

Q60 SERIES PHOTOELECTRIC SENSOR (10-30VDC)

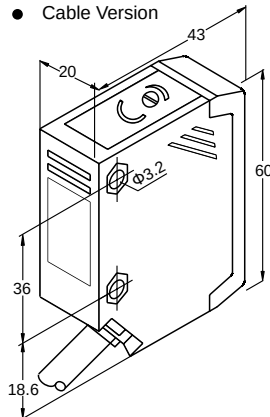
Series	Q60	Q60
Sensing Mode	Diffuse with background suppression	Diffuse with background suppression
Sensing Schematic		
Sensing Range	500mm	1000mm
Supply Voltage	10-30VDC (±10%)	10-30VDC (±10%)
Absorption At 30VDC	<35mA	<35mA
Max. Load current	100mA	100mA
Voltage Drop (Sensor ON)	≤2.0V (I=100mA)	≤2.0V (I=100mA)
Switching Hysteresis	<10%(Sr)	<10%(Sr)
Output	PNP or NPN	PNP or NPN
Output Operation	Light On & Dark On	Light On & Dark On
Response Time	15ms	15ms
Start Up Delay	100ms	100ms
Emitting Element	Red (660nm)	Red (660nm)
Protection Category	IP67	IP67
Operating Temperature	-25°C - +55°C	-25°C - +55°C
Light Immunity	>10.000Lux	>10.000Lux
Sensitivity Adjustment	Trimmer 1 turn	Trimmer 1 turn
Short Circuit Protection	Yes	Yes
Reverse Polarity Protection	Yes	Yes
Indicator	Red LED: output	Red LED: output
Weight	approx.140 g	approx.140 g
Housing Material	PBT	PBT
2m PVC Cable (3.0Φ 4x0.15)	NPN Light On or Dark On	PPQ60-D05N-D1V2
	PNP Light On or Dark On	PPQ60-D05P-D1V2
	NPN or PNP Light On or Dark On	PPQ60-D05D-D1V2
M8 Connector	NPN Light On or Dark On	PPQ60-D05N-D1P4
	PNP Light On or Dark On	PPQ60-D05P-D1P4
	NPN or PNP Light On or Dark On	PPQ60-D05D-D1P4

Picture

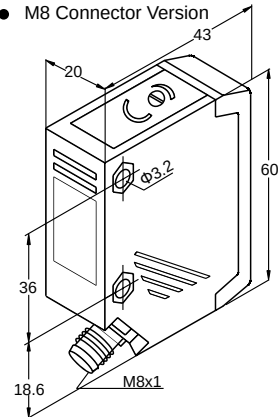


Dimensions (unit: mm)

● Cable Version

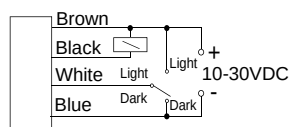


● M8 Connector Version

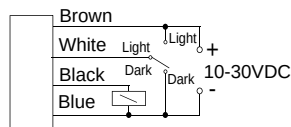


Wiring Diagram

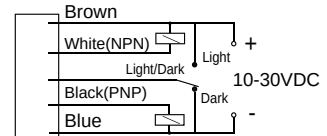
● Cable version - NPN Output
Light on or Dark on



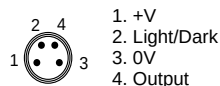
● Cable version - PNP Output
Light on or Dark on



● Cable version - NPN or PNP Output
Light on or Dark on



● M8 Connector version



Connector face view

Q60 SERIES PHOTOELECTRIC SENSOR (10-30VDC)

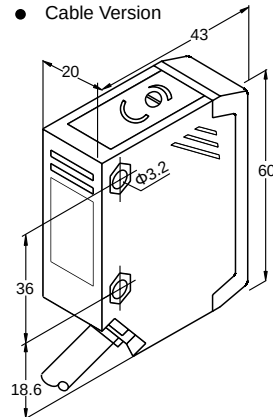
Series	Q60	Q60
Sensing Mode	Retro-reflective	Retro-reflective (With polarized filter)
Sensing Schematic		
Sensing Range	10M	6M
Supply Voltage	10-30VDC (±10%)	10-30VDC (±10%)
Absorption At 30VDC	<35mA	<35mA
Max. Load current	100mA	100mA
Voltage Drop (Sensor ON)	≤2.0V (I=100mA)	≤2.0V (I=100mA)
Switching Hysteresis	<10%(Sr)	<10%(Sr)
Output	PNP or NPN	PNP or NPN
Output Operation	Light On & Dark On	Light On & Dark On
Response Time	15ms	15ms
Start Up Delay	100ms	100ms
Emitting Element	Infrared (880nm)	Red (660nm)
Protection Category	IP67	IP67
Operating Temperature	-25°C - +55°C	-25°C - +55°C
Light Immunity	>10,000Lux	>10,000Lux
Sensitivity Adjustment	Trimmer 1 turn	Trimmer 1 turn
Short Circuit Protection	Yes	Yes
Reverse Polarity Protection	Yes	Yes
Indicator	Red LED: output	Red LED: output
Weight	approx.140 g	approx.140 g
Housing Material	PBT	PBT
2m PVC Cable (3.0φ 4x0.15)	NPN Light On or Dark On	PPQ60-R10MN-D1V2
	PNP Light On or Dark On	PPQ60-R10MP-D1V2
	NPN or PNP Light On or Dark On	PPQ60-R10MD-D1V2
M8 Connector	NPN Light On or Dark On	PPQ60-R10MN-D1P4
	PNP Light On or Dark On	PPQ60-R10MP-D1P4
	NPN or PNP Light On or Dark On	PPQ60-R10MD-D1P4

Picture

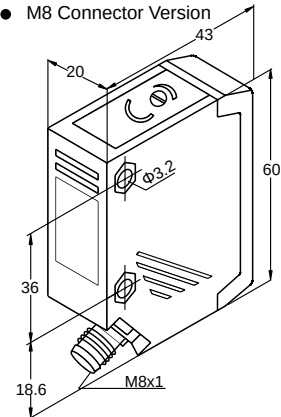


Dimensions (unit: mm)

● Cable Version

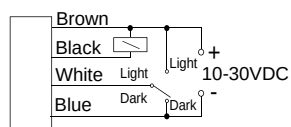


● M8 Connector Version

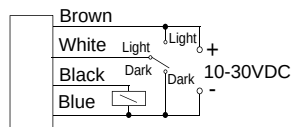


Wiring Diagram

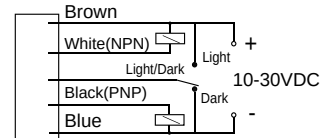
● Cable version - NPN Output
Light on or Dark on



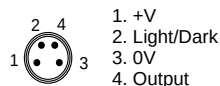
● Cable version - PNP Output
Light on or Dark on



● Cable version - NPN or PNP Output
Light on or Dark on

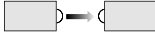


● M8 Connector version



Connector face view

Q60 SERIES PHOTOELECTRIC SENSOR (10-30VDC)

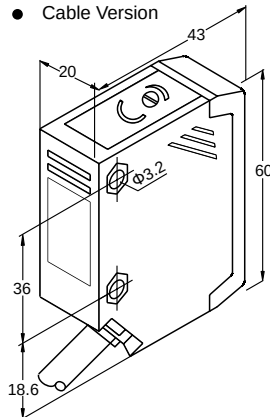
Series	Q60	Q60
Sensing Mode	Through-beam	Diffuse with background suppression
Sensing Schematic		
Sensing Range	22M	400mm
Supply Voltage	10-30VDC (±10%)	10-30VDC (±10%)
Absorption At 30VDC	<35mA	<35mA
Max. Load current	100mA	100mA
Voltage Drop (Sensor ON)	≤2.0V (I=100mA)	≤2.0V (I=100mA)
Switching Hysteresis	<10%(Sr)	<10%(Sr)
Output	PNP or NPN	PNP or NPN
Output Operation	Light On & Dark On	Light On & Dark On
Response Time	15ms	15ms
Start Up Delay	100ms	100ms
Emitting Element	Infrared (880nm)	Red (660nm)
Protection Category	IP67	IP67
Operating Temperature	-25°C - +55°C	-25°C - +55°C
Light Immunity	>10.000Lux	>10.000Lux
Sensitivity Adjustment	Trimmer 1 turn	Trimmer 1 turn
Short Circuit Protection	Yes	Yes
Reverse Polarity Protection	Yes	Yes
Indicator	Red LED: output	Red LED: output
Weight	approx.140 g	approx.140 g
Housing Material	PBT	PBT
2m PVC Cable (3.0Φ 4x0.15)	Emitter	
	NPN Light On or Dark On	PPQ60-T22ME-H1V2
	PNP Light On or Dark On	PPQ60-T22MN-D1V2
	NPN or PNP Light On or Dark On	PPQ60-T22MP-D1V2
M8 Connector	Emitter	
	NPN Light On or Dark On	PPQ60-T22MD-D1V2
	PNP Light On or Dark On	PPQ60-T22ME-H1P4
	NPN or PNP Light On or Dark On	PPQ60-T22MN-D1P4
	Emitter	
	NPN Light On or Dark On	PPQ60-T22MP-D1P4
	PNP Light On or Dark On	PPQ60-T22MD-D1P4
	NPN or PNP Light On or Dark On	PPQ60-T22ME-H1V2

Picture

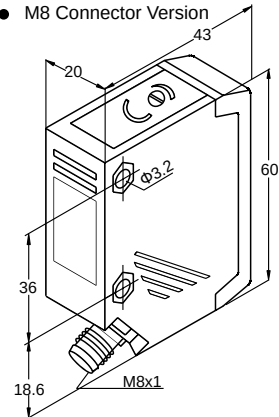


Dimensions (unit: mm)

- Cable Version

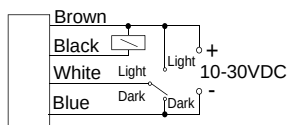


- M8 Connector Version

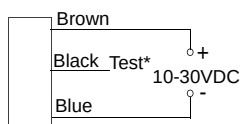


Wiring Diagram

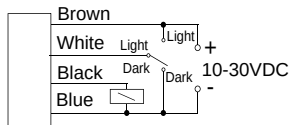
- Cable version - NPN Output
Light on or Dark on



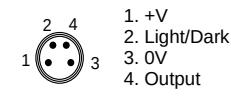
- Emitter (cable version)



- Cable version - PNP Output
Light on or Dark on

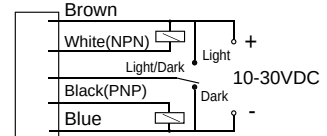


- M8 Connector version

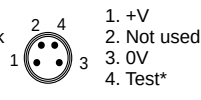


Connector face view

- Cable version - NPN or PNP Output
Light on or Dark on



For Emitter:



Connector face view

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