

OBT200.-18GM70-..-V1

Reflection light scanner

OBT200.-18GM70-..-V1

with 4-pin, M12 connector



www.DataSheet4U.com

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".

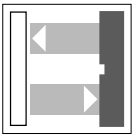
Subject to reasonable modifications due to technical advances.

Copyright Pepperl+Fuchs, Printed in Germany

Pepperl+Fuchs Group • Tel.: Germany (06 21) 7 76-0 • USA (330) 4 25 35 55 • Singapore 7 79 90 91 • Internet <http://www.pepperl-fuchs.com>

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

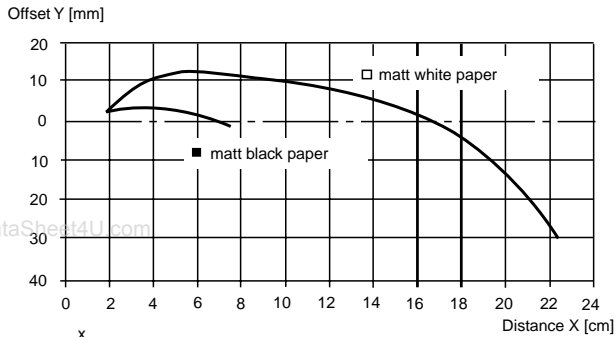


OBT200.-18GM70-.-V1

Diagrams

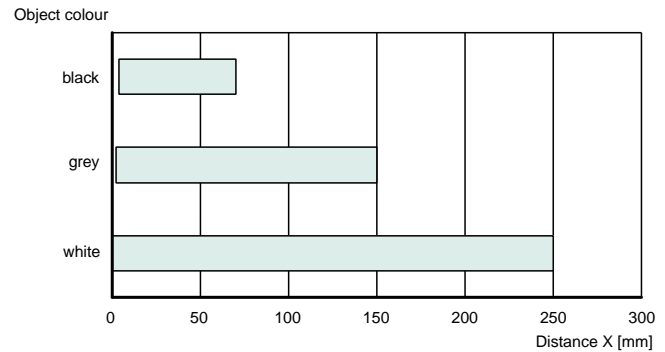
Characteristic response curve

OBT200-18GM70

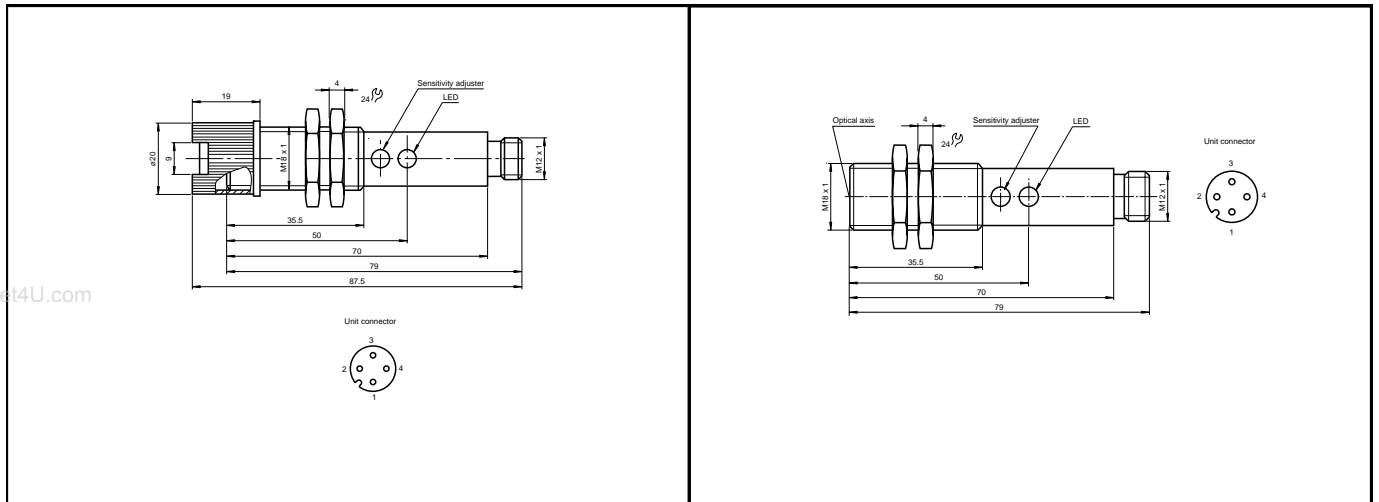


Scanning range without fibre optics

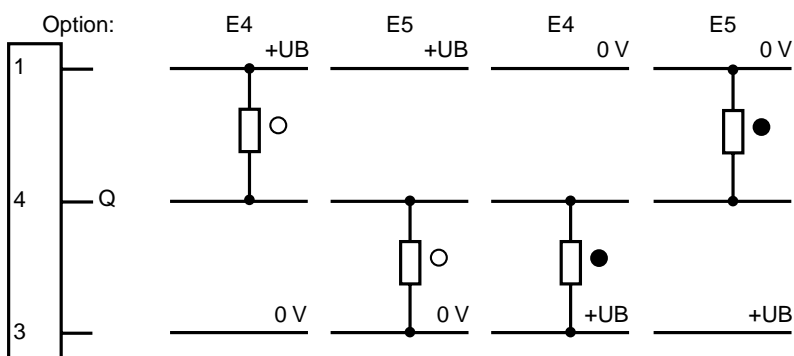
OBT200-18GM70



Dimensions



Electrical Connection



○ = Light ON, ● = Dark ON

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

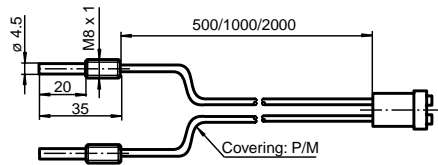


Fig. 2

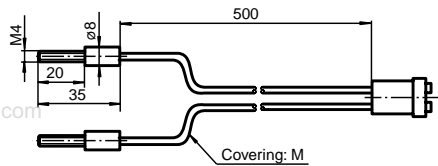


Fig. 3

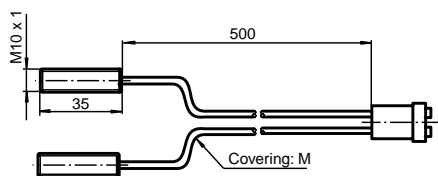


Fig. 4

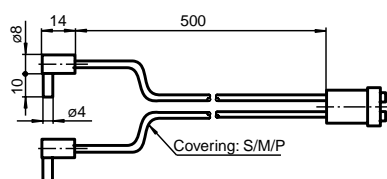


Fig. 5

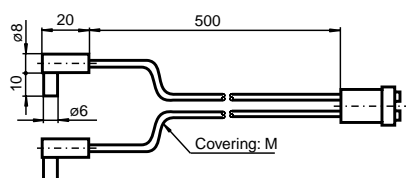


Fig. 6

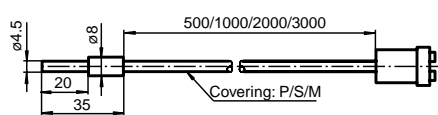


Fig. 7

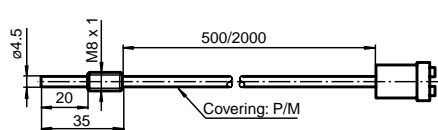


Fig. 8

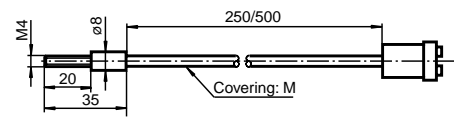


Fig. 9

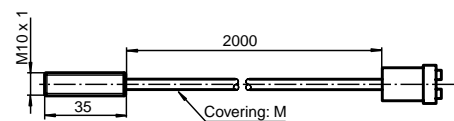


Fig. 10

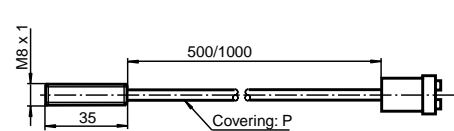


Fig. 11

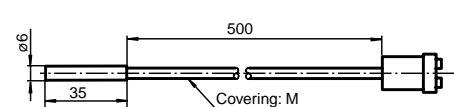


Fig. 12

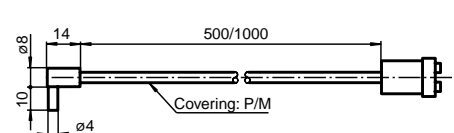
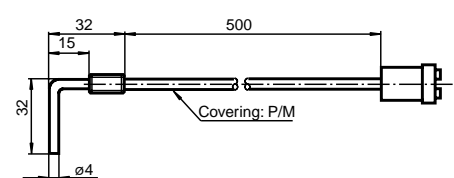
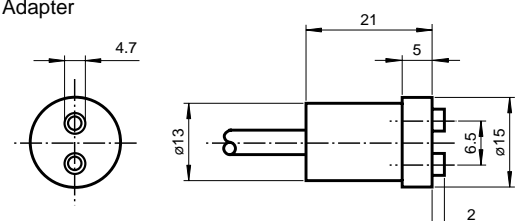


Fig. 13



Adapter



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