
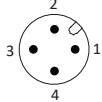


OSQ18-RPL SERIES

ARTICLE PROPERTIES

<b>SENSOR TYPE</b>	Photoelectric sensor	<b>CONNECTION TYPES</b> (see table)	
<b>SIZE</b>	See dimensions	• Cable	TPU, 0.15 mm <sup>2</sup> , 2 m**
<b>OPERATING DISTANCE</b>	See table	• M8 connector, A-coded	
<b>DETECTION MODE</b>	Laser polarized retro-reflective	• M12 connector, A-coded	

\*\* Other cable lengths are available on request

TECHNICAL DATA

<b>OPERATING VOLTAGE</b>	10 ... 30 V DC	<b>HOUSING MATERIAL</b>	PBT + ABS
<b>RIPPLE VOLTAGE</b>	±10 % of U <sub>B</sub>	<b>FRONT SCREEN MATERIAL</b>	Glass
<b>LIGHT SOURCE</b>	Laser	<b>VOLTAGE WITHSTANDING</b>	650 V/AC, 50/60 Hz, 60 s
<b>LIGHT SPOT SIZE</b>	∅ 5 mm (5 m)	<b>REVERSE POLARITY PROTECTION</b>	Yes
<b>OUTPUT</b>	PNP / NPN	<b>OVERLOAD RESISTANCE</b>	Yes
<b>FREQUENCY</b>	See table	<b>SHORT CIRCUIT PROTECTION</b>	Yes
<b>CURRENT CONSUMPTION</b>	≤ 15 mA	<b>MTTF</b>	219 years
<b>LOAD CURRENT</b>	≤ 200 mA		

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>	-25 ... +55 °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>	-40 ... +70 °C	<b>ANTI-AMBIENT LIGHT</b>	≤ 10000 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

APPROVALS



OSQ18-RPL SERIES

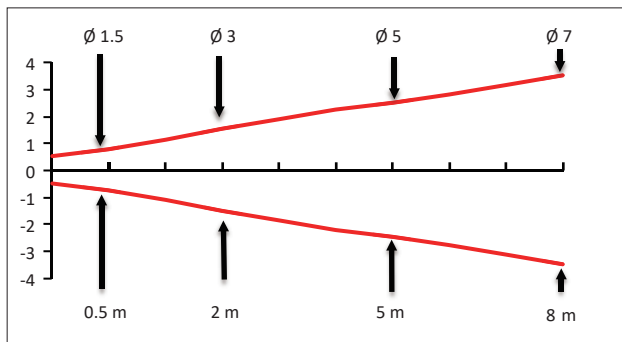
**DETECTION MODE RETRO-REFLECTIVE**

Article number	Operating distance	Light source	Frequency	Output (wiring diagram)	Switching mode	Connection	Dimensions
OSQ18-RPLVP6 *M <sup>1)</sup>	0.1 ... 8 m	Laser	800 Hz	PNP (WD1)	L.O + D.O	cable	see Fig. 1
OSQ18-RPLVN6 *M <sup>1)</sup>	0.1 ... 8 m	Laser	800 Hz	NPN (WD2)	L.O + D.O	cable	see Fig. 1
OSQ18-RPLVP6-0.3-Q8	0.1 ... 8 m	Laser	800 Hz	PNP (WD3)	L.O + D.O	0.3 m cable + M8 connector	see Fig. 2
OSQ18-RPLVN6-0.3-Q8	0.1 ... 8 m	Laser	800 Hz	NPN (WD4)	L.O + D.O	0.3 m cable + M8 connector	see Fig. 2
OSQ18-RPLVP6-0.3-Q12	0.1 ... 8 m	Laser	800 Hz	PNP (WD5)	L.O + D.O	0.3 m cable + M12 connector	see Fig. 3
OSQ18-RPLVN6-0.3-Q12	0.1 ... 8 m	Laser	800 Hz	NPN (WD6)	L.O + D.O	0.3 m cable + M12 connector	see Fig. 3

Note 1): \* M refers to the cable length in meters. If there is no \* M in the model, the default cable length is 2 meters.

**BEAM PATTERN**

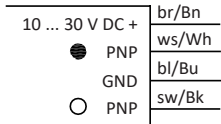
**OSQ18-RPL (mm)**



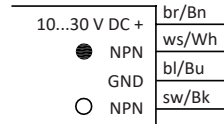
OSQ18-RPL SERIES

WIRING DIAGRAMS (○= LIGHT ON ● = DARK ON )

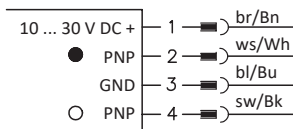
**WD1** PNP / Light on | Dark on



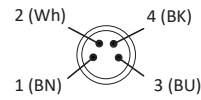
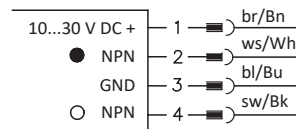
**WD2** NPN / Light on | Dark on



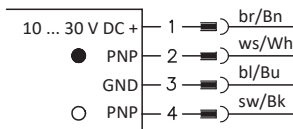
**WD3** PNP / Light on | Dark on



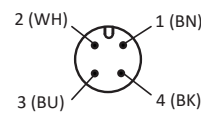
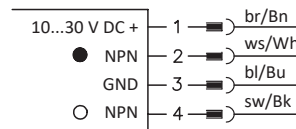
**WD4** NPN / Light on | Dark on



**WD5** PNP / Light on | Dark on

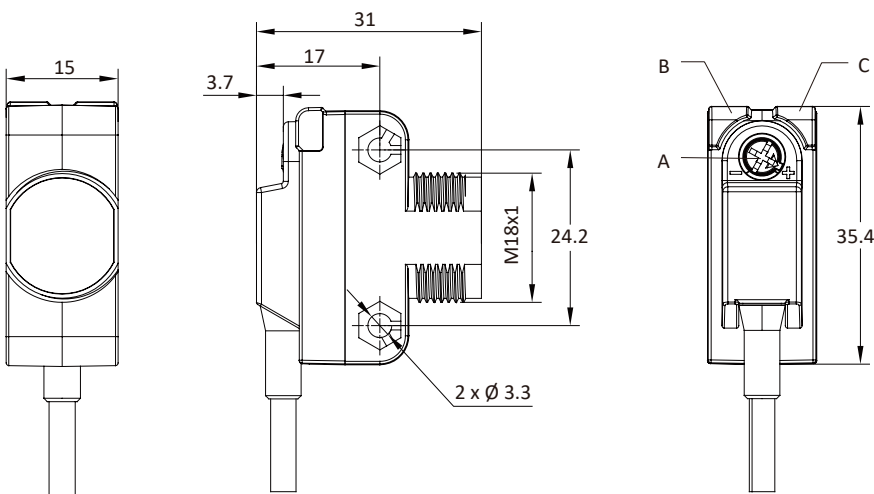


**WD6** NPN / Light on | Dark on



DIMENSIONS (mm)

**Fig. 1**

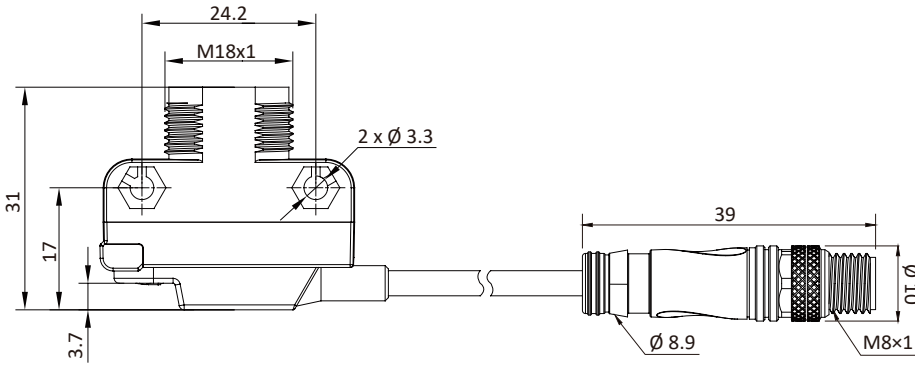


INDICATORS		
A	Potentiometer	
B	Output indicator	Yellow
C	Power indicator	Green

OSQ18-RPL SERIES

DIMENSIONS (mm)

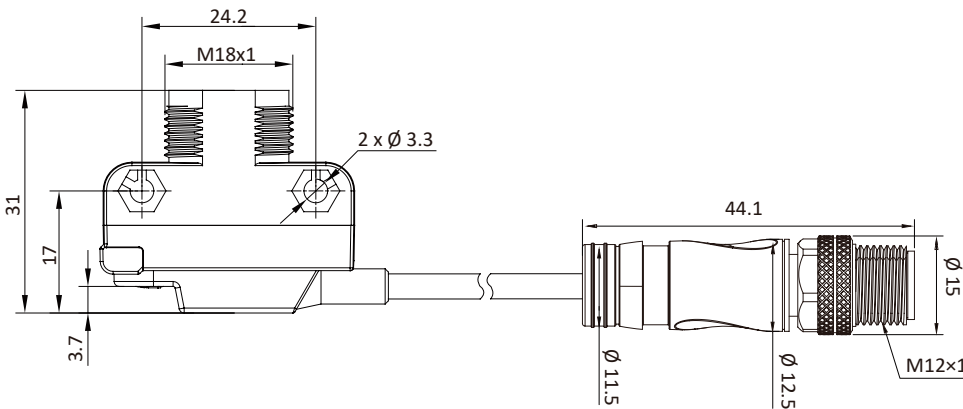
Fig. 2 M8 Connector



INDICATORS

A	Potentiometer	
B	Output indicator	Yellow
C	Power indicator	Green

Fig. 3 M12 Connector

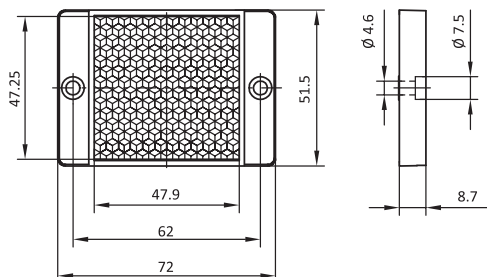


INDICATORS

A	Potentiometer	
B	Output indicator	Yellow
C	Power indicator	Green

REFLECTOR (OPTIONAL)

RB50x50-1



## OSQ18-RPL SERIES

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