

Tw = 16 ... 120 mm

- detection of edges/steps independent of the distance
- reference steps adjustable
- min. output pulse 10 ms



general data

type	step analysis
sensing distance Tw	16 ... 120 mm
Teach-in range min.	> 0,2 mm
adjustment	Teach-in
power on indication	LED green
output indicator	LED red
light source	pulsed red laser diode
laser class	2
wave length	675 nm
beam diameter	0,5 ... 0,2

electrical data

response time	< 5 ms
voltage supply range +Vs	12 ... 28 VDC
current consumption max.	80 mA
current consumption typ.	40 mA
output current	< 100 mA
output pulse length	10 ms
voltage drop Vd	< 2,8 VDC
reverse polarity protection	yes, Vs to GND
short circuit protection	yes

mechanical data

width / diameter	12,4 mm
height / length	37 mm
depth	34,5 mm
type	rectangular
front (optics)	glass
housing material	die-cast zinc
connection types	connector M8, 4 pin

ambient conditions

operating temperature	0 ... +50 °C
protection class	IP 67

connectors

ESG 32AH0200	4 pin	2 m straight
ESW 31AH0200	4 pin	2 m angular

additional cable connectors and field wireable connectors, see accessories

accessories

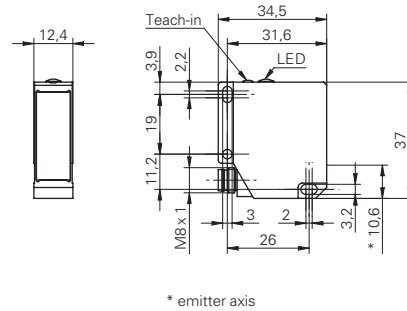
SENSOFIX mounting kit	150328
mounting bracket	113873

for details, see accessories section

order reference **output circuit**

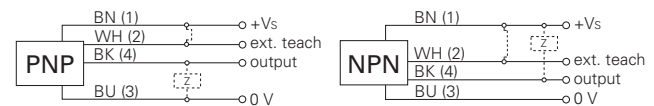
OBDM 12N6910/S35A	NPN
OBDM 12P6910/S35A	PNP

dimension drawing

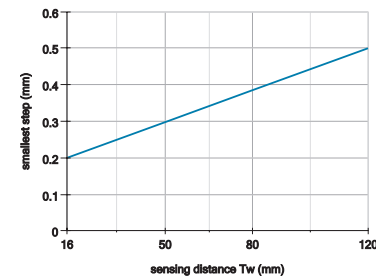


* emitter axis

connection diagrams



min. detectable difference



laser warning

CAUTION

LASER RADIATION

DO NOT STARE INTO BEAM

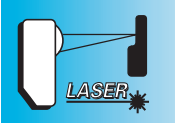
LASERDIODE

Wavelength: 630 - 680 nm
Max. Output: < 1 mW
Complies with EN60825-1:2001

Class 2 LASER Product

OBDM 12 Tw = 16 ... 120 mm

Difference sensors



Tw = 16 ... 120 mm

- analysis of distance differences (min./max.)
- max. difference tolerance adjustable
- measuring time selectable



OBDM 12 Tw = 16 ... 120 mm

general data

type	min./max. analysis
sensing distance Tw	16 ... 120 mm
Teach-in range min.	> 0,3 mm
adjustment	Teach-in
power on indication	LED green
output indicator	LED red
light source	pulsed red laser diode
laser class	2
wave length	675 nm
beam diameter	0,5 ... 0,2

electrical data

response time	< 1 ms
voltage supply range +Vs	12 ... 28 VDC
current consumption max.	80 mA
current consumption typ.	40 mA
output current	< 100 mA
voltage drop Vd	< 2,8 VDC
reverse polarity protection	yes, Vs to GND
short circuit protection	yes

mechanical data

width / diameter	12,4 mm
height / length	37 mm
depth	34,5 mm
type	rectangular
front (optics)	glass
housing material	die-cast zinc
connection types	connector M8, 4 pin

ambient conditions

operating temperature	0 ... +50 °C
protection class	IP 67

connectors

ESG 32AH0200	4 pin	2 m straight
ESW 31AH0200	4 pin	2 m angular

additional cable connectors and field wireable connectors, see accessories

accessories

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mounting bracket	113873

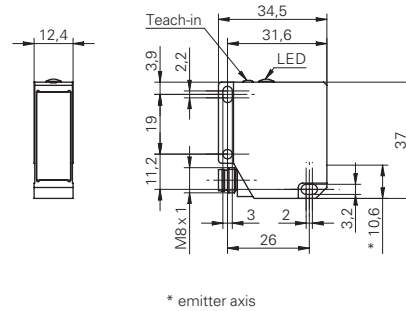
for details, see accessories section

order reference

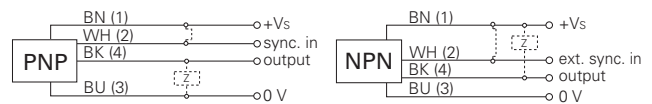
OBDM 12N6920/S35A	NPN
OBDM 12P6920/S35A	PNP

output circuit

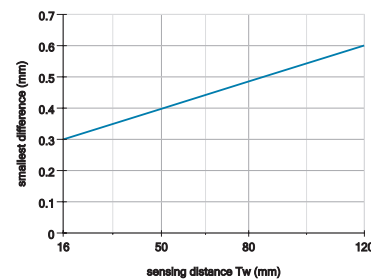
dimension drawing



connection diagrams

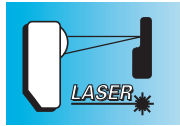


min. detectable difference



laser warning





Tw = 16 ... 120 mm

- distance monitoring within a tolerance band
- nominal distance
- adjustable tolerance band



general data

type	tolerance analysis
sensing distance Tw	16 ... 120 mm
Teach-in range min.	> 0,4 mm
adjustment	Teach-in
power on indication	LED green
output indicator	LED red
light source	pulsed red laser diode
laser class	2
wave length	675 nm
beam diameter	0,5 ... 0,2

electrical data

response time	< 1 ms
voltage supply range +Vs	12 ... 28 VDC
current consumption max.	80 mA
current consumption typ.	40 mA
output current	< 100 mA
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reverse polarity protection	yes, Vs to GND
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mechanical data

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type	rectangular
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connection types	connector M8, 4 pin

ambient conditions

operating temperature	0 ... +50 °C
protection class	IP 67

connectors

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ESW 31AH0200	4 pin	2 m angular

additional cable connectors and field wireable connectors, see accessories

accessories

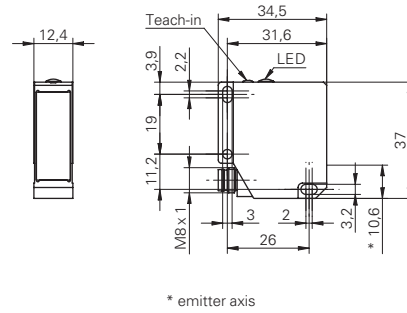
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order reference output circuit

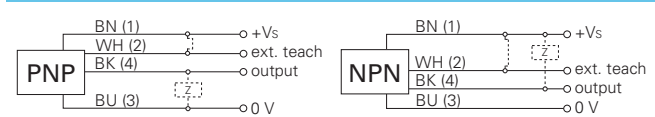
OBDM 12N6930/S35A	NPN
OBDM 12P6930/S35A	PNP

dimension drawing

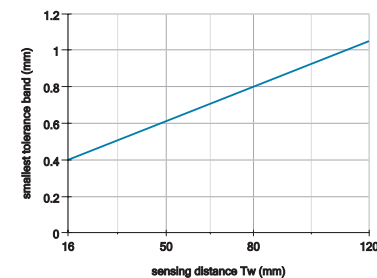


* emitter axis

connection diagrams



min. detectable difference



laser warning

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LASER RADIATION

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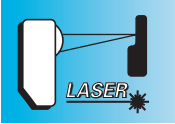
LASERDIODE

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Max. Output: < 1 mW
Complies with EN60825-1:2001

Class 2 LASER Product

OBDM 12 Tw = 16 ... 120 mm

Difference sensors



Tw = 16 ... 120 mm

- range switch (foreground / background suppression)
- adjustable window



OBDM 12 Tw = 16 ... 120 mm

general data

type	window analysis
sensing distance Tw	16 ... 120 mm
Teach-in range min.	> 0,4 mm
adjustment	Teach-in
power on indication	LED green
output indicator	LED red
light source	pulsed red laser diode
laser class	2
wave length	675 nm
beam diameter	0,5 ... 0,2

electrical data

response time	< 1 ms
voltage supply range +Vs	12 ... 28 VDC
current consumption max.	80 mA
current consumption typ.	40 mA
output current	< 100 mA
voltage drop Vd	< 2,8 VDC
reverse polarity protection	yes, Vs to GND
short circuit protection	yes

mechanical data

width / diameter	12,4 mm
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type	rectangular
front (optics)	glass
housing material	die-cast zinc
connection types	connector M8, 4 pin

ambient conditions

operating temperature	0 ... +50 °C
protection class	IP 67

connectors

ESG 32AH0200	4 pin	2 m straight
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additional cable connectors and field wireable connectors, see accessories

accessories

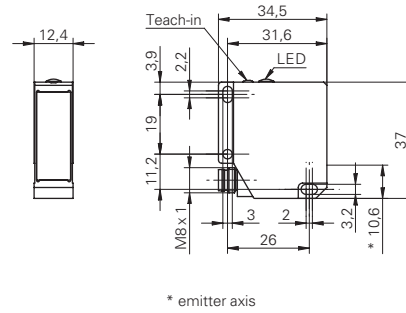
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for details, see accessories section

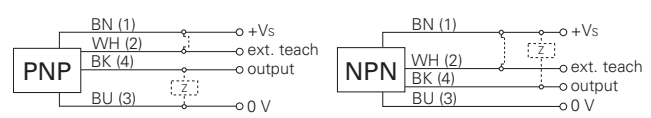
order reference output circuit

OBDM 12N6940/S35A	NPN
OBDM 12P6940/S35A	PNP

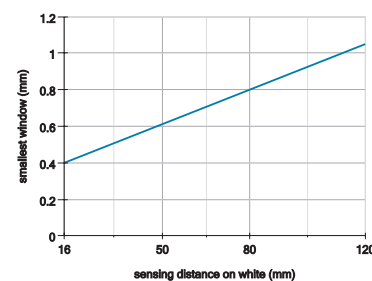
dimension drawing



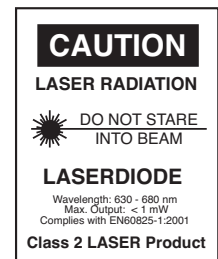
connection diagrams

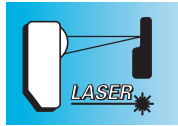


min. detectable difference



laser warning





Tw = 16 ... 120 mm



- comparison of two distances
- max. tolerance adjustable
- specific measuring moment selectable

general data

type	2-point comparison
sensing distance Tw	16 ... 120 mm
Teach-in range min.	> 0,3 mm
adjustment	Teach-in
power on indication	LED green
output indicator	LED red
light source	pulsed red laser diode
laser class	2
wave length	675 nm
beam diameter	0,5 ... 0,2

electrical data

response time	< 1 ms
voltage supply range +Vs	12 ... 28 VDC
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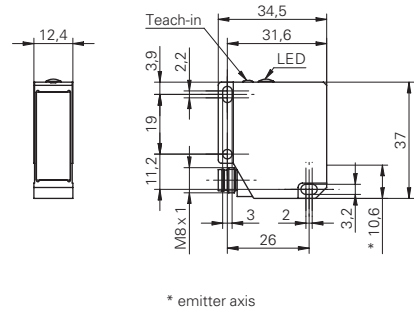
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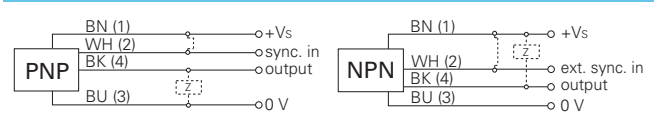
order reference **output circuit**

OBDM 12N6950/S35A	NPN
OBDM 12P6950/S35A	PNP

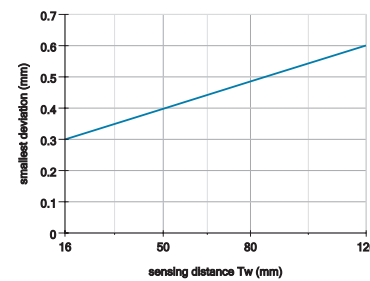
dimension drawing



connection diagrams



min. detectable difference



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