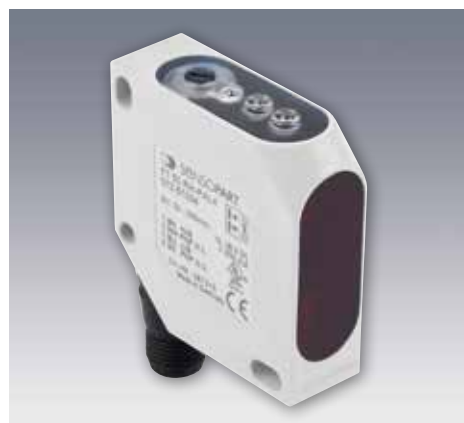


# FT 50 IH

Diffuse infrared sensor with background suppression



## PRODUCT HIGHLIGHTS

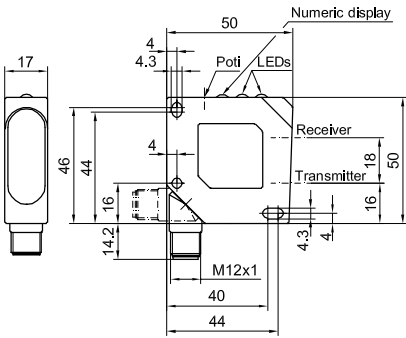
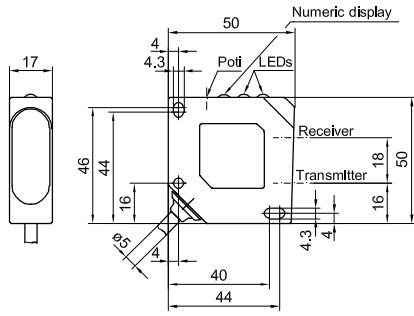
- Long scanning distance of 600 mm
- Precisely adjustable background suppression
- Simple scanning distance adjustment thanks to indicator scale
- Optional contamination output

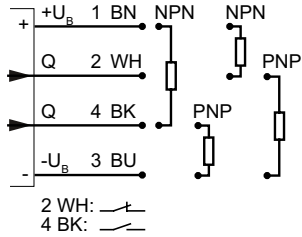
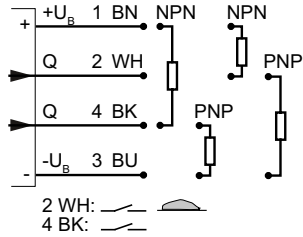
| Optical data                        |                                                                            | Functions                       |                             |
|-------------------------------------|----------------------------------------------------------------------------|---------------------------------|-----------------------------|
| Scanning distance                   | 150 ... 600 mm <sup>1</sup>                                                | Indicator LED, green            | Operating voltage indicator |
| Type of light                       | LED, infrared, 880 nm                                                      | Indicator LED, yellow           | Switching output indicator  |
| Light spot size <sup>2</sup>        | 20 x 20 mm <sup>2</sup>                                                    | Indicator LED, red              | Contamination indicator     |
| Hysteresis <sup>3</sup>             | < 5 %                                                                      | Scanning distance adjustment    | Via potentiometer           |
| Electrical data                     |                                                                            | Mechanical data                 |                             |
| Operating voltage, +U <sub>B</sub>  | 10 ... 30 V DC <sup>4</sup>                                                | Dimensions                      | 50 x 50 x 17 mm             |
| No-load current, I <sub>0</sub>     | ≤ 70 mA <sup>5</sup>                                                       | Enclosure rating                | IP 67 <sup>7</sup>          |
| Output current, I <sub>e</sub>      | ≤ 200 mA                                                                   | Material, housing               | ABS                         |
| Protective circuits                 | Reverse-polarity protection, U <sub>B</sub> / 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)  | ≤ 800 Hz                                                                   | Weight (cable device)           | 130 g                       |
| Response time                       | 625 μs                                                                     | Vibration and impact resistance | EN 60947-5-2                |
| Connection, BK                      | N.O.                                                                       |                                 |                             |
| Connection, WH <sup>6</sup>         | N.C.                                                                       |                                 |                             |
| Contamination output, WH (optional) | N.O. (see selection table)                                                 |                                 |                             |

<sup>1</sup> Reference material: grey, 18 % reflectivity    <sup>2</sup> At scanning distance of 400 mm    <sup>3</sup> 18 % / 18 %    <sup>4</sup> Max. 10 % ripple, within U<sub>B</sub>    <sup>5</sup> At 24 V DC    <sup>6</sup> Without contamination output

<sup>7</sup> With connected IP 67 plug

| Scanning distance | Switching output | Type of connection | Contamination output | Part number    | Article number |
|-------------------|------------------|--------------------|----------------------|----------------|----------------|
| 150 ... 600 mm    | PNP, antivalent  | Plug, M12x1, 4-pin | No                   | FT 50 IH-PAL4  | 572-51029      |
| 150 ... 600 mm    | NPN, antivalent  | Plug, M12x1, 4-pin | No                   | FT 50 IH-NAL4  | 572-51038      |
| 150 ... 600 mm    | PNP (N.O.)       | Plug, M12x1, 4-pin | Yes                  | FT 50 IH-PSVL4 | 572-51031      |
| 150 ... 600 mm    | NPN (N.O.)       | Plug, M12x1, 4-pin | Yes                  | FT 50 IH-NSVL4 | 572-51058      |
| 150 ... 600 mm    | PNP, antivalent  | Cable, 3 m, 4-wire | No                   | FT 50 IH-PAK4  | 572-51032      |
| 150 ... 600 mm    | NPN, antivalent  | Cable, 3 m, 4-wire | No                   | FT 50 IH-NAK4  | 572-51037      |
| 150 ... 600 mm    | PNP (N.O.)       | Cable, 3 m, 4-wire | Yes                  | FT 50 IH-PSVK4 | 572-51033      |
| 150 ... 600 mm    | NPN (N.O.)       | Cable, 3 m, 4-wire | Yes                  | FT 50 IH-NSVK4 | 572-51057      |

| Plug connection                                                                   | Cable connection                                                                   |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|  |  |
| 153-00061                                                                         | 153-00060                                                                          |

| Connection, 4-pin                                                                  | Connection, 4-pin with contamination output                                          |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  |  |
| 154-00517                                                                          | 154-00525                                                                            |

| Accessories       |                                                                                        |
|-------------------|----------------------------------------------------------------------------------------|
| Connection cables | <a href="http://www.sensopart.com/en/accessories">www.sensopart.com/en/accessories</a> |
| Brackets          |                                                                                        |