

# FS/FE 12 RL

Laser photoelectric through-beam sensor



CE

IP  
67



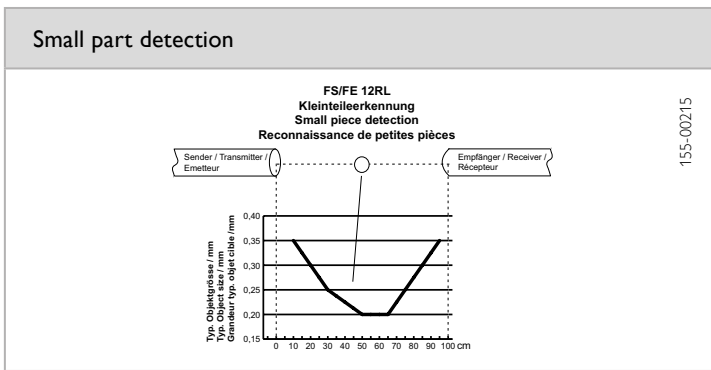
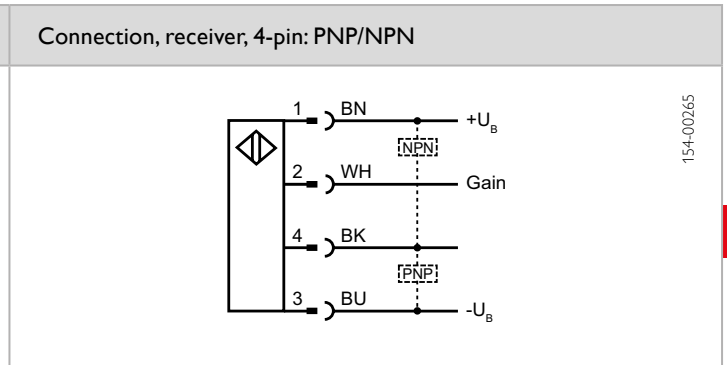
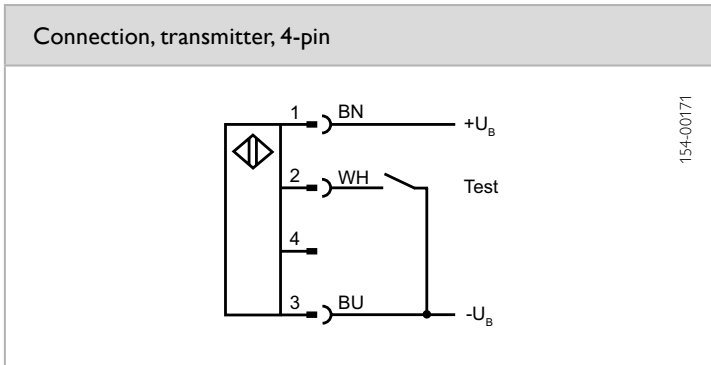
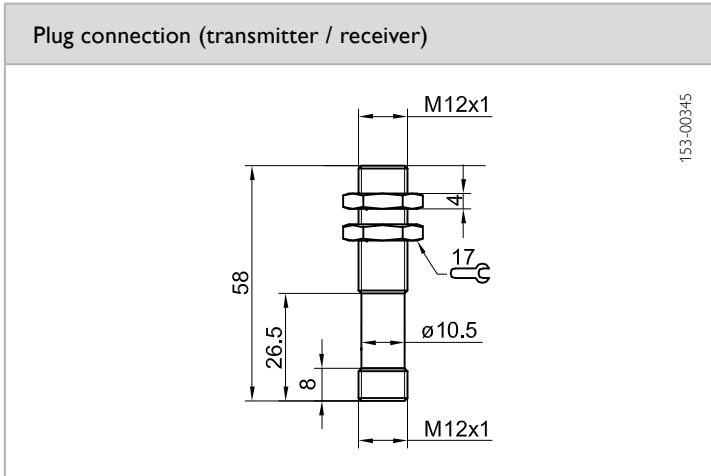
## PRODUCT HIGHLIGHTS

- Fine, parallel light beam
- Small part detection to 0.2 mm at a max. distance of 1 m
- Simple installation thanks to standard M12 metal thread
- Control line for setting of 3 sensitivity levels
- Test input

Optical data		Functions	
Range	0 ... 5 m	Indicator LED, yellow	Switching state indicator
Type of light	Laser, red, 650 nm	Sensitivity adjustment	Via control line
Laser Class (IEC 60825-1)	1		
Electrical data		Mechanical data	
Operating voltage, +U <sub>B</sub>	10 ... 30V DC	Dimensions	M12 × 58 mm
No-load current, I <sub>0</sub>	≤ 30 mA	Enclosure rating	IP 67 <sup>2</sup>
Output current, I <sub>e</sub>	≤ 100 mA	Material, housing	Brass, nickel-plated
Protective circuits	Reverse-polarity protection, U <sub>B</sub> / short-circuit protection	Material, front screen	PMMA
Protection Class	2	Type of connection	See selection table
Power On Delay	≤ 300 ms	Ambient temperature: operation	-20 ... +60 °C
Switching output, Q	PNP/NPN (see selection table)	Ambient temperature: storage	-20 ... +80 °C
Output function	N.O./N.C.	Weight (transmitter / receiver)	30 g
Switching frequency, f (ti/tp 1:1)	10 kHz		
Control input, Test, transmitter	-U <sub>B</sub> : transmitter = off +U <sub>B</sub> or Open: transmitter = on		
Control input, Gain, receiver <sup>1</sup>	1 Open = medium sensitivity 2 -U <sub>B</sub> = high sensitivity 3 +U <sub>B</sub> = low sensitivity		

<sup>1</sup> Change in Gain setting is only effective after renewed switch on / switch off    <sup>2</sup> With connected IP 67 plug

Transmitter / receiver	Switching output	Type of connection	Part number	Article number
Receiver	PNP N.O.	Plug, M12, 4-pin	FE 12 RL-PS-L4	580-51402
Receiver	PNP N.C.	Plug, M12, 4-pin	FE 12 RL-PO-L4	580-51403
Receiver	NPN N.C.	Plug, M12, 4-pin	FE 12 RL-NS-L4	580-51405
Transmitter	—	Plug, M12, 4-pin	FS 12 RL-L4	580-51401



**Accessories**

Connection cables	From Page A-38
Brackets	From Page A-4