

The clear choice.

FR 25 RGO – retro-reflective light barrier for the recognition of transparent objects



FR 25-RGO

Retro-reflective light barrier for the recognition of transparent objects





PRODUCT HIGHLIGHTS

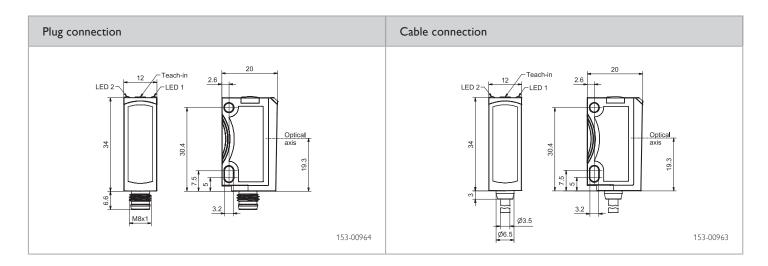
- Reliable recognition of transparent objects regardless of their shape
- Autocollimation principle: Reliable and precise recognition starting from a range of just 0 mm
- DELTA-function (Dynamic Evaluation of Light for Threshold Adaption): Dynamic adaption of the sensor to alternating environmental conditions – not influenced by dust or dirt
- Precise and highly visible light spot with a sharp contour for an easy alignment of the sensor

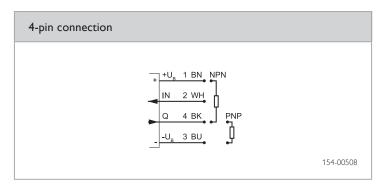
Optical data		Functions		
Operating range	0 2 m ¹	Indicator LED green	Operating voltage indicator	
Type of light	LED, red, 632 nm	Indicator LED yellow	Switching output indicator	
Polarisation filter	Yes	Sensitivity adjustment	Via teach-in button and control input	
		Teach-in modes	Mode 1: during running process Mode 2: during stationary process	
		Adjustment possibilities	N.O./N.C. via teach-in button and control input Button lock via control input	
		Default settings	Max. range and N.O.	
Electrical data		Mechanical data		
Operating voltage +U _B	10 30 V DC ²	Dimensions	34 × 20 × 12 mm	
No-load current lo	≤ 30 mA	Enclosure rating	IP 69K & IP 67 ³	
Output current le	≤ 100 mA	Material housing	ABS	
Protective circuits	Reverse-polarity protection U _g / short-circuit protection (Q)	Material front screen	PMMA	
		Type of connection	(see selection table)	
Protection class	2	Ambient temperature: operation	-20 +60 °C	
Time to readiness	< 300 ms	Ambient temperature: storage	-20 +80 °C	
Switching output Q	PNP / NPN (see selection table)	Weight (plug)	10 g	
Output function	N.O./ N.C.	Weight (cable)	40 g	
Switching frequency f (ti/tp 1:1)	≤ 1000 Hz	Resistance to vibrations	EN 60947-5-2	
Response time	500 μs	and impacts		
Control input IN	+U _B = Teach-in -U _B = Button locked Open = Normal operation			

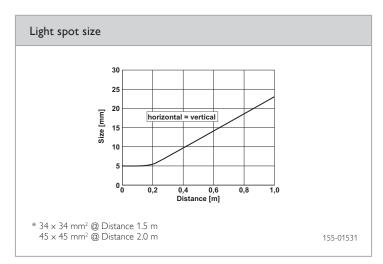
 $^{^{1}}$ Reference material reflector R5L $^{-2}$ Max. 10% ripple, within U $_{\rm B}$ \sim 50 Hz / 100 Hz $^{-3}$ With connected IP 67 / IP 69K plug

Operating range	Switching output	Type of connection	Order designation	Part no.
0 2 m	PNP	Plug, M8×1, 4-pin	FR 25-RGO-PS-M4	606-11020
0 2 m	NPN	Plug, M8×1, 4-pin	FR 25-RGO-NS-M4	606-11021
0 2 m	PNP	Metal plug, M8×1, 4-pin	FR 25-RGO-PS-M4M	606-11016
0 2 m	NPN	Metal plug, M8×1, 4-pin	FR 25-RGO-NS-M4M	606-11017
0 2 m	PNP	Cable, 2 m, 4-wire	FR 25-RGO-PS-K4	606-11018
0 2 m	NPN	Cable, 2 m, 4-wire	FR 25-RGO-NS-K4	606-11019









Reflectors/Reflective foil*	Description	Operating distance for transparent cylindrical objects	Operating distance for transparent flat objects
R5/L (904-51543)	Reflector 51 × 61 mm, 2 mounting holes	0 500 mm	0 800 mm
RF-230 KL* (904-51593)	Reflective foil 230 x 230 mm, self-adhesive, cut-to-size	0 300 mm	0 800 mm

Accessories: www.sensopart.com

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Yesterday, today and in the future.











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the technological leader in many areas of industrial sensor technology.

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