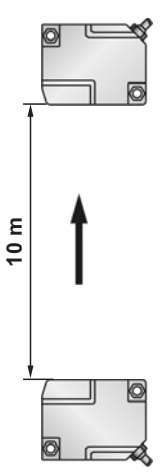









## Opposed Mode

Sensing Mode	Connection	Supply Voltage	Output Mode	Part Number
<p style="text-align: center;">Light Source: Red LED</p>  <p style="text-align: center;">Opposed Mode Sensing Distance: 10 m</p>	<p>2m Cable</p> 	10-30V DC	Emitter	<u>RS62-T010MD-EY6C2L2</u>
			NPN	<u>RS62-T010MN-CY6C4U2</u>
			PNP	<u>RS62-T010MP-CY6C4U2</u>
			NPN/PNP	<u>RS62-T010MD-CY6C4U2</u>
		12-240V DC/ 24-240V AC	Emitter (2-wire)	<u>RS62-T010MC-EY6C2L2</u>
			SPDT Relay (5-wire)	<u>RS62-T010MR-CY6C5L2</u>
			SPST Solid-state Light-ON (2-wire)	<u>RS62-T010MC-LY6C2U2</u>
			SPST Solid-state Dark-ON (2-wire)	<u>RS62-T010MC-DY6C2U2</u>
	<p>5m Cable</p> 	10-30V DC	Emitter	<u>RS62-T010MD-EY6C2L5</u>
			NPN	<u>RS62-T010MN-CY6C4U5</u>
			PNP	<u>RS62-T010MP-CY6C4U5</u>
			NPN/PNP	<u>RS62-T010MD-CY6C4U5</u>
		12-240V DC/ 24-240V AC	Emitter (2-wire)	<u>RS62-T010MC-EY6C2L5</u>
			SPDT Relay (5-wire)	<u>RS62-T010MR-CY6C5L5</u>
			SPST Solid-state Light-ON (2-wire)	<u>RS62-T010MC-LY6C2U5</u>
			SPST Solid-state Dark-ON (2-wire)	<u>RS62-T010MC-DY6C2U5</u>
<p>6" Pigtail</p> 	10-30V DC (Euro-style)	Emitter	<u>RS62-T010MD-EY6P4LE</u>	
		NPN	<u>RS62-T010MN-CY6P4UE</u>	
		PNP	<u>RS62-T010MP-CY6P4UE</u>	
		NPN/PNP	<u>RS62-T010MD-CY6P4UE</u>	
	12-240V DC/ 24-240V AC (Micro-style)	Emitter (2-wire)	<u>RS62-T010MC-EY6P3LM</u>	
		SPDT Relay (5-wire)	<u>RS62-T010MR-CY6P5LM</u>	
		SPST Solid-state Light-ON (2-wire)	<u>RS62-T010MC-LY6P3UM</u>	
		SPST Solid-state Dark-ON (2-wire)	<u>RS62-T010MC-DY6P3UM</u>	

**Note:**  
 Coming Soon : Part numbers with underline  
 In Preparation: Part numbers with a line through the middle  
 — Au-01 —

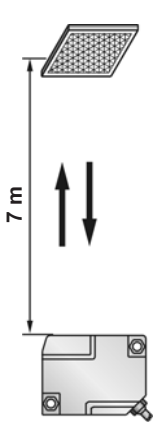



## Opposed Mode

Sensing Mode	Connection	Supply Voltage	Output Mode	Part Number
<p style="text-align: center;">Light Source: Infrared LED</p>  <p style="text-align: center;">Opposed Mode Sensing Distance: 30 m</p>	<p>2m Cable</p> 	10-30V DC	Emitter	<u>RS62-T030MD-EY9C2L2</u>
			NPN	RS62-T030MN-CY9C4U2
			PNP	RS62-T030MP-CY9C4U2
			NPN/PNP	RS62-T030MD-CY9C4U2
		12-240V DC/ 24-240V AC	Emitter (2-wire)	RS62-T030MC-EY9C2L2
			SPDT Relay (5-wire)	RS62-T030MR-CY9C5L2
			SPST Solid-state Light-ON (2-wire)	RS62-T030MC-LY9C2U2
			SPST Solid-state Dark-ON (2-wire)	RS62-T030MC-DY9C2U2
	<p>5m Cable</p> 	10-30V DC	Emitter	<u>RS62-T030MD-EY9C2L5</u>
			NPN	RS62-T030MN-CY9C4U5
			PNP	RS62-T030MP-CY9C4U5
			NPN/PNP	RS62-T030MD-CY9C4U5
		12-240V DC/ 24-240V AC	Emitter (2-wire)	RS62-T030MC-EY9C2L5
			SPDT Relay (5-wire)	RS62-T030MR-CY9C5L5
			SPST Solid-state Light-ON (2-wire)	RS62-T030MC-LY9C2U5
			SPST Solid-state Dark-ON (2-wire)	RS62-T030MC-DY9C2U5
<p>6" Pigtail</p> 	10-30V DC (Euro-style)	Emitter	<u>RS62-T030MD-EY9P4LE</u>	
		NPN	RS62-T030MN-CY9P4UE	
		PNP	RS62-T030MP-CY9P4UE	
		NPN/PNP	RS62-T030MD-CY9P4UE	
	12-240V DC/ 24-240V AC (Micro-style)	Emitter (2-wire)	RS62-T030MC-EY9P3LM	
		SPDT Relay (5-wire)	RS62-T030MR-CY9P5LM	
		SPST Solid-state Light-ON (2-wire)	RS62-T030MC-LY9P3UM	
		SPST Solid-state Dark-ON (2-wire)	RS62-T030MC-DY9P3UM	

**Note:**  
 Coming Soon : Part numbers with underline  
 In Preparation: Part numbers with a line through the middle  
 —Au-02—

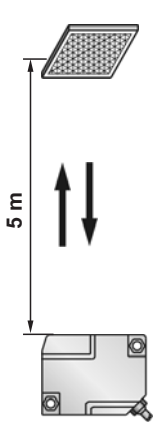



Au: RS62 SERIES

## Retroreflective Mode

Sensing Mode	Connection	Supply Voltage	Output Mode	Part Number
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Light Source: Infrared LED</p>  <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Retroreflective Mode Sensing Distance: 7 m (Note)</p>	<p>2m Cable</p> 	10-30V DC	NPN	<u>RS62-L7000N-CY9C4U2</u>
			PNP	<u>RS62-L7000P-CY9C4U2</u>
			NPN/PNP	<u>RS62-L7000D-CY9C4U2</u>
		12-240V DC/ 24-240V AC	SPDT Relay (5-wire)	<u>RS62-L7000R-CY9C5L2</u>
			SPST Solid-state Light-ON (2-wire)	<u>RS62-L7000G-LY9C2U2</u>
			SPST Solid-state Dark-ON (2-wire)	<u>RS62-L7000G-DY9C2U2</u>
	<p>5m Cable</p> 	10-30V DC	NPN	<u>RS62-L7000N-CY9C4U5</u>
			PNP	<u>RS62-L7000P-CY9C4U5</u>
			NPN/PNP	<u>RS62-L7000D-CY9C4U5</u>
		12-240V DC/ 24-240V AC	SPDT Relay (5-wire)	<u>RS62-L7000R-CY9C5L5</u>
			SPST Solid-state Light-ON (2-wire)	<u>RS62-L7000G-LY9C2U5</u>
			SPST Solid-state Dark-ON (2-wire)	<u>RS62-L7000G-DY9C2U5</u>
	<p>6" Pigtail</p> 	10-30V DC (Euro-style)	NPN	<u>RS62-L7000N-CY9P4UE</u>
			PNP	<u>RS62-L7000P-CY9P4UE</u>
			NPN/PNP	<u>RS62-L7000D-CY9P4UE</u>
		12-240V DC/ 24-240V AC (Micro-style)	SPDT Relay (5-wire)	<u>RS62-L7000R-CY9P5LM</u>
			SPST Solid-state Light-ON (2-wire)	<u>RS62-L7000G-LY9P3UM</u>
			SPST Solid-state Dark-ON (2-wire)	<u>RS62-L7000G-DY9P3UM</u>





**Note:** Used with RE-6152 (supplied with sensor) reflector.  
 Coming Soon : Part numbers with underline  
 In Preparation: Part numbers with a line through the middle  
 —Au-03—

## Retroreflective Mode with Polarizing Filter

Sensing Mode	Connection	Supply Voltage	Output Mode	Part Number
<p style="text-align: center;">Light Source: Red LED</p>  <p style="text-align: center;">Retroreflective Mode with Polarizing Filter Sensing Distance: 5 m (Note)</p>	<p>2m Cable</p> 	10-30V DC	NPN	<u>RS62-L5000N-CY6C4U2-PF</u>
			PNP	<u>RS62-L5000P-CY6C4U2-PF</u>
			NPN/PNP	<u>RS62-L5000D-CY6C4U2-PF</u>
		12-240V DC/ 24-240V AC	SPDT Relay (5-wire)	<u>RS62-L5000R-CY6C5L2-PF</u>
			SPST Solid-state Light-ON (2-wire)	<u>RS62-L5000G-LY6C2U2-PF</u>
			SPST Solid-state Dark-ON (2-wire)	<u>RS62-L5000C-DY6C2U2-PF</u>
	<p>5m Cable</p> 	10-30V DC	NPN	<u>RS62-L5000N-CY6C4U5-PF</u>
			PNP	<u>RS62-L5000P-CY6C4U5-PF</u>
			NPN/PNP	<u>RS62-L5000D-CY6C4U5-PF</u>
		12-240V DC/ 24-240V AC	SPDT Relay (5-wire)	<u>RS62-L5000R-CY6C5L5-PF</u>
			SPST Solid-state Light-ON (2-wire)	<u>RS62-L5000G-LY6C2U5-PF</u>
			SPST Solid-state Dark-ON (2-wire)	<u>RS62-L5000C-DY6C2U5-PF</u>
	<p>6" Pigtail</p> 	10-30V DC (Euro-style)	NPN	<u>RS62-L5000N-CY6P4UE-PF</u>
			PNP	<u>RS62-L5000P-CY6P4UE-PF</u>
			NPN/PNP	<u>RS62-L5000D-CY6P4UE-PF</u>
		12-240V DC/ 24-240V AC (Micro-style)	SPDT Relay (5-wire)	<u>RS62-L5000R-CY6P5LM-PF</u>
			SPST Solid-state Light-ON (2-wire)	<u>RS62-L5000G-LY6P3UM-PF</u>
			SPST Solid-state Dark-ON (2-wire)	<u>RS62-L5000C-DY6P3UM-PF</u>

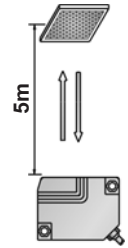


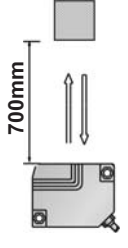


**Note:** Used with RE-6152 (supplied with sensor) reflector.  
 Coming Soon : Part numbers with underline  
 In Preparation: Part numbers with a line through the middle  
 —Au-04—

## Diffuse Mode

Sensing Mode	Connection	Supply Voltage	Output Mode	Part Number
<p style="text-align: center;">Light Source: Infrared LED</p>  <p style="text-align: center;">700 mm</p>	<p>2m Cable</p> 	10-30V DC	NPN	<u>RS62-D0700N-CY9C4U2</u>
			PNP	<u>RS62-D0700P-CY9C4U2</u>
			NPN/PNP	<u>RS62-D0700D-CY9C4U2</u>
		12-240V DC/ 24-240V AC	SPDT Relay (5-wire)	<u>RS62-D0700R-CY9C5L2</u>
			SPST Solid-state Light-ON (2-wire)	<u>RS62-D0700C-LY9C2U2</u>
			SPST Solid-state Dark-ON (2-wire)	<u>RS62-D0700C-DY9C2U2</u>
	<p>5m Cable</p> 	10-30V DC	NPN	<u>RS62-D0700N-CY9C4U5</u>
			PNP	<u>RS62-D0700P-CY9C4U5</u>
			NPN/PNP	<u>RS62-D0700D-CY9C4U5</u>
		12-240V DC/ 24-240V AC	SPDT Relay (5-wire)	<u>RS62-D0700R-CY9C5L5</u>
			SPST Solid-state Light-ON (2-wire)	<u>RS62-D0700C-LY9C2U5</u>
			SPST Solid-state Dark-ON (2-wire)	<u>RS62-D0700C-DY9C2U5</u>
<p>Diffuse Mode</p> <p>Sensing Distance: 700 mm</p>	<p>6" pigtail</p> 	10-30V DC (Euro-style)	NPN	<u>RS62-D0700N-CY9P4UE</u>
			PNP	<u>RS62-D0700P-CY9P4UE</u>
			NPN/PNP	<u>RS62-D0700D-CY9P4UE</u>
		12-240V DC/ 24-240V AC (Micro-style)	SPDT Relay (5-wire)	<u>RS62-D0700R-CY9P5LM</u>
			SPST Solid-state Light-ON (2-wire)	<u>RS62-D0700C-LY9P3UM</u>
			SPST Solid-state Dark-ON (2-wire)	<u>RS62-D0700C-DY9P3UM</u>

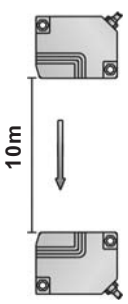


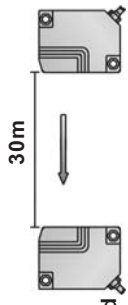


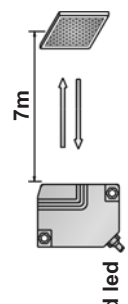


**Note:**  
 Coming Soon : Part numbers with underline  
 In Preparation: Part numbers with a line through the middle  
 —Au-05—

## RS62 SENSORS SELECTION GUIDE

Sensing mode	Connection	Supply Voltage	Output mode	Part number
 <p>Retroreflective mode With Polarizing filter Sensing distance: 5m Light source : red led</p>	<b>2m cable</b> 	12-240V DC or 24-240V AC	SPDT RELAY (Light-ON)	<u>RS62-L5000R-LY6C5L2-PF</u>
			SPDT RELAY (Dark-ON)	<u>RS62-L5000R-DY6C5L2-PF</u>
			—	—
	<b>5m cable</b> 	12-240V DC or 24-240V AC	SPDT RELAY (Light-ON)	<u>RS62-L5000R-LY6C5L5-PF</u>
			SPDT RELAY (Dark-ON)	<u>RS62-L5000R-DY6C5L5-PF</u>
			—	—
 <p>Diffuse Mode Sensing Distance: 0.7m Light source: infrared led</p>	<b>2m cable</b> 	12-240V DC or 24-240V AC	SPDT RELAY (Light-ON)	<u>RS62-D0700R-LY9C5L2</u>
			SPDT RELAY (Dark-ON)	<u>RS62-D0700R-DY9C5L2</u>
			—	—
	<b>5m cable</b> 	12-240V DC or 24-240V AC	SPDT RELAY (Light-ON)	<u>RS62-D0700R-LY9C5L5</u>
			SPDT RELAY (Dark-ON)	<u>RS62-D0700R-DY9C5L5</u>
			—	—
		12-240V DC or 24-240V AC	SPDT RELAY (Light-ON)	—
			SPDT RELAY (Dark-ON)	—
			—	—
		12-240V DC or 24-240V AC	SPDT RELAY (Light-ON)	—
			SPDT RELAY (Dark-ON)	—
			—	—

**Note:**  
Coming Soon : Part numbers with underline

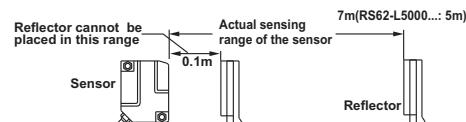
## RS62 SENSORS SELECTION GUIDE

Sensing mode	Connection	Supply Voltage	Output mode	Part number
 <p>Oppose mode Sensing distance:10m Light source : red led</p>	2m cable 	12-240V DC or 24-240V AC	Emitter	<u>RS62-T010MD-EY6C2L2</u>
			SPDT RELAY (Light-ON)	<u>RS62-T010MR-LY6C5L2</u>
			SPDT RELAY (Dark-ON)	<u>RS62-T010MR-DY6C5L2</u>
	5m cable 	12-240V DC or 24-240V AC	Emitter	<u>RS62-T010MD-EY6C2L5</u>
			SPDT RELAY (Light-ON)	<u>RS62-T010MR-LY6C5L5</u>
			SPDT RELAY (Dark-ON)	<u>RS62-T010MR-DY6C5L5</u>
 <p>Oppose mode Sensing distance:30m Light source: infrared led</p>	2m cable 	12-240V DC or 24-240V AC	Emitter	<u>RS62-T030MD-EY9C2L2</u>
			SPDT RELAY (Light-ON)	<u>RS62-T030MR-LY9C5L2</u>
			SPDT RELAY (Dark-ON)	<u>RS62-T030MR-DY9C5L2</u>
	5m cable 	12-240V DC or 24-240V AC	Emitter	<u>RS62-T030MD-EY9C2L5</u>
			SPDT RELAY (Light-ON)	<u>RS62-T030MR-LY9C5L5</u>
			SPDT RELAY (Dark-ON)	<u>RS62-T030MR-DY9C5L5</u>
 <p>Retroreflective mode Sensing distance:7m Light source : infrared led</p>	2m cable 	12-240V DC or 24-240V AC	SPDT RELAY (Light-ON)	<u>RS62-L7000R-LY9C5L2</u>
			SPDT RELAY (Dark-ON)	<u>RS62-L7000R-DY9C5L2</u>
			—	—
	5m cable 	12-240V DC or 24-240V AC	SPDT RELAY (Light-ON)	<u>RS62-L7000R-LY9C5L5</u>
			SPDT RELAY (Dark-ON)	<u>RS62-L7000R-DY9C5L5</u>
			—	—

Note:  
Coming Soon : Part numbers with underline

## Specifications (DC)

Type	Retroreflective Mode		Diffuse Mode	Thru-beam Mode	
	with polarizing filters	Long sensing range			Long sensing range
Model Number	RS62-L5000...	RS62-L7000...	RS62-D0700...	RS62-T010M...	RS62-T030M...
Item					
Sensing Range	0.1 to 5m (Note 1)	0.1 to 7m (Note 1)	700mm (Note 2)	10m	30m
Sensing Object	φ50 mm or more opaque,translucent or specular Object (Note 1)	φ50mm or more opaque or translucent Object (Note 1)	Opaque,translucent or transparent object	φ 20mm or more opaque object (If slit masks are fitted, an object as small as 3x6mm can be detected.)	
Hysteresis	————		15% or less of operation distance	————	
Supply Voltage	10-30V DC				
Current Consumption	<35 mA (no load)				
Output Type	PNP, NPN, PNP+NPN				
Output Voltage High	PNP: Vs - (<=1.5V); NPN: approx. Vs.				
Output Voltage Low	PNP: approx. 0V; NPN: <=1.5V.				
Output Current Max.	100 mA				
Operation Mode	Selectable either Light-on Dark-on by the control input wire				
Response Time	10ms or less				
Operation Indicator	Red LED (lights up when the output is ON)				
Stability Indicator	Green LED(lights up under stable light received condition or stable dark condition)				
Power Indicator	————				Red LED (lights up when the power is ON)
Sensitivity Adjuster	Continuously variable adjuster	————	Continuously variable adjuster	Continuously variable adjuster	————
Interference Immunity	Incorporated (Two units of sensors can be mounted closely.)			(Use optional interference prevention filters)	
Pollution Degree	3 (Industrial environment)				
Enclose Category	IP66(IEC)				
Operating Temperature	-20 to +55°C (No dew condensation or icing allowed ) , Storage:-30 to +70°C				
Operating Humidity	35 to 85% RH,Storage:35 to 85% RH				
Ambient illuminance	Sunlight:11,000lx at the light-receiving face, Incandescent light:3500lx at the light-receiving face				
EMC	IEC 60947-5-2 Parts 7.2.6.1,2,3 or RFI>3V/m(In30-1000MHz),EFT>1KV,ESD>4KV(contact)				
Voltage with Standability	IEC 60947-5-2 Parts 8.3.3.4, or 500VDC for one min between all supply terminals connected together and enclosure				
Insulation Resistance	>20M,with 500VDC megger between all supply terminals				
Vibration Resistance	IEC 60947-5-2 Parts 7.4.2 or 10-55Hz 1.0m amplitude in X Y and Z directions for 30 min				
Shock Resistance	IEC 60947-5-2 Parts 7.4.1 or 30g 11ms in X Y and Z directions for six time each				
Emitting Element	Red LED (modulated)	Infrared LED (modulated)	Red LED (modulated)	Infrared LED (modulated)	
Material	Enclosure: Acrylonitrile Butadine Styrene (ABS),Lens:Polycarbonate,Cover:Acrylonitrile Butadine Styrene (ABS), Front cover: Acrylic (retroreflective type sensor only)				
Cable	0.3mm <sup>2</sup> 4-core or 2-core cabtyre cable, 2m long				
Cable Length	Extension up to total 100m is possible with 0.3mm <sup>2</sup> ,or more ,cable(thru-beam type: both emitter and receiver).				
Weight	140g approx.		Emitter: 100g approx. Receiver:140g approx.	Emitter: 125g approx. Receiver:140g approx.	
Accessories	MB-7240, MB-7040, MB-6445 (optional)				
Notes:	<p>1)Used with RE-6152 (supplied with sensor) reflector . The sensing range and the sensing object of the retroreflective type sensor is specified for the reflector. further, the sensing range is the possible setting range for the reflector.</p> <p>2)The sensing range of the diffuse reflective type sensor is specified for white non-glossy paper (200 x 200mm) as the object.</p>				

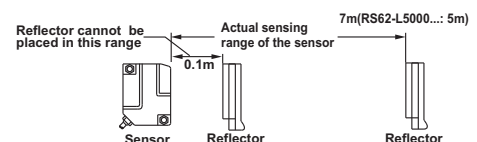




## Specifications (AC/DC)

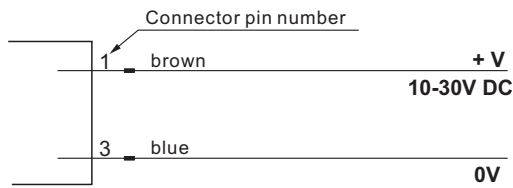
Type	Retroreflective Mode		Diffuse Mode	Thru-beam Mode	
	with polarizing filters	Long sensing range		Long sensing range	
Model Number	RS62-L5000...	RS62-L7000...	RS62-D0700...	RS62-T010M...	RS62-T030M...
Item					
Sensing Range	0.1 to 5m (Note 1)	0.1 to 7m (Note 1)	700mm (Note 2)	10m	30m
Sensing Object	φ 50 mm or more opaque,translucent or specular Object (Note 1)	φ 50mm or more opaque or translucent Object (Note 1)	Opaque,translucent or transparent object	φ 20mm or more opaque object (If slit masks are fitted, an object as small as 3x6mm can be detected.)	
Hysteresis	—————		15% or less of operation distance	—————	
Repeatability	0.2mm or less		0.3mm or less	0.1mm or less	0.2mm or less
Power Supply	24 to 240V AC		10% or 12 to 240V DC	10% Ripple P-P 10% or less	
Power Consumption	2VA or less			Emitter: 1VA or less Receiver:2VA or less	Emitter:1.5VA or less Receiver: 2VA orless
Output	Relay contact 1c • Switching capacity:250V AC 1A (resistive load) 30V DC 2A (resistive load) • Electrical life:100,000or more operations (at rated AC load) 500,000or more operations (at rated DC load) • Mechanical life:100,000,000 or more operations				
Light/Dark Operation	Relay Oouput: Light-ON or Dark-ON selectable , SPST Solid state: Either Light-ON or Dark-ON				
Response Time	10ms or less				
Operation Indicator	Red LED (lights up when the output is ON)				
Stability Indicator	Green LED(lights up under stable light received condition or stable dark condition)				
Power Indicator	—————				Red LED (lights up when the power is ON)
Sensitivity Adjuster	Continuously variable adjuster	—————	Continuously variable adjuster	Continuously variable adjuster	—————
Interference Immunity	Incorporated (Two units of sensors can be mounted closely.)			(Use optional interference prevention filters)	—————
Pollution Degree	3 (Industrial environment)				
Enclose Category	IP66(IEC)				
Operating Temperature	-20 to +55°C (No dew condensation or icing allowed ) , Storage:-30 to +70°C				
Operating Humidity	35 to 85% RH,Storage:35 to 85% RH				
Ambient illuminance	Sunlight:11,000l x at the light-receiving face, Incandescent light:3500l at the light-receiving face				
EMC	IEC 60947-5-2 Parts 7.2.6.1,2,3 or RFI>3V/m(In30-1000MHz),EFT>1KV,ESD>4KV(contact)				
Voltage with Standability	IEC 60947-5-2 Parts 8.3.3.4, or 500VDC for one min between all supply terminals connected together and enclosure				
Insulation Resistance	>20M,with 500VDC megger between all supply terminals				
Vibration Resistance	IEC 60947-5-2 Parts 7.4.2 or 10-55Hz 1.0m amplitude in X Y and Z directions for 30 min				
Shock Resistance	IEC 60947-5-2 Parts 7.4.1 or 30g 11ms in X Y and Z directions for six time each				
Emitting Element	Red LED (modulated)	Infrared LED (modulated)	Red LED (modulated)	Infrared LED(modulated)	
Material	Enclosure: Acrylonitrile Butadine Styrene (ABS),Lens:Polycarbonate,Cover:Acrylonitrile Butadine Styrene (ABS), Front cover: Acrylic (retroreflective type sensor only)				
Cable	0.3mm <sup>2</sup> 5-core or 2-core cabtyre cable, 2m long				
Cable Length	Extension up to total 100m is possible with 0.3mm <sup>2</sup> ,or more ,cable(thru-beam type: both emitter and receiver).				
Weight	140g approx.			Emitter: 100g approx. Receiver:140g approx.	Emitter: 125g approx. Receiver:140g approx.
Accessories	MB-7240, MB-7040, MB-6445 (optional)				

**Notes:** 1)Used with RE-6152 (supplied with sensor) reflector.  
 The sensing range and the sensing object of the retroreflective type sensor is specified for the reflector. further, the sensing range is the possible setting range for the reflector.  
 2)The sensing range of the diffuse reflective type sensor is specified for white non-glossy paper (200 x 200mm) as the object.



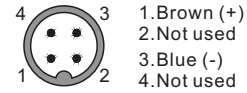
## Connection Diagrams (DC)

### Emitter of Thru-beam Mode

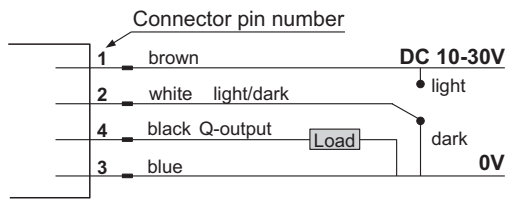


#### Connector pin position

##### Euro-style



### PNP output type

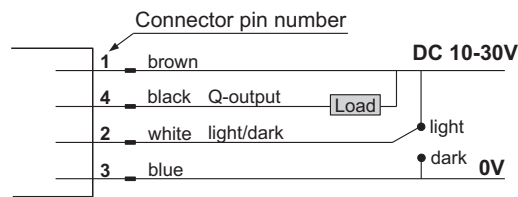


#### Connector pin position

##### Euro-style

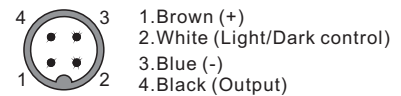


### NPN output type

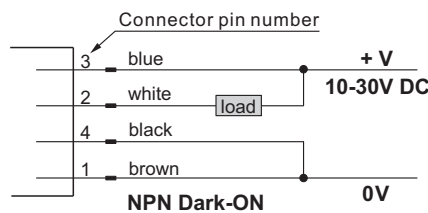
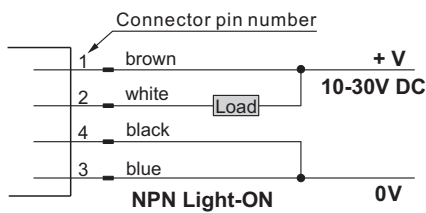


#### Connector pin position

##### Euro-style

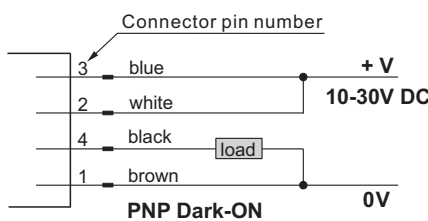
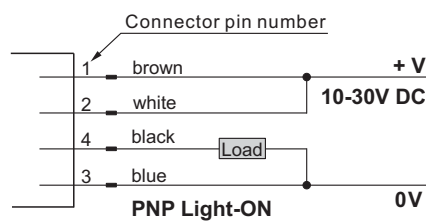
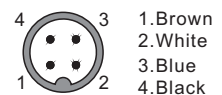


### NPN/PNP output type



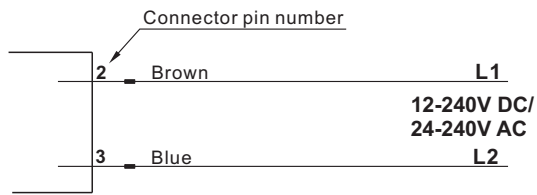
#### Connector pin position

##### Euro-style



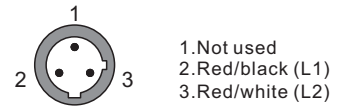
## Connection Diagrams (AC/DC)

### Emitter of Thru-beam Mode

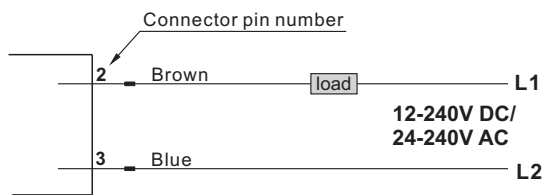


#### Connector face view

##### Micro-style

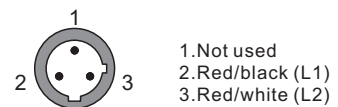


### SPST Solid-state output type

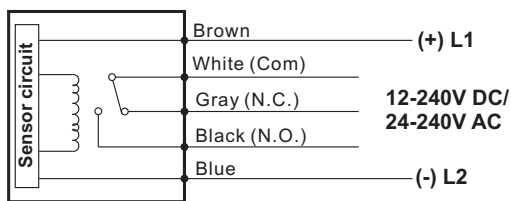


#### Connector face view

##### Micro-style



### SPDT Relay output



#### Connector face view

##### Micro-style



### SPDT Relay Output operation

Sensing Mode		Thru-beam & Retroreflective type				Diffuse type			
		Light-ON type		Dark-ON type		Light-ON type		Dark-ON type	
Output		NO (Black cable)	NC (Gray cable)	NO (Black cable)	NO (Gray cable)	NO (Black cable)	NC (Gray cable)	NO (Black cable)	NO (Gray cable)
Output Condition	Power OFF	Open	Close	Open	Close	Open	Close	Open	Close
	Beam-received	Close	Open	Open	Close	Close	Open	Open	Close
	Beam-interrupted	Open	Close	Close	Open	Open	Close	Close	Open

■ Object detected state

## Precautions For Proper Use

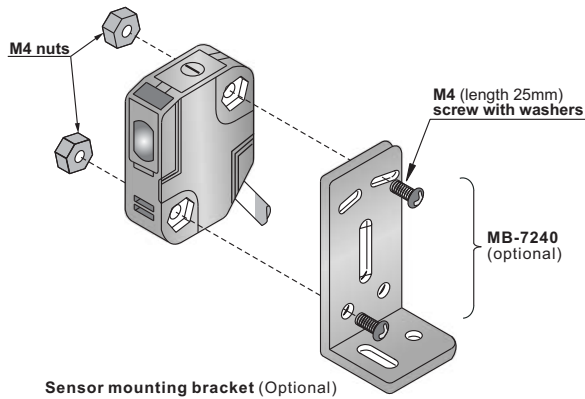
### Precautions for proper use

#### Cautions:

Don't use the sensor for a safety aim, because it's only designed for a normal object detection

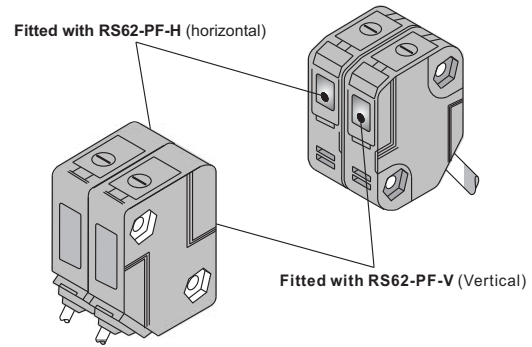
#### Mounting

The tightening torque should be 0.8N.m or less.



#### Interference prevention filter (Exclusively for RS62-T010M... )

Use the interference prevention filters (optional) when two units of thru-beam type sensors are mounted closely.



There are two types of interference prevention filters. The two sets of thru-beam type sensors should be fitted with different types of interference prevention filters.

#### Others

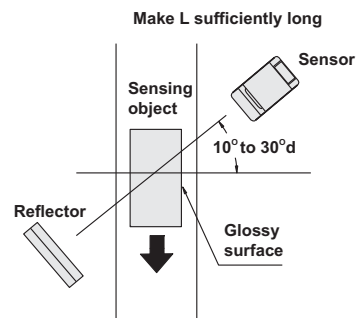
Do not use during the initial transient time (50ms) after the power supply is switched on.

### Retroreflective type sensor (RS62-L7000R-CY9C5L2 )

Please take care of the following points when detecting materials having a gloss.

- Make L, shown in the diagram, sufficiently long.
- Install at an angle of 10 to 30 degrees to the sensing object.

RS62-L500R-LY6C5L2-PF; does not need the above adjustment.



### Retroreflective type sensor with polarizing filters (RS62-L5000R-CY6C5L2-PF )

If a shiny object is covered or wrapped with a transparent film, such as those described below, the retroreflective type sensor with polarizing filters may not be able to detect it.

In that case, follow the steps given below.

#### Example of sensing objects

- Can wrapped by clear film
- Aluminum sheet covered by plastic film
- Gold or silver color (glossy) label or wrapping paper

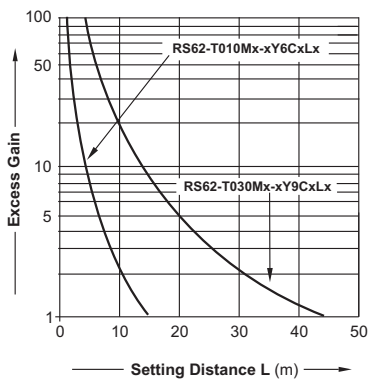
#### Steps

- Tilt the sensor with respect to the sensing object while fitting.
- Reduce the sensitivity.
- Increase the distance between the sensor and the sensing object.

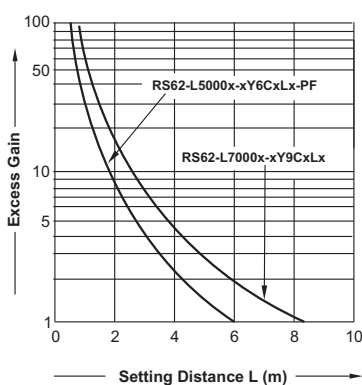
## Sensing Characteristics (Typical)

### All Models

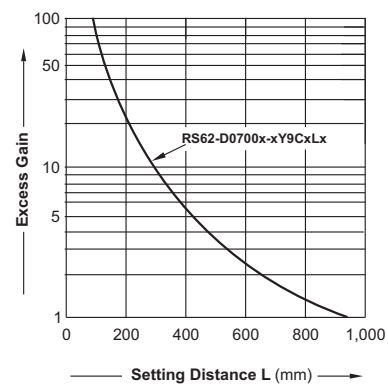
**Opposed Mode**



**Retroreflective Mode**

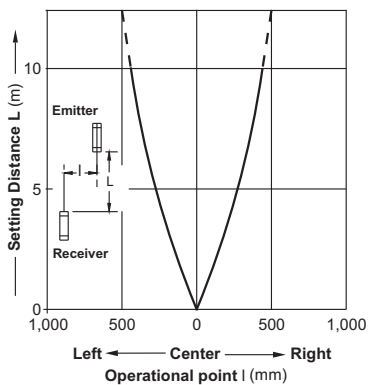


**Diffuse Mode**

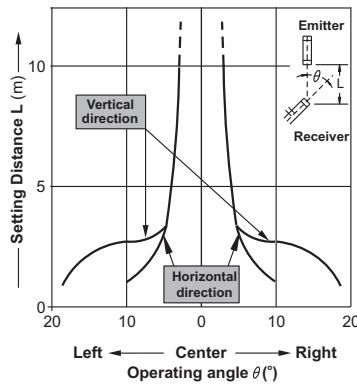


### Thru-beam Mode (Sn=10 m)

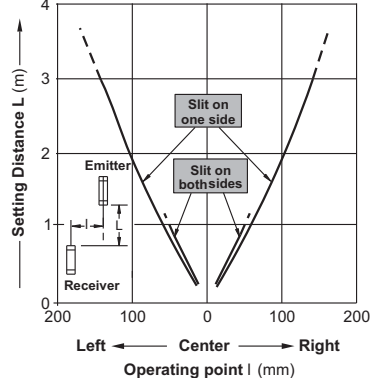
**Parallel Deviation**



**Angular Deviation**

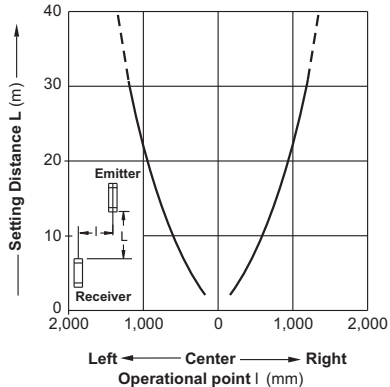


**Parallel Deviation with slit masks(3X6mm)**

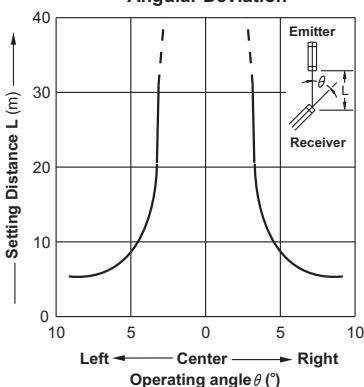


### Long Range Thru-beam Mode (Sn=30 m)

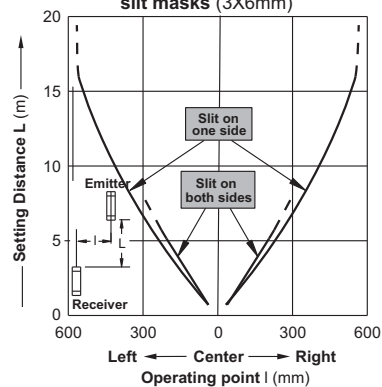
**Parallel Deviation**



**Angular Deviation**

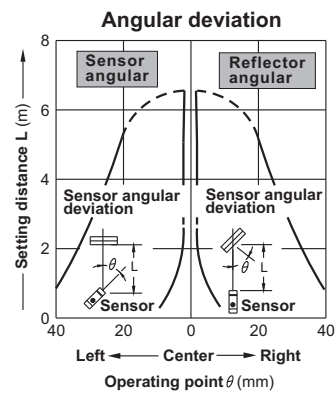
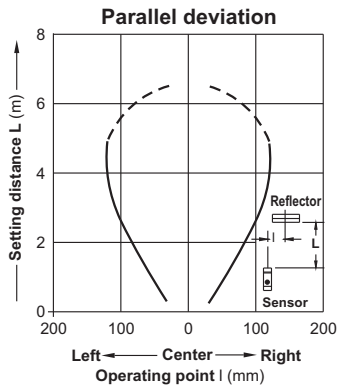


**Parallel Deviation with slit masks (3X6mm)**

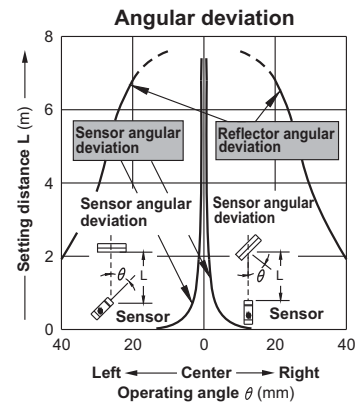
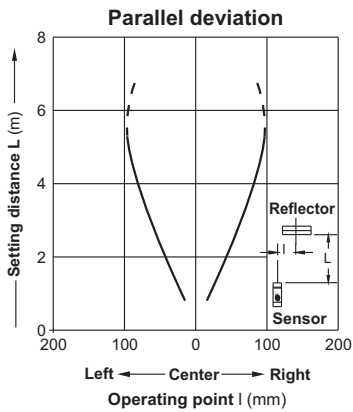


## Sensing Characteristics (Typical)

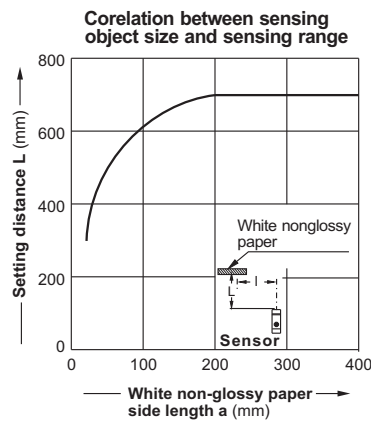
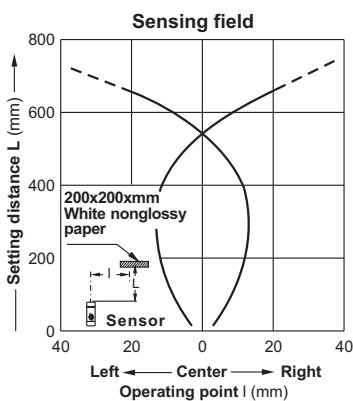
### Retroreflective Mode with polarizing filter (Sn=5 m)



### Retroreflective Mode (Sn=7 m)



### Diffuse Mode (Sn=700 mm)

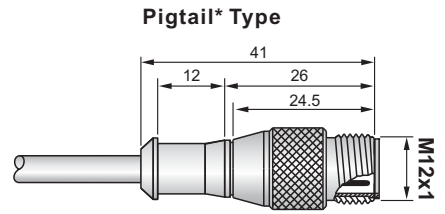
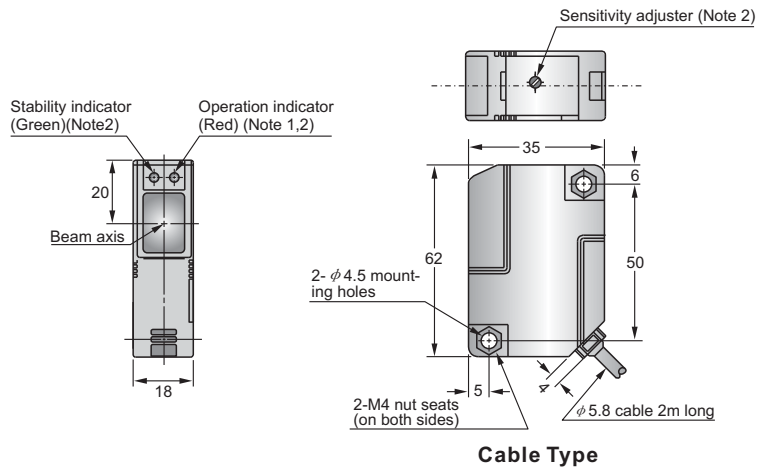


As the sensing object size becomes smaller than the standard size (white non-glossy paper 200X200mm), the sensing range shortens, as shown in the left graph.

For plotting the left graph, the sensitivity has been set such that a 200X200mm white nonglossy paper is just detectable at a distance of 700mm.

## Dimensions (Unit: mm)

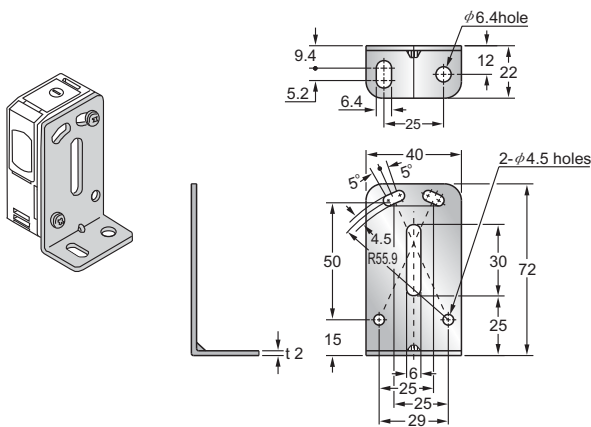
### Sensor Type



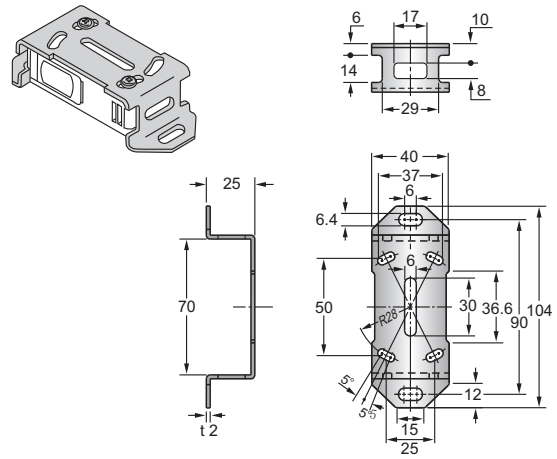
\*: Please see **Pigtail Series** or our **Cables & Connectors** catalogue for more information.

**Notes:** 1) It is the power indicator(red) on the emitter of thru-beam mode,  
2) Not incorporated on the emitter of thru-beam mode.

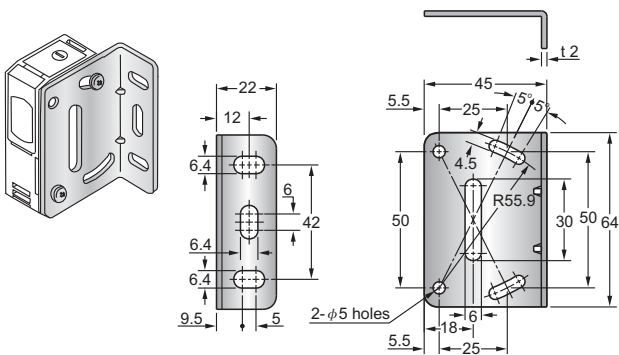
### MB-7240 (Sensor mounting bracket-optional)



### MB-7040 (Sensor mounting bracket-optional)



### MB-6445 (Sensor mounting bracket-optional)



Au: RS62 SERIES