


OS10S-TOF SERIES

ARTICLE PROPERTIES

<b>SENSOR TYPE</b>	Photoelectric sensor	<b>CONNECTION TYPES</b> (see table)
<b>SIZE</b>	See dimensions	<ul style="list-style-type: none"> <li>M8 connector</li> </ul>
<b>OPERATING DISTANCE</b>	See table	3-pin, A-coded 
<b>DETECTION MODE</b>	BGS TOF	

\*\* Other cable lengths are available on request

TECHNICAL DATA

<b>OPERATING VOLTAGE</b>	10 ... 30 V DC / 5 V DC (OS10S-K4000/UR)	<b>LOAD CURRENT</b>	≤ 100 mA
<b>RIPPLE VOLTAGE</b>	≤ 10 %	<b>HOUSING MATERIAL</b>	PC + PBT
<b>LASER CLASS</b>	Infrared laser (940 nm) / class 1	<b>VOLTAGE WITHSTANDING</b>	1000 V/AC, 50/60 Hz, 60 s
<b>LIGHT SPOT SIZE</b>	See beam pattern	<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>	24 V 25 mA	<b>MTTF</b>	141 years

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>	-40 ... +70 °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>	-20 ... +60 °C	<b>ANTI-AMBIENT LIGHT</b>	≤ 5000 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



OS10S-TOF SERIES

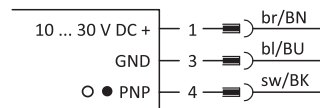
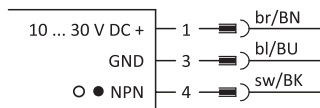
DETECTION MODE

Article number	Operating distance	Light source	Frequency	Output (wiring diagram)	Switching mode	Connection	Dimensions
OS10S-AK1000CN6-0.3-Q8.3	50 ... 1000 mm	Infrared laser + Red light indication	30 Hz	NPN (WD1)	L.O / D.O	0.3 m cable + M8, 3-pin	see Fig. 1
OS10S-AK1000CP6-0.3-Q8.3	50 ... 1000 mm	Infrared laser + Red light indication	30 Hz	PNP (WD2)	L.O / D.O	0.3 m cable + M8, 3-pin	see Fig. 1
OS10S-AK1500CN6-0.3-Q8.3	50 ... 1500 mm	Infrared laser + Red light indication	30 Hz	NPN (WD1)	L.O / D.O	0.3 m cable + M8, 3-pin	see Fig. 1
OS10S-AK1500CP6-0.3-Q8.3	50 ... 1500 mm	Infrared laser + Red light indication	30 Hz	PNP (WD2)	L.O / D.O	0.3 m cable + M8, 3-pin	see Fig. 1
OS10S-AK4000CN6-0.3-Q8.3	50 ... 4000 mm	Infrared laser + Red light indication	30 Hz	NPN (WD1)	L.O / D.O	0.3 m cable + M8, 3-pin	see Fig. 1
OS10S-AK4000CP6-0.3-Q8.3	50 ... 4000 mm	Infrared laser + Red light indication	30 Hz	PNP (WD2)	L.O / D.O	0.3 m cable + M8, 3-pin	see Fig. 1

WIRING DIAGRAMS

**WD1** NPN / Light on | Dark on

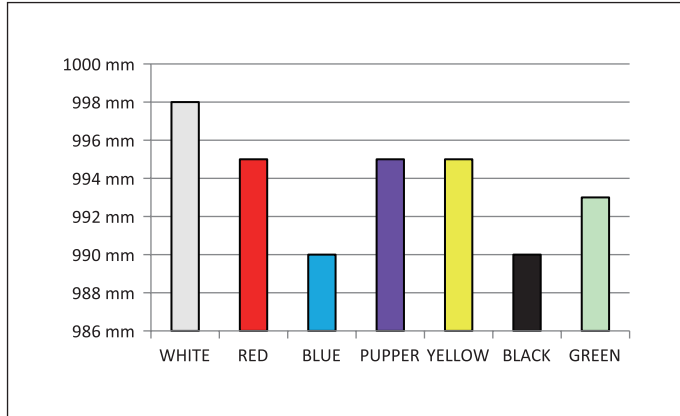
**WD2** PNP / Light on | Dark on



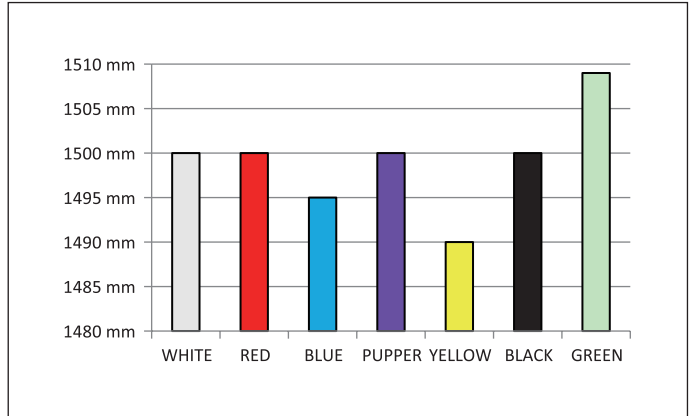
OS10S-TOF SERIES

ATTENUATION FIGURE

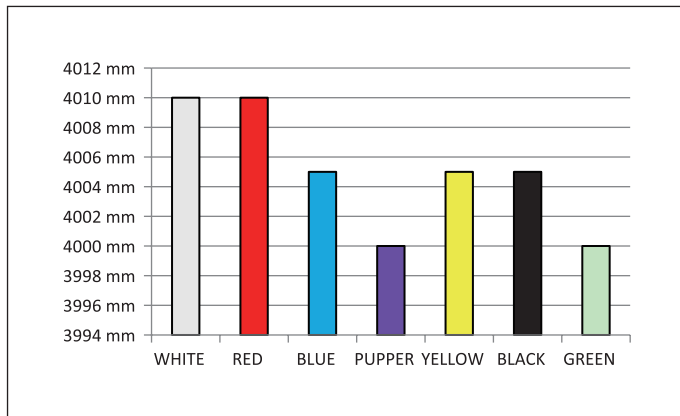
OS10S-AK1000



OS10S-AK1500

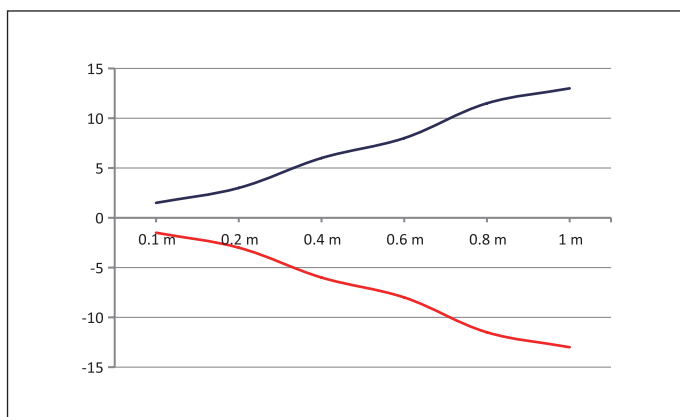


OS10S-AK4000

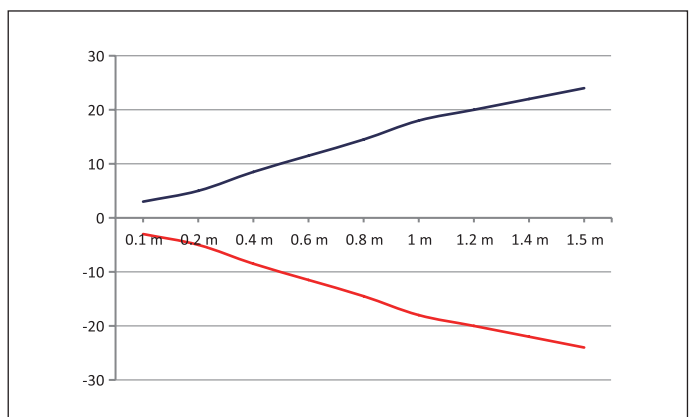


TRANSLATION CHARACTERISTIC CURVE

OS10S-AK1000 (mm)



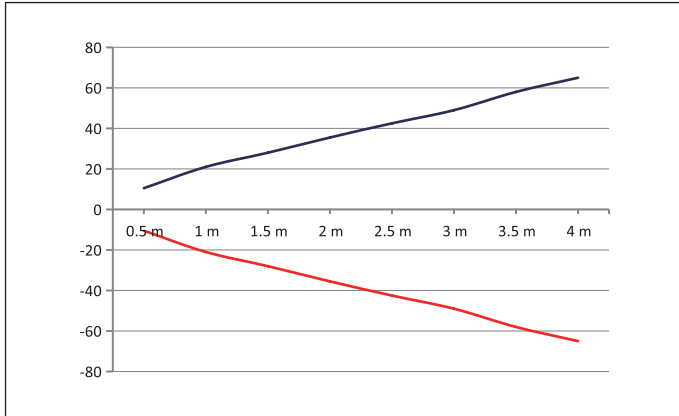
OS10S-AK1500 (mm)



OS10S-TOF SERIES

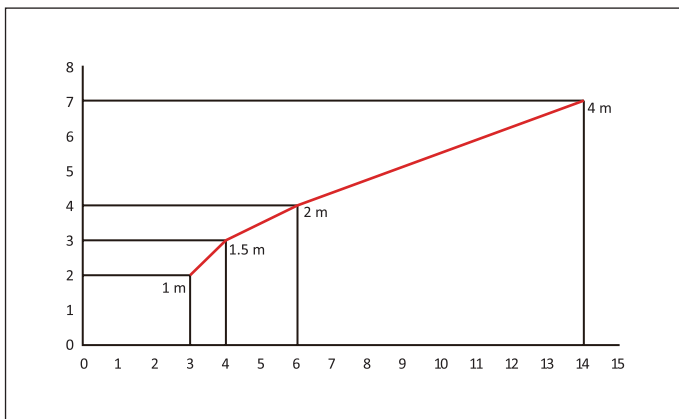
TRANSLATION CHARACTERISTIC CURVE

OS10S-AK4000 (mm)



BEAM PATTERN

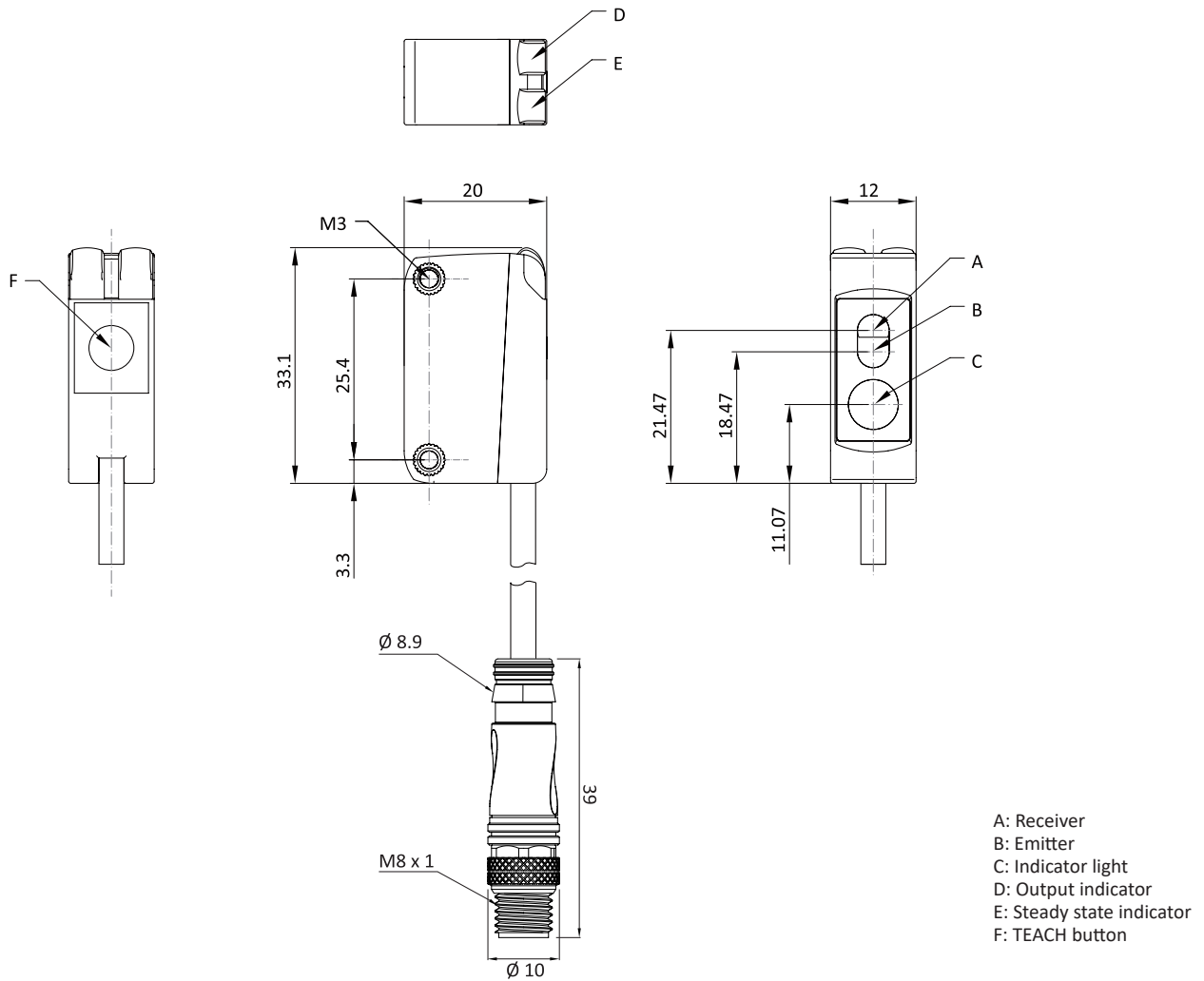
OS10S-AK1000/1500/4000 (cm)



OS10S-TOF SERIES

DIMENSIONS (mm)

Fig. 1



## OS10S-TOF SERIES

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