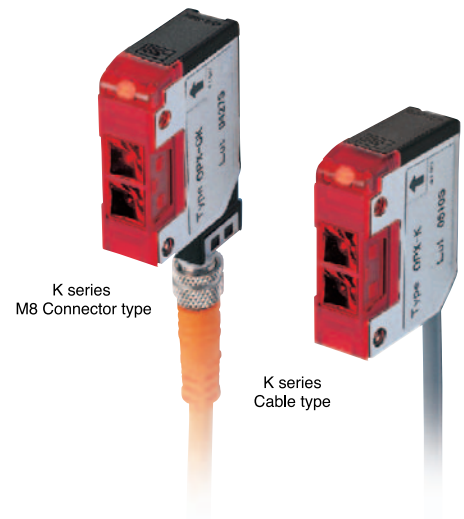
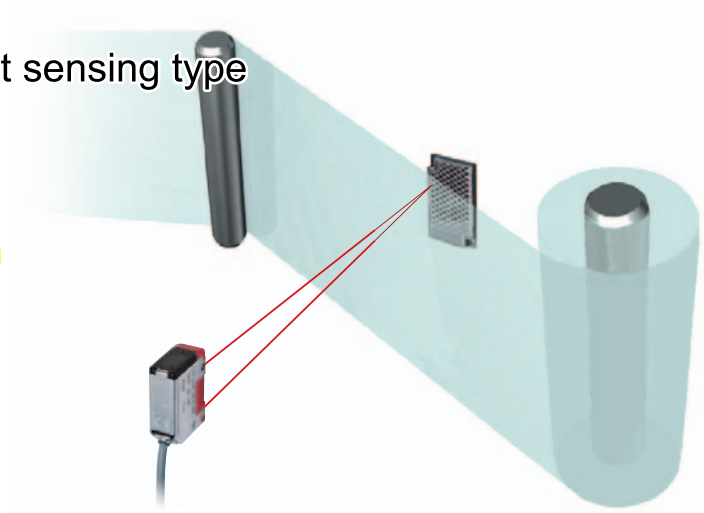


World standard of glass / transparent sensing type

KR-Q series

Stable sensing of PET, TFT, CRT and film is possible up to 3 meter distance. Regular family of product (Retro, Diffuse, Through-Beam, and Convergent types) are also listed.

- Through-beam type
KT-700N/KT-700P : 7m
- Retro-reflection type with polarizing filter
KR-250N/KR-250P : 2.5m
- Diffused reflection type
KD-400N/KD-400P : 400mm
- Convergent type
KD-L09N/KD-L09P : 10 to 90mm
- Transparent objects type
KR-Q50NW/KR-Q50PW : 500mm
KR-Q150NW/KR-Q150PW : 1.5m
KR-Q300NW/KR-Q300PW : 3m
- Connector versions are available for all types



Features

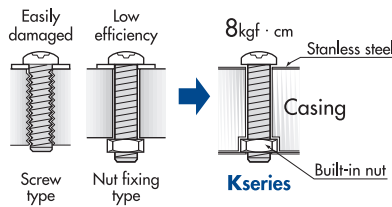
Stainless steel casing which protects the sensor from side impacts.

The stainless steel casing protects the sensor from damage when it is struck by the sharp edges or corners of passing objects.



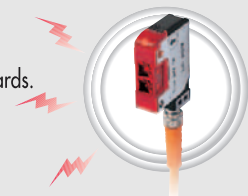
Built-in nuts which cannot be damaged by over-tightening

The built-in nuts make installation easy and efficient, eliminating the problem of thread damage caused by over-tightening.



Surpasses the VDE standard for electrical noise immunity.

The noise resistant circuitry is built-in accordance with the strict VDE standard. Further in-house Feilen Noise testing assures high reliability and compliance with international standards.



3-way wide angle indicator

A polarizing filter PFK-01(option) which prevents optical interference between through-beam sensors.

A slit attachment SK-01(option) which permits the detection of extremely small objects.

A multi-rubber stopper prevents the invasion of water,oil,etc.


Small diameter cable (water-proof,oil,heat and freeze resistant)

Sensor-encasing noise-resistant shield.

	Slit SK-01 (Emitter+receiver)	Pol.filter PFK-01	Slit+filter
Detection distance	1000mm	3000mm	500mm
Min.dia.	Ø1mm	Ø7mm	Ø1mm

*Just split the sticker to fix on the surface of lens.

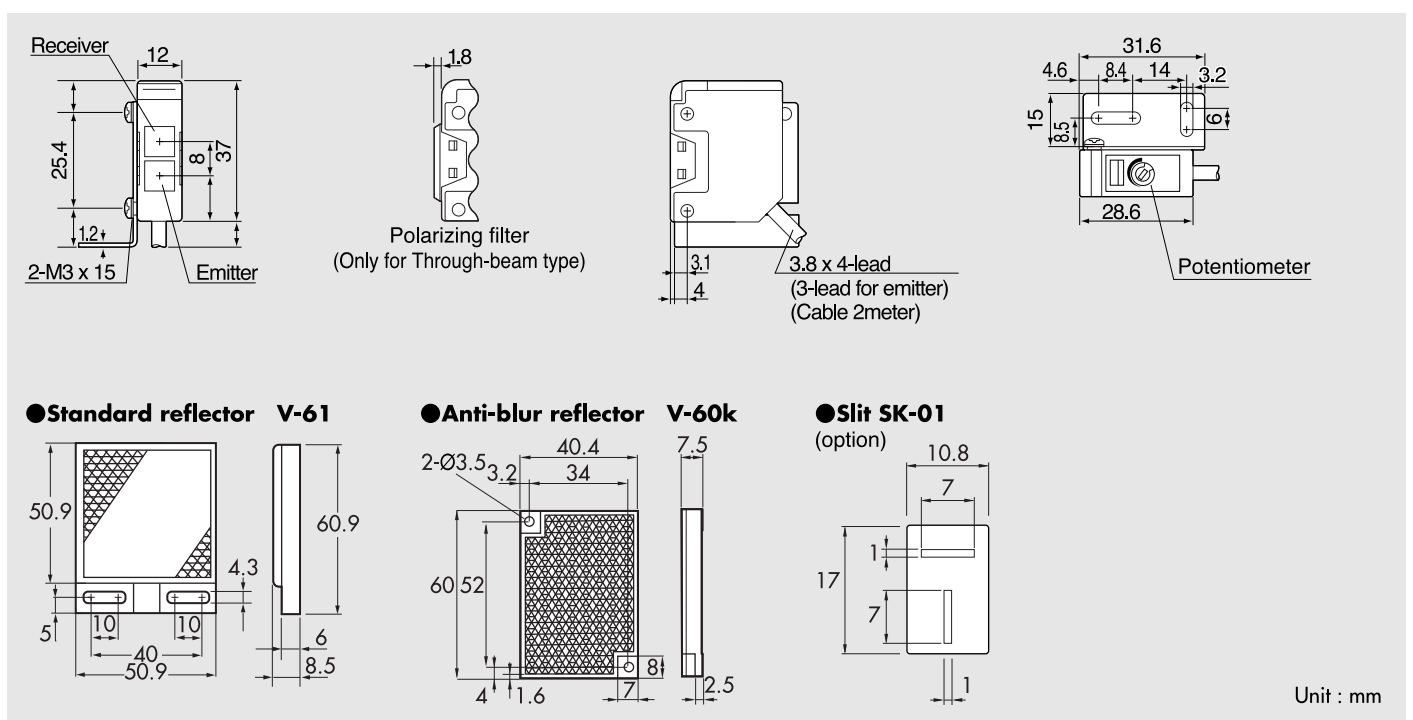
Types numbers (Example of cable type. Add "c" after numbers if you would need M8 connector types)

Types	Detecting distance	Light ON Dark ON	Sensitivity adjustment	Red LED	Test input	Supply voltage	Output	Model number
 Through-beam Retro-reflection Diffuse-reflection Convergent Transparent objects	7m	●	—	●	●	10~30V DC	NPN/PNP	KT-700N/KT-700P
	2.5m	●	—	●	—		NPN/PNP	KR-250N/KR-250P
	400mm	●	●	●	—		NPN/PNP	KD-40N/KD-40P
	10 to 90mm	●	●	●	—		NPN/PNP	KD-L09N/KD-L09P
	500mm	●	●	●	—		NPN/PNP	KR-Q50NW/KR-Q50PW
1.5m	●	●	●	—	NPN/PNP	KR-Q150NW/KR-Q150PW		
3m	●	●	●	—	—	NPN/PNP	KR-Q300NW/KR-Q300PW	

Specifications

Model	Through-beam	Retro-reflection (with polarizing filter)	Diffuse reflection	Limited range (convergent)	Glass sensing			
Cable type NPN/PNP	KT-700N / KT-700P	KR-250N / KR-250P	KD-40N / KD-40P	KD-L09N / KD-L09P	KR-Q50NW / KR-Q50PW	KR-Q150NW / KR-Q150PW	KR-Q300NW / KR-Q300PW	
M8 connector type NPN/PNP	KT-700CN / KT-700CP	KR-250CN / KR-250CP	KD-40CN / KD-40CP	KD-L09CN / KD-L09CP	KR-Q50CNW / KR-Q50CPW	KR-Q150CNW / KR-Q150CPW	KR-Q300CNW / KR-Q300CPW	
Sensing range	7m	2.5m	40cm	1 - 9cm	50cm	1.5m	3m	
Light source	Red							
Min objectives	Ø7mm	—	Ø40mm	—	Ø2.5mm (steel wire)			
Response time	1msec.Max.			0.7msec.Max.				
Hysteresis	NIL		20% Max.	10% Max.	NIL			
Sensitivity adjustment	Not equipped			Single turn Potentiometer				
Indicator	Single Indicator							
Control output	NPN or PNP Open collector, 100mA Max / 30V DC							
Test input	Equipped	Not equipped						
Operation Mode	Light ON/Dark ON switchover							
Insulation resistance	Min. 20 M Ohm/DC500V							
Supply voltage	10 to 30 V DC including 10% of ripple							
Power consumption	35mA Max.	30mA Max						
Conformity	JIS, UL, CE, VDE							
Ambient Temp/Humid	-25 to 55°C / 35 to 85% RH							
Environment illuminance	Sunlight:20,000lux max., Incandescent lamp:4,000 lux max.							
Vibration resistance	10 50 55 Hz amplitude 1.5mm, X-Y-Z for 2 hours							
Protection category	IEC 144 IP67, VDE Level3							
Housing Material	ABS(Case), PC(Lens), SUS304(Cover)							
Weight(Net)	25g(20g for emitter of through-beam type)					25g		

Dimensions



*Technical date, specsheet, instruction manual and this catalogue is available for download. Visit our Website ; <http://www.optex-fa.com>
For technical support please call our authorized distributor in your country that is also listed in our Website.