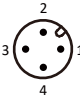


OSM41 SERIES

ARTICLE PROPERTIES

<b>SENSOR TYPE</b>	Laser distance sensor	<b>CONNECTION TYPES</b> (see table)
<b>SIZE</b>	45.7 x 26.5 x 20 mm	<ul style="list-style-type: none"> <li>• 2 m cable      PVC, 0.2 mm<sup>2</sup>, 2 m**</li> <li>• M12 connector A-coded</li> </ul>
<b>OPERATING DISTANCE</b>	See table	
<b>DETECTION MODE</b>	TOF 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 (680nm) / class 1	<b>HOUSING MATERIAL</b>	Housing: Die-cast zinc Front screen: Glass
<b>REPEATABILITY</b>	Tabula rasa 10 mm(dis < 5 m, 90% reflection) 30 mm(dis < 10 m, 90% reflection) Blackboard 30 mm (dis < 5 m, 6% reflection) 50 mm (dis < 10 m, 6% reflection)	<b>VOLTAGE WITHSTANDING</b>	650 V/AC, 50/60 Hz, 60 s
<b>LIGHT SPOT SIZE</b>	10 mm @ 2 m 20 mm @ 4 m 50 mm @ 10 m	<b>REVERSE POLARITY PROTECTION</b>	Yes
<b>SWITCH OUTPUT</b>	PNP / NPN	<b>OVERLOAD RESISTANCE</b>	Yes
<b>ANALOG OUTPUT</b>	4 ... 20 mA, 0 ... 5 V or 0 ... 10 V	<b>SHORT CIRCUIT PROTECTION</b>	Yes
<b>COMMUNICATION TYPE</b>	RS-485	<b>MTTF</b>	
<b>RESPONSE FREQUENCY</b>	10 Hz / 25 Hz / 50 Hz / 100 Hz	<ul style="list-style-type: none"> <li>• NPN / PNP + analog      68 years</li> <li>• NPN / PNP + RS-485      80 years</li> <li>• 2 x NPN / PNP      78 years</li> </ul>	
<b>SWITCHING MODE</b>	L.O / D.O		
<b>POWER</b>	< 1 W		

OSM41 SERIES

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>	≤ 8000 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



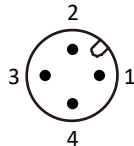
DETECTION MODE CMOS RANGING

Article number	Operating distance	Light source	Output (wiring diagram)	Resoluton	Connection	Dimensions
OSM41-KL10CBLIU6	0.1 ... 9999 mm	Red laser	NPN / PNP + analog V/mA (WD1)	1 mm	2 m cable	see Fig. 1
OSM41-KL10CB6/485	0.1 ... 9999 mm	Red laser	NPN / PNP + RS-485 (WD2)	1 mm	2 m cable	see Fig. 1
OSM41-KL10C2B6	0.1 ... 9999 mm	Red laser	2 x NPN / PNP (WD3)	1 mm	2 m cable	see Fig. 1
OSM41-KL10CBLIU6-0.3-Q12	0.1 ... 9999 mm	Red laser	NPN / PNP + analog V/mA (WD1)	1 mm	0.3 m cable + M12 connector	see Fig. 2
OSM41-KL10C2B6-0.3-Q12	0.1 ... 9999 mm	Red laser	2 x NPN / PNP (WD3)	1 mm	0.3 m cable + M12 connector	see Fig. 2

OSM41 SERIES

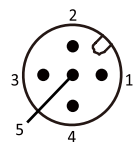
WIRING DIAGRAMS

WD1



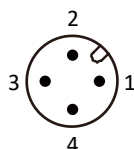
Number	Colour	Function
1	BN	Power +
2	GY	Analogue output
3	BU	Power -
4	BK	NPN / PNP

WD2



Number	Colour	Function
1	BN	Power +
2	GY	485B
3	BU	Power -
4	BK	NPN / PNP
5	PK	485A

WD3



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

OSM41 SERIES

DIMENSIONS

Fig. 1 Cable

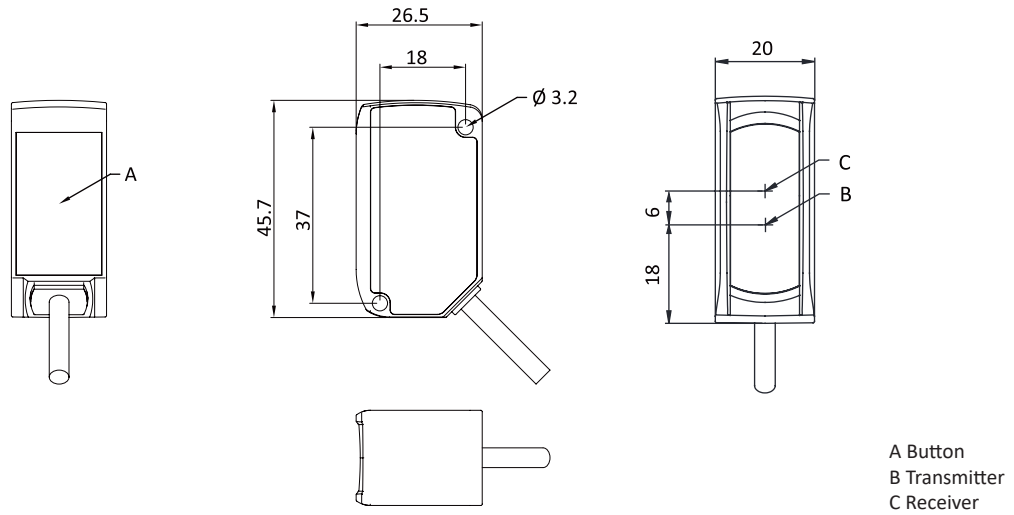
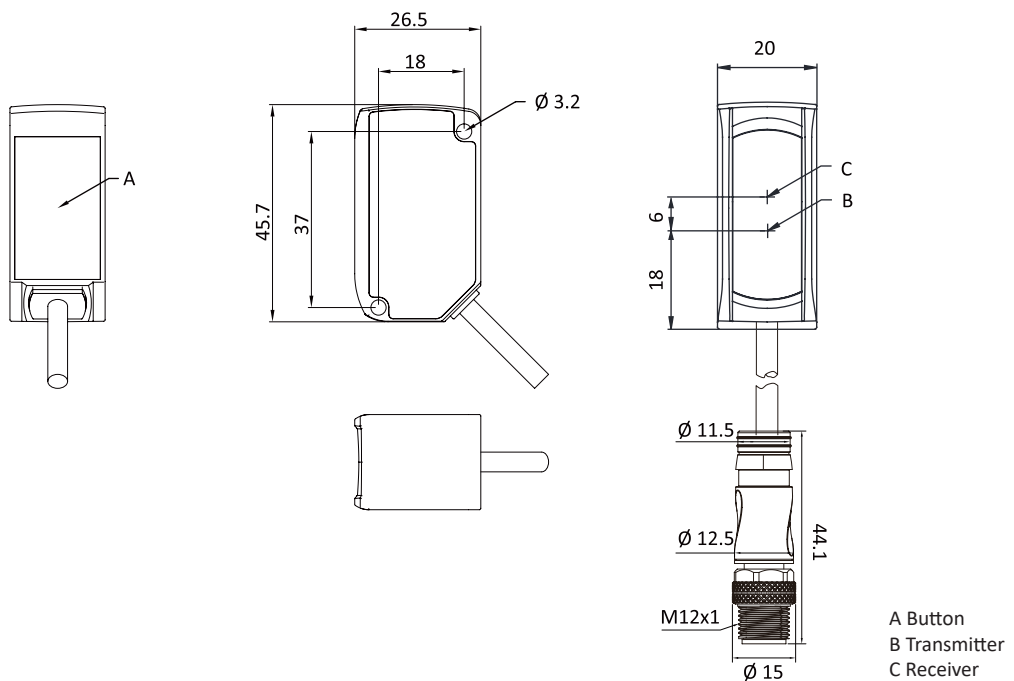


Fig. 2 Connector



## OSM41 SERIES

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