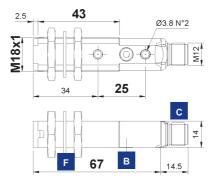
M AXIAL BACKGROUND SUPPRESSION WITH RED EMISSION

Background suppression proximity allows to precisely adjust the distance over which the object is not detected, with the minimum difference between reflective objects. The *EASYtouch™* setting procedure fixes automatically the best detection conditions, simply pressing once the teach-in pushbutton, in presence of the reference to detect.



DIMENSIONS

PLASTIC HOUSING



METAL HOUSING 2.5 43 B C 10





INDICATORS AND SETTINGS





OUTPUT status and READY/ERROR LEDs

B Teach-in push-button

c M12 connector output

Cable output

Fixing nuts

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 (A.03) and Fixing brackets (A.04) of the General Catalogue.

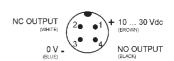






S50-XX-5









Value Val		TECHNICAL DATA								
Operating distance: 5 10 cm Power supply: 10 30 Vdc¹ Ripple: ≤ 2 Vpp Consumption: ≤ 30 mA Light emission: red LED 630 nm² Spot dimension: approx. 8 mm at 10 cm Setting: teach-in push-button Setting: teach-in EASYtouch™ Indicators: yellow OUTPUT LED green / red READY / ERROR LED • • • • • • • • • • • • • • • • • • •	TECHNICAL DATA									
Power supply:			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
Ripple:	Operating distance:	5 10 cm	•	•	•	•	•	•	•	•
Consumption: ≤ 30 mA ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	Power supply:	10 30 Vdc ¹	•	•	•	•	•	•	•	•
Light emission: red LED 630 nm²	Ripple:	≤ 2 Vpp	•	•	•	•	•	•	•	•
Spot dimension: approx. 8 mm at 10 cm ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	Consumption:	≤ 30 mA	•	•	•	•	•	•	•	•
Setting: teach-in push-button ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	Light emission:	red LED 630 nm ²	•	•	•	•	•	•	•	•
Setting procedure: teach-in EASYtouch™ ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	Spot dimension:	approx. 8 mm at 10 cm	•	•	•	•	•	•	•	•
Setting procedure: teach-in EASYtouch™ ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	Setting:		•	•	•	•	•	•	•	•
Indicators:	Setting procedure:		•	•	•	•	•	•	•	•
green / red READY / ERROR LED Output type: PNP, NO and NC NPN, NO and NC • • • • • • • • • • • • • • • • • • •								П	\Box	
Output type: PNP, NO and NC ●		yellow OUTPUT LED	•	•	•	•	•	•	•	•
PNP, NO and NC NPN, NO and NC ●		green / red READY / ERROR LED	•	•	•	•	•	•	•	•
NPN, NO and NC ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	Output type:							П	П	
Output current: ≤ 100 mA ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●		PNP, NO and NC		•		•	Г	•	П	•
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 cable³ M12 4-pole connector⁴ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		NPN, NO and NC	•		•		•	П	•	
Response time: 1 ms	Output current:	≤ 100 mA	•	•	•	•	•	•	•	•
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: lP67 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 • • • • • • • • • • • • •	Saturation voltage:	≤ 2 V	•	•	•	•	•	•	•	•
Operating mode: dark on NO / light on NC ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	Response time:		•	•	•	•	•	•	•	•
Connection: 2 m Ø 4 mm cable ³ ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	Switching frequency:	500 Hz	•	•	•	•	•	•	•	•
2 m Ø 4 mm cable 3	Operating mode:		•	•	•	•	•	•	•	•
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:	Connection:	· ·					Г	П	П	
Electrical protection: class 2 Mechanical protection: IP67 Protection devices: A, B s Housing material: PBT nickel plated brass • • • • • • • Lens material: PMMA Weight: 75 g max. 25 g max. • • • • • • • 110 g max. • • • • • • • • • • Operating temperature: -25 +55°C Storage temperature: -25 +70°C		2 m Ø 4 mm cable 3	•	•			•	•	П	
Electrical protection: class 2 Mechanical protection: IP67 Protection devices: A, B s Housing material: PBT nickel plated brass • • • • • • • Lens material: PMMA Weight: 75 g max. 25 g max. • • • • • • • 110 g max. • • • • • • • • • • Operating temperature: -25 +55°C Storage temperature: -25 +70°C		M12 4-pole connector 4			•	•		П	•	•
Mechanical protection: IP67 Protection devices: A, B ⁵ Housing material: PBT nickel plated brass ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Electrical protection:		•	•	•	•	•	•	•	•
Housing material: PBT nickel plated brass ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●		IP67	•	•	•	•	•	•	•	•
Housing material: PBT nickel plated brass ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	Protection devices:	A, B ⁵	•	•	•	•	•	•	•	•
nickel plated brass Lens material: PMMA ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	Housing material:	·							П	
Lens material: PMMA • • • • • • • • • • • • • • • • • • •		PBT	•	•	•	•				
Weight: 75 g max. ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●		nickel plated brass					•	•	•	•
75 g max.	Lens material:	PMMA	•	•	•	•	•	•	•	•
75 g max.	Weight:						П	П	П	_
25 g max. 110 g max. 60 g max. Operating temperature: -25 +55°C Storage temperature: -25 +70°C		75 g max.	•	•				П	П	
110 g max. ● ● 60 g max. ● ● Operating temperature: -25 +55°C ● ● ● ● ● ● ● Storage temperature: -25 +70°C ● ● ● ● ● ●					•	•	П	\exists	\exists	
60 g max.							•	•	\Box	
Operating temperature: -25 +55°C • • • • • • • Storage temperature: -25 +70°C • • • • • • •							П	\exists	•	•
Storage temperature: -25 +70°C	Operating temperature:		•	•	•	•	•	•	•	•
				•	-	-	•	•	•	•
	Reference standard:	EN 60947-5-2		•	•	•	•	•	•	•

ECTI		

plastic - axial optics - 2 m cable

plastic - axial optics - M12 connector

S50-MA-5-M03-NN

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

metai - axiai optics - 2 m cable						
S50-MA-2-M03-NN	952021550	NPN				
S50-MA-2-M03-PP	952021070	PNP				

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

S50-MA-5-M03-PP 952021270 PNP
All the ordering codes and information are summarised in the last pages of this catalogue.

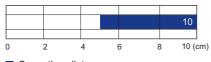
952021710

TECHNICAL NOTES

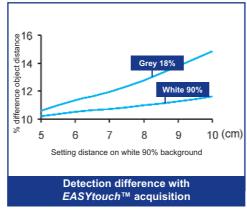
- ¹ Limit values
- 2 Average life of 100.000 h with T_A = +25 $^{\circ} \text{C}$
- ³ PVC, 4 x 0.14 mm²
- ⁴ Compatible with quick connection systems
- ⁵ A reverse polarity protection
 - B overload and short-circuit protection on the outputs

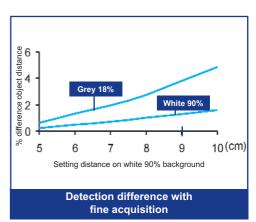
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DETECTION DIAGRAMS



Operating distance







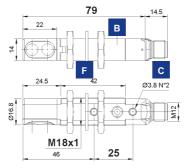
M RADIAL BACKGROUND SUPPRESSION WITH RED EMISSION

Background suppression proximity allows to precisely adjust the distance over which the object is not detected, with the minimum difference between reflective objects. The *EASYtouch™* setting procedure fixes automatically the best detection conditions, simply pressing once the teach-in pushbutton, in presence of the reference to detect.

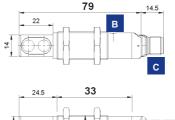


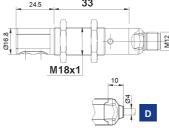
DIMENSIONS

PLASTIC HOUSING



METAL HOUSING







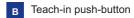
mm

INDICATORS AND SETTINGS





OUTPUT status and READY/ERROR LEDs



- c M12 connector output
- Cable output
- Fixing nuts
- 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 (A.03) and Fixing brackets (A.04) of the General Catalogue.

CONNECTIONS

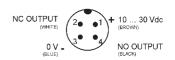






S50-XX-5







10 cm

TECHNICAL DATA \$50-P\$-2-M03-NN \$50-P\$-2-M03-NN \$50-P\$-5-M03-NN \$50-P\$-5-M03-NN \$50-M8-2-M03-NN \$50-M8-5-M03-NN \$50-M8-5-M03-NN 5 ... 10 cm Operating distance: Power supply: 10 ... 30 Vdc ≤ 2 Vpp Ripple: Consumption: ≤ 30 mA Light emission: red LED 630 nm² Spot dimension: approx. 10 mm at 10 cm Setting: teach-in push-button Setting procedure: teach-in EASYtouch™ Indicators: yellow OUTPUT LED green / red READY / ERROR LED Output type: PNP, NO and NC • NPN, NO and NC • • ≤ 100 mA Output current: Saturation voltage: ≤ 2 V Response time: 1 ms Switching frequency: 500 Hz dark on NO / light on NC Operating mode: Connection: 2 m Ø 4 mm cable³ 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. -25 ... +55°C Operating temperature: Storage temperature: -25 ... +70°C Reference standard: EN 60947-5-2

C	EC.	TIO	ПЛ		21 E
-	EU	\mathbf{I}		AL) L E

plastic - 2 m cable

S50-PS-2-M03-NN	952001900	NPN
S50-PS-2-M03-PP	952001910	PNP
metal - 2 m cable		
S50-MS-2-M03-NN	952021900	NPN
S50-MS-2-M03-PP	952021910	PNP
plastic - M12 connecto	or	
S50-PS-5-M03-NN	952001920	NPN
\$50-P\$-5-M03-PP	952001930	PNP

metal - M12 connector		
S50-MS-5-M03-NN	952021920	NPN
S50-MS-5-M03-PP	952021930	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 °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

(\in c UL) us listed \times II3D

DETECTION DIAGRAMS

