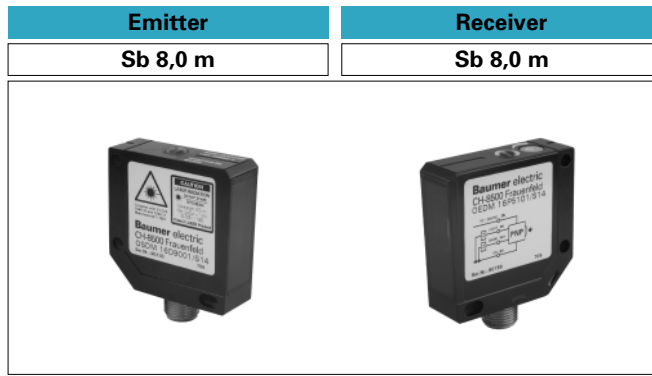


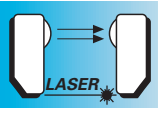
# Through beam laser sensors Series 16



### Preferential types

	Emitter		Receiver	
	cable	connector	cable	connector
<b>Emitter</b>	OSDM 16D9601	OSDM 16D9601/S14		
<b>PNP</b>	light/dark operate		OEDM 16P5101	OEDM 16P5101/S14
<b>NPN</b>	light/dark operate			
<b>technical data</b>				
nominal range Sn	-		10 m	
actual range Sb	-		8,0 m	
beam focal point	0,4 m		-	
repeatability at laser focus	≤ 0,1 mm <sup>2)</sup> , ≤ 0,4 mm <sup>3)</sup>		-	
repeatability within complete range	≤ 0,3 mm <sup>2)</sup> , ≤ 0,8 mm <sup>3)</sup>		-	
switching point accuracy <sup>1)</sup>	≤ 0,5 mm <sup>2)</sup> , ≤ 1,0 mm within ±15 °C		-	
power indicator	green LED		-	
output indicator	-		yellow LED	
indicator for optimized adjustment	-		green LED	
light source	pulsed red laser diode		-	
wave length	675 nm		-	
laser class (IEC 825-1/1996) for Europe	1		-	
laser class (21CFR 1040.1) for USA	2		-	
voltage supply range	10 - 30 VDC		10 - 30 VDC	
max. supply current average value / peak value	60 mA / 75 mA		30 mA / 30 mA	
max. switching current	-		200 mA	
voltage drop	-		≤ 1,8 VDC	
response time / release time	-		≤ 0,1 ms	
test input	emitter off	+Vs	-	
test input	emitter on	0 V or not connected	-	
sensitivity adjustment	-		270° pot	
short circuit protection	-		yes	
reverse polarity protection	yes		yes	
temperature range	+10...+65 °C		-25...+65 °C	
housing material	die-cast zinc		die-cast zinc	
protection class	IP 67		IP 67	
<sup>1)</sup> for the complete range with reference to the optical axis				
	<sup>2)</sup> at constant temperature			
	<sup>3)</sup> within temperature range			

	Options		OEDM 16P3401		OEDM 16P3401/S14	
	alarm output dark	PNP				



## Series 16

- Detects object sizes down to 1,6 mm at Sb 8,0 m
- Very wide range
- Sensitivity adjustable
- Two-color LED display for optimum setting
- Visible red light for alignment aid

### Sb 8,0 m

### Alignment aid

### Alarm output

### Test input

### Visible red light

**Class 1 LASER Product**  
IEC 825-1/1996

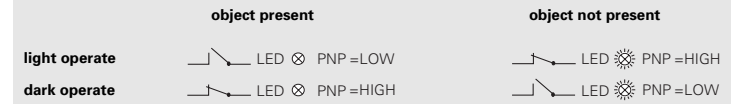
**CAUTION**  
LASER RADIATION  
DO NOT STARE INTO BEAM  
LASERDIODE  
CLASS 2 LASER PRODUCT  
21CFR 1040.10

### connection diagram

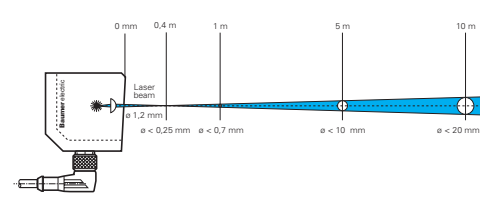


Version with alarm output:  
light operate output is used as alarm output

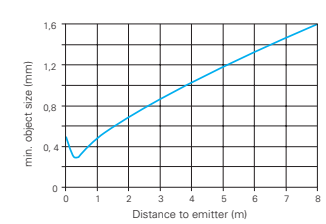
### output state



### beam diameter chart



### object size diagram



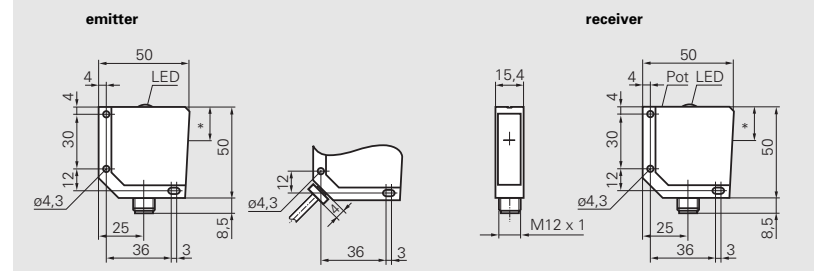
### connectors

- ES 14
- ES 24
- ESW 33AH0200 4 pin 2 m PUR halogen-free
- ESG 34AH0200 4 pin 2 m PUR halogen-free

### accessories

- mounting bracket receiver 113917
- mounting bracket emitter 119373

for details see accessories section



\* emitter and receiver axis 21,5 mm

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