

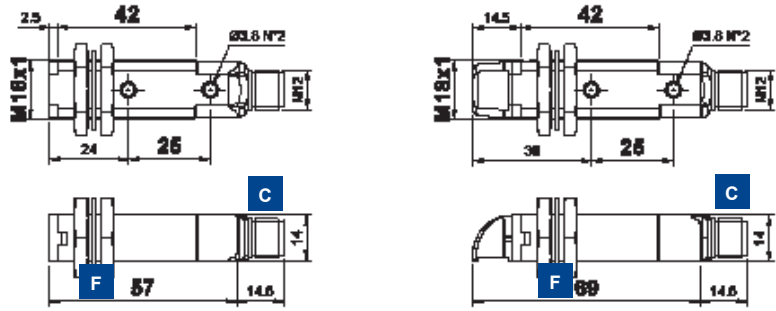
D FIXED FOCUS PROXIMITY WITH RED EMISSION

The fixed focus proximity sensor offers a simple fixed background suppression distance beyond which no object is detected. The fixed triangulation of the optics greatly reduces the detection distance of reflective objects. The visible red emission facilitates sensor installation.

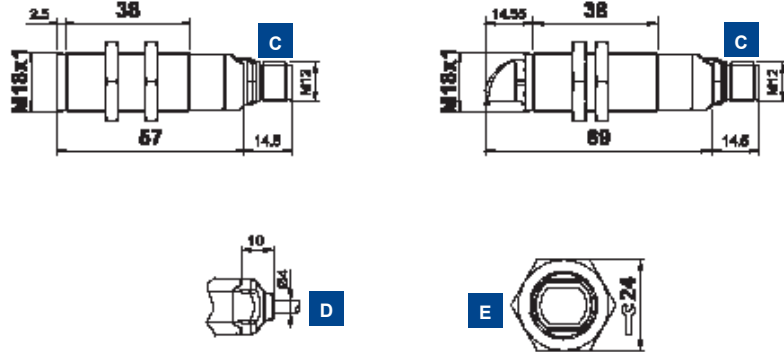


DIMENSIONS

PLASTIC HOUSING

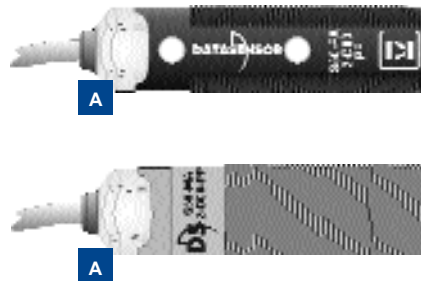
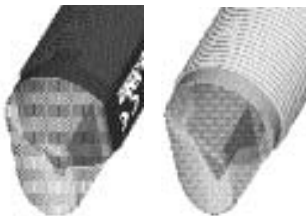


METAL HOUSING



INDICATORS AND SETTINGS

RADIAL OPTICS



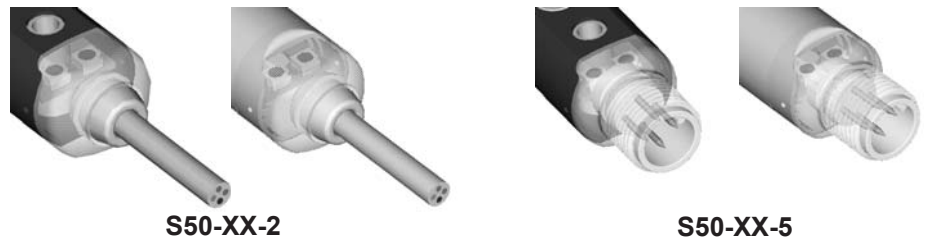
- A** OUTPUT status LED
- C** M12 connector output
- D** Cable output
- E** Fixing nuts
- F** Fixing gasket

ACCESSORIES

For dedicated accessories refer to the **ACCESSORIES** section of this catalogue.

Refer also to **Connectors (A.03)** and **Fixing brackets (A.04)** of the **General Catalogue**.

CONNECTIONS



- BROWN 1 + 10 ... 30 Vdc
- WHITE 2 NC OUTPUT
- BLACK 3 NC OUTPUT
- BLUE 4 0V





TECHNICAL DATA

		S50-PA-2-D00-NN	S50-PA-2-D00-PP	S50-PA-5-D00-NN	S50-PA-5-D00-PP	S50-PR-2-D00-NN	S50-PR-2-D00-PP	S50-PR-5-D00-NN	S50-PR-5-D00-PP	S50-MA-2-D00-NN	S50-MA-2-D00-PP	S50-MA-5-D00-NN	S50-MA-5-D00-PP	S50-MR-2-D00-NN	S50-MR-2-D00-PP	S50-MR-5-D00-NN	S50-MR-5-D00-PP
Operating distance:																	
	axial optics	0.5 ... 10 cm	●	●	●					●	●	●	●				
	radial optics	0 ... 8 cm				●	●	●	●					●	●	●	●
Power supply:	10 ... 30 Vdc ¹		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Ripple:	≤ 2 Vpp		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Consumption:	≤ 35 mA		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Light emission:	red LED 630 nm ²		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Spot dimension:																	
	axial optics	approx. 20 mm at 10 cm	●	●	●					●	●	●	●				
	radial optics	approx. 25 mm at 8 cm				●	●	●	●					●	●	●	●
Indicators:	yellow OUTPUT LED		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Output type:																	
	PNP, NO and NC		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	NPN, NO and NC		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Output current:	≤ 100 mA		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Saturation voltage:	≤ 2 V		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Response time:	0.5 ms		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Switching frequency:	1 kHz		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Operating mode:	dark on NO / light on NC		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Connection:																	
	2 m Ø 4 mm cable ³		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	M12 4-pole connector ⁴			●						●	●	●	●				
Electrical protection:	class 2		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Mechanical protection:	IP67		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Protection devices:	A, B ⁵		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Housing material:																	
	PBT		●	●	●	●	●	●	●								
	nickel plated brass									●	●	●	●	●	●	●	●
	PMMA		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Lens material:																	
Weight:																	
	75 g max.		●	●													
	25 g max.			●	●			●	●								
	110 g max.									●	●			●	●		
	60 g max.										●	●	●		●	●	●
Operating temperature:	-25 ... +55°C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Storage temperature:	-25 ... +70°C		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Reference standard:	EN 60947-5-2		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

SELECTION TABLE

plastic - axial optics - 2 m cable		
S50-PA-2-D00-NN	952001640	NPN
S50-PA-2-D00-PP	952001090	PNP

metal - axial optics - 2 m cable		
S50-MA-2-D00-NN	952021530	NPN
S50-MA-2-D00-PP	952021030	PNP

plastic - axial optics - M12 connector		
S50-PA-5-D00-NN	952001530	NPN
S50-PA-5-D00-PP	952001100	PNP

metal - axial optics - M12 connector		
S50-MA-5-D00-NN	952021690	NPN
S50-MA-5-D00-PP	952021230	PNP

plastic - radial optics - 2 m cable		
S50-PR-2-D00-NN	952001810	NPN
S50-PR-2-D00-PP	952001110	PNP

metal - radial optics - 2 m cable		
S50-MR-2-D00-NN	952021630	NPN
S50-MR-2-D00-PP	952021160	PNP

plastic - radial optics - M12 connector		
S50-PR-5-D00-NN	952001750	NPN
S50-PR-5-D00-PP	952001120	PNP

metal - radial optics - M12 connector		
S50-MR-5-D00-NN	952021790	NPN
S50-MR-5-D00-PP	952021360	PNP

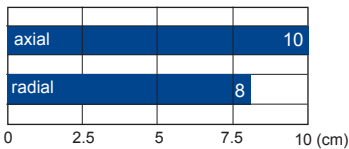
All the ordering codes and information are summarised in the last pages of this catalogue.

TECHNICAL NOTES

- ¹ Limit values
- ² Average life of 100.000 h with $T_A = +25^\circ\text{C}$
- ³ PVC, 4 x 0.14 mm²
- ⁴ Compatible with quick connection systems
- ⁵ A - reverse polarity protection
B - overload and short-circuit protection on the outputs



DETECTION DIAGRAMS



■ Operating distance

