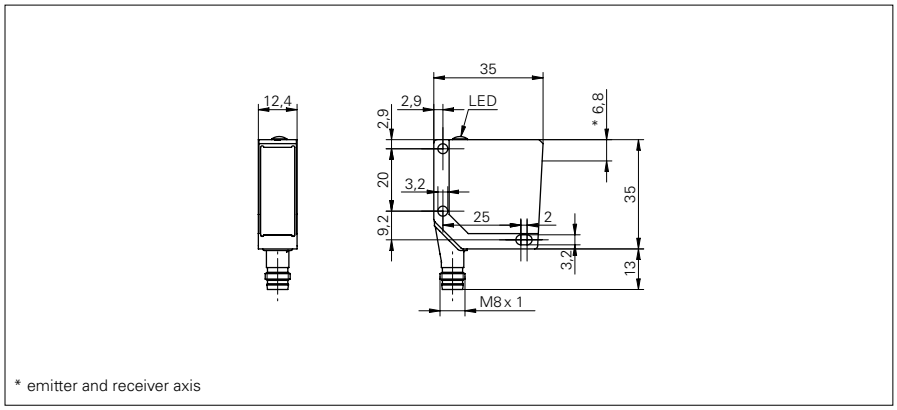
Retro-reflective sensors

OPDM 12 (Laser)

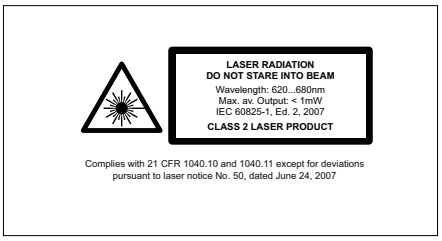
sample drawing



* emitter and receiver axis

sample picture

laser warning



general data	
type	retro-reflective laser sensor
version	single lens optics
light source	pulsed red laser diode
repeat accuracy	< 0,1 mm at laser focus
polarization filter	yes
alignment / soiled lens indicator	flashing light indicator
light indicator	LED yellow
power on indication	LED green
sensitivity adjustment	no
laser class	2
wave length	650 nm
actual range Sb = 4,5 m	
nominal range Sn	5 m
actual range Sb = 7 m	
nominal range Sn	8 m

electrical data	
voltage supply range +Vs	10 ... 30 VDC
current consumption max. (no load)	50 mA
current consumption typ.	40 mA
voltage drop Vd	< 1,8 VDC
output function	light / dark operate
output current	< 100 mA
short circuit protection	yes
reverse polarity protection	yes

mechanical data	
width / diameter	12,4 mm
height / length	35 mm
depth	35 mm
type	rectangular
housing material	die-cast zinc
front (optics)	glass

ambient conditions	
operating temperature	-10 ... +50 °C
protection class	IP 67

Retro-reflective sensors OPDM 12 (Laser)

order reference	actual range Sb	connection types	output circuit	response time / release time	distance to focus
OPDM 12N5101/S35A	7 m	connector M8 4 pin	NPN	< 0,1 ms	400 mm
OPDM 12P5101	7 m	cable 4 pin, 2 m	PNP	< 0,1 ms	400 mm
OPDM 12P5101/S35A	7 m	connector M8 4 pin	PNP	< 0,1 ms	400 mm
OPDM 12P5102/S35A	4,5 m	connector M8 4 pin	PNP	< 0,1 ms	100 mm
OPDM 12P5103/S35A	7 m	connector M8 4 pin	PNP	< 0,1 ms	parallel beam
OPDM 12P5104/S35A	4,5 m	connector M8 4 pin	PNP	< 0,05 ms	100 mm