

Photoelectric Sensors—Compact-OSQ18



Description:

Optional mounting methods: mounting hole for barrel series or screw for rectangular series, 30m long distance opposed, laser beam products. Set the distance BGS type products have excellent black and white attenuation characteristics, suitable for automotive parts, packaging, logistics transportation, metal processing and others.

Features:

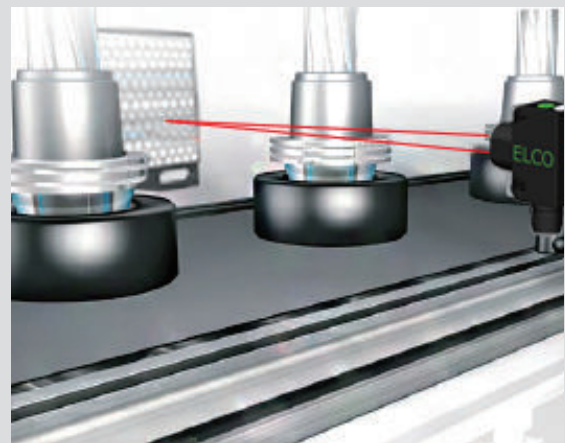
- Compact size
- Long sensing range
- Visible red beam, laser beam

Sensor function description:



The laser beam opposed, the ultra-fine spot does not diverge. Close mounting does not interfere with each other. Multiple pairs of side-by-side mounted sensors measure carton's height which is economical and practical.

Polarized retro-reflective photoelectric sensor is suitable for automotive, metal processing, printing and other industries, can stably detect highly reflective objects.



Type:

Detection mode	Type	Distance	Light source	Frequency	Output	Switching mode	Connection	Wiring		
Opposed	OSQ18-S6(emitter)	25m	Infrared	— —	— —	— —	2m cable	Fig.1		
	OSQ18-EVP6(receiver)		— —	800Hz	PNP	NO+NC	2m cable	Fig.3		
	OSQ18-EVN6(receiver)		— —	800Hz	NPN	NO+NC	2m cable	Fig.4		
	Opposed	OSQ18-S6Q(emitter)	25m	Infrared	— —	— —	— —	M12 connector	Fig.2	
		OSQ18-EVP6Q(receiver)		— —	800Hz	PNP	NO+NC	M12 connector	Fig.5	
		OSQ18-EVN6Q(receiver)		— —	800Hz	NPN	NO+NC	M12 connector	Fig.6	
	Opposed	OSQ18-SL306 (emitter)	30m	laser	— —	— —	— —	2m cable	Fig.1	
		OSQ18-EL30VP6(receiver)		— —	800Hz	PNP	NO+NC	2m cable	Fig.3	
		OSQ18-EL30VN6 (receiver)		— —	800Hz	NPN	NO+NC	2m cable	Fig.4	
		Opposed	OSQ18-SL306Q(emitter)	30m	laser	— —	— —	— —	M12 connector	Fig.2
			OSQ18-EL30VP6Q(receiver)		— —	800Hz	PNP	NO+NC	M12 connector	Fig.5
			OSQ18-EL30VN6Q(receiver)		— —	800Hz	NPN	NO+NC	M12 connector	Fig.6
Retro-reflective	OSQ18-RVP6	3.5m	Red	800Hz	PNP	NO+NC	2m cable	Fig.3		
	OSQ18-RVN6	3.5m	Red	800Hz	NPN	NO+NC	2m cable	Fig.4		
	OSQ18-RVP6Q	3.5m	Red	800Hz	PNP	NO+NC	M12 connector	Fig.5		
	OSQ18-RVN6Q	3.5m	Red	800Hz	NPN	NO+NC	M12 connector	Fig.6		
Polarized retro-reflective	OSQ18-RPVP6	3.5m	Red	800Hz	PNP	NO+NC	2m cable	Fig.3		
	OSQ18-RPVN6	3.5m	Red	800Hz	NPN	NO+NC	2m cable	Fig.4		
	OSQ18-RPVP6Q	3.5m	Red	800Hz	PNP	NO+NC	M12 connector	Fig.5		
	OSQ18-RPVN6Q	3.5m	Red	800Hz	NPN	NO+NC	M12 connector	Fig.6		
Diffused	OSQ18-K200VP6	200mm	Red	800Hz	PNP	NO+NC	2m cable	Fig.7		
	OSQ18-K200VN6	200mm	Red	800Hz	NPN	NO+NC	2m cable	Fig.8		
	OSQ18-K200VP6Q	200mm	Red	800Hz	PNP	NO+NC	M12 connector	Fig.9		
	OSQ18-K200VN6Q	200mm	Red	800Hz	NPN	NO+NC	M12 connector	Fig.10		
	Diffused	OSQ18-K400VP6	400mm	Red	800Hz	PNP	NO+NC	2m cable	Fig.7	
		OSQ18-K400VN6	400mm	Red	800Hz	NPN	NO+NC	2m cable	Fig.8	
	Diffused	OSQ18-K400VP6Q	400mm	Red	800Hz	PNP	NO+NC	M12 connector	Fig.9	
		OSQ18-K400VN6Q	400mm	Red	800Hz	NPN	NO+NC	M12 connector	Fig.10	
	Diffused	OSQ18-K600VP6	600mm	Red	800Hz	PNP	NO+NC	2m cable	Fig.7	
		OSQ18-K600VN6	600mm	Red	800Hz	NPN	NO+NC	2m cable	Fig.8	
	Diffused	OSQ18-K600VP6Q	600mm	Red	800Hz	PNP	NO+NC	M12 connector	Fig.9	
		OSQ18-K600VN6Q	600mm	Red	800Hz	NPN	NO+NC	M12 connector	Fig.10	

Photoelectric Sensors—Compact-OSQ18

Type:

Detection mode	Type	Distance	Light source	Frequency	Output	Switching mode	Connection	Wiring
BGS	OSQ18-AK50VP6	5...50mm	Red	800Hz	PNP	NO+NC	2m cable	Fig.7
	OSQ18-AK50VN6	5...50mm	Red	800Hz	NPN	NO+NC	2m cable	Fig.8
	OSQ18-AK50VP6Q	5...50mm	Red	800Hz	PNP	NO+NC	M12 connector	Fig.9
	OSQ18-AK50VN6Q	5...50mm	Red	800Hz	NPN	NO+NC	M12 connector	Fig.10
	OSQ18-AK100VP6	8...100mm	Red	800Hz	PNP	NO+NC	2m cable	Fig.7
	OSQ18-AK100VN6	8...100mm	Red	800Hz	NPN	NO+NC	2m cable	Fig.8
	OSQ18-AK100VP6Q	8...100mm	Red	800Hz	PNP	NO+NC	M12 connector	Fig.9
	OSQ18-AK100VN6Q	8...100mm	Red	800Hz	NPN	NO+NC	M12 connector	Fig.10
	OSQ18-AK150VP6	10...150mm	Red	800Hz	PNP	NO+NC	2m cable	Fig.7
	OSQ18-AK150VN6	10...150mm	Red	800Hz	NPN	NO+NC	2m cable	Fig.8
	OSQ18-AK150VP6Q	10...150mm	Red	800Hz	PNP	NO+NC	M12 connector	Fig.9
	OSQ18-AK150VN6Q	10...150mm	Red	800Hz	NPN	NO+NC	M12 connector	Fig.10
	OSQ18-AK200VP6	10...200mm	Red	800Hz	PNP	NO+NC	2m cable	Fig.7
	OSQ18-AK200VN6	10...200mm	Red	800Hz	NPN	NO+NC	2m cable	Fig.8
	OSQ18-AK200VP6Q	10...200mm	Red	800Hz	PNP	NO+NC	M12 connector	Fig.9
	OSQ18-AK200VN6Q	10...200mm	Red	800Hz	NPN	NO+NC	M12 connector	Fig.10

Technical Data:

Operating voltage	10...30VDC
Ripple voltage	≤10%
No-load current	Opposed: ≤25mA; Others: ≤15mA
Load current	≤200mA
Black and white attenuation	< 3mm(AK50); < 10mm(AK100); < 15mm(AK150)
Spot size	5mm(AK50); 8mm(AK100); 10mm(AK150)
Protective circuit	Reverse polarity protection, short circuit protection, overload protection
Sensitivity	Adjustable, with single-turn knob. Fixed distance products are not adjustable.
Output indicator	Red LED
Steady state indicator	Green LED
Ambient temperature	-25...55°C
Storage temperature	-40...70°C
Voltage resistance	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
Housing material	PBT+ABS

Wiring:

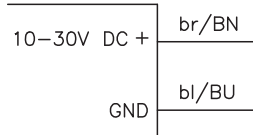


Fig. 1

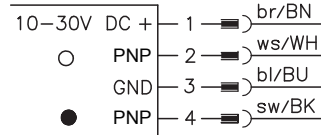


Fig. 5

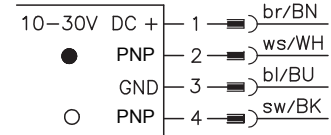


Fig. 9

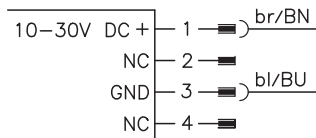


Fig. 2

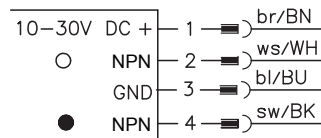


Fig. 6

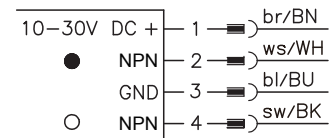


Fig. 10

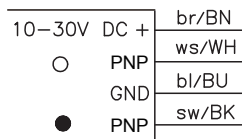


Fig. 3

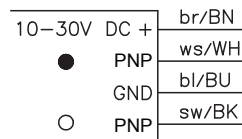


Fig. 7

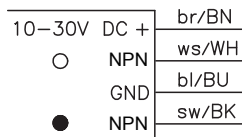


Fig. 4

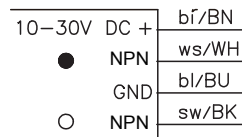
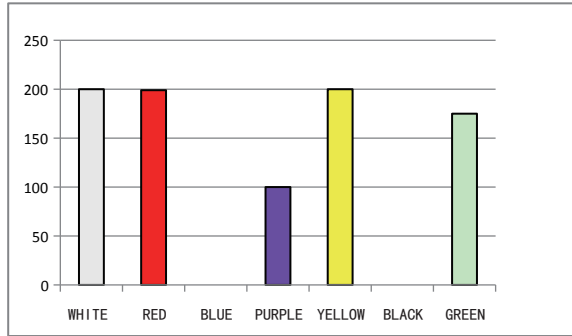


Fig. 8

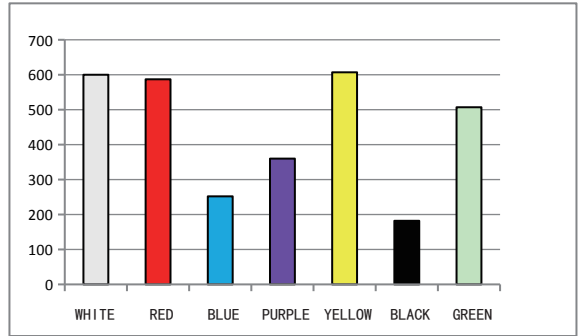
Photoelectric Sensors—Compact-OSQ18

Attenuation figure:

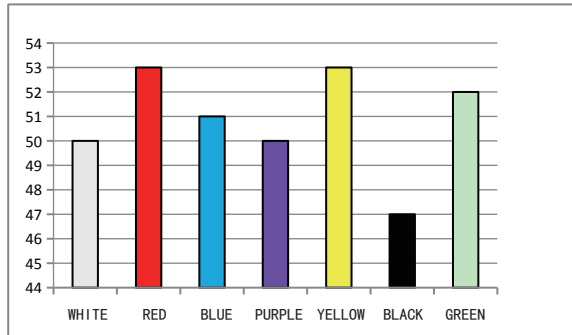
OSQ18-K200



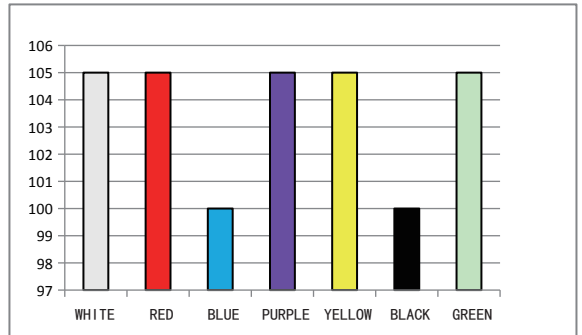
OSQ18-K600



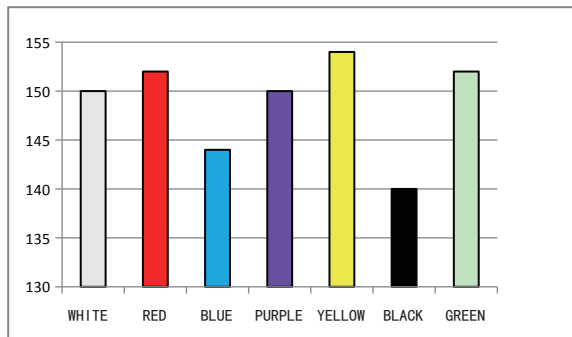
OSQ18-AK50



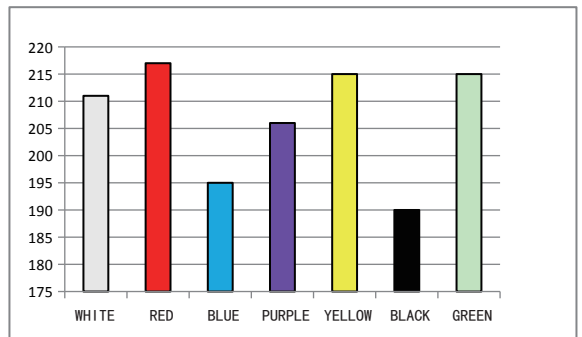
OSQ18-AK100



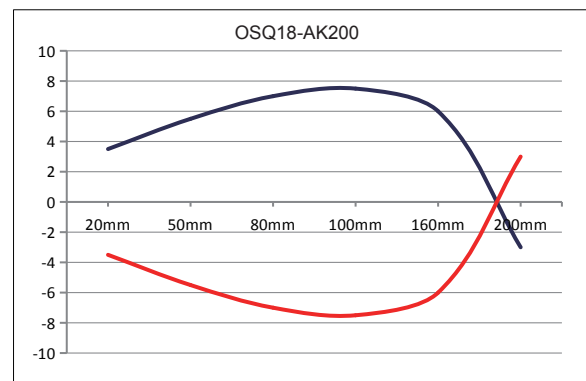
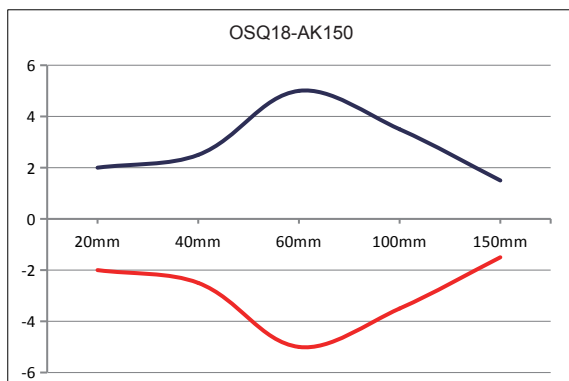
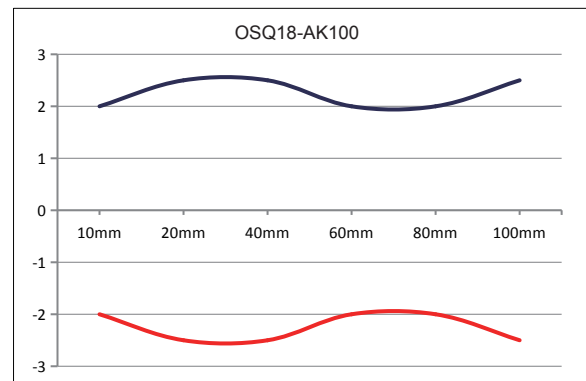
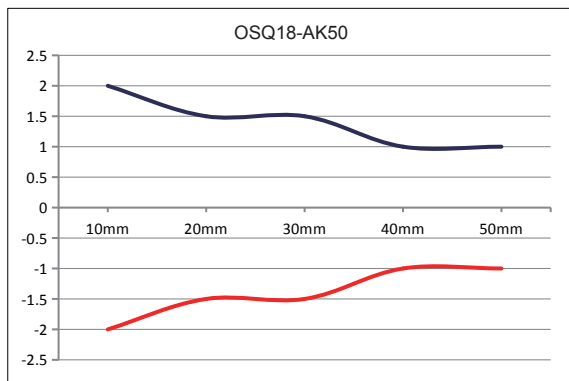
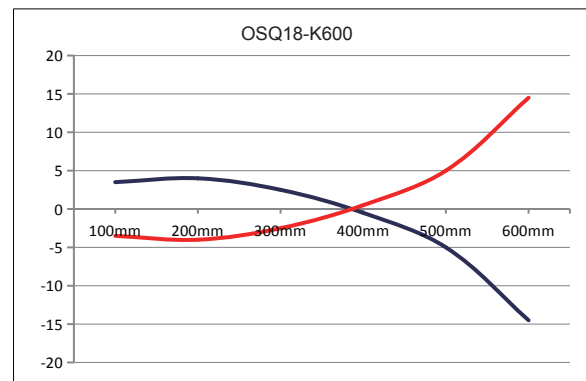
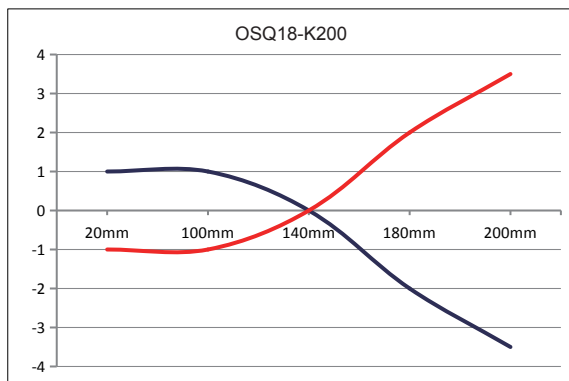
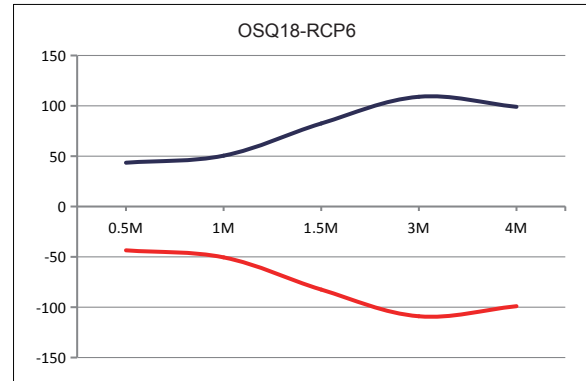
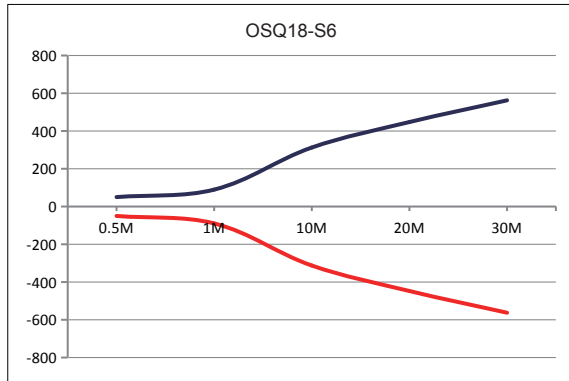
OSQ18-AK150



OSQ18-AK200



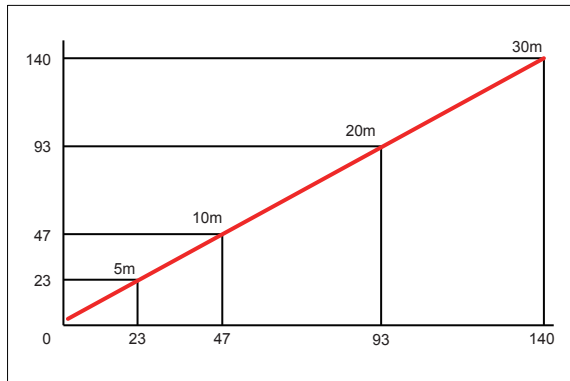
Translation characteristic curve:



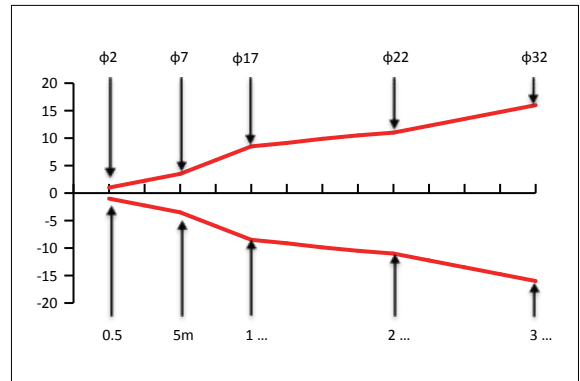
Photoelectric Sensors—Compact-OSQ18

Beam Pattern:

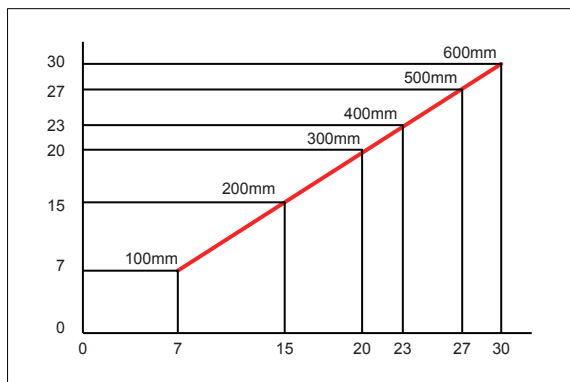
OSQ18-S6 (cm)



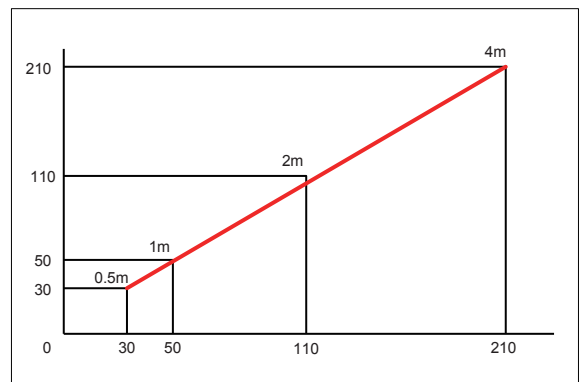
OSQ18-SL (mm)



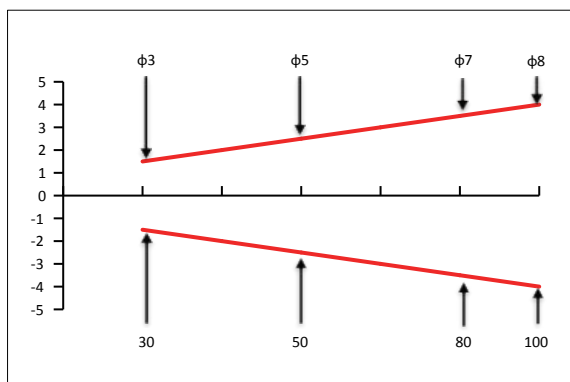
OSQ18-K (mm)



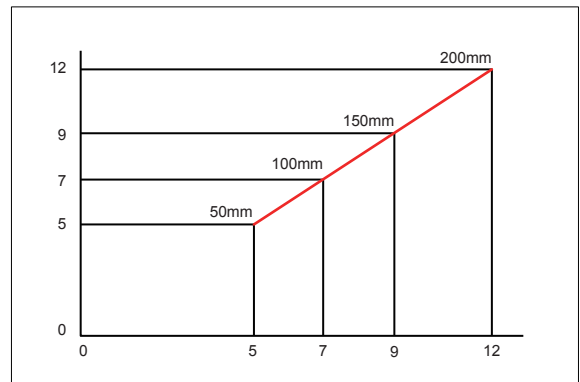
OSQ18-RP/R (mm)



OSQ18-AK50/100 (mm)

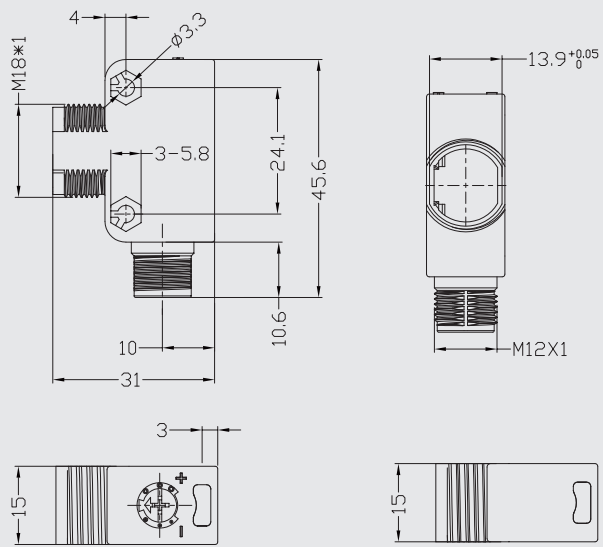


OSQ18-AK150/200 (mm)

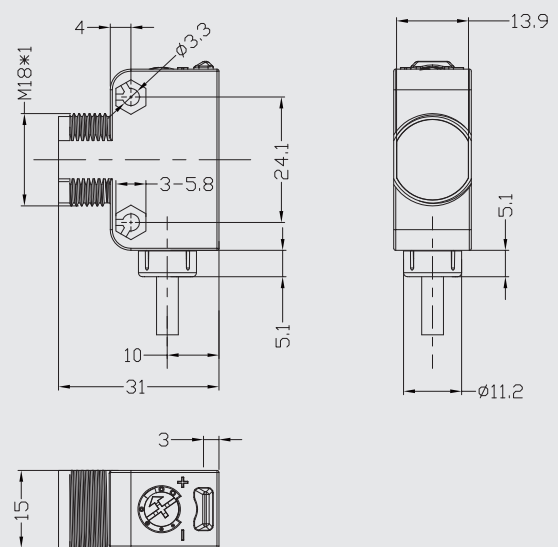


Dimensions:

M12 connector



2m cable



Reflector (optional):

RB50x50-1

