

FT 25-RH

Photoelectric proximity sensor with background suppression



PRODUCT HIGHLIGHTS

- Precisely adjustable background suppression
- Reliable switching despite varying object colours and surfaces
- Reliable operation even with highly reflective backgrounds, thanks to SensoPart ASIC technology
- Simple alignment thanks to easily visible light spot
- Sensor setting via teach-in and control input
- Robust glass-fibre-reinforced plastic housings

Optical data		Functions	
Scanning distance	1 ... 200 mm ¹	Indicator LED, green	Operating voltage indicator
Adjustment range	10 ... 200 mm ¹	Indicator LED, yellow	Switching output indicator
Type of light	LED, red, 632 nm	Scanning distance adjustment	Via Teach-in button and control input
Light spot size	See diagram	Teach-in modes	Mode 1: during running process Mode 2: during standing process
		Adjustment possibilities	N.O./N.C. via Teach-in button and control input Button lock via control input
		Default settings	Max. scanning distance and N.O.
Electrical data		Mechanical data	
Operating voltage, +U _b	10 ... 30V DC ²	Dimensions	34 x 20 x 12 mm
No-load current, I ₀	≤ 30 mA	Enclosure rating	IP 69K & IP 67 ⁴
Output current, I _e	≤ 100 mA	Material, housing	ABS
Protective circuits	Reverse-polarity protection, U _b / short-circuit protection (Q)	Material, front screen	PMMA
Protection Class	2	Type of connection	See Selection Table
Power On Delay	< 300 ms	Ambient temperature: operation	-20 ... +60 °C ⁵
Switching output, Q	PNP/NPN (see Selection Table)	Ambient temperature: storage	-20 ... +80 °C
Output function	N.O./N.C.	Weight (plug device)	10 g
Switching frequency, f (ti/tp 1:1)	≤ 1000 Hz	Weight (metal plug device ⁶)	10 g
Response time	500 μs	Weight (cable device)	40 g
Control input, IN ³	+U _b = teach-in -U _b = button locked Open = normal operation	Weight (pigtail)	20 g
		Vibration and impact resistance	EN 60947-5-2

¹ Reference material: white, 90 % reflectivity

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

³ Only 4-pin design

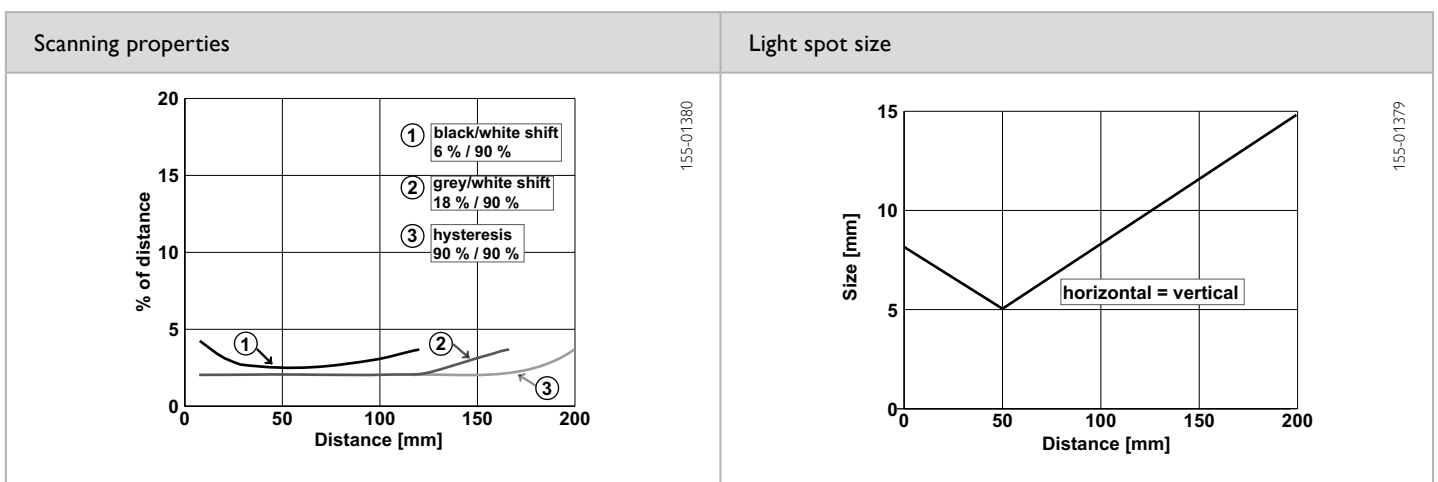
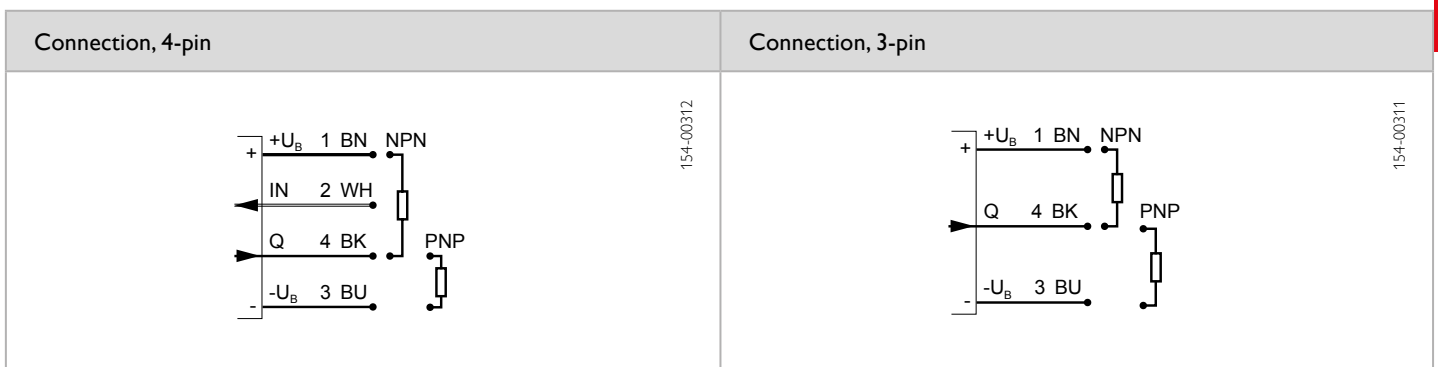
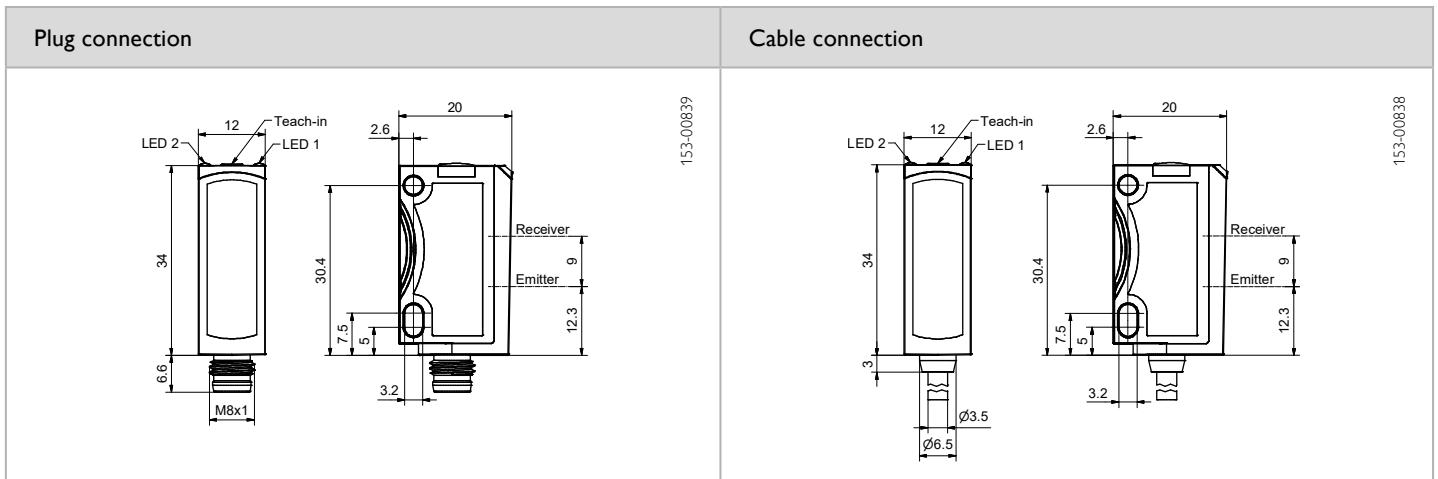
⁴ With connected IP 67 / IP 69K plug

⁵ UL: -20 ... +50 °C

⁶ No Ecolab

Scanning distance	Switching output	Type of connection	Part number	Article number
1 ... 200 mm	PNP	Plug, M8x1, 4-pin	FT 25-RH-PS-M4	608-11004
1 ... 200 mm	NPN	Plug, M8x1, 4-pin	FT 25-RH-NS-M4	608-11006
1 ... 200 mm	PNP	Metal plug, M8x1, 3-pin	FT 25-RH-PS-M3M	608-11012
1 ... 200 mm	NPN	Metal plug, M8x1, 3-pin	FT 25-RH-NS-M3M	608-11013
1 ... 200 mm	PNP	Metal plug, M8x1, 4-pin	FT 25-RH-PS-M4M	608-11014
1 ... 200 mm	NPN	Metal plug, M8x1, 4-pin	FT 25-RH-NS-M4M	608-11015
1 ... 200 mm	PNP	Cable, 2 m, 4-wire	FT 25-RH-PS-K4	608-11005
1 ... 200 mm	NPN	Cable, 2 m, 4-wire	FT 25-RH-NS-K4	608-11007
1 ... 200 mm	PNP	Pigtail, 150 mm with plug, M8, 4-pin	FT 25-RH-PS-KM4	608-11031
1 ... 200 mm	NPN	Pigtail, 150 mm with plug, M8, 4-pin	FT 25-RH-NS-KM4	608-11032

Scanning distance	Switching output	Type of connection	Part number	Article number
1 ... 200 mm	PNP	Pigtail, 150 mm with plug, M12, 4-pin	FT 25-RH-PS-KL4	608-11008
1 ... 200 mm	NPN	Pigtail, 150 mm with plug, M12, 4-pin	FT 25-RH-NS-KL4	608-11009



Reference material	Detection range	Accessories
White (90 %)	1 ... 200 mm	Connection cables Brackets
Grey (18 %)	2 ... 160 mm	
Black (6 %)	4 ... 120 mm	
		From Page A-38
		From Page A-4