

IND. CONT. EQ.  
 81U2  
 Type 1

### Basic features

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

### Display/Operation

Function indicator	yes
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### Electrical connection

Connection	M12x1-Male
Polarity reversal protected	yes
Short-circuit protection	no

### Electrical data

Min. operating current $I_m$	5 mA
Operating voltage $U_b$	20...250 V AC
Protection class	I
Rated insulation voltage $U_i$	250 V AC
Rated operating current $I_e$	500 mA
Rated operating voltage $U_e$ AC	110 V
Rated short circuit current	100 A
Ready delay $t_v$ max.	100 ms
Residual current $I_r$ max.	1500 $\mu$ A
Switching frequency	25 Hz
Utilization category	AC-140
Voltage drop static max.	4 V

### Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
Protection degree	IP67

Inductive Sensors  
**BES 516-418-E5-L-S27**  
Order Code: BES0316

# BALLUFF

## Material

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

## Mechanical data

Dimension	Ø 30 x 65 mm
Installation	for flush mounting
Size	M30x1.5
Tightening torque	40 Nm

## Output/Interface

Switching output	Normally open (NO)
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## Range/Distance

Assured operating distance Sa	8 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	10 mm
Real switching distance sr	10 mm
Repeat accuracy max. (% of Sr)	5.0 %
Temperature drift max. (% of Sr)	10 %
Tolerance Sr	±10 %

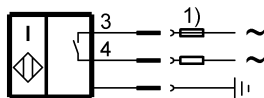
## Remarks

A filter is required for the EMC protection circuit. Conducted interference emission. Epcos, Model: B84112B0000B030.  
Recommendation: After a short circuit check the device for proper function.

## Connector Drawings



## Wiring Diagrams



1) For SCP see electrical data