



OBT200L-18GM70-E5-V1

Fibre optics sensor

OBT200L-18GM70-E5-V1

with 4-pin, M12 connector

CE



- ◆ Sensing range up to 200 mm
- ◆ Light/dark ON, programmable
- ◆ Sensitivity adjuster for optimal adaptation to the application
- ◆ Strong metallic housing in cylindrical shape M18 x 1
- ◆ LED indicator for a simple operation start
- ◆ Protection degree IP67
- ◆ For glass fibre optics
- ◆ Sensing range depends on the fibre optics being used

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General specifications

Detection range	depends on the fibre optics being used
Light source	LED
Approvals	CE
Adjustment range	20 ... 200 mm
Reference target	standard white 50 mm x 50 mm (in direct detection)
Light type	infrared, modulated light
Ambient light limit	10000 Lux

Indicators/operating means

Function display	LED yellow: switching state
Operating elements	sensitivity adjuster

Electrical specifications

Operating voltage	10 ... 30 V DC
Ripple	10 %
No-load supply current I_0	≤ 20 mA
Time delay before availability t_v	≤ 50 ms

Output

Switching type	Light/dark ON, programmable
Signal output	1 switch output pnp
Switching voltage	max. 30 V DC
Switching current	max. 100 mA
Voltage drop U_d	≤ 2.5 V
Switching frequency f	≤ 300 Hz
Switch-on delay t_{on}	1.5 ms
Response time	≤ 1.5 ms

Standard conformity

Standards	EN 60947-5-2
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Ambient conditions

Ambient temperature	-25 ... 55 °C (248 ... 328 K)
Storage temperature	-40 ... 70 °C (233 ... 343 K)

Mechanical specifications

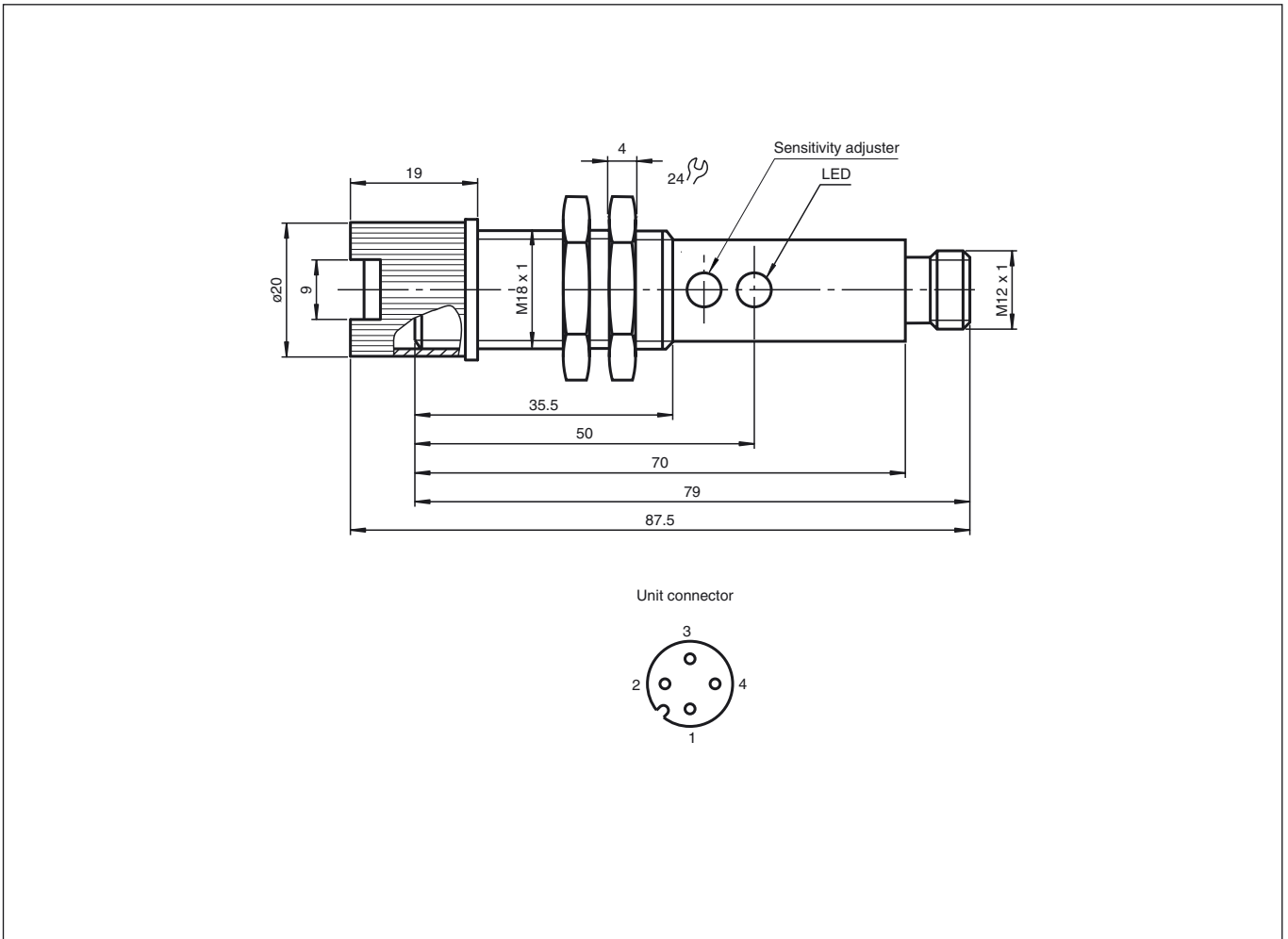
Protection degree	IP67
Connection	connector M12 x 1, 4-pin
Material	
Housing	brass, nickel-plated
Optical face	PMMA
Mass	45 g

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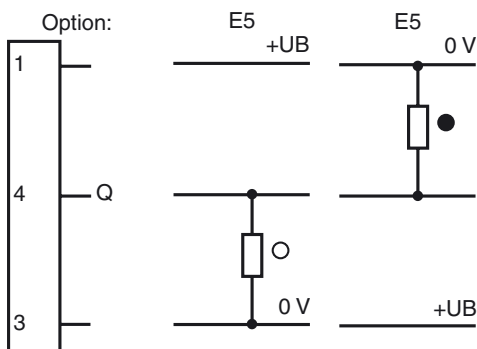


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Dimensions



Electrical connection



○ = light on, ● = dark on

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Selection table for fibre

	Model number	Range in mm	Detection range in mm	Fig.
fibre optic, single path with PVC coating	LCE 18-2,3-0,5-K2	600		1
	LCE 18-2,3-0,5-K9	600		4
fibre optic, single path with metal coating	LME 18-1,9-0,5-K9	500		4
	LME 18-2,3-0,5-K10	600		5
	LME 18-2,3-0,5-K2	600		1
	LME 18-2,3-0,5-K3	600		2
	LME 18-2,3-0,5-K4	600		3
	LME 18-2,3-1,0-K2	600		1
	LME 18-2,3-2,0-K2	600		1
Glass fibre optics, single path with silicon coating	LSE 18-1,1-0,5-K9	100		4
fibre optic, reflex with PVC coating	LCR 18-2,7-1,0-K9		75	12
	LCR 18-3,2-0,5-K1		100	6
	LCR 18-3,2-0,5-K2		100	7
	LCR 18-3,2-2,0-K2		100	7
	LMR 18-1,1-0,5-K3		10	8
	LMR 18-2,3-0,25-K3		45	8
Glass fibre optics, reflex with metal coating	LMR 18-2,3-0,5-K2		45	7
	LMR 18-2,3-0,5-K3		45	8
	LMR 18-2,3-0,5-K7		45	11
	LMR 18-2,7-0,5-K9		75	12
	LMR 18-3,2-0,5-K1		100	6
	LMR 18-3,2-0,5-K5		100	10
	LMR 18-3,2-1,0-K1		100	6
	LMR 18-3,2-1,0-K5		100	10
	LMR 18-3,2-2,0-K1		100	6
	LMR 18-3,2-2,0-K4		100	9
LMR 18-3,2-3,0-K1		100	6	
fibre optic, reflex with silicon coating	LSR 18-2,3-0,5-K12		45	13
	LSR 18-3,2-0,5-K1		100	6

Other lengths and end pieces available on request

Fig. 1

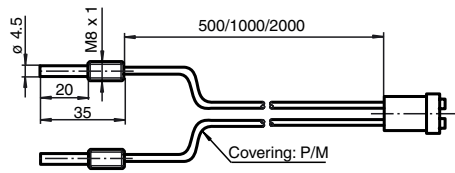


Fig. 2

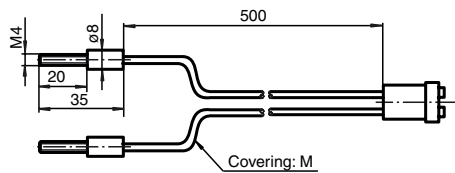


Fig. 3

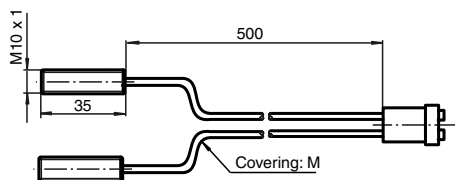


Fig. 4

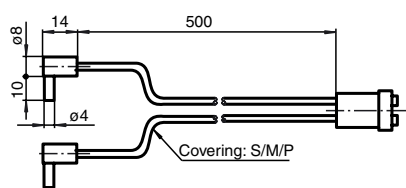


Fig. 5

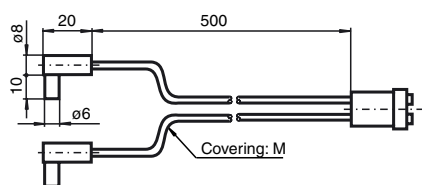


Fig. 6

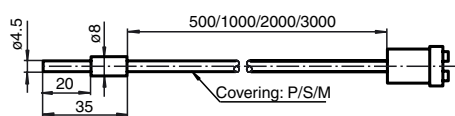


Fig. 7

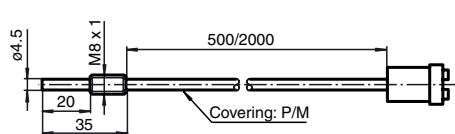


Fig. 8

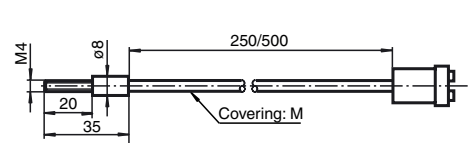


Fig. 9

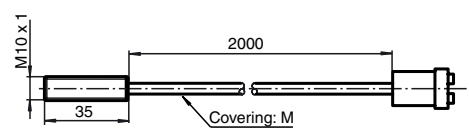


Fig. 10

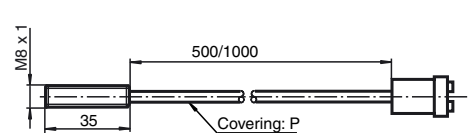


Fig. 11

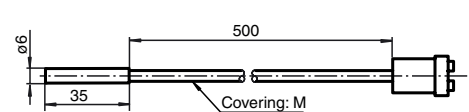


Fig. 12

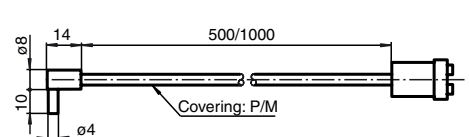
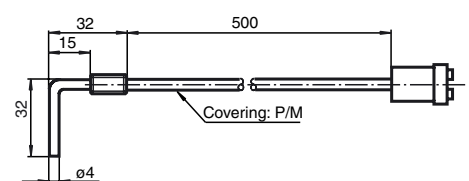


Fig. 13



Adapter

