




















## Through-beam type sensor selection guide




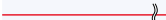








## Through-beam type photoelectric sensors (DC power)

Light source/Sensing distance	Shape	Size	Degree of protection	Distance adjustment	Housing material	Type	Connection type	Model	Page
 Red 30 m		W: 11 D: 21 H: 32.1	Cable type: IP69K Connector type: Equivalent to IP67g	Potentiometer 	SUS316L	Built-in amplifier	Cable type	<b>ZT-M3000</b> □	<b>P.158</b>
 Red 25 m		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>Z3T-2500</b> □	<b>P.148</b>
 Red 25 m		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>Z2T-2000</b> □	<b>P.168</b>
 Red 25 m		ø : 16.6 D : 58	IP67	Potentiometer 	Brass Ni plated	Built-in amplifier	Cable type	<b>CTD-2500</b> □-R	<b>P.224</b>
 Red 12 m		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>S2T-1200</b> □	<b>P.216</b>
 Infrared 10 m		W: 11 D: 38 H: 23	IP67g	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>JT-H1000</b> □	<b>P.188</b>
 Infrared 10 m		W: 11 D: 23 H: 38	IP67g	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>JT-S1000</b> □	<b>P.188</b>
 Red 7 m		W: 12 D: 28.6 H: 37	IP67	None	Resin + SUS protector	Built-in amplifier	Cable type/ Connector type	<b>KT-700</b> □	<b>P.200</b>
 Red 4 m		W: 10 D: 17 H: 28	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>ST-400</b> □	<b>P.208</b>
 Red 0.5 m		W: 12 D: 3.5 H: 20	IP67	None	Resin	Built-in amplifier	Cable type	<b>ET-500</b> □	<b>P.178</b>
 Red 0.5 m		W: 5 D: 12 H: 20	IP67	None	Resin	Built-in amplifier	Cable type	<b>ET-S500</b> □	<b>P.178</b>

## Through-beam type photoelectric sensors (universal voltage/DC power)

Light source/Sensing distance	Shape	Size	Degree of protection	Distance adjustment	Housing material	Type	Connection type	Model	Page
 Red 70 m		W: 20 D: 43.9 H: 60	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type	<b>V2T-7000</b> □	<b>P.246</b>
 Red 70 m		W: 23.5 D: 55.8 H: 74.5	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>V3T-7000</b> □	<b>P.256</b>
 Red 70 m		W: 23.5 D: 63 H: 74.5	IP67	Potentiometer 	Resin	Built-in amplifier	Terminal block type	<b>V4T-7000</b> □	<b>P.256</b>
 Red 40 m		W: 25 D: 63 H: 78	IP67	Potentiometer 	Resin	Built-in amplifier	Terminal block type	<b>VT-4000</b> □	<b>P.264</b>
 Red 30 m		W: 25 D: 63 H: 78	IP67	Potentiometer 	Resin	Built-in amplifier	Terminal block type	<b>VT-3000</b> □	<b>P.264</b>

Through-beam type laser sensors 

Light source/Sensing distance	Shape	Size	Degree of protection	Distance adjustment	Housing material	Type	Connection type	Model	Page
 Laser 40 m		W: 15 D: 30 H: 44.4	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>DT-4000</b> □	<b>P.298</b>
 Class 1 laser 30 m		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>ZT-L3000</b> □	<b>P.272</b>
 Class 1 laser 2 m		W: 13.4 D: 34.6 H: 26.5	IP67	Teaching (with amplifier) 	Resin	Sensor head for amplifier separate type	Connector type	<b>DSTC-200</b> □ (Sensor head only)	<b>P.280</b>
 Class 1 laser; 30 mm wide 2 m Length measurement mode: 0.5 m		W: 13.4 D: 52.9 H: 47	IP67	Teaching (with amplifier) 	Resin	Sensor head for amplifier separate type	Connector type	<b>DSTA-200</b> □ (Sensor head only)	<b>P.280</b>














## Retro-reflective type sensor selection guide

## Retro-reflective type photoelectric sensors (DC power)

**Related products** Sensor head for amplifier separate type selection page **394**







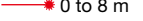





Light source/Sensing distance	Shape	Size	Degree of protection	Distance adjustment	Housing material	Type	Connection type	Model	Page
 Red 0.01 to 5.5 m		W: 11 D: 21 H: 32.1	Cable type: IP69K Connector type: Equivalent to IP67g	Potentiometer 	SUS316L	Built-in amplifier	Cable type	<b>ZR-M550</b> □	<b>P.158</b>
 Red 0.01 to 4.4 m		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>Z2R-400</b> □	<b>P.168</b>
 Red 0.01 to 4 m		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>Z3R-400</b> □	<b>P.148</b>
 Red 0.01 to 4 m		ø : 16.6 D : 58	IP67	Potentiometer 	Brass Ni plated	Built-in amplifier	Cable type	<b>CRD-400</b> □-R	<b>P.224</b>
 Red 0.01 to 3.5 m		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>S2R-350</b> □	<b>P.216</b>
 Red 0.01 to 3 m		W: 11 D: 38 H: 23	IP67g	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>JR-H300</b> □	<b>P.188</b>
 Red 0.01 to 3 m		W: 11 D: 23 H: 38	IP67g	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>JR-S300</b> □	<b>P.188</b>
 Red 0.01 to 2.5 m		W: 12 D: 28.6 H: 37	IP67	None	Resin + SUS protector	Built-in amplifier	Cable type/ Connector type	<b>KR-250</b> □	<b>P.200</b>
 Red 0.02 to 1.5 m		W: 10 D: 17 H: 28	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>SR-150</b> □	<b>P.208</b>

### Retro-reflective type photoelectric sensors (universal voltage/DC power)

Light source/Sensing distance	Shape	Size	Degree of protection	Distance adjustment	Housing material	Type	Connection type	Model	Page
 0.01 to 12 m		W: 20 D: 43.9 H: 60	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type	<b>V2R-1200</b> □	<b>P.246</b>
 0.01 to 12 m		W: 23.5 D: 55.8 H: 74.5	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>V3R-1200</b> □	<b>P.256</b>
 0.01 to 12 m		W: 23.5 D: 63 H: 74.5	IP67	Potentiometer 	Resin	Built-in amplifier	Terminal block type	<b>V4R-1200</b> □	<b>P.256</b>
 0.01 to 10 m  0.01 to 8 m		W: 25 D: 63 H: 78	IP67	Potentiometer 	Resin	Built-in amplifier	Terminal block type	<b>VR-1000</b> □ <b>VR-800</b> □	<b>P.264</b>

### Retro-reflective type laser sensors

**Related products** Sensor head for amplifier separate type selection page **394**















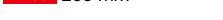
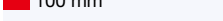
Light source/Sensing distance	Shape	Size	Degree of protection	Distance adjustment	Housing material	Type	Connection type	Model	Page
<b>Laser</b>  0.5 to 50 m Sensitivity correction setting: 1 to 70 m		W: 13.4 D: 34.6 H: 26.5	IP67	Teaching (with amplifier) 	Resin	Sensor head for amplifier separate type	Connector type	<b>DSR-5000</b> (Sensor head only)	<b>P.280</b>
<b>Laser</b>  0.2 to 10 m		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>ZR-L1000</b> □	<b>P.272</b>
<b>Laser</b>  0 to 8 m Sensitivity correction setting: 0.2 to 20 m		W: 13.4 D: 34.6 H: 26.5	IP67	Teaching (with amplifier) 	Resin	Sensor head for amplifier separate type	Connector type	<b>DSR-800</b> (Sensor head only)	<b>P.280</b>
<b>Laser</b>  0 to 5 m		W: 15 D: 30 H: 44.4	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>DR-500</b> □	<b>P.298</b>

## Diffuse-reflective type sensor selection guide

## Diffuse-reflective type photoelectric sensors (DC power)









Related products

BGS type selection page 308

Light source/Sensing distance	Shape	Size	Degree of protection	Distance adjustment	Housing material	Type	Connection type	Model	Page
 Red 1 m		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>Z3D-100</b> □	<b>P.148</b>
 Red 1 m		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>Z2D-80</b> □	<b>P.168</b>
 Red 1 m		ø : 16.6 D: 58	IP67	Potentiometer 	Brass Ni plated	Built-in amplifier	Cable type	<b>CDD-100</b> □-R	<b>P.224</b>
 Red 800 mm		W: 11 D: 21 H: 32.1	Cable type: IP69K Connector type: Equivalent to IP67g	Potentiometer 	SUS316L	Built-in amplifier	Cable type	<b>ZD-M80</b> □	<b>P.158</b>
 Red 800 mm		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>S2D-80</b> □	<b>P.216</b>
 Red 800 mm		W: 11 D: 38 H: 23	IP67g	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>JD-HR80</b> □	<b>P.188</b>
 Red 800 mm		W: 11 D: 23 H: 38	IP67g	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>JD-SR80</b> □	<b>P.188</b>
 Red 400 mm		W: 12 D: 28.6 H: 37	IP67	Potentiometer 	Resin + SUS protector	Built-in amplifier	Cable type/ Connector type	<b>KD-40</b> □	<b>P.200</b>
 Red 200 mm		W: 10 D: 17 H: 28	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>SD-20</b> □	<b>P.208</b>
 Red 100 mm		W: 14 D: 3.5 H: 19.5	IP67	None	Resin	Built-in amplifier	Cable type	<b>ED-100</b> □	<b>P.178</b>
 Red 30 mm		W: 5 D: 15.45 H: 19.9	IP67	None	Resin	Built-in amplifier	Cable type	<b>ED-S30</b> □	<b>P.178</b>





Diffuse-reflective type photoelectric sensors (universal voltage/DC power)

Related products BGS type selection page 308

Light source/Sensing distance	Shape	Size	Degree of protection	Distance adjustment	Housing material	Type	Connection type	Model	Page
Infrared } 3 m Infrared } 2.5 m		W: 25 D: 63 H: 78	IP67	Potentiometer 	Resin	Built-in amplifier	Terminal block type	VD-300□ VD-250	P.264
Red } 2 m		W: 23.5 D: 55.8 H: 74.5	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	V3D-200□	P.256
Red } 2 m		W: 23.5 D: 63 H: 74.5	IP67	Potentiometer 	Resin	Built-in amplifier	Terminal block type	V4D-200□	P.256
Red } 1.3 m Red } 1 m		W: 25 D: 63 H: 78	IP67	Potentiometer 	Resin	Built-in amplifier	Terminal block type	VD-130□ VD-100	P.264

Diffuse-reflective type laser sensors 

Related products BGS type selection page 308












Light source/Sensing distance	Shape	Size	Degree of protection	Distance adjustment	Housing material	Type	Connection type	Model	Page
Laser } 0 to 1 m Sensitivity correction setting: 1.5 m		W: 13.4 D: 34.6 H: 26.5	IP67	Teaching (with amplifier) 	Resin	Sensor head for amplifier separate type	Connector type	DSD-100 (Sensor head only)	P.280
Laser } 400 mm		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	ZD-L40□	P.272

## Limited diffuse reflective type sensor selection guide

### Limited diffuse reflective type photoelectric sensors (DC power)







**Related products**

 BGS type selection page **308**

Light source/Sensing distance	Shape	Size	Degree of protection	Distance adjustment	Housing material	Type	Connection type	Model	Page
<b>Red</b> 0 to 110 mm		ø : 16.6 D : 58	IP67	Potentiometer 	Brass Ni plated	Built-in amplifier	Cable type	<b>CDD-11□-R</b>	<b>P.224</b>
<b>Red</b> 10 to 90 mm		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>Z3D-L09□</b>	<b>P.148</b>
<b>Red</b> 10 to 90 mm		W: 12 D: 28.6 H: 37	IP67	Potentiometer 	Resin + SUS protector	Built-in amplifier	Cable type/ Connector type	<b>KD-L09□</b>	<b>P.200</b>
<b>Red</b> 20 to 50 mm		W: 11 D: 38/23 H: 23/38	IP67g	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>JD-HL03□</b> <b>JD-SL03□</b>	<b>P.188</b>
<b>Red</b> 5 to 30 mm		W: 14 D: 3.5 H: 19.5	IP67	None	Resin	Built-in amplifier	Cable type	<b>EL-30□</b>	<b>P.178</b>
<b>Red</b> 2 to 15 mm		W: 5 D: 15.45 H: 19.9	IP67	None	Resin	Built-in amplifier	Cable type	<b>EL-S15□</b>	<b>P.178</b>
<b>Red</b> 2 to 15 mm		W: 14 D: 3.5 H: 19.5	IP67	None	Resin	Built-in amplifier	Cable type	<b>EL-15□</b>	<b>P.178</b>
<b>Red</b> 3 to 8 mm		W: 14 D: 3.5 H: 19.5	IP67	None	Resin	Built-in amplifier	Cable type	<b>EL-08□</b>	<b>P.178</b>

## Wide angle diffuse reflective type sensor selection guide

## Wide angle diffuse reflective type photoelectric sensors (DC power)

Light source/Sensing distance	Shape	Size	Degree of protection	Distance adjustment	Housing material	Type	Connection type	Model	Page
 Red 200 mm		W: 11 D: 20 H: 31	IP67	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>Z3D-W20</b> □	<b>P.148</b>
 Red 80 mm		W: 11 D: 38/23 H: 23/38	IP67g	Potentiometer 	Resin	Built-in amplifier	Cable type/ Connector type	<b>JD-HW08</b> □ <b>JD-SW08</b> □	<b>P.188</b>