

FLS 18 / FLE 18

Through-beam laser sensor



PRODUCT HIGHLIGHTS

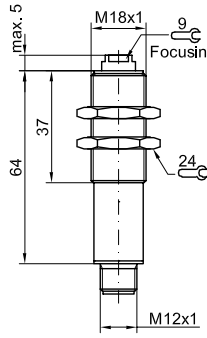
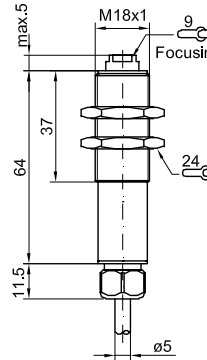
- Operating range: 50 m
- Red light laser, 650 nm
- Transmitter beam can be focused according to application
- Accuracy adjustable via beam spot size
- Smallest detectable part: 0.03 mm
- Switching frequency, 6000 Hz
- Metal M18 threaded sleeve

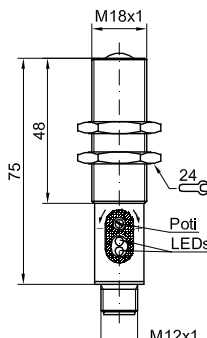
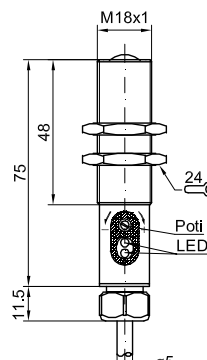
Optical data		Functions	
Operating range	0 ... 50 m	Indicator LED, green	Operating voltage indicator
Type of light	Laser, red, 650 nm	Indicator LED, yellow	Switching output indicator
Laser Class (IEC 60825-1)	1	Indicator LED, red	Contamination indicator
		Sensitivity adjustment	Via 18-step potentiometer
		Default settings	Max. operating range
Electrical data		Mechanical data	
Operating voltage, +U _B	10 ... 30V DC ¹	Dimensions	See dimensional drawings
No-load current, I ₀	≤ 25 mA	Enclosure rating	IP 65 ²
Output current, I _e	≤ 200 mA	Material, housing	Brass, nickel-plated
Protective circuits	Reverse-polarity protection, U _B / short-circuit protection (Q)	Type of connection	See selection table
Protection Class	2	Ambient temperature: operation	-10 ... +50 °C
Power On Delay	≤ 300 ms	Ambient temperature: storage	-20 ... +80 °C
Switching output, Q	PNP	Weight (plug device)	85 g
Output function	N.O./N.C. (see selection table)	Weight (cable device)	190 g
Switching frequency, f (ti/tp 1:1)	≤ 6000 Hz		
Response time	83 μs		
Control input, Test	< 2V: transmitter off > 10V or Open: transmitter on		

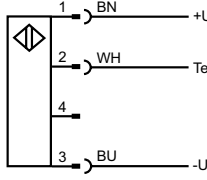
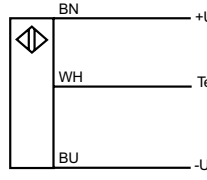
¹ 10 % ripple, within U_B ² With connected IP 65 plug

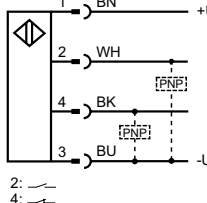
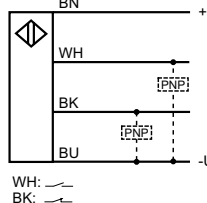
Transmitter / receiver	Switching output	Type of connection	Part number	Article number
Transmitter	–	Plug, M12x1, 4-pin	FLS 18-L4	580-51406
Receiver	PNP (N.O./N.C.)	Plug, M12x1, 4-pin	FLE 18-L4	580-51410
Receiver	PNP (N.C.)	Plug, M12x1, 4-pin	FLE 18-L4-15	580-51411
Transmitter	–	Cable, 3 m, 4-wire	FLS 18	580-51407
Receiver	PNP (N.O./N.C.)	Cable, 3 m, 4-wire	FLE 18	580-51412
Receiver	PNP (N.C.)	Cable, 3 m, 4-wire	FLE 18-15	580-51413

Accessories	
Connection cables	www.sensopart.com/en/accessories
Brackets	

Plug connection (transmitter): FLS 18-L4	Cable connection, (transmitter): FLS 18
	

Plug connection (receiver): FLE 18-L4 / FLE 18-L4-15	Cable connection, (receiver): FLE 18 / FLE 18-15
	

Connection, 4-pin (transmitter)	Connection, 4-wire (transmitter)
	

Connection, 4-pin (receiver): FLE 18-L4	Connection, 4-wire (receiver): FLE 18
	

Connection, 4-pin (receiver): FLE 18-L4-15	Connection, 4-wire (receiver): FLE 18-15
