FSE 18-2

Photoelectric through-beam sensor

CE

IP 67

PRODUCT HIGHLIGHTS

- Economical solution for numerous applications
- Long range of up to 10 m
- Simple adjustment via potentiometer
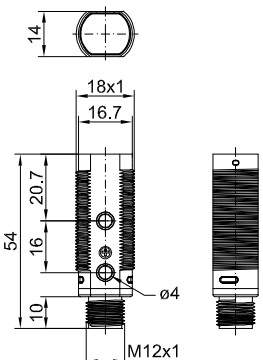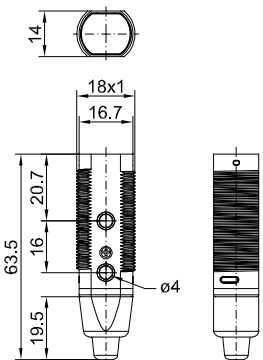- 2 through holes as additional mounting possibility

Optical data	
Operating range	10 m
Type of light	See selection table

Functions	
Indicator LED, green	Operating voltage indicator
Indicator LED, yellow	Switching output indicator
Sensitivity adjustment	Via potentiometer
Adjustment possibilities	N.O./N.C. via control input (IN)
Default settings	Max. scanning distance and N.O.

Electrical data	
Operating voltage, $+U_B$	10 … 30 V DC
No-load current, I_0	≤ 30 mA
Output current, Ie	≤ 100 mA
Protective circuits	Reverse-polarity protection, U_B / short-circuit protection
Switching output, Q	PNP/NPN (see selection table)
Output function	N.O./N.C.
Switching frequency, f (ti/tp 1:1)	≤ 400 Hz
Response time	≤ 2.5 ms
Control input, IN	$+U_B$ = Test (transmitter off) $-U_B$ / open = normal operation

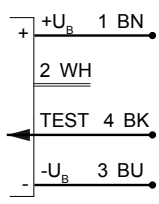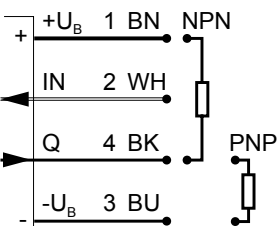| Mechanical data	
Dimensions	See dimensional drawings
Enclosure rating	IP 67[1]
Material, housing	Brass, nickel-plated
Material, front screen	PMMA
Type of connection	See selection table
Ambient temperature: operation	-25 … +55 °C
Weight (plug device)	46 g
Weight (cable device)	130 g
Max. tightening torque	3 Nm

[1] With connected IP 67 plug

Transmitter / receiver	Type of light	Light exit	Switching output	Type of connection	Part number	Article number
Transmitter / receiver	Infrared	Straight	PNP	Metal plug, M12, 4-pin	FSE 18-2 IM-PS-L4	742-51004
Transmitter / receiver	Infrared	Straight	NPN	Metal plug, M12, 4-pin	FSE 18-2 IM-NS-L4	742-51005
Transmitter / receiver	Infrared	Straight	PNP	Cable, 2 m, 4-wire	FSE 18-2 IM-PS-K4	742-51006
Transmitter / receiver	Infrared	Straight	NPN	Cable, 2 m, 4-wire	FSE 18-2 IM-NS-K4	742-51007

Scope of delivery	
Transmitter & receiver	
2 × securing nuts	

Version: 01/2019. Subject to changes; diagrams similar

Plug connection		Cable connection	
	153-00985		153-00984

14 · 18x1 · 16.7 · 54 · 20.7 · 16 · 10 · ø4 · M12x1

14 · 18x1 · 16.7 · 63.5 · 20.7 · 16 · 19.5 · ø4

Connection, 4-pin (transmitter)		Connection, 4-pin (receiver)	
	154-00516		154-00312

+ $+U_B$ 1 BN
2 WH
TEST 4 BK
- $-U_B$ 3 BU

+ $+U_B$ 1 BN NPN
IN 2 WH
Q 4 BK PNP
- $-U_B$ 3 BU

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Accessories

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