



## Description

Mini-rectangular photoelectric sensors OS10S series, with high performance and 25.4 mm standard mounting hole distance, product series include 1 m, 1.5 m, 4 m BGS. With optional red beam. They are suitable for logistics transportation, new energy and other application fields.

## Features

- LO or DO adjustable
- 1.5 m, 4 m BGS adjustable with teach button
- IP67

## Type

Detection mode	Type	Distance	Light source	Frequency	Output	Switching mode	Connection	Wiring
BGS TOF	OS10S-AK1000CN6	50 ... 1000 mm	Infrared laser + Red light indication	30 Hz	NPN	Light on / Dark on	2 m cable	Fig. 1
	OS10S-AK1000CP6	50 ... 1000 mm	Infrared laser + Red light indication	30 Hz	PNP	Light on / Dark on	2 m cable	Fig. 2
	OS10S-AK1000CN6Q8	50 ... 1000 mm	Infrared laser + Red light indication	30 Hz	NPN	Light on / Dark on	M8 connector, 4-pin	Fig. 5
	OS10S-AK1000CP6Q8	50 ... 1000 mm	Infrared laser + Red light indication	30 Hz	PNP	Light on / Dark on	M8 connector, 4-pin	Fig. 6
	OS10S-AK1000CN6Q8.3	50 ... 1000 mm	Infrared laser + Red light indication	30 Hz	NPN	Light on / Dark on	M8 connector, 3-pin	Fig. 7
	OS10S-AK1000CP6Q8.3	50 ... 1000 mm	Infrared laser + Red light indication	30 Hz	PNP	Light on / Dark on	M8 connector, 3-pin	Fig. 8
	OS10S-AK1500CN6	50 ... 1500 mm	Infrared laser + Red light indication	30 Hz	NPN	Light on / Dark on	2 m cable	Fig. 1
	OS10S-AK1500CP6	50 ... 1500 mm	Infrared laser + Red light indication	30 Hz	PNP	Light on / Dark on	2 m cable	Fig. 2
	OS10S-AK1500CN6Q8	50 ... 1500 mm	Infrared laser + Red light indication	30 Hz	NPN	Light on / Dark on	M8 connector, 4-pin	Fig. 5
	OS10S-AK1500CP6Q8	50 ... 1500 mm	Infrared laser + Red light indication	30 Hz	PNP	Light on / Dark on	M8 connector, 4-pin	Fig. 6
	OS10S-AK1500CN6Q8.3	50 ... 1500 mm	Infrared laser + Red light indication	30 Hz	NPN	Light on / Dark on	M8 connector, 3-pin	Fig. 7
	OS10S-AK1500CP6Q8.3	50 ... 1500 mm	Infrared laser + Red light indication	30 Hz	PNP	Light on / Dark on	M8 connector, 3-pin	Fig. 8
	OS10S-AK4000CN6	50 ... 4000 mm	Infrared laser + Red light indication	30 Hz	NPN	Light on / Dark on	2 m cable	Fig. 1
	OS10S-AK4000CP6	50 ... 4000 mm	Infrared laser + Red light indication	30 Hz	PNP	Light on / Dark on	2 m cable	Fig. 2
	OS10S-AK4000CN6Q8	50 ... 4000 mm	Infrared laser + Red light indication	30 Hz	NPN	Light on / Dark on	M8 connector, 4-pin	Fig. 5
	OS10S-AK4000CP6Q8	50 ... 4000 mm	Infrared laser + Red light indication	30 Hz	PNP	Light on / Dark on	M8 connector, 4-pin	Fig. 6
	OS10S-AK4000CN6Q8.3	50 ... 4000 mm	Infrared laser + Red light indication	30 Hz	NPN	Light on / Dark on	M8 connector, 3-pin	Fig. 7
	OS10S-AK4000CP6Q8.3	50 ... 4000 mm	Infrared laser + Red light indication	30 Hz	PNP	Light on / Dark on	M8 connector, 3-pin	Fig. 8

\* OS10S... empfohlene Typen

# Photoelectric Sensors - Rectangular OS10S (TOF)



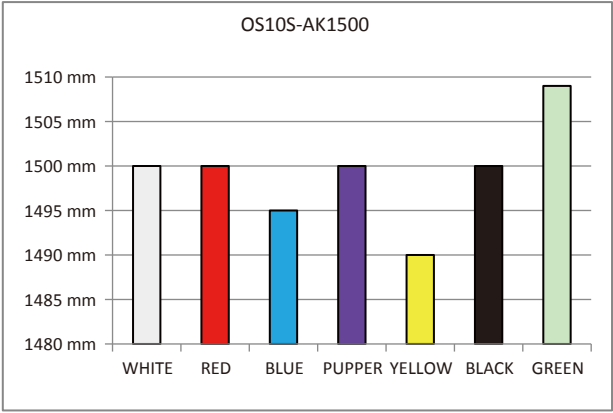
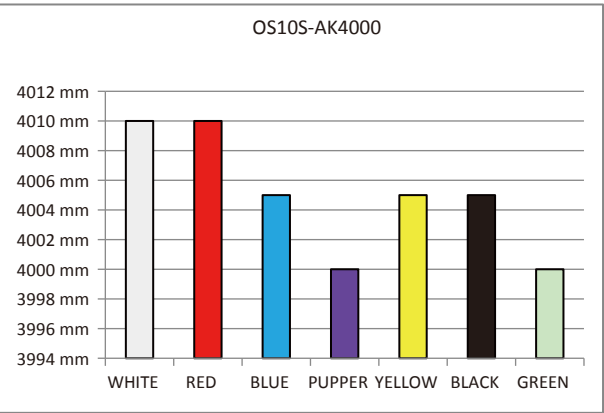
## Type

Detection mode	Type	Distance	Light source	Repeatability	Output	Measurement accuracy	Connection	Wiring
BGS TOF	OS10S-K4000/485	50 ... 4000 mm	Infrared laser	10 mm	RS 485	30 mm	2 m cable	Fig. 3
	OS10S-K4000/485/R-0.2-Q8	50 ... 4000 mm	Infrared laser + Red light indication	10 mm	RS 485	30 mm	M8 Pigtail	Fig. 9
	OS10S-K4000/UR	50 ... 4000 mm	Infrared laser	10 mm	UR	30 mm	2 m cable	Fig. 4

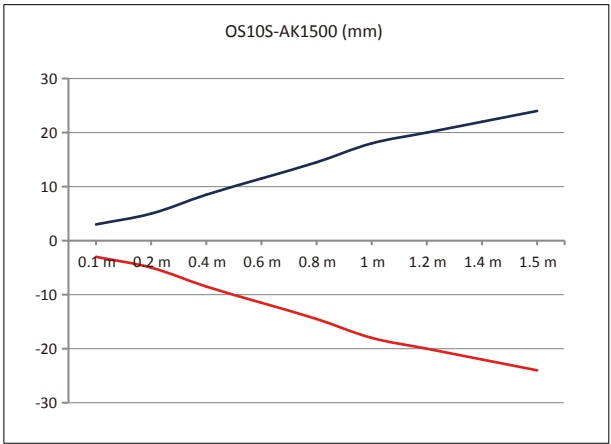
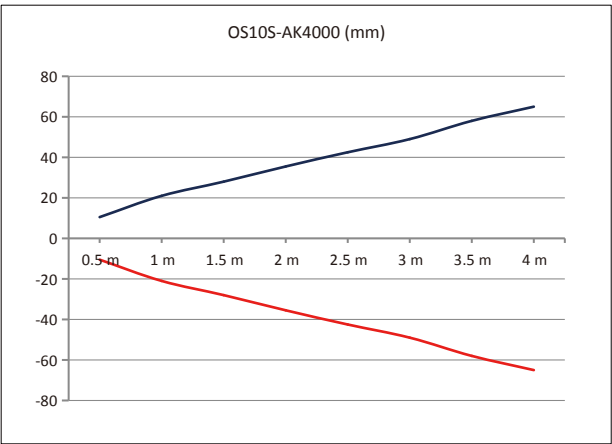
## Technical Data

Operating voltage	10 ... 30 V DC / 5 V DC (OS10S-K4000/UR)
Ripple voltage	≤ 10%
Light source	Infrared laser (940 nm) / class 1
Output type	PNP / NPN
Switch mode	LO / DO
No-load current	24 V 25 mA
Load current	≤ 100 mA
Housing	PC + PBT
Connection	2 m cable / M8 3-pin or 4-pin connector
Ambient temperature	-20 ... +60 °C
Storage temperature	-40 ... +70 °C
Operating environment humidity	35% to 85%RH (no condensation)
Voltage withstanding	1000 V/AC 50/60 Hz 60 s
Insulation impedance	≥ 50 MΩ (500 V DC)
Shock resistance	Complex amplitude 1.5 mm 10 ... 50 Hz (2 hr X, Y, Z respectively)
Impact resistance	500 m/s <sup>2</sup> (50 G) 3 times X, Y, Z respectively
Protection class	IP67

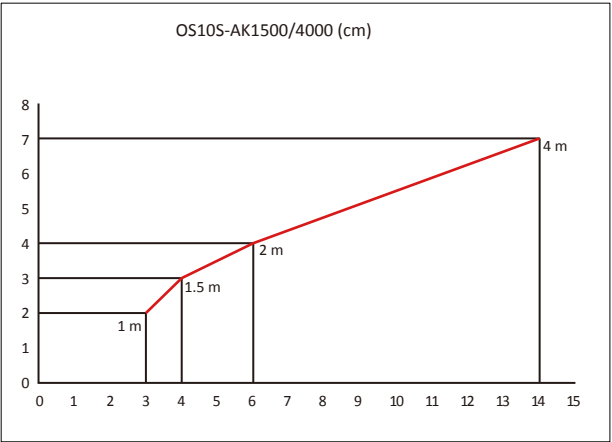
Attenuation Figure



## Translation Characteristic Curve



## Beam Pattern



## Wiring

### Cable

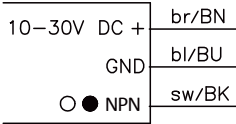


Fig. 1

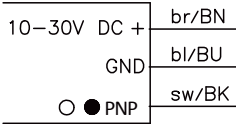


Fig. 2

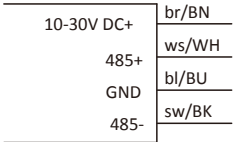


Fig. 3

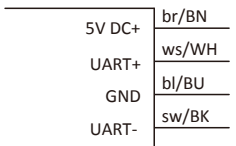


Fig. 4

### M8 connector

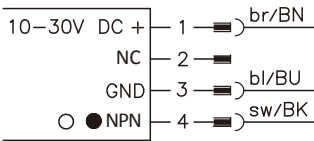


Fig. 5

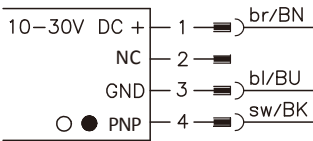


Fig. 6

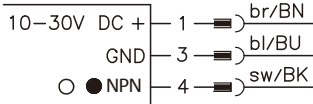


Fig. 7

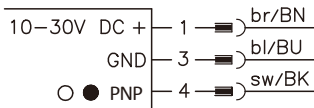


Fig. 8

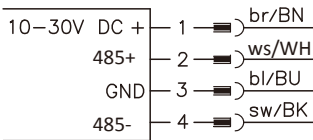
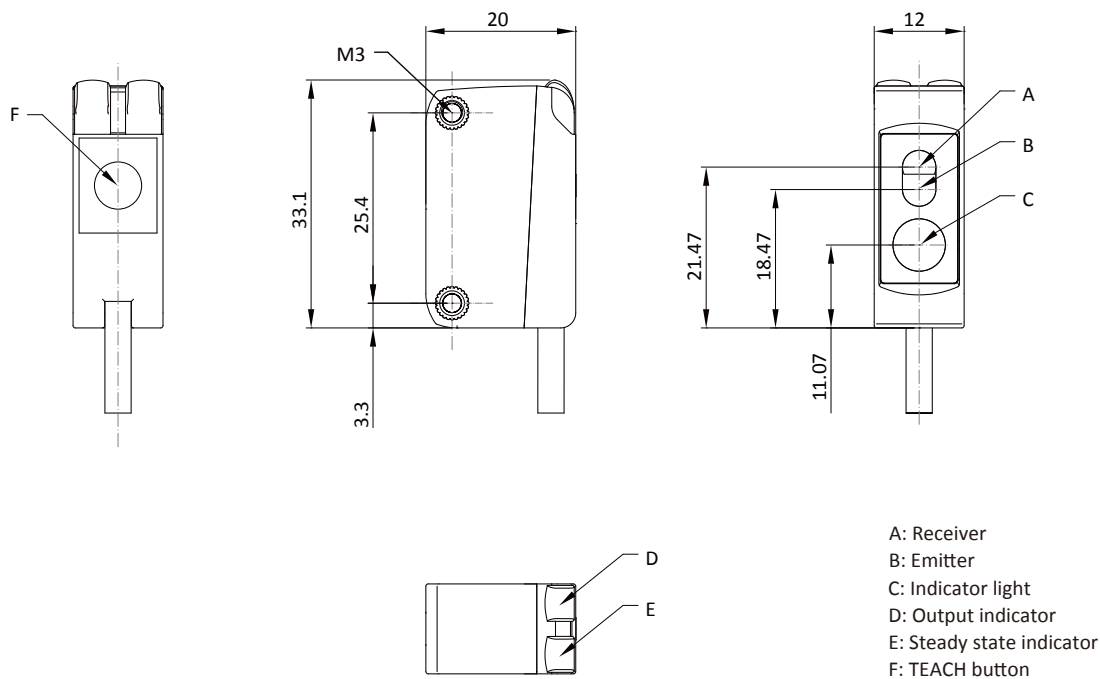


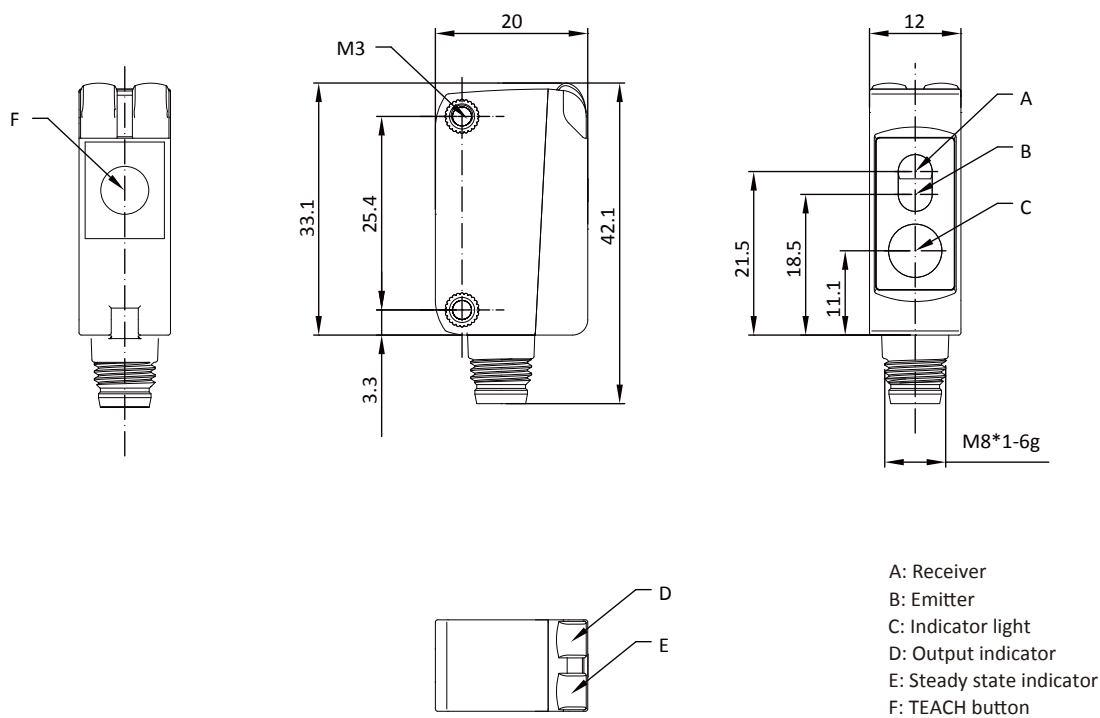
Fig. 9

## Dimensions (BGS TOF)

Cable



M8 connector



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