



OS10U-KL300 SERIES

ARTICLE PROPERTIES

SENSOR TYPE	Photoelectric sensor	CONNECTION TYPES (see table)	
SIZE	See dimensions	• Cable	PVC, 0.14 mm ² , 2 m**
OPERATING DISTANCE	See table	• M8 connector 4-pin, A-coded	
		• M12 connector, A-coded	

** Other cable lengths are available on request

TECHNICAL DATA

OPERATING VOLTAGE	10 ... 30 V DC	MEASUREMENT ACCURACY	30 ... 100 mm (Repeatability 2 mm) 100 ... 300 mm (Repeatability 5 mm)
LASER CLASS	Red laser (655 nm) / class 1	HOUSING MATERIAL	PC + PBT
LIGHT SPOT SIZE	1.2*1 mm @ 100 mm 0.8*1 mm @ 250 mm 1*1.2 mm @ 300 mm	VOLTAGE WITHSTANDING	650 V/AC, 50/60 Hz, 60 s
OUTPUT	Push-Pull, RS485, IO-Link	REVERSE POLARITY PROTECTION	Yes
DISTANCE ADJUSTMENT	Teach button	OVERLOAD RESISTANCE	Yes
POWER	0.5 W	SHORT CIRCUIT PROTECTION	Yes
LOAD CURRENT	≤ 100 mA	MTTF	35 years

ENVIRONMENTAL CONDITIONS

OPERATING ENVIRONMENT HUMIDITY	35 % to 85 % RH (no condensation)	INSULATION IMPEDENCE	≥ 20 MΩ (500 V DC)
PROTECTION CLASS	IP67	SHOCK RESISTANCE (EN 60068-2-27)	500 m/s ² (50 G) 3 times X, Y, Z respectively
STORAGE TEMPERATURE	-25 ... +75 °C	IMPACT RESISTANCE (EN 60068-2-6)	Complex amplitude 1.5 mm 10 ... 50 Hz (2hr X, Y, Z respectively)
AMBIENT TEMPERATURE	-10 ... +50 °C	ANTI-AMBIENT LIGHT	≤ 5000 Lux

STANDARDS AND DIRECTIVES

EMC DIRECTIVE 2014/30/EU	EN IEC 60947-5-2	ROHS DIRECTIVE 2011/65/EU	EN IEC 63000
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OS10U-KL300 SERIES

APPROVALS



DETECTION MODE CABLE

Article number	Operating distance	Light source	Frequency	Output (wiring diagram)	Resolution	Connection	Dimensions
OS10U-KL300CB6	30 ... 300 mm	Red laser	500 Hz	Push-pull (WD1)	1 mm	2 m cable	see Fig. 1
OS10U-KL300/485	30 ... 300 mm	Red laser	— —	RS485 (WD2)	1 mm	2 m cable	see Fig. 1
OS10U-KL300/IO	30 ... 300 mm	Red laser	— —	IO-Link (WD3)	1 mm	2 m cable	see Fig. 1

DETECTION MODE M8 CONNECTOR

Article number	Operating distance	Light source	Frequency	Output (wiring diagram)	Resolution	Connection	Dimensions
OS10U-KL300CB6-0.3-Q8	30 ... 300 mm	Red laser	500 Hz	Push-pull (WD4)	1 mm	0.3 m cable + M8, 4-pin	see Fig. 2
OS10U-KL300/485-0.3-Q8	30 ... 300 mm	Red laser	— —	RS485 (WD5)	1 mm	0.3 m cable + M8, 4-pin	see Fig. 2
OS10U-KL300/IO-0.3-Q8	30 ... 300 mm	Red laser	— —	IO-Link (WD6)	1 mm	0.3 m cable + M8, 4-pin	see Fig. 2

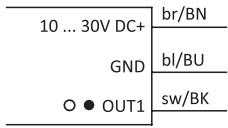
DETECTION MODE M12 CONNECTOR

Article number	Operating distance	Light source	Frequency	Output (wiring diagram)	Resolution	Connection	Dimensions
OS10U-KL300CB6-0.3-Q12	30 ... 300 mm	Red laser	500 Hz	Push-pull (WD4)	1 mm	0.3 m cable + M12, 4-pin	see Fig. 3
OS10U-KL300/485-0.3-Q12	30 ... 300 mm	Red laser	— —	RS485 (WD5)	1 mm	0.3 m cable + M12, 4-pin	see Fig. 3
OS10U-KL300/IO-0.3-Q12	30 ... 300 mm	Red laser	— —	IO-Link (WD6)	1 mm	0.3 m cable + M12, 4-pin	see Fig. 3

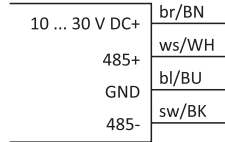
OS10U-KL300 SERIES

WIRING DIAGRAMS

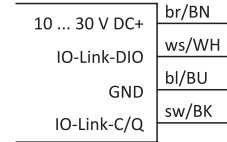
WD1 Push-pull



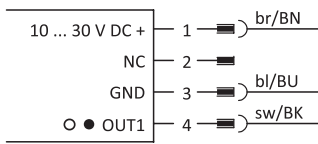
WD2 RS485



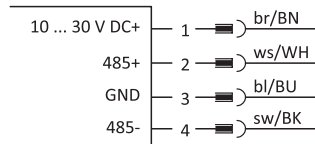
WD3 IO-Link



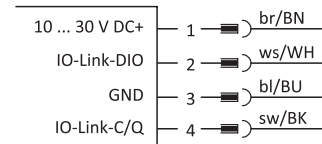
WD4 Push-pull



WD5 RS485

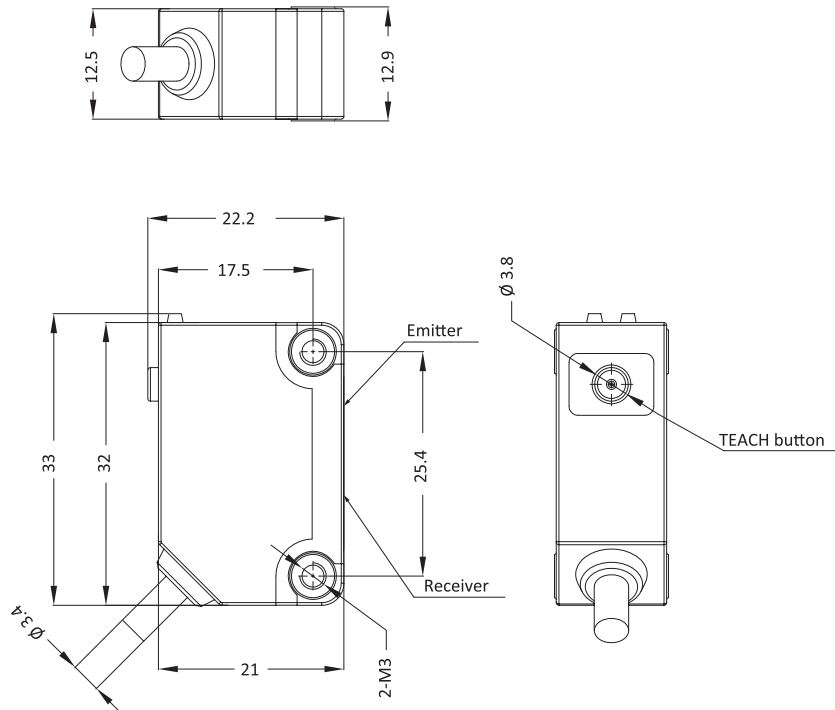


WD6 IO-Link



DIMENSIONS (mm)

Fig. 1 2 m cable



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DIMENSIONS (mm)

Fig. 2 0.3 m cable + M8 connector

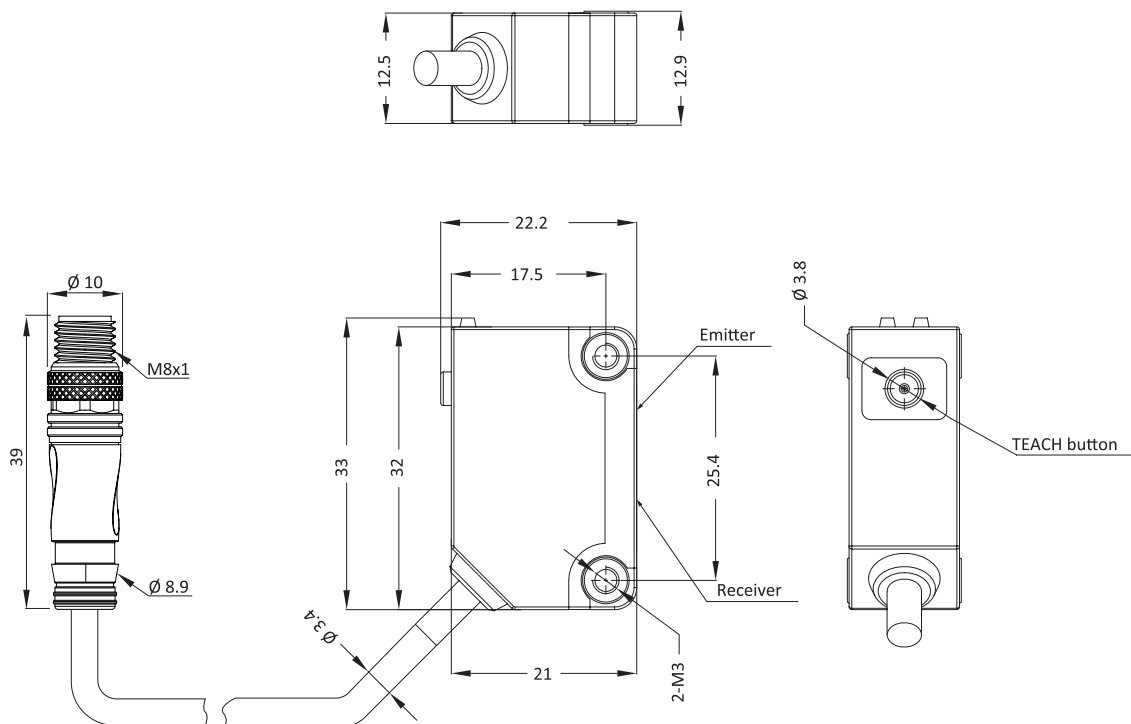
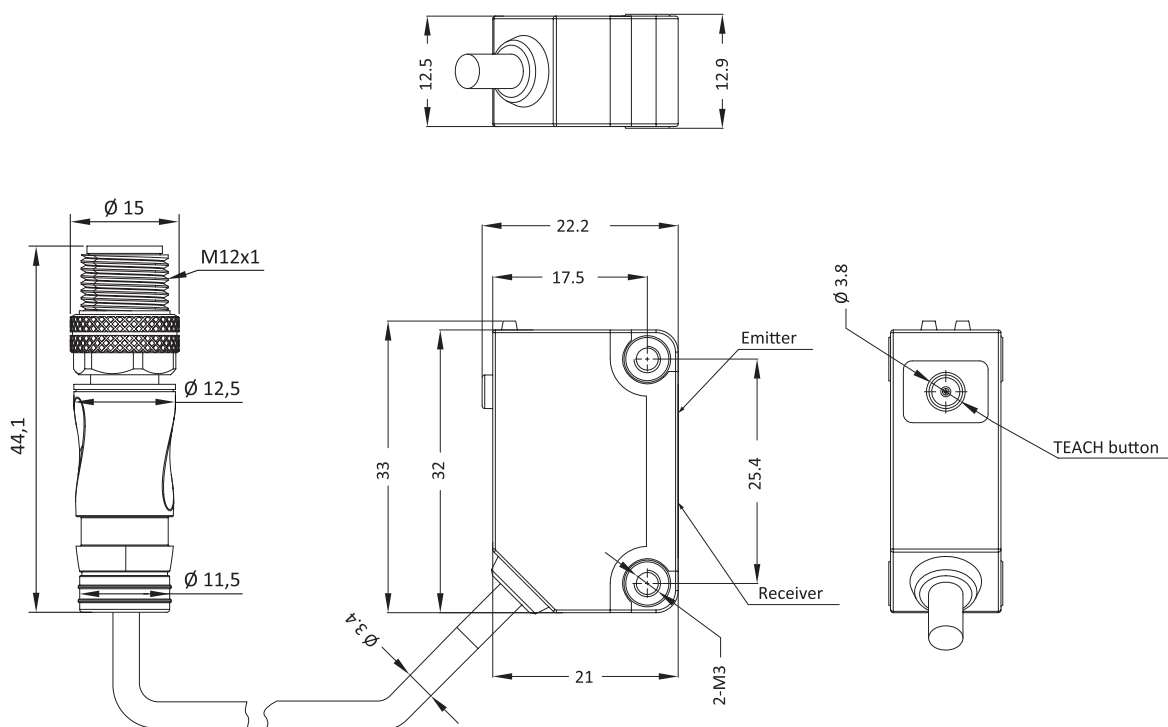


Fig. 2 0.3 m cable + M12 connector



OS10U-KL300 SERIES

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