

Specifications (DC)

Item \ Sensing Mode	Thru-beam	Retroreflective (with polarizing filter)	Standard Diffuse	Diffuse (background suppression)	Glass Fiber Optic
Sensing Range, Adjustable	28m	10m (Note)	800 mm	300 mm	Depends on fiber optic used
Angle of Divergence	approx. 1°	approx. 1.7°	approx. 1.1°	approx. 1.7°	——
Light Spot Size	350mm@20m	150mm@5m	15mm@800mm	17mm@300mm	——
Light Source	Infrared 880nm	Red Light 660nm	Infrared 880nm	Infrared 880nm	Red Light 660nm
Response Time/Frequency	<=1ms/500Hz			<=2ms/250Hz	<=1ms/500Hz
Supply Voltage	10-30V DC (limit values)				
Current Consumption (no load)	<35 mA				
Ripple (within Vs tolerance)	<= 5 V peak-to-peak				
Indicator LED	Yellow: Power, Green: Output, Red: Margin (Emitter of thru-beam mode: Red LED)				
Output Type	PNP, NPN, PNP/NPN				
Output Voltage High	PNP is Vs (<=2.5V); NPN is approx. Vs				
Output Voltage Low	PNP is approx. 0V; NPN is <=1.5V				
Output Current Max.	100 mA				
Operation Mode	Light or dark switching selectable via switch				
Housing Material	ABS				
Enclosure Rating	IP 66 / NEMA 4				
Circuit Protection	Outputs short circuit and over current protected, Vs reverse polarity protected				
Test Input	0 V: light source off; VS or no connection: light source on (only for thru-beam mode)				
Time Options	No delay, On delay, Off delay, One-shot (with timer mode only)				
Time Settings	0.1 ... 5s Variable (with timer mode only)				
Ambient Operating Temperature	-25...55°C				
Storage Temperature	-40...70°C				
EMC	IEC 60947-5-2, Parts 7.2.6.1.2.3 or RFI>3V/m (in 80-1000MHz), EFT>1KV, ESD>4KV(contact)				
Voltage With Stand Ability	IEC 60947-5-2, Part 8.3.3.4 or 500VDC for one min, between all supply terminals connected together and enclosure				
Insulation Resistance	>20MΩ, with 500V DC megger between all supply terminals connected together and enclosure				
Vibration Resistance	IEC 60947-5-2, Part 7.4.2 or 10-55HZ, 1.0mm amplitude in x, y and z directions for 30 min				
Shock Resistance	IEC 60947-5-2, Part 7.4.1 or 30g, 11ms in x, y and z directions for six time each				
Weight	Approx. 120 g				
Mounting Bracket	MB-7263 (optional)				
Pigtail Type	See our pigtail series or our Cables & Connectors catalogue				

Note: Used with RE-6152 (supplied with sensor) reflector.

Specifications (AC/DC)

Item \ Sensing Mode	Thru-beam	Retroreflective (with polarizing filter)	Standard Diffuse	Diffuse (background suppression)	Glass Fiber Optic
Sensing Range, Adjustable	28m	10m (Note)	800 mm	300 mm	Depends on fiber optic used
Angle of Divergence	approx.1°	approx.1.7°	approx.1.1°	approx.1.7°	——
Light Spot Size	350mm@20m	150mm@5m	15mm@800mm	17mm@300mm	——
Light Source	Infrared 880nm	Red Light 660nm	Infrared 880nm	Infrared 880nm	Red Light 660nm
Response Time / Frequency	<20 ms /25 Hz				
Supply Voltage	12-240V DC / 24-240V AC (10%)				
Power Consumption	< 2 VA				
Indicator LED	Yellow: Power, Green: Output, Red: Margin (Emitter of thru-beam mode: Red LED)				
Output Type	Relay NO isolated (provide arc suppression for inductive / capacitive loads), SPST Solid-state with either normally closed or normally open contact				
Switching Voltage Max.	240 V AC				
Switching Current Max.	3 A				
Current Consumption(No load)	< 30 mA				
Operation Mode	Light or dark switching selectable via switch				
Housing Material	ABS				
Enclosure Rating	IP 66 / NEMA 4				
Circuit Protection	Output short circuit protected (only for 2-wire type), Vs reverse polarity protected				
Time Options	No delay, On delay, Off delay, One-shot (with timer mode only)				
Time Settings	Adjustable, 0.1...5 s (with timer mode only)				
Ambient Operating Temperature	-25...55°C				
Storage Temperature	-40...70°C				
EMC	IEC 60947-5-2, Parts 7.2.6.1.2.3 or RFI>3V/m(in 30-1000MHz), EFT>1KV, ESD>4KV(contact)				
Voltage Withstand Ability	IEC 60947-5-2, Part 8.3.3.4 or 1500V AC for one min, between all supply terminals connected together and enclosure				
Insulation Resistance	>20MΩ , with 500V AC megger between all supply terminals connected together and enclosure				
Vibration Resistance	IEC 60947-5-2, Part 7.4.2 or 10-55HZ, 1.0mm amplitude in x , y and z directions for 30 min				
Shock Resistance	IEC 60947-5-2, Part 7.4.1 or 30g, 11ms in x , y and z directions for six time each				
Mounting Bracket	MB-7263 (optional)				
Weight	approx. 120 g				
Pig tail Type	See Pigtail Series or our Cables & Connector catalogue				

Note: Used with RE-6152 (supplied with sensor) reflector.