

OBT200.-18GM70-.-V1

Reflection light scanner

OBT200.-18GM70-.-V1

with 4-pin, M12 connector

CE

Sensors in
threaded housings

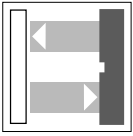


- ◆ Sensing range up to 200 mm
- ◆ Light/dark ON, programmable
- ◆ Sensitivity adjuster for optimal adaptation to the application
- ◆ Strong metallic housing in cylindrical shape M18 x 1
- ◆ LED indicating for a simple operation start
- ◆ Protection degree IP67
- ◆ For glass fibre optics
- ◆ Sensing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

For suitable cable sockets, reflectors and mounting aids refer to chapter "accessories".

Ordering code		OBT200-18GM70-E4-V1	OBT200-18GM70-E5-V1	OBT200L-18GM70-E4-V1	OBT200L-18GM70-E5-V1
Detection range	Depends on the fibre optics being used				
	0 ... 200 mm	◆	◆	◆	◆
Reference target	Standard white 200 mm x 200 mm	◆	◆		
	Standard white 50 mm x 50 mm (in direct detection)			◆	◆
Adjustment range	20 ... 200 mm			◆	◆
	5 ... 200 mm	◆	◆		
Light source	LED	◆	◆	◆	◆
Light type	Infrared, alternating light	◆	◆	◆	◆
Ambient light limit	10000 Lux	◆	◆	◆	◆
Standard conformity	EN 60947-5-2	◆	◆	◆	◆
Approvals	CE	◆	◆	◆	◆
Function display	LED yellow: switching state	◆	◆	◆	◆
Controls	sensitivity adjuster	◆	◆		◆
Operating voltage	10 ... 30 V DC	◆	◆	◆	◆
Ripple	10 %	◆	◆	◆	◆
No-load supply current	≤ 20 mA	◆	◆	◆	◆
Time delay before availability	≤ 50 ms	◆	◆	◆	◆
Signal output	1 switch output npn	◆		◆	
	1 switch output pnp		◆		◆
Switching type	Light/dark ON, programmable	◆	◆	◆	◆
Switching voltage	max. 30 V DC	◆	◆	◆	◆
Switching current	max. 100 mA	◆	◆	◆	◆
Voltage drop	≤ 2.5 V	◆	◆	◆	◆
Switching frequency	≤ 300 Hz	◆	◆	◆	◆
Switch-on delay	1.5 ms	◆	◆	◆	◆
Response time	≤ 1.5 ms	◆	◆	◆	◆
Range hysteresis	≤ 10 %	◆	◆	◆	◆
Ambient temperature	-25 ... +55 °C	◆	◆	◆	◆
Storage temperature	-40 ... +70 °C	◆	◆	◆	◆
Protection degree	IP67	◆	◆	◆	◆
Connection type	Connector M12 x 1, 4-pin	◆	◆	◆	◆
Housing	brass, nickel plated	◆	◆	◆	◆
Light exit	PC	◆	◆		
	PMMA			◆	◆
Mass	15 g	◆	◆		
	45 g			◆	◆

Sensors in threaded housings

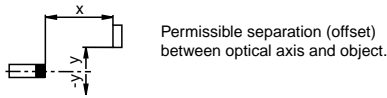
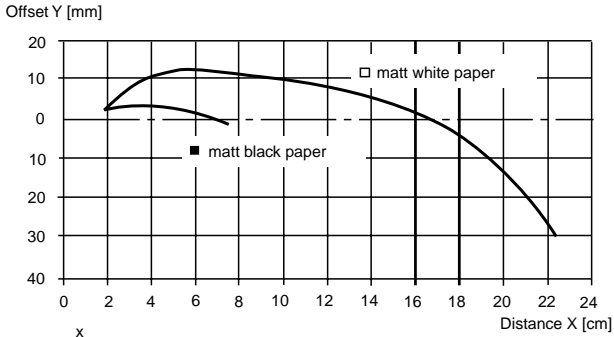


OBT200.-18GM70-.-V1

Diagrams

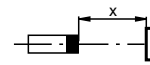
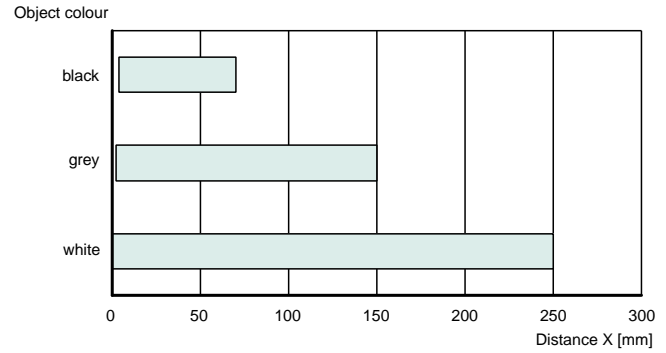
Characteristic response curve

OBT200-18GM70



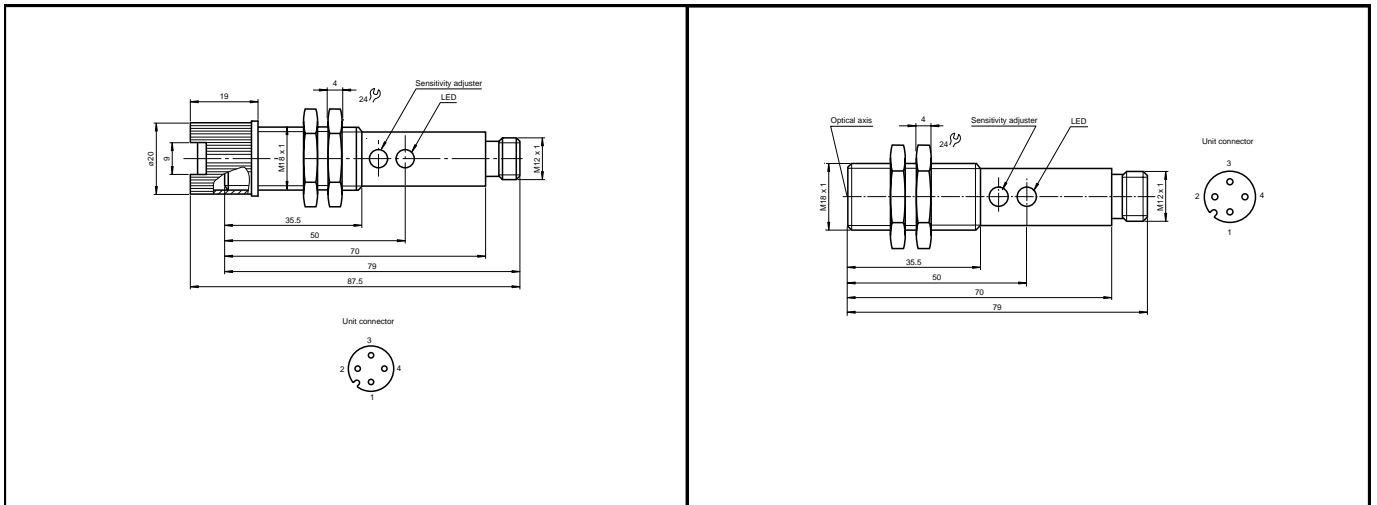
Scanning range without fibre optics

OBT200-18GM70

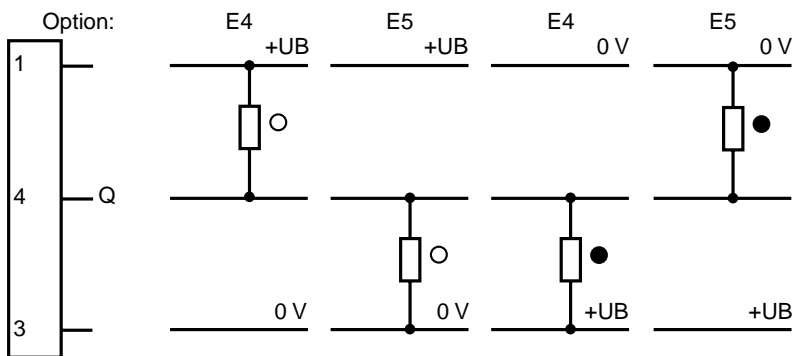


Sensors in threaded housings

Dimensions



Electrical Connection



○ = Light ON, ● = Dark ON

OBT200.-18GM70-...-V1

Selection table for fibre

	Model number	Sensing 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 silicone 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 silicone 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

10/15/01

Date of issue

Fig. 1

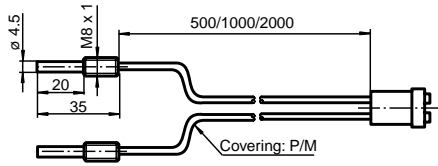


Fig. 2

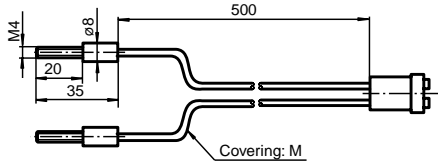


Fig. 3

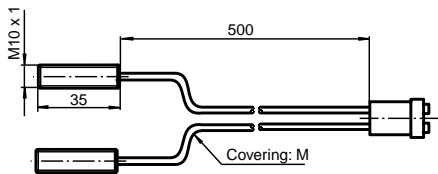


Fig. 4

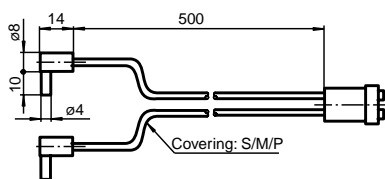


Fig. 5

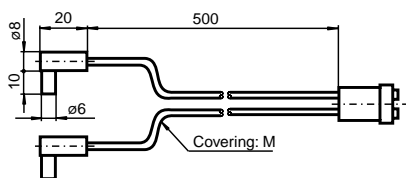


Fig. 6

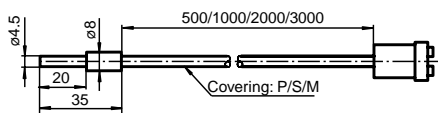


Fig. 7

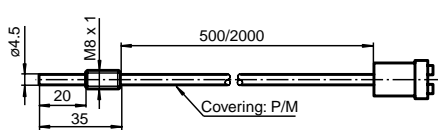


Fig. 8

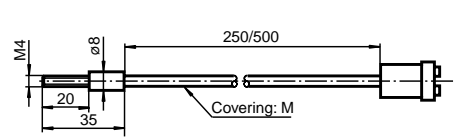


Fig. 9

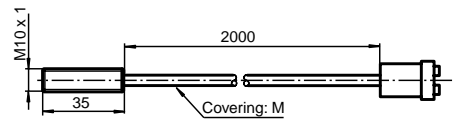


Fig. 10

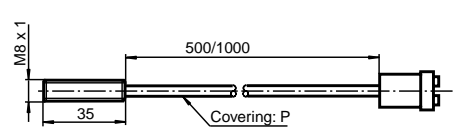


Fig. 11

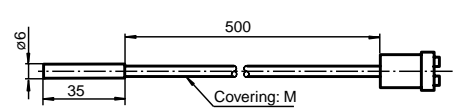


Fig. 12

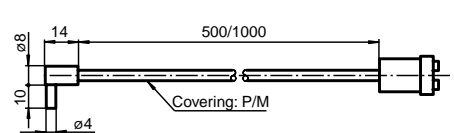
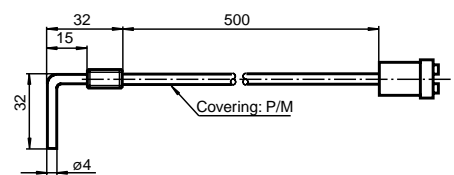
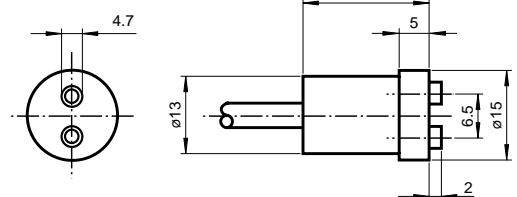


Fig. 13



Adapter



Covering material:
M = metal, P = PVC, S = silicone