

M18 SERIES

M18 Series

Image	Series Description	Modes	Range
	Cylindrical Photoelectric Sensor - Standard 18mm Housing - Pre-wired or Quick Disconnect - Metal or Plastic Housings - Self-contained Amplifier	Through Beam	15m
		Retroreflective	3m
		Diffuse	500mm

	Through-beam	Diffuse	Retroreflective	Retroreflective (Polarized)
Operating Range	15m (49.2 ft.)	0.5m (1.6 ft.)	3m (9.8 ft.)	1m (3.2ft.)
Light Emission	880nm Infrared LED			660nm Red LED

DC Models

Part Numbers - Metal Housing

Emitter	M18B-T015MD-EX9Q4LE			
NPN - Light/Dark	M18B-T015MN-CX9Q4UE	M18B-D0500N-CX9Q4UE	M18B-L3000N-CX9Q4UE	M18B-L1000N-CX6Q4UE-PF
PNP - Light/Dark	M18B-T015MP-CX9Q4UE	M18B-D0500P-CX9Q4UE	M18B-L3000P-CX9Q4UE	M18B-L1000P-CX6Q4UE-PF

Part Numbers - Plastic Housing (right-angle body)

Emitter	M18P-T015MD-EZ9Q4LE			
NPN - Light/Dark	M18P-T015MN-CZ9Q4UE	M18P-D0500N-CZ9Q4UE	M18P-L3000N-CZ9Q4UE	M18P-L1000N-CZ6Q4UE-PF
PNP - Light/Dark	M18P-T015MP-CZ9Q4UE	M18P-D0500P-CZ9Q4UE	M18P-L3000P-CZ9Q4UE	M18P-L1000P-CZ6Q4UE-PF

AC Models

Part Numbers - Metal Housing

Emitter	M18B-T015MA-EX9Q4LM			
Light-ON	M18B-T015MA-LX9Q4UM	M18B-D0500A-LX9Q4UM	M18B-L3000A-LX9Q4UM	M18B-L1000A-LX6Q4UM-PF
Dark-ON	M18B-T015MA-DX9Q4UM	M18B-D0500A-DX9Q4UM	M18B-L3000A-DX9Q4UM	M18B-L1000A-DX6Q4UM-PF

Part Numbers - Plastic Housing (right-angle body)

Emitter	M18P-T015MA-EZ9Q4LM			
Light-ON	M18P-T015MA-LZ9Q4UM	M18P-D0500A-LZ9Q4UM	M18P-L3000A-LZ9Q4UM	M18P-L1000A-CZ6Q4UM-PF
Dark-ON	M18P-T015MA-DZ9Q4UM	M18P-D0500A-DZ9Q4UM	M18P-L3000A-DZ9Q4UM	M18P-L1000A-CZ6Q4UM-PF

TECHNICAL DATA

	DC Models	AC Models
Power Supply	10...30 VDC	20 to 250 VAC
Current Consumption	30mA max.	5mA max.
Indicator LEDs	Red LED (output activated)	
Voltage Drop	2.5 V or less	10 VAC
Current Load Max	200mA	300mA
Response Time	1.5ms	-
Connection	M12 - Recommended Mating Cable: part # R-FS4TZ-V075 (straight), R-FA4TZ-V075 (right-angle)	½"-20 UNF - Recommended Mating Cable: part # U-FS4TA-V165 (straight), U-FA4TA-V165 (right-angle)
Electrical Protection	Short-circuit, Reverse Polarity and Overload Current Protection	-
Mechanical Protection	IP67 (IEC)	
Housing Material	Metal: Nickel-plated Brass; Plastic: PBT	
Environment	-25°C to +55°C (-13°F to 131°F) ; 35-85% RH	
Storage Temp.	-25°C to + 70°C (-13°F to +158°F)	
Reference Standard	IEC 60947-5-2	

DIAGRAMS

Dimensions	Connections	
AC: ½" - 20 UNF Thread DC: M12 x 1	Emitter AC	AC Connector (½"-20 UNF)
	AC Through-beam Receiver, Diffuse & Retro	AC Connector (½"-20 UNF)
	Emitter DC	DC Connector (M12)
	NPN/PNP NPN D1: Reverse polarity protection diode ZD1: Surge absorption zener diode T1: NPN output transistor PNP D1: Reverse polarity protection diode ZD1: Surge absorption zener diode T1: PNP output transistor	DC Connector (M12)