

# Diffuse mode sensor

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



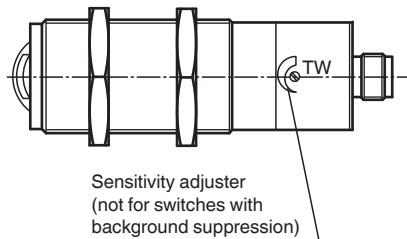
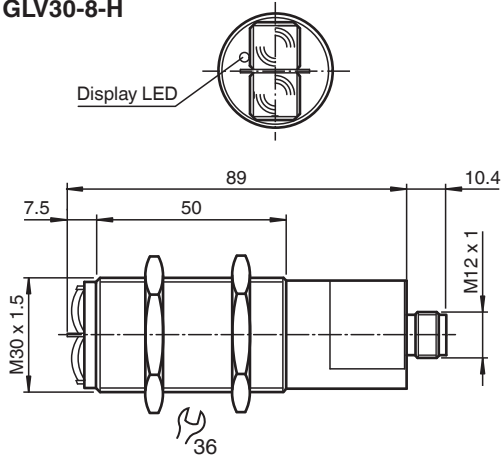
- M30 nickel plated brass threaded housing
- Light-on/dark-on switching
- For glass fibre light guide
- Extensive fiber optic product selection as accessories

Diffuse mode sensor



### Dimensions

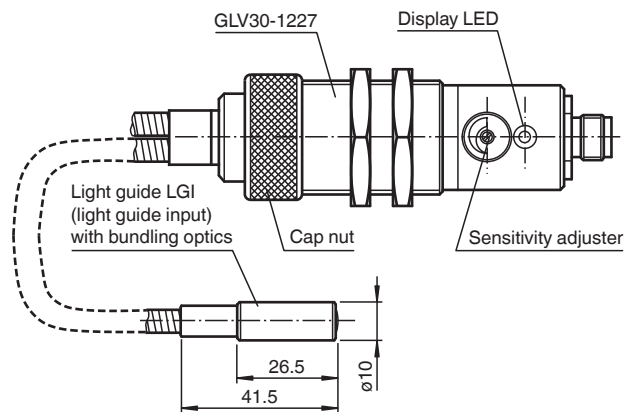
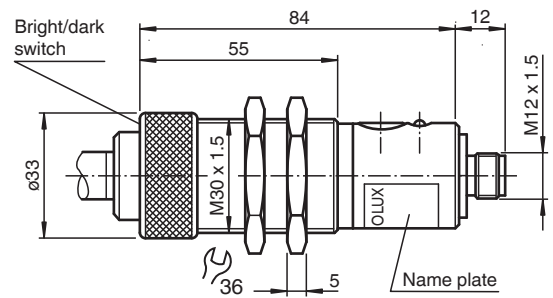
GLV30-8-2500  
GLV30-8-H



Unit connector



GLV30-LL...



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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**PF** PEPPERL+FUCHS

## 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		IRE D
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		
CCC approval		CCC approval / marking not required for products rated $\leq 36$ V
Approvals		CE
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

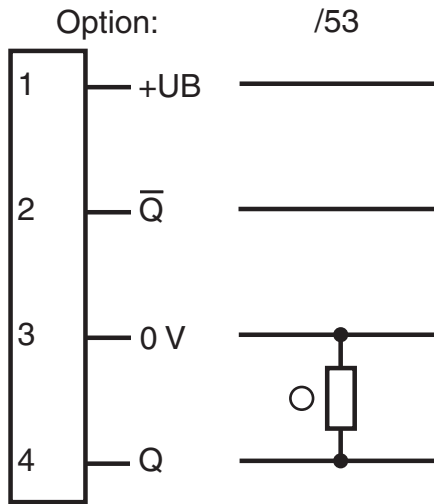
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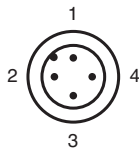
**PEPPERL+FUCHS**

**Connection Assignment**



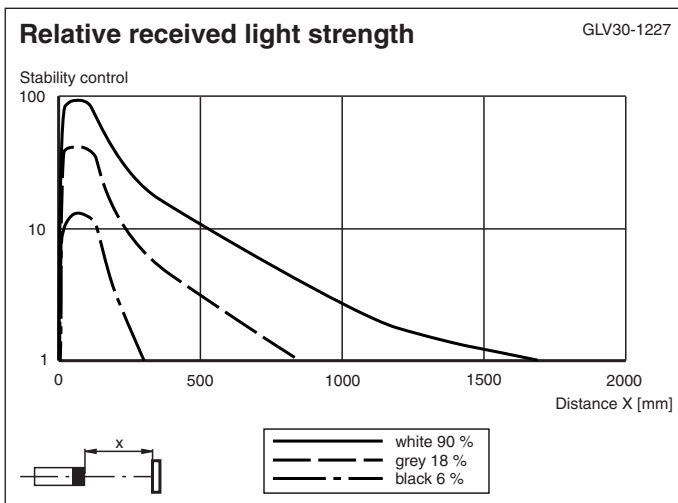
○ = Light on  
● = Dark on

**Connection Assignment**

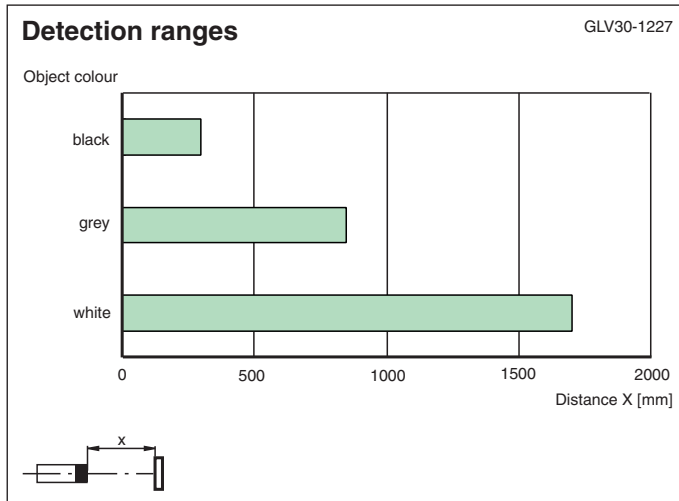


Wire colors in accordance with EN 60947-5-2

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



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## Accessories

	<b>V1-G-2M-PUR</b>	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	<b>V1-W-2M-PUR</b>	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey
	<b>BF 30</b>	Mounting flange, 30 mm
	<b>BF 30-F</b>	Plastic mounting adapter, 30 mm

## 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

Fig. 1

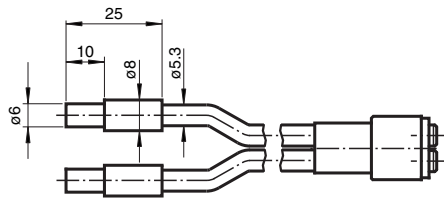


Fig. 5

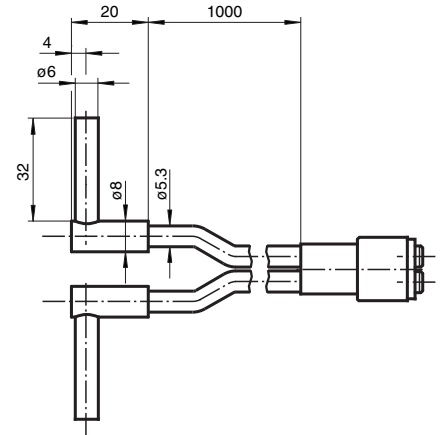


Fig. 2

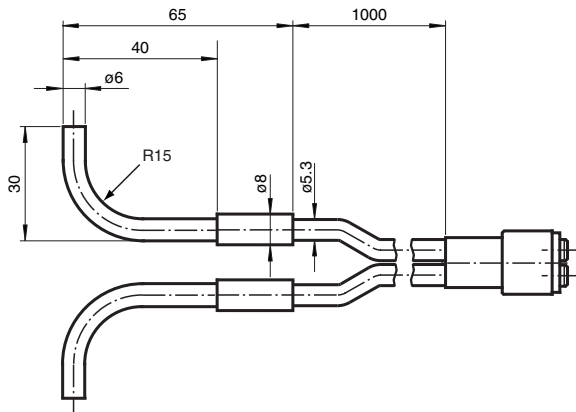


Fig. 6

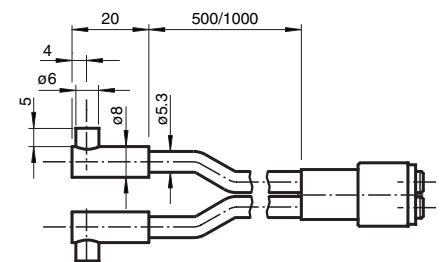


Fig. 3

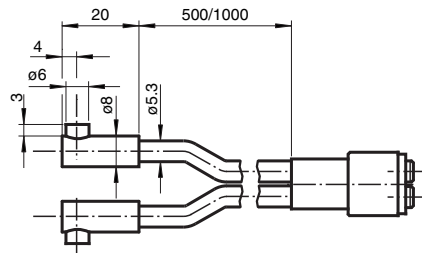


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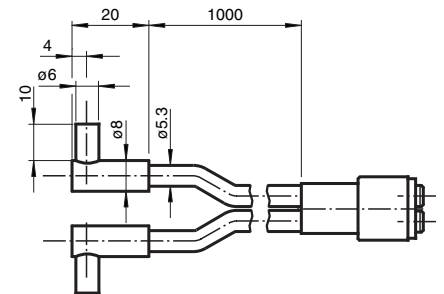


Fig. 4

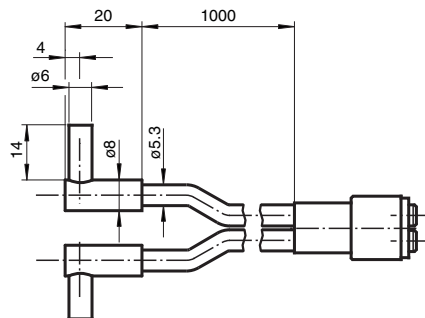
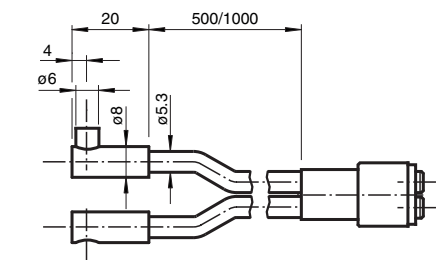


Fig. 8



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Fig. 9

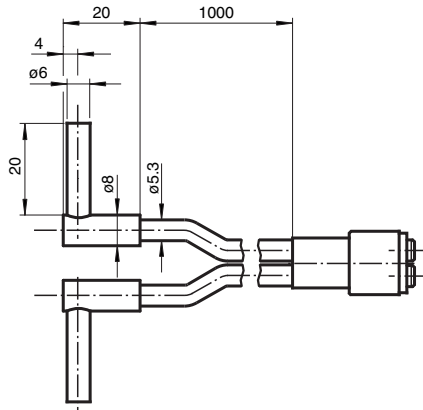


Fig. 13

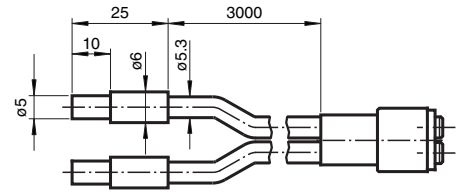


Fig. 10

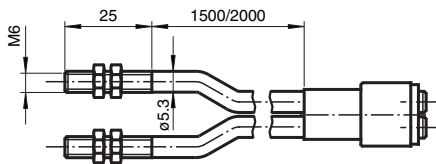


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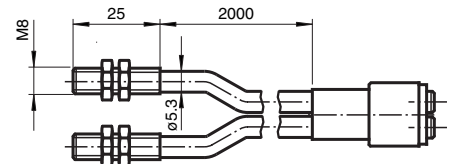


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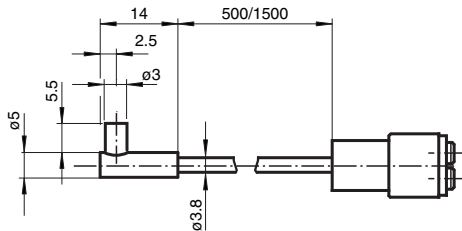


Fig. 15

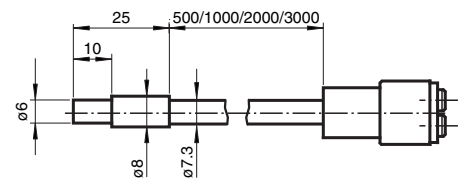


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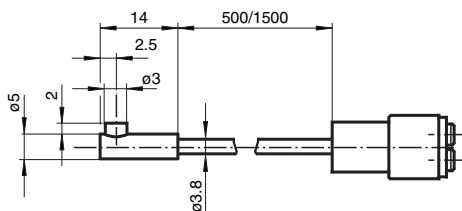
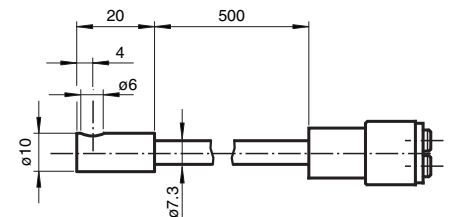


Fig. 16



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Fig. 17

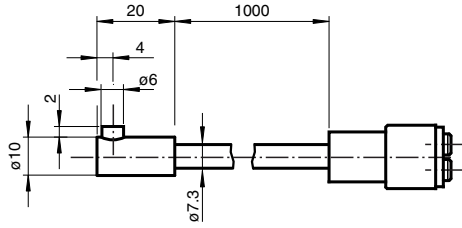


Fig. 20

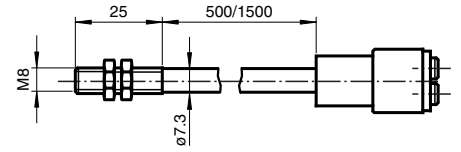


Fig. 18

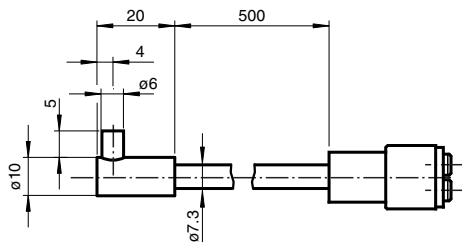


Fig. 21

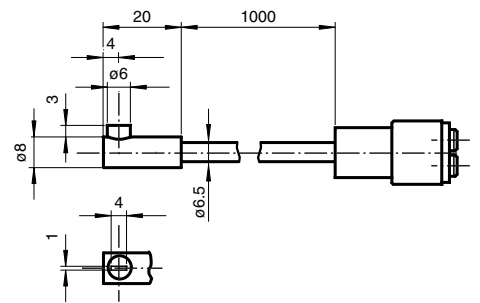
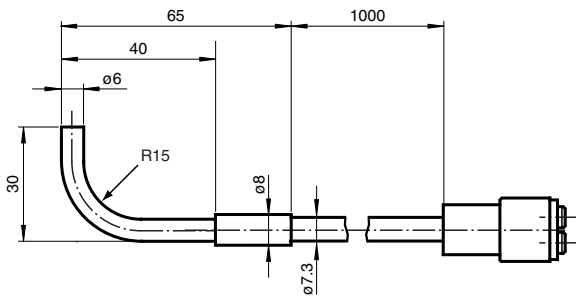


Fig. 19



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