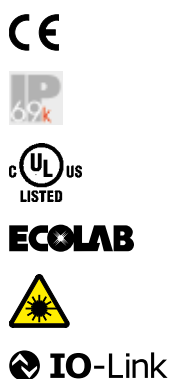


FT 55-RLAP2

Distance sensor with IO-Link measurement value output



PRODUCT HIGHLIGHTS

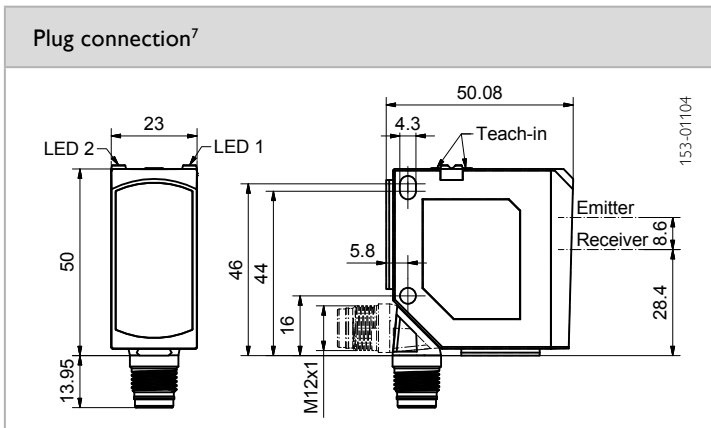
- Measurement value output via IO-Link
- For detection tasks with all object surfaces at high scanning distances
- Reliable object detection even with tilted objects and with bright, highly reflective or shiny backgrounds
- Compact housing for an easy integration
- Simple teach-in
- Clearly visible laser light spot (laser class 1) for an easy alignment and full eye safety

Optical data		Functions	
Scanning distance	0.06 ... 5 m (see selection table) ¹	Indicator LED 2 green	Operating voltage indicator
Type of light	Laser, red 655 nm	Indicator LED 1 yellow	Switching output indicator Q
Laser class (IEC 60825-1)	1	Scanning distance adjustment	Via Teach-in button and IO-Link
Resolution	< 5 mm	Adjustment possibilities	N.O. / N.C. and Auto-Detect / NPN / PNP via teach-in and control line, wide variety of adjustment possibilities for service and process data via IO-Link
Hysteresis	20 mm	Default settings	3 m, N.O., Auto-Detect
Linearity	± 15 mm (see diagram) ²		
Repeatability	≤ 7 mm (6 σ, see diagram) ^{1,2,3}		
Electrical data		Mechanical data	
Operating voltage +U _B	18 ... 30V DC	Dimensions	50 x 50.1 x 23 mm
No-load current I ₀	≤ 60 mA	Enclosure rating	IP 67 & IP 69K ⁵
Output current I _e Q	≤ 100 mA	Material, housing	ABS
Protection 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	< 500 ms	Ambient temperature: operation	-40 ... +60 °C ⁶
Switching output Q	1 x Auto-Detect (PNP/NPN) ⁴	Ambient temperature: storage	-40 ... +80 °C
Output function	N.O./N.C.	Weight (plug device)	42 g
Switching frequency f (ti/tp 1:1) Q	≤ 250 Hz	Resistance to vibration and impacts	EN 60947-5-2
Response time Q	1 ms		
Response time measurement value output	Min. cycle time IO-Link		
Temperature drift	< 1 mm / K		
Warm-up time	20 min.		
Control input IN	+U _B = Teach-in -U _B = button locked Open = normal operation		
		IO-Link	
		Communication mode	COM 2
		Min. cycle time	2.7 ms
		SIO mode	Compatible
		Process bit length	24 Bit
		Specification	1.1

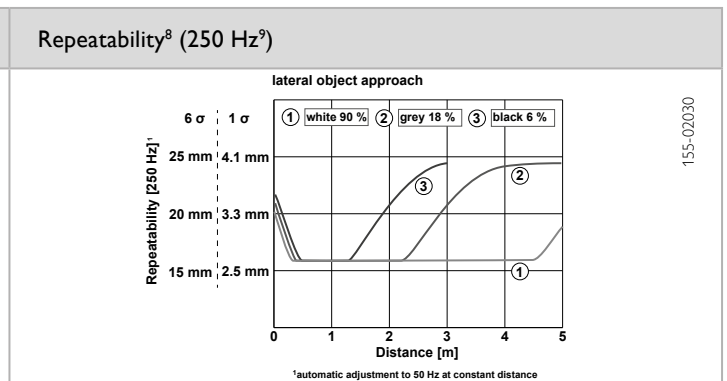
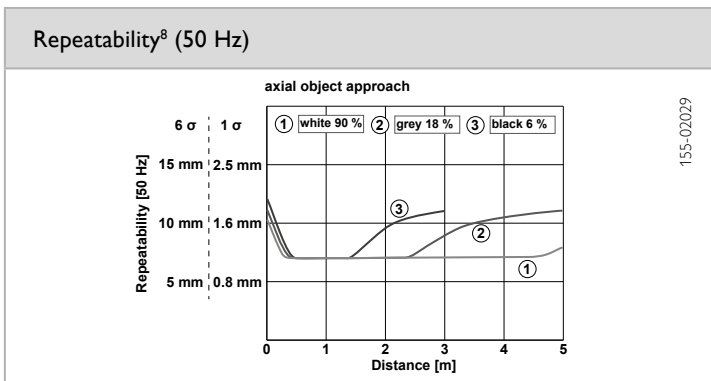
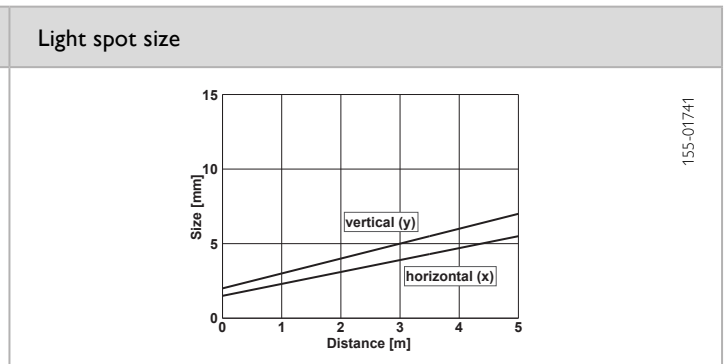
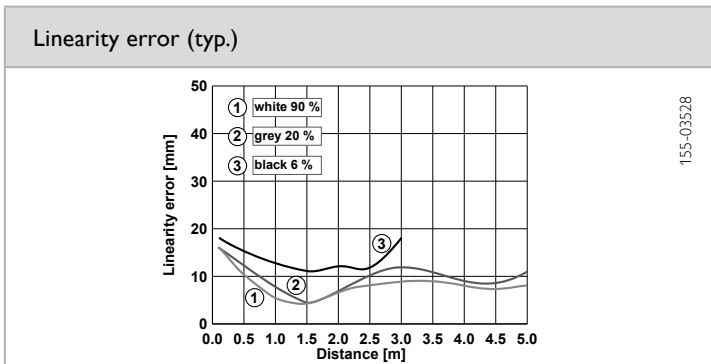
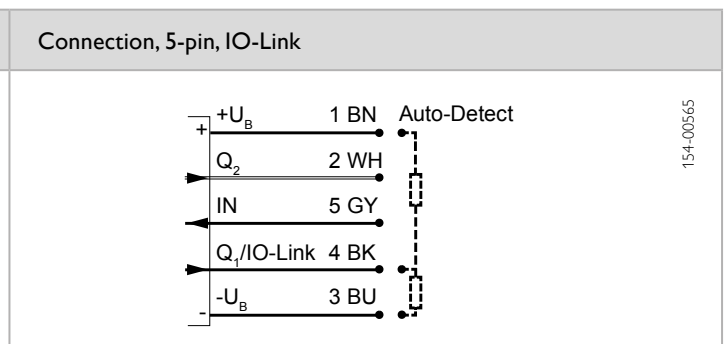
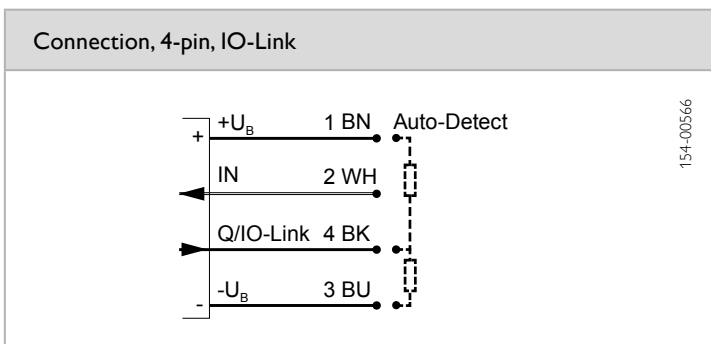
¹ Reference material 90 % reflectivity ² 20 ... 90 % ³ 50 Hz ⁴ Auto-Detect: Automatic selection of PNP or NPN by the sensor; PNP or NPN can be fixed

⁵ With connected IP 67 / IP 69K plug ⁶ UL: max. +45 °C

Scanning distance	Switching output	Type of connection	Part Number	Article number
0.06 ... 5 m	1 x Auto-Detect	Plug, M12x1, 4-pin, IO-Link	FT 55-RLAP2-PNSL-L4	623-11035
0.06 ... 5 m	2 x Auto-Detect	Plug, M12x1, 5-pin, IO-Link	FT 55-RLAP2-2PNSL-L5	622-21022



⁷ FT 55-RLAP2...L4 with one button | FT 55-RLAP2...L5 with two buttons



⁸ At constant ambient conditions ⁹ Automatic adjustment to 50 Hz at constant distance

Reference material	Scanning distance	Accessories
White (90 %)	0.06 ... 5 m	Connection cables
Grey (18 %)	0.06 ... 5 m	Brackets
Black (6 %)	0.06 ... 3 m	

www.sensopart.com/en/accessories