

FT 25-WV

White-light contrast sensor



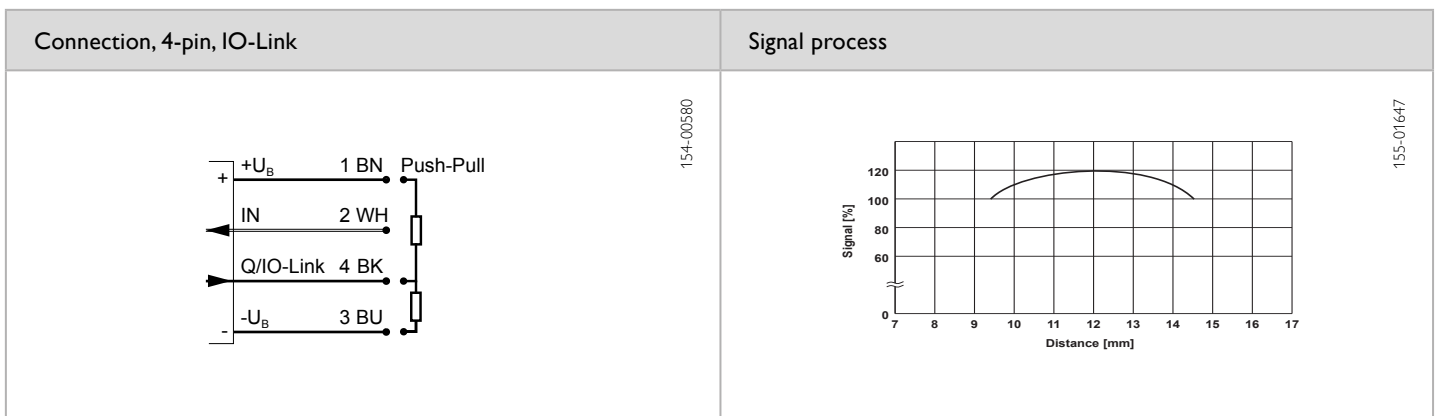
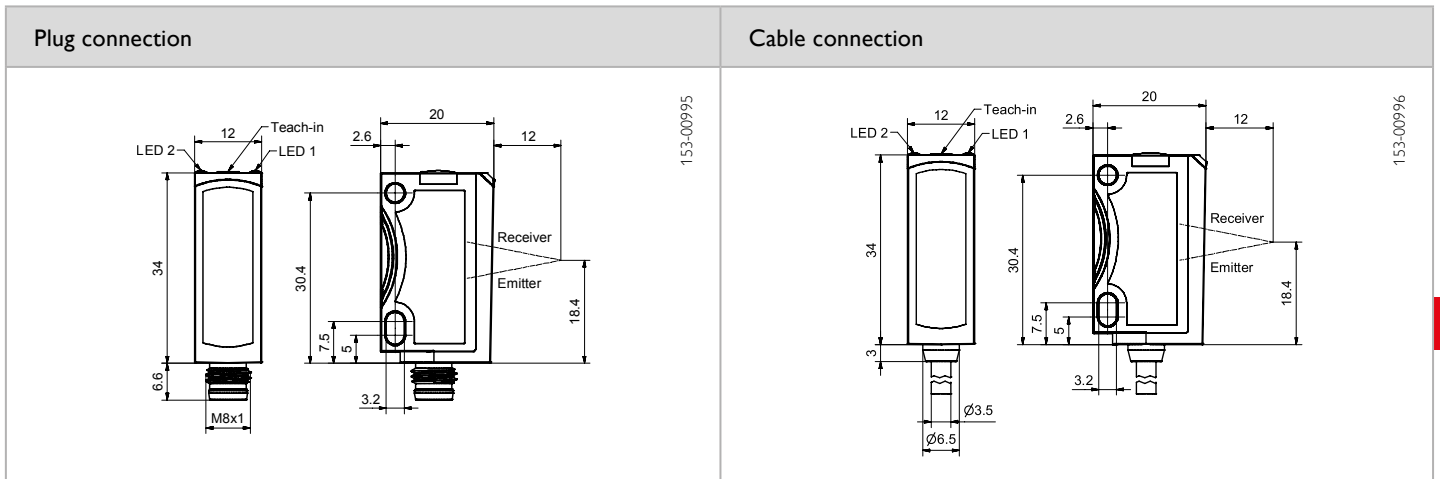
PRODUCT HIGHLIGHTS

- Precise detection of the slightest contrast differences
- Very robust operation despite fluttering and glossy objects
- Simple alignment through very precise and easily visible light spot
- Housings that are many times smaller than standard housings – and offer better performance
- Very high positioning accuracy with 10 μs scanning

Optical data		Functions	
Scanning distance	12 mm	Indicator LED, green	Operating voltage indicator
Depth of field	± 2.5 mm	Indicator LED, yellow	Switching output indicator
Type of light	White LED, 400 ... 780 nm	Sensitivity adjustment	Via teach-in button, control line and IO-Link
Light spot size	1 x 4 mm	Teach-in modes	Mode 1: with running process Mode 2: with standing process
		Adjustment possibilities	LO / DO via Teach-in button and control line Button lock via control input Wide variety of adjustment possibilities via IO-Link
Electrical data		Mechanical data	
Operating voltage, +U _B	10 ... 30V DC ¹	Dimensions	34 x 20 x 12 mm
No-load current, I ₀	≤ 30 mA	Enclosure rating	IP 69 & IP 67 ³
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 ... +55 °C ⁴
Switching output, Q	Push-Pull	Ambient temperature: storage	-20 ... +80 °C
Output function	LO/DO	Weight (plug device)	10 g
Switching frequency, f (ti/tp 1:1) ²	See selection table	Weight (metal plug device ⁵)	10 g
Response time	See selection table	Weight (integrated cable)	20 g
Jitter (electrical)	See selection table	Vibration and impact resistance	EN 60947-5-2
Control input, IN	+U _B = teach-in -U _B = button locked open = normal operation		
IO-Link			
Communication mode	COM 2		
Min. cycletime	2.3 ms		
SIO mode	Compatible		
Length process data	16 Bit		
Specification	1.1		

¹ Max. 10 % ripple, within U_B, ~ 50 Hz / 100 Hz ² f = 1 / (T x Nyq x 2) ³ With connected IP 67 / IP 69 plug ⁴ UL: -20 ... +50 °C ⁵ no Ecolab

Switching frequency, f (t_i/t_p 1:1) ²	Response time	Jitter (electrical)	Type of connection	Part number	Article number
≤ 25000 Hz	≤ 20 μ s	10 μ s	Metal plug, M8x1, 4-pin, IO-Link	FT 25-W1-GSL-M4M	607-21033
≤ 25000 Hz	≤ 20 μ s	10 μ s	Pigtail, 150 mm with plug M12x1, 4-pin, IO-Link	FT 25-W1-GSL-KL4	607-21032
≤ 10000 Hz	≤ 50 μ s	25 μ s	Plug, M8x1, 4-pin, IO-Link	FT 25-W2-GSL-M4	607-21034
≤ 10000 Hz	≤ 50 μ s	25 μ s	Pigtail, 150 mm with plug M12x1, 4-pin, IO-Link	FT 25-W2-GSL-KL4	607-21035



Accessories	
Connection cables	From Page A-38
Brackets	From Page A-4
SensolO (901-01000)	From Page A-4