. switching distance $S_r$	4 mm
Tolerance $S_r$	$\pm 10\%$
Assured operating distance $S_a$	3,2 mm
Hysteresis $H$ max. (in % of $S_r$ )	15 %
Repeat accur. $R$ max. (% of $S_r$ )	5 %
Ambient temperature	-25...70 °C
Temp. drift max. (% of $S_r$ )	10%
Switching freq. $f$ max.	500 Hz
Ready delay $t_v$ max.	30 ms
Utilisation category	DC 13
Function indicator	Yes
Power-on indicator	No
Short-circuit protected	Yes
Degree of protection as per IEC 60529	IP68 according to BWN PR 20
Protection class	II
Protected against polarity reversal	Yes
Protected against reverse connection	Yes

**Electrical data**

Operating voltage	
Rated operating voltage $U_e$ DC	24 V
Ripple max. (% of $U_e$ )	15 %
Voltage drop static max.	2,5 V
Rated insulation voltage $U_i$	250 AC V
Effective operating current $I_e$	200 mA
No-load current $I_o$ damped	10 mA
No-load current $I_o$ undamped	5 mA
Off-state current $I_r$ max.	20 $\mu$ A
Minimum operating current $I_m$	0 mA

Rated short circuit current	100 A
Output resistance $R_a$	33,0k + D
Load capacitance max. (at $U_e$ )	1 $\mu$ F
Principle of operation	Inductive

**Mechanical data**

Housing material	CuZn
Surface protection	Nickel-plated
Sensing surface material	PA 12
Tightening torque max.	15 Nm
Mounting length	50 mm
Connection type	Cable
Cable jacket material	PVC
Cable diameter $D$ max.	4,7 mm
Cable short designation	LiY-Y-O
Cable length	3 m
Number of conductors	3
Conductor cross-section	0,34 mm <sup>2</sup>
Shock rating	Shock, half-sinus, 30 gn, 11ms
Vibration rating	55 Hz, 1 mm ampl., 3x30 min
Degree of contamination	3

**Basic data**

Basic standard	IEC 60947-5-2
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**Remarks**

The sensor is functional again after the overload has been eliminated.  
 Embeddable: See installation notes for inductive sensors with extended switching distance 825357.



Definitions see main catalog

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