








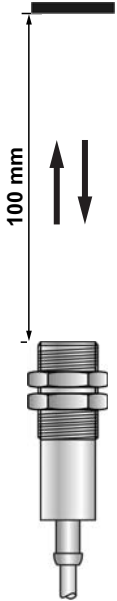






Thru-beam Mode

Sensing Mode	Housing Material	Connection	Supply Voltage	Output Mode	Part Number	
 <p>Infrared LED</p> <p>20m</p> <p>Thru-beam Mode Sensing Distance: 20 m</p>	Plastic Housing	 <p>2m Cable</p>	10-30V DC	Emitter	<u>EM18P-T020MD-EX9C3L2</u>	
				NPN	<u>EM18P-T020MN-CX9C4U2</u>	
				PNP	<u>EM18P-T020MP-CX9C4U2</u>	
				NPN/PNP	<u>EM18P-T020MD-CX9C4U2</u>	
		24-240V AC	Emitter (2-wire)	<u>EM18P-T020MA-EX9C2L2</u>		
			Light-ON(2-wire)	<u>EM18P-T020MA-LX9C2U2</u>		
			Dark-ON (2-wire)	<u>EM18P-T020MA-DX9C2U2</u>		
			Quick Disconnect	 <p>Quick Disconnect</p>	10-30V DC (Euro-style)	Emitter
		NPN				<u>EM18P-T020MN-CX9Q4UE</u>
		PNP				<u>EM18P-T020MP-CX9Q4UE</u>
		NPN/PNP				<u>EM18P-T020MD-CX9Q4UE</u>
		24-240V AC (Micro-style)	Emitter (2-wire)	<u>EM18P-T020MA-EX9Q3LM</u>		
	Light-ON(2-wire)		<u>EM18P-T020MA-LX9Q3UM</u>			
	Dark-ON (2-wire)		<u>EM18P-T020MA-DX9Q3UM</u>			
	Brass Housing		 <p>6" Pigtail</p>	10-30V DC (Euro-style)	Emitter	<u>EM18P-T020MD-EX9P4LE</u>
		NPN			<u>EM18P-T020MN-CX9P4UE</u>	
		PNP			<u>EM18P-T020MP-CX9P4UE</u>	
		NPN/PNP			<u>EM18P-T020MD-CX9P4UE</u>	
		24-240V AC (Micro-style)	Emitter (2-wire)	<u>EM18P-T020MA-EX9P3LM</u>		
			Light-ON(2-wire)	<u>EM18P-T020MA-LX9P3UM</u>		
			Dark-ON (2-wire)	<u>EM18P-T020MA-DX9P3UM</u>		
			2m Cable	 <p>2m Cable</p>	10-30V DC	Emitter
		NPN				<u>EM18B-T020MN-CX9C4U2</u>
		PNP				<u>EM18B-T020MP-CX9C4U2</u>
NPN/PNP		<u>EM18B-T020MD-CX9C4U2</u>				
24-240V AC		Emitter (2-wire)	<u>EM18B-T020MA-EX9C2L2</u>			
	Light-ON(2-wire)	<u>EM18B-T020MA-LX9C2U2</u>				
	Dark-ON (2-wire)	<u>EM18B-T020MA-DX9C2U2</u>				
	Quick Disconnect	 <p>Quick Disconnect</p>	10-30V DC (Euro-style)	Emitter	<u>EM18B-T020MD-EX9Q4LE</u>	
NPN				<u>EM18B-T020MN-CX9Q4UE</u>		
PNP				<u>EM18B-T020MP-CX9Q4UE</u>		
NPN/PNP				<u>EM18B-T020MD-CX9Q4UE</u>		
24-240V AC (Micro-style)	Emitter (2-wire)	<u>EM18B-T020MA-EX9Q3LM</u>				
	Light-ON(2-wire)	<u>EM18B-T020MA-LX9Q3UM</u>				
	Dark-ON (2-wire)	<u>EM18B-T020MA-DX9Q3UM</u>				
	6" Pigtail	 <p>6" Pigtail</p>	10-30V DC (Euro-style)	Emitter	<u>EM18B-T020MD-EX9P4LE</u>	
NPN				<u>EM18B-T020MN-CX9P4UE</u>		
PNP				<u>EM18B-T020MP-CX9P4UE</u>		
NPN/PNP				<u>EM18B-T020MD-CX9P4UE</u>		
24-240V AC (Micro-style)	Emitter (2-wire)	<u>EM18B-T020MA-EX9P3LM</u>				
	Light-ON(2-wire)	<u>EM18B-T020MA-LX9P3UM</u>				
	Dark-ON (2-wire)	<u>EM18B-T020MA-DX9P3UM</u>				

Note:
 Coming Soon : Part numbers with underline
 In Preparation: Part numbers with a line through the middle

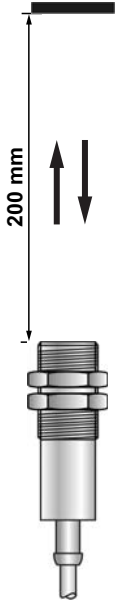








G: EM18 SERIES

Diffuse Mode (Sn=100 mm)

Sensing Mode	Housing Material	Connection	Supply Voltage	Output Mode	Part Number
Infrared LED  100 mm Diffuse Mode Sensing Distance: 100 mm	Plastic Housing	 2m Cable	10-30V DC	NPN	<u>EM18P-D0100N-CX9C4U2</u>
				PNP	<u>EM18P-D0100P-CX9C4U2</u>
				NPN/PNP	<u>EM18P-D0100D-CX9C4U2</u>
			24-240V AC	Light-ON (2-wire)	<u>EM18P-D0100A-LX9C2U2</u>
				Dark-ON (2-wire)	<u>EM18P-D0100A-DX9C2U2</u>
		 Quick Disconnect	10-30V DC (Euro-style)	NPN	<u>EM18P-D0100N-CX9Q4UE</u>
				PNP	<u>EM18P-D0100P-CX9Q4UE</u>
				NPN/PNP	<u>EM18P-D0100D-CX9Q4UE</u>
			24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18P-D0100A-LX9Q3UM</u>
				Dark-ON (2-wire)	<u>EM18P-D0100A-DX9Q3UM</u>
	Brass Housing	 6" Pigtail	10-30V DC (Euro-style)	NPN	<u>EM18P-D0100N-CX9P4UE</u>
				PNP	<u>EM18P-D0100P-CX9P4UE</u>
				NPN/PNP	<u>EM18P-D0100D-CX9P4UE</u>
			24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18P-D0100A-LX9P3UM</u>
				Dark-ON (2-wire)	<u>EM18P-D0100A-DX9P3UM</u>
		 2m Cable	10-30V DC	NPN	<u>EM18B-D0100N-CX9C4U2</u>
				PNP	<u>EM18B-D0100P-CX9C4U2</u>
				NPN/PNP	<u>EM18B-D0100D-CX9C4U2</u>
			24-240V AC	Light-ON (2-wire)	<u>EM18B-D0100A-LX9C2U2</u>
				Dark-ON (2-wire)	<u>EM18B-D0100A-DX9C2U2</u>
 Quick Disconnect	10-30V DC (Euro-style)	NPN	<u>EM18B-D0100N-CX9Q4UE</u>		
		PNP	<u>EM18B-D0100P-CX9Q4UE</u>		
		NPN/PNP	<u>EM18B-D0100D-CX9Q4UE</u>		
	24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18B-D0100A-LX9Q3UM</u>		
		Dark-ON (2-wire)	<u>EM18B-D0100A-DX9Q3UM</u>		
 6" Pigtail	10-30V DC (Euro-style)	NPN	<u>EM18B-D0100N-CX9P4UE</u>		
		PNP	<u>EM18B-D0100P-CX9P4UE</u>		
		NPN/PNP	<u>EM18B-D0100D-CX9P4UE</u>		
	24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18B-D0100A-LX9P3UM</u>		
		Dark-ON (2-wire)	<u>EM18B-D0100A-DX9P3UM</u>		








Note:
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 In Preparation: Part numbers with a line through the middle

Diffuse Mode (Sn=200 mm)

Sensing Mode	Housing Material	Connection	Supply Voltage	Output Mode	Part Number
Diffuse Mode Sensing Distance: 200 mm 	Infrared LED  200 mm 	 2m Cable	10-30V DC	NPN	<u>EM18P-D0200N-CX9C4U2</u>
				PNP	<u>EM18P-D0200P-CX9C4U2</u>
				NPN/PNP	<u>EM18P-D0200D-CX9C4U2</u>
			24-240V AC	Light-ON (2-wire)	<u>EM18P-D0200A-LX9C2U2</u>
				Dark-ON (2-wire)	<u>EM18P-D0200A-DX9C2U2</u>
		 Quick Disconnect	10-30V DC (Euro-style)	NPN	<u>EM18P-D0200N-CX9Q4UE</u>
				PNP	<u>EM18P-D0200P-CX9Q4UE</u>
				NPN/PNP	<u>EM18P-D0200D-CX9Q4UE</u>
			24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18P-D0200A-LX9Q3UM</u>
				Dark-ON (2-wire)	<u>EM18P-D0200A-DX9Q3UM</u>
	 6" Pigtail	10-30V DC (Euro-style)	NPN	<u>EM18P-D0200N-CX9P4UE</u>	
			PNP	<u>EM18P-D0200P-CX9P4UE</u>	
			NPN/PNP	<u>EM18P-D0200D-CX9P4UE</u>	
		24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18P-D0200A-LX9P3UM</u>	
			Dark-ON (2-wire)	<u>EM18P-D0200A-DX9P3UM</u>	
	Brass Housing	 2m Cable	10-30V DC	NPN	<u>EM18B-D0200N-CX9C4U2</u>
				PNP	<u>EM18B-D0200P-CX9C4U2</u>
				NPN/PNP	<u>EM18B-D0200D-CX9C4U2</u>
			24-240V AC	Light-ON (2-wire)	<u>EM18B-D0200A-LX9C2U2</u>
				Dark-ON (2-wire)	<u>EM18B-D0200A-DX9C2U2</u>
 Quick Disconnect		10-30V DC (Euro-style)	NPN	<u>EM18B-D0200N-CX9Q4UE</u>	
			PNP	<u>EM18B-D0200P-CX9Q4UE</u>	
			NPN/PNP	<u>EM18B-D0200D-CX9Q4UE</u>	
		24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18B-D0200A-LX9Q3UM</u>	
			Dark-ON (2-wire)	<u>EM18B-D0200A-DX9Q3UM</u>	
 6" Pigtail	10-30V DC (Euro-style)	NPN	<u>EM18B-D0200N-CX9P4UE</u>		
		PNP	<u>EM18B-D0200P-CX9P4UE</u>		
		NPN/PNP	<u>EM18B-D0200D-CX9P4UE</u>		
	24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18B-D0200A-LX9P3UM</u>		
		Dark-ON (2-wire)	<u>EM18B-D0200A-DX9P3UM</u>		







Note:
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 In Preparation: Part numbers with a line through the middle

Diffuse Mode (Sn=400mm)

Sensing Mode	Housing Material	Connection	Supply Voltage	Output Mode	Part Number
Infrared LED  Diffuse Mode Sensing Distance: 400 mm	Plastic Housing	 2m Cable	10-30V DC	NPN	<u>EM18P-D0400N-CX9C4U2</u>
				PNP	<u>EM18P-D0400P-CX9C4U2</u>
				NPN/PNP	<u>EM18P-D0400D-CX9C4U2</u>
			24-240V AC	Light-ON (2-wire)	<u>EM18P-D0400A-LX9C2U2</u>
				Dark-ON (2-wire)	<u>EM18P-D0400A-DX9C2U2</u>
		 Quick Disconnect	10-30V DC (Euro-style)	NPN	<u>EM18P-D0400N-CX9Q4UE</u>
				PNP	<u>EM18P-D0400P-CX9Q4UE</u>
				NPN/PNP	<u>EM18P-D0400D-CX9Q4UE</u>
			24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18P-D0400A-LX9Q3UM</u>
				Dark-ON (2-wire)	<u>EM18P-D0400A-DX9Q3UM</u>
	Brass Housing	 6" Pigtail	10-30V DC (Euro-style)	NPN	<u>EM18P-D0400N-CX9P4UE</u>
				PNP	<u>EM18P-D0400P-CX9P4UE</u>
				NPN/PNP	<u>EM18P-D0400D-CX9P4UE</u>
			24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18P-D0400A-LX9P3UM</u>
				Dark-ON (2-wire)	<u>EM18P-D0400A-DX9P3UM</u>
		 2m Cable	10-30V DC	NPN	<u>EM18B-D0400N-CX9C4U2</u>
				PNP	<u>EM18B-D0400P-CX9C4U2</u>
				NPN/PNP	<u>EM18B-D0400D-CX9C4U2</u>
			24-240V AC	Light-ON (2-wire)	<u>EM18B-D0400A-LX9C2U2</u>
				Dark-ON (2-wire)	<u>EM18B-D0400A-DX9C2U2</u>
 Quick Disconnect	10-30V DC (Euro-style)	NPN	<u>EM18B-D0400N-CX9Q4UE</u>		
		PNP	<u>EM18B-D0400P-CX9Q4UE</u>		
		NPN/PNP	<u>EM18B-D0400D-CX9Q4UE</u>		
	24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18B-D0400A-LX9Q3UM</u>		
		Dark-ON (2-wire)	<u>EM18B-D0400A-DX9Q3UM</u>		
 6" Pigtail	10-30V DC (Euro-style)	NPN	<u>EM18B-D0400N-CX9P4UE</u>		
		PNP	<u>EM18B-D0400P-CX9P4UE</u>		
		NPN/PNP	<u>EM18B-D0400D-CX9P4UE</u>		
	24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18B-D0400A-LX9P3UM</u>		
		Dark-ON (2-wire)	<u>EM18B-D0400A-DX9P3UM</u>		







Note:
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Retroreflective Mode with Polarizing Filter (Sn=2m)

Sensing Mode	Housing Material	Connection	Supply Voltage	Output Mode	Part Number
Retro-reflective Mode with Polarizing Filter Sensing Distance: 2 m (Note)	Plastic Housing	 2m Cable	10-30V DC	NPN	EM18P-L2000N-CX6G4U2-PF
				PNP	EM18P-L2000P-CX6G4U2-PF
				NPN/PNP	EM18P-L2000D-CX6G4U2-PF
			24-240V AC	Light-ON (2-wire)	EM18P-L2000A-LX6G2U2-PF
				Dark-ON (2-wire)	EM18P-L2000A-DX6G2U2-PF
		 Quick Disconnect	10-30V DC (Euro-style)	NPN	EM18P-L2000N-CX6Q4UE-PF
				PNP	EM18P-L2000P-CX6Q4UE-PF
				NPN/PNP	EM18P-L2000D-CX6Q4UE-PF
			24-240V AC (Micro-style)	Light-ON (2-wire)	EM18P-L2000A-LX6Q3UM-PF
				Dark-ON (2-wire)	EM18P-L2000A-DX6Q3UM-PF
	Brass Housing	 6" Pigtail	10-30V DC (Euro-style)	NPN	<u>EM18P-L2000N-CX6P4UE-PF</u>
				PNP	EM18P-L2000P-CX6P4UE-PF
				NPN/PNP	EM18P-L2000D-CX6P4UE-PF
			24-240V AC (Micro-style)	Light-ON (2-wire)	EM18P-L2000A-LX6P3UM-PF
				Dark-ON (2-wire)	EM18P-L2000A-DX6P3UM-PF
		 2m Cable	10-30V DC	NPN	EM18B-L2000N-CX6C4U2-PF
				PNP	EM18B-L2000P-CX6C4U2-PF
				NPN/PNP	EM18B-L2000D-CX6C4U2-PF
			24-240V AC	Light-ON (2-wire)	EM18B-L2000A-LX6C2U2-PF
				Dark-ON (2-wire)	EM18B-L2000A-DX6C2U2-PF
 Quick Disconnect	10-30V DC (Euro-style)	NPN	EM18B-L2000N-CX6Q4UE-PF		
		PNP	EM18B-L2000P-CX6Q4UE-PF		
		NPN/PNP	EM18B-L2000D-CX6Q4UE-PF		
	24-240V AC (Micro-style)	Light-ON (2-wire)	EM18B-L2000A-LX6Q3UM-PF		
		Dark-ON (2-wire)	EM18B-L2000A-DX6Q3UM-PF		
 6" Pigtail	10-30V DC (Euro-style)	NPN	EM18B-L2000N-CX6P4UE-PF		
		PNP	EM18B-L2000P-CX6P4UE-PF		
		NPN/PNP	EM18B-L2000D-CX6P4UE-PF		
	24-240V AC (Micro-style)	Light-ON (2-wire)	EM18B-L2000A-LX6P3UM-PF		
		Dark-ON (2-wire)	EM18B-L2000A-DX6P3UM-PF		

Note: Used with RE-6152 (supplied with sensor) reflector.
 Coming Soon : Part numbers with underline
 In Preparation: Part numbers with a line through the middle

Retroreflective Mode (Sn=3m)

Sensing Mode	Housing Material	Connection	Supply Voltage	Output Mode	Part Number
Retro-reflective Mode Sensing Distance: 3 m (Note)	Plastic Housing	 2m Cable	10-30V DC	NPN	<u>EM18P-L3000N-CX9C4U2</u>
				PNP	<u>EM18P-L3000P-CX9C4U2</u>
				NPN/PNP	<u>EM18P-L3000D-CX9C4U2</u>
			24-240V AC	Light-ON (2-wire)	<u>EM18P-L3000A-LX9C2U2</u>
				Dark-ON (2-wire)	<u>EM18P-L3000A-DX9C2U2</u>
		 Quick Disconnect	10-30V DC (Euro-style)	NPN	<u>EM18P-L3000N-CX9Q4UE</u>
				PNP	<u>EM18P-L3000P-CX9Q4UE</u>
				NPN/PNP	<u>EM18P-L3000D-CX9Q4UE</u>
			24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18P-L3000A-LX9Q3UM</u>
				Dark-ON (2-wire)	<u>EM18P-L3000A-DX9Q3UM</u>
	Brass Housing	 6" Pigtail	10-30V DC (Euro-style)	NPN	<u>EM18P-L3000N-CX9P4UE</u>
				PNP	<u>EM18P-L3000P-CX9P4UE</u>
				NPN/PNP	<u>EM18P-L3000D-CX9P4UE</u>
			24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18P-L3000A-LX9P3UM</u>
				Dark-ON (2-wire)	<u>EM18P-L3000A-DX9P3UM</u>
		 2m Cable	10-30V DC	NPN	<u>EM18B-L3000N-CX9C4U2</u>
				PNP	<u>EM18B-L3000P-CX9C4U2</u>
				NPN/PNP	<u>EM18B-L3000D-CX9C4U2</u>
			24-240V AC	Light-ON (2-wire)	<u>EM18B-L3000A-LX9C2U2</u>
				Dark-ON (2-wire)	<u>EM18B-L3000A-DX9C2U2</u>
 Quick Disconnect	10-30V DC (Euro-style)	NPN	<u>EM18B-L3000N-CX9Q4UE</u>		
		PNP	<u>EM18B-L3000P-CX9Q4UE</u>		
		NPN/PNP	<u>EM18B-L3000D-CX9Q4UE</u>		
	24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18B-L3000A-LX9Q3UM</u>		
		Dark-ON (2-wire)	<u>EM18B-L3000A-DX9Q3UM</u>		
 6" Pigtail	10-30V DC (Euro-style)	NPN	<u>EM18B-L3000N-CX9P4UE</u>		
		PNP	<u>EM18B-L3000P-CX9P4UE</u>		
		NPN/PNP	<u>EM18B-L3000D-CX9P4UE</u>		
	24-240V AC (Micro-style)	Light-ON (2-wire)	<u>EM18B-L3000A-LX9P3UM</u>		
		Dark-ON (2-wire)	<u>EM18B-L3000A-DX9P3UM</u>		

Note: Used with RE-6152 (supplied with sensor) reflector.
 Coming Soon : Part numbers with underline
 In Preparation: Part numbers with a line through the middle

Specifications (DC)

Type Item \ Model No.	Thru-beam	Retroreflective		Diffuse Mode			
	EM18x-T020Mx-xX9xxxx	EM18x-L3000x-xX9xxxx	with polarizing filters	EM18x-L2000x-xX6xxxx-PF	EM18x-D0100x-xX9xxxx	EM18x-D0200x-xX9xxxx	EM18x-D0400x-xX9xxxx
Sensing Range	20m	3m (Note)	2m (Note)	100mm	200mm	400mm	
Sensing Object	Opaque object of ϕ 8mm or more	3-way mirror		200x200mm White paper			
Hysteresis	20% or less of operation distance						
Supply Voltage	10 to 30V DC, Ripple P-P 10% or less						
Current Consumption	30mA or less						
Output	<NPN> output type> NPN open-collector transistor • Applied voltage: 30V DC or less • Maximum sink current: 200mA • Voltage drop: 2.5V or less			<PNP> output type> PNP open-collector transistor • Applied voltage: 30V DC or less • Maximum sink current: 200mA • Voltage drop: 2.5V or less			
Output Operation	Selectable either Light-ON Dark-ON by the control input wire						
Short-circuit Protection	Yes						
Reverse Polarity Protection	Yes						
Overload Current Protection	Yes						
Response Time	1.5ms						
Operation Indicator	Red LED (light up when the output is activated), Thru-beam sensor is provided it on the receiver						
Pollution Degree	3(Industrial environment)						
Protection	IP67(IEC)						
Ambient Temperature	-25°C to +55°C						
Ambient Humidity	35 to 85% RH,Storage:35 to 85% RH						
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 Withstand Ability	IEC 60947-5-2, Part 7.4.2 or 1500V AC for one min, between all supply terminals connected together and enclosure						
Insulation Resistance	>20M Ω , with 1500V AC megger between all supply terminals connected together and enclosure						
Vibration Resistance	IEC 60947-5-2, Part 7.4.2 or 10-55Hz, 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 time each						
Emitting Element	Infrared LED (modulated)	Red LED (modulated)	Infrared LED (modulated)				
Housing Material	Plastic housing: PBT		Metal housing: Nickel-plated brass				
Cable	2m or 9m 5.8 ϕ (Plastic Housing:4 ϕ) 4X0.5 (Emitter :3X0.5) PVC.						
Connector	Euro-style quick connector(M12x1 thread)						
Pigtail Type	See Pigtail Series or our Cables & Connectors catalogue						

Note: Used with RE-6152 (supplied with sensor) reflector.

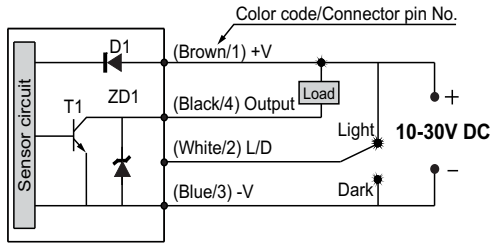
Specifications (AC)

Item	Type	Diffuse Mode			Retroreflective		
	Model No.	Thru-beam Mode				with polarizing filters	
		EM18x-T020MC-xxxxxxx	EM18x-D0100C-xX9xxUx	EM18x-D0200C-xX9xxUx	EM18x-D0400C-xX9xxUx	EM18x-L3000C-xX9xxUx	EM18x-L2000C-xX6xxUx-PF
Sensing Range		20 m	100mm	200mm	400mm	3m (Note)	2m (Note)
Sensing Object		100x100mm White paper			3-way mirror		
Hysteresis		20% or less of operation distance					
Supply Voltage		24~240V AC					
Current Consumption		30mA or less					
Output		SPST solid-state switch, 2-wire hookup ● Applied voltage: 24 ~ 240V AC ● Max Load current: 300mA ● Voltage drop: 10V or less					
Output Operation		Selectable either Light-ON Dark-ON by type number					
Short-circuit Protection		Yes					
Reverse Polarity Protection		Yes					
Overload Current Protection		Yes					
Response Time		15ms					
Operation Indicator		Red LED (light up when the output is activated), Thru-beam sensor is provided it on the receiver					
Pollution Degree		3(Industrial environment)					
Protection		IP67(IEC)					
Ambient Temperature		-25°C to +55°C					
Ambient Humidity		35 to 85% RH, Storage: 35 to 85% RH					
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 Withstand Ability		IEC 60947-5-2, Part 8.3.3.4 or 1500V AC for one min, between all supply terminals connected together and enclosure					
Insulation Resistance		>20M Ω , with 1500V AC megger between all supply terminals connected together and enclosure					
Vibration Resistance		IEC60947-5-2, Part 7.4.2 or 10-55Hz, 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 time each					
Emitting Element		Infrared LED (modulated)				Red LED (modulated)	
Housing Material		Plastic Housing: PBT		Metal Housing: Nickel-plated brass			
Cable		2m or 9m 5.8 ϕ (Plastic Housing: 4 ϕ) 4X0.5 (Emitter :3X0.5) PVC.					
Connector		3 pins Micro-style quick connector(1/2"-20UNF thread)					
Pigtail Type		See Pigtail Series or our Cables & Connectors catalogue					

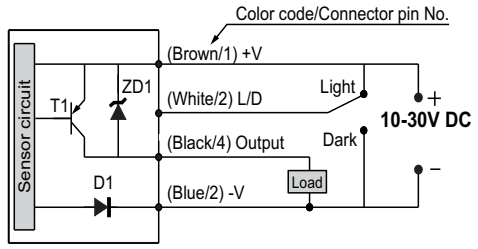
Note: Used with RE-6152 (supplied with sensor) reflector.

Connection Diagrams

NPN output type PNP output type



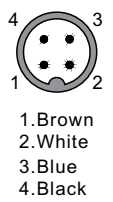
Symbol D1: Reverse polarity protection diode
 ZD1: Surge absorption zener diode
 T1: NPN output transistor



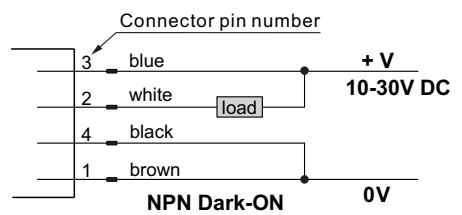
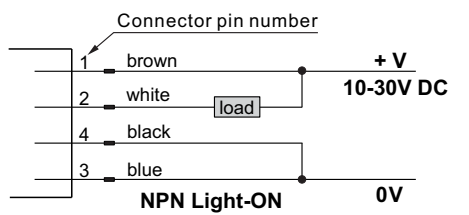
Symbol D1: Reverse polarity protection diode
 ZD1: Surge absorption zener diode
 T1: PNP output transistor

Connector pin position

Euro-style

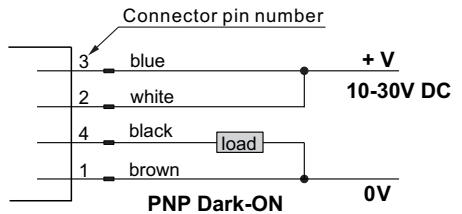
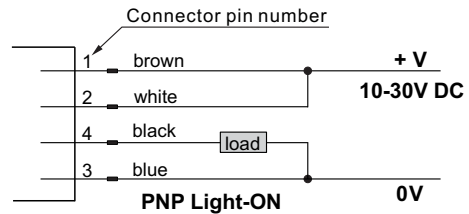


NPN/PNP output type

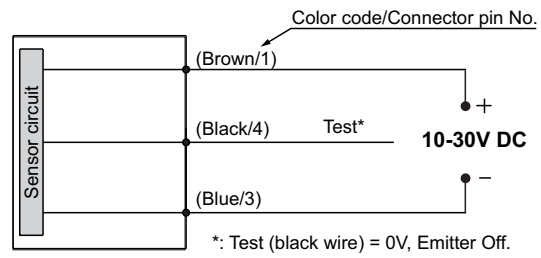


Connector pin position

Euro-style

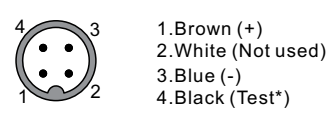


Emitter of Thru-beam Mode (DC)



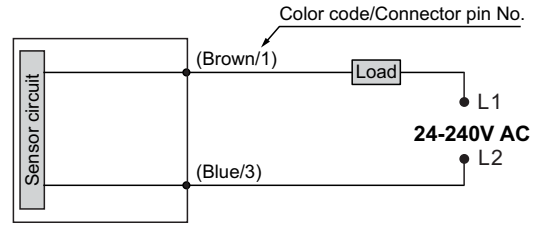
Connector pin position

Euro-style



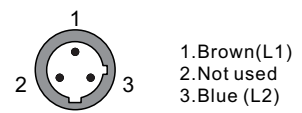
G: EM18 SERIES

Receiver of Thru-beam Mode, Retroreflective & Diffuse reflective sensors (AC)

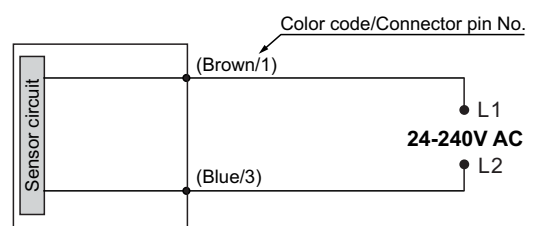


Connector face view

Micro-style

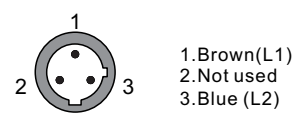


Emitter of Thru-beam Mode (AC)



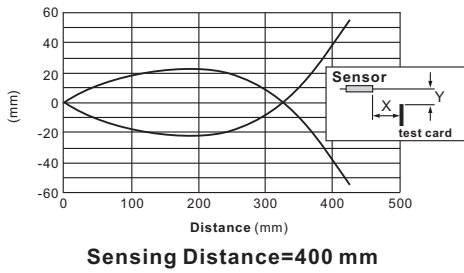
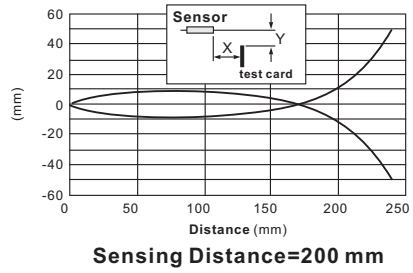
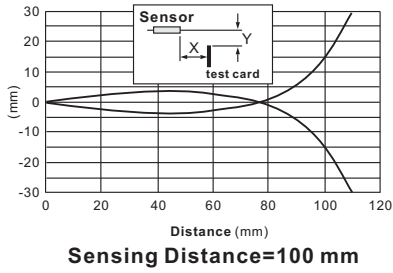
Connector face view

Micro-style

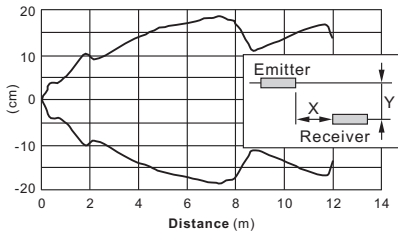


Sensing Characteristics (Typical)

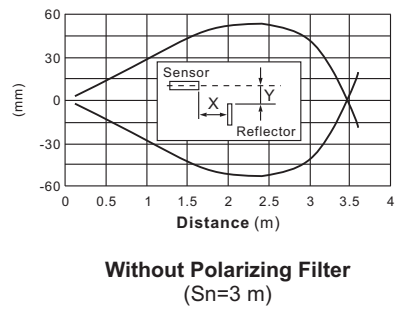
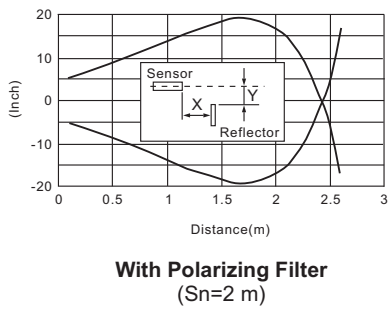
Diffuse Mode Sensor



Thru-beam Mode Sensor



Retroreflective Mode Sensor

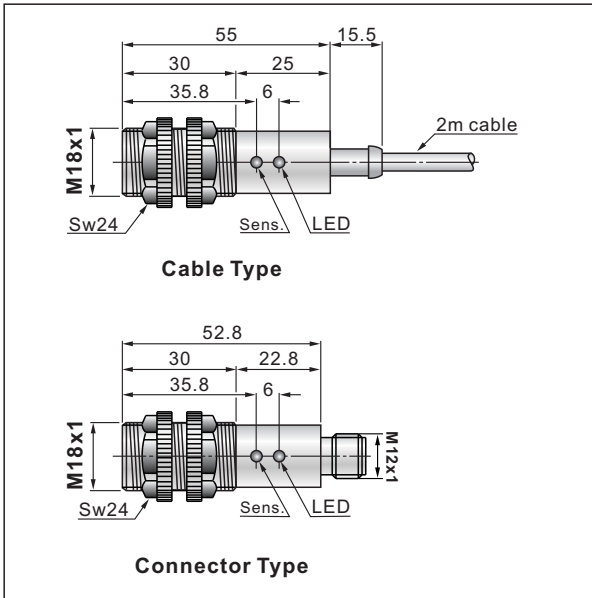


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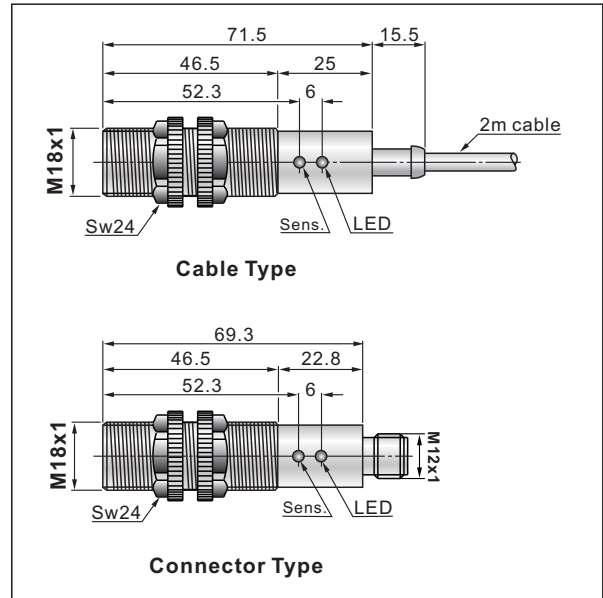
Dimensions (Unit: mm)

Plastic Housing Type Sensor

DC type Sensor

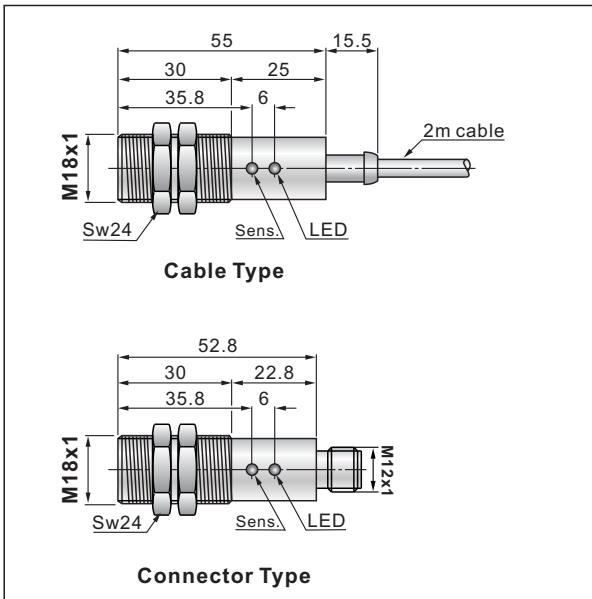


AC/DC type Sensor

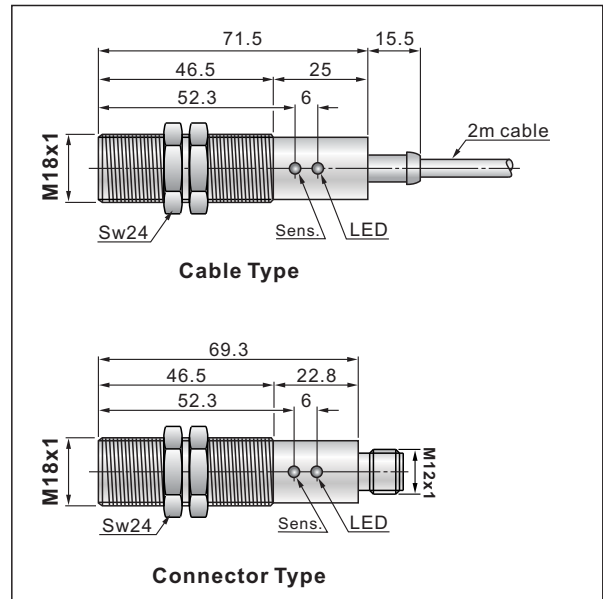


Brass Housing Type Sensor

DC type Sensor

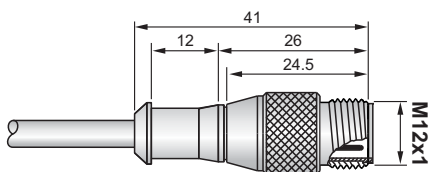


AC/DC type Sensor



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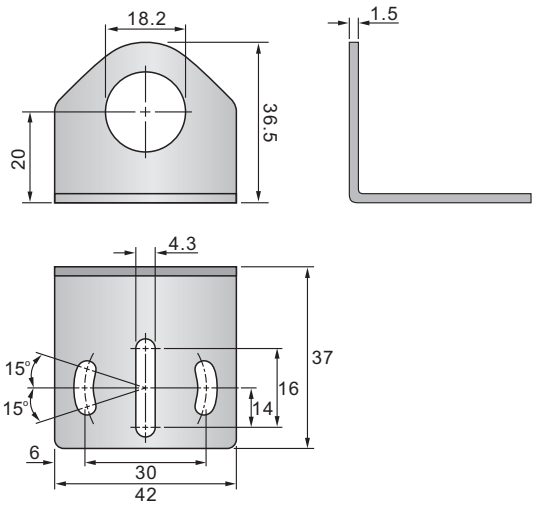
Pigtail* Type



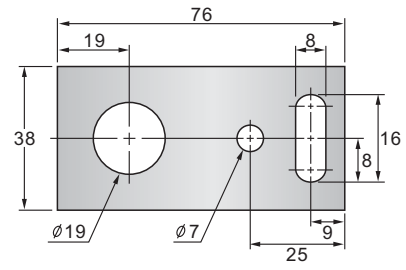
*: Please see **Pigtail Series** or our **Cables & Connectors** catalogue for more information.

Mounting Bracket's * Dimensions (Unit: mm)

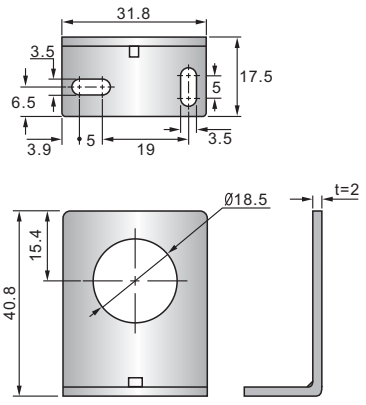
MB-4237 (optional)



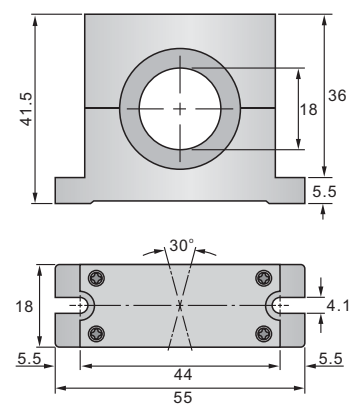
MB-7638 (optional)



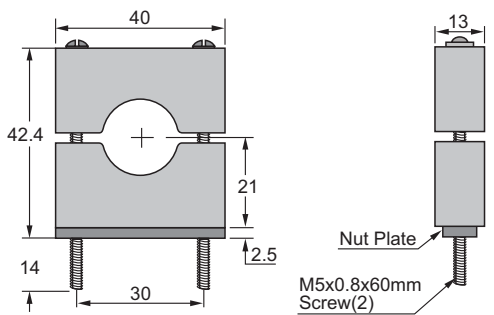
MB-4032 (optional)



MB-5542 (optional)

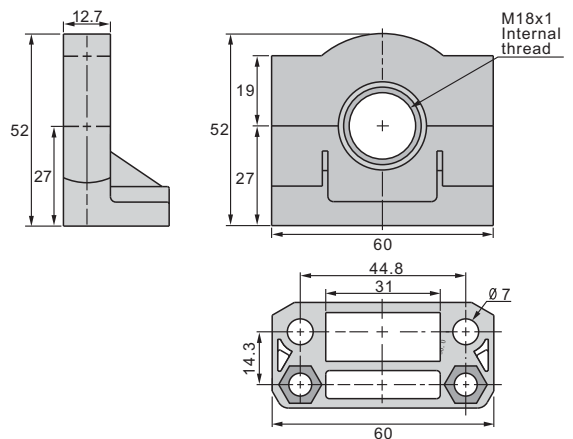


MB-4240 (optional)



18mm split clamp bracket
Black reinforced thermoplastic polyester

MB-6052 (optional)



Mounting Bracket to Provide 360° Rotation

*: Please see **Accessories** (Universal Mounting Brackets Series).

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