

FMS 30-44 U

Photoelectric proximity sensor for adaptation of fibre-optic cables



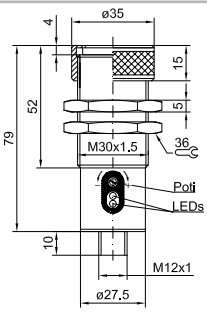
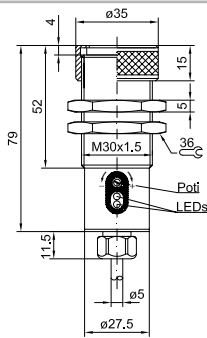
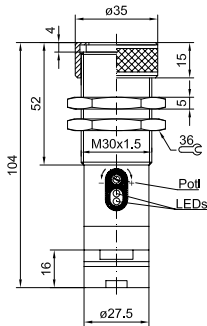
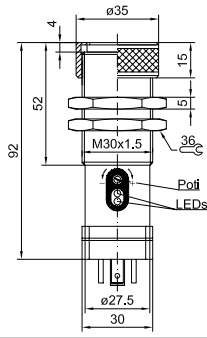
PRODUCT HIGHLIGHTS

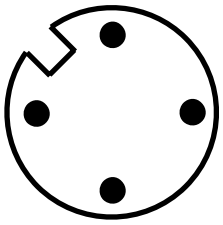
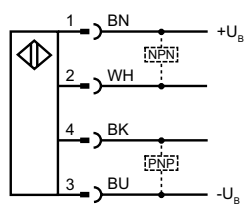
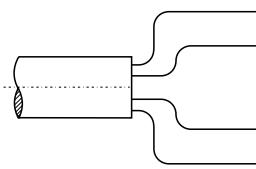
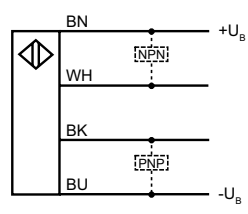
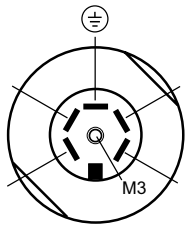
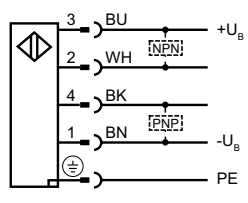
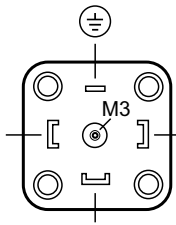
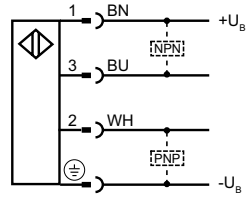
- Scanning distance dependant on fibre-optic cable
- High switching frequency, 1 kHz, 5 kHz
- Fibre-optic cable adaptable
- Universal PNP/NPN output
- N.O./N.C. selectable
- M30 metal threaded sleeve

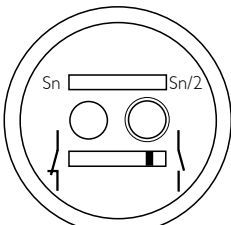
Optical data		Functions	
Scanning distance	0.5 m / 1m ¹	Indicator LED, green	Operating voltage indicator
Type of light	Infrared, 880 nm	Indicator LED, yellow	Switching output indicator
Distance hysteresis ¹	< 10 % of the set scanning distance	Indicator LED, red	Contamination indicator
		Sensitivity adjustment	Via 18-step potentiometer
Electrical data		Mechanical data	
Operating voltage, +U _B	10 ... 30V DC ²	Dimensions	(See connection diagram)
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	See Selection Table
Power On Delay	≤ 300 ms	Vibration and impact resistance	EN 60947-5-2
Switching output, Q	PNP/NPN		
Output function	N.O./N.C.		
Switching frequency, f (ti/tp 1:1)	See Selection Table		

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

Scanning distance	Switching frequency, f (ti/tp 1:1)	Type of connection	Weight	Part number	Article number	No.
1 m	1000 Hz	Plug, M12, 4-pin	210 g	FMS 30-44 UL4-56	530-51591	1
0.5 m	5000 Hz	Plug, M12, 4-pin	210 g	FMS 30-44 UL4-60	530-51592	1
1 m	1000 Hz	Cable, 3 m, 4-wire	320 g	FMS 30-44 U-56	530-51587	2
0.5 m	5000 Hz	Cable, 3 m, 4-wire	310 g	FMS 30-44 U-60	530-51588	2
0.5 m	5000 Hz	Plug, M12, 5-pin	240 g	FMS 30-44 UT-60	530-51596	3
1 m	1000 Hz	Plug, M12, 5-pin	240 g	FMS 30-44 UG-56	530-51590	4
0.5 m	5000 Hz	Plug, M12, 4-pin	240 g	FMS 30-44 UG-60	530-51589	4

Plug connection, No. 1	Cable connection, No. 2
 153-00005	 153-00004
Plug connection, No. 3	Plug connection. 4
 153-00006	 153-00007

Connection, 4-pin, No. 1	Connection, 4-pin, No. 2
 154-00136  154-00282	 154-00132  154-00282
Connection, 5-pin, No. 3	Connection, 4-pin, No. 4
 154-00145  154-00260	 154-00146  154-00261

N.O./N.C. function		
	155-00927	N.O./N.C. function is set via the sliding switch on the front. Switch position "Sn/2" halves scanning distance but permits better resolution.