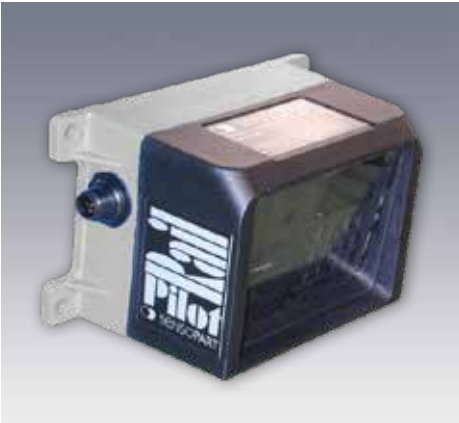


FR 85 RailPilot

Distance sensor for collision prevention



PRODUCT HIGHLIGHTS

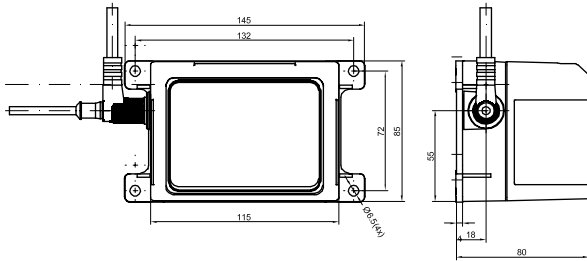
- Measurement range: 0 ... 6 m
- Wide detection cone
- RS485 interface
- Reliable suppression of foreign objects (girders, pillars)

Optical data		Functions	
Scanning distance	0 ... 6 m ¹	Indicator LED, green	Operating voltage indicator
Type of light	Infrared, 905 nm	Indicator LED, red	Switching output indicator
Laser Class (IEC 60825-1)	1	Scanning distance adjustment	Via control wire
Resolution	~ 1 mm		
Repeatability	≤ 10 mm		
Linearity	± 70 mm		
Electrical data		Mechanical data	
Operating voltage, +U _B	18 ... 30V DC ²	Dimensions	145 x 85 x 80 mm
No-load current, I ₀	≤ 100 mA	Enclosure rating	IP 54 ³
Protective circuits	Reverse-polarity protection, U _B / short-circuit protection (Q)	Material, housing	ABS
		Material, front screen	PMMA
Protection Class	2	Type of connection	See selection table
Power On Delay	< 300 ms	Ambient temperature: operation	0 ... +50 °C
Output function	See selection table	Ambient temperature: storage	-20 ... +70 °C
Serial interface	RS485 / R = 1 KΩ	Weight	340 g

¹ Reference material: R10/2 reflector ² 10 % ripple, within U_B ³ With connected IP 54 plug

Interface	Baud rate	Suitable for control	Type of connection	Part number	Article number
RS485	57.6 kB	SEW / Lenze / DETO	Plug, M12x1, 5-pin	FR 85-2 ILLG-S1L5	529-11008
RS485	57.6 kB	Standard (e.g. Siemens)	Plug, M12x1, 5-pin	FR 85-2 ILLG2-S1L5	529-11009
RS485	62.5 kB	LJU	Plug, M12x1, 5-pin	FR 85-2 ILLG-S1L5-62,5 kB	529-11014

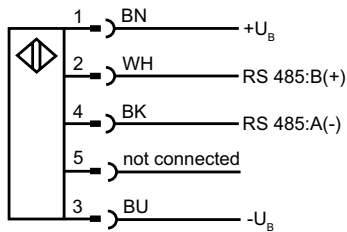
Plug connection



153-00349

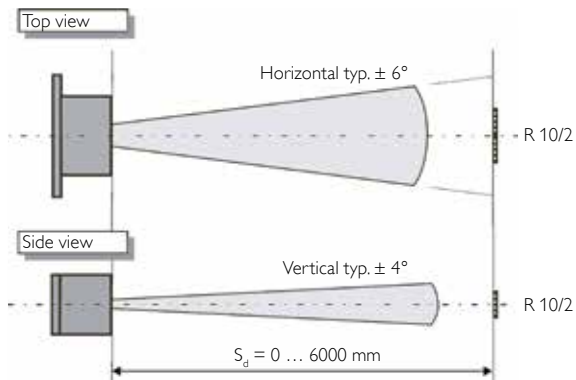
5

Connection, 5-pin: FR 85-2 ILLG(x)-S1L5



154-00478

Detection cone



155-00202

Reflector	Article number	Accessories	
R10 / 2 (2xR10)	904-51636	Reflectors	www.sensopart.com/en/accessories
		Connection cables	