

# FT 12 R

Photoelectric diffuse sensor



## PRODUCT HIGHLIGHTS

- Scanning distance: 1 ... 300 mm, adjustable
- Red light, 660 nm
- Easy installation thanks to standard M12 metal thread
- Functional reserve indicator

Optical data		Functions	
Scanning distance	1 ... 300 mm <sup>1</sup>	Indicator LED, green	Functional reserve indicator
Type of light	Red, 660 nm	Indicator LED, yellow	Switching state indicator
Light spot size	Ø 5 mm <sup>2</sup>	Scanning distance adjustment	Via potentiometer
Electrical data		Mechanical data	
Operating voltage, +U <sub>B</sub>	10 ... 36 V DC	Dimensions (plug device)	M12 x 60 mm
No-load current, I <sub>0</sub>	≤ 15 mA	Dimensions (cable device)	M12 x 50 mm
Output current, I <sub>e</sub>	≤ 200 mA	Enclosure rating	IP 67 <sup>3</sup>
Protective circuits	Reverse-polarity protection, U <sub>B</sub> / short-circuit protection	Material, housing	Brass, chromium-plated
Protection Class	2	Material, front screen	Glass
Power On Delay	60 msec	Type of connection	See selection table
Switching output, Q	PNP/NPN / max. 200 mA	Ambient temperature: operation	-25 ... +55 °C
Output function	N.O.	Weight (plug device)	20 g
Switching frequency, f (ti/tp 1:1)	≤ 1000 Hz	Weight (cable device)	100 g
Response time	≤ 500 µs	Vibration and impact resistance	IEC 60947-5-2

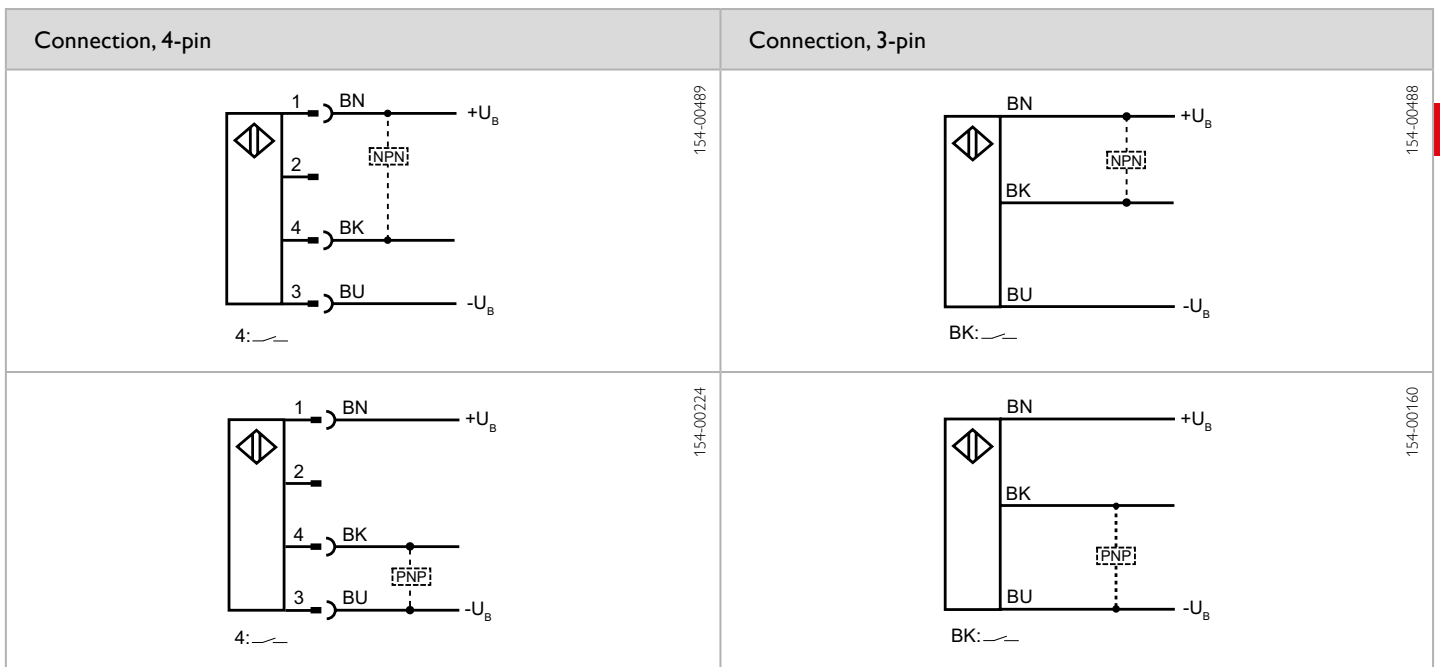
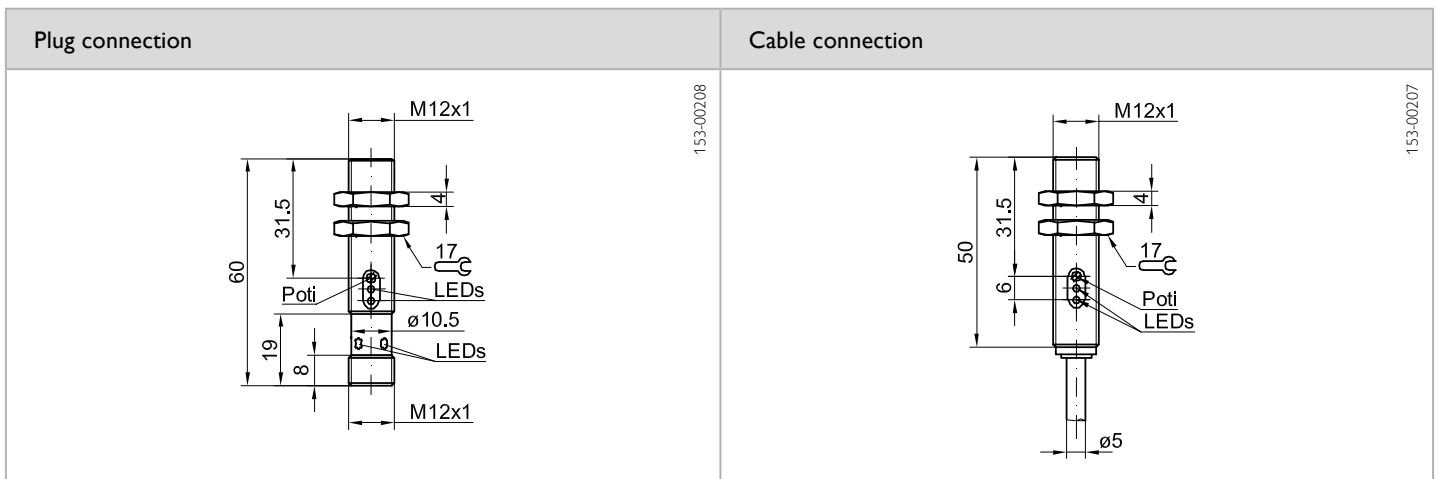
<sup>1</sup> Reference material: Kodak white, 90 % reflectivity    <sup>2</sup> At scanning distance of 10 mm    <sup>3</sup> With connected IP 67 plug

Switching output	Type of connection	Part number	Article number
PNP	Plug, M12, 4-pin	FT 12 R-PSL4	701-21000
NPN	Plug, M12, 4-pin	FT 12 R-NSL4	701-21001
PNP	Cable, PVC, 3 x 0.34 mm <sup>2</sup> , 2 m	FT 12 R-PSK3	701-21002
NPN	Cable, PVC, 3 x 0.34 mm <sup>2</sup> , 2 m	FT 12 R-NSK3	701-21003

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