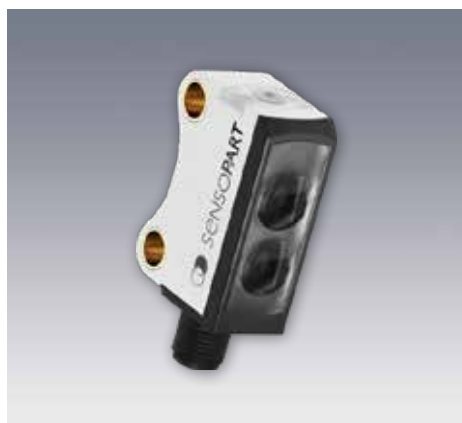


FT 10-BHD

BlueLight-Photoelectric diffuse sensor with background suppression and two switching outputs



PRODUCT HIGHLIGHTS

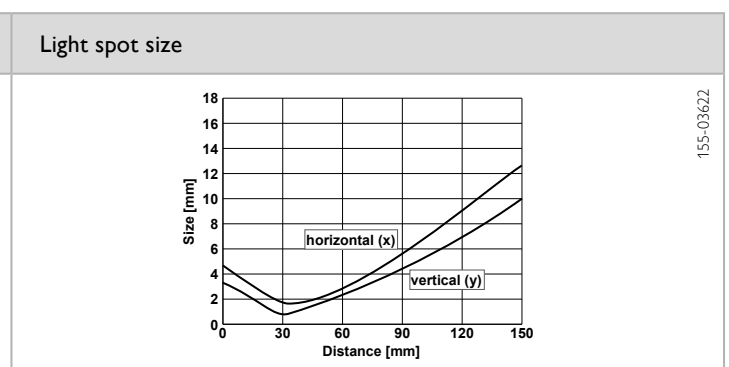
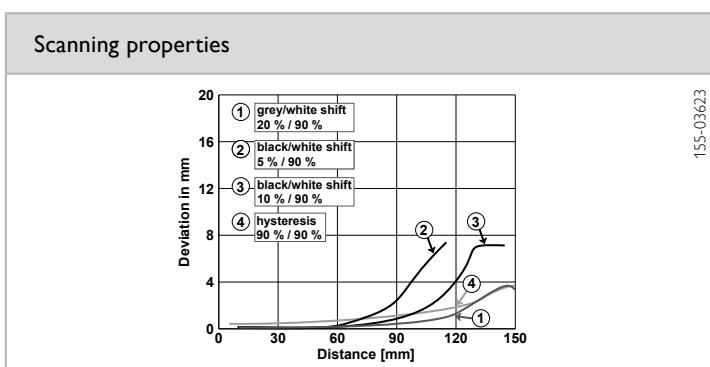
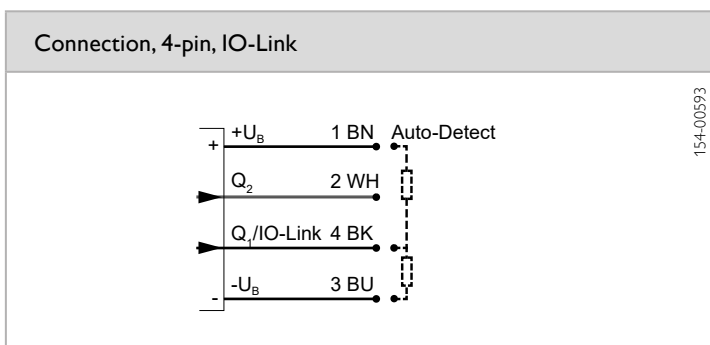
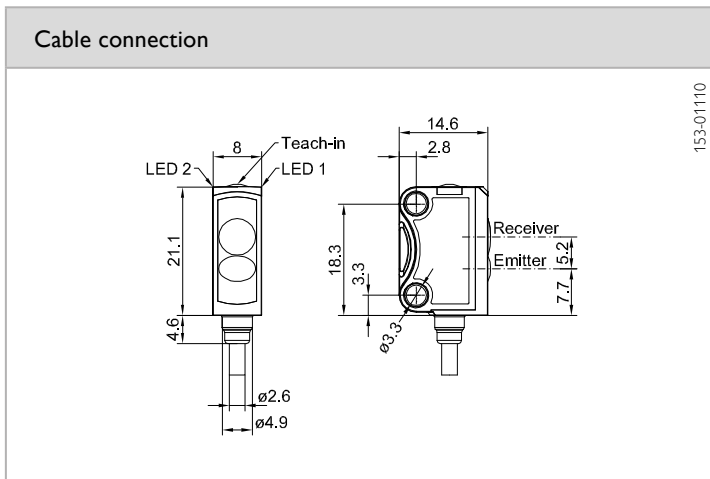
- Sub-miniature sensor with BlueLight technology and precise, adjustable background suppression
- Precise and reliable switching behaviour with strongly light-absorbing objects
- Reliable operation without reflector - even with critical surfaces
- Two physical switching outputs
- Sensor settings via teach-in, control input and IO-Link
- No blind zone in Detect All mode

Optical data		Functions	
Scanning distance	3 ... 150 mm ¹	Indicator LED, green	Operating voltage indicator
Adjustment range	10 ... 150 mm ¹	Indicator LED, yellow	Switching output indicator
Used light	LED, blue, 470 nm	Scanning distance adjustment	Via Teach-in button and IO-Link
Light spot size	See diagram	Teach-in modes	Mode 1: during running process Mode 2: during standing process
Hysteresis	≤ 3.6 mm ^{1,2}	Adjustment possibilities	N.O./N.C. and Auto-Detect / NPN / PNP via teach-in button and IO-Link Button lock via IO-Link Wide variety of adjustment possibilities via IO-Link
Grey/white shift (20 % / 90 %)	See diagram	Default settings	Max. range and N.O.
Black/white shift (5 % / 90 %)	See diagram		
Electrical data		Mechanical data	
Operating voltage, +U _b	13 ... 30V DC ³	Dimensions	21,1 × 14,6 × 8 mm
No-load current, I ₀	≤ 20 mA	Enclosure rating	IP 67 ⁵
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
Power On Delay	< 300 ms	Ambient temperature: operation	-20 ... +60 °C ⁶
Switching output, Q	1 × Auto-Detect (PNP/NPN) ⁴	Ambient temperature: storage	-20 ... +80 °C
Output function	N.O./N.C.	Weight (cable device)	Approx. 22 g
Switching frequency, f (ti/tp 1:1)	≤ 700 Hz	Weight (pigtail)	Approx. 10 g
Response time	700 μs		
Number of switching outputs	2		
IO-Link			
Communication mode	COM 2		
Min. cycletime	2.3 ms		
SIO mode	Compatible		
Length process data	16 Bit		
Specification	1.1		

¹ Reference material white, 90 % reflectivity ² At maximum scanning distance ³ Max. 10 % ripple within U_b, ~ 50 Hz / 100 Hz ⁴ Auto-Detect, automatic PNP/NPN selection by the sensor; PNP or NPN fixed ⁵ With connected IP 67 plug ⁶ UL: -20 ... +30 °C

Scanning distance	Switching output	Type of connection	Part number	Article number
3 ... 150 mm ¹	2 x Auto-Detect	Cable, 2 m, 4-wire, IO-Link	FT 10-BHD-2PNSL-K4	600-11065
3 ... 150 mm ¹	2 x Auto-Detect	Pigtail, 200 mm with M8 plug, 4-pin, IO-Link	FT 10-BHD-2PNSL-KM4	600-11064

Including dovetail clamp mounting MBD F 10 for all types



Reference material	Detection range	Accessories
Grey (20 %)	3 ... 150 mm	Connection cables
Black (10 %)	4 ... 145 mm	Brackets
Ultra black (5 %)	5 ... 115 mm	SensolO (901-01001)
		www.sensopart.com/en/accessories