

Tw = 25 ... 300 mm

- rugged metal housing
- long sensing range
- high repeatability



general data

type	background suppression
light source	pulsed red laser diode
sensing distance Tw	25 ... 300 mm
sensing range Tb (at Tw max.)	40 ... 300 mm
sensing range Tb (at Tw min.)	5 ... 25 mm
repeatability	< 0,1 mm at laser focus
output indicator	LED yellow
sensing distance adjustment	mechanical, 8 turn
laser class	2

electrical data

voltage supply range +Vs	10 ... 30 VDC
current consumption max.	35 mA
current consumption typ.	25 mA
voltage drop Vd	< 1,8 VDC
output function	light / dark operate
output current	< 200 mA
short circuit protection	yes
reverse polarity protection	yes

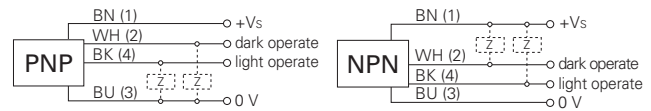
mechanical data

width / diameter	15,4 mm
height / length	50 mm
depth	50 mm
type	rectangular
housing material	die-cast zinc
front (optics)	glass

ambient conditions

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

connection diagrams



connectors

ESG 34AH0200	4 pin	2 m straight
ESW 33AH0200	4 pin	2 m angular

additional cable connectors and field wireable connectors, see accessories

accessories

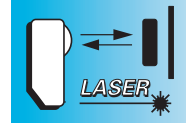
SENSOFIX mounting kit	151721
mounting bracket	113917
lens cleaning air nozzle bracket	116407

for details, see accessories section

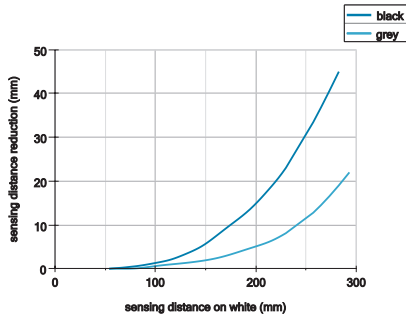
laser warning



order reference	connection types	output circuit	response time / release time	wave length	distance to laser focus	suppression of reciprocal influence
OHDM 16N5001	cable 4 pin	NPN	< 0,6 ms	650 nm	80 mm	yes
OHDM 16N5001/S14	connector M12, 4 pin	NPN	< 0,6 ms	650 nm	80 mm	yes
OHDM 16P5001	cable 4 pin	PNP	< 0,6 ms	650 nm	80 mm	yes
OHDM 16P5001/S14	connector M12, 4 pin	PNP	< 0,6 ms	650 nm	80 mm	yes
OHDM 16P5002/S14	connector M12, 4 pin	PNP	< 0,6 ms	675 nm	40 mm	yes
OHDM 16P5012	cable 4 pin	PNP	< 0,1 ms	650 nm	60 mm	-
OHDM 16P5012/S14	connector M12, 4 pin	PNP	< 0,1 ms	650 nm	60 mm	-



sensing distance diagram

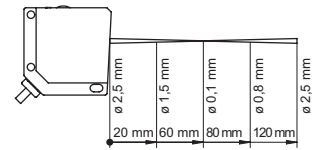
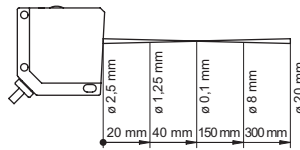
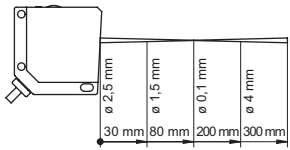


beam characteristic

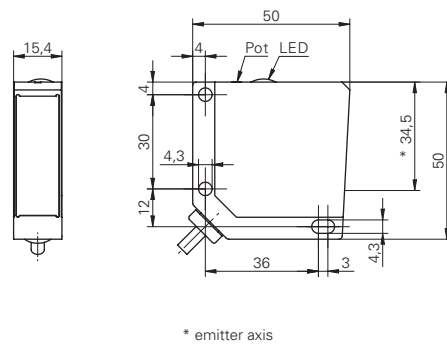
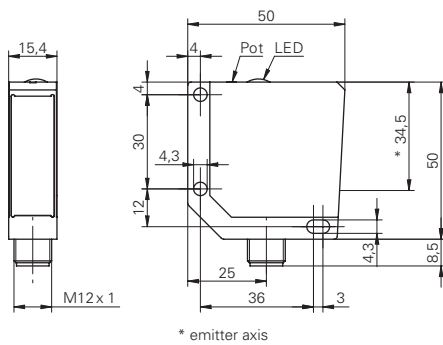
distance to laser focus = 80 mm

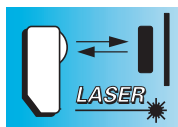
distance to laser focus = 40 mm

distance to laser focus = 60 mm



dimension drawings





Tw = 133 mm

- for lateral detection of wafer edges
- very long range
- laser sensor in rugged metal housing



OHDM 16 Tw = 133 mm Diffuse sensors with background suppression

general data

type	background suppression
special type	Wafer mapping sensor
light source	pulsed red laser diode
sensing distance Tw	123 ... 143 mm
repeatability	< 0,1 mm at laser focus
output indicator	LED yellow
power on indication	LED green
sensing distance adjustment	no
laser class	2
wave length	650 nm
suppression of reciprocal influence	yes

electrical data

response time / release time	< 5 ms
voltage supply range +Vs	10 ... 30 VDC
current consumption max.	35 mA
current consumption typ.	25 mA
voltage drop Vd	< 1,8 VDC
output function	light / dark operate
output current	< 200 mA
short circuit protection	yes
reverse polarity protection	yes

mechanical data

width / diameter	15,4 mm
height / length	50 mm
depth	50 mm
type	rectangular
housing material	die-cast zinc
front (optics)	glass
connection types	5 pin cable

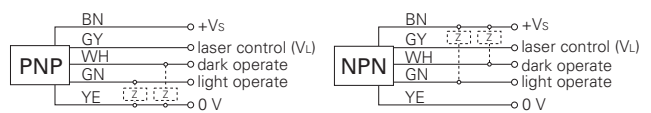
ambient conditions

operating temperature	-5 ... +50 °C
protection class	IP 67

order reference output circuit

OHDM 16N5651	NPN
OHDM 16P5651	PNP

connection diagrams



accessories

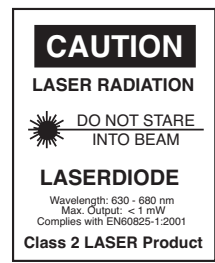
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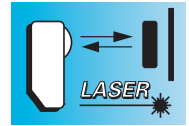
for details, see accessories section

remarks

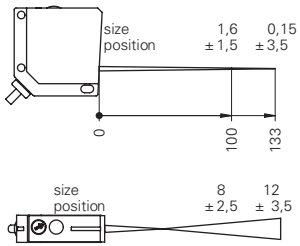
Function laser control - input:
 - Laser diode on VL < 1 V
 - Laser diode off VL > Vs - 4 V or open

laser warning

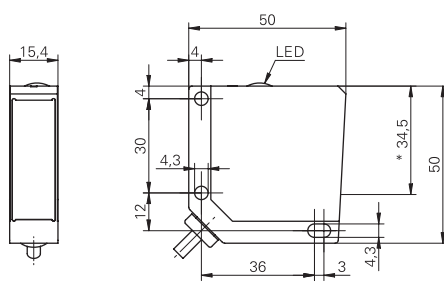




beam characteristic



dimension drawing



* emitter axis