



Safety Connection Systems

Bulletin Numbers 888D, 888R, 898D, 898R

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Safety Wired T-port

Dual-Channel, No Enunciation

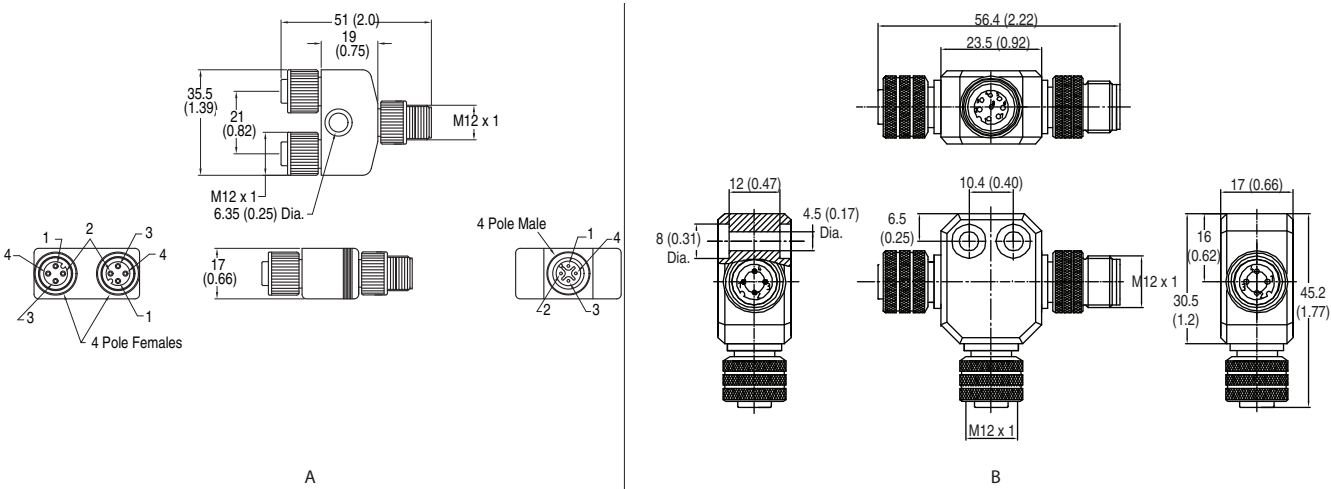


Specifications

Connector Shell Material	Epoxy-coated zinc
Contact Material	Brass, gold over nickel plating
O-Ring Material	Fluorelastomer
Enclosure Type Rating	IP67, NEMA 6P
Operating Temperature [C (F)]	-20...105° (-13...221°)

Approximate Dimensions

Dimensions are shown in mm (in.). Dimensions are not intended to be used for installation purposes.



Safety Wired Distribution Boxes

Dual-Channel, N.C., No Enunciation

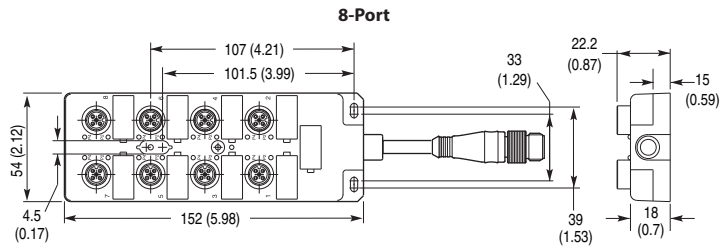
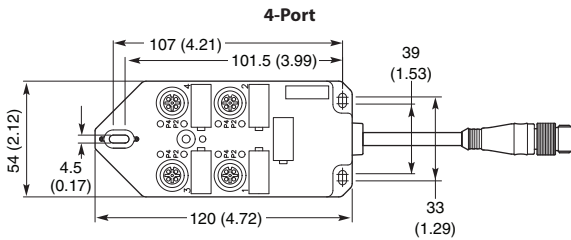
Specifications

Housing Material	Red PBT
Connector Insert Material	PBT
Connector Shell Material	Nickel-plated brass
Contact Material	Gold-plated palladium/nickel
Cable O.D.	9.8 mm (0.39 in.)
Cable Type	Oil-resistant yellow PVC jacket, 22 AWG conductors
Enclosure Type Rating	IP67
Operating Temperature [C (F)]	-20...105° (-13...221°)

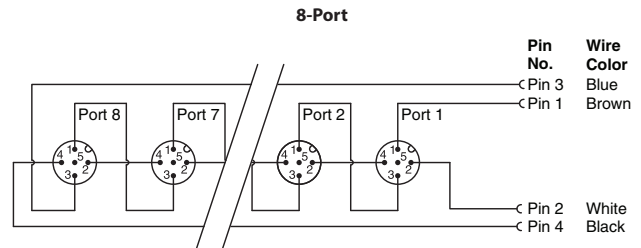
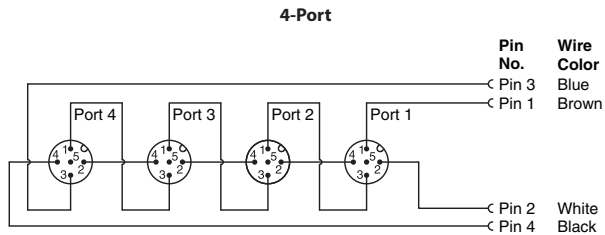


Approximate Dimensions

Dimensions are shown in mm (in.). Dimensions are not intended to be used for installation purposes.



Wiring Diagrams



Safety Wired Distribution Boxes

Dual-Channel, N.C./N.O., No Enunciation

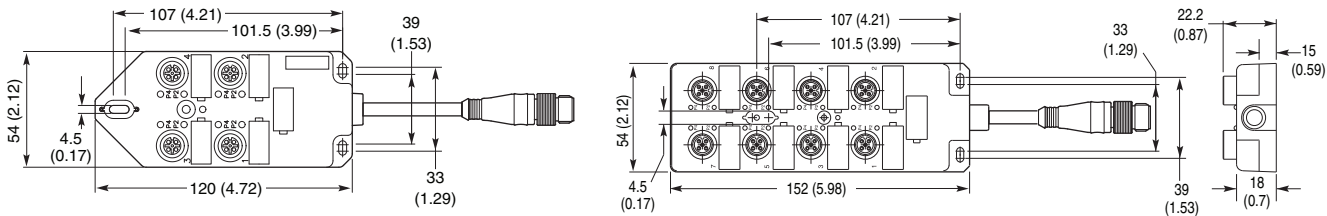


Specifications

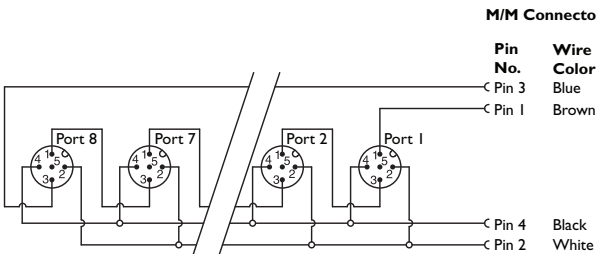
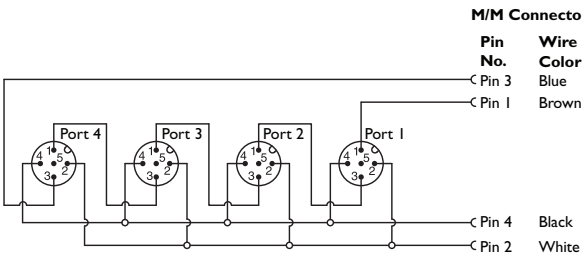
Housing Material	Red PBT
Connector Insert Material	PBT
Connector Shell Material	Nickel-plated brass
Contact Material	Gold-plated palladium/nickel
Cable O.D.	9.8 mm (0.39 in.)
Cable Type	Oil-resistant yellow PVC jacket, 22 AWG conductors
Enclosure Type Rating	IP67
Operating Temperature [C (F)]	-20...105° (-13...221°)

Approximate Dimensions

Dimensions are shown in mm (in.). Dimensions are not intended to be used for installation purposes.



Wiring Diagrams



Safety Wired Distribution Boxes

Single-Channel, N.C. plus Individual N.O. Enunciation



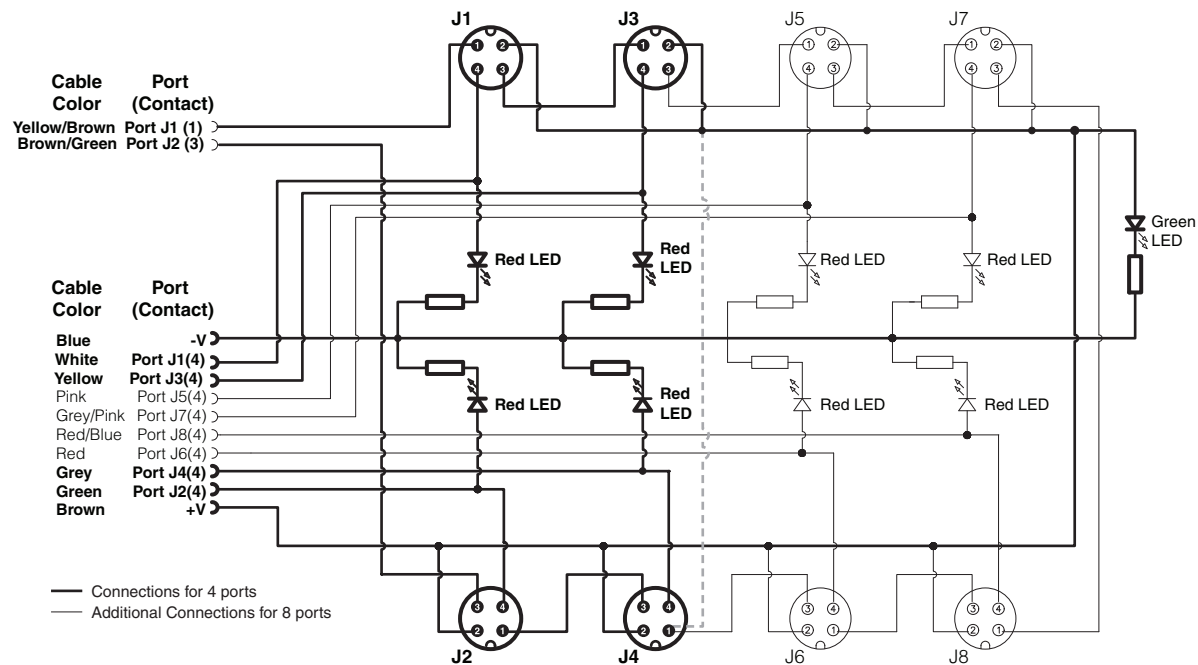
Specifications

Housing Material	Red PBT
Connector Insert Material	PBT
Connector Shell Material	Nickel-plated brass
Contact Material	Gold-plated palladium/nickel
Cable O.D.	9.8 mm (0.39 in.)
Cable Type	Oil-resistant yellow PVC jacket, (12) 18 AWG conductors
Enclosure Type Rating	IP67
Operating Temperature [C (F)]	-20...105° (-13...221°)

Approximate Dimensions

See 8-port dimensions on page 3.

Wiring Diagrams



Safety Wired Distribution Boxes

8-Pin, Two OSSD Signals per Port, M23 Main Connector



Specifications

Certifications	UL Recognized and CSA Certified
Mechanical	
Material	Red Pocan
Connector Insert Material	PBT
Receptacle Shell Material	Zinc diecast with nickel plating
Contact Material	Gold-plated palladium/nickel
Main Connector Style	19-pin M23
Environmental	
Enclosure Type Rating	IP67; 1200 psi washdown
Operating Temperature [C (F)]	-20...+90° (-4...+194°)

Pinout

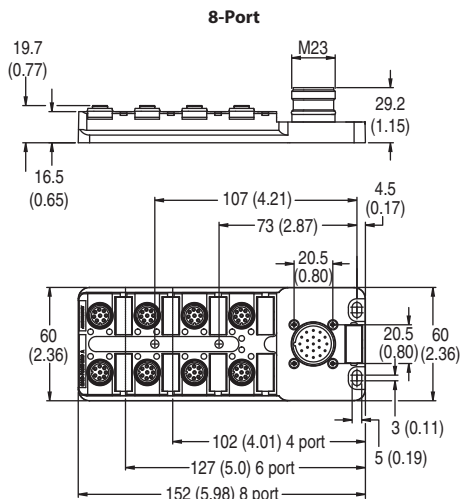
Device Connection		Main Connection		
4-Port (2 OSSD)	8-Port (2 OSSD)	Description	Color	M23 Connector (Male 19-Pin)
(+) All Ports Pin 2	(+) All Ports Pin 2	+24V DC	Brown	19
(-) All Ports Pin 7	(-) All Ports Pin 7	Common	Blue	6
Ground	Ground	Ground	Green/Yellow	12
Pin 5	Pin 5	Safety A (OSSD)	Grey	3
Pin 8	Pin 8	Safety A+ (OSSD)	Red	2
Pin 6	Pin 6	Safety B (OSSD)	Pink	17
Pin 4	Pin 4	Safety B+ (OSSD)	Yellow	16
Port 1 Pin 1	Port 1 Pin 1	Aux J1	Grey/Pink	7
Port 2 Pin 1	Port 2 Pin 1	Aux J2	Red/Blue	4
Port 3 Pin 1	Port 3 Pin 1	Aux J3	White/Green	8
Port 4 Pin 1	Port 4 Pin 1	Aux J4	Brown/Green	14
—	Port 5 Pin 1	Aux J5	White/Yellow	9
—	Port 6 Pin 1	Aux J6	Yellow/Brown	13
—	Port 7 Pin 1	Aux J7	White/Grey	10
—	Port 8 Pin 1	Aux J8	Grey/Brown	18
Pin 3	Pin 3	Lock Command	Black	11

Safety Wired Distribution Boxes

8-Pin, Two OSSD Signals per Port, M23 Main Connector

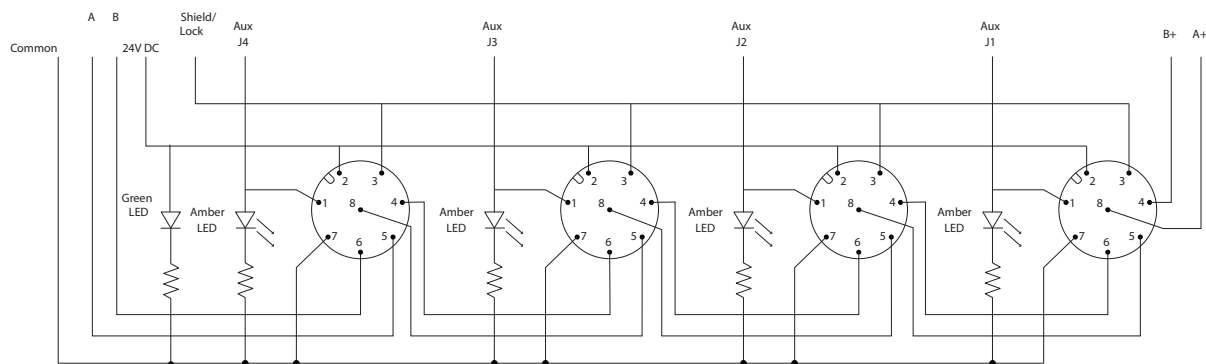
Approximate Dimensions

Dimensions are shown in mm (in.). Dimensions are not intended to be used for installation purposes.

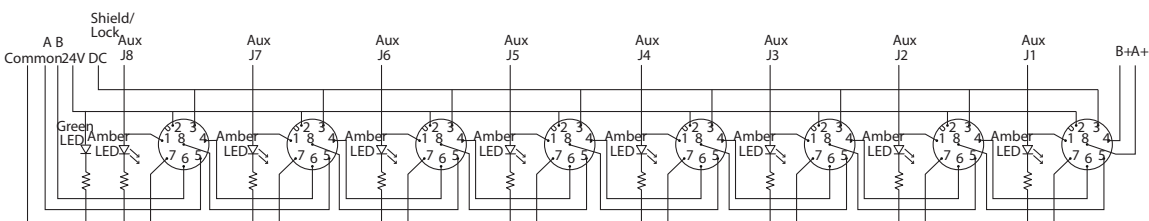


Wiring Diagrams

4-Port Safety Distribution Block



8-Port Safety Distribution Block



Notes:

1. When light curtain is used, connect the receiver to J1 connector only.
2. Do not connect 24V DC to "A+" (pin 2) and "B+" (pin 16) on the M23 cordset when using a light curtain.
3. Please check system response time when using a light curtain.

Safety Wired Distribution Boxes

8-Port, Dual-Channel, (2 N.C.) plus Individual N.O. Enunciation



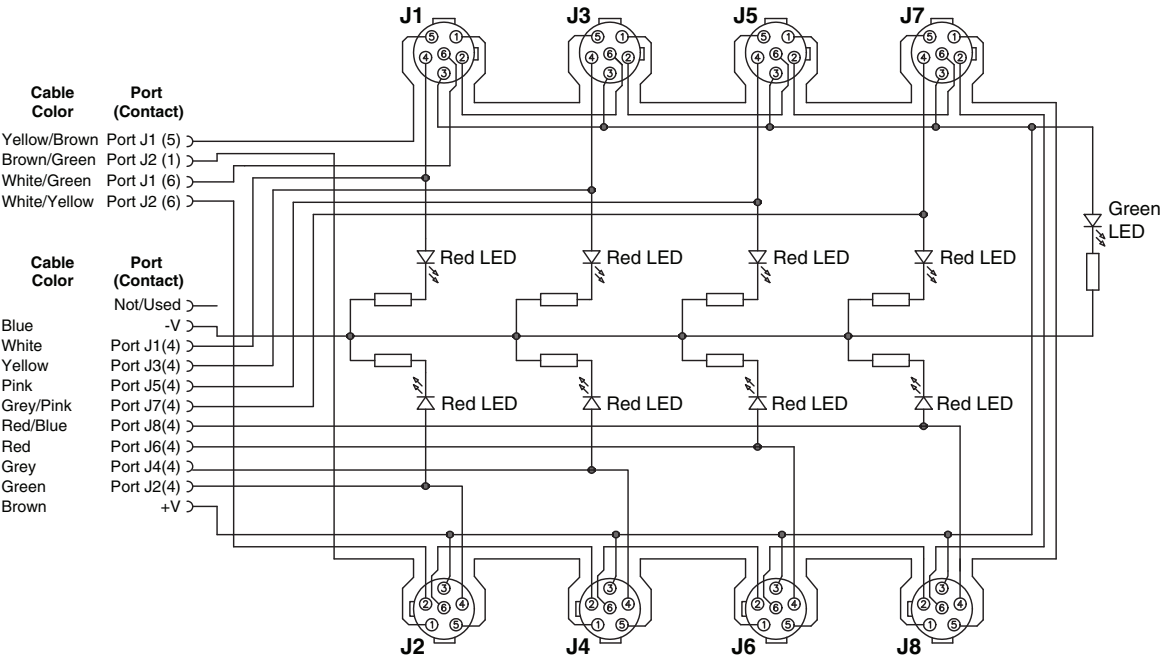
Specifications

Housing Material	Red PBT
Connector Insert Material	PBT
Connector Shell Material	Nickel-plated brass
Contact Material	Gold-plated palladium/nickel
Cable O.D.	9.8 mm (0.39 in.) OD
Cable Type	Oil-resistant yellow PVC jacket, (6) 19 AWG conductors and (8) 22 AWG conductors
Enclosure Type Rating	IP67
Operating Temperature [C (F)]	-20...105° (-13...221°)

Approximate Dimensions

See 8-port dimensions on page 3.

Wiring Diagrams



Safety DC Micro and M12 Cordset

18 and 22 AWG, Red PVC



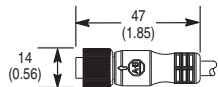
4-Pin DC Micro Cordset

Specifications

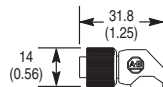
Certifications	UL Recognized and CSA Certified
Mechanical	
Coupling Nut Material	Epoxy-coated zinc
Material	Molded oil-resistant PUR
Contact Material	Gold over nickel-plated brass
Cable Type	Oil-resistant PVC jacket, 18 & 22 AWG or 24 AWG conductors, 300V; UL Recognized and CSA Certified
Bend Radius	10x diameter
Cable Diameter [mm (in.)]	4/c: 0.18 ± 0.01 (4.75 ± 0.25) 5/c: 0.230 ± 0.02 (5.84 ± 0.25) 8/c: 0.256 ± 0.01 (6.5 ± 0.25) 19/c: 0.475 ± 0.10 (12.06 ± 0.25)
Electrical	
Cable Rating	4 & 5/c (PUR): UL AWM style 20866 VW-1 80C 300V, CSA AWM A/B I/II 80C 300V FT1, UV oil and water resistant 8/c (PUR): UL AWM style 20866 90C 300V, CSA II A 90C 300V TPE: UL AWM style 20327 VW-1 105C 300V, CSA AWM A/B I/II 105C 300V FT1, UV oil and water resistant
Environmental	
Enclosure Type Rating	IP67, NEMA 6P, 1200 psi (8270 kPa) washdown, IP69K
Temperature Rating [C (F)]	-20...105 ° (-4...+221 °)

Approximate Dimensions

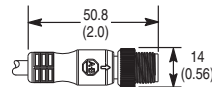
Dimensions are in mm (in.). Illustrations are not drawn to scale.



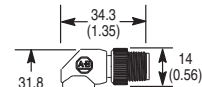
Straight Female



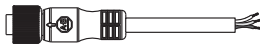
Right Angle Female



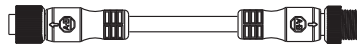
Straight Male



Right Angle Male



Example of Cordset



Example of Patchcord

Pinout and Color Code

Face View Pinout					
4-Pin		5-Pin		8-Pin	
Female		Male		Female Male	
1 Brown	4 Black	1 Brown	4 Black	1 White	5 Grey
2 White	5 NA	2 White	5 Grey	2 Brown	6 Pink
3 Blue		3 Blue		3 Green	7 Blue
				4 Yellow	8 Red
				19-Pin	
				Female	Male
				1 Violet	7 Grey/Pink
				2 Red	8 White/Green
				3 Grey	9 White/Yellow
				4 Red/Blue	10 White/Grey
				5 Green★	11 Black
				6 Blue★	12 Green/Yellow
					13 Yellow/Brown
					14 Brown/Green
					15 White
					16 Yellow
					17 Pink
					18 Grey/Brown
					19 Brown★

★ 18 AWG

Safety Wired Shorting Plug

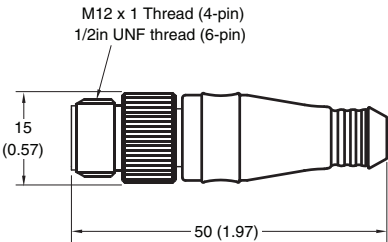


Specifications

Connector Insert Material	PUR
Connector Shell Material	RED PVC
Contact Material	Brass, gold over nickel plating
O-Ring Material	Fluorelastomer
Enclosure Type Rating	IP67, NEMA 6P
Operating Temperature [C (F)]	-20...105° (-13...221°)

Approximate Dimensions

Dimensions are shown in mm (in.). Dimensions are not intended to be used for installation purposes.



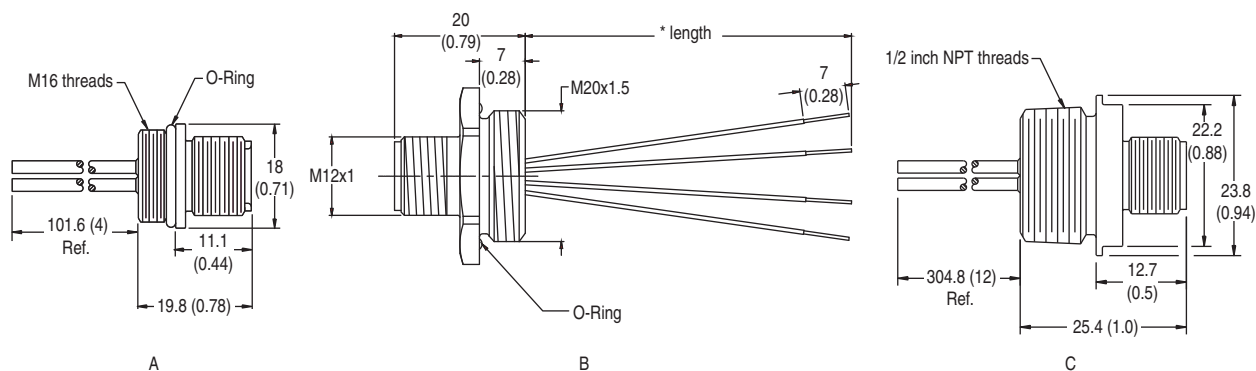


Specifications

Connector Shell Material	Nickel-plated brass
Connector Insert Material	Nylon
Contact Type	Machined brass with gold over nickel plating
Wire Insulation	Oil-resistant PVC, 22 AWG stranded copper, 250V
Operating Temperature [C (F)]	-40...+105° (-40...+221°)
Enclosure Type Rating	NEMA 1, 3, 4, 6P and IEC IP68

Approximate Dimensions

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Receptacles, AC Micro

Male 6-Pin

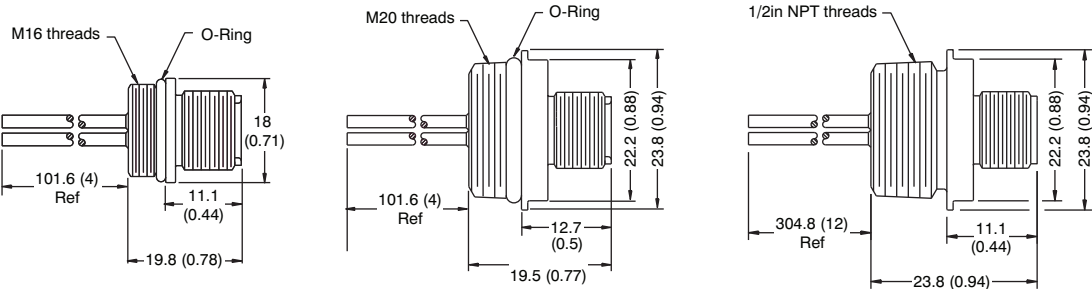


Specifications

Connector Shell Material	Nickel-plated brass
Connector Insert Material	Nylon
Contact Material	Gold-plated brass
Wire Insulation	Oil-resistant PVC, 22 AWG stranded copper, 300V, UL Recognized and CSA Certified
Operating Temperature [C (F)]	-40...+105° (-22...+221°)

Approximate Dimensions

Dimensions are shown in mm (in.). Dimensions are not intended to be used for installation purposes.



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