
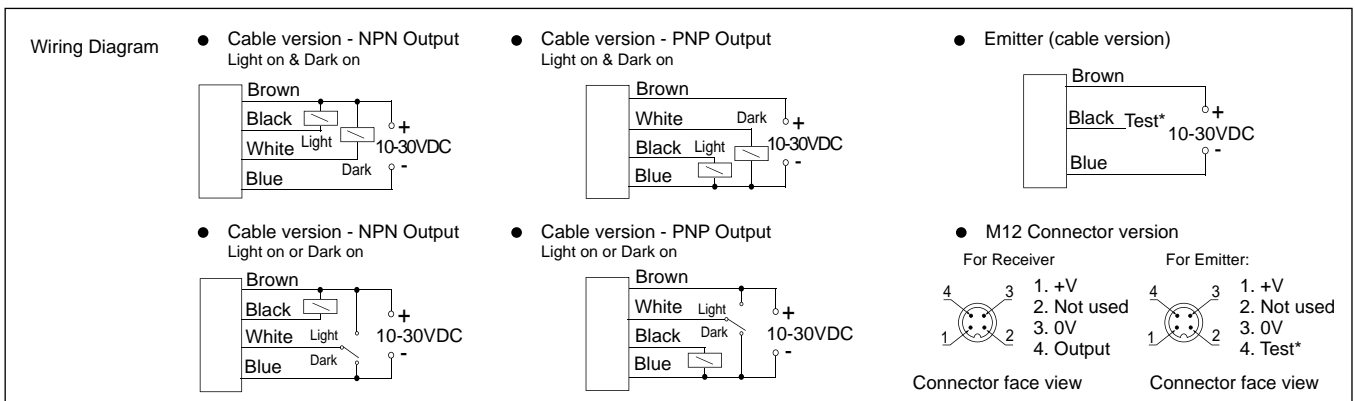
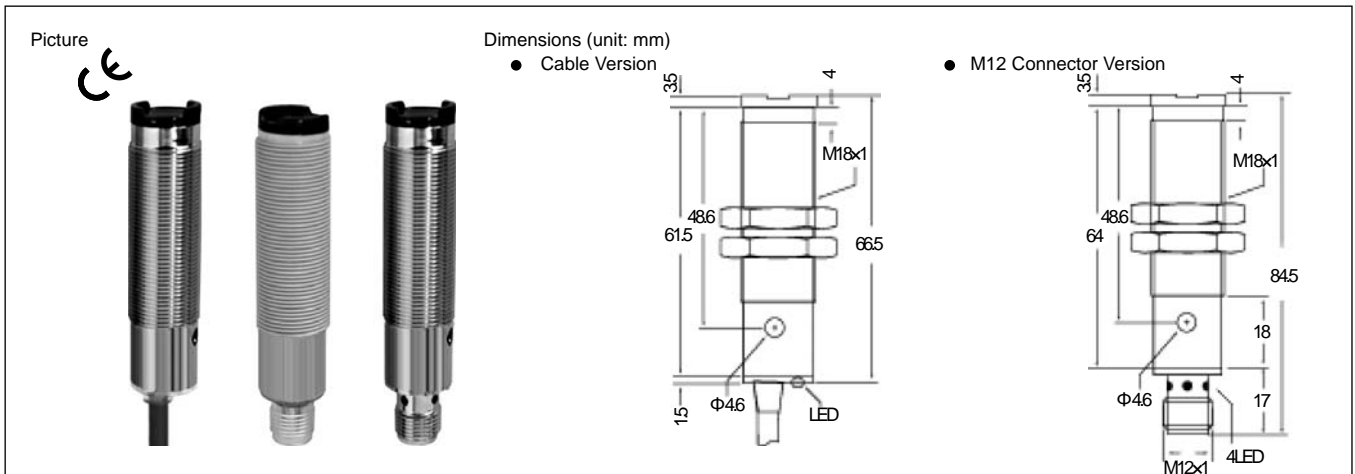


M18 SERIES PHOTOELECTRIC SENSOR (10-30VDC)

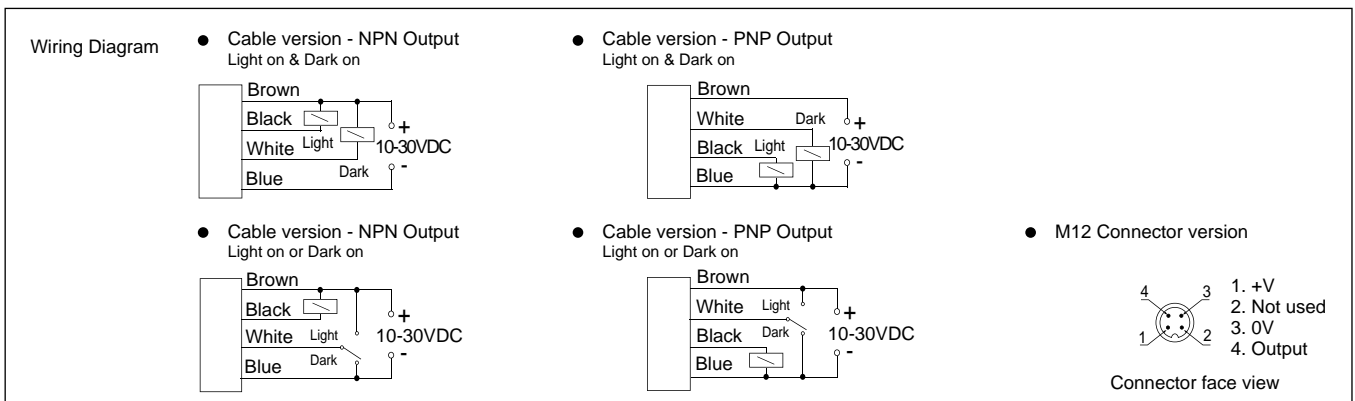
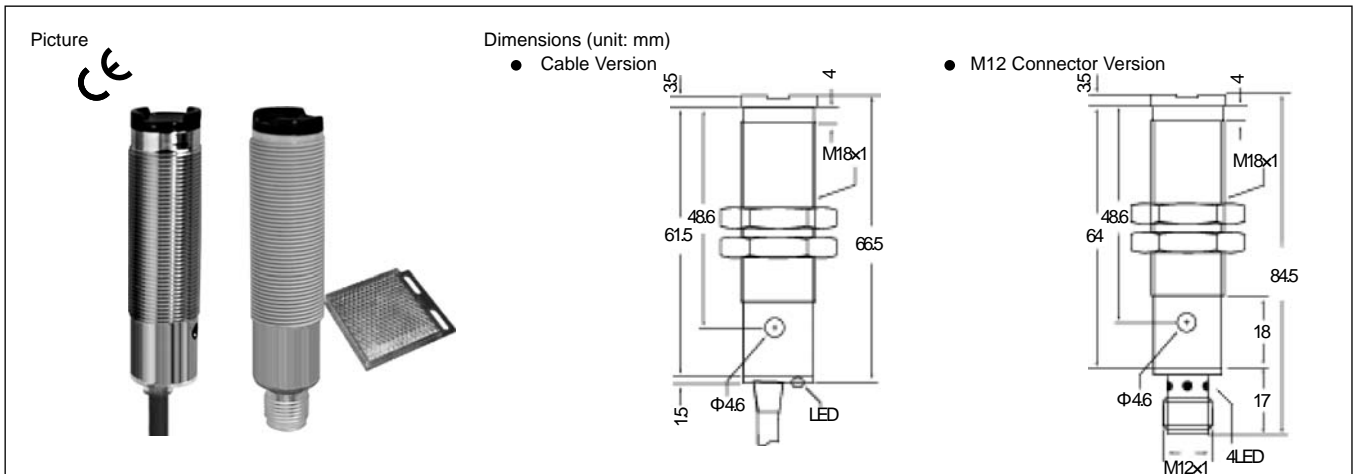
Series	M18		
Sensing Mode	Through-beam		
Sensing Schematic			
Sensing Range	15M		
Supply Voltage	10-30VDC (±10%)		
No Load Current	≤30mA		
Max. Load current	200mA		
Voltage Drop (Sensor ON)	≤2.5V		
Switching Hysteresis	<10%(Sr)		
Output	PNP or NPN		
Output Operation	Light On or Dark On; Light On & Dark On		
Response Time	1ms		
Emitting Element	Infrared (880nm)		
Protection Category	IP67		
Operating Temperature	-25°C - +55°C		
Ambient Humidity	35% - 85% RH		
Light Immunity	>10,000Lux		
Sensitivity Adjustment	Trimmer 1 turn		
Short Circuit Protection	Yes		
Electric Protections	Yes		
Sensing Object	Φ8mm or more		
Weight	approx.105 g	approx.120 g	
Housing Material	Plastic	Nickel Plated Brass	
2m PVC Cable (5.0φ 4x0.25)	Emitter	PPM18-T15ME-H1V2	PBM18-T15ME-H1V2
	NPN Light On & Dark On	PPM18-T15MN-C1V2	PBM18-T15MN-C1V2
	PNP Light On & Dark On	PPM18-T15MP-C1V2	PBM18-T15MP-C1V2
	NPN Light On or Dark On	PPM18-T15MN-D1V2	PBM18-T15MN-D1V2
	PNP Light On or Dark On	PPM18-T15MP-D1V2	PBM18-T15MP-D1V2
M12 Connector	Emitter	PPM18-T15ME-H1E4	PBM18-T15ME-H1E4
	NPN Light On & Dark On	PPM18-T15MN-C1E4	PBM18-T15MN-C1E4
	PNP Light On & Dark On	PPM18-T15MP-C1E4	PBM18-T15MP-C1E4
	NPN Light On or Dark On	PPM18-T15MN-D1E4	PBM18-T15MN-D1E4
	PNP Light On or Dark On	PPM18-T15MP-D1E4	PBM18-T15MP-D1E4



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

M18 SERIES PHOTOELECTRIC SENSOR (10-30VDC)

Series	M18		M18		
Sensing Mode	Retro-reflective		Retro-reflective (With polarized filter)		
Sensing Schematic					
Sensing Range	3M		1M		
Supply Voltage	10-30VDC (±10%)		10-30VDC (±10%)		
No Load Current	≤30mA		≤30mA		
Max. Load current	200mA		200mA		
Voltage Drop (Sensor ON)	≤2.5V		≤2.5V		
Switching Hysteresis	<10%(Sr)		<10%(Sr)		
Output	PNP or NPN		PNP or NPN		
Output Operation	Light On or Dark On; Light On & Dark On		Light On or Dark On; Light On & Dark On		
Response Time	1ms		1ms		
Emitting Element	Infrared (880nm)		Red (660nm)		
Protection Category	IP67		IP67		
Operating Temperature	-25°C - +55°C		-25°C - +55°C		
Ambient Humidity	35% - 85% RH		35% - 85% RH		
Light Immunity	>10.000Lux		>10.000Lux		
Sensitivity Adjustment	Trimmer 1 turn		Trimmer 1 turn		
Short Circuit Protection	Yes		Yes		
Electric Protections	Yes		Yes		
Sensing Object	Q51 Mirror		Q51 Mirror		
Weight	approx.105 g	approx.120 g	approx.65 g	approx.75 g	
Housing Material	Plastic	Nickel Plated Brass	Plastic	Nickel Plated Brass	
2m PVC Cable (5.0φ 4x0.25)	NPN Light On & Dark On	PPM18-R3N-C1V2	PBM18-R3N-C1V2	PPM18-R1N-C1V2/F	PBM18-R1N-C1V2/F
	PNP Light On & Dark On	PPM18-R3P-C1V2	PBM18-R3P-C1V2	PPM18-R1N-C1V2/F	PBM18-R1N-C1V2/F
	NPN Light On or Dark On	PPM18-R3N-D1V2	PBM18-R3N-D1V2	PPM18-R1P-C1V2/F	PBM18-R1P-C1V2/F
	PNP Light On or Dark On	PPM18-R3P-D1V2	PBM18-R3P-D1V2	PPM18-R1P-C1V2/F	PBM18-R1P-C1V2/F
M12 Connector	NPN Light On & Dark On	PPM18-R3N-C1E4	PBM18-R3N-C1E4	PPM18-R1N-C1E4/F	PBM18-R1N-C1E4/F
	PNP Light On & Dark On	PPM18-R3P-C1E4	PBM18-R3P-C1E4	PPM18-R1N-C1E4/F	PBM18-R1N-C1E4/F
	NPN Light On or Dark On	PPM18-R3N-D1E4	PBM18-R3N-D1E4	PPM18-R1P-C1E4/F	PBM18-R1P-C1E4/F
	PNP Light On or Dark On	PPM18-R3P-D1E4	PBM18-R3P-D1E4	PPM18-R1P-C1E4/F	PBM18-R1P-C1E4/F



M18 SERIES PHOTOELECTRIC SENSOR (10-30VDC)

Series	M18		M18		
Sensing Mode	Diffuse		Diffuse		
Sensing Schematic					
Sensing Range	150mm		500mm		
Supply Voltage	10-30VDC (±10%)		10-30VDC (±10%)		
No Load Current	≤30mA		≤30mA		
Max. Load current	200mA		200mA		
Voltage Drop (Sensor ON)	≤2.5V		≤2.5V		
Switching Hysteresis	<10%(Sr)		<10%(Sr)		
Output	PNP or NPN		PNP or NPN		
Output Operation	Light On or Dark On; Light On & Dark On		Light On or Dark On; Light On & Dark On		
Response Time	1ms		1ms		
Emitting Element	Infrared (880nm)		Infrared (880nm)		
Protection Category	IP67		IP67		
Operating Temperature	-25°C - +55°C		-25°C - +55°C		
Ambient Humidity	35% - 85% RH		35% - 85% RH		
Light Immunity	>10.000Lux		>10.000Lux		
Sensitivity Adjustment	Trimmer 1 turn		Trimmer 1 turn		
Short Circuit Protection	Yes		Yes		
Electric Protections	Yes		Yes		
Sensing Object	10x10cm white paper		20x20cm white paper		
Weight	approx.105 g	approx.120 g	approx.65 g	approx.75 g	
Housing Material	Plastic	Nickel Plated Brass	Plastic	Nickel Plated Brass	
2m PVC Cable (5.0φ 4x0.25)	NPN Light On & Dark On	PPM18-D015N-C1V2	PBM18-D015N-C1V2	PPM18-D05N-C1V2	PBM18-D05N-C1V2
	PNP Light On & Dark On	PPM18-D015P-C1V2	PBM18-D015P-C1V2	PPM18-D05P-C1V2	PBM18-D05P-C1V2
	NPN Light On or Dark On	PPM18-D015N-D1V2	PBM18-D015N-D1V2	PPM18-D05N-D1V2	PBM18-D05N-D1V2
	PNP Light On or Dark On	PPM18-D015P-D1V2	PBM18-D015P-D1V2	PPM18-D05P-D1V2	PBM18-D05P-D1V2
M12 Connector	NPN Light On & Dark On	PPM18-D015N-C1E4	PBM18-D015N-C1E4	PPM18-D05N-C1E4	PBM18-D05N-C1E4
	PNP Light On & Dark On	PPM18-D015P-C1E4	PBM18-D015P-C1E4	PPM18-D05P-C1E4	PBM18-D05P-C1E4
	NPN Light On or Dark On	PPM18-D015N-D1E4	PBM18-D015N-D1E4	PPM18-D05N-D1E4	PBM18-D05N-D1E4
	PNP Light On or Dark On	PPM18-D015P-D1E4	PBM18-D015P-D1E4	PPM18-D05P-D1E4	PBM18-D05P-D1E4

