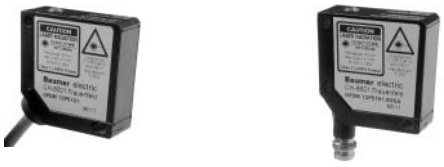
Retro-reflective laser sensors Series 12

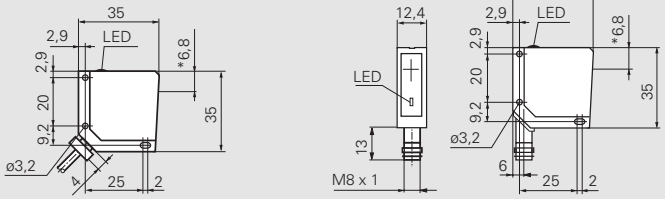
Polarization Filter

Sb 5,0 m



		cable	connector
PNP	light operate		
	dark operate		
	light/dark operate	**OPDM 12P5101**	**OPDM 12P5101/S35A**
NPN	light operate		
	dark operate		
	light/dark operate	**OPDM 12N5101**	**OPDM 12N5101/S35A**

technical data		
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



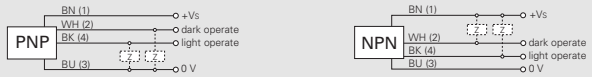
* emitter and receiver axis

- **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**

LASER

Series 12

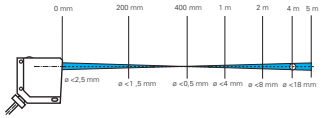
connection diagrams



output states

	object present	object not present
light operate	LED ⊗ PNP =LOW NPN =HIGH	LED ☼ PNP =HIGH NPN =LOW
dark operate	LED ⊗ PNP =HIGH NPN =LOW	LED ☼ PNP =LOW NPN =HIGH

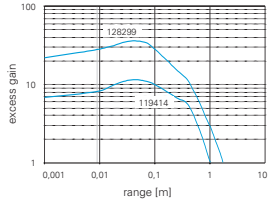
beam diameter chart



reflector / actual range

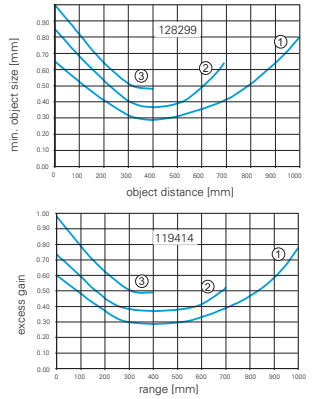
part number	Reflector	actual range
TC 101	ø 20 mm	1...2,5 m
TC 104	ø 40 mm	1...5,0 m
128299	20 x 20	0...1,0 m
119414	25 x 15 mm	0...1,0 m

excess gain curve



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

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

Operating distance 5,0 m

Polarisation filter

Visible red light

CAUTION
LASER RADIATION
DO NOT STARE INTO BEAM
LASERDIODE
Class 2 LASER Product

IEC 825-1/1996
21CFR 1040.10

Vydas International Marketing
Swan House Passfield Business Centre
Lynchborough Road Passfield
Hampshire GU30 7SB United Kingdom
Tel:44(0)1428 751822 Fax:44(0)1428 751833
Email:info@vydas.co.uk Web: www.vydas.co.uk