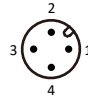


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ARTICLE PROPERTIES

<b>SENSOR TYPE</b>	Laser distance sensor	<b>CONNECTION TYPES</b> (see table)	
<b>SIZE</b>	26.1 x 29 x 20 mm	• 2 m cable	PVC, 0.2 mm <sup>2</sup> , 2 m**
<b>OPERATING DISTANCE</b>	See table	• M12 connector A-coded	
<b>DETECTION MODE</b>	CMOS ranging		

\*\* Other cable lengths are available on request

TECHNICAL DATA

<b>OPERATING VOLTAGE</b>	10 ... 30 V DC	<b>LOAD CURRENT</b>	≤ 150 mA
<b>LIGHT SOURCE</b>	Red laser (655 nm) / class2	<b>HOUSING MATERIAL</b>	Housing: Die-cast zinc Front screen: Glass
<b>REPEATABILITY</b>	2 mm @ 600 mm 5 mm @ 800 mm 10 mm @ 2000 mm	<b>VOLTAGE WITHSTANDING</b>	1000 V/AC, 50/60 Hz, 60 s
<b>LIGHT SPOT SIZE</b>	1.5 mm @ 1200 mm 2 mm @ 1500 mm 3 mm @ 2000 mm	<b>REVERSE POLARITY PROTECTION</b>	Yes
<b>SWITCH OUTPUT</b>	Push-pull	<b>OVERLOAD RESISTANCE</b>	Yes
<b>RESPONSE TIME</b>	30 Hz	<b>SHORT CIRCUIT PROTECTION</b>	Yes
<b>SWITCHING MODE</b>	L.O / D.O	<b>MTTF</b>	147 years
<b>POWER</b>	< 0.8 W		

ENVIRONMENTAL CONDITIONS

<b>OPERATING ENVIRONMENT HUMIDITY</b>	35 % to 85 % RH (no condensation)	<b>INSULATION IMPEDENCE</b>	≥ 50 MΩ (500 V DC)
<b>PROTECTION CLASS</b>	IP67	<b>SHOCK RESISTANCE (EN 60068-2-27)</b>	500 m/s <sup>2</sup> (50 G) 3 times X, Y, Z respectively
<b>STORAGE TEMPERATURE</b>	-20 ... +60 °C	<b>IMPACT RESISTANCE (EN 60068-2-6)</b>	Complex amplitude 1.5 mm 10 ... 50 Hz (2hr X, Y, Z respectively)
<b>AMBIENT TEMPERATURE</b>	-10 ... +50 °C	<b>ANTI-AMBIENT LIGHT</b>	≤ 3000 Lux

STANDARDS AND DIRECTIVES

<b>EMC DIRECTIVE 2014/30/EU</b>	EN IEC 60947-5-2	<b>ROHS DIRECTIVE 2011/65/EU</b>	EN IEC 63000
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APPROVALS



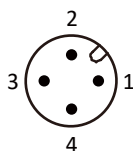
OSM42 SERIES

**DETECTION MODE CMOS RANGING**

Article number	Operating distance	Light source	Output (wiring diagram)	Resoluton	Connection	Dimensions
OSM42-KL1200C2B6	150 ... 1200 mm	Red laser	2 × push-pull (WD1)	1 mm	2 m cable	see Fig. 1
OSM42-KL1500C2B6	150 ... 1500 mm	Red laser	2 × push-pull (WD1)	1 mm	2 m cable	see Fig. 1
OSM42-KL2000C2B6	150 ... 2000 mm	Red laser	2 × push-pull (WD1)	1 mm	2 m cable	see Fig. 1
OSM42-KL1200C2B6-0.3-Q12	150 ... 1200 mm	Red laser	2 × push-pull (WD1)	1 mm	0.3 m cable + M12 connector	see Fig. 2
OSM42-KL1500C2B6-0.3-Q12	150 ... 1500 mm	Red laser	2 × push-pull (WD1)	1 mm	0.3 m cable + M12 connector	see Fig. 2
OSM42-KL2000C2B6-0.3-Q12	150 ... 2000 mm	Red laser	2 × push-pull (WD1)	1 mm	0.3 m cable + M12 connector	see Fig. 2

**WIRING DIAGRAMS**

**WD1**

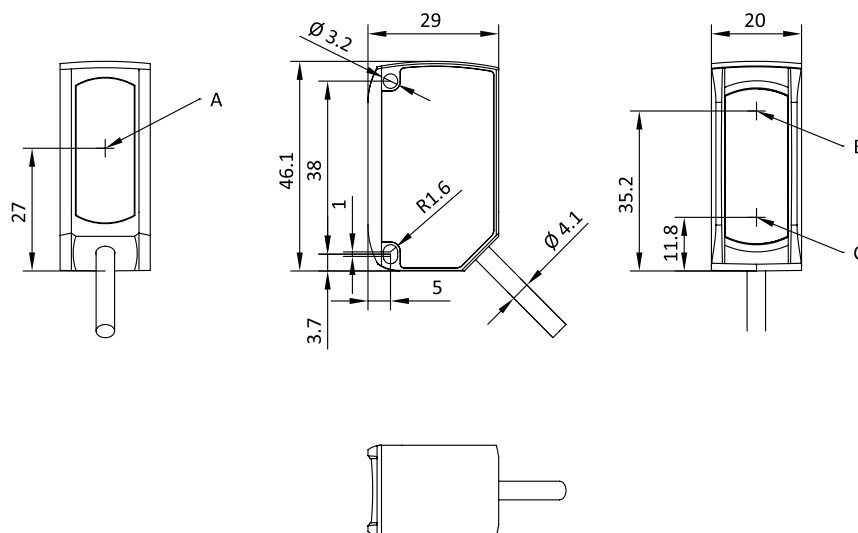


Number	Colour	Function
1	BN	Power +
2	GY	NPN / PNP 2
3	BU	Power -
4	BK	NPN / PNP 1

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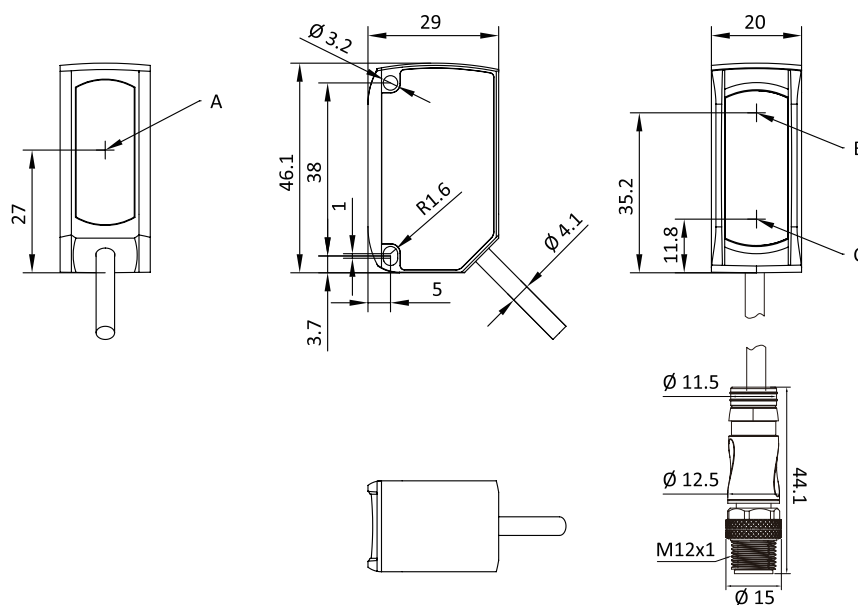
DIMENSIONS

Fig. 1 Cable



A Teach button & indicator  
 B Transmitter  
 C Receiver

Fig. 2 Connector



A Teach button & indicator  
 B Transmitter  
 C Receiver

## OSM42 SERIES

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