

GW Fork Light Barriers

Infrared-, redlight and laserversions



In case of light barriers, the transmitter and receiver position is face to face in a housing that is shaped like a fork. The distance between transmitter and receiver is fixed by the shape of the housing and is known as fork-width. These through beam sensors with laser, infrared or red light are available with a fork-width up to 220 mm and digital output circuit.

	GWL	GWE	GWR
GENERAL DATA			
Type	Fork Light Barrier		
Light source	Laser	Infraredlight	Redlight
Wavelength	-	880 nm	650 nm
Sensorfunction	Switch		
Connection type	M8 connector, 3-pin		
Lined up installation	Yes	-	Yes
Sensitivity setting	Potentiometer		
MEASUREMENT DATA			
Repeat accuracy	0.01 mm	0.06 / 0.04 / 0.02 mm	
OUTPUTS			
Number of outputs	1		
Output circuit	Digital (PNP-transistor)		
Output function	NO / NC (switchable)		
Switching hysteresis	< 0.02 mm	< 0.03 mm	
Switching frequency	10 kHz	1 kHz	
POWER SUPPLY			
Power supply V DC	10 - 30 V DC		
Load current max	60 mA	-	
Load current typical	40 mA	35 / 21 / 18 mA	
Load current	400 mA		
Short circuit protection	Yes		
Voltage drop	2.5 V at 200 mA		
PHYSICAL CHARACTERISTICS			
Housing material	Aluminium, black anodized		
Ingress protection	IP65		
Dimensions	See dimension drawing		
ENVIRONMENTAL			
Operating temperature range	-10 - +60 °C		

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Versions

LIGHT SOURCE	MINIMUM DETECTABLE OBJECT	FORK-WIDTH	FORK-LENGTH	PRODUCT
Laser	Ø 0.05 mm	220 mm	55 mm	GWL 0622PS/OS2
		120 mm	55 mm	GWL 0612PS/OS2
		80 mm	55 mm	GWL 0608PS/OS2
		50 mm	55 mm	GWL 0605PS/OS2
		30 mm	35 mm	GWL 0403PS/OS2
		20 mm	35 mm	GWL 0402PS/OS2

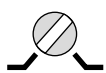
Infraredlight	Ø 1.2 mm	220 mm	105 mm	GWE 1122PS/OS2
		220 mm	55 mm	GWE 0622PS/OS2
		150 mm	200 mm	GWE 2015PS/OS2
		120 mm	200 mm	GWE 2012PS/OS2
		120 mm	145 mm	GWE 1512PS/OS2
		120 mm	55 mm	GWE 0612PS/OS2
		80 mm	80 mm	GWE 0808PS/OS2
		80 mm	55 mm	GWE 0608PS/OS2
		50 mm	55 mm	GWE 0605PS/OS2
		Ø 0.8 mm	30 mm	35 mm
	20 mm		35 mm	GWE 0402PS/OS2
	10 mm		35 mm	GWE 0401PS/OS2

Redlight	Ø 1.2 mm	220 mm	105 mm	GWR 1122PS/OS2
		220 mm	55 mm	GWR 0622PS/OS2
		150 mm	200 mm	GWR 2015PS/OS2
		120 mm	200 mm	GWR 2012PS/OS2
		120 mm	145 mm	GWR 1512PS/OS2
		120 mm	55 mm	GWR 0612PS/OS2
		80 mm	80 mm	GWR 0808PS/OS2
		80 mm	55 mm	GWR 0608PS/OS2
		50 mm	55 mm	GWR 0605PS/OS2
		Ø 0.8 mm	30 mm	35 mm
	20 mm		35 mm	GWR 0402PS/OS2
	10 mm		35 mm	GWR 0401PS/OS2

Adjustment possibilities

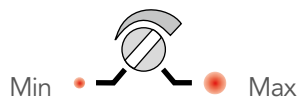
Light / dark switching

Dark switching NO

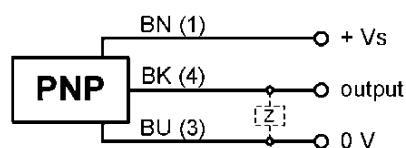


Light switching NC

Sensitivity



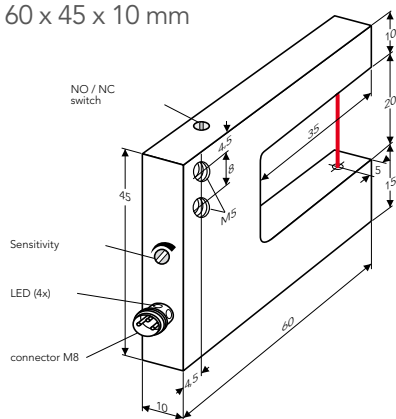
Wiring



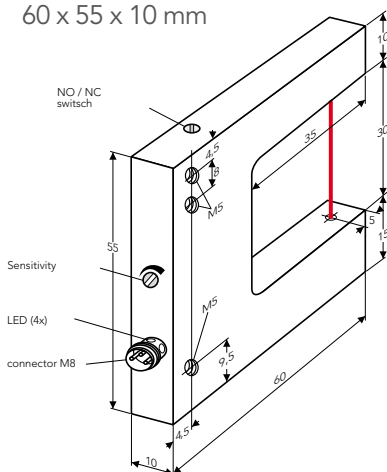
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Laser versions dimensions

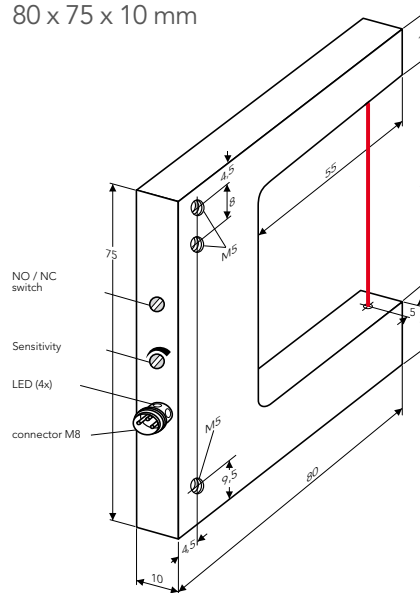
GWL 0402PS/OS2
60 x 45 x 10 mm



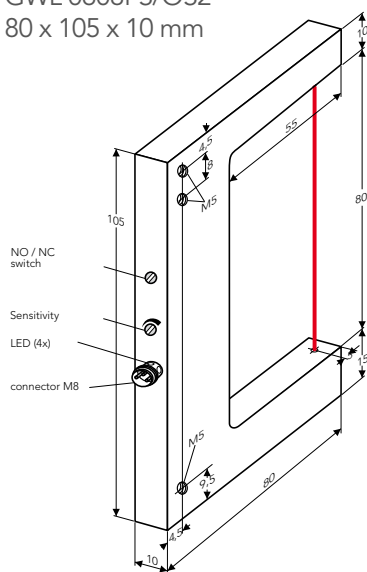
GWL 0403PS/OS2
60 x 55 x 10 mm



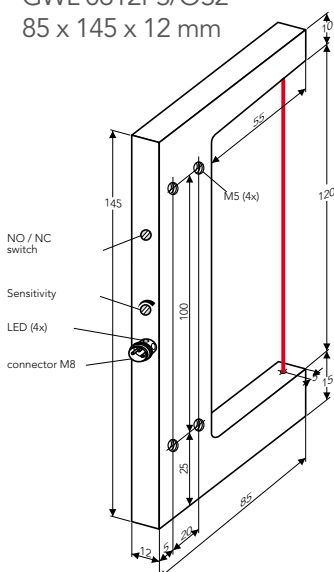
GWL 0605PS/OS2
80 x 75 x 10 mm



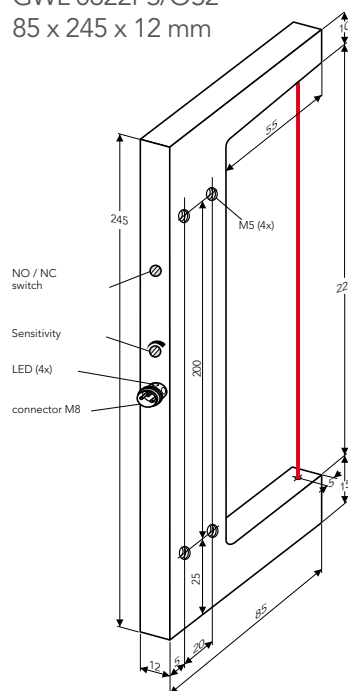
GWL 0608PS/OS2
80 x 105 x 10 mm



GWL 0612PS/OS2
85 x 145 x 12 mm



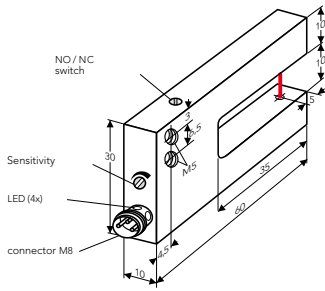
GWL 0622PS/OS2
85 x 245 x 12 mm



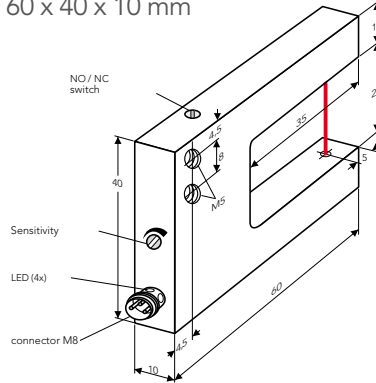
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Infrared- and redlight versions dimensions

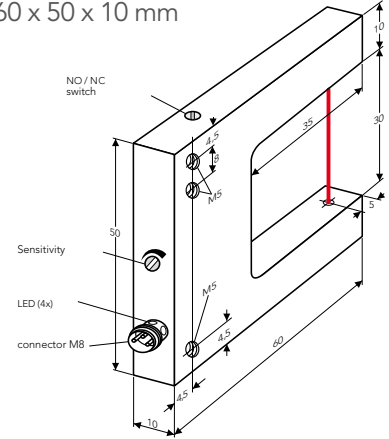
GWE / GWR 0401PS/OS2
60 x 30 x 10 mm



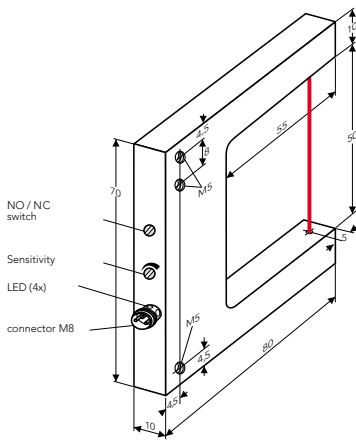
GWE / GWR 0402PS/OS2
60 x 40 x 10 mm



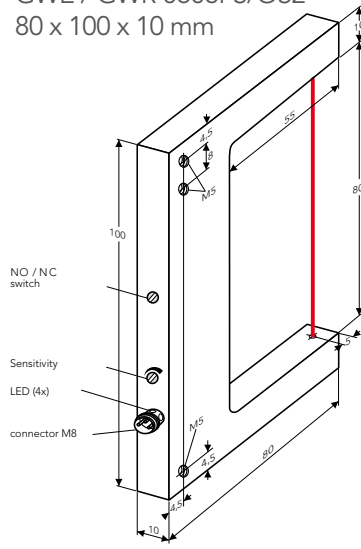
GWE / GWR 0403PS/OS2
60 x 50 x 10 mm



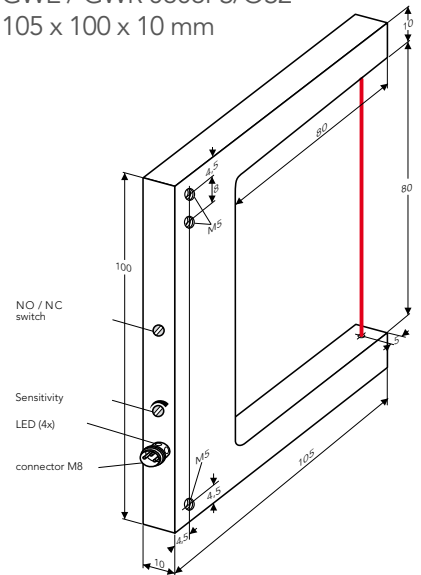
GWE / GWR 0605PS/OS2
80 x 70 x 10 mm



GWE / GWR 0608PS/OS2
80 x 100 x 10 mm



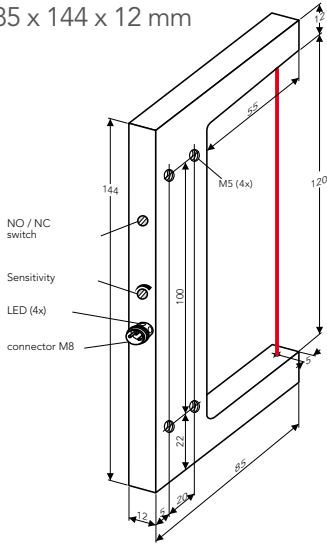
GWE / GWR 0808PS/OS2
105 x 100 x 10 mm



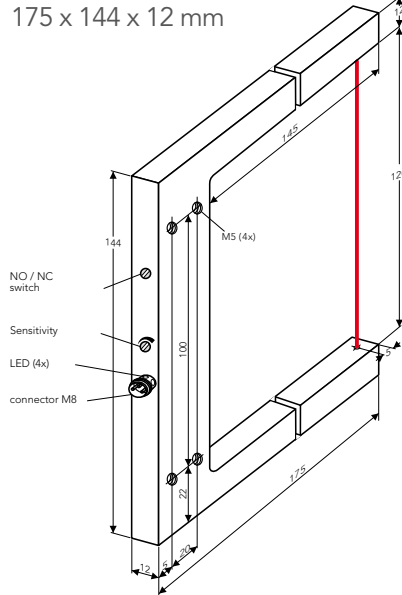
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Infrared- and redlight versions dimensions

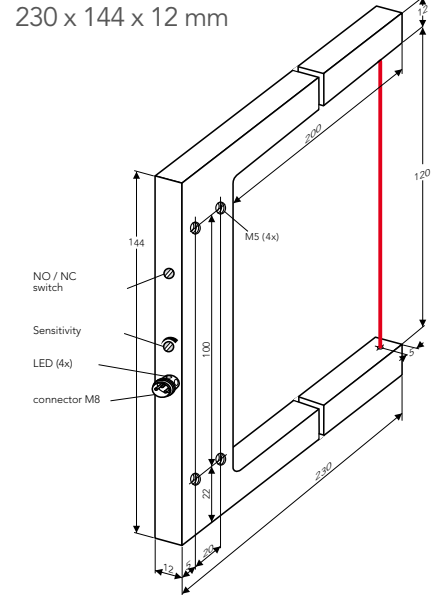
GWE / GWR 0612PS/OS2
85 x 144 x 12 mm



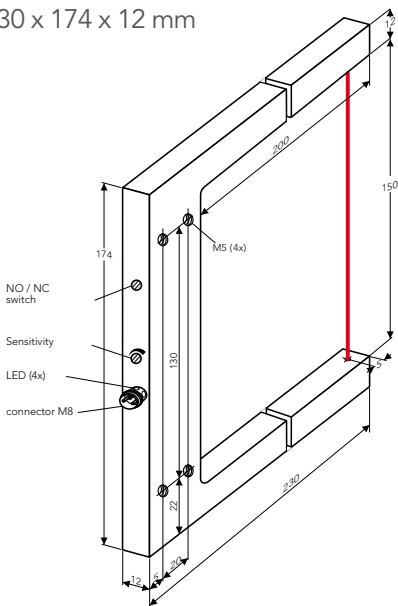
GWE / GWR 1512PS/OS2
175 x 144 x 12 mm



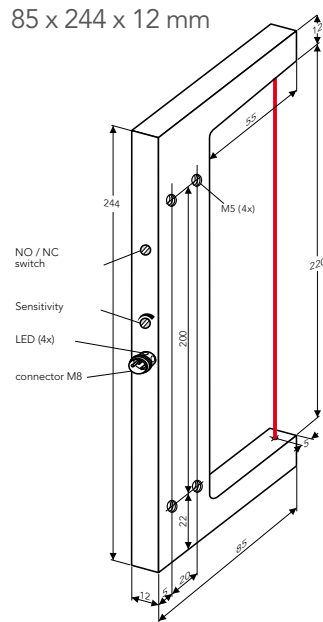
GWE / GWR 2012PS/OS2
230 x 144 x 12 mm



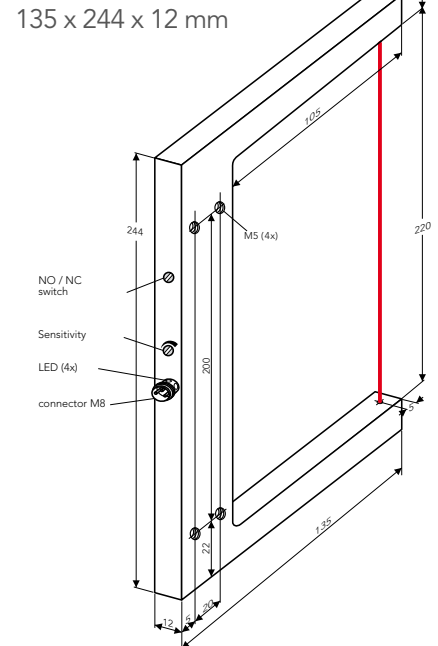
GWE / GWR 2015PS/OS2
230 x 174 x 12 mm



GWE / GWR 0622PS/OS2
85 x 244 x 12 mm



GWE / GWR 1122PS/OS2
135 x 244 x 12 mm



Welotec is using a ISO 9001:2008 certified quality management system • All specifications are subject to change

CAT-GW-V1-EN ed. 09/14 Welotec GmbH