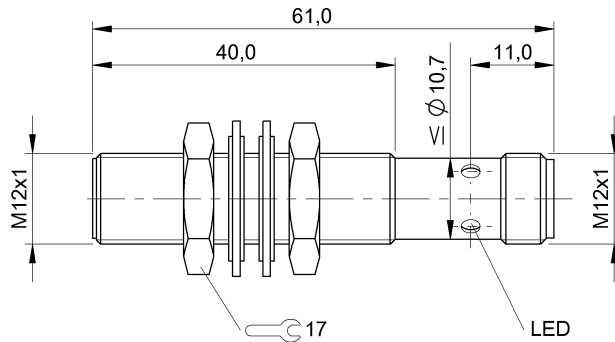


**BES 516-325-S4-W**  
**Ordering code: BES02J6**

Inductive sensor  
M12x61 mm  
Weld immune  
Magnetic field immune

DC, direct current  
PNP/Normally open (NO)  
Sn = 2 mm  
Flush (shielded)

**BALLUFF**  
*sensors worldwide*



**Characteristic data**

Eff. switching distance $S_r$	2,00 mm
Tolerance $S_r$	$\pm 10\%$
Assured operating distance $S_a$	1,60 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.	1000 Hz
Ready delay $t_v$ max.	60 ms
Utilisation category	DC 13
Function indicator	Yes
Power-on indicator	No
Short-circuit protected	Yes
Magnetic field immune	immune to magnetic DC and AC fields
Degree of protection as per IEC 60529	IP67
Protection class	II
Protected against polarity reversal	Yes
Protected against reverse connection	Yes

**Electrical data**

Operating voltage	
Rated operating voltage $U_e$ DC	24,0 V
Ripple max. (% of $U_e$ )	10 %
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	20 mA

No-load current $I_o$ undamped	15 mA
Off-state current $I_r$ max.	80 $\mu$ 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
Magnetic field strength	100 kA/m

**Mechanical data**

Housing material	CuZn
Surface protection	PTFE coating
Sensing surface material	LCP
Tightening torque max.	10 Nm
Mounting length	40 mm
Connection type	Connector
Connector type	M12x1-S04
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.  
With connector, e.g. BKS-S 20-... total length = switch length + 18 mm.



Definitions see main catalog

subject to change

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