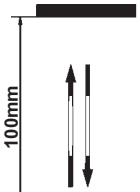
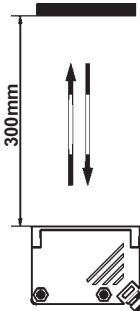
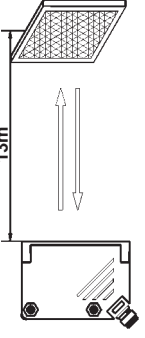
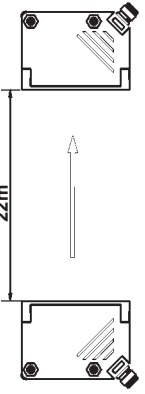


RP43 SENSORS SELECTION GUIDE

Sensing Mode	Connection	Supply Voltage	Output Mode	Part Number
 Diffuse Mode With Background Suppression Sensing Distance:100mm	Cable 	10-30V DC	Emitter	_____
			NPN	RP43-D0100N-CY6C4U2-BS
			PNP	RP43-D0100P-CY6C4U2-BS
	Quick Disconnect 	10-30V DC	Emitter	_____
			NPN	RP43-D0100N-CY6Q4UP-BS
			PNP	RP43-D0100P-CY6Q4UP-BS
	Pig Tail 	10-30V DC	Emitter	_____
			NPN	RP43-D0100N-CY6P4U-BS
			PNP	RP43-D0100P-CY6P4U-BS
 Diffuse Mode With Background Suppression Sensing Distance:300mm	Cable 	10-30V DC	Emitter	_____
			NPN	RP43-D0300N-CY6C4U2-BS
			PNP	RP43-D0300P-CY6C4U2-BS
	Quick Disconnect 	10-30V DC	Emitter	_____
			NPN	RP43-D0300N-CY6Q4UP-BS
			PNP	RP43-D0300P-CY6Q4UP-BS
	Pig Tail 	10-30V DC	Emitter	_____
			NPN	RP43-D0300N-CY6P4U-BS
			PNP	RP43-D0300P-CY6P4U-BS

RP43 SENSORS SELECTION GUIDE

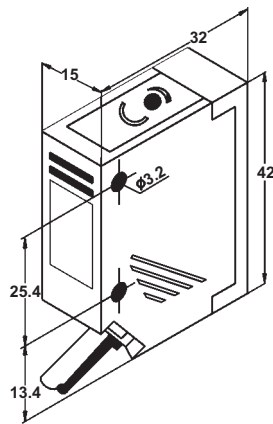
Sensing Mode	Connection	Supply Voltage	Output Mode	Part Number
 Retro-reflective Mode With Polarizing filter Sensing Distance:13m	Cable 	10-30V DC	Emitter	_____
			NPN	RP43-L013MN-CY6C4U2-PF
			PNP	RP43-L013MP-CY6C4U2-PF
	Quick Disconnect 	10-30V DC	Emitter	_____
			NPN	RP43-L013MN-CY6Q4UP-PF
			PNP	RP43-L013MP-CY6Q4UP-PF
	Pig Tail 	10-30V DC	Emitter	_____
			NPN	RP43-L013MN-CY6P4U-PF
			PNP	RP43-L013MP-CY6P4U-PF
 Through-beam Mode Sensing Distance:22m	Cable 	10-30V DC	Emitter	RP43-T022MD-EY6C3L2
			NPN	RP43-T022MN-CY6C4U2
			PNP	RP43-T022MP-CY6C4U2
	Quick Disconnect 	10-30V DC	Emitter	RP43-T022MD-EY6Q4LP
			NPN	RP43-T022MN-CY6Q4UP
			PNP	RP43-T022MP-CY6Q4UP
	Pig Tail 	10-30V DC	Emitter	RP43-T022MD-EY6P4L
			NPN	RP43-T022MN-CY6P4U
			PNP	RP43-T022MP-CY6P4U

RP43 SENSORS SPECIFICATIONS DC

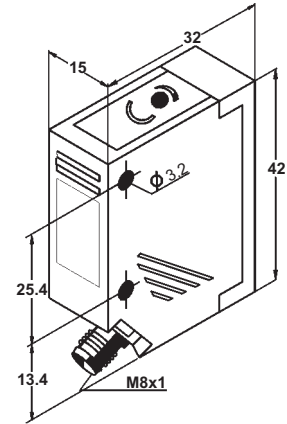
Sensing Mode	Diffuse Mode (With background suppression)	Retro-reflective Mode (With polarizing filter)	Through-beam Mode	
			Emitter	Receiver
Sensing Range, Adjustable	40...100 mm (1.6...3.9 in) 100...300 mm(3.9...11.8 in)	Max.: 13m(42.7 ft) Typical: 8m(26.2ft)	Max.: 22m(72.2 ft) Typical: 14m(45.9ft)	
Angle of Divergence	approx.40°	approx.2.5°	approx.40°	
Light spot size	approx. 10mm @ 100mm approx. 30mm @ 300mm	approx. 400mm @ 8m (15.7 in @ 26.2 ft)	approx. 1.5m @ 20m (4.9 ft @ 65.6 ft)	
Light Source	LED Red			
Response Time/Frequency	<2 ms / 250 Hz	<0.7 ms / 700 Hz	<15 ms / 33 Hz	
Supply Voltage	10...30V DC (limit values)			
Current Consumption(no load)	<=35 mA			
Ripple (within Vs tolerance)	< 6 V peak-to-peak			
Output Type	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	Light or dark switching selectable via switch			
Connection	Cable or M8 4-pin plug			
Connecting Cable	PVC, 2m			
Housing	Glass fiber reinforced plastic			
Enclosure Rating	IP 67 / NEMA 6			
Circuit Protection	Outputs short circuit and over current protected, Vs reverse polarity protected			
Test Input	_____			
Alarm Output	_____			
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			
Mounting Bracket	RP43-A1 (see page U-03)			
Weight	approx. 23g			
cable	2M or 9m 4.0ϕ 4X0.5 (Emitter :3X0.5) PVC.			
Pigtail Tpye	See page Q-01 for cable and connect at pigtail			

RP43 SENSORS DIMENSIONS

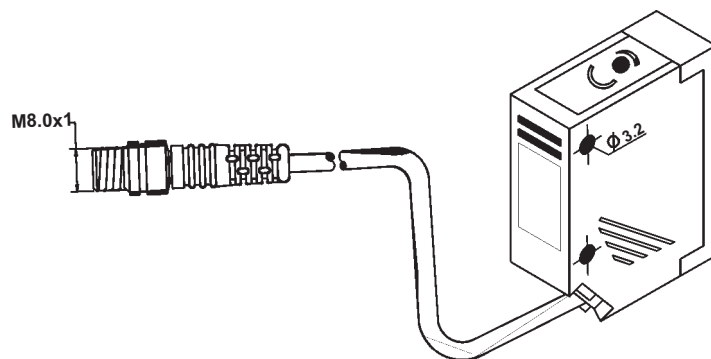
Cable



Quick Disconnect (pico style)



Pig tail*

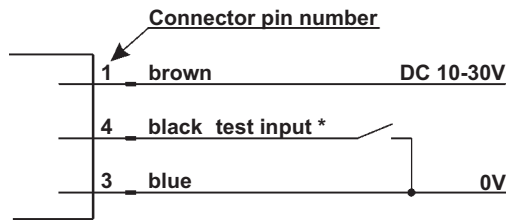


*: Pig tail series please reference page Q-01.

RP43 SENSORS CONNECTION DIAGRAM

Emitter

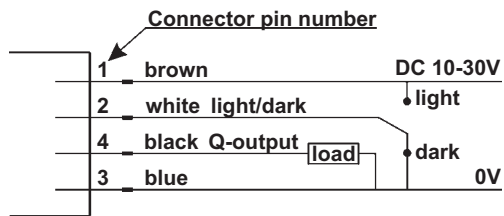
M8 connector (PICO style)



*: Test input=0V Emitter off.

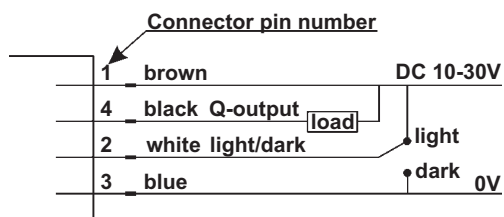
PNP

M8 connector (PICO style)



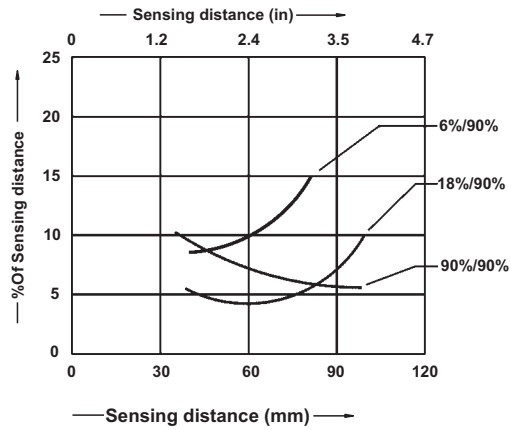
NPN

M8 connector (PICO style)



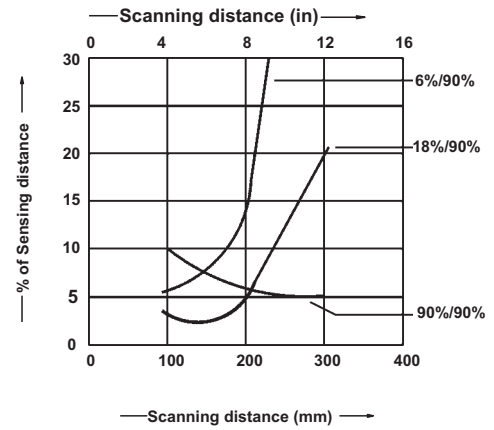
RP43 SENSORS SENSING FIELDS (TYPICAL)

Diffuse sensor
(sensing distance=100mm)



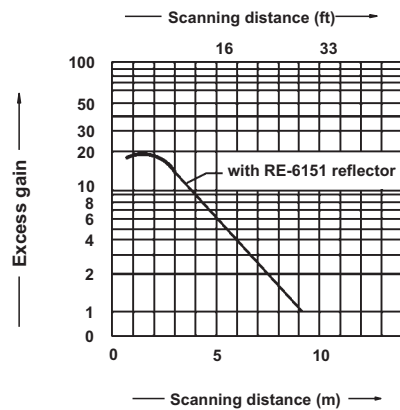
Background suppression

Diffuse sensor
(sensing distance=300mm)



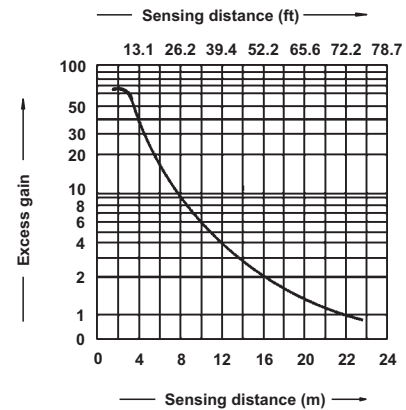
Background suppression

Retro-reflective sensor



Excess gain curve

Through - beam sensor



Excess gain curve