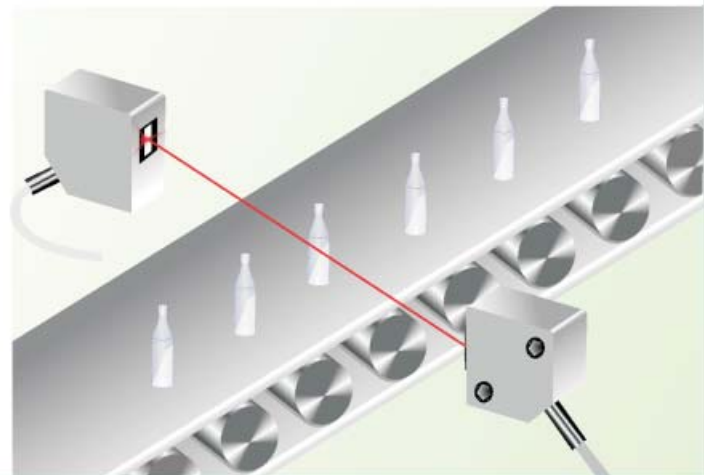
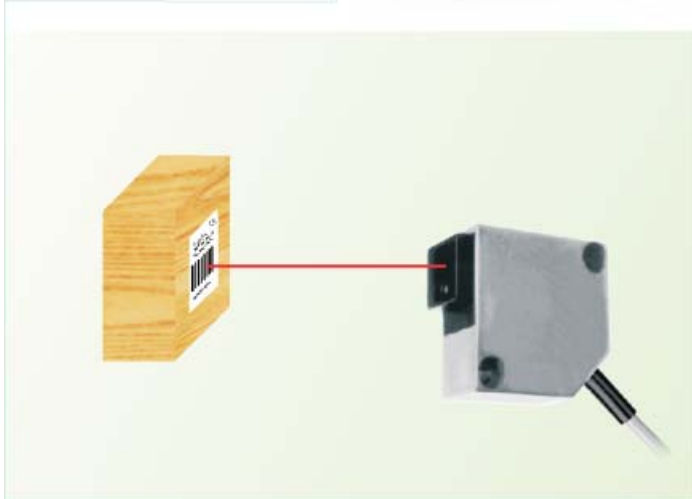
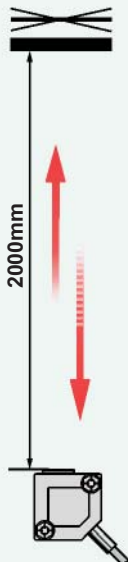







RP40 SERIES

- Background suppression..... L-01...L-02
- Diffuse mode..... L-03...L-04
- Through-beam mode..... L-05...L-06
- Retro-reflective mode..... L-07...L-08
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background suppression

Sensing mode	Appearance	Supply voltage	OUTPUT MODE	Part Number		
 <p>Diffuse mode with background suppression Sensing distance 2000mm Infrared 880nm</p>		10-36VDC	NPN	RP40-D2000N-LX9C4U2-BS RP40-D2000N-DX9C4U2-BS RP40-D2000N-CX9C4U2-BS		
			PNP	RP40-D2000P-LX9C4U2-BS RP40-D2000P-DX9C4U2-BS RP40-D2000P-CX9C4U2-BS		
			NPN/PNP	RP40-D2000D-LX9C4U2-BS RP40-D2000D-DX9C4U2-BS RP40-D2000D-CX9C4U2-BS		
				10-36VDC	NPN	RP40-D2000N-LX9P4UP-BS RP40-D2000N-DX9P4UP-BS RP40-D2000N-CX9P4UP-BS
					PNP	RP40-D2000P-LX9P4UP-BS RP40-D2000P-DX9P4UP-BS RP40-D2000P-CX9P4UP-BS
					NPN/PNP	RP40-D2000D-LX9P4UP-BS RP40-D2000D-DX9P4UP-BS RP40-D2000D-CX9P4UP-BS
				10-36VDC	NPN	RP40-D2000N-LX9P4UE-BS RP40-D2000N-DX9P4UE-BS RP40-D2000N-CX9P4UE-BS
					PNP	RP40-D2000P-LX9P4UE-BS RP40-D2000P-DX9P4UE-BS RP40-D2000P-CX9P4UE-BS
					NPN/PNP	RP40-D2000D-LX9P4UE-BS RP40-D2000D-DX9P4UE-BS RP40-D2000D-CX9P4UE-BS
		10-36VDC			NPN	RP40-D2000N-LX9Q4UP-BS RP40-D2000N-DX9Q4UP-BS RP40-D2000N-CX9Q4UP-BS
					PNP	RP40-D2000P-LX9Q4UP-BS RP40-D2000P-DX9Q4UP-BS RP40-D2000P-CX9Q4UP-BS
					NPN/PNP	RP40-D2000D-LX9Q4UP-BS RP40-D2000D-DX9Q4UP-BS RP40-D2000D-CX9Q4UP-BS
	10-36VDC	NPN	RP40-D2000N-LX9Q4UE-BS RP40-D2000N-DX9Q4UE-BS RP40-D2000N-CX9Q4UE-BS			
		PNP	RP40-D2000P-LX9Q4UE-BS RP40-D2000P-DX9Q4UE-BS RP40-D2000P-CX9Q4UE-BS			
		NPN/PNP	RP40-D2000D-LX9Q4UE-BS RP40-D2000D-DX9Q4UE-BS RP40-D2000D-CX9Q4UE-BS			

Sensors specifications

Sensing Mode	Diffuse Mode (With background suppression)
Sensing Range, Adjustable	2000 mm
Angle of Divergence	approx. 3.0°
Light spot size	approx. 25mm @ 300mm approx. 35mm @ 500mm
Light Source	Infrared light
External Light Immunity	Modulated light source with 2-bit evaluation
Response Time/Frequency	<15 ms / 33 Hz
Supply Voltage	10...36V DC (limit values)
Max. Switching frequency	1000Hz/500Hz
Max. Ripple content	20%
Output Type	PNP, NPN, PNP+NPN
No-load supply current	15mA Typ.
Output Voltage drop	2.0V max. At 200mA
Output Current Max.	200 mA
Operation Mode	Selectable either Light-on Dark-on by the control input wire
Connection	Cable or M8 、 M12 4-pin plug
Connecting Cable	PVC, 2m
Housing	Glass fiber reinforced plastic
Enclosure Rating	IP 67 / NEMA 6
VDE Protection Class	II Double Insulated
Circuit Protection	Outputs short circuit and over current protected, Vs reverse polarity protected
Construction	IEC IP66;NEMA1,3,4,12,13
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 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
cable	2M or more (based on your request).
Pigtail Tpye, connection type	Pico style(M8), Euro style(M12)
Weight	Approx. 90/35g

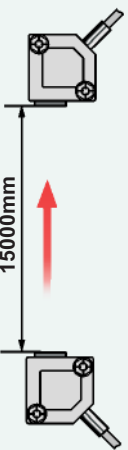

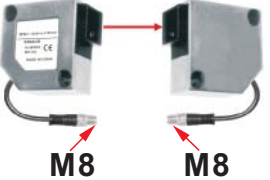

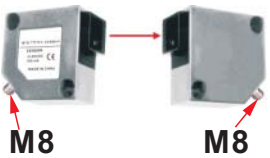
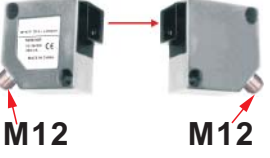
Diffuse sensor

Sensing mode	Appearance	Supply voltage	OUTPUT MODE	Part Number
Diffuse mode Sensing distance 2000mm Infrared 880nm		10-36VDC	NPN light-ON	RP40-D2000N-LX9C4U2
			NPN dark-ON	RP40-D2000N-DX9C4U2
			PNP light-ON	RP40-D2000P-LX9C4U2
			PNP dark-ON	RP40-D2000P-DX9C4U2
		12-240VDC/ 24-240VAC	SPDT Relay	RP40-D2000R-LX9C5L2
			SPDT Relay with Timing	RP40-D2000R-DX9C5L2-T
			Solid state isolated N.O.	RP40-D2000S-LX9C4L2
			Solid state isolated N.O. With Timing	RP40-D2000S-DX9C4L2-T
		10-36VDC	NPN light-ON	RP40-D2000N-LX9P4UP
			NPN dark-ON	RP40-D2000N-DX9P4UP
			PNP light-ON	RP40-D2000P-LX9P4UP
			PNP dark-ON	RP40-D2000P-DX9P4UP
		12-240VDC/ 24-240VAC	SPDT Relay	RP40-D2000R-LX9P5UP
			SPDT Relay with Timing	RP40-D2000R-DX9P5UP-T
			Solid state isolated N.O.	RP40-D2000S-LX9P4UP
			Solid state isolated N.O. With Timing	RP40-D2000S-DX9P4UP-T
		10-36VDC	NPN light-ON	RP40-D2000N-LX9P4UE
			NPN dark-ON	RP40-D2000N-DX9P4UE
			PNP light-ON	RP40-D2000P-LX9P4UE
			PNP dark-ON	RP40-D2000P-DX9P4UE
		12-240VDC/ 24-240VAC	SPDT Relay	RP40-D2000R-LX9P5UM
			SPDT Relay with Timing	RP40-D2000R-DX9P5UM-T
			Solid state isolated N.O.	RP40-D2000S-LX9P4UM
			Solid state isolated N.O. With Timing	RP40-D2000S-DX9P4UM-T
	10-36VDC	NPN light-ON	RP40-D2000N-LX9Q4UP	
		NPN dark-ON	RP40-D2000N-DX9Q4UP	
		PNP light-ON	RP40-D2000P-LX9Q4UP	
		PNP dark-ON	RP40-D2000P-DX9Q4UP	
	12-240VDC/ 24-240VAC	SPDT Relay	RP40-D2000R-LX9Q5UP	
		SPDT Relay with Timing	RP40-D2000R-DX9Q5UP-T	
		Solid state isolated N.O.	RP40-D2000S-LX9Q4UP	
		Solid state isolated N.O. With Timing	RP40-D2000S-DX9Q4UP-T	
	10-36VDC	NPN light-ON	RP40-D2000N-LX9Q4UE	
		NPN dark-ON	RP40-D2000N-DX9Q4UE	
		PNP light-ON	RP40-D2000P-LX9Q4UE	
		PNP dark-ON	RP40-D2000P-DX9Q4UE	
	12-240VDC/ 24-240VAC	SPDT Relay	RP40-D2000R-LX9Q5UM	
		SPDT Relay with Timing	RP40-D2000R-DX9Q5UM-T	
		Solid state isolated N.O.	RP40-D2000S-LX9Q4UM	
		Solid state isolated N.O. With Timing	RP40-D2000S-DX9Q4UM-T	

Sensors specifications

For part model	Diffuse (NPN or PNP)		Diffuse AC	
	Without timing delay	With timing delay	Without timing delay	With timing delay
Sensing Range, Adjustable	2000 mm			
Field of View	Standard diffuse:3.5° Long Range Diffuse:6.5°			
Light Source	Infrared 880nm			
Indicator LEDs	Green: Power Yellow: Output Red: Margin			
Response Time	2 ms		SPDT EM Relay output: 15ms Solid State Isolated N.O. Output: 2ms	
Supply Voltage	10-36V DC		12-240V DC/24-240V AC	
Output Type	NPN or PNP		SPDT EM Relay or Solid State Isolated N.O.	
Max. Load Current	250 mA		SPDT EM Relay: 10A at 120VAC, 5A at 240VAC, 10A at 28VAC Solid State Isolate N.O.: 300mA at 240V DC/AC	
No Load Current	<30 mA			
Max. Leakage Current	<10 uA		SPDT EM Relay:0; Solid State Isolate N.O. : 1mA at 240VAC	
Operation Mode	Light or dark switching delectable via switch			
Housing Material	Glass fiber reinforced plastic			
Lens Material	Acrylic			
Cover Gasket Material	Neoprene			
Enclosure Rating	IP67			
Circuit Protection	Outputs short circuit and over current protected, Vs reverse polarity protected			
Time Options	_____		No delay, On delay, Off delay, One-shot	
Time Settings	_____		Adjustable, 0.1...15 s	
Ambient Operating Temperature	-25...55°C			
Storage Temperature	-40...70°C			
Relative Humidity	5% to 95%			
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 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	>20M Ω , 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			
cable	2M or more (based on your request).			
Pigtail Type 、 connector type	Pico-style, Euro-style, Mico-style.			

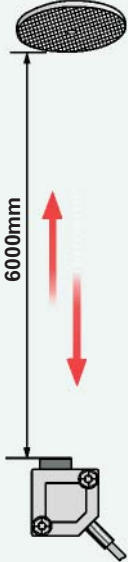





Through-beam mode

Sensing mode	Appearance	Supply voltage	OUTPUT MODE	Part Number
 <p>Through-beam mode Sensing distance 15000mm Infrared 880nm</p>		10-36VDC	Emitter	RP40-T15000D-EX9C3U2
		12-240VDC/ 24-240VAC	NPN light-ON	RP40-T15000N-LX9C4U2
			NPN dark-ON	RP40-T15000N-DX9C4U2
			PNP light-ON	RP40-T15000P-LX9C4U2
			PNP dark-ON	RP40-T15000P-DX9C4U2
			SPDT Relay	RP40-T15000R-LX9C5U2
			SPDT Relay with Timing	RP40-T15000R-DX9C5U2-T
			Solid state isolated N.O.	RP40-T15000S-LX9C4U2
	Solid state isolated N.O. With Timing		RP40-T15000S-DX9C4U2-T	
		10-36VDC	Emitter	RP40-T15000D-EX9P3UP
		12-240VDC/ 24-240VAC	NPN light-ON	RP40-T15000N-LX9P4UP
			NPN dark-ON	RP40-T15000N-DX9P4UP
			PNP light-ON	RP40-T15000P-LX9P4UP
			PNP dark-ON	RP40-T15000P-DX9P4UP
			SPDT Relay	RP40-T15000R-LX9P5UP
			SPDT Relay with Timing	RP40-T15000R-DX9P5UP-T
			Solid state isolated N.O.	RP40-T15000S-LX9P4UP
	Solid state isolated N.O. With Timing		RP40-T15000S-DX9P4UP-T	
		10-36VDC	Emitter	RP40-T15000D-EX9P3UE
		12-240VDC/ 24-240VAC	NPN light-ON	RP40-T15000N-LX9P4UE
NPN dark-ON			RP40-T15000N-DX9P4UE	
PNP light-ON			RP40-T15000P-LX9P4UE	
PNP dark-ON			RP40-T15000P-DX9P4UE	
SPDT Relay			RP40-T15000R-LX9P5UM	
SPDT Relay with Timing			RP40-T15000R-DX9P5UM-T	
Solid state isolated N.O.			RP40-T15000S-LX9P4UM	
Solid state isolated N.O. With Timing	RP40-T15000S-DX9P4UM-T			
	10-36VDC	Emitter	RP40-T15000D-EX9Q3UP	
	12-240VDC/ 24-240VAC	NPN light-ON	RP40-T15000N-LX9Q4UP	
		NPN dark-ON	RP40-T15000N-DX9Q4UP	
		PNP light-ON	RP40-T15000P-LX9Q4UP	
		PNP dark-ON	RP40-T15000P-DX9Q4UP	
		SPDT Relay	RP40-T15000R-LX9Q5UP	
		SPDT Relay with Timing	RP40-T15000R-DX9Q5UP-T	
		Solid state isolated N.O.	RP40-T15000S-LX9Q4UP	
Solid state isolated N.O. With Timing		RP40-T15000S-DX9Q4UP-T		
	10-36VDC	Emitter	RP40-T15000D-EX9Q3UE	
	12-240VDC/ 24-240VAC	NPN light-ON	RP40-T15000N-LX9Q4UE	
		NPN dark-ON	RP40-T15000N-DX9Q4UE	
		PNP light-ON	RP40-T15000P-LX9Q4UE	
		PNP dark-ON	RP40-T15000P-DX9Q4UE	
		SPDT Relay	RP40-T15000R-LX9Q5UM	
		SPDT Relay with Timing	RP40-T15000R-DX9Q5UM-T	
		Solid state isolated N.O.	RP40-T15000S-LX9Q4UM	
Solid state isolated N.O. With Timing		RP40-T15000S-DX9Q4UM-T		

Sensors specifications

For Part model	Diffuse (NPN or PNP)		Diffuse AC	
	Without timing delay	With timing delay	Without timing delay	With timing delay
Sensing Range, Adjustable	15000 mm			
Field of View	15°			
Light Source	Infrared 880nm			
Indicator LEDs	Green: Power			
Response Time	5 ms		SPDT EM Relay output: 23ms Solid State Isolated N.O. Output: 15ms	
Supply Voltage	10-36V DC		12-240V DC/24-240V AC	
Output Type	NPN or PNP		SPDT EM Relay or Solid State Isolated N.O.	
Max. Load Current	250 mA		SPDT EM Relay: 10A at 120VAC, 5A at 240VAC, 10A at 28VAC Solid State Isolate N.O.: 300mA at 240V DC/AC	
No Load Current	<30 mA			
Max. Leakage Current	<10 uA		SPDT EM Relay: 0; Solid State Isolate N.O. : 1mA at 240VAC	
Operation Mode	Light or dark switching delectable via switch			
Housing Material	Glass fiber reinforced plastic			
Lens Material	Acrylic			
Cover Gasket Material	Neoprene			
Enclosure Rating	IP67			
Circuit Protection	Outputs short circuit and over current protected, Vs reverse polarity protected			
Time Options	_____		No delay, On delay, Off delay, One-shot	
Time Settings	_____		Adjustable, 0.1...15 s	
Ambient Operating Temperature	-25...55°C			
Storage Temperature	-40...70°C			
Relative Humidity	5% to 95%			
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 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			
cable	2M or more (based on your request).			
Pigtail Type 、 connector type	Pico-style, Euro-style, Micro-style			

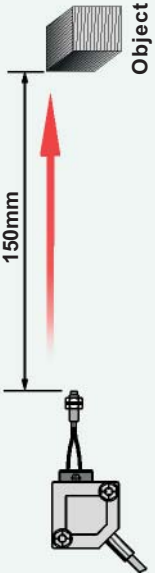





Retro-reflective mode

Sensing mode	Appearance	Supply voltage	OUTPUT MODE	Part Number
 <p>Retro-reflective mode Sensing distance 6000mm LED red polarized 660nm</p>		10-36VDC	NPN light-ON	RP40-L6000N-LX9C4U2
			NPN dark-ON	RP40-L6000N-DX9C4U2
			PNP light-ON	RP40-L6000P-LX9C4U2
			PNP dark-ON	RP40-L6000P-DX9C4U2
		12-240VDC/ 24-240VAC	SPDT Relay	RP40-L6000R-LX9C5L2
			SPDT Relay with Timing	RP40-L6000R-DX9C5L2-T
			Solid state isolated N.O.	RP40-L6000S-LX9C4L2
			Solid state isolated N.O. With Timing	RP40-L6000S-DX9C4L2-T
	 <p>M8</p>	10-36VDC	NPN light-ON	RP40-L6000N-LX9P4UP
			NPN dark-ON	RP40-L6000N-DX9P4UP
			PNP light-ON	RP40-L6000P-LX9P4UP
			PNP dark-ON	RP40-L6000P-DX9P4UP
		12-240VDC/ 24-240VAC	SPDT Relay	RP40-L6000R-LX9P5UP
			SPDT Relay with Timing	RP40-L6000R-DX9P5UP-T
			Solid state isolated N.O.	RP40-L6000S-LX9P4UP
			Solid state isolated N.O. With Timing	RP40-L6000S-DX9P4UP-T
	 <p>M12</p>	10-36VDC	NPN light-ON	RP40-L6000N-LX9P4UE
			NPN dark-ON	RP40-L6000N-DX9P4UE
			PNP light-ON	RP40-L6000P-LX9P4UE
			PNP dark-ON	RP40-L6000P-DX9P4UE
		12-240VDC/ 24-240VAC	SPDT Relay	RP40-L6000R-LX9P5UM
			SPDT Relay with Timing	RP40-L6000R-DX9P5UM-T
			Solid state isolated N.O.	RP40-L6000S-LX9P4UM
			Solid state isolated N.O. With Timing	RP40-L6000S-DX9P4UM-T
 <p>M8</p>	10-36VDC	NPN light-ON	RP40-L6000N-LX9Q4UP	
		NPN dark-ON	RP40-L6000N-DX9Q4UP	
		PNP light-ON	RP40-L6000P-LX9Q4UP	
		PNP dark-ON	RP40-L6000P-DX9Q4UP	
	12-240VDC/ 24-240VAC	SPDT Relay	RP40-L6000R-LX9Q5UP	
		SPDT Relay with Timing	RP40-L6000R-DX9Q5UP-T	
		Solid state isolated N.O.	RP40-L6000S-LX9Q4UP	
		Solid state isolated N.O. With Timing	RP40-L6000S-DX9Q4UP-T	
 <p>M12</p>	10-36VDC	NPN light-ON	RP40-L6000N-LX9Q4UE	
		NPN dark-ON	RP40-L6000N-DX9Q4UE	
		PNP light-ON	RP40-L6000P-LX9Q4UE	
		PNP dark-ON	RP40-L6000P-DX9Q4UE	
	12-240VDC/ 24-240VAC	SPDT Relay	RP40-L6000R-LX9Q5UM	
		SPDT Relay with Timing	RP40-L6000R-DX9Q5UM-T	
		Solid state isolated N.O.	RP40-L6000S-LX9Q4UM	
		Solid state isolated N.O. With Timing	RP40-L6000S-DX9Q4UM-T	

Sensors specifications

For part model	Diffuse (NPN or PNP)		Diffuse AC	
	Without timing delay	With timing delay	Without timing delay	With timing delay
Sensing Range, Adjustable	6000 mm			
Field of View	1.5°			
Light Source	Red LED			
Indicator LEDs	Green: Power Yellow: output Red: Margin			
Response Time	2 ms		SPDT EM Relay output: 15ms Solid State Isolated N.O. Output: 2ms	
Supply Voltage	10-36V DC		12-240V DC/24-240V AC	
Output Type	NPN or PNP		SPDT EM Relay or Solid State Isolated N.O.	
Max. Load Current	250 mA		SPDT EM Relay: 10A at 120VAC, 5A at 240VAC, 10A at 28VAC Solid State Isolate N.O.: 300mA at 240V DC/AC	
No Load Current	<30 mA			
Max. Leakage Current	<10 uA		SPDT EM Relay: 0; Solid State Isolate N.O. : 1mA at 240VAC	
Operation Mode	Light or dark switching delectable via switch			
Housing Material	Glass fiber reinforced plastic			
Lens Material	Acrylic			
Cover Gasket Material	Neoprene			
Enclosure Rating	IP67			
Circuit Protection	Outputs short circuit and over current protected, Vs reverse polarity protected			
Time Options	_____		No delay, On delay, Off delay, One-shot	
Time Settings	_____		Adjustable, 0.1...15 s	
Ambient Operating Temperature	-25...55° C			
Storage Temperature	-40...70° C			
Relative Humidity	5% to 95%			
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 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	>20M Ω , 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			
cable	2M or more (based on your request).			
Pigtail Type 、 connector type	Pico-style, Euro-style.Micro-style.			

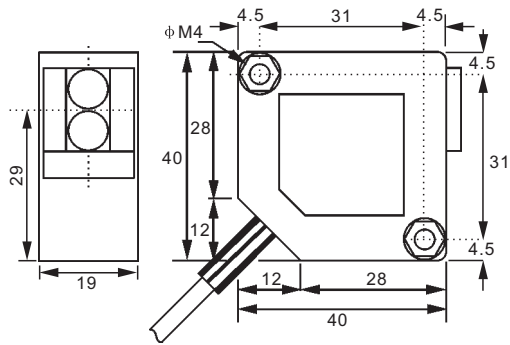
Fiber-optic amplifier

Sensing mode	Appearance	Supply voltage	OUTPUT MODE	Part Number
 <p>Fiber-optic mode Sensing distance 150mm Infrared 880nm</p>		10-36VDC	NPN light-ON	RP40-FGFN-LX9C4U2/150
			NPN dark-ON	RP40-FGFN-DX9C4U2/150
			PNP light-ON	RP40-FGFP-LX9C4U2/150
			PNP dark-ON	RP40-FGFP-DX9C4U2/150
		12-240VDC/ 24-240VAC	SPDT Relay	RP40-FGFR-LX9C5L2/150
			SPDT Relay with Timing	RP40-FGFR-DX9C5L2/150-T
			Solid state isolated N.O.	RP40-FGFS-LX9C4L2/150
			Solid state isolated N.O. With Timing	RP40-FGFS-DX9C4L2/150-T
	 <p>M8</p>	10-36VDC	NPN light-ON	RP40-FGFN-LX9P4UP/150
			NPN dark-ON	RP40-FGFN-DX9P4UP/150
			PNP light-ON	RP40-FGFP-LX9P4UP/150
			PNP dark-ON	RP40-FGFP-DX9P4UP/150
		12-240VDC/ 24-240VAC	SPDT Relay	RP40-FGFR-LX9P5UP/150
			SPDT Relay with Timing	RP40-FGFR-DX9P5UP/150-T
			Solid state isolated N.O.	RP40-FGFS-LX9P4UP/150
			Solid state isolated N.O. With Timing	RP40-FGFS-DX9P4UP/150-T
	 <p>M12</p>	10-36VDC	NPN light-ON	RP40-FGFN-LX9P4UE/150
			NPN dark-ON	RP40-FGFN-DX9P4UE/150
			PNP light-ON	RP40-FGFP-LX9P4UE/150
			PNP dark-ON	RP40-FGFP-DX9P4UE/150
		12-240VDC/ 24-240VAC	SPDT Relay	RP40-FGFR-LX9P5UM/150
			SPDT Relay with Timing	RP40-FGFR-DX9P5UM/150-T
			Solid state isolated N.O.	RP40-FGFS-LX9P4UM/150
			Solid state isolated N.O. With Timing	RP40-FGFS-DX9P4UM/150-T
 <p>M8</p>	10-36VDC	NPN light-ON	RP40-FGFN-LX9Q4UP/150	
		NPN dark-ON	RP40-FGFN-DX9Q4UP/150	
		PNP light-ON	RP40-FGFP-LX9Q4UP/150	
		PNP dark-ON	RP40-FGFP-DX9Q4UP/150	
	12-240VDC/ 24-240VAC	SPDT Relay	RP40-FGFR-LX9Q5UP/150	
		SPDT Relay with Timing	RP40-FGFR-DX9Q5UP/150-T	
		Solid state isolated N.O.	RP40-FGFS-LX9Q4UP/150	
		Solid state isolated N.O. With Timing	RP40-FGFS-DX9Q4UP/150-T	
 <p>M12</p>	10-36VDC	NPN light-ON	RP40-FGFN-LX9Q4UE/150	
		NPN dark-ON	RP40-FGFN-DX9Q4UE/150	
		PNP light-ON	RP40-FGFP-LX9Q4UE/150	
		PNP dark-ON	RP40-FGFP-DX9Q4UE/150	
	12-240VDC/ 24-240VAC	SPDT Relay	RP40-FGFR-LX9Q5UM/150	
		SPDT Relay with Timing	RP40-FGFR-DX9Q5UM/150-T	
		Solid state isolated N.O.	RP40-FGFS-LX9Q4UM/150	
		Solid state isolated N.O. With Timing	RP40-FGFS-DX9Q4UM/150-T	

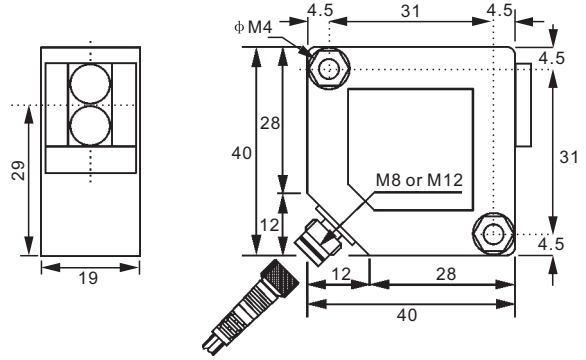
Sensors specifications

For part model	Diffuse (NPN or PNP)		Diffuse (AC)	
	Without timing delay	With timing delay	Without timing delay	With timing delay
Sensing Range, Adjustable	150 mm			
Field of View	_____			
Light Source	Infrared 880 nm			
Indicator LEDs	Green: Power Yellow: output Red: Margin			
Response Time	2 ms		SPDT EM Relay output: 15ms Solid State Isolated N.O. Output: 2ms	
Supply Voltage	10-36V DC		12-240V DC/24-240V AC	
Output Type	NPN or PNP		SPDT EM Relay or Solid State Isolated N.O.	
Max. Load Current	250 mA		SPDT EM Relay: 10A at 120VAC, 5A at 240VAC, 10A at 28VAC Solid State Isolate N.O.: 300mA at 240V DC/AC	
No Load Current	<30 mA			
Max. Leakage Current	<10 uA		SPDT EM Relay: 0; Solid State Isolate N.O. : 1mA at 240VAC	
Operation Mode	Light or dark switching delectable via switch			
Housing Material	Glass fiber reinforced plastic			
Lens Material	Acrylic			
Cover Gasket Material	Neoprene			
Enclosure Rating	IP67			
Circuit Protection	Outputs short circuit and over current protected, Vs reverse polarity protected			
Time Options	_____		No delay, On delay, Off delay, One-shot	
Time Settings	_____		Adjustable, 0.1...15 s	
Ambient Operating Temperature	-25...55°C			
Storage Temperature	-40...70°C			
Relative Humidity	5% to 95%			
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 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			
cable	2M or more (based on your request).			
Pigtail Type \ connector type	Pico-style, Euro-style, Micro-style.			

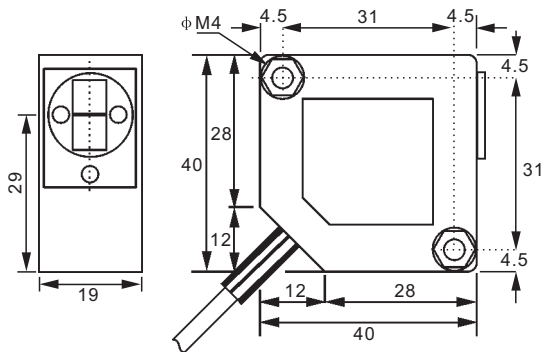
■ Dimensions



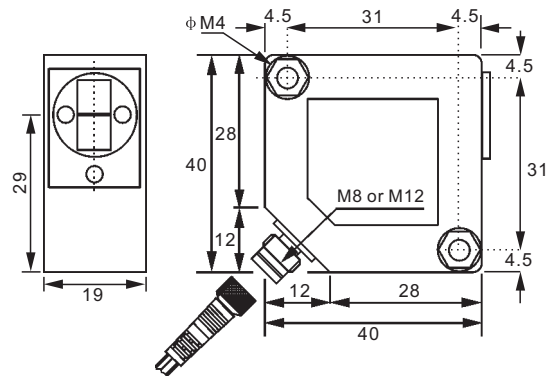
**Through-beam sensor/cable
Reflex sensor/cable**



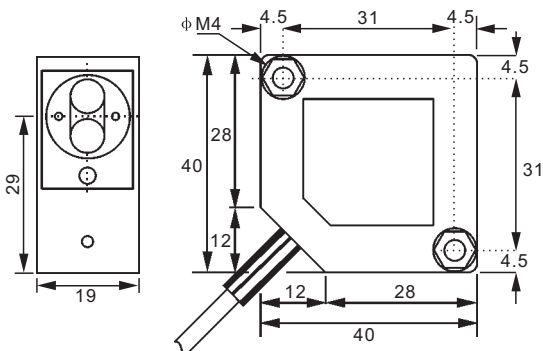
**Through-beam sensor/connector
Reflex sensor/connector**



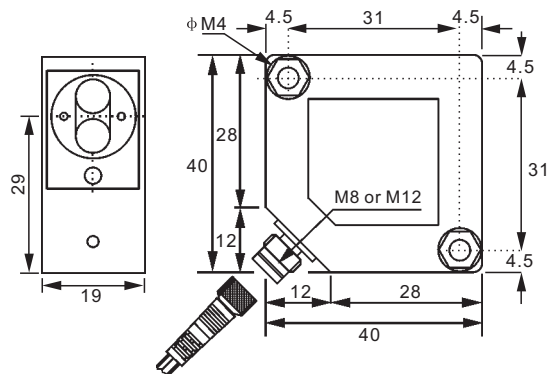
Diffuse sensor/cable



Diffuse sensor/connector

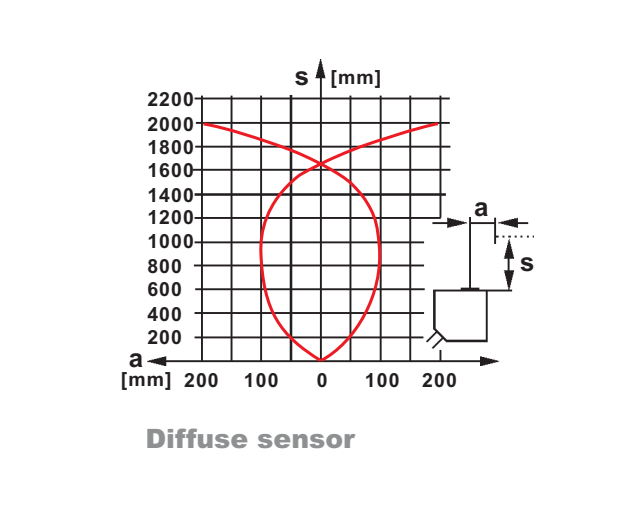
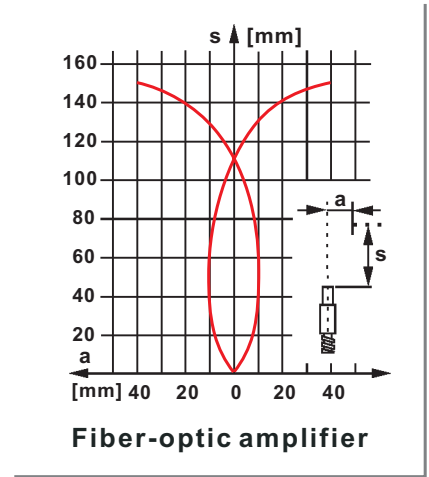
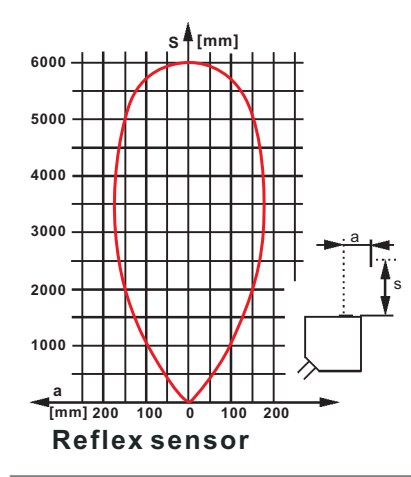
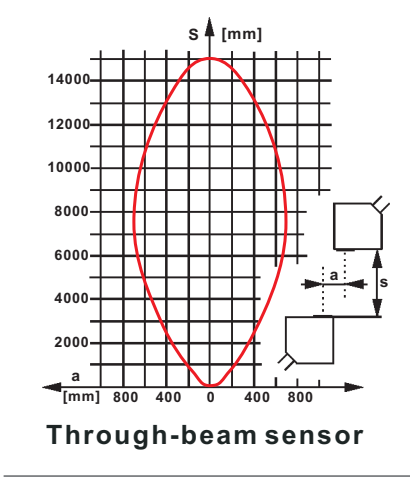


Fiber-optic amplifier/cable



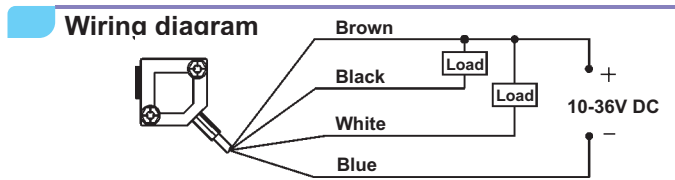
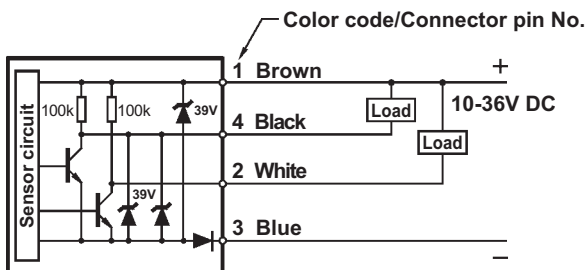
Fiber-optic amplifier/connector

Characteristic curve

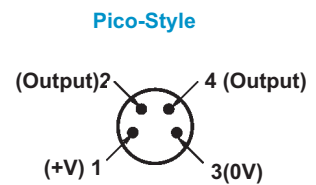
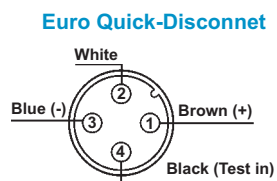


NPN output type

NPN changeover outputs

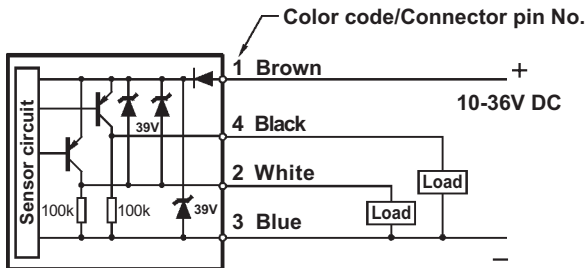


Connector pin position

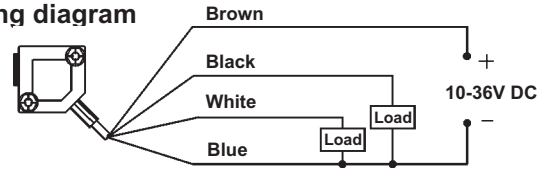


PNP output type

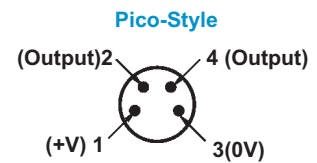
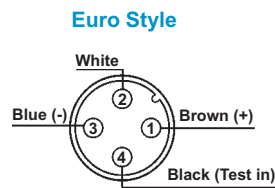
PNP changeover outputs



Wiring diagram

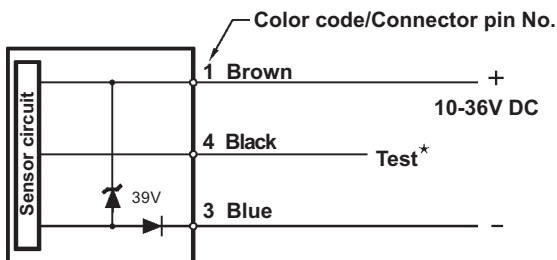


Connector pin position



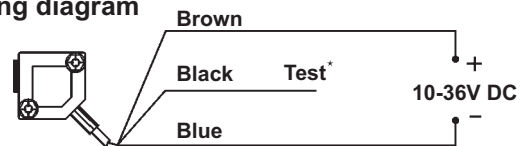
Emitter

I/O circuit diagram

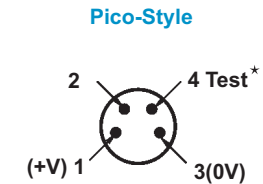
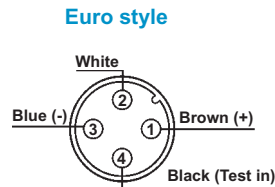


*: Test(black wire)=0V, Emitter off.

Wiring diagram

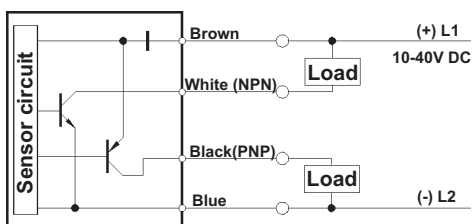


Connector pin position

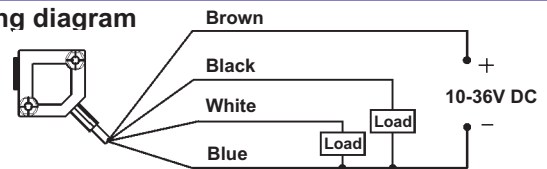


NPN/PNP output type

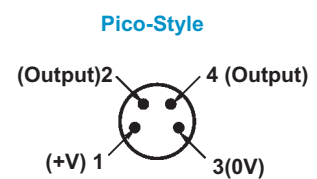
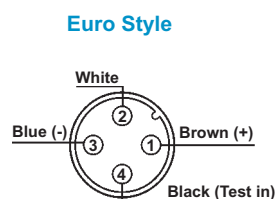
PNP/NPN outputs



Wiring diagram

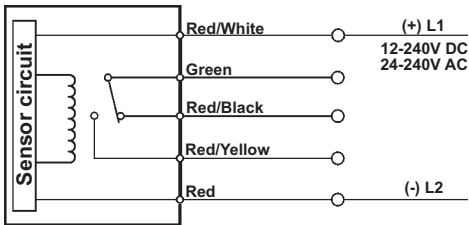


Connector pin position

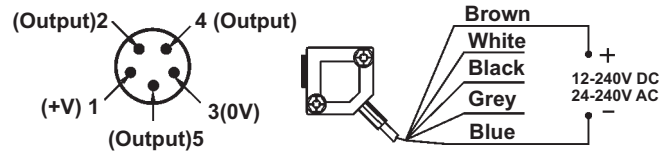


SPDT EM Relay Version

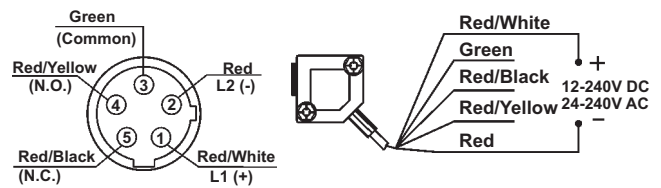
I/O circuit diagram



Wiring diagram(Pico style)

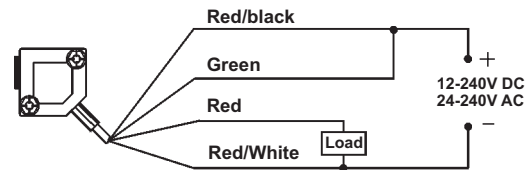
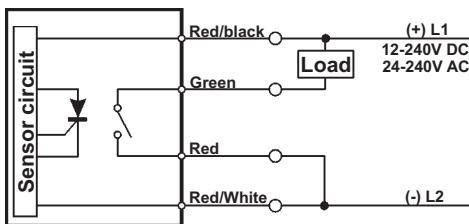


Wiring diagram(Micro style)

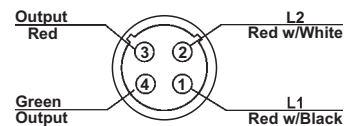
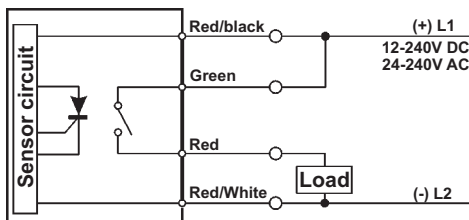


Solid State Isolated N.O.

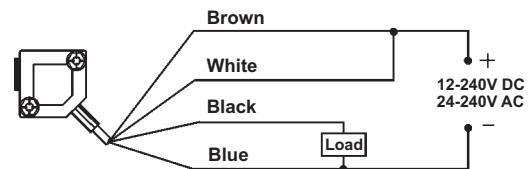
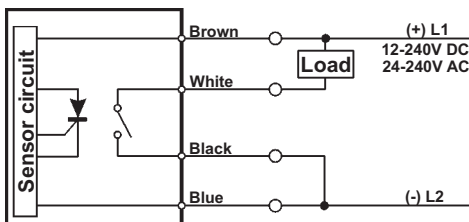
I/O circuit diagram and Wiring diagram (Micro-style)



OR



I/O circuit diagram and Wiring diagram (Pico-style)



OR

