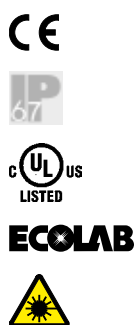


FT 10-RLH

Laser photoelectric proximity sensor with background suppression



PRODUCT HIGHLIGHTS

- Sub-miniature sensor with laser light and adjustable background suppression
- Precise and reliable switching behaviour, even with varying object surfaces and colours
- Reliable operation even with highly reflective machine parts in the background, thanks to SensoPart ASIC technology
- Particularly suitable for detecting the smallest of parts and for installation in extremely confined spaces

Optical data		Functions	
Scanning distance	6 ... 70 mm ¹	Indicator LED, green	Operating voltage indicator
Adjustment range	10 ... 70 mm ¹	Indicator LED, yellow	Switching output indicator
Type of light	Laser, red, 655 nm	Scanning distance adjustment	Via Teach-in button and control input
Light spot size (total detection area)	1 x 3 mm ²	Adjustment possibilities	Button lock via control input
Laser Class (IEC 60825-1)	1	Default settings	Max. scanning distance and N.O.
Electrical data		Mechanical data	
Operating voltage, +U _B	10 ... 30V DC ²	Dimensions	21.1 x 14.6 x 8 mm
No-load current, I ₀	≤ 12 mA	Enclosure rating	IP 67 ³
Output current, I _e	≤ 50 mA	Material, housing	PUR
Protective circuits	Reverse-polarity protection, U _B / short-circuit protection (Q)	Material, front screen	PMMA
Protection Class	2	Type of connection	See Selection Table
Switching output, Q	PNP/NPN (see Selection Table)	Ambient temperature: operation	-20 ... +50 °C ⁴
Output function	N.O.	Ambient temperature: storage	-20 ... +80 °C
Switching frequency, f (ti/tp 1:1)	≤ 1000 Hz	Weight (plug device)	Ca. 3 g
Response time	500 µs	Weight (cable device)	Ca. 22 g
Control input, I _N (only 4-pin design)	+U _B = teach-in -U _B = button locked Open = normal operation	Weight (pigtail)	Ca. 10 g

¹ Reference material white, 90 % reflectivity

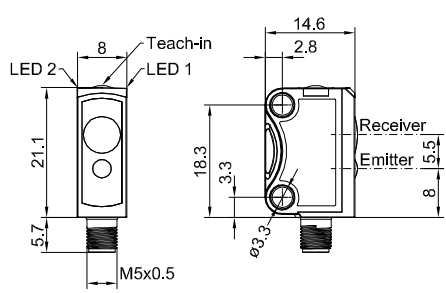
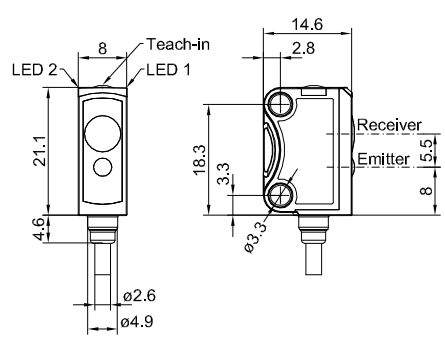
² Max. 10 % ripple, within U_B ~ 50 Hz / 100 Hz

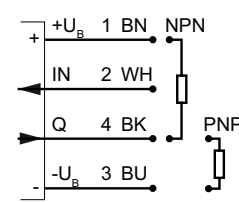
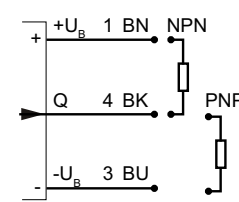
³ With connected IP 67 plug

⁴ UL: -20 ... +30 °C

Scanning distance	Switching output	Type of connection	Part number	Article number
6 ... 70 mm	PNP	Plug, M5x0.5, 4-pin	FT 10-RLH-PS-E4	600-11130
6 ... 70 mm	NPN	Plug, M5x0.5, 4-pin	FT 10-RLH-NS-E4	600-11131
6 ... 70 mm	PNP	Cable, 2 m, 4-wire	FT 10-RLH-PS-K4	600-11132
6 ... 70 mm	NPN	Cable, 2 m, 4-wire	FT 10-RLH-NS-K4	600-11133
6 ... 70 mm	PNP	Pigtail, 200 mm with M8 plug, 4-pin	FT 10-RLH-PS-KM4	600-11134
6 ... 70 mm	NPN	Pigtail, 200 mm with M8 plug, 4-pin	FT 10-RLH-NS-KM4	600-11135
6 ... 70 mm	PNP	Pigtail, 200 mm with M8 plug, 3-pin	FT 10-RLH-PS-KM3	600-11146
6 ... 70 mm	NPN	Pigtail, 200 mm with M8 plug, 3-pin	FT 10-RLH-NS-KM3	600-11147
6 ... 70 mm	PNP	Pigtail, 500 mm with M8 plug, 3-pin	FT 10-RLH-PS-KM3-X07	600-11158

Including dovetail clamp mounting MBD F 10 for all types

Plug connection	Cable connection
 153-00894	 153-00895

Connection, 4-pin	Connection, 3-pin
 154-00508	 154-00509

Reference material	Detection range
White (90 %)	6 ... 70 mm
Grey (18 %)	7 ... 70 mm
Black (6 %)	7 ... 70 mm

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