



Description:

Mini-rectangular photoelectric sensors OS10S series, with high performance and 25.4mm standard mounting hole distance, product series include 10m opposed, 3m polarized, 350mm and 1m/4m BGS. With optional red beam. They are suitable for logistics transportation, new energy and other application fields.

Features:

- 350mm BGS LO or DO adjustable
- 1m, 1.5m, 4m BGS adjustable with teach button
- Opposed and Polarized retroreflective, Light/Dark Operate, Fixed distance products are not adjustable
- */R Infrared laser light source products can provide red light indication light source
- IP67

Type:

Detection mode	Type	Distance	Light source	Frequency	Output	Switching mode	Connection	Wiring
Opposed	OS10S-S6	10m	Red	— —	— —	— —	2m cable	Fig.1
	OS10S-ECN6	10m	— —	800Hz	NPN	Light on/dark on	2m cable	Fig.2
	OS10S-ECP6	10m	— —	800Hz	PNP	Light on/dark on	2m cable	Fig.3
	OS10S-S6Q8	10m	Red	— —	— —	— —	M8 connector, 4-pin	Fig.9
	OS10S-ECN6Q8	10m	— —	800Hz	NPN	Light on/dark on	M8 connector, 4-pin	Fig.10
	OS10S-ECP6Q8	10m	— —	800Hz	PNP	Light on/dark on	M8 connector, 4-pin	Fig.11
	OS10S-S6Q8.3	10m	Red	— —	— —	— —	M8 connector, 3-pin	Fig.17
	OS10S-ECN6Q8.3	10m	— —	800Hz	NPN	Light on/dark on	M8 connector, 3-pin	Fig.18
	OS10S-ECP6Q8.3	10m	— —	800Hz	PNP	Light on/dark on	M8 connector, 3-pin	Fig.19
Polarized retroreflective	OS10S-RPCN6	3m	Red	800Hz	NPN	Light on/dark on	2m cable	Fig.2
	OS10S-RPCP6	3m	Red	800Hz	PNP	Light on/dark on	2m cable	Fig.3
	OS10S-RPCN6Q8	3m	Red	800Hz	NPN	Light on/dark on	M8 connector, 4-pin	Fig.10
	OS10S-RPCP6Q8	3m	Red	800Hz	PNP	Light on/dark on	M8 connector, 4-pin	Fig.11
	OS10S-RPCN6Q8.3	3m	Red	800Hz	NPN	Light on/dark on	M8 connector, 3-pin	Fig.18
	OS10S-RPCP6Q8.3	3m	Red	800Hz	PNP	Light on/dark on	M8 connector, 3-pin	Fig.19
BGS	OS10S-AK150CN6	6...150mm	Red	400Hz	NPN	Light on/dark on	2m cable	Fig.2
	OS10S-AK150CP6	6...150mm	Red	400Hz	PNP	Light on/dark on	2m cable	Fig.3
	OS10S-AK150CN6Q8	6...150mm	Red	400Hz	NPN	Light on/dark on	M8 connector, 4-pin	Fig.10
	OS10S-AK150CP6Q8	6...150mm	Red	400Hz	PNP	Light on/dark on	M8 connector, 4-pin	Fig.11
	OS10S-AK150CN6Q8.3	6...150mm	Red	400Hz	NPN	Light on/dark on	M8 connector, 3-pin	Fig.18
	OS10S-AK150CP6Q8.3	6...150mm	Red	400Hz	PNP	Light on/dark on	M8 connector, 3-pin	Fig.19
	OS10S-AK350CN6	6...350mm	Red	400Hz	NPN	Light on/dark on	2m cable	Fig.2
	OS10S-AK350CP6	6...350mm	Red	400Hz	PNP	Light on/dark on	2m cable	Fig.3
	OS10S-AK350CN6Q8	6...350mm	Red	400Hz	NPN	Light on/dark on	M8 connector, 4-pin	Fig.10
	OS10S-AK350CP6Q8	6...350mm	Red	400Hz	PNP	Light on/dark on	M8 connector, 4-pin	Fig.11
	OS10S-AK350CN6Q8.3	6...350mm	Red	400Hz	NPN	Light on/dark on	M8 connector, 3-pin	Fig.18
	OS10S-AK350CP6Q8.3	6...350mm	Red	400Hz	PNP	Light on/dark on	M8 connector, 3-pin	Fig.19

Photoelectric Sensors - Rectangular OS10S

Detection mode	Type	Distance	Light source	Frequency	Output	Switching mode	Connection	Wiring
BGS TOF	OS10S-AK1000CN6	50...1000mm	Infrared laser + Laser indication	30HZ	NPN	Light on/dark on	2m cable	Fig.2
	OS10S-AK1000CP6	50...1000mm	Infrared laser + Laser indication	30HZ	PNP	Light on/dark on	2m cable	Fig.3
	OS10S-AK1000CN6Q8	50...1000mm	Infrared laser + Laser indication	30HZ	NPN	Light on/dark on	M8 connector, 4-pin	Fig.10
	OS10S-AK1000CP6Q8	50...1000mm	Infrared laser + Laser indication	30HZ	PNP	Light on/dark on	M8 connector, 4-pin	Fig.11
	OS10S-AK1500CN6	50...1500mm	Infrared laser + Laser indication	30HZ	NPN	Light on/dark on	2m cable	Fig.2
	OS10S-AK1500CP6	50...1500mm	Infrared laser + Laser indication	30HZ	PNP	Light on/dark on	2m cable	Fig.3
	OS10S-AK1500CN6Q8	50...1500mm	Infrared laser + Laser indication	30HZ	NPN	Light on/dark on	M8 connector, 4-pin	Fig.10
	OS10S-AK1500CP6Q8	50...1500mm	Infrared laser + Laser indication	30HZ	PNP	Light on/dark on	M8 connector, 4-pin	Fig.11
	OS10S-AK4000CN6	50...4000mm	Infrared laser + Laser indication	30HZ	NPN	Light on/dark on	2m cable	Fig.2
	OS10S-AK4000CP6	50...4000mm	Infrared laser + Laser indication	30HZ	PNP	Light on/dark on	2m cable	Fig.3
	OS10S-AK4000CN6Q8	50...4000mm	Infrared laser + Laser indication	30HZ	NPN	Light on/dark on	M8 connector, 4-pin	Fig.10
	OS10S-AK4000CP6Q8	50...4000mm	Infrared laser + Laser indication	30HZ	PNP	Light on/dark on	M8 connector, 4-pin	Fig.11
	OS10S-AK1000LN6	50...1000mm	Infrared laser	10 HZ	NPN	Light on	2m cable	Fig.4
	OS10S-AK1000LP6	50...1000mm	Infrared laser	10 HZ	PNP	Light on	2m cable	Fig.5
	OS10S-AK1000DN6	50...1000mm	Infrared laser	10 HZ	NPN	Dark on	2m cable	Fig.6
	OS10S-AK1000DP6	50...1000mm	Infrared laser	10 HZ	PNP	Dark on	2m cable	Fig.7
	OS10S-AK1000LN6Q8	50...1000mm	Infrared laser	10 HZ	NPN	Light on	M8 connector, 4-pin	Fig.12
	OS10S-AK1000LP6Q8	50...1000mm	Infrared laser	10 HZ	PNP	Light on	M8 connector, 4-pin	Fig.13
	OS10S-AK1000DN6Q8	50...1000mm	Infrared laser	10 HZ	NPN	Dark on	M8 connector, 4-pin	Fig.14
	OS10S-AK1000DP6Q8	50...1000mm	Infrared laser	10 HZ	PNP	Dark on	M8 connector, 4-pin	Fig.15
	OS10S-AK1000LN6Q8.3	50...1000mm	Infrared laser	10 HZ	NPN	Light on	M8 connector, 3-pin	Fig.20
	OS10S-AK1000LP6Q8.3	50...1000mm	Infrared laser	10 HZ	PNP	Light on	M8 connector, 3-pin	Fig.21
	OS10S-AK1000DN6Q8.3	50...1000mm	Infrared laser	10 HZ	NPN	Dark on	M8 connector, 3-pin	Fig.22
	OS10S-AK1000DP6Q8.3	50...1000mm	Infrared laser	10 HZ	PNP	Dark on	M8 connector, 3-pin	Fig.23
	OS10S-AK1500LN6	50...1500mm	Infrared laser	10 HZ	NPN	Light on	2m cable	Fig.4
	OS10S-AK1500LP6	50...1500mm	Infrared laser	10 HZ	PNP	Light on	2m cable	Fig.5
	OS10S-AK1500DN6	50...1500mm	Infrared laser	10 HZ	NPN	Dark on	2m cable	Fig.6
	OS10S-AK1500DP6	50...1500mm	Infrared laser	10 HZ	PNP	Dark on	2m cable	Fig.7
	OS10S-AK1500LN6Q8	50...1500mm	Infrared laser	10 HZ	NPN	Light on	M8 connector, 4-pin	Fig.12
	OS10S-AK1500LP6Q8	50...1500mm	Infrared laser	10 HZ	PNP	Light on	M8 connector, 4-pin	Fig.13
	OS10S-AK1500DN6Q8	50...1500mm	Infrared laser	10 HZ	NPN	Dark on	M8 connector, 4-pin	Fig.14
	OS10S-AK1500DP6Q8	50...1500mm	Infrared laser	10 HZ	PNP	Dark on	M8 connector, 4-pin	Fig.15
	OS10S-AK1500LN6Q8.3	50...1500mm	Infrared laser	10 HZ	NPN	Light on	M8 connector, 3-pin	Fig.20
	OS10S-AK1500LP6Q8.3	50...1500mm	Infrared laser	10 HZ	PNP	Light on	M8 connector, 3-pin	Fig.21
	OS10S-AK1500DN6Q8.3	50...1500mm	Infrared laser	10 HZ	NPN	Dark on	M8 connector, 3-pin	Fig.22
	OS10S-AK1500DP6Q8.3	50...1500mm	Infrared laser	10 HZ	PNP	Dark on	M8 connector, 3-pin	Fig.23
	OS10S-AK4000LN6	50...4000mm	Infrared laser	10 HZ	NPN	Light on	2m cable	Fig.4
	OS10S-AK4000LP6	50...4000mm	Infrared laser	10 HZ	PNP	Light on	2m cable	Fig.5
	OS10S-AK4000DN6	50...4000mm	Infrared laser	10 HZ	NPN	Dark on	2m cable	Fig.6
	OS10S-AK4000DP6	50...4000mm	Infrared laser	10 HZ	PNP	Dark on	2m cable	Fig.7
	OS10S-AK4000LN6Q8	50...4000mm	Infrared laser	10 HZ	NPN	Light on	M8 connector, 4-pin	Fig.12
	OS10S-AK4000LP6Q8	50...4000mm	Infrared laser	10 HZ	PNP	Light on	M8 connector, 4-pin	Fig.13

Type:

Detection mode	Type	Distance	Light source	Frequency	Output	Switching mode	Connection	Wiring
BGS TOF	OS10S-AK4000DN6Q8	50...4000mm	Infrared laser	10HZ	NPN	Dark on	M8 connector, 4-pin	Fig.14
	OS10S-AK4000DP6Q8	50...4000mm	Infrared laser	10HZ	PNP	Dark on	M8 connector, 4-pin	Fig.15
	OS10S-AK4000LN6Q8.3	50...4000mm	Infrared laser	10HZ	NPN	Light on	M8 connector, 3-pin	Fig.20
	OS10S-AK4000LP6Q8.3	50...4000mm	Infrared laser	10HZ	PNP	Light on	M8 connector, 3-pin	Fig.21
	OS10S-AK4000DN6Q8.3	50...4000mm	Infrared laser	10HZ	NPN	Dark on	M8 connector, 3-pin	Fig.22
	OS10S-AK4000DP6Q8.3	50...4000mm	Infrared laser	10HZ	PNP	Dark on	M8 connector, 3-pin	Fig.23

Detection mode	Type	Distance	Light source	Repeatability	Output	Measurement accuracy	Connection	Wiring
BGS TOF	OS10S-K4000/485	50...4000mm	Infrared laser	10mm	485	30mm	2m cable	Fig.8
	OS10S-K4000/485/R-0.2-Q8	50...4000mm	Infrared laser	10mm	485	30mm	M8 Pigtail	Fig.16
	OS10S-K4000/UR	50...4000mm	Infrared laser	10mm	UR	30mm	2m cable	Fig.9

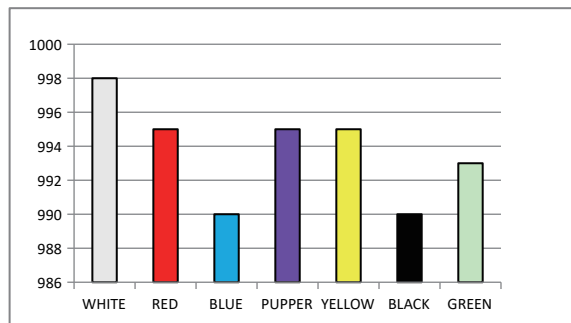
Technical Data:

Operating voltage	10...30VDC/5VDC
Ripple voltage	≤10%
Light source	630 nm red beam(opposed, retroreflective, AK350 diffused); TOF infrared laser (940 nm)/class 1
Output type	PNP / NPN
Switch mode	LO/DO optional (opposed, retroreflective, AK350 diffused); LO/DO (AK1000 / AK1500 / AK4000)
No-load current	24V 25mA
load current	≤100mA
Output indicator	Red LED
Steady state indicator	Green LED
Housing	PC+PBT
Connection	2m cable(3 wires)/ M8 3-pin or 4-pin connector
Ambient temperature	-20 °C...+60 °C
Storage temperature	-40 °C...+70 °C
Voltage withstanding	1000V/AC/ 50/60Hz 60s
Insulation impedance	≥50MΩ (500VDC)
Shock resistance	Complex amplitude 1.5mm 10... 50Hz (2hr X, Y,Z respectively)
Impact resistance	500m/s ² (50G) 3 times X,Y,Z respectively
Protection class	IP67

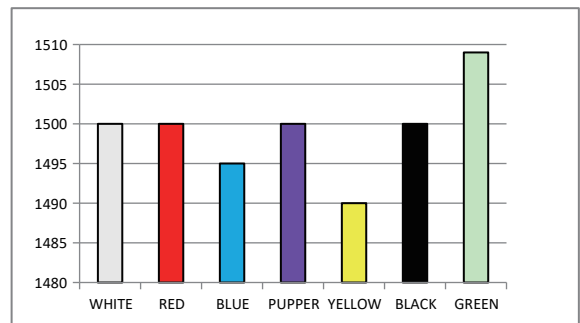
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Attenuation figure:

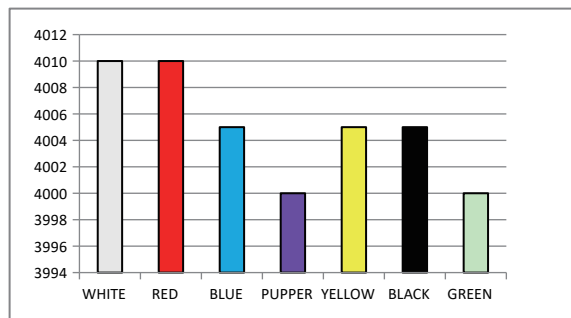
OS10S-AK1000



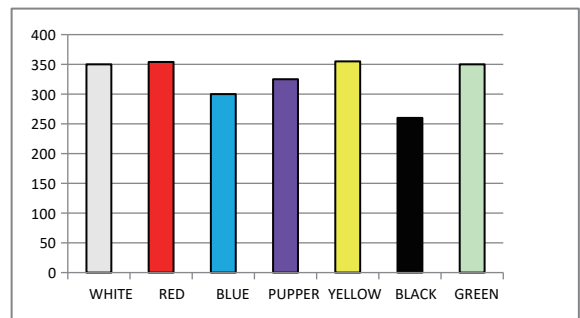
OS10S-AK1500



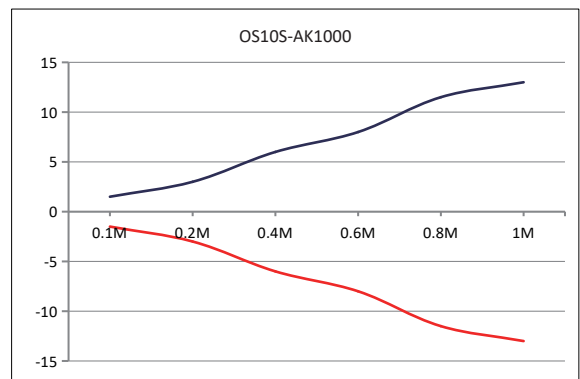
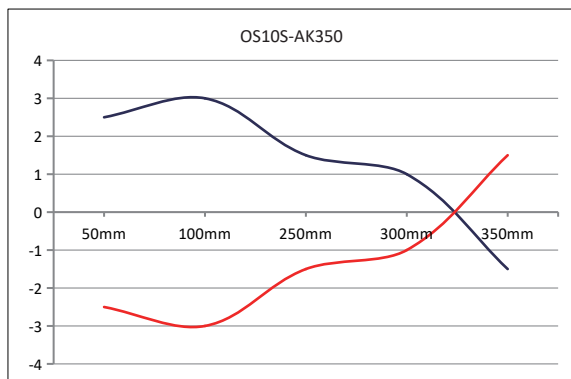
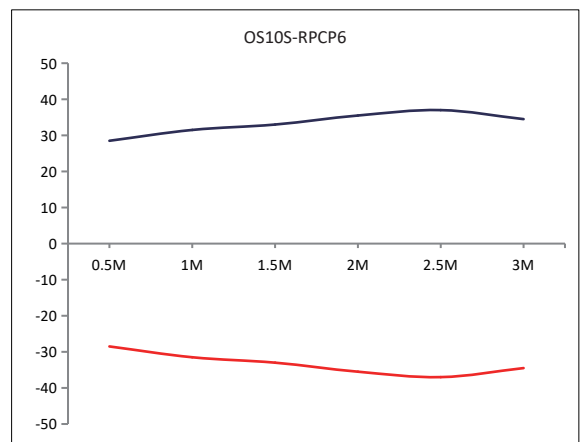
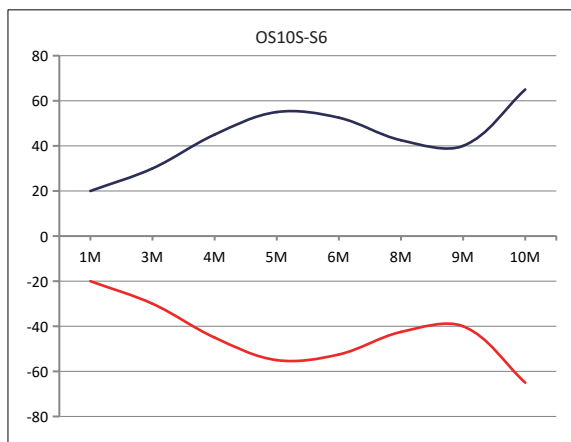
OS10S-AK4000



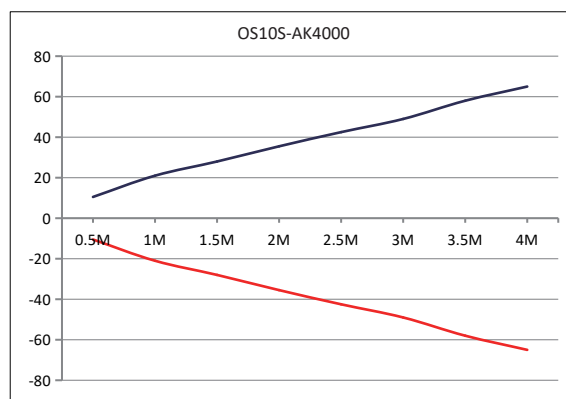
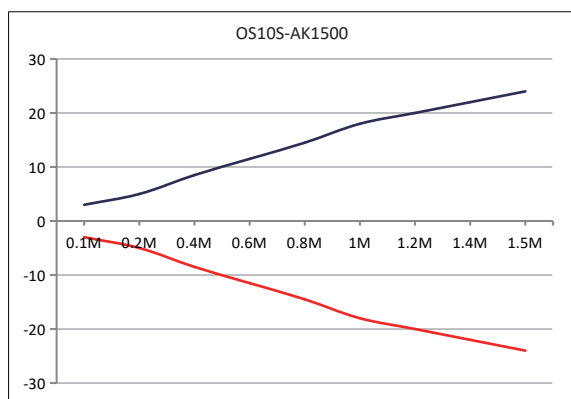
OS10S-AK350



Translation characteristic curve:

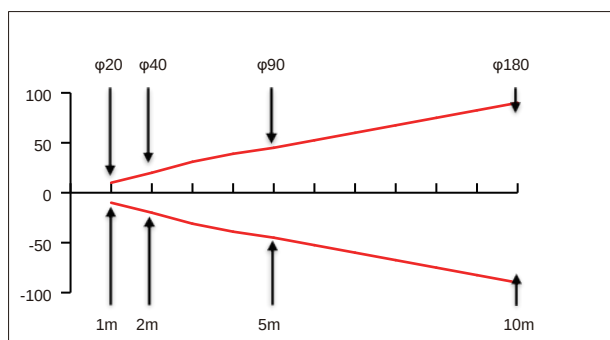


Translation characteristic curve:

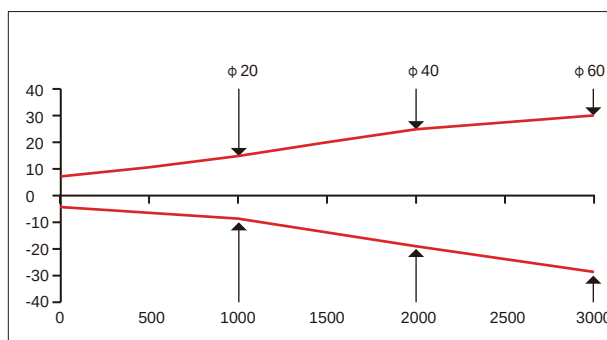


Beam Pattern:

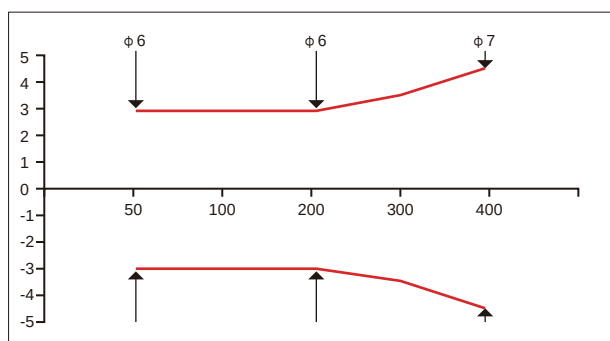
OS10S-S6 (mm)



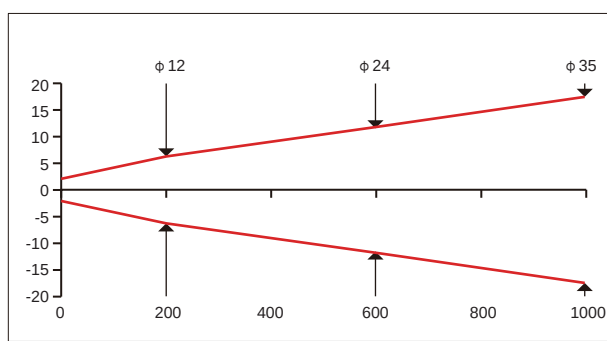
OS10S-PR (mm)



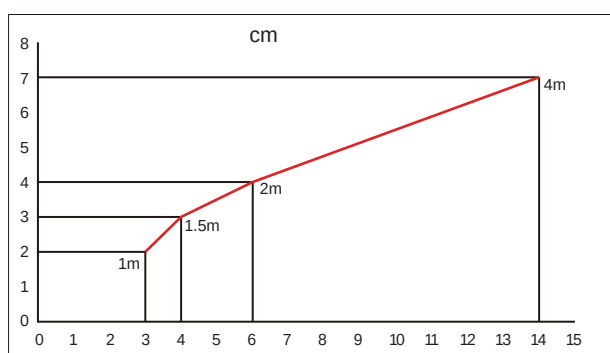
OS10S-AK350 (mm)



OS10S-AK1000 (mm)



OS10S-AK1500/4000 (cm)



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Wiring:

Cable

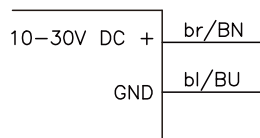


Fig.1

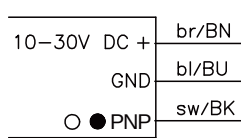


Fig.3

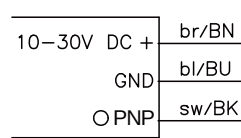


Fig.5

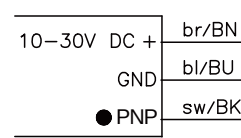


Fig.7

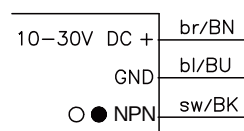


Fig.2

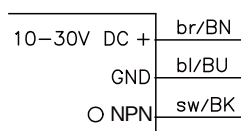


Fig.4

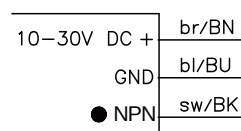


Fig.6

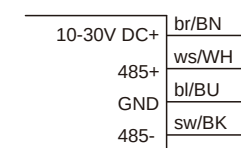


Fig.8

M8 connector

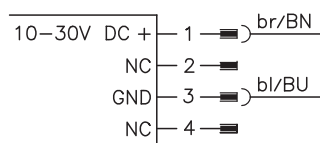


Fig.9

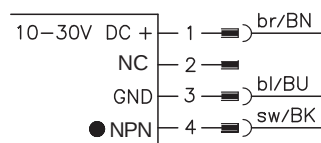


Fig.14

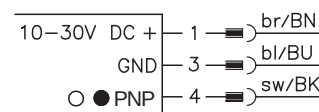


Fig.19

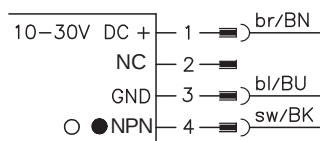


Fig.10

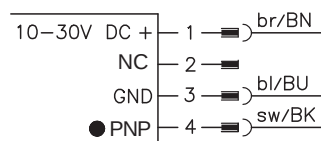


Fig.15

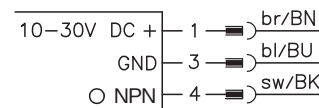


Fig.20

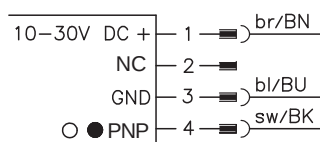


Fig.11

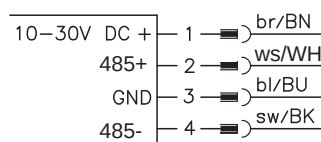


Fig.16

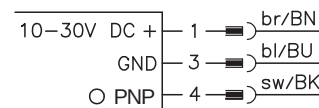


Fig.21

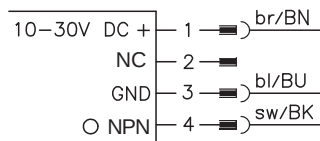


Fig.12

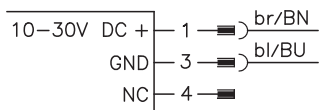


Fig.17

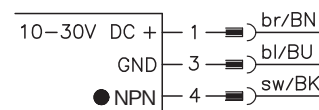


Fig.22

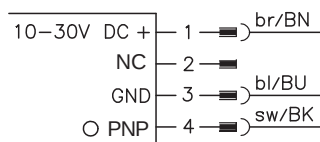


Fig.13

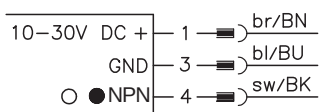


Fig.18

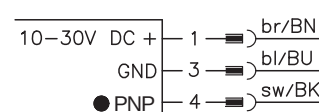
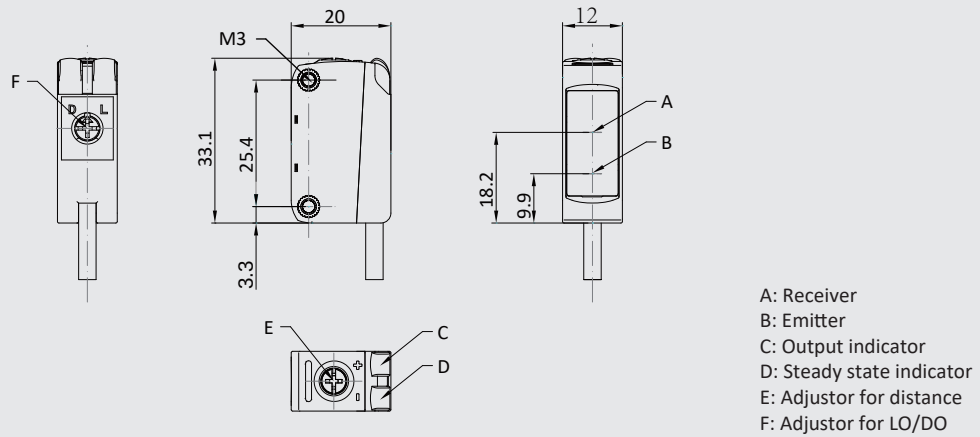


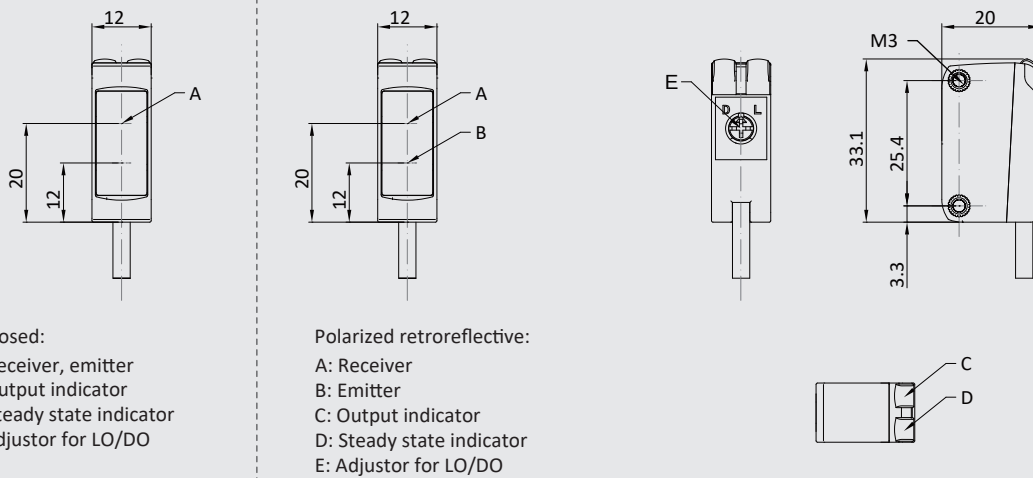
Fig.23

Dimensions:(Cable)

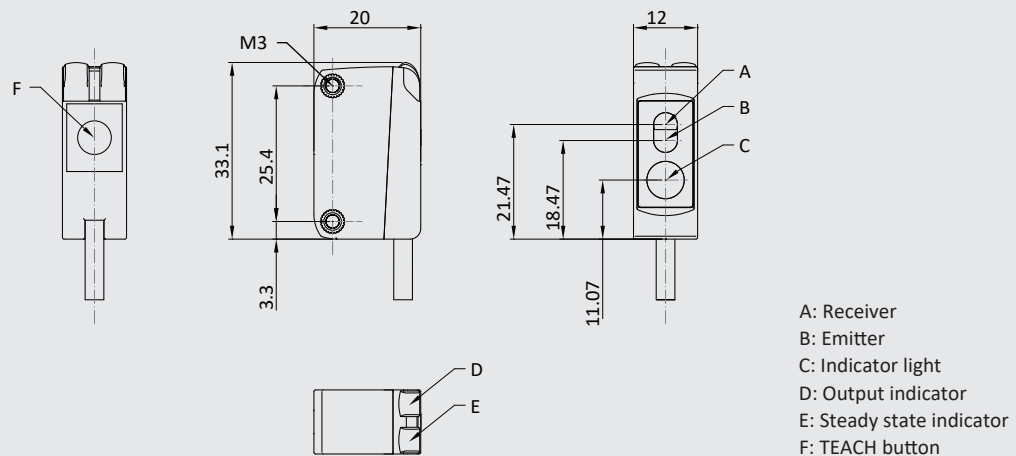
BGS



Opposed / Polarized retroreflective

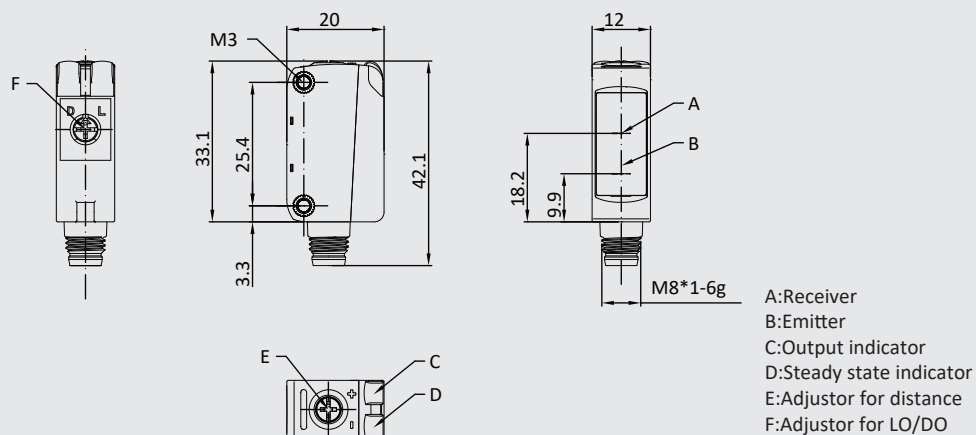


BGS TOF

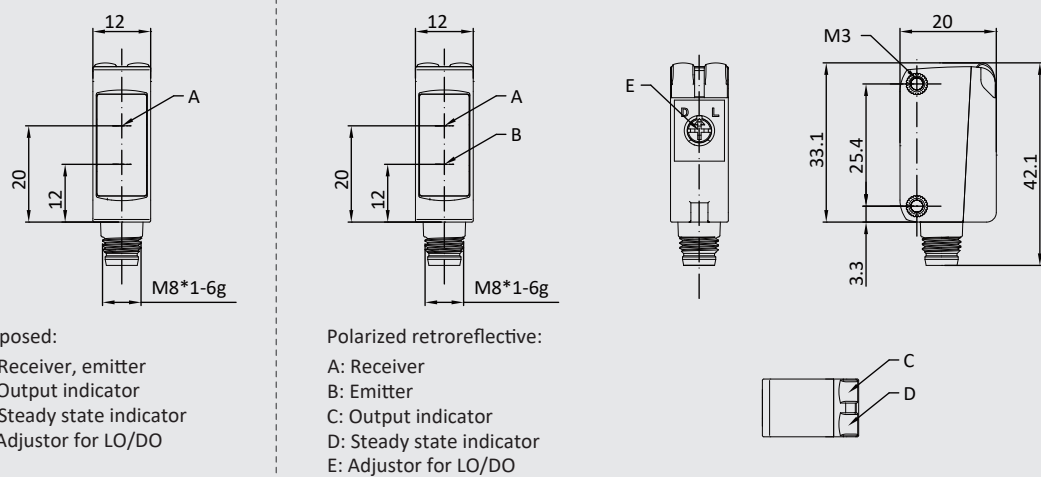


Dimensions:(M8 connector)

BGS



Opposed / Polarized retroreflective



BGS TOF

