FT 10-B-RLF

Diffuse laser sensor with background suppression, fixed focus



PRODUCT HIGHLIGHTS

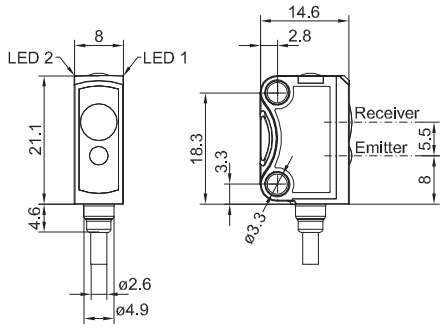
- Sub-miniature sensor with laser light and precise fixed background suppression
- Reliable switching behaviour even with varying object surfaces and colors
- Particularly suitable for detecting the smallest of parts and for installation in extremely confined spaces
- Tamper-proof sensor design – no misalignment possible
- Robust, glass-fibre-reinforced plastic housings

Optical data		Functions	
Scanning distance	6 … 30 mm[1]	Indicator LED, green	Operating voltage indicator
Type of light	Laser, red, 655 nm	Indicator LED, yellow	Switching output indicator
Light spot size (total detection area)	1 x 3 mm		
Laser Class (IEC 60825-1)	1		
Electrical data		**Mechanical data**	
Operating voltage, $+U_B$	10 … 30 V 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, Ie	≤ 50 mA	Material, housing	PUR
Protective circuits	Reverse-polarity protection, U_B / short-circuit protection (Q)	Material, front screen	PMMA
		Type of connection	See selection table
Protection Class	2	Ambient temperature: operation	-20 … +50 °C[4]
Switching output, Q	PNP	Ambient temperature: storage	-20 … +80 °C
Output function	N.O./N.C.	Weight (pigtail)	Approx. 10 g
Switching frequency, f (ti/tp 1:1)	≤ 1000 Hz		
Response time	660 µs		

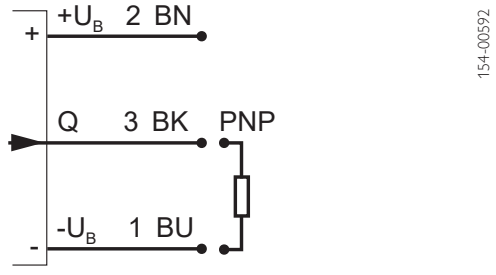
[1] Reference material white, 90 % reflectivity [2] Max. 10 % ripple, within U_B, ~ 50 Hz / 100 Hz [3] With connected IP 67 plug [4] UL: -20 ... +30 °C

Operating range	Switching output	Type of connection	Part number	Article number
6 … 30 mm	PNP	Pigtail with plug JST-ZHR3	FT 10-B-RLF2-PS-T3-X17	600-11178

Plug connection



Connection, 3-pin



Reference material	Detection range
White (90 %)	6 … 30 mm
Grey (18 %)	7 … 30 mm
Black (6 %)	7 … 30 mm