

FS/FE 50 I

Infrared through-beam sensor



PRODUCT HIGHLIGHTS

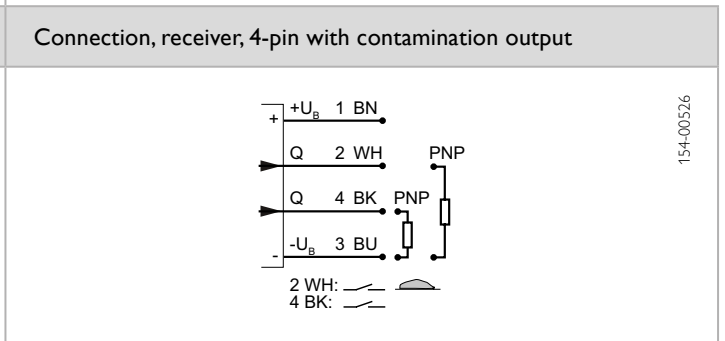
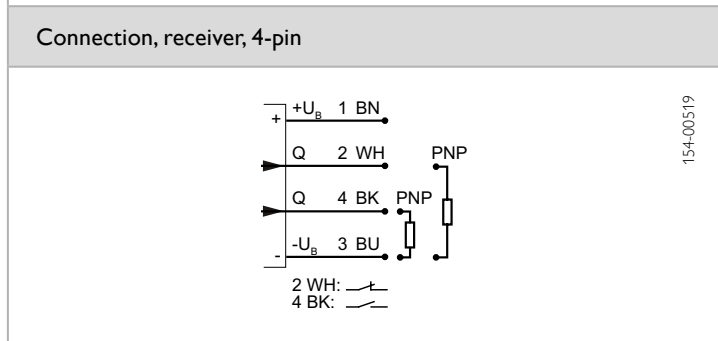
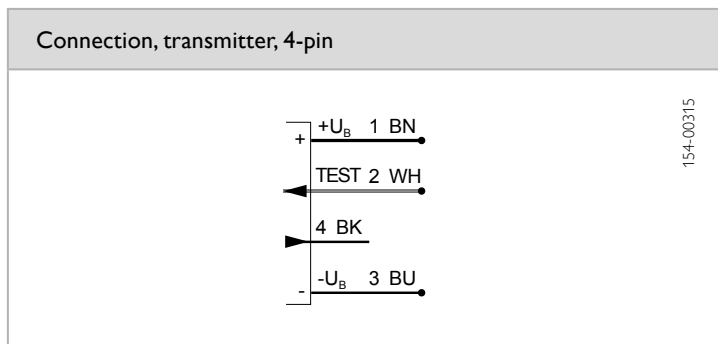
- Simple range adjustment thanks to indicator scale
- Test input for controlling function of the sensor pair
- Optional contamination output
- Plug connector rotatable

| Optical data | | Functions | |
|---|---|-----------------------------------|---|
| Limit operating range | 0 ... 18 m | Indicator LED, green | Operating voltage indicator |
| Operating range | 0 ... 15 m | Indicator LED, yellow | Switching output indicator |
| Type of light | LED, infrared, 880 nm | Indicator LED, red (transmitter) | Operating voltage indicator (transmitter off) |
| | | Indicator LED, red (receiver) | Contamination indicator |
| | | Sensitivity adjustment (receiver) | Via potentiometer |
| Electrical data | | Mechanical data | |
| Operating voltage, +U _B | 10 ... 30V DC ¹ | Dimensions | 50 x 50 x 17 mm |
| No-load current, I ₀ | ≤ 30 mA | Enclosure rating | IP 67 ³ |
| Output current, I _e | ≤ 200 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 |
| Switching output, Q | PNP/NPN, antivalent (see selection table) | Ambient temperature: storage | -20 ... +80 °C |
| Output function | N.O./N.C. (see selection table) | Weight (plug device) | 40 g |
| Switching frequency, f (ti/tp 1:1) | ≤ 1000 Hz | Weight (cable device) | 130 g |
| Response time | 500 μs | Vibration and impact resistance | EN 60947-5-2 |
| Connection, BK (receiver) | N.O. | | |
| Connection, WH ² (receiver) | N.C. | | |
| Contamination output, WH (receiver; optional) | N.O. (see selection table) | | |
| Control input, (transmitter) | +U _B = Test (transmitter off) -U _B / Open = normal operation | | |

¹ Max. 10 % ripple, within U_B ² Without contamination output ³ With connected IP 67 plug

| Operating range | Switching output | Type of connection | Contamination output | Part number | Article number |
|-----------------|------------------|--------------------|----------------------|---------------|----------------|
| 0 ... 15 m | PNP, antivalent | Plug, M12x1, 4-pin | No | FE 50 I-PAL4 | 573-52007 |
| 0 ... 15 m | PNP (N.O.) | Plug, M12x1, 4-pin | Yes | FE 50 I-PSVL4 | 573-52004 |
| 0 ... 15 m | – | Plug, M12x1, 4-pin | No | FS 50 I-L4 | 573-52006 |
| 0 ... 15 m | PNP, antivalent | Cable, 3 m, 4-wire | No | FE 50 I-PAK4 | 573-52003 |
| 0 ... 15 m | PNP (N.O.) | Cable, 3 m, 4-wire | Yes | FE 50 I-PSVK4 | 573-52005 |
| 0 ... 15 m | – | Cable, 3 m, 4-wire | No | FS 50 I-K4 | 573-52002 |

| | |
|--|---|
| <p>Plug connection (transmitter)</p> <p>153-00206</p> | <p>Cable connection (transmitter)</p> <p>153-00064</p> |
| <p>Plug connection (receiver)</p> <p>153-00062</p> | <p>Cable connection (receiver)</p> <p>153-00063</p> |



| Accessories | |
|-------------------|----------------|
| Connection cables | From Page A-38 |
| Brackets | From Page A-4 |