

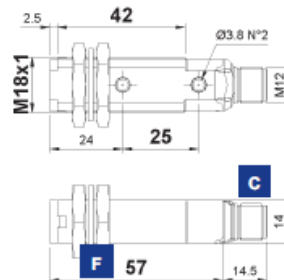
A INFRARED EMISSION

With retroreflex sensors the object is detected when it interrupts the light beam generated between the sensor and its associated prismatic reflector. This retroreflex system, created between the sensor and the reflector, offers the advantage of electrically connecting one single unit instead of two, as in the emitter-receiver system.

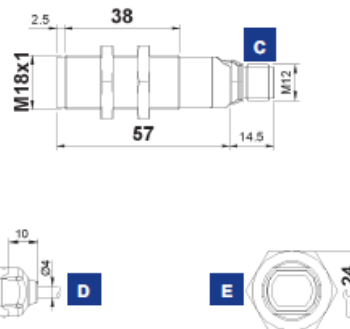


DIMENSIONS

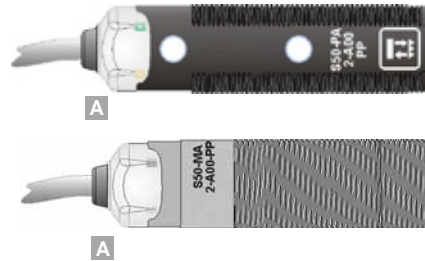
PLASTIC HOUSING



METAL HOUSING



INDICATORS AND SETTINGS



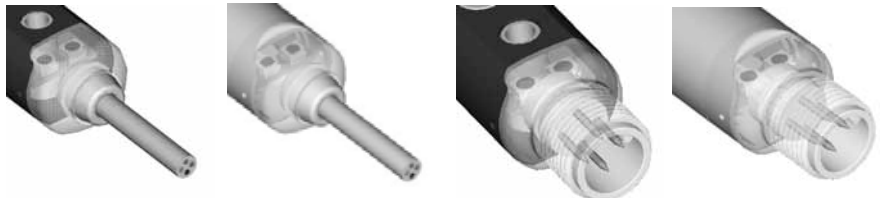
- A** OUTPUT status LED
- C** M12 connector output
- D** Cable output
- E** Fixing nuts
- F** Fixing gasket

ACCESSORIES

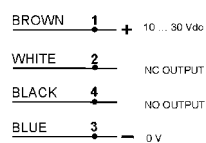
For **dedicated accessories** refer to the **ACCESSORIES** section of this catalogue.

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

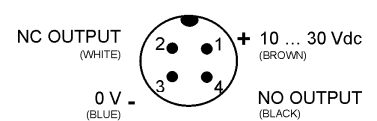
CONNECTIONS



S50-XX-2



S50-XX-5



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

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-A00-NN	S50-PA-2-A00-PP	S50-PA-5-A00-NN	S50-PA-5-A00-PP	S50-MA-2-A00-NN	S50-MA-2-A00-PP	S50-MA-5-A00-NN	S50-MA-5-A00-PP
Operating distance:	0.1 ... 5 m	•	•	•	•	•	•	•	•
Power supply:	10 ... 30 Vdc ¹	•	•	•	•	•	•	•	•
Ripple:	≤ 2 Vpp	•	•	•	•	•	•	•	•
Consumption:	≤ 35 mA	•	•	•	•	•	•	•	•
Light emission:	infrared LED 880 nm ²	•	•	•	•	•	•	•	•
Spot dimension:	approx. 100 mm at 2 m	•	•	•	•	•	•	•	•
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					•	•	•	•
Lens material:	PMMA	•	•	•	•	•	•	•	•
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-A00-NN	952002090	NPN
S50-PA-2-A00-PP	952002080	PNP

metal - axial optics - 2 m cable		
S50-MA-2-A00-NN	952022090	NPN
S50-MA-2-A00-PP	952022080	PNP

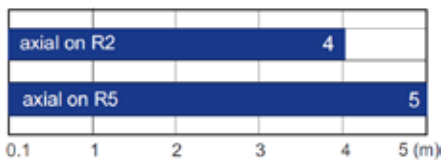
plastic - axial optics - M12 connector		
S50-PA-5-A00-NN	952002110	NPN
S50-PA-5-A00-PP	952002100	PNP

metal - axial optics - M12 connector		
S50-MA-5-A00-NN	952022110	NPN
S50-MA-5-A00-PP	952022100	PNP

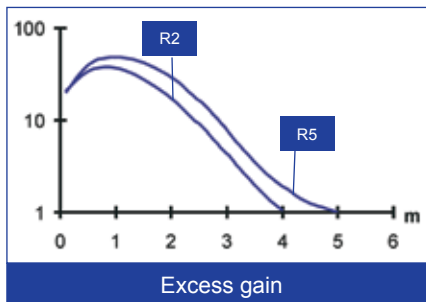
All the ordering codes and information are summarised in the last pages of this catalogue.



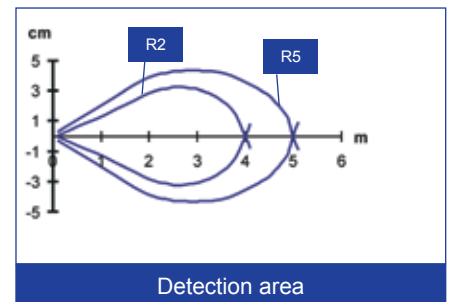
DETECTION DIAGRAMS



■ Operating distance



Excess gain



Detection area