

PHOTOELECTRIC SENSORS



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CONTENTS

Image	Series Description	Modes	Ranges	Page #
	Advanced Performance	Through Beam	020m	4 - 5
	Photoelectric Sensor	Retroreflective	0.120m	
	Standard 50 x 50mm Housing	Diffuse	52000mm	-
	Rotatable M12 Connector	Background Suppression	7200mm	
	High QualityMany Operating Modes Available	Contrast	19mm	-
		Distance	50150mm	

RP18 Series				
Image	Series Description	Modes	Ranges	Page #
	Compact Photoelectric Sensor	Through Beam	0.120m	6 - 7
	M18 threaded lens	Retroreflective	0.12.5mm	
	 Visible Red LED Several mounting options Multi-voltage 	Diffuse	20350mm	
				T

MP Series							
Image	Series Description	Modes	Ranges	Page #			
	Universal Mount Photoelectric	Through Beam	30m	8 - 9			
	 Sensor Mounts on Standard or Flat Bracket Long Range - Up to 30m Several Detection Modes 	Retroreflective	5m				
		Diffuse	380mm				
		Convergent	43mm				
	Compact Size	Fiber Optic Mode - (range depends on fiber used)		-			

M18 Series						
Image	Series Description	Modes	Range	Page		
	Cylindrical Photoelectric Sensor	Through Beam	15m	10 - 11		
	Standard 18mm Housing	Retroreflective	3m			
	Pre-wired or Quick Disconnect	Diffuse	500mm			
	Metal or Plastic HousingsSelf-contained Amplifier					

M12 Series						
Image	Series Description	Modes	Range	Page		
	Cylindrical Photoelectric Sensor	Through Beam	5.2m	12		
	Standard 12mm Housing	Retroreflective	1m			
	 Pre-wired or Quick Disconnect Self-contained Amplifier	Diffuse	200mm	-		

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Image	Series Description	Modes	Ranges	Page #
States	Multi-purpose Photoelectric Sensor	Through Beam	61m	13
	Built-in Timer Modes	Retroreflective	9.14m	
	Several Mounting OptionsUniversal Power SupplyLong Range	Diffuse	3.04m	
		Clear Object Detection	1.2m	
		Fiber Optic Mode - (range depends on fiber used)		1

RP76 Series					
Image	Series Description	Modes	Ranges	Page #	
	Terminal (Conduit) Mount	Through Beam	28m	14	
	Back or Bottom Mounting Option	Retroreflective	10m		
THE .	Universal Power Supply	Diffuse with Background Suppression	300mm	-	
	Built-in Timer Modes			1	

RS62 Series							
Image	Series Description	Modes	Ranges	Page # 15			
	Multi-voltage Photoelectric Sensor	Through Beam	1030m				
0	• 12-240 VDC or 24-240 VAC	Retroreflective	57m				
128	SPDT Relay Models	Diffuse	700mm				
	Accurate Detection			1			

U Series						
Image	Series Description	Modes	Ranges	Page #		
	 Slot Photoelectric Sensor 2, 15, 30, 50, 80 and 120mm Widths High Switching Frequency Rugged Die-cast Metal Housings 	Through Beam	2mm120mm	16 - 17		

RP32 Series						
Image	Series Description	Modes	Ranges	Page #		
	Miniature Photoelectric Sensor	Through Beam	8.5m	18		
	Compact & Rugged Design	Retroreflective	4m			
BET TH	Stainless Steel and Glass Fiber Reinforced Plastic Housing	Diffuse	400mm	-		
e	Shock & Vibration Resistant	Clear Object Detection	500mm	1		

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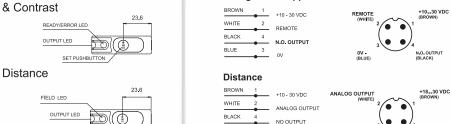
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H60 SERIES

Series Descrip	Series Description Modes		Ranges	
Advanced Porfe	rmanco	Through Beam	020m 0.120m	
		Retroreflective		
• Standard 50 x 5	50mm Housing	Diffuse	52000mm	
	Connector	Background Suppression	7200mm	
0, ,		Contrast	19mm	
	g wodes Available	Distance	50150mm	
nation				
Through-beam (30m range)	Diffuse	Laser Diffuse	Polarized Retroreflective	
020m (65.6 ft.)	0.0052m (6.56 ft.)	00.6m (1.97 ft.)	0.18m (26.2 in.)	
Infrared LED, 880nm	Red LED, 880nm	Red Laser, 650nm	Red LED, 600nm	
	,			
H60-THRU-E-PO-4Q				
H60-THRU-R-NO-4Q	H60-DIF-NO-4Q	H60-LASER-D-NO-4Q	H60-RETRO-NO-4Q	
H60-THRU-R-PO-4Q	H60-DIF-PO-4Q	H60-LASER-D-PO-4Q	H60-RETRO-PO-4Q	
Laser Retroreflective	Background Suppression	Contrast	Distance	
0.120m (65.6 ft.)	0.0070.2m (7.87 in.)	19mm (0.75 in.)	50150mm (5.9 in.)	
Red Laser, 650nm	Red LED, 670nm	White LED, 400-700nm	Red LED, 670nm	
H60-LASER-R-NO-4Q	H60-BGS-NO-4Q	H60-CONTRAST-NO-4Q	H60-DISTANCE-NO-4Q	
H60-LASER-R-PO-4Q	H60-BGS-PO-4Q	H60-CONTRAST-PO-4Q	H60-DISTANCE-PO-4Q	
		Connections		
	a			
Retrore	flective	BROWN 1	TEST + +1030 VDC	
		WHITE 2 TEST +	TEST + (WHITE) 2 () (BROWN) +1030 VDC	
		BLACK 4 TEST - BLUE 3 OV	0V- (BLUE) 3 4 TEST- (BLACK)	
			r, Diffuse & Retroreflective	
26.5	23.6	BROWN 1 +10 - 30 VDC	N.C. OUTPUT +1030 VDC (white) 2 1 (BROWN)	
		WHITE 2 N.C. OUTPUT BLACK 4 N.O. OUTPUT	OV - RUE 3 4 4 (black)	
	Advanced Perfo Photoelectric Se • Standard 50 x 8 • Rotatable M12 • High Quality • Many Operating nation Through-beam (30m range) 020m (65.6 ft.) Infrared LED, 880nm H60-THRU-E-PO-4Q H60-THRU-R-NO-4Q H60-THRU-R-NO-4Q H60-THRU-R-PO-4Q H60-THRU-R-PO-4Q H60-THRU-R-PO-4Q H60-LASER-R-NO-4Q H60-LASER-R-NO-4Q H60-LASER-R-PO-4Q	Advanced Performance Photoelectric Sensor	Advanced Performance Photoelectric Sensor Through Beam Retroreflective 9 Standard 50 x 50mm Housing 9 Rotatable M12 Connector 9 Rotatable M12 Connector 9 High Quality 9 Many Operating Modes Available Diffuse Laser Diffuse 0 20m (65.6 ft.) 0.0052m (6.56 ft.) 00.6m (1.97 ft.) 1 Infrared LED, 880nm Red LED, 880nm Red Laser, 650nm H60-THRU-E-PO-4Q H60-DIF-NO-4Q H60-LASER-D-NO-4Q H60-THRU-R-PO-4Q H60-DIF-PO-4Q H60-LASER-D-NO-4Q H60-THRU-R-PO-4Q H60-DIF-PO-4Q H60-LASER-D-PO-4Q H60-THRU-R-PO-4Q H60-DIF-PO-4Q H60-LASER-D-NO-4Q H60-LASER-R-NO-4Q H60-BGS-NO-4Q H60-CONTRAST-NO-4Q H60-LASER-R-NO-4Q H60-BGS-NO-4Q H60-CONTRAST-NO-4Q H60-LASER-R-PO-4Q H60-BGS-NO-4Q H60-CONTRAST-NO-4Q H60-LASER-R-PO-4Q H60-BGS-PO-4Q H60-CONTRAST-NO-4Q H60-LASER-R-PO-4Q H60-BGS-PO-4Q H60-CONTRAST-NO-4Q H60-LASER-R-PO-4Q H60-BGS-PO-4Q H60-CONTRAST-NO-4Q	

Background Suppression & Contrast



BLUE

_ 0V

Call: 800-644-1756

Through-beam

d) (Ø

TDI

STABILITY LEI

OUTPUT LED

RECEIVER

23.6

M12 Ø15

EMITTER

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SET PUSHBUTTON

Background Suppression

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OV -

NO OUTPUT (BLACK)



	Through-	Diff	fuse	Retrore	flective	DCC	Contract	Distance
	beam	Standard	Laser	Polarized	Laser	BGS	Contrast	Distance
Power Supply:				1030 VDC				1830 VDC
Ripple:				≤ 2	Vpp			7
Current Consumption:	≤ 35 mA	≤ 40 mA	≤ 35 mA	≤ 40 mA	≤ 35 mA	≤ 30 mA	≤ 30 mA	≤ 60 mA
Spot Dimension:	approx. 200 mm at 4m	approx. 250mm at 1m	approx. 0.2mm @ 15cm approx. 2mm @ 50cm	approx. 90mm at 3m	approx. 10mm	approx. 16mm at 200mm	approx. 3.5mm at 19mm	approx. 16 mm at 150mm
Setting:	sensitivity trimmer				pı	sh-button teach	ing	
Indicators:	yellow: OUTPUT LED green: STABILITY LED green (emitter): POWER ON LED	OUTPUT LED green: yellow: yellow: yellow: yellow: STABILITY OUTPUT LED OUTPUT LED OUTPUT LED OUTPUT LED LED green: green: </td <td>green / red RE</td> <td>JTPUT LED EADY / ERROR ED</td> <td>yellow: OUTPUT LED red: FIELD LED</td>				green / red RE	JTPUT LED EADY / ERROR ED	yellow: OUTPUT LED red: FIELD LED
Output Type:	PNP, N.O. and N.C. / NPN, N.O. and N.C. PNP, N.O. / NPN						/ NPN, N.O.	PNP, NO NPN, NO analog with 010 V (8 bit)
Output Current:	≤ 100 mA							
Saturation Voltage:				≤2	2 V			
Response Time:	1 ms	500 µs	250 µs	500 µs	250 µs	500 µs	100 µs	1 ms
Switching Frequency:	500 Hz	1 kHz	2 kHz	1 kHz	2 kHz	1 kHz	5 kHz	500 Hz
Operating Mode:	dark on N.O. / light on light on N.O. / dark on N.C. dark on N.O. / light on N.C. N.C.				dark / light configurable	automatic dark / light fine acquisition	automatic dark / light fine acquisition configurable direct / inverse proportionality	
Timing Function:				-			20 ms minimum output ON	-
Auxiliary Functions:	Test + and Test -		-		-		e teach/ /lock	-
Connection:	M12, 4-pin (90° rotatable) -	Recommended	Mating Cable: p	oart # R-FS4TZ-	V075 (straight),	R-FA4TZ-V075	(right-angle)
Electrical Protection:				clas	ss 2			
Mechanical Protection:				IP	67			
Protection Devices:			Reverse I	Polarity, Overloa	id, Short-circuit I	Protection		
Housing Material:				A	BS			
Lens Material:		Exter	mal - PMMA, Int	ernal - Polycarb	onate		Glass	External - PMMA, Internal - Polycarbonate
Operating Temperature:				-25	+55°C			
Storage Temperature:				-25	+70°C			
Reference Standard:		EN 6	0947-5-2 (Laser M	odels: EN 60947-!	5-2 EN 60825-1	CDRH21 CER 10	40 10)	



RP18 SERIES

RP18 Series							
Image		Series	Description		Modes		Ranges
6.00					Through B	eam	0.120m
3 11 6		-	ct Photoelectric Sens	or	Retroreflec	tive	0.12m
			threaded lens le Red LED		Diffuse		200.5m
			ral mounting options -voltage				
	Through	n-beam	Diffuse	(Fixed-fie	fuse d with Back- uppression)	Retroreflective	Retroreflective with Polarizing Filte
Operating Range	ng Range 20m (65.6 ft.)		DC: 500mm (19.7 in.) AC: 300mm (11.8 in.)	100mm	n (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 - Qui	ck Connect, I	M12 - Reco	mmended Mating Cable:	part # R-FS4	TZ-V075 (stra	aight), R-FA4TZ-V075 (right-angle)
Emitter	RP18-T02 EY9Q4LE						
NPN	RP18-T020MN- CY9Q4UE		RP18-D0500N- CY9Q4UE	RP18-D0100N- CY9Q4UE-BS		RP18-L2000N- CY9Q4UE	RP18-L2000N- CY6Q4UE-PF
PNP	RP18-T02 CY9Q4UE		RP18-D0500P- CY9Q4UE	RP18-D CY9Q4l		RP18-L2000P- CY9Q4UE	RP18-L2000P- CY6Q4UE-PF
AC Models - Qui	ck Connect, 1	1∕₂"-20 UNF	- Recommended Mating	Cable: part :	# U-FS4TA-V	165 (straight), U-FA4TA	V165 (right-angle)
Emitter (2-wire)	RP18-T02 EY9Q4LM						
Light-ON (3-wire)	RP18-T02 LY9Q4UM		RP18-D0300A- LY9Q4UM	RP18-D LY9Q4U		RP18-L2000A- LY9Q4UM	RP18-L2000A- LY6Q4UM-PF
Dark-ON (3-wire)	RP18-T02 DY9Q4UN		RP18-D0300A- DY9Q4UM	RP18-D DY9Q4U		RP18-L2000A- DY9Q4UM	RP18-L2000A- DY6Q4UM-PF
AC/DC Models	- Quick Con	nect, ½"-20	UNF - Recommended M	lating Cable	part # U-FS4	TA-V165 (straight), U-F	A4TA-V165 (right-angle)
Emitter (2-wire)	RP18-T02 EY9Q4LM						
Light-ON (2-wire)	RP18-T02 LY9Q4UM		RP18-D0300C- LY9Q4UM	RP18-D LY9Q4U		RP18-L2000C- LY9Q4UM	RP18-L2000C- LY6Q4UM-PF
Dark-ON (2-wire)	RP18-T02 DY9Q4UN		RP18-D0300C- DY9Q4UM	RP18-D DY9Q4U		RP18-L2000C- DY9Q4UM	RP18-L2000C- DY6Q4UM-PF



		DC		AC		AC/DC
Operating Voltage	10-	30 VDC	2	4-240 VAC		20-250 VAC/DC
Voltage Drop	2.5	/ or less	3V @300m/	3V @300mA AC; 2V @ 15mA AC		3V or less
Current Consumption	30m	A or less	Ę	imA or less		30mA or less
Response Time	1	1.5ms		15ms		15ms
Max. Load Current	2	00mA		30)0mA	
Output Operation	U	rk-ON selectable by I input wire		Light-ON or Dark-ON	selectable by t	ype number
Reverse Polarity Protection				Yes		
Short Circuit Protection						
Overload Current Protection	1			Yes		
Housing Material			PBT (plastic) housing		
Indicators			Red	LED indicator		
Environmental Rating				IP67		
Operating Temperature		-25	5°C to +55°C (I	Max. relative humidity: 8	35%)	
EMC	IEC 6	0947-5-2, Parts 7.2.6.	1.2.3 or RFI>3	//m (in 30-1000MHz), E	EFT>1KV, ESE	0>4KV (contact)
Voltage Withstandability		IEC 60947-5-	2, Part 8.3.3.4	or 500 VDC (or 1500 V Is connected together a	/AC) for 1 min.	
Insulation Resistance	>20MΩ, with	500 VDC (or 1500 VA	C) megger bet	ween all supply termina	Is connected t	ogether and enclosure.
Vibration Resistance	IEC	60947-5-2, Part 7.4.2	or 10-55 Hz, 1	.0mm amplitude in x, y,	and z directio	ns for 30 min.
Shock Resistance		IEC 60947-5-2, Part	7.4.1 or 30g, 1	1ms in x, y, and z direct	ions for six tin	nes each
Cable		Standard	length 2m. Ot	her lengths available up	oon request	
Connector	M12x1 DC	Micro Connector		1⁄2-2	0" UNF	
Dimensions		Connections				
18mm_	. 30mm	AC Emit	ter	AC		AC Pins
M18	30mm	1. Brown	L1 20-250 VAC L2	1. Brown 3. Black 2. Blue) L1 20-250 VAC ا L2	Red / White (L2) Red (Not used on emitter) Red / Black (L 3 0 0 0 0 0 0 0 0 0 0 0 0 0
		DC Emit	ter	DC NPN &	PNP	DC Pins
Two (2) Securing	15mm M12	I. Brown		D1: Reverse polarity protection diode ZD1: Surge absorption zener diode	of (+) 10-30 VDC ark (*)	Emitter White Not used Blue (0V) (3 0) Brown (+V) Black Not used Black
Nuts Provided 20mm	Pot.	3. Blue	∮ (*) 10-30 VDC (*)	TI: MPN output transistor PNP 1. Brown 2. White Li	ent (+) 10-30 VDC rrk () (-)	Receiver
Transa	ANNA	AC / DC En	nitter	AC / DC		AC / DC Pins
		1. Brown	L1 20-250 VAC or DC L2	1. Brown CO Best 2. Blue	L1 20-250 VAC or DC L2	Red / White (L2)

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MP SERIES

Imaga	Series Description	Modes	Bangaa
Image	Series Description	wodes	Ranges
	Universal Mount Photoelectric	Through Beam	
	Sensor	Retroreflective	5m
	 Mounts on Standard or Flat Bracket Long Range - Up to 30m 	Diffuse	380mm
	Several Detection Modes	Convergent	43mm
and and	Compact Size	Fiber Optic Mode - (range depends on fiber used)	

DC Models - Quick Connect

Mode	Through-beam (30m range)	Retroreflective	Diffuse	Convergent
Light Emission	Infrared LED, 880nm	Red LED, 650nm	Infrared LED, 880nm	Red LED, 650nm
Operating Range	30m (98.4 ft.)	5m (16.4 ft.)	380mm (14.96 in.)	43mm (1.69 in.)
Part Numbers				
Emitter	MP-T030MD-EX9Q4LE			
NPN / PNP	MP-T030MD-CX9Q4UE	MP-L5000D-CX6Q4UE	MP-D0380D-CX9Q4UE	MP-C0043D-CX6Q4UE

Mode	Through-beam (3m range)	Retroreflective (Polarized)	Fiber Optic (Diffuse)	Fiber Optic (Through-beam)	
Light Emission Infrared LED, 880nm		Red LED, 650nm	Infrarec	LED, 880nm	
Operating Range 3m (9.84 ft.)		2m (6.56 ft.)	Depends on fiber used (see pages 18-21)		
Part Numbers					
Emitter	MP-T3000D-EX9Q4LE				
NPN / PNP	MP-T3000D-CX9Q4UE	MP-L2000D-CX6Q4UE-PF	MP-DGFD-CX9Q4UE	MP-TGFD-CX9Q4UE	

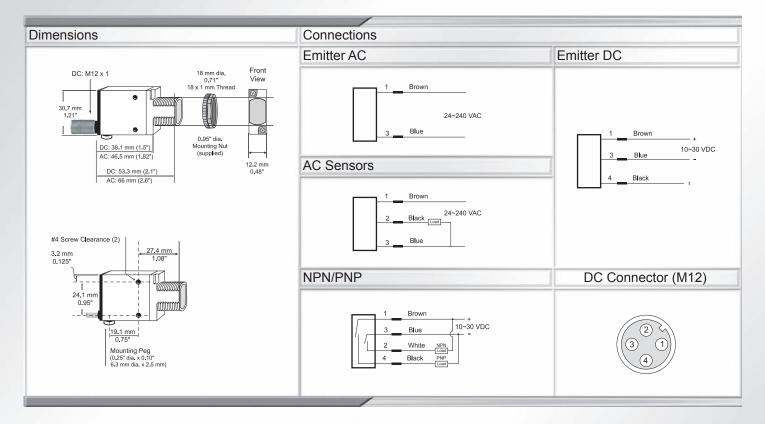
AC Models - Prewired

Mode	Through-beam (30m range) Retroreflective Diffuse		Diffuse	Convergent
Light Emission	Infrared LED, 880nm	Red LED, 650nm	Infrared LED, 880nm	Red LED, 650nm
Operating Range	30m (98.4 ft.)	5m (16.4 ft.) 380mm (14.96 in.)		43mm (1.69 in.)
Part Numbers				
Emitter	MP-T030MA-EX9C2L2			
SPST, Solid State	MP-T030MA-CX9C3U2	MP-L5000A-CX6C3U2	MP-D0380A-CX9C3U2	MP-C0043A-CX6C3U2
	,			
Mode	Through-beam (3m range)	Retroreflective (Polarized)	Fiber Optic (Diffuse)	Fiber Optic (Through-beam)
Mode Light Emission	•		(Diffuse)	Fiber Optic (Through-beam) LED, 880nm
	(3m range)	(Polarized)	(Diffuse)	(Through-beam)
Light Emission	(3m range) Infrared LED, 880nm	(Polarized) Red LED, 650nm	(Diffuse)	(Through-beam) LED, 880nm
Light Emission Operating Range	(3m range) Infrared LED, 880nm	(Polarized) Red LED, 650nm	(Diffuse)	(Through-beam) LED, 880nm



	DC Models	AC Models				
Power Supply	1030 VDC	20 to 250 VAC				
Current Consumption	25mA max.	25mA max. (1.7mA max. for emitter)				
Output Configuration	Bipolar: One current sourcing (PNP) and one current sinking (NPN) open-collector transistor	SPST MOSFET solid-state relay with either N.O. or N.C. contact (light/dark operate selectable: 3-wire hook-up)				
Voltage Drop	<2.0V @ 150mA	<10V @ 200mA				
Current Load Max	150mA	200mA				
Response Time	1ms	8ms (4ms for Retroreflective Models)				
Adjustments	LIGHT/DARK Operate sensitivity adjustment switch					
Connection	M12 - Recomended Mating Cable: part # R-FS4TZ-V075 (straight), R-FA4TZ-V075 (right-angle)	2 meter cable				
Electrical Protection	Short-circuit, Reverse Polarity and Overload Current Protection	-				
Mechanical Protection	IP67	(IEC)				
Housing Material		psulated o-ring sealing, acrylic lenses and stainless steel ews				
Environment	-20°C to +70°C (-4°F to 158	3°F) ; Max. 90% RH @ 50°C				
Reference Standard	IEC 60	947-5-2				

DIAGRAMS





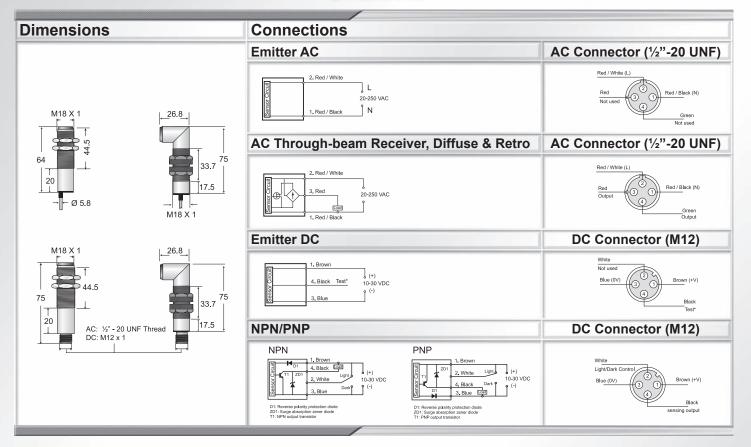
M18 SERIES

M18 Series			1	10	
Image	Series De	scription	Modes	Range	
		Dhata da stria Osmann	Through Beam	15m	
		Photoelectric Sensor Retroreflective 18mm Housing Diffuse		3m	
	Pre-wired Metal or	d or Quick Disconnect Plastic Housings ained Amplifier	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 - N	Netal Housing				
Emitter	M18B-T015MD-EX9Q4LE				
NPN - Light/Dark	M18B-T015MN-CX9Q4UE	M18B-D0500N-CX9Q4UE	M18B-L3000N-CX9Q4UE	M18B-L1000N-CX6Q4UE-PI	
PNP - Light/Dark	M18B-T015MP-CX9Q4UE	M18B-D0500P-CX9Q4UE M18B-L3000P-CX9Q4UE		M18B-L1000P-CX6Q4UE-PF	
Part Numbers - P	Plastic Housing (right-angle bo	dy)			
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 - N	letal Housing				
Emitter	M18B-T015MA-EX9Q4LM	1			
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-P	
Part Numbers - F	Plastic Housing (right-angle bo	ody)			
Emitter	M18P-T015MA-EZ9Q4LM				
Light-ON	M18P-T015MA-LZ9Q4UM	M18P-D0500A-LZ9Q4UM	M18P-L3000A-LZ9Q4UM	M18P-L1000A-CZ6Q4UM-PI	
Dark-ON	M18P-T015MA-DZ9Q4UM	M18P-D0500A-LZ9Q4UM	1		



	DC Models	AC Models
Power Supply	1030 VDC	20 to 250 VAC
Current Consumption	30mA max.	5mA max.
Indicator LEDs	Red LED (ou	tput 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)	1/2"-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	l 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 60	947-5-2

DIAGRAMS



M12 SERIES

Image	Series Description		Modes	Range	
n ng.			Through Beam	5.2m	
	Cylindrical Photoelectric	Cylindrical Photoelectric Sensor		1m	
	Standard 12mm Housing		Diffuse	200mm	
E	 Pre-wired or Quick Discont Self-contained Amplifier 	Pre-wired or Quick Disconnect			
	Through-beam		Diffuse	Retroreflective (Polariz	
Operating Range	5.2m (17.06 ft.)		0.2m (0.66 ft.)	1m (3.28 ft.)	
Light Emission	880nm	n Infrared LED		660nm Red LED	
Part Numbers					
Emitter	M12B-T5200D-EX9Q4LE				
NPN - Light/Dark	M12B-T5200N-CX9Q4UE	M12B-D02	200N-CX9Q4UE	M12B-L1000N-CX6Q4UE-PF	
PNP - Light/Dark	M12B-T5200P-CX9Q4UE	M12B-D02	200P-CX9Q4UE	M12B-L1000P-CX6Q4UE-PF	
Technical Data					
Power Supply			1030 VDC		
Current Consumption		30mA max.			
Indicator LEDs		Red LED (output activated)			
Voltage Drop		2.5 V or less			
Current Load Max		200mA			
Response Time		1.5ms			
Connection				t), R-FA4TZ-V075 (right-angle)	
Electrical Protection	Short-cir	cuit, Reverse P	olarity and Overload Curr	ent Protection	
Mechanical Protection			IP67 (IEC)		
Housing Material			I-plated Brass; Plastic: PE		
Environment			(-13°F to 131°F) ; 35-85%	6 RH	
Storage Temp.			+ 70°C (-13°F to +158°F)		
Reference Standard		/	IEC 60947-5-2		
Dimensions	Connections				
	Emitter			Emitter	
M12 x 1 3 49.4		1. Brown 4. Black Test* 10-30 VDC turn off emitter. 3. Blue			
77.4	NPN	PNP		NPN / PNP	
 15 7 0 1.5 0 1.5 1.5 1.2 1.2	D1: Reverse polarity protection diode 2D1, ZD2: Surge absorption zener diode T1, Z: NPN output transistor	D1: Reverse pol	arity protection diode	White Light/Dark Control Blue (0V) (3 (1) Brown (+V) (4) Black sensing output	

RP74 SERIES

Image		s Description	Modes		Ranges	
	L.			Thr	ough Beam	61m
ाज माज	Multi-	Multi-purpose Photoelectric Sensor		<u></u>	roreflective	9.14m
		uilt-in Timer Modes		Diff	use	3.04m
		everal Mounting Options		Clea	ar Object Detection	1.2m
U.		niversal Power Supply ong Range		Fibe	er Optic Mode - (range c	lepends on fiber used)
	Through-beam	Diffuse	Retroreflec (Polarized		Fiber Optic	Clear Object Detection
Operating Range	61m (200 ft.)	3.04m (10 ft.)	9.14m (30 ft	i.)	Depends on fiber	1.20m (3.9 ft.)
Light Emission	880nm Infrared LED	880nm Red LED	660nm Red L	ED	880nm Infrared LED	660nm Red LED
	40 VDC) M12 - Recommende	ad Mating Cable: part # R-ES	S4TZ-V075 (straight)	R-FA4T	Z-V075 (right-angle)	
Emitter	RP74-T061MD-EY9Q4LE		5412-0075 (Straight),	11-1 /1- 1 /2		
NPN / PNP - with	RP74-T061MD-	RP74-D3040D-	RP74-L9140D-	_	RP74-FGFD-	RP74-S1200D-
timing	CY9Q4UE-T	CY9Q4UE-T	CY6Q4UE-T		CY9Q4UE-T	CY6Q4UE-T
AC Models (12-	-240 VDC/24-240 VAC) ½"-2	20 UNF - Recommended N	Mating Cable: part # U	J-FS5TA	-V105 (straight), U-FA5TA-V	105 (right-angle)
Emitter	RP74-T061MA-EY9Q4LM					
SPDT Relay	RP74-T061MR- CY9Q5LM-T	RP74-D3040R- CY9Q5LM-T	RP74-L9140R- CY6Q5LM-T		RP74-FGFR- CY9Q5LM-T	RP74-S1200R- CY6Q5LM-T
Technical Data						
Power Supply		10-40 \	/DC or 12-240VDC	/24-24() VAC	
Indicator LEDs	Green: Power, Yellow: Output, Red: Margin					
Current Consumption	30mA max.					
Saturation Voltage			2.5 V max.			
Output Current			30mA max.			
Response Time		NPN/	PNP: 5ms, SPDT F	Relay: 23ms		
Timing Options		No Delay, On Delay, Off	Delay, One-shot (f	or Mode	els With Timing Delay).	
Time Settings		Adjustable, 0.	.115s (for Models	with Ti	ming Delay)	
Mechanical Protection			IP67			
Housing Material		Glass Fiber Reinford	ed Plastic, Cover C	Gasket	Material: Neoprene	
Lens Material			Acrylic			
Operating Temp.		-	25+55°C (-13+	131°F)		
Storage Temp.		-	40+55°C (-40+	131°F)		
Reference Standard			EN 60947-5-2	2		
Dimensions	C	onnections				
		mitter AC		ŀ	AC Receiver, Diffuse 8	Retro.
73	48.5	Red / White (+) L1 20 - 264V AC/DC USUN USUN Red / Black	Red / White (L) Red / Black Output Output Comput		Red / White (+) L1 Green Red / Black 20 - 264V AC Red / Plow Red / Plow (+) L2	Green (common)
15	- Andrew State Sta	mitter DC		1	NPN/PNP	
15 AC: ½" - 20 DC: M12 x	5.21x8.13 0 UNF Thread 1	Brown (+) L1 10-40 VDC Test in Blue 9 (-) L2	(+) L1 Net Used 00-40 VDC Black (+) Test 000000000000000000000000000000000000			C White NPN Output Blar (-) (-) (-) (-) (-) (-) (-) (-) (-) (-)



RP76 SERIES

RP76 Series	O o mi	Decentration		Madaa	Danara
Image	Serie	es Description		Modes	Ranges
Contraction of the second	Taura			Through Beam	28m
ier •		ninal (Conduit) Mou		Retroreflective	10m
		Back or Bottom Mounting Option Jniversal Power Supply Built-in Timer Modes		Diffuse with Background Supp	ression 300mm
	•				
	Thro	ugh-beam	Diffuse	•	Retroreflective (Polarized)
DC Models					
Emitter	RP76-T028MD-I	EY9T4L			
NPN - Timing Delay	RP76-T028MN-0	CY9T4U-T	RP76-D0300N-CY9T4L	J-BT RP76-L01	0MN-CY6T4U-TP
PNP - Timing Delay	RP76-T028MP-0		RP76-D0300P-CY9T4L		0MP-CY6T4U-TP
AC Models					
Emitter	RP76-T028MA-E	EY9T4L			
Relay SPST - Timing Delay	RP76-T028MR-0	CY9T4L-T	RP76-D0300R-CY9T4L	-BT RP76-L01	0MR-CY6T4L-TP
Technical Data					
Operating Range	28n	n (91.8 ft.)	0.3m (11.8	in.)	10m (32.8ft.)
Light Emission			nfrared LED		660nm Red LED
Power Supply				C: 20-250 VAC	
Current Consumption	-		DC: <35 mA (no load)	AC: <2 VA	
Time Options		No Delay, On	, , ,	t (for Models With Timing De	elay)
Time Settings		Adji	ustable, 0.115s (for Mod	els with Timing Delay)	
Indicator LEDs	-	Gr	een: Power, Yellow: Outpu	t, Red: Margin / SCP	
Housing Material			Glass fiber reinfor		
Lens Material			Acrylic		
Mechanical Protection	[IP66 / NEM	A4	
Circuit Protection	Reve	erse polarity protected	(DC Models also have out	puts short circuit and over c	current protected)
Operating Temperature			-25°C to +55°C (-13		
Storage Temperature			-40°C to +55°C (-40		
Reference Standard			IEC 60947-	5-2	
Dimensions		Connections			
		Emitter AC		AC Receiver, Diffu	use & Retro.
Front Ter	minal		Terminal Number		minal Number
80 77.5			terminal Number Supply Voltage 20-240 VAC/DC		mma Number Supply Voltage 20-240 VAC/DC Reley Output
45	19.5	Emitter DC		NPN/PNP	
$\begin{array}{c c} \downarrow \blacksquare \\ \hline \\ 25 \end{array}$	19.5		erminal Number DC 10-30V T1 - test input 0V	Terminal Number brown DC 10 black cross d 2 blue 0 NPN	reminal Number brown DC 10-3 black v v PNP

Call: 800-644-1756 8651 Buffalo Avenue, Niagara Falls, NY 14304



RS62 SERIES

RS62 Series		ription	Modes	Ranges		
		inpuon	Through Beam	1030m		
		Photoelectric Sensor	Retroreflective	57m		
	•	• 12-240 VDC or 24-240 VAC		700mm		
	SPDT RelayAccurate De					
	Through-beam	Diffuse	Retroreflective	Retroreflective with Polarizing Filter		
Operating Range	30m (98.4 ft.)	700mm (27.56 in.)	7m (22.9 ft.)	5m (16.4 ft.)		
Part Numbers						
Emitter	RS62-T030MD-EY9C2L2	2				
SPDT Relay (Light On)	RS62-T030MR-LY9C5L2	RS62-D0700R-LY9C5L	5 RS62-L7000R-LY9C5L5	RS62-L5000R-LY6C5L5-PF		
SPDT Relay (Dark On)	RS62-T030MR-DY9C5L2	2 RS62-D0700R-DY9C5I	.5 RS62-L7000R-DY9C5L5	RS62-L5000R-DY6C5L5-PI		
Technical Data						
Power Supply	1	12240 VD	C or 24-240 VAC ± 10%			
Current Consumption		2 VA max.				
Light Emission	Infrared (Throu	gh-beam, Diffuse & Retrorefle	ective) or Modulated Red LED (P	olarized Retroreflective)		
Setting	Continuousl	y variable adjuster (except for	long range through-beam and re	etroreflective models)		
Indicator LEDs		Red LED: Operation Ind	icator, Green LED: Stability Indic	ator		
Output (Relay contact 1c)		* Switching capacity: 250 VAC 1A (resistive load) 30 VDC 2A (resistive load) * Electrical life: 100,000 or more operations (at rated AC load) 50,000 or more operations (at rated DC load) * Mechanical life: 100,000 or more operations				
Response Time			10 ms max.			
Switching Frequency			10 Hz max.			
Connection		2	2 meter cable			
Mechanical Protection			IP66			
Housing Material		Housing: AE	S, Lens: Polycarbonate			
Operating Temp.		-20+	55°C (-4+131°F)			
Reference Standard	EN 60947-5-2					
Dimensions	Con	nections				
	Wire					
	18 18 18 18 10 10 10 10 10 10 10 10 10 10	Brown (+) 20 - 240 0 - 240 12 - 240 Blue (-) L		Brown (+) L1 Orange (Common) White (NC) 20 - 240V AC or Black (NO) 12 - 240V DC Blue (-) L2		

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U SERIES

U Series							
Images							
Series Description:	Slot Photoelectric Sensor • 2, 15, 30, 50, 80 and 120mm V	Vidths	Modes Through Beam	Ranges 2mm120mm			
	High Switching FrequencyRugged Die-cast Metal Housin	gs					
Part Numbers							
NPN (red LED, 660nm)	U02-T0002N-CY6Q4UP	U15-T0015N-CY6Q4UP	U30-T0030	N-CY6Q4UP			
PNP (red LED, 660nm)	U02-T0002P-CY6Q4UP	U15-T0015P-CY6Q4UP	U30-T0030	P-CY6Q4UP			
Slot Spacing	2mm	15mm		30mm			
Supply Voltage		10-30 VD0	C				
Voltage Drop		< 3V					
Rated Isolated Voltage		75 VDC					
Rated Operational Current		200mA					
No-load Supply Current		≤35mA					
Reverse Polarity Protection		Yes					
Short-circuit Protection		Yes					
On/Off Delay		0.2ms					
Operating Frequency	30	00Hz		1500Hz			
Switching Hysteresis	and the second se	≤0.1mm					
Resolution		0.3mm					
Repeatability		0.02mm					
Output Function		Light On / Dar	'k On				
Permissible Ambient Light		10 Kł					
Function Indicator		red LED					
Operating Temp.		-10°C to 60°C (14°F	⁻ to 140°F)				
Mechanical Protection	1	IP65					
Reference Standard		IEC 60947-5-2					
Housing Material	Die-cast Zinc						
Connection	M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle						
	$ \begin{array}{c} - \end{array} \\ \hline \\ 73 \\ \hline \\ 04.2 \\ \hline \\ 26 \\ \hline \\ 26 \\ \hline \\ - 26 \\ \hline \\ - 26 \\ \hline \\ - 26 \\ \hline \\ \hline \\ 1 \\ \hline \\ 1 \\ \hline \\ - 26 \\ \hline \\ 1 \\ 1$		73 				

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U SERIES

Connections M8 DC 4-wire PNP - N.O. & N.C. M8 DC 4-wire PNP - N.O. & N.C. Image: Second	U Series					
1. Brown 1. Brown (V*) 1. Brown (V*) 1. Brown (V*) 1. Brown 1. Brown <th></th> <th></th> <th></th> <th></th>						
Image: Second	M8 DC 4-wire NPN - N.O.	& N.C.	M8 DC 4-wire PNP - N.O. & N.C.			
NPN (red LED, 660nm) U50-T0050N-CY6Q4UP U60-T0080N-CY6Q4UP U120-T0120N-CY6Q4UP PNP (red LED, 660nm) U50-T0050P-CY6Q4UP U80-T0080P-CY6Q4UP U120-T0120P-CY6Q4UP Slot Spacing 50mm 80mm 120mm Supply Voltage 10-30 VDC Voltage Drop. < 3V Rated Isolated Voltage 75 VDC Rated Isolated Voltage 75 VDC Rated Isolated Voltage 75 VDC Rated Isolated Voltage 35mA Reverse Polarity Protection Yes Short-circuit Protection Yes On/Off Delay 0.2ms 0.3ms 0.9mm Operating Frequency 1500Hz Simm Simm Switching Hysteresis ≤0.1mm 0.8mm 0.8mm Repeatability 0.04mm 0.06mm 0.8mm Output Function Light On / Dark On Permissible Ambient Light 10 Kf 5 Kf Function Indicator Operating Temp. -10°C to 60°C (14°F to 140°F) Mechanical Protection 1665 Reference Standard IEC 60947-5-2 Housing Material Die-cast Zinc 10 ff fff	4. Black 2. White 3. Blue		4. Black 2. White 3. Blue			
NPN (red LED, 660nm) U50-T0050N-CY6Q4UP U80-T0080N-CY6Q4UP U120-T0120N-CY6Q4UP PNP (red LED, 660nm) U50-T0050P-CY6Q4UP U80-T0080P-CY6Q4UP U120-T0120P-CY6Q4UP Slot Spacing 50mm 80mm 120mm Slupply Voltage 10-30 VDC Voltage Drop < 3V Rated Isolated Voltage 75 VDC Rated Supply Current 200mA No-load Supply Current 235mA Reverse Polarity Protection Yes Short-circult Protection Yes 0.33ms Operating Frequency On/Off Delay 0.2ms 0.33ms 0.8mm Resolution 0.5mm 0.8mm 0.8mm Repeatability 0.04mm 0.06mm 0.8mm Output Function Light On / Dark On Permissible Ambient Light 10 Kf 5 Kf Function Indicator Operating Trenp. -10°C to 60°C (14°F to 140°F) Mechanical Protection IEC 60947-5-2 Housing Material Die-cast Zinc Die-cast Zinc Image: Strenge difference Standard IEC 60947-5-2 Housing Material Die cast Zinc Image:	Part Numbers					
PNP (red LED, 860nm) U50-T0050P-CY6Q4UP U80-T0080P-CY6Q4UP U120-T0120P-CY6Q4UP Slopply Voltage 50mm 80mm 120mm Supply Voltage 10-30 VDC Voltage Drop < 3V Rated Isolated Voltage 75 VDC Rated Isolated Voltage 75 VDC Rated Solated Voltage 75 VDC Sigma A Reverse Polarity Protection Yes Short-circuit Protection Yes Short-circuit Protection Yes 0.33ms Operating Frequency 1500Hz Switching Hysteresis \$0.1mm 0.5mm 0.8mm Resolution 0.08mm Output Function 0.5mm 0.8mm 0.8mm Resolution 0.08mm Output Function Light On / Dark On 10 KI 5 KI Function Indicator Permissible Ambient Light 10 KI 5 KI Function Indicator 10°C to 60°C (14°F to 140°F) Mechanical Protection IP65 IEC 60947-5-2 Housing Material Die-cast Zinc Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (stralight), or C-FA4TZ-V075 (right-angle <t< th=""><th></th><th>U50-T0050N-CY6O4UP</th><th>U80-T0080N-CY6Q4UP</th><th>U120-T0120N-CY6Q4UP</th></t<>		U50-T0050N-CY6O4UP	U80-T0080N-CY6Q4UP	U120-T0120N-CY6Q4UP		
Slot Spacing 50mm 80mm 120mm Supply Voltage 10-30 VDC Voltage Drop < 3V		1				
Supply Voltage 10-30 VDC Voltage Drop < 3V						
Voltage Drop < 3V			2			
Rated Isolated Voltage 75 VDC Rated Operational Current 200mA No-load Supply Current 335mA Reverse Polarity Protection Yes Short-circuit Protection Yes On/Off Delay 0.2ms 0.33ms Operating Frequency 1500Hz Switching Hysteresis \$0.1mm \$0.2mm Resolution 0.5mm 0.8mm Output Function 0.5mm 0.8mm Output Function 10 Kf 5 Kf Function Indicator red LED 500°C (14°F to 140°F) Mechanical Protection IP65 Reference Standard Reference Standard IEC 60947-5-2 Iec 60947-5-2 Housing Material Die-cast Zinc Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle Image: Im						
Rated Operational Current 200mA No-load Supply Current S35mA Reverse Polarity Protection Yes Short-circuit Protection Yes On/Off Delay 0.2ms 0.33ms Operating Frequency 1500Hz Switching Hysteresis \$0.1mm \$0.2mm Resolution 0.5mm 0.8mm Repeatability 0.04mm 0.06mm 0.08mm Output Function Light On / Dark On Permissible Ambient Light 10 Kf 5 Kf Function Indicator red LED Function Indicator red LED Operating Temp. -10°C to 60°C (14°F to 140°F) Mechanical Protection IP65 Reference Standard IEC 60947-5-2 Housing Material Die-cast Zinc Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle Image: Image						
No-load Supply Current S35mA Reverse Polarity Protection Yes Short-circuit Protection Yes On/Off Delay 0.2ms 0.33ms Operating Frequency 1500Hz Switching Hysteresis \$0.1mm \$0.2mm Resolution 0.5mm 0.8mm Resolution 0.04mm 0.06mm 0.08mm Output Function 0.04mm 0.06mm 0.08mm Output Function Cremissible Ambient Light 10 Kf 5 Kf Function Indicator red LED 00°C (14°F to 140°F) 10 Kf Operating Temp. -10°C to 60°C (14°F to 140°F) 10 Kf 10 Kf Reference Standard IEC 60947-5-2 10°C to 60°C (14°F to 140°F) 10 Kf Mechanical Protection IEC 60947-5-2 10°C to 60°C (14°F to 140°F), or C-FA4TZ-V075 (right-angle Reference Standard IEC 60947-5-2 10°C to 60°C (14°F to 140°F), or C-FA4TZ-V075 (right-angle Image:						
Yes Short-circuit Protection Yes On/Off Delay 0.2ms 0.33ms Operating Frequency Switching Hysteresis Solution 0.0m 0.0mm Resolution 0.0mm 0.8mm Repeatability 0.04mm 0.06mm 0.08mm Output Function 0.04mm 0.06mm 0.08mm Output Function Indicator red LED 5K/ Function Indicator red LED 5K/ Operating Temp. -10°C to 60°C (14°F to 140°F) 10 Kl Mechanical Protection IEC 60947-5-2 100sing Material Operating Material Die-cast Zinc 10 Kl 0.7FATZ-V075 (tright-angle Image: Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standard Image Standa						
Short-circuit Protection Yes On/Off Delay 0.2ms 0.33ms Operating Frequency 1500Hz Switching Hysteresis ≤0.1mm ≤0.2mm Resolution 0.5mm 0.8mm Repeatability 0.04mm 0.06mm 0.8mm Output Function Light On / Dark On 0.08mm Permissible Ambient Light 10 Kℓ 5 Kℓ Function Indicator red LED 5 Kℓ Operating Temp. -10°C to 60°C (14°F to 140°F) Mechanical Protection Mechanical Protection IP65 E Reference Standard IEC 60947-5-2 Die-cast Zinc Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle Image:						
On/Off Delay 0.2ms 0.33ms Operating Frequency 1500Hz Switching Hysteresis ≤0.1mm ≤0.2mm Resolution 0.5mm 0.8mm Repeatability 0.04mm 0.06mm 0.8mm Output Function Light On / Dark On 0.8mm Permissible Ambient Light 10 Kl 5 Kl Function Indicator red LED 5 Kl Operating Temp. -10°C to 60°C (14°F to 140°F) Mechanical Protection Reference Standard IEC 60947-5-2 IEC 60947-5-2 Housing Material Die-cast Zinc M8 4 pin connector - Recommended Mating Cable: Part # C-FSATZ-V075 (straight), or C-FA4TZ-V075 (right-angle might in the straight in the straigh		2				
Operating Frequency 1500Hz Switching Hysteresis ≤0.1mm Resolution 0.5mm Repeatability 0.04mm Output Function Light On / Dark On Permissible Ambient Light 10 Kf Function Indicator red LED Operating Temp. -10°C to 60°C (14°F to 140°F) Mechanical Protection IP65 Reference Standard IEC 60947-5-2 Housing Material Die-cast Zinc Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle Image: Straight for the strain straight for the straight for the straight for the s		0.2ms		3ms		
Switching Hysteresis ≤0.1mm ≤0.2mm Resolution 0.5mm 0.8mm Repeatability 0.04mm 0.06mm 0.08mm Output Function Light On / Dark On Permissible Ambient Light 10 Kl 5 Kl Function Indicator red LED 000000000000000000000000000000000000			1			
Resolution 0.5mm 0.8mm Repeatability 0.04mm 0.06mm 0.08mm Output Function Light On / Dark On Eight On / Dark On Permissible Ambient Light 10 Kl 5 Kl Function Indicator red LED Operating Temp. -10°C to 60°C (14°F to 140°F) Mechanical Protection IP65 Reference Standard IEC 60947-5-2 Housing Material Die-cast Zinc Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle Image: Strange of the strang	-	≤0.1mm		2mm		
Output Function Light On / Dark On Permissible Ambient Light 10 Kt 5 Kt Function Indicator red LED Operating Temp. -10°C to 60°C (14°F to 140°F) Mechanical Protection IP65 Reference Standard IEC 60947-5-2 Housing Material Die-cast Zinc Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle Image: Connection Image: Connection for the formed form		0.5	5mm	0.8mm		
Output Function Light On / Dark On Permissible Ambient Light 10 Kl 5 Kl Function Indicator red LED Operating Temp. -10°C to 60°C (14°F to 140°F) Mechanical Protection IP65 Reference Standard IEC 60947-5-2 Housing Material Die-cast Zinc Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle Image: Connection Image: Connection for the formed form	Repeatability	0.04mm	0.06mm	0.08mm		
Permissible Ambient Light 10 Kl 5 Kl Function Indicator red LED Operating Temp. -10°C to 60°C (14°F to 140°F) Mechanical Protection IP65 Reference Standard IEC 60947-5-2 Housing Material Die-cast Zinc Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle Image: Connection Image: Connection for the strain for strain for strain for the strain for the strain for			Light On / Dark On			
Function Indicator red LED Operating Temp. -10°C to 60°C (14°F to 140°F) Mechanical Protection IP65 Reference Standard IEC 60947-5-2 Housing Material Die-cast Zinc Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle Image: Connection Image: Connection for the straight for the st		10 Kł		Kł		
Mechanical Protection IP65 Reference Standard IEC 60947-5-2 Housing Material Die-cast Zinc Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle Image: Straight of the st			red LED			
Mechanical Protection IP65 Reference Standard IEC 60947-5-2 Housing Material Die-cast Zinc Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle Image: Straight of the st	Operating Temp.		-10°C to 60°C (14°F to 140°F)			
Housing Material Die-cast Zinc Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle Image: strain str						
Connection M8 4 pin connector - Recommended Mating Cable: Part # C-FS4TZ-V075 (straight), or C-FA4TZ-V075 (right-angle Image: straight of the	Reference Standard		IEC 60947-5-2			
	Housing Material	1	Die-cast Zinc			
	Connection					
$ 72 \longrightarrow $ $ 102 \longrightarrow $ $ 142 \longrightarrow $						



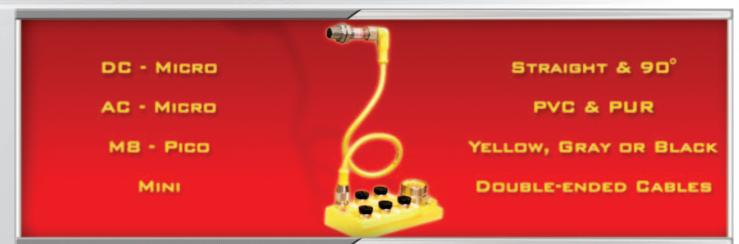
RP32 SERIES

Image	Series	s Description Modes			Ranges	
inage	Ocrica I	-		Through Beam		8.5m
	Miniatu	re Photoelectric Sensor		Retroreflective		4m
Part of the second seco	• Com	Reiorenective				400mm
HIEDINA CHO				Dinuse		40011111
				ction	500mm	
	Through-beam	Diffuse	Re	etroreflective	ective Clear Objective Detection	
Part Numbers	- P					
Emitter	RP32-T8500D-EY6Q4LP					
NPN	RP32-T8500N-CY6Q4UP	RP43-D0400N-CY6Q4UP	RP32-L4	4000N-CY6Q4UP-PF	RP32-L050	00N-CY6Q4UP-PE
PNP	RP32-T8500P-CY6Q4UP	RP43-D0400P-CY6Q4UP	RP32-L4	4000P-CY6Q4UP-PF	RP32-L050	00P-CY6Q4UP-PE
Technical Data						
Operating Range	8.5m (27.8 ft.)	400mm (15.7 in.)		4m (13 ft.)	0.	5m (19 in.)
Power Supply	(,	k	030 VD		1	. /
Current Consumption	35mA max.					
Ripple	1	±10% (within Vs tolerance)				
Light Emission		660nm Infrared LED				
Angle of Divergence	approx. 3.5°			approx. 4.5°		
Light Spot Size	approx. 440mm@7m	40mm@400mm		approx.200mm@2.5m		
Setting		sensitivity trimmer				
Output Voltage	High: PN	P: Vs - (≤1.5V); NPN is appro	ox. Vs; L	.ow: PNP is approx. 0\	/; NPN is ≤1.	5V
Output Current Max.	100mA max.,	short-circuit protected and o	ver currei	nt protected, Vs revers	e polarity pro	otected
Response Time	<15 ms	<2 ms		<0	.7 ms	
Switching Frequency	33 Hz	250 Hz		70	00 Hz	
Connection	M8 4 pin connector - Red	commended Mating Cable: F	art # C-F	S4TZ-V075 (straight),	or C-FA4TZ-	V075 (right-angle)
Mechanical Protection		IPe	67 / NEMA	۹6		
Housing Material		Stainless Steel / Glass fiber reinforced plastic				
Operating Temp.		-25+55	5°C (-13	+131°F)		
Storage Temp.		-40+70)°С (-40	+158°F)		
Reference Standard	EN 60947-5-2					
Dimensions	Connections					
	Wires					Pins
Ment	5.4 Emitter Connector Pin Number brown DC 1 black T1 - test input blue blue blue blue blue blue blue blue	0-30V Connector Pin Number Brown (+) 10-30 VD White light/dark Light Black Q-output Dark Blue OV PNP		onnector Pin Number krown (+) 10-30 VDC lack Q-output hite light/dark Dark lue ov NPN	3	2

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			/			
Cables				Boxes		
	C Serie	s - M8 Pico	R Series - M	112 DC Micro	4 Port	8 Port
	63 	9		9	ġ	
Part Numbers						
3 Poles	C-FS3TZ-V075	C-FA3TZ-V075				
4 Poles	C-FS4TZ-V075	C-FA4TZ-V075	R-FS4TZ-V075	R-FA4TZ-V075		
4 Port PNP					ASTR4-5/4PA-1005	
4 Port NPN					ASTR-5/4NA-1005	
8 Port PNP	1	1				DSTR8-5/4PA-1205
8 Port NPN						DSTR8-5/4NA-1205
Diagrams	915 MEXT 22.5 MAS 22.5 MAS					
Field Connec	tors					
				۲		~
Part Number		R-FS4KZPG7	R-FA4KZPG7	R-MS4	4KZPG7	R-MA4KZPG7
Poles		4 (female)	4 (female)		nale)	4 (male)
Max. Wire Sec		18 AWG	18 AWG		AWG	18 AWG
Screw Joint for	Cables P	G7 (Φ4.0-6.0mm)	PG7 (Φ4.0-6.0mn	n) PG7 (Φ4	.0-6.0mm) P	G7 (Φ4.0-6.0mm)

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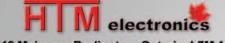
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