

# 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 <sub>B</sub>	10 ... 30V DC <sup>1</sup>	Dimensions	50 x 50 x 17 mm
No-load current, I <sub>0</sub>	≤ 30 mA	Enclosure rating	IP 67 <sup>3</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)	≤ 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 <sup>2</sup> (receiver)	N.C.		
Contamination output, WH (receiver; optional)	N.O. (see selection table)		
Control input, (transmitter)	+U <sub>B</sub> = Test (transmitter off) -U <sub>B</sub> / Open = normal operation		

<sup>1</sup> Max. 10 % ripple, within U<sub>B</sub>    <sup>2</sup> Without contamination output    <sup>3</sup> 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><b>Plug connection (transmitter)</b></p> <p style="text-align: right;">153-00206</p>	<p><b>Cable connection (transmitter)</b></p> <p style="text-align: right;">153-00064</p>
<p><b>Plug connection (receiver)</b></p> <p style="text-align: right;">153-00062</p>	<p><b>Cable connection (receiver)</b></p> <p style="text-align: right;">153-00063</p>

<p><b>Connection, transmitter, 4-pin</b></p> <p style="text-align: right;">154-00315</p>
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<p><b>Connection, receiver, 4-pin</b></p> <p style="text-align: right;">154-00519</p>	<p><b>Connection, receiver, 4-pin with contamination output</b></p> <p style="text-align: right;">154-00526</p>
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Accessories	
Connection cables	From Page A-38
Brackets	From Page A-4