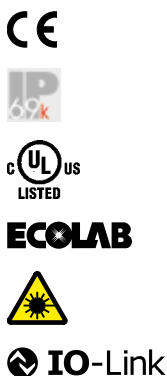


FT 55-RLAP2

Distance sensor with IO-Link measurement value output



PRODUCT HIGHLIGHTS

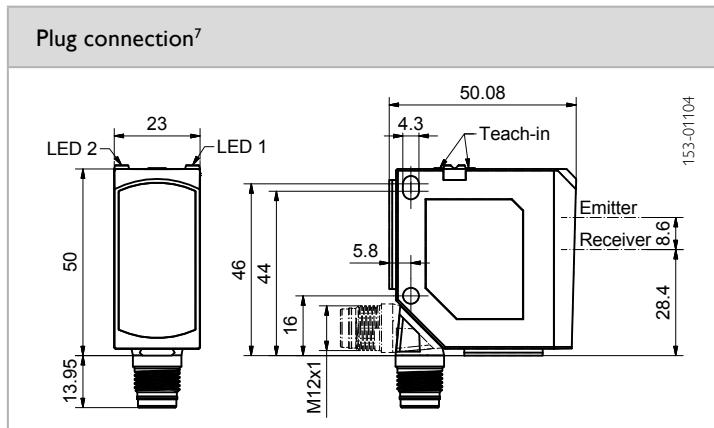
- Measurement value output via IO-Link
- For detection tasks with all object surfaces at high scanning distances
- Reliable object detection even with tilted objects and with bright, highly reflective or shiny backgrounds
- Compact housing for an easy integration
- Simple teach-in
- Clearly visible laser 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 | IO-Link | |
| Temperature drift | < 1 mm / K | Communication mode | COM 2 |
| Warm-up time | 20 min. | Min. cycle time | 2.7 ms |
| Control input IN | +U _B = Teach-in -U _B = button locked Open = normal operation | 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

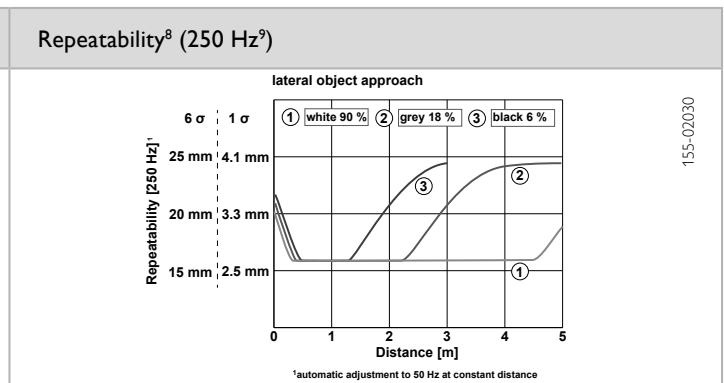
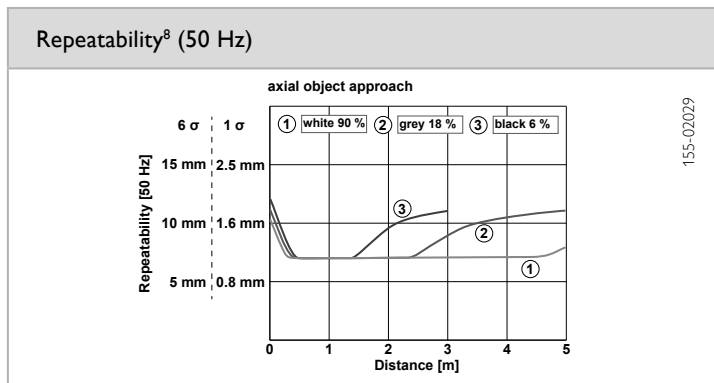
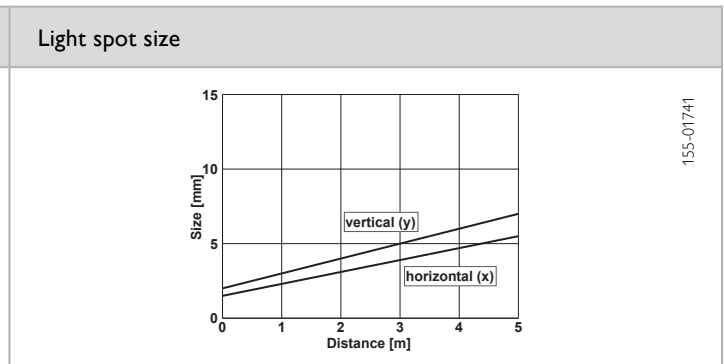
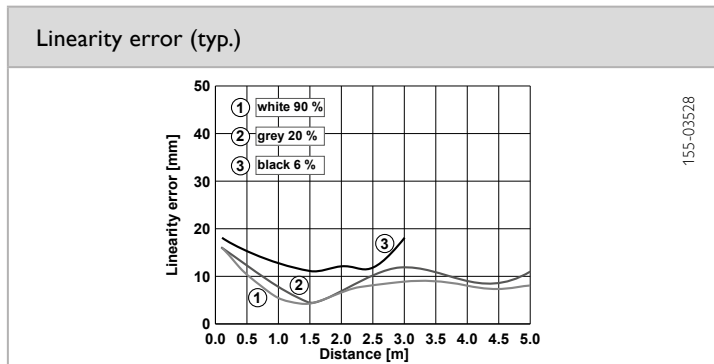
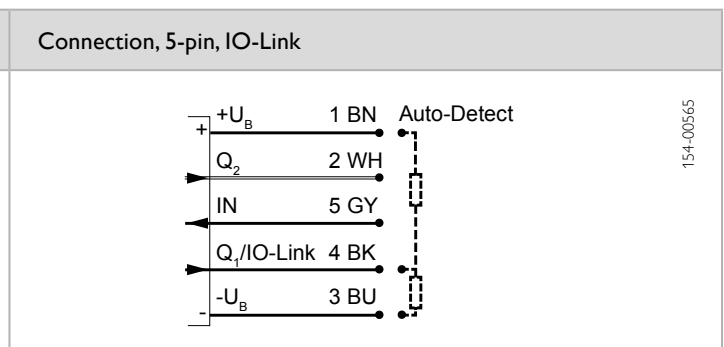
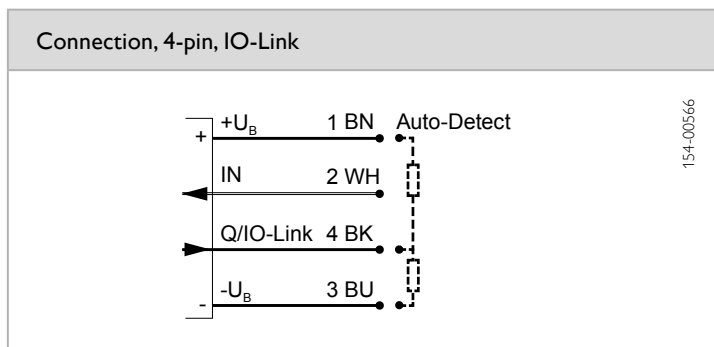
⁵ With connected IP 67 / IP 69K plug ⁶ UL: max. +45 °C

| 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 |



Sold & Serviced By:
ELECTROMATE
 Toll Free Phone (877) SERV098
www.electromate.com
sales@electromate.com

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 Brackets www.sensopart.com/en/accessories |
| Grey (18 %) | 0.06 ... 5 m | |
| Black (6 %) | 0.06 ... 3 m | |