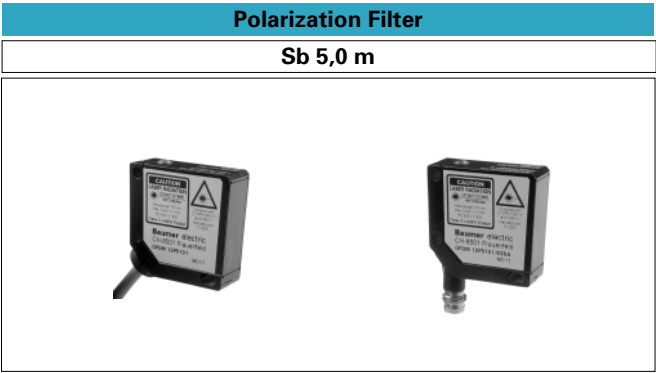


Retro-reflective laser sensors Series 12



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

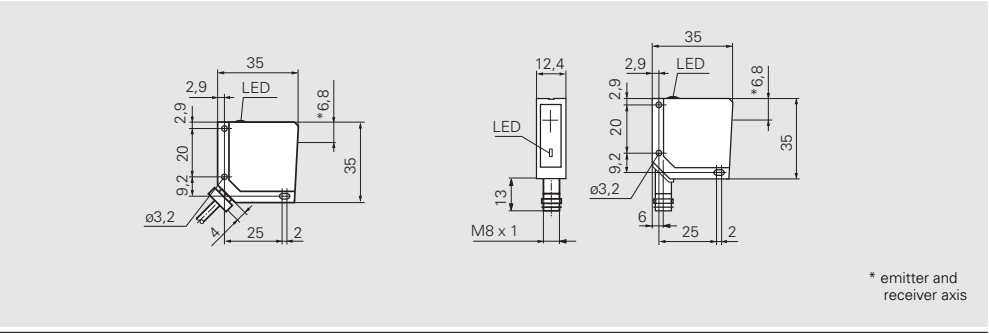
cable
OPDM 12P5101
OPDM 12N5101

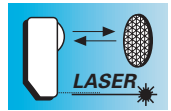
connector
OPDM 12P5101/S35A
OPDM 12N5101/S35A

technical data
nominal range Sn
operating distance Sb
distance beam focal point
repeatability
output indicator
alignment aid / soiled lens indicator
power indicator
light source
wave length
laser class
voltage supply range
max. supply current average value / peak value
max. switching current
voltage drop
response time / release time
sensitivity adjustment
short circuit protection
reverse polarity protection
temperature range
housing material
protection class

5,5 m
5,0 m
400 mm
< 0,1 mm at laser focus
yellow LED
flashing yellow LED
green LED
pulsed red laser diode
675 nm
2
10 - 30 VDC
40 mA / 50 mA
100 mA
≤ 1,8 VDC
≤ 0,5 ms
-
yes
yes
-10...+50 °C
die-cast zinc
IP 67

5,5 m
5,0 m
400 mm
< 0,1 mm at laser focus
yellow LED
flashing yellow LED
green LED
pulsed red laser diode
675 nm
2
10 - 30 VDC
40 mA / 50 mA
100 mA
≤ 1,8 VDC
≤ 0,5 ms
-
yes
yes
-10...+50 °C
die-cast zinc
IP 67

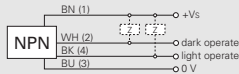
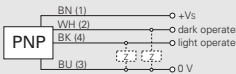




Series 12

- 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

connection diagrams



output states

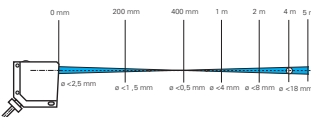
object present

light operate LED ⊗ PNP=LOW NPN=HIGH
dark operate LED ⊗ PNP=HIGH NPN=LOW

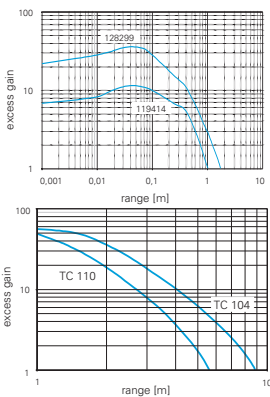
object not present

light operate LED ☀ PNP=HIGH NPN=LOW
dark operate LED ☀ PNP=LOW NPN=HIGH

beam diameter chart



excess gain curve

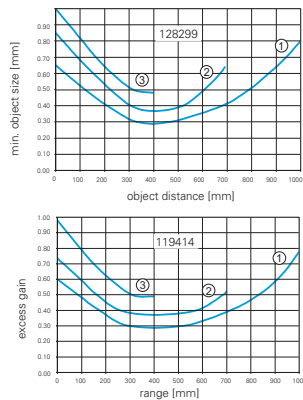


- ① Tape at 1000 mm
- ② Tape at 700 mm
- ③ Tape at 400 mm

reflector / actual range

part number	Reflector	actual range
TC 101	ø 20 mm	1...2,5 m
TC 104	ø 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



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

accessories

mounting bracket	113873
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Operating distance
5,0 m

Polarisation filter

Visible red light

