

IND. CONT. EQ  
 11ZA  
 for use in the secondary of  
 a class 2 source of supply



### Basic features

Approval/Conformity	CE TÜV cULus WEEE
Operating principle	non-contact (inductive)
Principle of operation	Inductive sensor

### Electrical connection

Connection	M12x1-Male, 4-pin, A-coded
Short-circuit protection	yes

### Electrical data

Current draw max.	20 mA
Operating voltage $U_b$	19.2...30 VDC
Protection class	III
Rated insulation voltage $U_i$	30 V DC
Rated operating voltage $U_e$ DC	24 V
Ready delay $t_v$ max.	1 s
Utilization category	DC -13

### Environmental conditions

Ambient temperature	-25...70 °C, for service life $\leq$ 10 years 10...40 °C, for service life $\leq$ 20 years
Protection degree	IP67

### Functional safety

Device type (VDMA 66413)	1
MTTFd	2011 a
Mission Time	20 a
PFHd (EN 62061)	1.0 E-7 1/h
Performance Level	d
Risk time	20 ms
SIL (IEC 61508)	2
SIL CL (EN 62061)	2
Safety category (EN ISO 13849-1)	2
Type (EN ISO 14119)	3

### Material

Housing material	Stainless steel (1.4404)
Material sensing surface	PBT

### Mechanical data

Approach direction	any to sensing surface
Dimension	$\varnothing$ 12 x 70 mm
Installation	non-flush
Size	M12x1
Tightening torque	7 Nm

### Output/Interface

Switching output	PNP OSSD PNP normally closed (NC)
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Safety Sensors  
**BES M12EN-PFC40F-S04G-D11**  
Order Code: BES0574

# BALLUFF

### Range/Distance

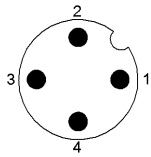
Assured operating distance $S_{ao}$	4 mm
Assured switch off distance $S_{ar}$	6 mm

Range	0.5...4 mm
Rated operating distance $S_n$	4 mm
Response time max.	1 ms

### Remarks

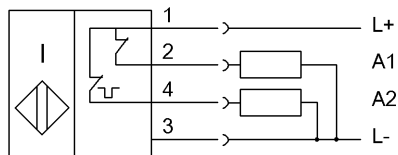
Please refer to manual.

## Connector Drawings



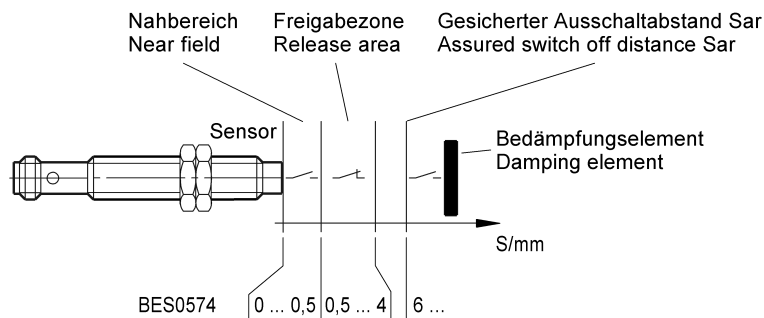
- PIN 1: +UB
- PIN 2: Output 1
- PIN 3: 0V
- PIN 4: Output 2 OSSD

## Wiring Diagrams



Shown in damped state

## Technical Drawings



Gilt für / Valid for: Material FE360 (ST37K) nach / acc. EN 60947-5-2

Distance characteristic