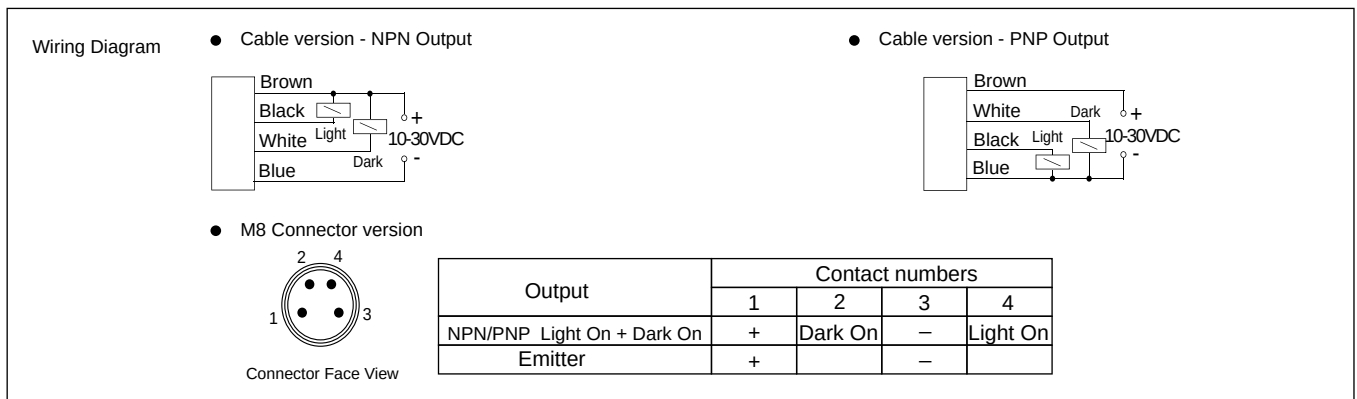
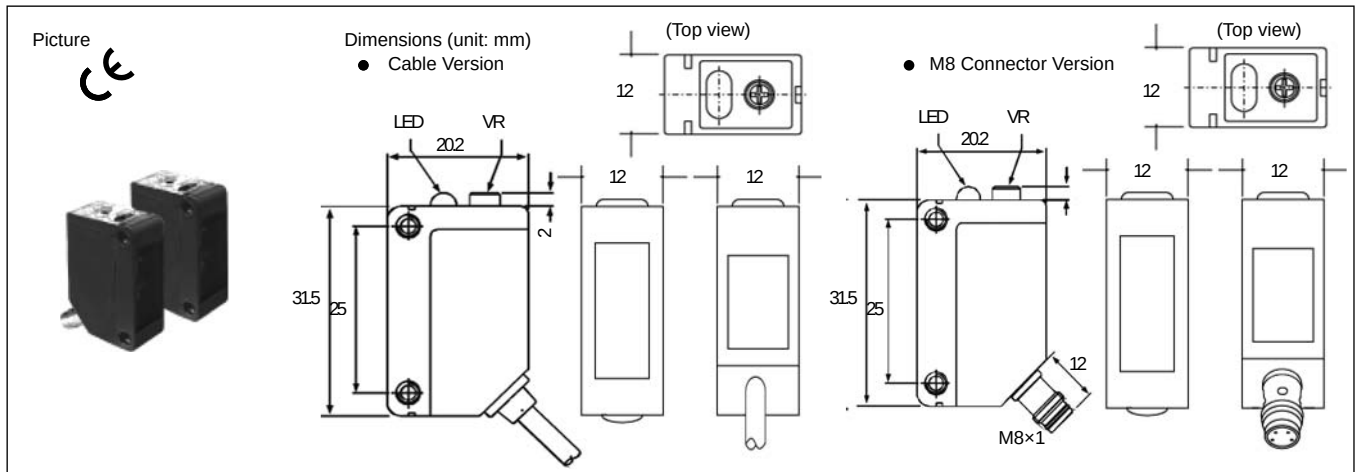


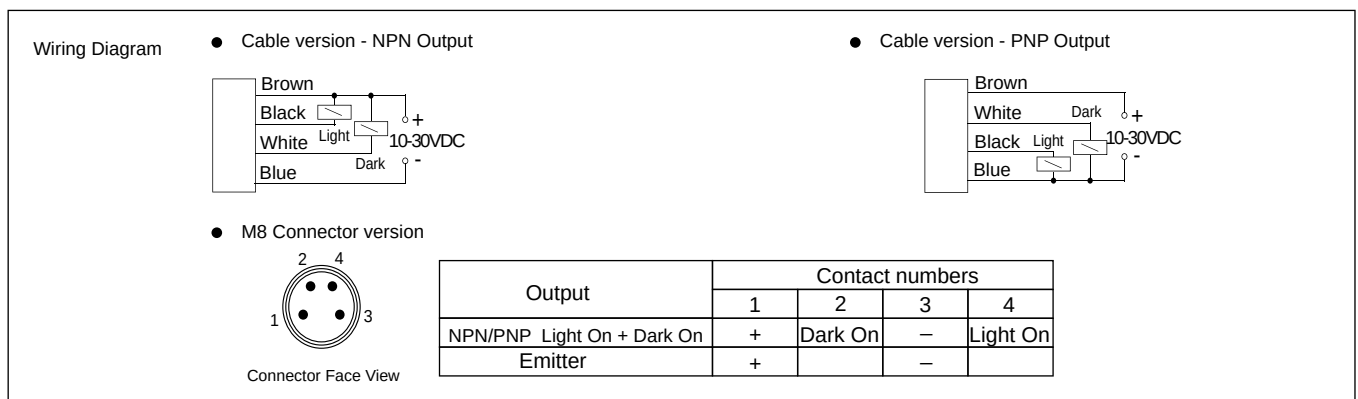
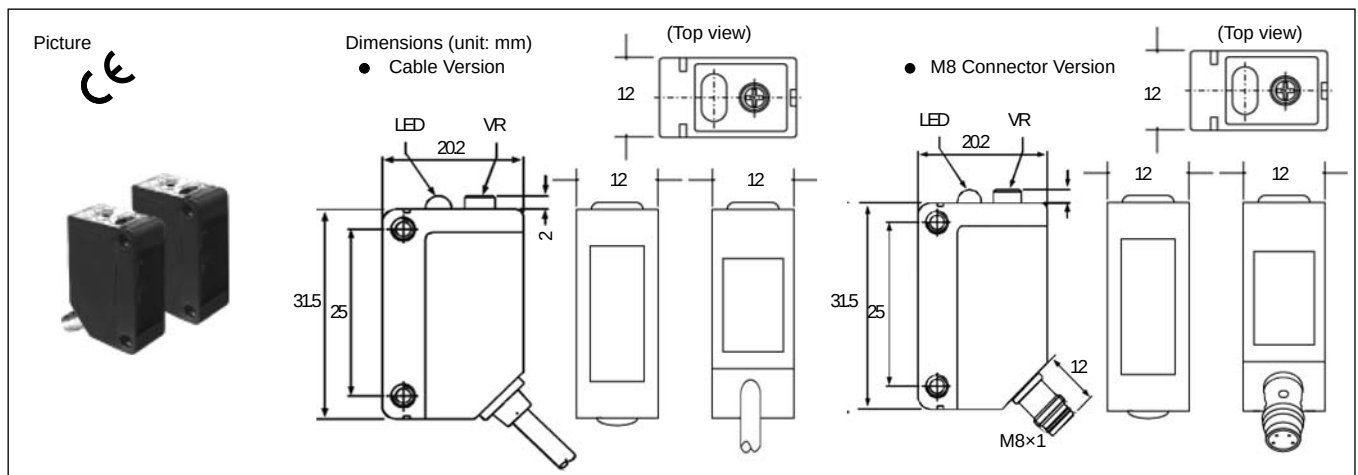
Q31 SERIES PHOTOELECTRIC SENSOR (10-30VDC)

Series	Q31	Q31
Sensing Mode	Diffuse	Diffuse
Sensing Schematic		
Sensing Range	110mm	350mm
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	<15%(Sr)	<15%(Sr)
Output	PNP or NPN	PNP or NPN
Output Operation	Light On & Dark On	Light On & Dark On
Response Time	1ms	1ms
Start Up Delay	300ms	300ms
Emitting Element	Infrared (880nm)	Infrared (880nm)
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	Yellow LED: output; Green LED: Power Supply	Yellow LED: output; Green LED: Power Supply
Sensing Object	10x10cm white paper	10x10cm white paper
Housing Material	ABS	ABS
2m PVC Cable (3.0φ 4x0.15)	NPN Light On & Dark On	PPQ31-D011N-C1V2
	PNP Light On & Dark On	PPQ31-D011P-C1V2
M8 Connector	NPN Light On & Dark On	PPQ31-D011N-C1P4
	PNP Light On & Dark On	PPQ31-D011P-C1P4
		PPQ31-D035N-C1V2
		PPQ31-D035P-C1V2
		PPQ31-D035N-C1P4
		PPQ31-D035P-C1P4



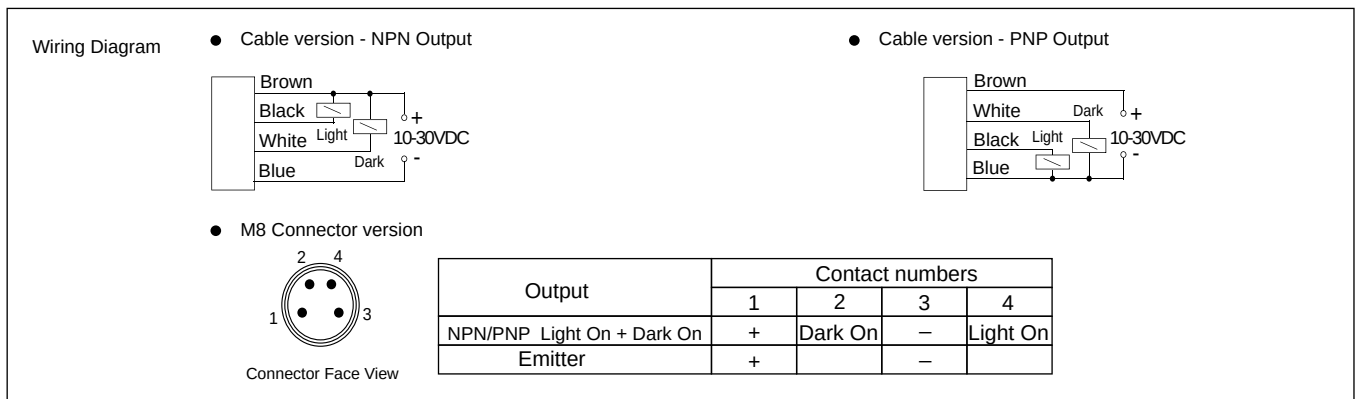
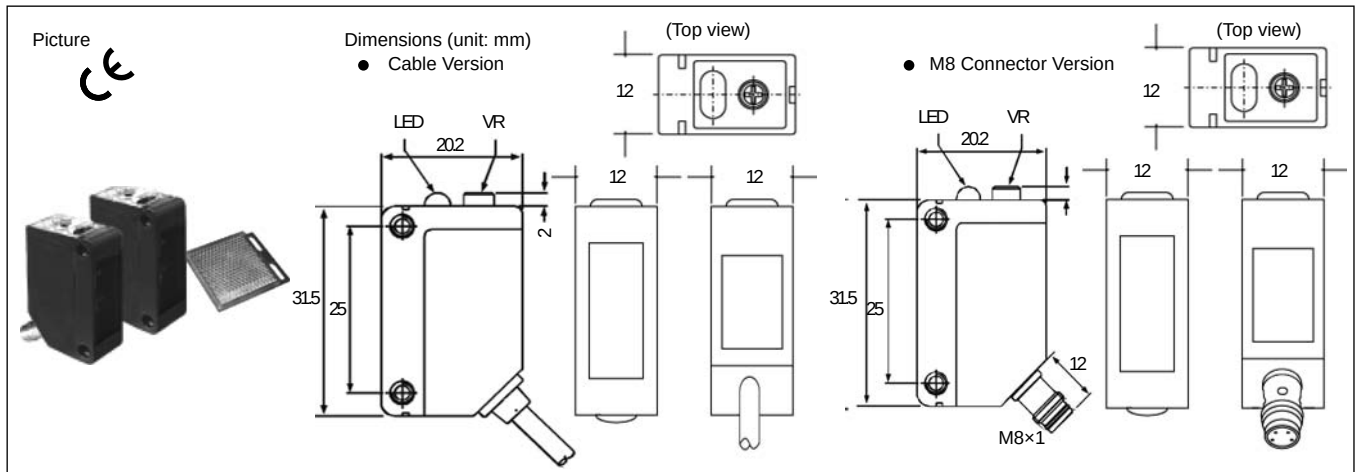
Q31 SERIES PHOTOELECTRIC SENSOR (10-30VDC)

Series	Q31	
Sensing Mode	Diffuse	
Sensing Schematic		
Sensing Range	800mm	
Supply Voltage	10-30VDC (±10%)	
Absorption At 30VDC	<35mA	
Max. Load current	100mA	
Voltage Drop (Sensor ON)	≤2.0V (I=100mA)	
Switching Hysteresis	<15%(Sr)	
Output	PNP or NPN	
Output Operation	Light On & Dark On	
Response Time	1ms	
Start Up Delay	300ms	
Emitting Element	Infrared (880nm)	
Protection Category	IP67	
Operating Temperature	-25℃ - +55℃	
Light Immunity	>10.000Lux	
Sensitivity Adjustment	Trimmer 1 turn	
Short Circuit Protection	Yes	
Reverse Polarity Protection	Yes	
Indicator	Yellow LED: output; Green LED: Power Supply	
Sensing Object	20x20cm white paper	
Housing Material	ABS	
2m PVC Cable (3.0φ 4x0.15)	NPN Light On & Dark On	
	PNP Light On & Dark On	
M8 Connector	NPN Light On & Dark On	
	PNP Light On & Dark On	

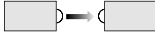


Q31 SERIES PHOTOELECTRIC SENSOR (10-30VDC)

Series	Q31	Q31
Sensing Mode	Retro-reflective	Retro-reflective (For transparent)
Sensing Schematic		
Sensing Range	0.1~4M	0.1~0.7M
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	<15%(Sr)	<15%(Sr)
Output	PNP or NPN	PNP or NPN
Output Operation	Light On & Dark On	Light On & Dark On
Response Time	1ms	1ms
Start Up Delay	300ms	300ms
Emitting Element	Infrared (880nm)	Infrared (880nm)
Protection Category	IP67	IP67
Operating Temperature	-25℃ - +55℃	-25℃ - +55℃
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	Yellow LED: output; Green LED: Power Supply	Yellow LED: output; Green LED: Power Supply
Sensing Object	Q51 Mirror	Q51 Mirror
Housing Material	ABS	ABS
2m PVC Cable (3.0φ 4x0.15)	NPN Light On & Dark On	PPQ31-R4N-C1V2
	PNP Light On & Dark On	PPQ31-R4P-C1V2
M8 Connector	NPN Light On & Dark On	PPQ31-R4N-C1P4
	PNP Light On & Dark On	PPQ31-R4P-C1P4
		PPQ31-R07N-C1V2/T
		PPQ31-R07P-C1V2/T
		PPQ31-R07N-C1P4/T
		PPQ31-R07P-C1P4/T



Q31 SERIES PHOTOELECTRIC SENSOR (10-30VDC)

Series	Q31	Q31
Sensing Mode	Through-beam	Through-beam
Sensing Schematic		
Sensing Range	5M	10M
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	<15%(Sr)	<15%(Sr)
Output	PNP or NPN	PNP or NPN
Output Operation	Light On & Dark On	Light On & Dark On
Response Time	1ms	1ms
Start Up Delay	300ms	300ms
Emitting Element	Infrared (880nm)	Infrared (880nm)
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	Yellow LED: output; Green LED: Power Supply	Yellow LED: output; Green LED: Power Supply
Weight	approx.45 g	approx.45 g
Housing Material	ABS	ABS
2m PVC Cable (3.0φ 4x0.15)	Emitter	PPQ31-T5E-H1V2
	NPN Light On & Dark On	PPQ31-T5N-C1V2
	PNP Light On & Dark On	PPQ31-T5P-C1V2
M8 Connector	Emitter	PPQ31-T10ME-H1P4
	NPN Light On & Dark On	PPQ31-T10MN-C1P4
	PNP Light On & Dark On	PPQ31-T10MP-C1P4

