Diffuse mode sensor

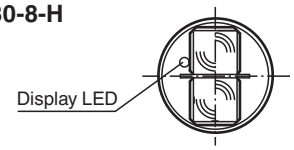
GLV30-LL-1227/40a/53/92

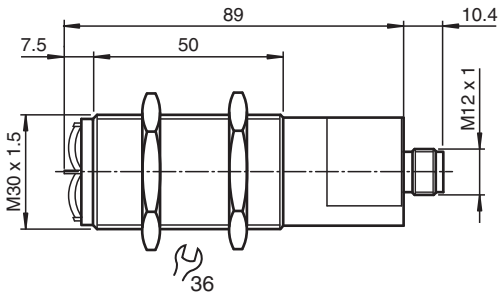
- M30 nickel plated brass threaded housing
- Light-on/dark-on switching
- For glass fibre light guide
- Extensive fiber optic product selection as accessories

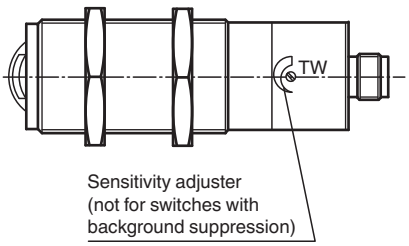
Diffuse mode sensor

Dimensions

GLV30-8-2500
GLV30-8-H

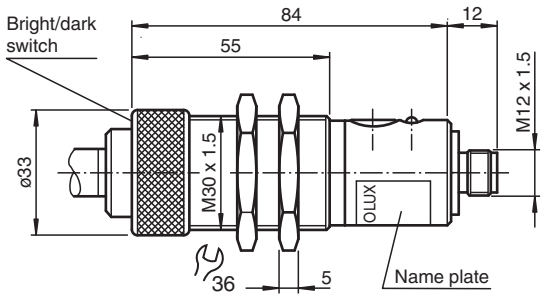


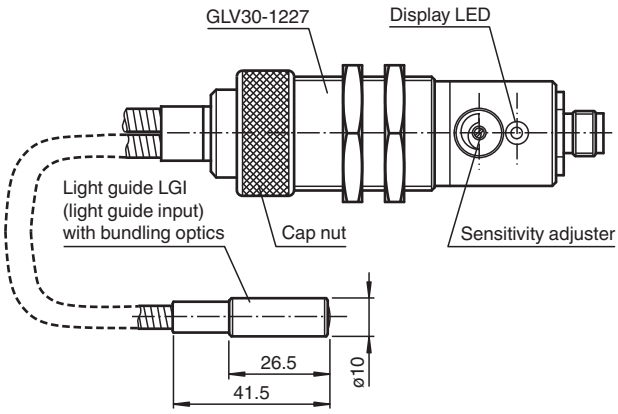




Unit connector

GLV30-LL...





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Technical Data

General specifications		
Detection range		without fiberoptic cable : 0 ... 1700 mm , with fiberoptic cable see selection table for fiberoptic cables
Adjustment range		250 ... 1700 mm (on use without fiberoptics)
Reference target		standard white 200 mm x 200 mm (only for retroreflective fiberoptic cables)
Light source		IRED
Light type		modulated infrared light
Diameter of the light spot		approx. 400 mm at 1700 mm sensor range
Opening angle		approx. 15 °
Ambient light limit		50000 Lux
Indicators/operating means		
Function indicator		LED yellow, lights up with receiver lit
Control elements		Sensitivity adjuster, light/dark switch
Electrical specifications		
Operating voltage	U_B	10 ... 30 V DC
Ripple		10 %
No-load supply current	I_0	40 mA
Output		
Switching type		light/dark on
Signal output		1 PNP, not short-circuit protected
Switching voltage		max. 30 V DC
Switching current		max. 500 mA
Response time		2 ms
De-energized delay	t_{off}	7 ms
Conformity		
Product standard		EN 60947-5-2
Approvals and certificates		
UL approval		cULus Listed, Class 2 Power Source, Type 1 enclosure
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		-20 ... 75 °C (-4 ... 167 °F)
Mechanical specifications		
Degree of protection		IP65
Connection		4-pin, M12 metal connector
Material		
Housing		brass, nickel-plated
Optical face		glass
Mass		370 g

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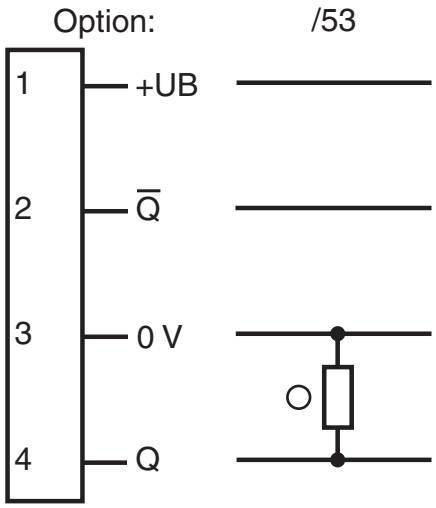
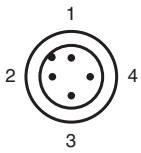
Connection Assignment



○ = Light on
● = Dark on

Connection Assignment

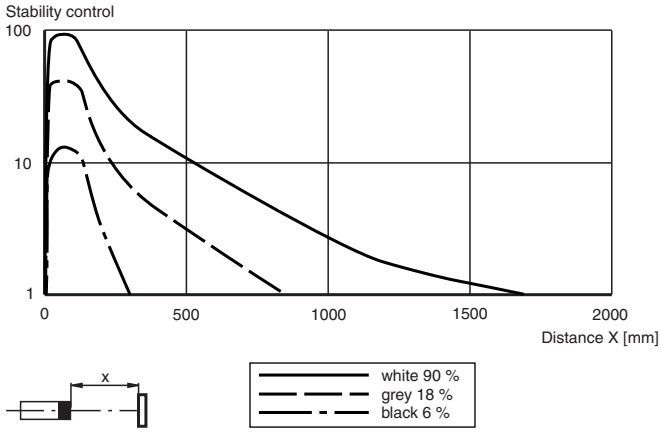


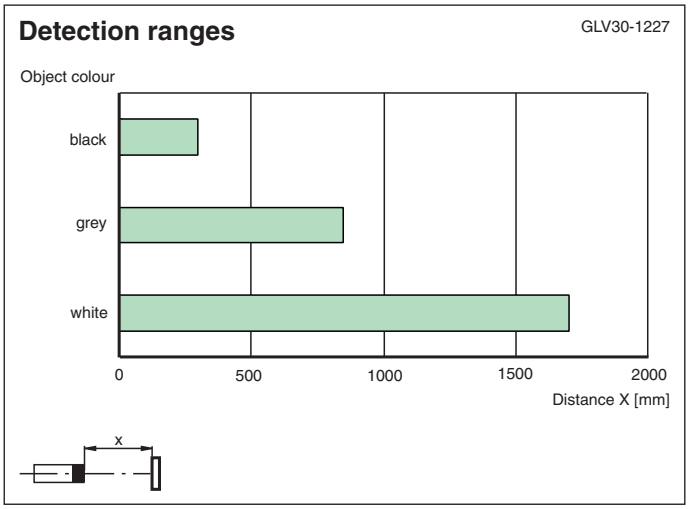
Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Relative received light strength

GLV30-1227





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Selection table for fibre

	Model number	Max. sensing range / detection range in mm	Figure
glass fibre optics, single path with metal-silicone coating	LLE 18/30-2,3-0,5-Z1	420	1
	LLE 18/30-2,3-1,0-Z 1	300	1
	LLE 18/30-2,3-2.0-Z 1	200	1
	LLE 18/30-2.3-1.0-WR	300	2
	LLE 18/30-2.3-0.5-WC3	400	3
	LLE 18/30-2,3-1,0-WC14	300	4
	LLE 18/30-2,3-1,0-WC32	250	5
	LLE 18/30-2,3-1,0-WC5	300	6
	LLE 18/30-2,3-1,0-WC10	300	7
	LLE 18/30-2,3-1,0-WC0	230	8
	LLE 18/30-2,3-1,0-WC20	250	9
	LLE 18/30-2.3-1.0-WC3	300	3
	LLE 18/30-1,6-0,5-Z1	200	1
	LLE 18/30-1.1-2.0-G	100	10
	LLE 18/30-2.3-1.5-G	250	10
glass fibre optics, reflex with metal-silicone coating	LLE 18/30-1.9-0.5-Z1	130	15
	LLE 18/30-1.9-1.0-Z1	120	15
	LLR 18/30-1.9-0.5-WC0	70	16
	LLR 18/30-1,9-1,0-WC2	90	17
	LLR 18/30-1,9-0,5-WC5	90	18
	LLR 18/30-1.9-1.0-WR	90	19
	LLR 18/30-1.9-1.5-G	100	20
	LLR 18/30-1.6-1.0-QW 1x4	70	21
glass fibre optics reflex with metal coating	LMR 18/30-1.9-1.0-Z1	120	15
	LMR 18/30-1.9-3.0-Z1	85	15
	LMR 18/30-1.9-1.5-Z1	100	15

Other lengths and end pieces available on request

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Fig. 1

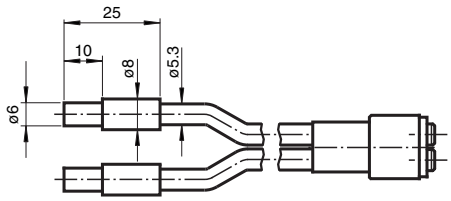

Fig. 2

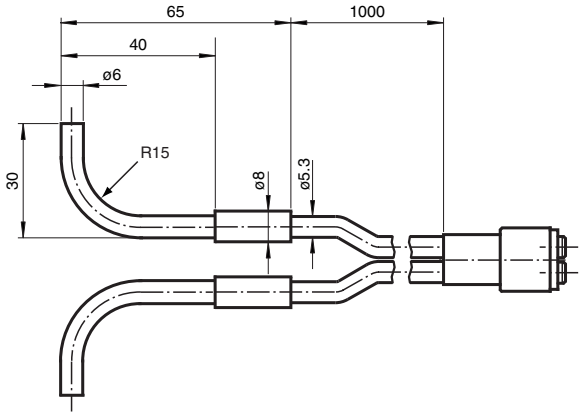

Fig. 3

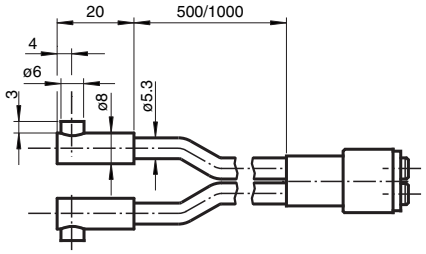

Fig. 4

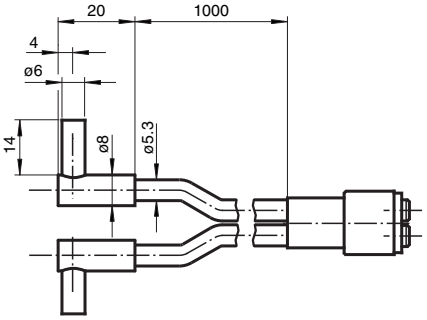

Fig. 5

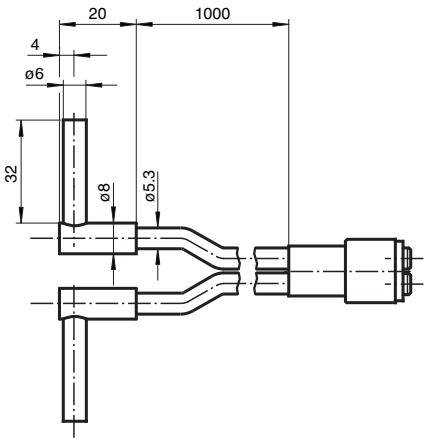

Fig. 6

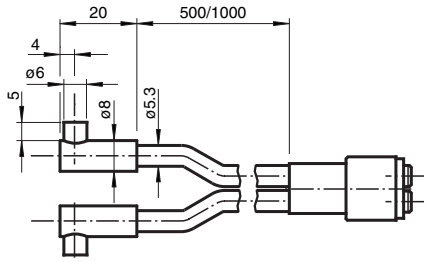

Fig. 7

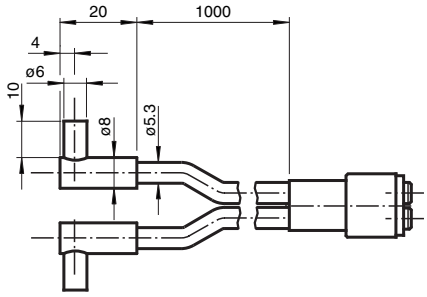

Fig. 8

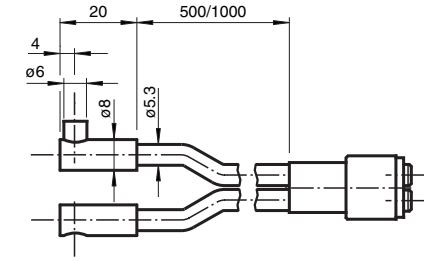

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Fig. 9

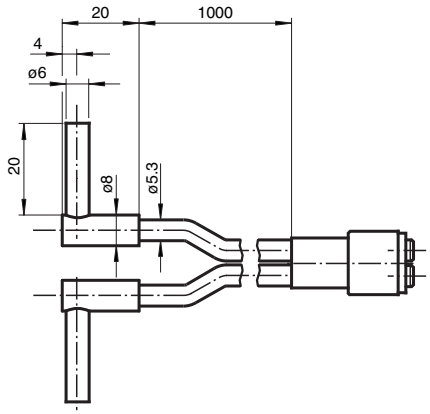

Fig. 10

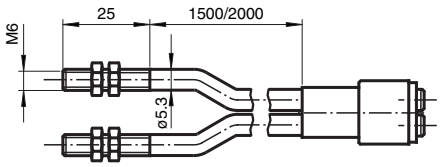

Fig. 11

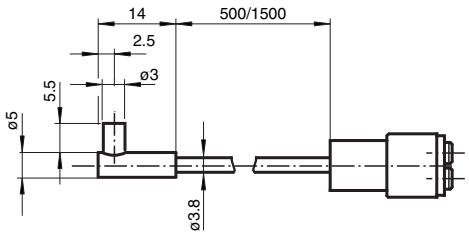

Fig. 12

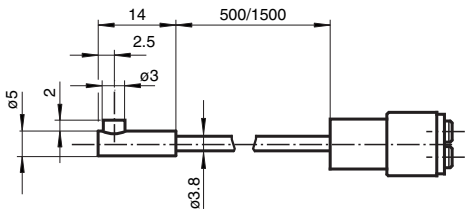

Fig. 13

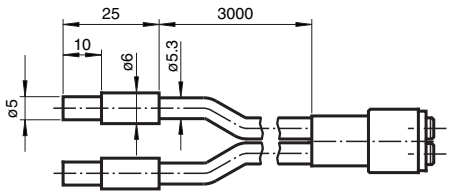

Fig. 14

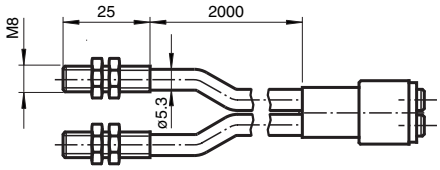

Fig. 15

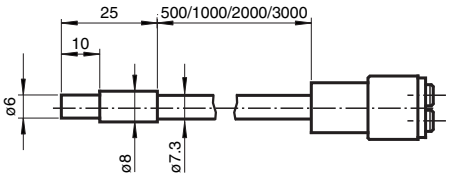

Fig. 16

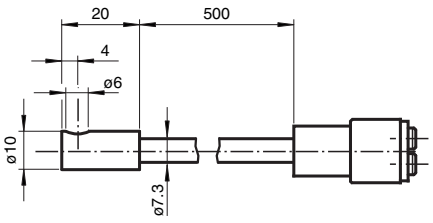

Fig. 17

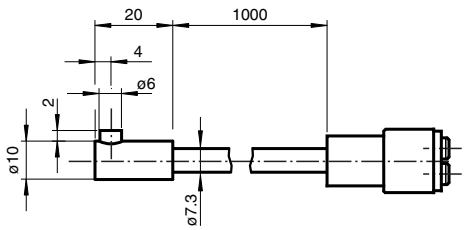

Fig. 18

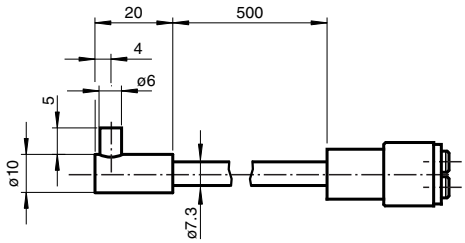

Fig. 19

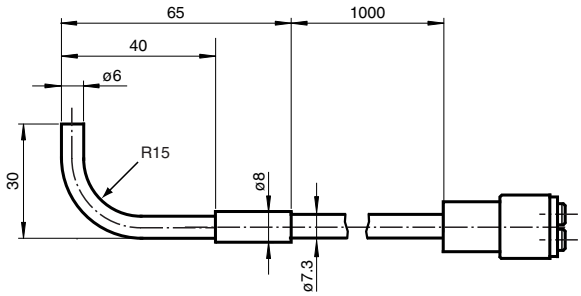

Fig. 20

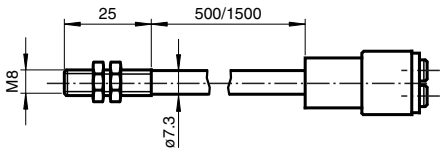

Fig. 21