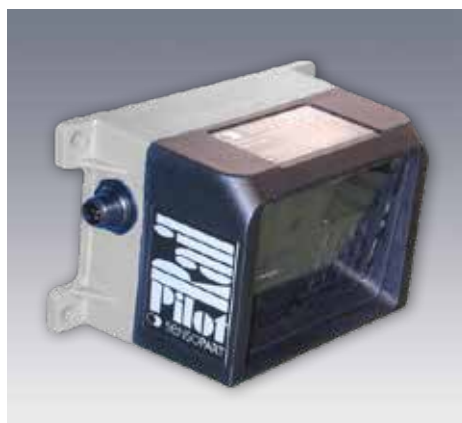


FR 85 RailPilot

Distance sensor for collision prevention



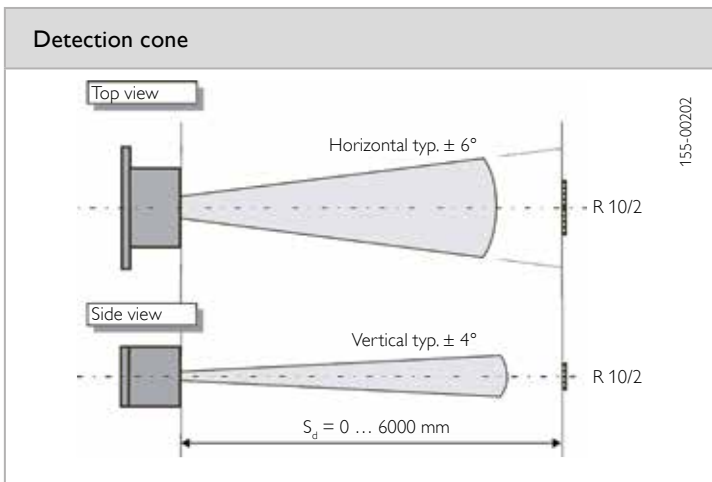
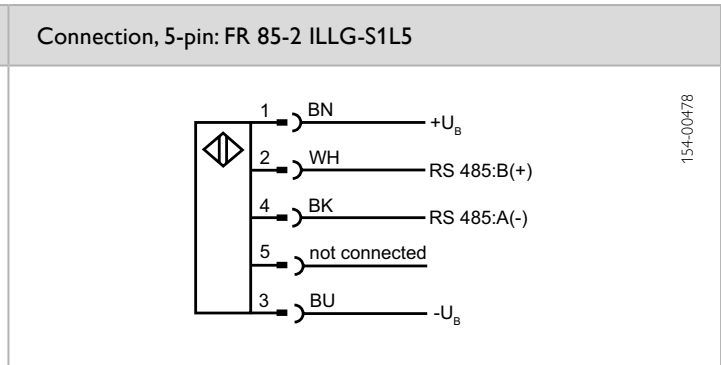
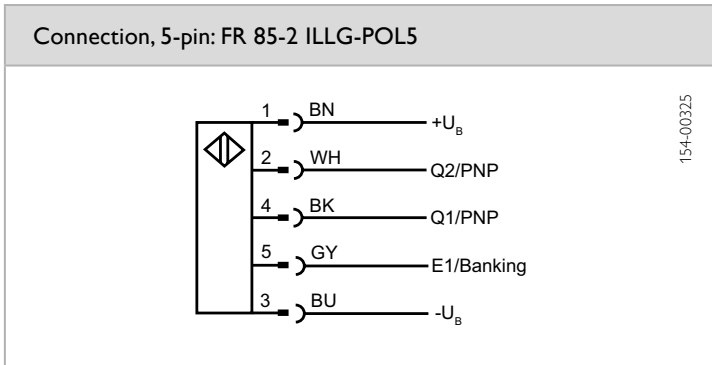
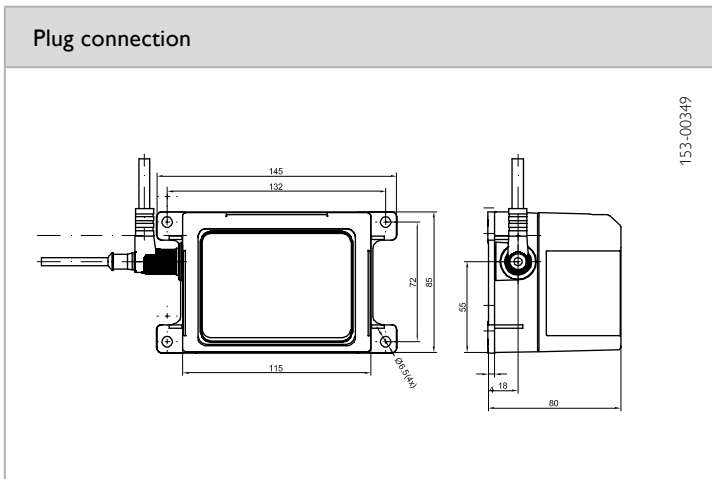
PRODUCT HIGHLIGHTS

- Measurement range: 0 ... 6 m
- Wide detection cone
- 2x2 detection zones
- 1 input
- 2 PNP outputs
- RS485 interface
- Detection zone adjustable externally
- 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 × 85 × 80 mm
No-load current, I ₀	≤ 100 mA	Enclosure rating	IP 54 ⁴
Output current, I _e	≤ 200 mA	Material, housing	ABS
Protective circuits	Reverse-polarity protection, U _B / short-circuit protection (Q)	Material, front screen	PMMA
Protection Class	2	Type of connection	See selection table
Power On Delay	< 300 ms	Ambient temperature: operation	0 ... +50 °C
Switching output, Q	See selection table	Ambient temperature: storage	-20 ... +70 °C
Output function	See selection table	Weight	340 g
Serial interface	RS485 / R = 1 KΩ ³		
Control input E1 / banking	Close and remote switching -U _B (low) Q1 = switching point 1; Q2 = switching point 2 +U _B (high) Q1 = switching point 3; Q2 = switching point 4		

¹ Reference material: R10/2 reflector ² 10 % ripple, within U_B ³ Type FR85 ... S1L5 ⁴ With connected IP 54 plug

Interface	Baud rate	Suitable for control	Type of connection	Part number	Article number
RS485	57,6 kB	Lenze / DETO	Plug, M12x1, 5-pin	FR 85-2 ILLG-S1L5	529-11008
RS485	62,5 kB	LJU	Plug, M12x1, 5-pin	FR 85-2 ILLG-S1L5-62,5 kB	529-11014
2 switching points Q (PNP) N.C.	-	-	Plug, M12x1, 5-pin	FR 85-2 ILLG-POL5	529-11010



Reflector	Article number	Accessories						
R10 / 2 (2xR10)	904-51636	<table border="1"> <tr> <td>Reflectors</td> <td>From Page A-18</td> </tr> <tr> <td>Connection cables</td> <td>From Page A-46</td> </tr> <tr> <td>Setup Box FR 85-2 ILLX 533-11016</td> <td>From Page A-53</td> </tr> </table>	Reflectors	From Page A-18	Connection cables	From Page A-46	Setup Box FR 85-2 ILLX 533-11016	From Page A-53
Reflectors	From Page A-18							
Connection cables	From Page A-46							
Setup Box FR 85-2 ILLX 533-11016	From Page A-53							