

TECHNICAL DATA

TECHNICAL NOTES

- ¹Limit values
- ²Average life of 100,000 h with TA = +25 °C
- ³PVC, 4 x 0.14 mm²
- ⁴Compatible with quick connection systems
- ⁵A - reverse polarity protection
- B - overload and short-circuit protection on receiver outputs

		S50-PA-2-M03-NN	S50-PA-2-M03-PP	S50-PA-5-M03-NN	S50-PA-5-M03-PP	S50-MA-2-M03-NN	S50-MA-2-M03-PP	S50-MA-5-M03-NN	S50-MA-5-M03-PP
Operating distance:	5 ... 10 cm	•	•	•	•	•	•	•	•
Power supply:	10 ... 30 Vdc ¹	•	•	•	•	•	•	•	•
Ripple:	≤ 2 Vpp	•	•	•	•	•	•	•	•
Consumption:	≤30 mA	•	•	•	•	•	•	•	•
Light emission:	red LED 630 nm ²	•	•	•	•	•	•	•	•
Spot dimension:	teach-in push-button	•	•	•	•	•	•	•	•
Setting:	teach-in EASYtouch™	•	•	•	•	•	•	•	•
Indicators:	yellow OUTPUT LED	•	•	•	•	•	•	•	•
	green / red READY / ERROR LED	•	•	•	•	•	•	•	•
Output type:	PNP, NO and NC		•		•		•		•
	NPN, NO and NC	•		•		•		•	
Output current:	≤100 mA	•	•	•	•	•	•	•	•
Saturation voltage:	≤ 2 V	•	•	•	•	•	•	•	•
Response time:	1 ms	•	•	•	•	•	•	•	•
Switching frequency:	500 Hz	•	•	•	•	•	•	•	•
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 / PVC	•	•	•	•				
	nickel plated brass					•	•	•	•
Lens material:	glass	•	•	•	•	•	•	•	•
Weight:	90 g max.	•	•						
	40 g max.			•	•				
	125 g max.					•	•		
	75 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-M03-NN	952001670	NPN
S50-PA-2-M03-PP	952001230	PNP

metal - axial optics - 2 m cable		
S50-MA-2-M03-NN	952021550	NPN
S50-MA-2-M03-PP	952021070	PNP

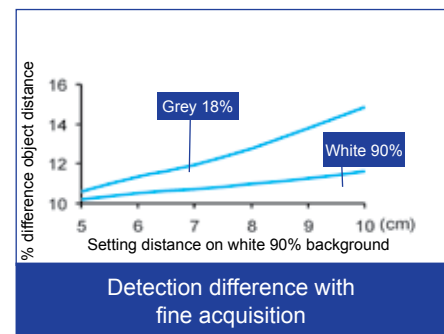
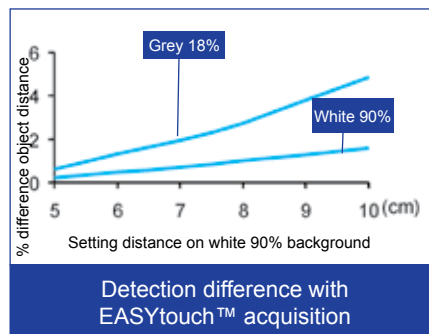
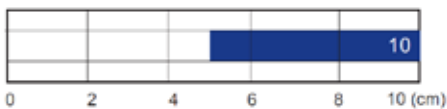
plastic - axial optics - M12 connector		
S50-PA-5-M03-NN	952001560	NPN
S50-PA-5-M03-PP	952001000	PNP

metal - axial optics - M12 connector		
S50-MA-5-M03-NN	952021710	NPN
S50-MA-5-M03-PP	952021270	PNP

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



DETECTION DIAGRAMS



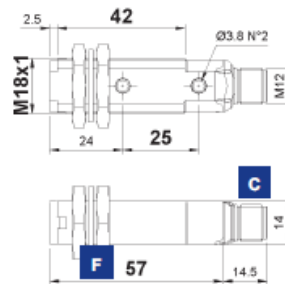
M RADIAL RED EMISSION

This version of diffuse proximity sensor has a detection distance that can be set using the sensitivity adjustment trimmer. The green stability LED indicates whether the received signal is above to the minimum signal for stable output switching.

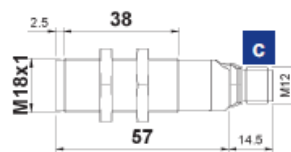


DIMENSIONS

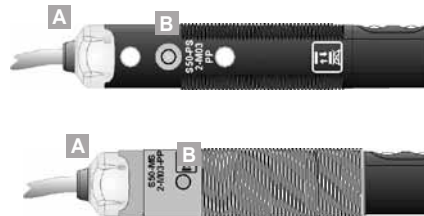
PLASTIC HOUSING



METAL HOUSING



INDICATORS AND SETTINGS



- A** OUTPUT status and READY/ ERROR LEDs
- B** Teach-in push-button
- C** M12 connector output
- D** Cable output
- E** Fixing nuts
- F** Fixing gasket

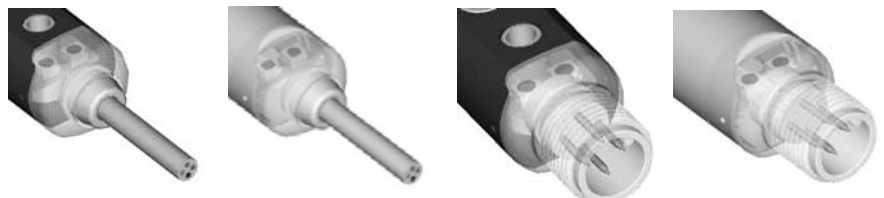
Teach-in button for setting.
EASYtouch™ provides two setting modes: standard or fine, both obtained by pressing the push-button only once. Please refer to instructions manual for operating details.

ACCESSORIES

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

Refer also to **Connectors and Fixing brackets** of the **General Catalogue**.

CONNECTIONS



S50-XX-2

S50-XX-5

BROWN 1 + 10 ... 30 Vdc
 WHITE 2 NC OUTPUT
 BLACK 4 NO OUTPUT
 BLUE 3 0 V

NC OUTPUT (WHITE) 2 + 10 ... 30 Vdc (BROWN) 1
 0 V (BLUE) 3 NO OUTPUT (BLACK) 4

Versions and options: refer to **MODEL ALPHABETICAL INDEX** of this catalogue.