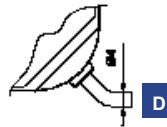
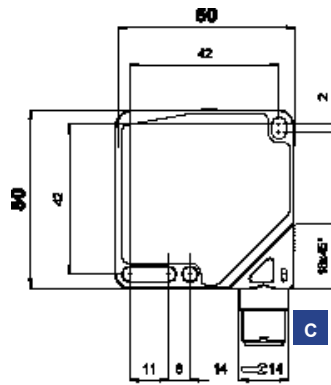


# G/F THROUGH BEAM WITH INFRARED EMISSION

The detection system with two separate emitter and receiver units allows the user to reach larger operating distances. The trimmer, present on the receiver, allows to adjust sensitivity and to detect objects that obscure, even partially, the light emission. The IR emission is modulated to avoid interference with other light sources and can be turned off to test the functioning even without the object to detect.

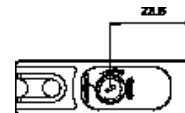


## DIMENSIONS

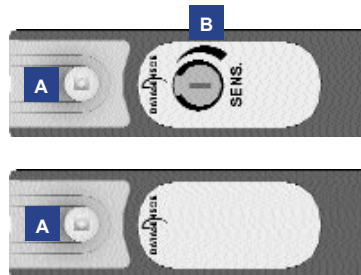


EMITTER

RECEIVER



## INDICATORS AND SETTINGS



- A** Output status and stability LEDs (receiver); power on LED (emitter)
- B** Adjustment trimmer (receiver)
- C** M12 connector output
- D** Cable output

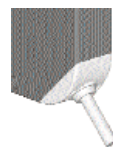
Single-turn trimmer for sensitivity adjustment. Rotate clockwise to increase the operating distance.

## ACCESSORIES

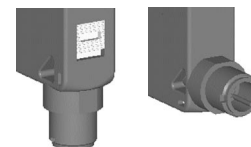
For **dedicated accessories** refer to the **ACCESSORIES** section of this catalogue.

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

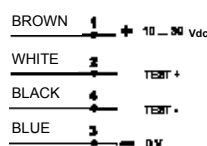
## CONNECTIONS



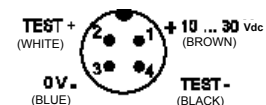
S60-PA-2



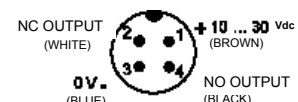
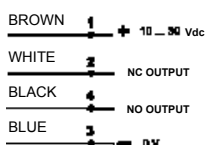
S60-PA-5



EMITTER



RECEIVER



## TECHNICAL DATA

		S60-PA-2-F01-NN	S60-PA-2-F01-PP	S60-PA-2-G00-XG	S60-PA-5-F01-NN	S60-PA-5-F01-PP	S60-PA-5-G00-XG
<b>Operating distance:</b>	0 ... 20 m	●	●	●	●	●	●
<b>Power supply:</b>	10 ... 30 Vdc <sup>1</sup>	●	●	●	●	●	●
<b>Ripple:</b>	≤ 2 Vpp	●	●	●	●	●	●
<b>Consumption:</b>	≤ 35 mA	●	●	●	●	●	●
<b>Light emission:</b>	infrared LED 880 nm <sup>2</sup>			●			●
<b>Spot dimension:</b>	aprox. 200 mm at 4 m						●
<b>Setting:</b>	sensitivity trimmer <sup>3</sup>	●	●		●	●	
<b>Indicators:</b>							
	yellow OUTPUT LED	●	●		●	●	
	green STABILITY LED	●	●		●	●	
	green POWER ON LED			●			●
<b>Output type:</b>							
	PNP, NO and NC		●			●	
	NPN, NO and NC	●			●		
<b>Output current:</b>	≤ 100 mA	●	●		●	●	
<b>Saturation voltage:</b>	≤ 2 V	●	●		●	●	
<b>Response time:</b>	1 ms	●	●		●	●	
<b>Switching frequency:</b>	500 Hz	●	●		●	●	
<b>Operating mode:</b>	dark on NO / light on NC	●	●		●	●	
<b>Auxiliary functions:</b>	Test + and Test - <sup>4</sup>			●			●
<b>Connection:</b>							
	2 m Ø 4 mm cable <sup>5</sup>	●	●				
	M12 4-pole connector <sup>6</sup>				●	●	
<b>Electrical protection:</b>	class 2	●	●		●	●	
<b>Mechanical protection:</b>	IP67	●	●		●	●	
<b>Protection devices:</b>	A, B <sup>7</sup>	●	●		●	●	
<b>Housing material:</b>	ABS	●	●		●	●	
<b>Lens material:</b>	window in PMMA <sup>8</sup>	●	●		●	●	
<b>Weight:</b>							
	90 g max.	●	●				
	40 g max.				●	●	
<b>Operating temperature:</b>	-25 ... +55°C	●	●		●	●	
<b>Storage temperature:</b>	-25 ... +70°C	●	●		●	●	
<b>Reference standard:</b>	EN 60947-5-2	●	●		●	●	

## SELECTION TABLE

receiver - 2 m cable		
S60-PA-2-F01-NN	956201490	NPN
S60-PA-2-F01-PP	956201330	PNP

emitter - 2 m cable		
S60-PA-2-G00-XG	956201340	

receiver - M12 connector		
S60-PA-5-F01-NN	956201210	NPN
S60-PA-5-F01-PP	956201060	PNP

emitter - M12 connector		
S60-PA-5-G00-XG	956201070	

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

## TECHNICAL NOTES

<sup>1</sup> Limit values

<sup>2</sup> Average life of 100.000 h with  $T_A = +25^\circ\text{C}$

<sup>3</sup> 270 ° trimmer

<sup>4</sup> Emitter off with Test+ on Vdc and Test- on 0 V

<sup>5</sup> PVC, 4 x 0.14 mm<sup>2</sup>

<sup>6</sup> Connector can be blocked on two positions

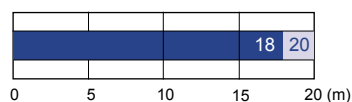
<sup>7</sup> A - reverse polarity protection

B - overload and short-circuit protection on receiver outputs

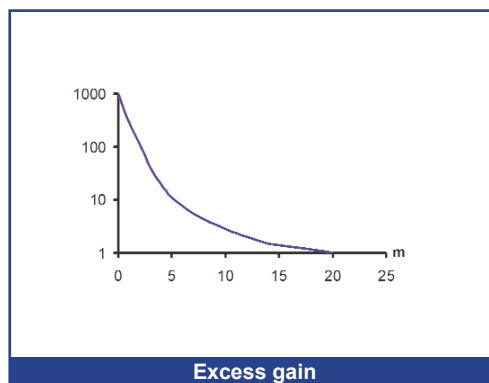
<sup>8</sup> Internal lenses in Polycarbonate



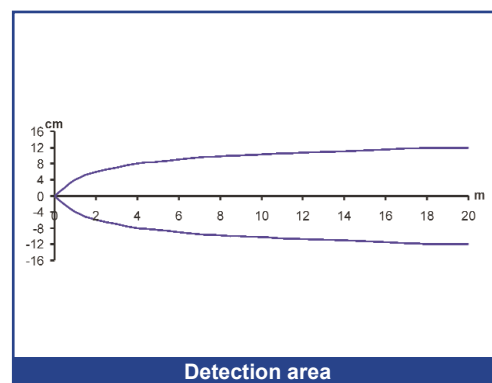
## DETECTION DIAGRAMS



■ Recommended operating distance  
 ■ Maximum operating distance



Excess gain



Detection area