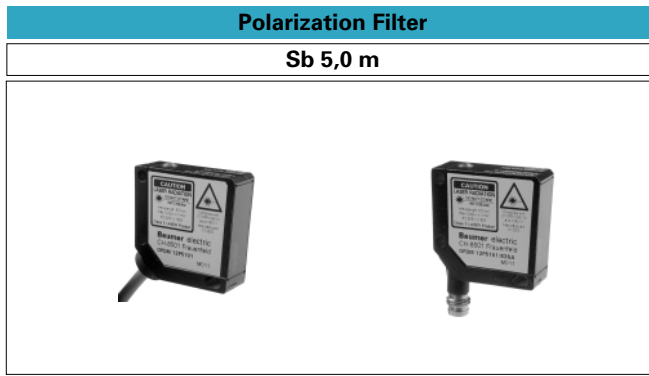


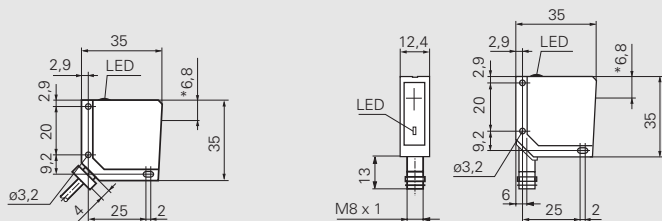
Retro-reflective laser sensors Series 12



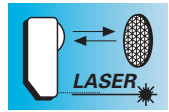
PNP	light operate
	dark operate
	light/dark operate
NPN	light operate
	dark operate
	light/dark operate

cable	connector
OPDM 12P5101	OPDM 12P5101/S35A
OPDM 12N5101	OPDM 12N5101/S35A

technical data	OPDM 12P5101	OPDM 12N5101/S35A
nominal range Sn	5,5 m	5,5 m
operating distance Sb	5,0 m	5,0 m
distance beam focal point	400 mm	400 mm
repeatability	< 0,1 mm at laser focus	< 0,1 mm at laser focus
output indicator	yellow LED	yellow LED
alignment aid / soiled lens indicator	flashing yellow LED	flashing yellow LED
power indicator	green LED	green LED
light source	pulsed red laser diode	pulsed red laser diode
wave length	675 nm	675 nm
laser class	2	2
voltage supply range	10 - 30 VDC	10 - 30 VDC
max. supply current average value / peak value	40 mA / 50 mA	40 mA / 50 mA
max. switching current	100 mA	100 mA
voltage drop	≤ 1,8 VDC	≤ 1,8 VDC
response time / release time	≤ 0,5 ms	≤ 0,5 ms
sensitivity adjustment	-	-
short circuit protection	yes	yes
reverse polarity protection	yes	yes
temperature range	-10...+50 °C	-10...+50 °C
housing material	die-cast zinc	die-cast zinc
protection class	IP 67	IP 67



* emitter and receiver axis



Series 12

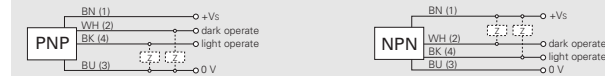
- Small diameter laser beam for precise detection tasks
- Polarization filter to detect shiny objects
- Alignment aid / soiled lens indicator (flashing LED)
- Rugged metal housing
- Optics with single lens

Operating distance
5,0 m

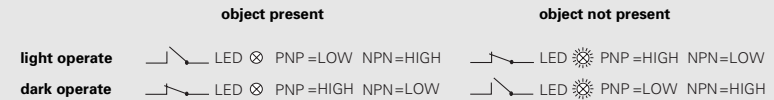
Polarisation filter

Visible red light

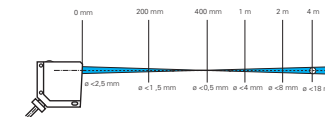
connection diagrams



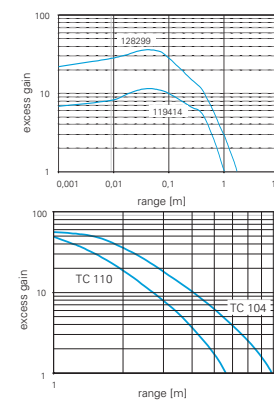
output states



beam diameter chart



excess gain curve

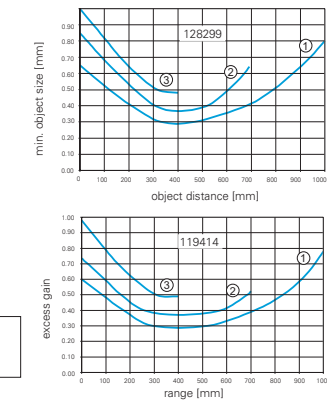


- ① Tape at 1000 mm
- ② Tape at 700 mm
- ③ Tape at 400 mm

reflector / actual range

part number	Reflector	actual range
TC 101	∅ 20 mm	1...2,5 m
TC 104	∅ 40 mm	1...5,0 m
128299	20 x 20	0...1,0 m
119414	25 x 15 mm	0...1,0 m

object size diagram



accessories

mounting bracket	113873
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connectors

ES 8A	4 pin	2 m PVC
ES 9A	4 pin	2 m PVC
ESW 31AH0200	4 pin	2 m PUR halogen-free
ESG 32AH0200	4 pin	2 m PUR halogen-free

for details see accessories section