

FMS 18-34 B

Photoelectric diffuse sensor



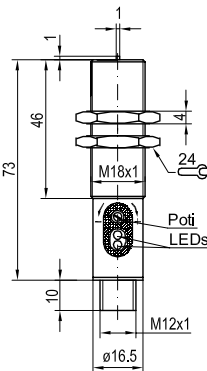
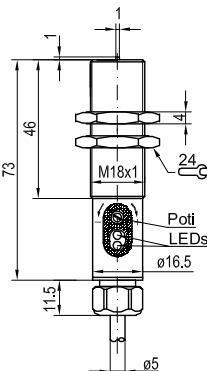
PRODUCT HIGHLIGHTS

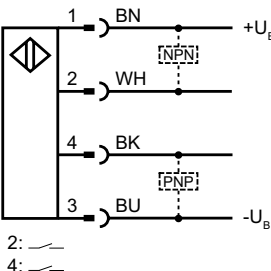
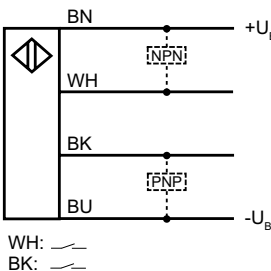
- Scanning distance: 5 ... 400 mm, adjustable
- Wide beam (large aperture angle)
- Separating seam
- Metal M18 threaded sleeve
- Contamination indicator

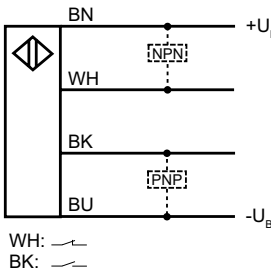
Optical data		Functions	
Scanning distance	5 ... 400 mm ¹	Indicator LED, green	Operating voltage indicator
Type of light	Infrared, 880 nm	Indicator LED, yellow	Switching output indicator
Distance hysteresis	≤ 10 % of set scanning distance	Indicator LED, red	Contamination indicator
Aperture angle	25°	Sensitivity adjustment	Via 18-step potentiometer
		Default setting	Max. scanning distance
Electrical data		Mechanical data	
Operating voltage, +U _B	10 ... 30V DC ²	Dimensions	See dimensional drawings
No-load current, I ₀	≤ 25 mA	Enclosure rating	IP 65 ³
Output current, I _e	≤ 200 mA	Material, housing	Brass, nickel-plated
Pull-up resistance	22 kΩ	Type of connection	See selection table
Pull-down resistance	22 kΩ	Ambient temperature: operation	-20 ... +60 °C
Protective circuits	Reverse-polarity protection, U _B / short-circuit protection (Q)	Ambient temperature: storage	-40 ... +80 °C
Protection Class	2	Weight (plug device)	65 g
Power On Delay	≤ 300 ms	Weight (cable device)	165 g
Switching output, Q	See selection table	Vibration and impact resistance	EN 60947-5-2
Output function	See selection table		
Switching frequency, f (ti/tp 1:1)	≤ 1000 Hz		
Response time	500 μs		

¹ Reference material: Kodak white, 90 % reflectivity ² 10 % ripple, within U_B ³ With connected IP 65 plug

Scanning distance	Switching output	Type of connection	Part number	Article number
5 ... 400 mm	PNP (N.O.) / NPN (N.O.)	Plug, M12x1, 4-pin	FMS 18-34 B-L4	516-50781
5 ... 400 mm	PNP (N.O.) / NPN (N.O.)	Cable, 3 m, 4-wire	FMS 18-34 B	516-50782
5 ... 400 mm	PNP (N.O.) / NPN (N.C.)	Cable, 3 m, 4-wire	FMS 18-34 B ONSP	516-50783

Plug connection	Cable connection
 <p style="text-align: right;">153-00032</p>	 <p style="text-align: right;">153-00031</p>

Connection, 4-pin	Connection, 4-wire: FMS 18-34 B
 <p style="text-align: right;">154-00211</p>	 <p style="text-align: right;">154-00211</p>

Connection, 4-wire: FMS 18-34 B ONSP
 <p style="text-align: right;">154-00213</p>

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