

# FM 04

## Photoelectric proximity sensor



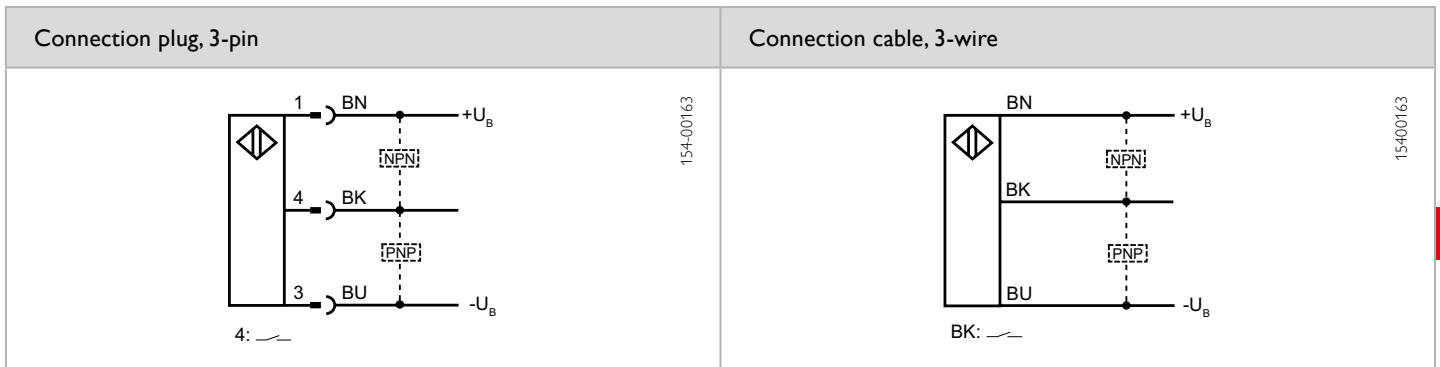
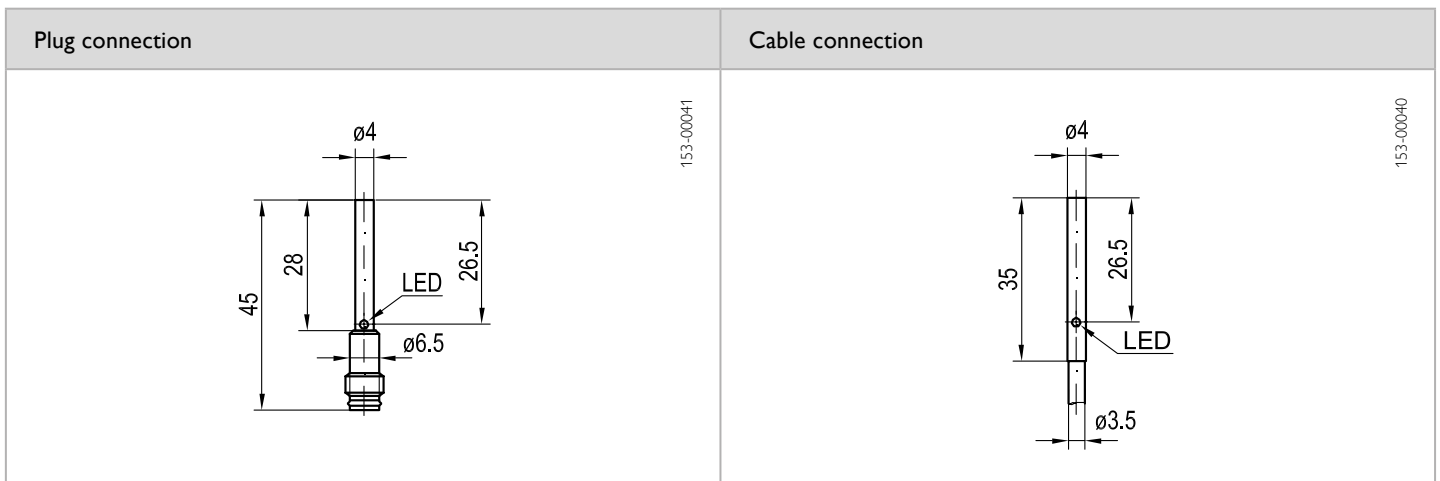
### PRODUCT HIGHLIGHTS

- Very small housing diameter: 4 mm
- Long switching distance of 50 mm
- Glass optics for easy cleaning
- Fully sealed under vacuum, enclosure rating of IP 67

Optical data		Functions	
Scanning distance	0 ... 50 mm <sup>1</sup>	Indicator LED, yellow	Switching state indicator
Type of light	Infrared, 880 nm		
Electrical data		Mechanical data	
Operating voltage, +U <sub>B</sub>	10 ... 30V DC	Dimensions (plug device)	Ø 4 x 45 mm
No-load current, I <sub>0</sub>	≤ 15 mA	Dimensions (cable device)	Ø 4 x 35 mm
Output current, I <sub>e</sub>	≤ 100 mA	Enclosure rating	IP 67 <sup>2</sup>
Protective circuits	Reverse-polarity protection, U <sub>B</sub> / short-circuit protection	Material, housing	Stainless steel, V2A
Power On Delay	120 msec	Material, front screen	Glass
Switching output, Q	PNP/NPN / max. 100 mA	Type of connection	See Selection Table
Output function	N.O.	Ambient temperature: operation	0 ... +55 °C
Switching frequency, f (ti/tp 1:1)	≤ 250 Hz	Vibration and impact resistance	IEC 60947-5-2
Response time	≤ 2.5 ms		

<sup>1</sup> Reference material: Kodak white, 90 % reflectivity    <sup>2</sup>With connected IP 67 plug

Switching output	Type of connection	Part number	Article number
PNP	Plug, M8, 3-pin	FM 04-163	718-51400
NPN	Plug, M8, 3-pin	FM 04-153	718-51401
PNP	Cable, PVC, 3 x 0.14 mm <sup>2</sup> , 2 m	FM 04-161	718-51398
NPN	Cable, PVC, 3 x 0.14 mm <sup>2</sup> , 2 m	FM 04-151	718-51399



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