


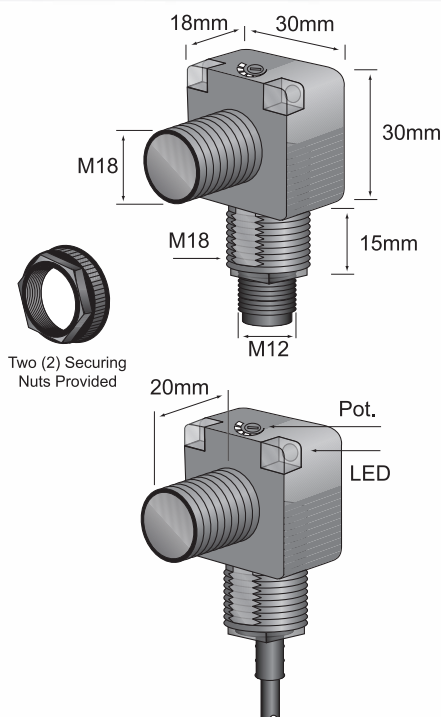
RP18 SERIES

RP18 Series					
Image	Series Description		Modes	Ranges	
	Compact Photoelectric Sensor <ul style="list-style-type: none"> • M18 threaded lens • Visible Red LED • Several mounting options • Multi-voltage 		Through Beam	0.1...20m	
			Retroreflective	0.1...2m	
			Diffuse	20...0.5m	
	Through-beam	Diffuse	Diffuse (Fixed-field with Background Suppression)	Retroreflective	Retroreflective - with Polarizing Filter
Operating Range	20m (65.6 ft.)	DC: 500mm (19.7 in.) AC: 300mm (11.8 in.)	100mm (3.94 in)	2m (6.56 ft.)	1m (3.28 ft.)
Light Emission	950nm Infrared LED	Infrared LED, 880 nm	Infrared LED, 880nm	Infrared LED, 950nm	Red LED, 680nm
DC Models - Quick Connect, M12 - Recommended Mating Cable: part # R-FS4TZ-V075 (straight), R-FA4TZ-V075 (right-angle)					
Emitter	RP18-T020MD-EY9Q4LE				
NPN	RP18-T020MNCY9Q4UE	RP18-D0500NCY9Q4UE	RP18-D0100NCY9Q4UE-BS	RP18-L2000NCY9Q4UE	RP18-L2000NCY6Q4UE-PF
PNP	RP18-T020MPCY9Q4UE	RP18-D0500PCY9Q4UE	RP18-D0100PCY9Q4UE-BS	RP18-L2000PCY9Q4UE	RP18-L2000PCY6Q4UE-PF
AC Models - Quick Connect, 1/2"-20 UNF - Recommended Mating Cable: part # U-FS4TA-V165 (straight), U-FA4TA-V165 (right-angle)					
Emitter (2-wire)	RP18-T020MA-EY9Q4LM				
Light-ON (3-wire)	RP18-T020MALY9Q4UM	RP18-D0300ALY9Q4UM	RP18-D0100ALY9Q4UM-BS	RP18-L2000ALY9Q4UM	RP18-L2000ALY6Q4UM-PF
Dark-ON (3-wire)	RP18-T020MADY9Q4UM	RP18-D0300ADY9Q4UM	RP18-D0100ADY9Q4UM-BS	RP18-L2000ADY9Q4UM	RP18-L2000ADY6Q4UM-PF
AC/DC Models - Quick Connect, 1/2"-20 UNF - Recommended Mating Cable: part # U-FS4TA-V165 (straight), U-FA4TA-V165 (right-angle)					
Emitter (2-wire)	RP18-T020MCEY9Q4LM				
Light-ON (2-wire)	RP18-T020MCLY9Q4UM	RP18-D0300CLY9Q4UM	RP18-D0100CLY9Q4UM-BS	RP18-L2000CLY9Q4UM	RP18-L2000CLY6Q4UM-PF
Dark-ON (2-wire)	RP18-T020MCDY9Q4UM	RP18-D0300CDY9Q4UM	RP18-D0100CDY9Q4UM-BS	RP18-L2000CDY9Q4UM	RP18-L2000CDY6Q4UM-PF

TECHNICAL DATA

	DC	AC	AC/DC
Operating Voltage	10-30 VDC	24-240 VAC	20-250 VAC/DC
Voltage Drop	2.5V or less	3V @300mA AC; 2V @ 15mA AC	3V or less
Current Consumption	30mA or less	5mA or less	30mA or less
Response Time	1.5ms	15ms	15ms
Max. Load Current	200mA	300mA	
Output Operation	Light-ON or Dark-ON selectable by control input wire		Light-ON or Dark-ON selectable by type number
Reverse Polarity Protection	Yes		
Short Circuit Protection	Yes		
Overload Current Protection	Yes		
Housing Material	PBT (plastic) housing		
Indicators	Red LED indicator		
Environmental Rating	IP67		
Operating Temperature	-25°C to +55°C (Max. relative humidity: 85%)		
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 Withstandability	IEC 60947-5-2, Part 8.3.3.4 or 500 VDC (or 1500 VAC) for 1 min., between all supply terminals connected together and enclosure		
Insulation Resistance	>20MΩ, with 500 VDC (or 1500 VAC) megger between all supply terminals connected together and enclosure.		
Vibration Resistance	IEC 60947-5-2, Part 7.4.2 or 10-55 Hz, 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 times each		
Cable	Standard length 2m. Other lengths available upon request		
Connector	M12x1 DC Micro Connector	½-20" UNF	

Dimensions



Connections

AC Emitter	AC	AC Pins
DC Emitter	DC NPN & PNP	DC Pins
	<p>NPN</p> <p>PNP</p> <p><small>D1: Reverse polarity protection diode ZD1: Surge absorption zener diode T1: NPN output transistor</small></p>	<p>Emitter</p> <p>Receiver</p>
AC / DC Emitter	AC / DC	AC / DC Pins