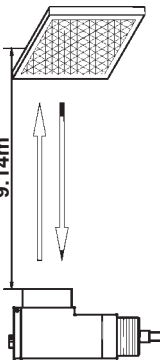


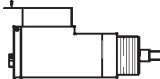


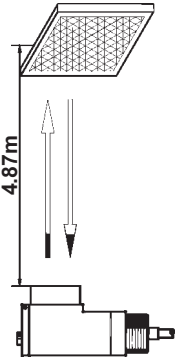








RP74 SENSORS SELECTION GUIDE

RP74 SERIES

Sensing mode	Connection	Supply Voltage	Output mode	Part number
<p>Red light : 660nm</p>  <p>9.14m</p>	<p>Cable</p> 	10-40V DC	NPN/PNP	RP74-L9140D-CY6C4U2
			NPN/PNP with Timing	RP74-L9140D-CY6C4U2-T
		12-240VDC/ 24-240VAC	SPDT Relay	RP74-L9140R-CY6C5L2
			SPDT Relay with Timing	RP74-L9140R-CY6C5L2-T
			Solid State Isolated N.O.	RP74-L9140S-CY6C4U2
			Solid State Isolated N.O. with Timing	RP74-L9140S-CY6C4U2-T
	<p>Quick Disconnect</p> 	10-40V DC (Euro)	NPN/PNP	RP74-L9140D-CY6Q4UE
			NPN/PNP with Timing	RP74-L9140D-CY6Q4UE-T
		12-240VDC/ 24-240VAC (Micro)	Solid State Isolated N.O.	RP74-L9140S-CY6Q4UM
			Solid State Isolated N.O. with Timing	RP74-L9140S-CY6Q4UM-T
<p>Retroreflective mode</p> <p>Sensing distance: 9.14m</p>  <p>9.14m</p>	<p>Quick Disconnect (Mini)</p> 	10-40V DC	NPN/PNP	RP74-L9140D-CY6Q4UN
			NPN/PNP with Timing	RP74-L9140D-CY6Q4UN-T
	12-240VDC/ 24-240VAC	SPDT Relay	RP74-L9140R-CY6Q5LN	
		SPDT Relay with Timing	RP74-L9140R-CY6Q5LN-T	
		Solid State Isolated N.O.	RP74-L9140S-CY6Q4UN	
		Solid State Isolated N.O. with Timing	RP74-L9140S-CY6Q4UN-T	
	<p>Pig tail</p> 	10-40V DC	NPN/PNP	RP74-L9140D-CY6P4U
			NPN/PNP with Timing	RP74-L9140D-CY6P4U-T
		12-240VDC/ 24-240VAC	SPDT Relay	RP74-L9140R-CY6P5L
			SPDT Relay with Timing	RP74-L9140R-CY6P5L-T
Solid State Isolated N.O.			RP74-L9140S-CY6P4U	
Solid State Isolated N.O. with Timing			RP74-L9140S-CY6P4U-T	

RP74 SENSORS SELECTION GUIDE

Sensing mode	Connection	Supply Voltage	Output mode	Part number	
<p>Red light : 660nm</p>  <p>4.87m</p>	<p>Cable</p> 	10-40V DC	NPN/PNP	RP74-L4870D-CY6C4U2-PF	
			NPN/PNP with Timing	RP74-L4870D-CY6C4U2-TP	
		12-240VDC/ 24-240VAC	SPDT Relay	RP74-L4870R-CY6C5L2-PF	
			SPDT Relay with Timing	RP74-L4870R-CY6C5L2-TP	
			Solid State Isolated N.O.	RP74-L4870S-CY6C4U2-PF	
	Solid State Isolated N.O. With Timing	RP74-L4870S-CY6C4U2-TP			
	<p>Retroreflective mode with polarized</p> <p>Sensing distance: 4.87m</p> 	<p>Quick Disconnect</p> 	10-40V DC (Euro)	NPN/PNP	RP74-L4870D-CY6Q4UE-PF
				NPN/PNP with Timing	RP74-L4870D-CY6Q4UE-TP
		12-240VDC/ 24-240VAC (Micro)	Solid State Isolated N.O.	RP74-L4870S-CY6Q4UM-PF	
			Solid State Isolated N.O. with Timing	RP74-L4870S-CY6Q4UM-TP	
<p>Retroreflective mode with polarized</p> <p>Sensing distance: 4.87m</p> 	<p>Quick Disconnect (Mini)</p> 	10-40V DC	NPN/PNP	RP74-L4870D-CY6Q4UN-PF	
			NPN/PNP with Timing	RP74-L4870D-CY6Q4UN-TP	
	12-240VDC/ 24-240VAC	SPDT Relay	RP74-L4870R-CY6Q5LN-PF		
		SPDT Relay with Timing	RP74-L4870R-CY6Q5LN-TP		
		Solid State Isolated N.O.	RP74-L4870S-CY6Q4UN-PF		
		Solid State Isolated N.O. with Timing	RP74-L4870S-CY6Q4UN-TP		
	<p>Pig tail</p> 	10-40V DC	NPN/PNP	RP74-L4870D-CY6P4U-PF	
			NPN/PNP with Timing	RP74-L4870D-CY6P4U-TP	
		12-240VDC/ 24-240VAC	SPDT Relay	RP74-L4870R-CY6P5L-PF	
			SPDT Relay with Timing	RP74-L4870R-CY6P5L-TP	
Solid State Isolated N.O.			RP74-L4870S-CY6P4U-PF		
Solid State Isolated N.O. with Timing			RP74-L4870S-CY6P4U-TP		

**RP74 SENSORS SPECIFICATIONS** (retroreflective DC)

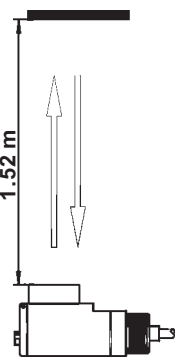




Part model	Without timing delay	With timing delay
Sensing Range, Adjustable	Retroreflective: 0.05...9.14m Ploarized Retroreflective: 0.05...4.87m	
Field of View	1.5°	
Light Source	LED Visible red 660nm	
Indicator LEDs	Green: Power Yellow: Output Red: Margin	
Response Time	2 ms	
Supply Voltage	10-40V DC (Ripple<=10%)	
Output Type	NPN/PNP	
Max. Load Current	250 mA	
No Load Current	<30 mA	
Max. Leakage Current	<10 uA	
Voltage Drop	<2.5 V	
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	
Mounting Bracket	RP74-A1 or RP74-A2 or RP74-A3 (See Page V-02)	

**RP74 SENSORS SPECIFICATIONS** (retroreflective AC)

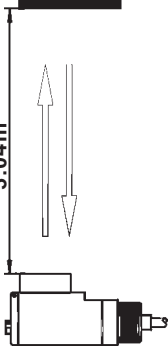




Part model	Without timing delay	With timing delay
Sensing Range, Adjustable	Retroreflective: 0.05...9.14m, Ploarized Retroreflective: 0.05...4.87m	
Field of View	1.5° □	
Light Source	LED Visible red 660nm	
Indicator LEDs	Green: Power Yellow: Output Red: Margin	
Response Time	SPDT EM Relay output: 15ms Solid State Isolated N.O. output: 2ms	
Supply Voltage	12-240V DC/24-240V AC	
Output Type	SPDT EM Relay or Solid State Isolated N.O.	
Max. Load Current	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	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	▪ ▪ ▪ ▪	
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 1500VAC for one min, between all supply terminals connected together and enclosure	
Insulation Resistance	>20M $\Omega$ , with 1500V 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	RP74-A1 or RP74-A2 or RP74-A3 (See Page V-02)	

RP74 SENSORS SELECTION GUIDE

RP74 SERIES

Sensing mode	Connection	Supply Voltage	Output mode	Part number	
Infrared : 880nm  	Cable  	10-40V DC	NPN/PNP	RP74-D1520D-CY9C4U2	
			NPN/PNP with Timing	RP74-D1520D-CY9C4U2-T	
		12-240VDC/ 24-240VAC	SPDT Relay	RP74-D1520R-CY9C5L2	
			SPDT Relay with Timing	RP74-D1520R-CY9C5L2-T	
			Solid State Isolated N.O.	RP74-D1520S-CY9C4U2	
			Solid State Isolated N.O. with Timing	RP74-D1520S-CY9C4U2-T	
		Quick Disconnect  	10-40V DC (Euro)	NPN/PNP	RP74-D1520D-CY9Q4UE
				NPN/PNP with Timing	RP74-D1520D-CY9Q4UE-T
	12-240VDC/ 24-240VAC (Micro)		Solid State Isolated N.O.	RP74-D1520S-CY9Q4UM	
			Solid State Isolated N.O. with Timing	RP74-D1520S-CY9Q4UM-T	
	Standard Diffuse mode  Sensing distance: 1.52m	Quick Disconnect (Mini)  	10-40V DC	NPN/PNP	RP74-D1520D-CY9Q4UN
				NPN/PNP with Timing	RP74-D1520D-CY9Q4UN-T
12-240VDC/ 24-240VAC			SPDT Relay	RP74-D1520R-CY9Q5LN	
			SPDT Relay with Timing	RP74-D1520R-CY9Q5LN-T	
			Solid State Isolated N.O.	RP74-D1520S-CY9Q4UN	
			Solid State Isolated N.O. with Timing	RP74-D1520S-CY9Q4UN-T	
Pig tail  			10-40V DC	NPN/PNP	RP74-D1520D-CY9P4U
				NPN/PNP with Timing	RP74-D1520D-CY9P4U-T
		12-240VDC/ 24-240VAC	SPDT Relay	RP74-D1520R-CY9P5L	
			SPDT Relay with Timing	RP74-D1520R-CY9P5L-T	
	Solid State Isolated N.O.	RP74-D1520S-CY9P4U			
	Solid State Isolated N.O. with Timing	RP74-D1520S-CY9P4U-T			

RP74 SENSORS SELECTION GUIDE

Sensing mode	Connection	Supply Voltage	Output mode	Part number
<p>Infrared : 880nm</p> 	<p>Cable</p> 	10-40V DC	NPN/PNP	RP74-D3040D-CY9C4U2
			NPN/PNP with Timing	RP74-D3040D-CY9C4U2-T
		12-240V DC/ 24-240V AC	SPDT Relay	RP74-D3040R-CY9C5L2
			SPDT Relay with Timing	RP74-D3040R-CY9C5L2-T
			Solid State Isolated N.O.	RP74-D3040S-CY9C4U2
			Solid State Isolated N.O. with Timing	RP74-D3040S-CY9C4U2-T
	<p>Quick Disconnect</p> 	10-40V DC (Euro)	NPN/PNP	RP74-D3040D-CY9Q4UE
			NPN/PNP with Timing	RP74-D3040D-CY9Q4UE-T
		12-240VDC/ 24-240VAC (Micro)	Solid State Isolated N.O.	RP74-D3040S-CY9Q4UM
			Solid State Isolated N.O. with Timing	RP74-D3040S-CY9Q4UM-T
<p>Long Range Diffuse mode</p> <p>Sensing distance: 3.04m</p>	<p>Quick Disconnect (Mini)</p> 	10-40V DC	NPN/PNP	RP74-D3040D-CY9Q4UN
			NPN/PNP with Timing	RP74-D3040D-CY9Q4UN-T
		12-240V DC/ 24-240V AC	SPDT Relay	RP74-D3040R-CY9Q5LN
			SPDT Relay with Timing	RP74-D3040R-CY9Q5LN-T
			Solid State Isolated N.O.	RP74-D3040S-CY9Q4UN
			Solid State Isolated N.O. with Timing	RP74-D3040S-CY9Q4UN-T
	<p>Pig tail</p> 	10-40V DC	NPN/PNP	RP74-D3040D-CY9P4U
			NPN/PNP with Timing	RP74-D3040D-CY9P4U-T
		12-240V DC/ 24-240V AC	SPDT Relay	RP74-D3040R-CY9P5L
			SPDT Relay with Timing	RP74-D3040R-CY9P5L-T
			Solid State Isolated N.O.	RP74-D3040S-CY9P4U
			Solid State Isolated N.O. with Timing	RP74-D3040S-CY9P4U-T

**RP74 SENSORS SPECIFICATIONS** (diffuse DC)

Part model	Without timing delay	With timing delay
Sensing Range, Adjustable	Standard Diffuse: 0.05...1.52m, Long Range Diffuse: 0.05...3.04m	
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	
Supply Voltage	10-40V DC (Ripple<=10%)	
Output Type	NPN/PNP	
Max. Load Current	250 mA	
No Load Current	<30 mA	
Max. Leakage Current	<10 uA	
Voltage Drop	<2.5 V	
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	
Mounting Bracket	RP74-A1 or RP74-A2 or RP74-A3 (See Page V-02)	

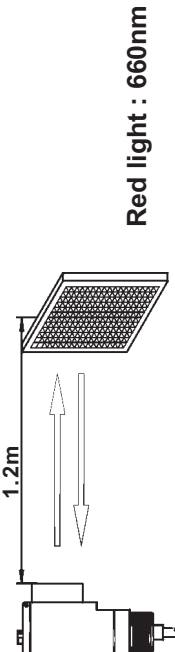




**RP74 SENSORS SPECIFICATIONS** (diffuse AC)

Part model	Without timing delay	With timing delay
Sensing Range, Adjustable	Standard Diffuse: 0.05...1.52m, Long Range Diffuse: 0.05...3.04m	
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	SPDT EM Relay output: 15ms Solid State Isolated N.O. output: 2ms	
Supply Voltage	12-240V DC/24-240V AC	
Output Type	SPDT EM Relay or Solid State Isolated N.O.	
Max. Load Current	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	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	——	
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%to95%	
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 1500VAC for one min, between all supply terminals connected together and enclosure	
Insulation Resistance	>20M $\Omega$ , with 1500V 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	RP74-A1 or RP74-A2 or RP74-A3 (See Page V-02)	



RP74 SENSORS SELECTION GUIDE

RP74 SERIES

Sensing mode	Connection	Supply Voltage	Output mode	Part number	
 <p>Red light : 660nm</p> <p>1.2m</p> <p>Clear Object Detector</p> <p>Sensing distance: 1.20m</p>	<b>Cable</b> 	10-40V DC	NPN/PNP	RP74-S1200D-CY6C4U2	
			NPN/PNP with Timing	RP74-S1200D-CY6C4U2-T	
		12-240V DC/ 24-240V AC	SPDT Relay	RP74-S1200R-CY6C5L2	
			SPDT Relay with Timing	RP74-S1200R-CY6C5L2-T	
			Solid State Isolated N.O.	RP74-S1200S-CY6C4U2	
			Solid State Isolated N.O. with Timing	RP74-S1200S-CY6C4U2-T	
		<b>Quick Disconnect</b> 	10-40V DC (Euro)	NPN/PNP	RP74-S1200D-CY6Q4UE
				NPN/PNP with Timing	RP74-S1200D-CY6Q4UE-T
	12-240VDC/ 24-240VAC (Micro)		Solid State Isolated N.O.	RP74-S1200S-CY6Q4UM	
			Solid State Isolated N.O. with Timing	RP74-S1200S-CY6Q4UM-T	
	<b>Quick Disconnect (Mini)</b> 	10-40V DC	NPN/PNP	RP74-S1200D-CY6Q4UN	
			NPN/PNP with Timing	RP74-S1200D-CY6Q4UN-T	
		12-240V DC/ 24-240V AC	SPDT Relay	RP74-S1200R-CY6Q5LN	
			SPDT Relay with Timing	RP74-S1200R-CY6Q5LN-T	
			Solid State Isolated N.O.	RP74-S1200S-CY6Q4UN	
			Solid State Isolated N.O. with Timing	RP74-S1200S-CY6Q4UN-T	
<b>Pig tail</b> 		10-40V DC	NPN/PNP	RP74-S1200D-CY6P4U	
			NPN/PNP with Timing	RP74-S1200D-CY6P4U-T	
	12-240V DC/ 24-240V AC	SPDT Relay	RP74-S1200R-CY6P5L		
		SPDT Relay with Timing	RP74-S1200R-CY6P5L-T		
		Solid State Isolated N.O.	RP74-S1200S-CY6P4U		
		Solid State Isolated N.O. with Timing	RP74-S1200S-CY6P4U-T		

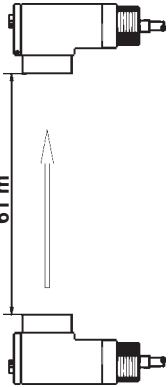




**RP74 SENSORS SPECIFICATIONS** (clear object detector DC)

Part model	Without timing delay	With timing delay
Sensing Range, Adjustable	0-1.2m	
Field of View	1.5°	
Light Source	LED Visible red 660nm	
Indicator LEDs	Green: Power Yellow: Output Red: Margin	
Response Time	2 ms	
Supply Voltage	10-40V DC (Ripple<=10%)	
Output Type	NPN/PNP	
Max. Load Current	250 mA	
No Load Current	<30 mA	
Max. Leakage Current	<10 uA	
Voltage Drop	<2.5 V	
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	
Mounting Bracket	RP74-A1 or RP74-A2 or RP74-A3 (See Page V-02)	

**RP74 SENSORS SPECIFICATIONS** (clear object detector AC)

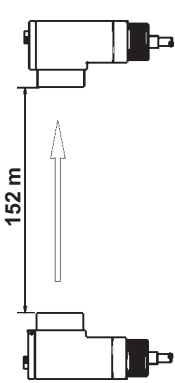




Part model	Without timing delay	With timing delay
Sensing Range, Adjustable	0-1.2m	
Field of View	1.5°	
Light Source	LED Visible red 660nm	
Indicator LEDs	Green: Power Yellow: Output Red: Margin	
Response Time	SPDT EM Relay output: 15ms Solid State Isolated N.O. output: 2ms	
Supply Voltage	12-240V DC/24-240V AC	
Output Type	SPDT EM Relay or Solid State Isolated N.O.	
Max. Load Current	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	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	....	
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 1500VAC for one min, between all supply terminals connected together and enclosure	
Insulation Resistance	>20MΩ , with 1500V 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	RP74-A1 or RP74-A2 or RP74-A3 (See Page V-02)	

RP74 SENSORS SELECTION GUIDE

Sensing mode	Connection	Supply Voltage	Output mode	Part number		
<p>Infrared : 880nm</p>  <p>61 m</p> <p>Through-beam mode Sensing distance: 61m</p>	<p>Cable</p> 	10-40V DC	Emitter	RP74-T061MD-EY9C3L2		
			NPN/PNP	RP74-T061MD-CY9C4U2		
			NPN/PNP with Timing	RP74-T061MD-CY9C4U2-T		
		12-240V DC/ 24-240V AC	Emitter	RP74-T061MA-EY9C2L2		
			SPDT Relay	RP74-T061MR-CY9C5L2		
			SPDT Relay with Timing	RP74-T061MR-CY9C5L2-T		
			Solid State Isolated N.O.	RP74-T061MS-CY9C4U2		
			Solid State Isolated N.O. with Timing	RP74-T061MS-CY9C4U2-T		
		Quick Disconnect		10-40V DC (Euro)	Emitter	RP74-T061MD-EY9Q4LE
					NPN/PNP	RP74-T061MD-CY9Q4UE
					NPN/PNP with Timing	RP74-T061MD-CY9Q4UE-T
				12-240VDC/ 24-240VAC (Micro)	Emitter	RP74-T061MA-EY9Q4LM
	Solid State Isolated N.O.				RP74-T061MS-CY9Q4UM	
	Solid State Isolated N.O. with Timing				RP74-T061MS-CY9Q4UM-T	
	Quick Disconnect (Mini)		10-40V DC	Emitter	RP74-T061MD-EY9Q4LN	
				NPN/PNP	RP74-T061MD-CY9Q4UN	
				NPN/PNP with Timing	RP74-T061MD-CY9Q4UN-T	
			12-240V DC/ 24-240V AC	Emitter	RP74-T061MA-EY9Q4LN	
				SPDT Relay	RP74-T061MR-CY9Q5LN	
				SPDT Relay with Timing	RP74-T061MR-CY9Q5LN-T	
				Solid State Isolated N.O.	RP74-T061MS-CY9Q4UN	
				Solid State Isolated N.O. with Timing	RP74-T061MS-CY9Q4UN-T	
			Pig tail		10-40V DC	Emitter
NPN/PNP						RP74-T061MD-CY9P4U
NPN/PNP with Timing						RP74-T061MD-CY9P4U-T
12-240V DC/ 24-240V AC	Emitter	RP74-T061MA-EY9P4L				
	SPDT Relay	RP74-T061MR-CY9P5L				
	SPDT Relay with Timing	RP74-T061MR-CY9P5L-T				
	Solid State Isolated N.O.	RP74-T061MS-CY9P4U				
	Solid State Isolated N.O. with Timing	RP74-T061MS-CY9P4U-T				

RP74 SENSORS SELECTION GUIDE

RP74 SERIES

Sensing mode	Connection	Supply Voltage	Output mode	Part number
<p>Infrared : 880nm</p>  <p>152 m</p>	<p>Cable</p> 	10-40V DC	Emitter	RP74-T152MD-EY9C3L2
			NPN/PNP	RP74-T152MD-CY9C4U2
			NPN/PNP with Timing	RP74-T152MD-CY9C4U2-T
		12-240V DC/ 24-240V AC	Emitter	RP74-T152MA-EY9C2L2
			SPDT Relay	RP74-T152MR-CY9C5L2
			SPDT Relay with Timing	RP74-T152MR-CY9C5L2-T
			Solid State Isolated N.O.	RP74-T152MS-CY9C4U2
			Solid State Isolated N.O. with Timing	RP74-T152MS-CY9C4U2-T
	<p>Quick Disconnect</p> 	10-40V DC (Euro)	Emitter	RP74-T152MD-EY9Q4LE
			NPN/PNP	RP74-T152MD-CY9Q4UE
			NPN/PNP with Timing	RP74-T152MD-CY9Q4UE-T
		12-240VDC/ 24-240VAC (Micro)	Emitter	RP74-T152MA-EY9Q4LM
			Solid State Isolated N.O.	RP74-T152MS-CY9Q4UM
			Solid State Isolated N.O. with Timing	RP74-T152MS-CY9Q4UM-T
<p>Through-beam mode</p> <p>Sensing distance: 152m</p> 	<p>Quick Disconnect (Mini)</p>	10-40V DC	Emitter	RP74-T152MD-EY9Q4LN
			NPN/PNP	RP74-T152MD-CY9Q4UN
			NPN/PNP with Timing	RP74-T152MD-CY9Q4UN-T
		12-240V DC/ 24-240V AC	Emitter	RP74-T152MA-EY9Q4LN
			SPDT Relay	RP74-T152MR-CY9Q5LN
			SPDT Relay with Timing	RP74-T152MR-CY9Q5LN-T
	Solid State Isolated N.O.		RP74-T152MS-CY9Q4UN	
	Solid State Isolated N.O. with Timing		RP74-T152MS-CY9Q4UN-T	
	<p>Pig tail</p> 	10-40V DC	Emitter	RP74-T152MD-EY9P4L
			NPN/PNP	RP74-T152MD-CY9P4U
			NPN/PNP with Timing	RP74-T152MD-CY9P4U-T
		12-240V DC/ 24-240V AC	Emitter	RP74-T152MA-EY9P4L
			SPDT Relay	RP74-T152MR-CY9P5L
			SPDT Relay with Timing	RP74-T152MR-CY9P5L-T
Solid State Isolated N.O.			RP74-T152MS-CY9P4U	
Solid State Isolated N.O. with Timing			RP74-T152MS-CY9P4U-T	

**RP74 SENSORS SPECIFICATIONS** (through beam DC)

Part model	Without timing delay	With timing delay
Sensing Range, Adjustable	0.025...61m or 0.025...152m	
Field of View	15°	
Light Source	Infrared 880nm	
Indicator LEDs	Green: Power	
Response Time	5 ms	
Supply Voltage	10-40V DC (Ripple<=10%)	
Output Type	NPN/PNP	
Max. Load Current	250 mA	
No Load Current	<30 mA	
Max. Leakage Current	<10 uA	
Voltage Drop	<2.5 V	
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	Emitter: Vs reverse polarity protected Receiver: 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	
Mounting Bracket	RP74-A1 or RP74-A2 or RP74-A3 (See Page V-02)	






**RP74 SENSORS SPECIFICATIONS** (through beam AC)

Part model	Without timing delay	With timing delay
Sensing Range, Adjustable	0.025...61m or 0.025...152m	
Field of View	15°	
Light Source	Infrared 880nm	
Indicator LEDs	Green: Power	
Response Time	SPDT EM Relay output: 23ms Solid State Isolated N.O. : 15ms	
Supply Voltage	12-240V DC/24-240V AC	
Output Type	SPDT EM Relay or Solid State Isolated N.O.	
Max. Load Current	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	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	_____	
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 1500VAC for one min, between all supply terminals connected together and enclosure	
Insulation Resistance	>20MΩ , with 1500V 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	RP74-A1 or RP74-A2 or RP74-A3 (See Page V-02)	

RP74 SERIES

RP74 SENSORS SELECTION GUIDE






E: RP74 SENSORS  
SELECTION GUIDE

Sensing mode	Connection	Supply Voltage	Output mode	Part number	
 <p>Visible Red Fiber-Optic Sensing distance: Depends on Fiber optic cable</p>	<b>Cable</b> 	10-40V DC	NPN/PNP	RP74-FPFD-CY6C4U2	
			NPN/PNP with Timing	RP74-FPFD-CY6C4U2-T	
		12-240V DC/ 24-240V AC	SPDT Relay	RP74-FPFR-CY6C5L2	
			SPDT Relay with Timing	RP74-FPFR-CY6C5L2-T	
			Solid State Isolated N.O.	RP74-FPFS-CY6C4U2	
			Solid State Isolated N.O. with Timing	RP74-FPFS-CY6C4U2-T	
		<b>Quick Disconnect</b> 	10-40V DC (Euro)	NPN/PNP	RP74-FPFD-CY6Q4UE
				NPN/PNP with Timing	RP74-FPFD-CY6Q4UE-T
	12-240V DC/ 24-240V AC (Micro)		Solid State Isolated N.O.	RP74-FPFS-CY6Q4UM	
			Solid State Isolated N.O. With Timing	RP74-FPFS-CY6Q4UM-T	
	<b>Quick Disconnect (Mini)</b> 	10-40V DC	NPN/PNP	RP74-FPFD-CY6Q4UN	
			NPN/PNP with Timing	RP74-FPFD-CY6Q4UN-T	
		12-240V DC/ 24-240V AC	SPDT Relay	RP74-FPFR-CY6Q5LN	
			SPDT Relay with Timing	RP74-FPFR-CY6Q5LN-T	
			Solid State Isolated N.O.	RP74-FPFS-CY6Q4UN	
			Solid State Isolated N.O. With Timing	RP74-FPFS-CY6Q4UN-T	
		<b>Pig tail</b> 	10-40V DC	NPN/PNP	RP74-FPFD-CY6P4U
				NPN/PNP with Timing	RP74-FPFD-CY6P4U-T
12-240V DC/ 24-240V AC	SPDT Relay		RP74-FPFR-CY6P5L		
	SPDT Relay with Timing		RP74-FPFR-CY6P5L-T		
	Solid State Isolated N.O.		RP74-FPFS-CY6P4U		
	Solid State Isolated N.O. With Timing		RP74-FPFS-CY6P4U-T		



RP74 SENSORS SELECTION GUIDE

RP74 SERIES

Sensing mode	Connection	Supply Voltage	Output mode	Part number	
<p>Infrared Fiber-Optic</p> <p>Sensing distance: Depends on Fiber optic cable</p> 	<p>Cable</p> 	10-40V DC	NPN/PNP	RP74-FGFD-CY9C4U2	
			NPN/PNP with Timing	RP74-FGFD-CY9C4U2-T	
		12-240V DC/ 24-240V AC	SPDT Relay	RP74-FGFR-CY9C5L2	
			SPDT Relay with Timing	RP74-FGFR-CY9C5L2-T	
			Solid State Isolated N.O.	RP74-FGFS-CY9C4U2	
			Solid State Isolated N.O. with Timing	RP74-FGFS-CY9C4U2-T	
		<p>Quick Disconnect</p> 	10-40V DC (Euro)	NPN/PNP	RP74-FGFD-CY9Q4UE
				NPN/PNP with Timing	RP74-FGFD-CY9Q4UE-T
	12-240V DC/ 24-240V AC (Micro)		Solid State Isolated N.O.	RP74-FGFS-CY9Q4UM	
			Solid State Isolated N.O. with Timing	RP74-FGFS-CY9Q4UM-T	
	<p>Quick Disconnect (Mini)</p> 	10-40V DC	NPN/PNP	RP74-FGFD-CY9Q4UN	
			NPN/PNP with Timing	RP74-FGFD-CY9Q4UN-T	
		12-240V DC/ 24-240V AC	SPDT Relay	RP74-FGFR-CY9Q5LN	
			SPDT Relay with Timing	RP74-FGFR-CY9Q5LN-T	
			Solid State Isolated N.O.	RP74-FGFS-CY9Q4UN	
			Solid State Isolated N.O. with Timing	RP74-FGFS-CY9Q4UN-T	
		<p>Pig tail</p> 	10-40V DC	NPN/PNP	RP74-FGFD-CY9P4U
				NPN/PNP with Timing	RP74-FGFD-CY9P4U-T
12-240V DC/ 24-240V AC	SPDT Relay		RP74-FGFR-CY9P5L		
	SPDT Relay with Timing		RP74-FGFR-CY9P5L-T		
	Solid State Isolated N.O.		RP74-FGFS-CY9P4U		
	Solid State Isolated N.O. With Timing		RP74-FGFS-CY9P4U-T		

RP74 SENSORS SPECIFICATIONS(fiber optic DC)

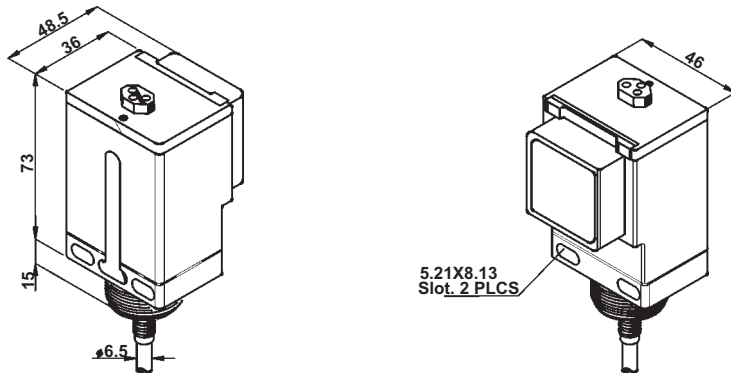
Part model	Without timing delay	With timing delay
Sensing Range, Adjustable	Depends on Fiber Optic cable	
Field of View	_____	
Light Source	Visible red 660nm or Infrared 880nm	
Indicator LEDs	Green: Power Yellow: Output Red: Margin	
Response Time	2 ms	
Supply Voltage	10-40V DC (Ripple<=10%)	
Output Type	NPN/PNP	
Max. Load Current	250 mA	
No Load Current	<30 mA	
Max. Leakage Current	<10 uA	
Voltage Drop	<2.5 V	
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	
Mounting Bracket	RP74-A1 or RP74-A2 or RP74-A3 (See Page V-02)	

**RP74 SENSORS SPECIFICATIONS(fiber optic AC)**

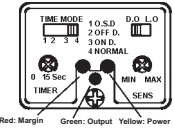
Part model	Without timing delay	With timing delay
Sensing Range, Adjustable	Depends on Fiber Optic cable	
Field of View	_____	
Light Source	Visible red 660nm or Infrared 880nm	
Indicator LEDs	Green: Power Yellow: Output Red: Margin	
Response Time	SPDT EM Relay output: 15ms Solid State Isolated N.O.: 2ms	
Supply Voltage	12-240V DC/24-240V AC	
Output Type	SPDT EM Relay or Solid State Isolated N.O.	
Max. Load Current	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	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	_____	
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 1500VAC for one min, between all supply terminals connected together and enclosure	
Insulation Resistance	>20MΩ , with 1500V 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	RP74-A1 or RP74-A2 or RP74-A3 (See Page V-02)	

## RP74 SENSORS DIMENSIONS

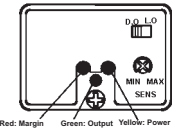
### Cable Version



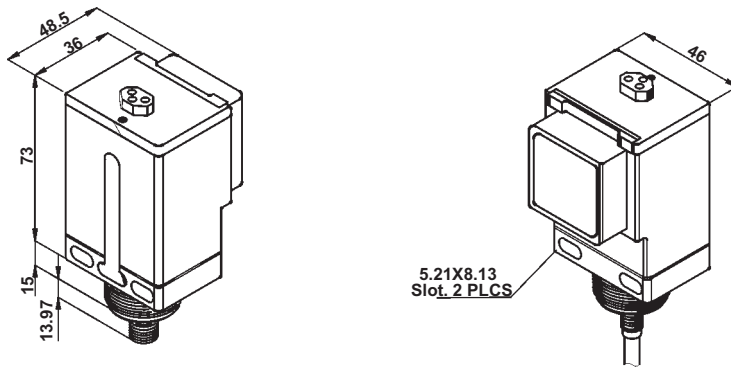
With timing



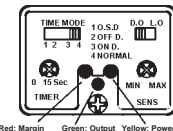
Without timing



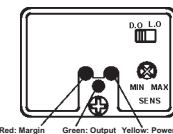
### Micro or Euro Connector Version



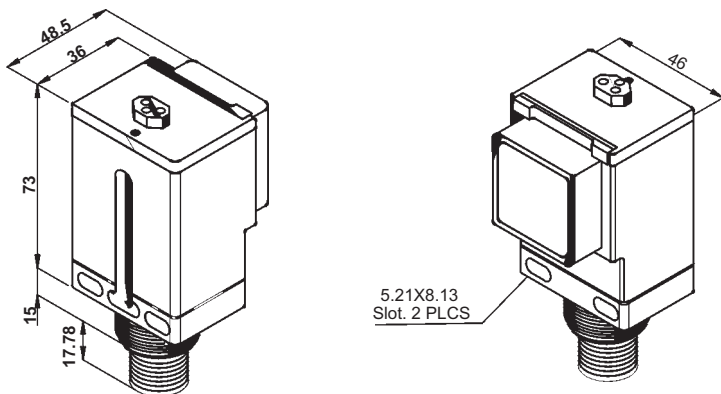
With timing



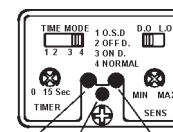
Without timing



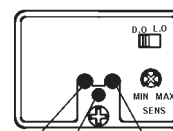
### Mini Connector Version



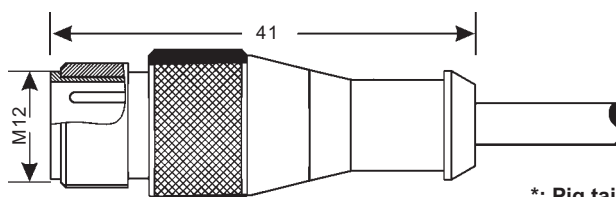
With timing



Without timing



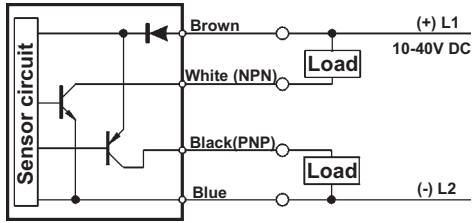
### Pig tail\*



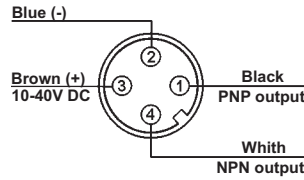
\*: Pig tail series please reference page Q-01~Q-02.

## RP74 SENSORS CONNECTION DIAGRAM

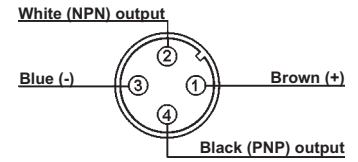
### NPN/PNP



### Mini Quick-Disconnet



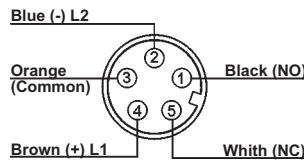
### Euro Quick-Disconnet



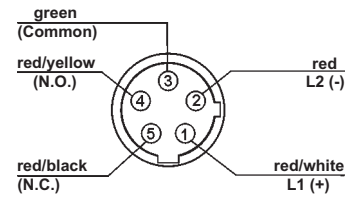
### SPDT EM Relay Version



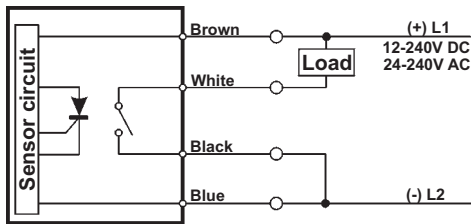
### Mini Quick-Disconnet



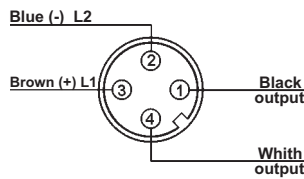
### Micro Quick-Disconnet



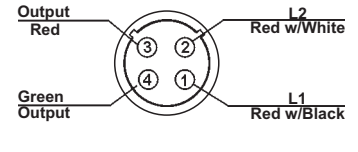
### Solid State Isolated N.O.



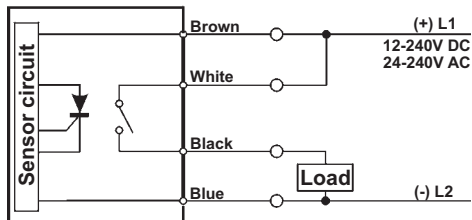
### Mini Quick-Disconnet



### Micro Quick-Disconnet

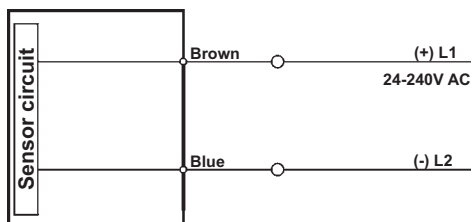


OR

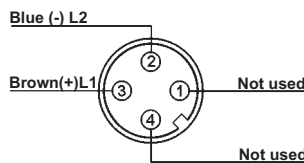


Connect load between red pin and L2

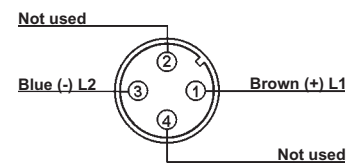
### Emitter (AC)



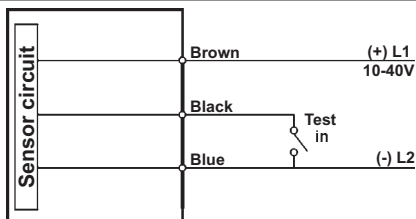
### Mini Quick-Disconnet



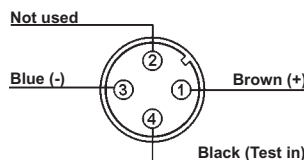
### Euro Quick-Disconnet



### Emitter (DC)

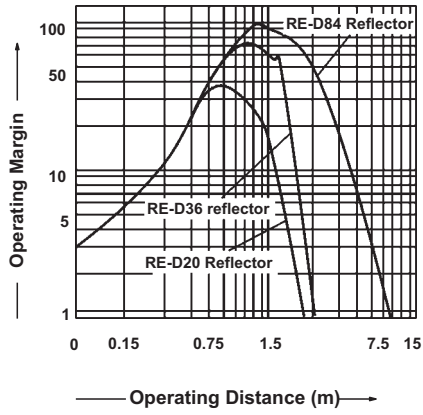


### Euro Quick-Disconnet

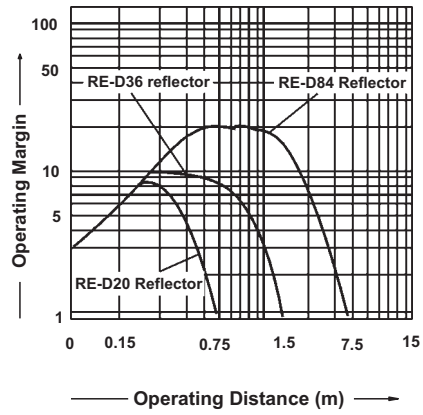


**RP74 SENSORS TYPICAL RESPONSE CURVE**

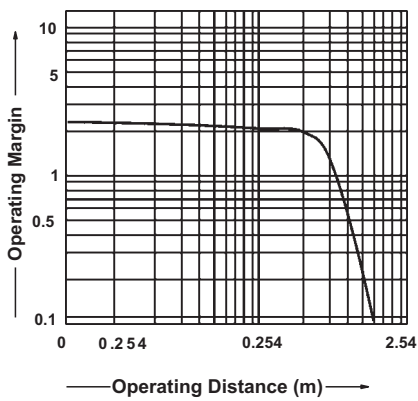
**Retroreflective sensor**



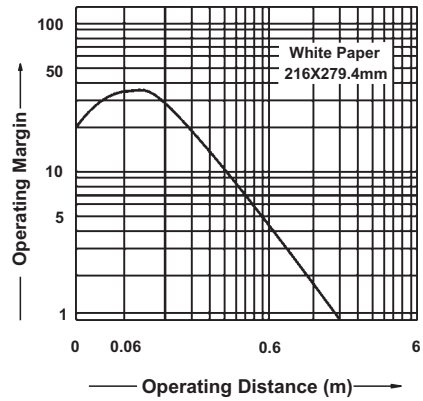
**Polarized Retroreflective sensor**



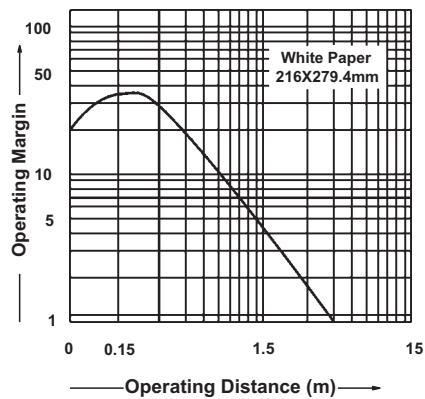
**Clear Object Detector**



**Standard Diffuse**

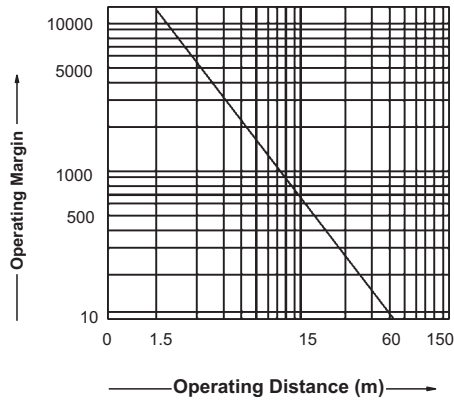


**Long Range Diffuse**

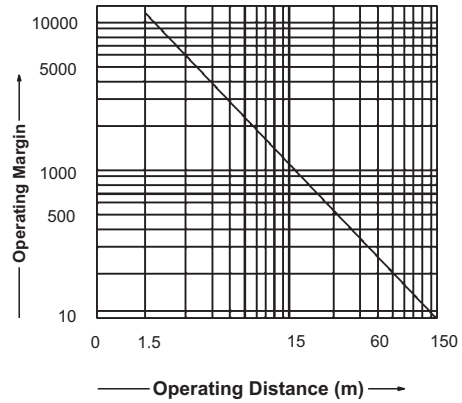


**RP74 SENSORS TYPICAL RESPONSE CURVE**

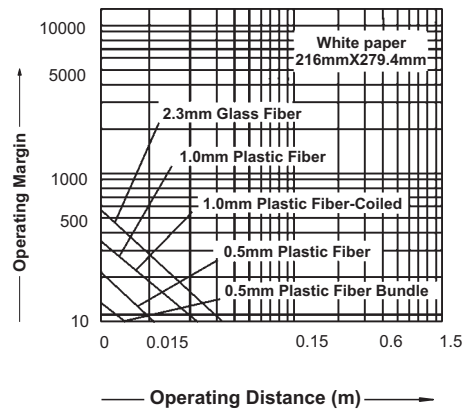
**Through Beam sensor with 61m Light Source**



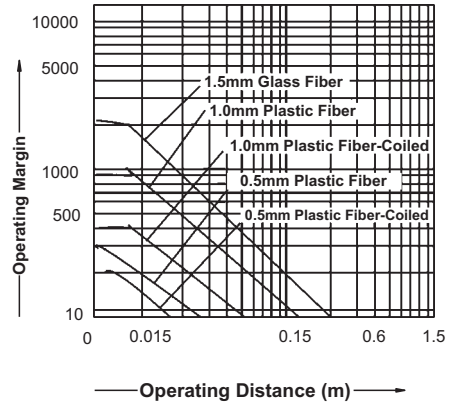
**Through Beam sensor with 152m Light Source**



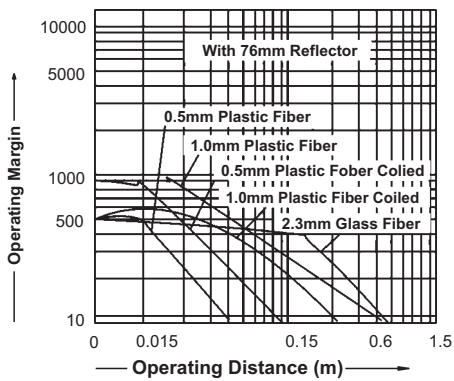
**Visible Red Fiber Optic Sensor Standard Diffuse**



**Visible Red Fiber Optic Sensor Through beam**

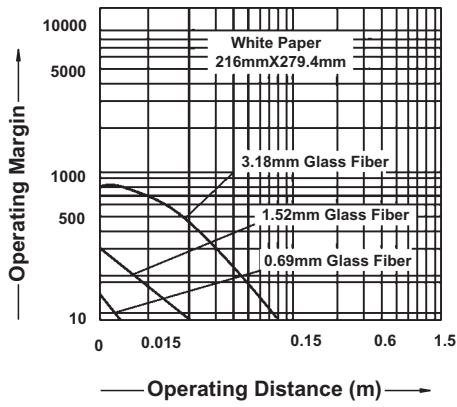


**Visible Red Fiber Optic Sensor Retroreflective**

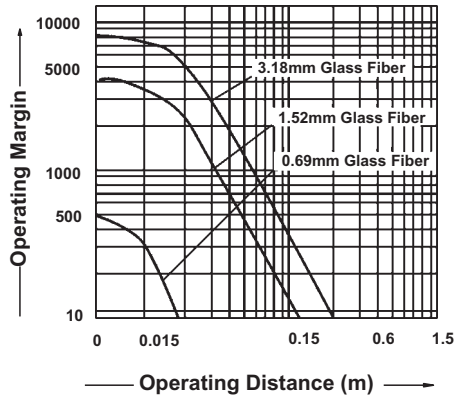


**RP74 SENSORS TYPICAL RESPONSE CURVE**

**Infraed Fiber Optic Sensor Standard Diffuse**



**Infraed Fiber Optic Sensor Through beam**



**Infraed Fiber Optic Sensor Retroreflective**

