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Specification Sheets

Space Level Screening

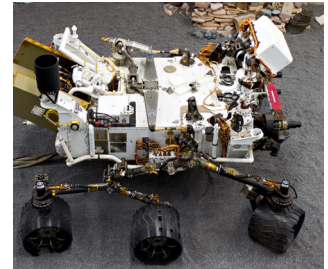
Per EEE-INST-002



Ordering Steps

- Step 1 - Choose a suitable Micro or Nano connector
- Step 2 - Choose a level of Space Screening
 - Level 1 - Mission Critical (Highest Reliability)
 - Level 2 - High Reliability
 - Level 3 - Standard Reliability
- Step 3 - Select any added outgassing processing needed.
- Step 4 - Specify chosen ORDERING CODES from table below. These codes should be used as separate line items on all quote Requests and Purchase Orders as required.

Ordering Codes (quoted as separate line items)		
Screening Level	Special Screening Only	Processing for Outgassing
Level 1 - Mission Critical	SPT1	All standard materials exhibit less than 1.0% TML without additional processing. Contact service for special requirements.
Level 2 - High Reliability	SPT2	
Level 3 - Standard Reliability	Standard	



Micro (.050" center)

Nano (.025" center)


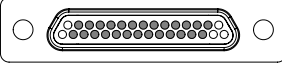
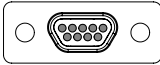
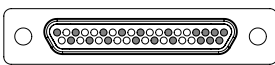
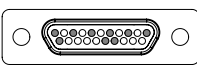



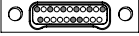
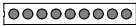









Inspection/Test	Micro (.050" center)		Nano (.025" center)	
	Level 1 Com'l/SCD	Level 2 Com'l/SCD	Level 1 Com'l/SCD	Level 2 Com'l/SCD
Visual	100%	100%	100%	100% 100%
Mechanical	2 (0)	2 (0)	2 (0)	2 (0)
Voltage Rating (DWV)	100%	2 (0)	100%	2 (0)
Insulation Resistance	2 (0)	2 (0)	2 (0)	2 (0)
Temperature Cycling	2 (0)	2 (0)	2 (0)	-
Low Level Contact Resistance	2 (0)	2 (0)	2 (0)	2 (0)
Mating/Unmating Force	2 (0)	-	2 (0)	-
Solderability/Resistance to heat (SMT & Thru-Hole only)	2 (0)	-	2 (0)	-

Specification Sheets

The Omnetics High-Speed Protocol Guide, based on extensive internal research, provides connector options for various high-speed signaling protocols. The high-speed signaling specifications for each protocol were scrutinized extensively to provide an optimal pinout and ensure that the connectors meet or exceed the performance requirements.

When necessary, measurements were taken on the Omnetics connectors and directly compared to commercially available connectors. In these cases, Omnetics connectors outperformed the commercial connectors, yielding lower loss values across the critical frequencies.

The pinouts for each available configuration are provided in the table below.

	Camera Link	Ethernet	HDMI	USB 3.0
Micro-D				
Nano-D				
Micro Strip				
Nano Strip				
Plastic Micro Circular				
Metal Micro Circular				
Plastic Nano Circular				
Metal Nano Circular				

MICRO 360[®] Plastic

Micro Circular Discrete Wire/Cable (Type WD/WC)



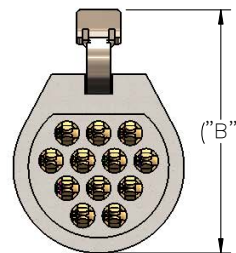
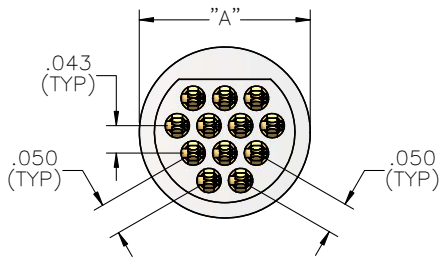
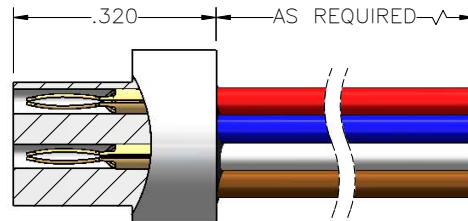
Electrical-Mechanical Specifications

- Operating Temperature: _____ -55°C to 125°C (200°C w/ High Temp Epoxy)
- Dielectric Withstand Voltage: _____ 600 VAC RMS @sea level
- Contact Resistance: _____ 26 milliohms(65 mV) Max @2.5 Amps
- Current Rating: _____ 3 Amps per contact
- Durability: _____ >2000 Mating Cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 50 g's with no discontinuities > 1 microsecond
- Vibration: _____ 20 g's with no discontinuities > 1 microsecond
- Thermal Vacuum Outgassing (Space Class): _____ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: _____ 3 oz (85 g) typical per contact

Material Specifications

- Contact: _____ Copper Alloy per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Wire: _____ 26 AWG (7-34) PTFE, color coded

Plastic - Pin - Wired MCP-WD

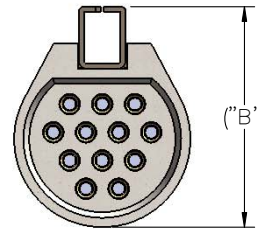
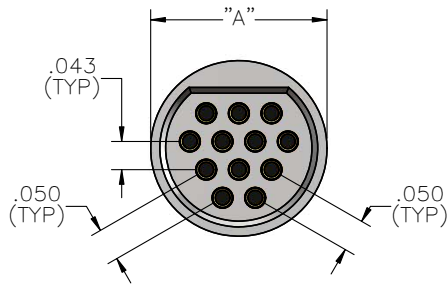
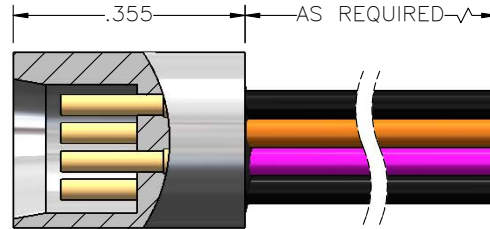


Part #	Contacts	English	Metric
		(IN)	(MM)
A22002-001	5	A	A
A22006-001	12	0.220	5.59
A22034-001	16	0.270	6.86
A22008-001	27	0.325	8.26
A22008-001	27	0.395	10.03
A22388-001	39	0.445	11.56

LATCHING OPTION

Part #	Contacts	English	Metric
		(IN)	(MM)
A22021-001	5	B	B
A22064-001	7	0.310	7.87
A22023-001	12	0.340	8.64
A22040-001	16	0.380	9.65
A22040-001	16	0.410	10.41
A22025-001	27	0.480	12.19

Plastic - Socket - Wired MCS-WD



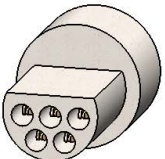
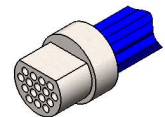
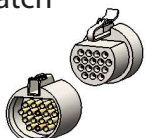
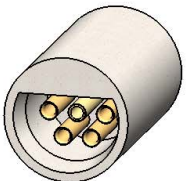



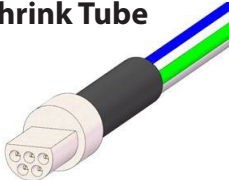


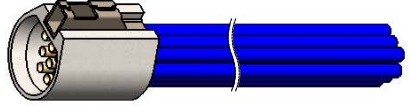


Part #	Contacts	English	Metric
		(IN)	(MM)
		A	A
A22003-001	5	0.220	5.59
A22007-001	12	0.270	6.86
A22035-001	16	0.325	8.26
A22009-001	27	0.395	10.03
A22396-001	39	0.445	11.56

LATCHING OPTION

Part #	Contacts	English	Metric
		(IN)	(MM)
		B	B
A22020-001	5	0.260	6.60
A22065-001	7	0.300	7.62
A22022-001	12	0.340	8.64
A22041-001	16	0.370	9.40
A22024-001	27	0.440	11.18

MICRO CIRCULAR DISCRETE WIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Options
MC	5	WD: Discrete Wire 	C Color Coded 
	7		
Male (P - Pin) 	12	WC: Cable 	LT Latch 
	16		
	27		
	39		
Female (S - Socket) 			CLIP Locking Clip 
			ST: Inline w/ Shrink Tube 
			
			RH RoHS COMPLIANT 
			

EXAMPLE:
MCS-12-WD-10.0-LT

MICRO 360[®] Plastic

Micro Circular Solder Cup (Type SS)



Electrical-Mechanical Specifications

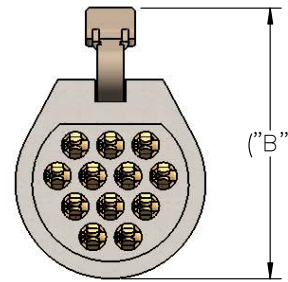
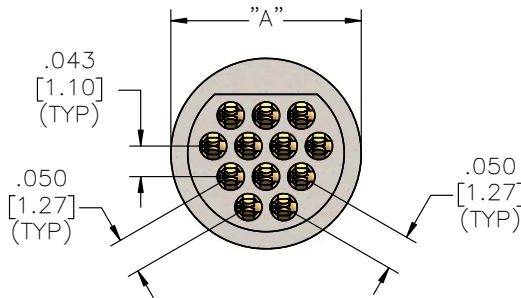
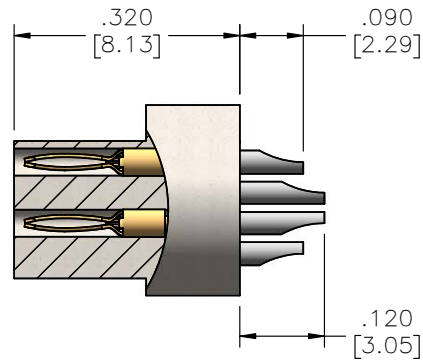
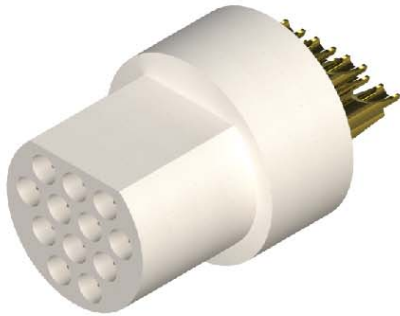
- Operating Temperature: _____ -55°C to 125°C (200°C w/ High Temp Epoxy)
- Dielectric Withstand Voltage: _____ 600 VAC RMS @sea level
- Contact Resistance: _____ 26 milliohms(65 mV) Max @2.5 Amps
- Current Rating: _____ 3 Amps per contact
- Durability: _____ >2000 Mating Cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 50 g's with no discontinuities > 1 microsecond
- Vibration: _____ 20 g's with no discontinuities > 1 microsecond
- Thermal Vacuum Outgassing (Space Class): _____ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: _____ 3 oz (85 g) typical per contact

Material Specifications

- Contact: _____ Copper Alloy per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519

Plastic - Pin - Solder Cup

MCP-SS



English (IN) **Metric (MM)**

Part #	Contacts	A	A
A22000-001	5	0.220	5.59
A22004-001	12	0.270	6.86
A22032-001	16	0.325	8.26
A22012-001	27	0.395	10.03
A22394-001	39	0.445	11.30

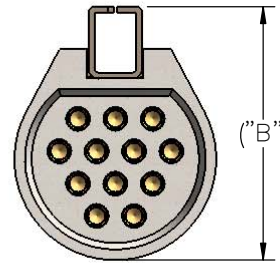
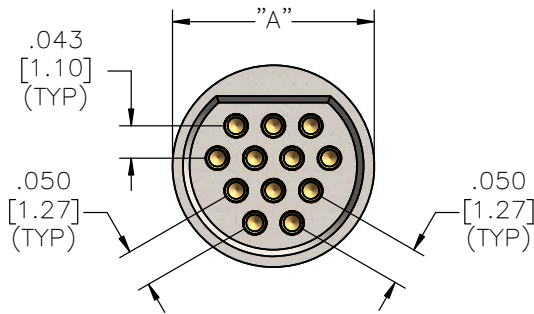
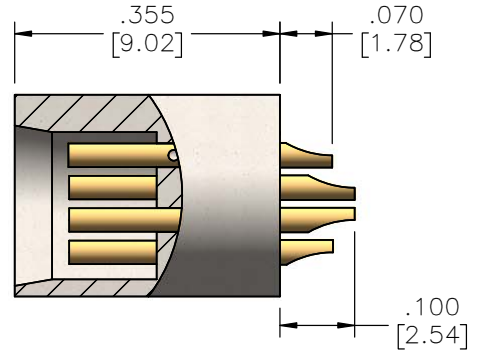
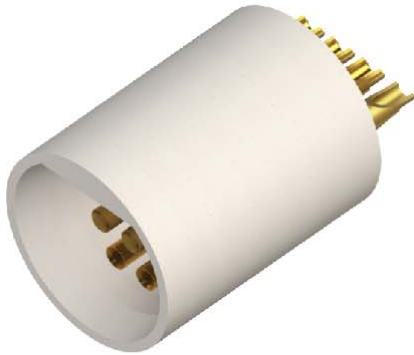
LATCHING OPTION

English (IN) **Metric (MM)**

Part #	Contacts	B	B
A22027-001	5	0.310	7.87
A22066-001	7	0.340	8.64
A22029-001	12	0.380	9.65
A22038-001	16	0.410	10.41
A22031-001	27	0.480	12.19

Plastic - Socket - Solder Cup

MCS-SS

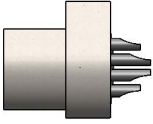
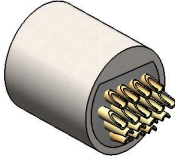



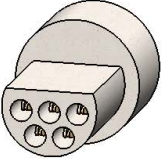
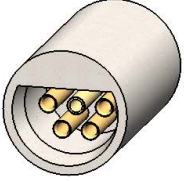
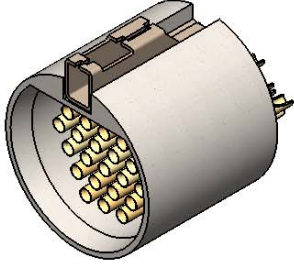


Part #	Contacts	English	Metric
		(IN)	(MM)
A22001-001	5	A	A
A22005-001	12	0.270	6.86
A22033-001	16	0.325	8.26
A22013-001	27	0.395	10.03
A22402-001	39	0.445	11.30

LATCHING OPTION

Part #	Contacts	English	Metric
		(IN)	(MM)
A22026-001	5	B	B
A22067-001	7	0.260	6.60
A22028-001	12	0.300	7.62
A22039-001	16	0.340	8.64
A22031-001	27	0.370	9.40
		0.440	11.18

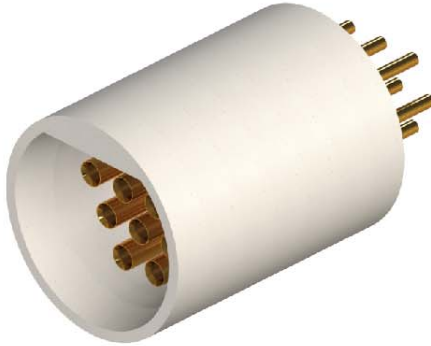
MICRO CIRCULAR SOLDER CUP (TYPE SS)

Series	# of Contacts	Termination Type	Options
MC	5	SS: Solder Cup  	LT Latch 
	7		
Male (P - Pin)	12		
	16		
	27		
	39		CLIP Locking Clip 
Female (S - Socket)			RH RoHS COMPLIANT 
			
			
			

EXAMPLE:
MCS-27-SS-LT

MICRO 360[®] Plastic

Micro Circular Straight Thru-Hole Tail (Type DD)



Electrical-Mechanical Specifications

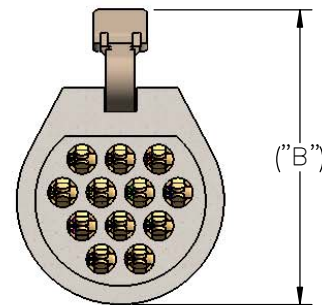
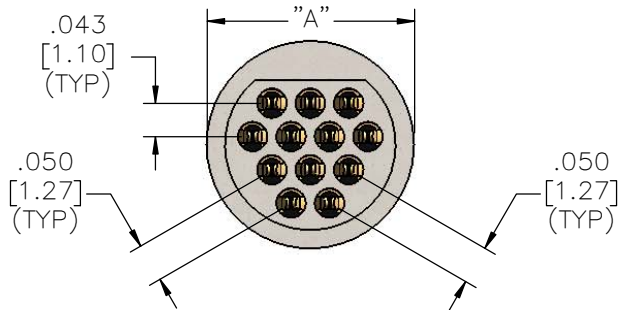
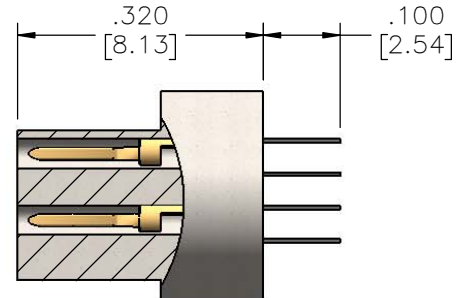
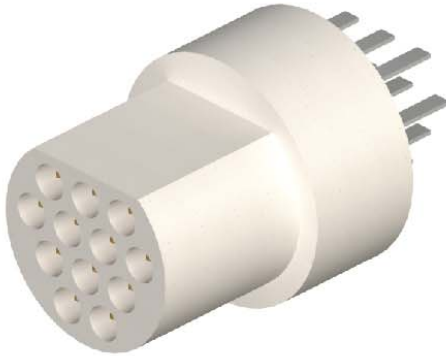
- Operating Temperature: _____ -55°C to 125°C (200°C w/ High Temp Epoxy)
- Dielectric Withstand Voltage: _____ 600 VAC RMS @sea level
- Contact Resistance: _____ 26 milliohms(65 mV) Max @2.5 Amps
- Current Rating: _____ 3 Amps per contact
- Durability: _____ >2000 Mating Cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 50 g's with no discontinuities > 1 microsecond
- Vibration: _____ 20 g's with no discontinuities > 1 microsecond
- Thermal Vacuum Outgassing (Space Class): _____ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: _____ 3 oz (85 g) typical per contact

Material Specifications

- Contact: _____ Copper Alloy per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519

Plastic - Pin - Straight Tail

MCP-DD



English (IN) Metric (MM)

Part #	Contacts	A	A
A22015-001	5	0.220	5.59
A22017-001	12	0.270	6.86
A22036-001	16	0.325	8.26
A22019-001	27	0.395	10.03
A22392-001	39	0.445	11.30

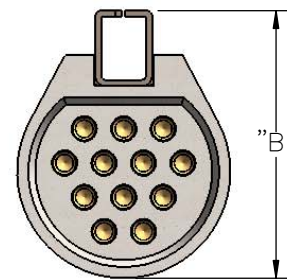
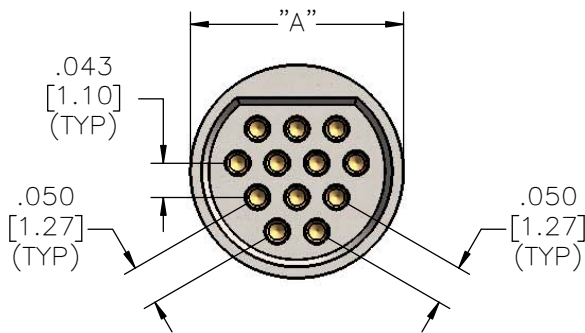
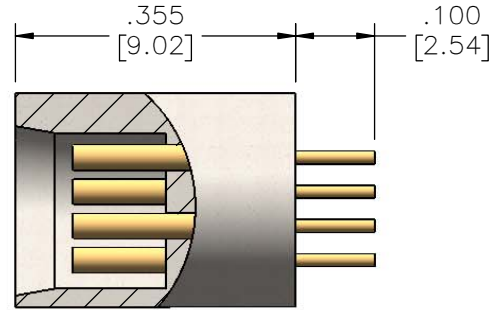
LATCHING OPTION

English (IN) Metric (MM)

Part #	Contacts	B	B
A22044-001	5	0.310	7.87
A22068-001	7	0.340	8.64
A22046-001	12	0.380	9.65
A22050-001	16	0.410	10.41
A22048-001	27	0.480	12.19

Plastic - Socket - Straight Tail

MCS-DD

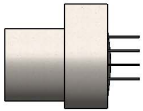

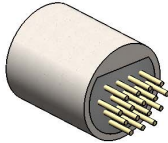



Part #	Contacts	English	Metric
		(IN)	(MM)
A22014-001	5	A	A
A22016-001	12	0.220	5.59
A22037-001	16	0.270	6.86
A22018-001	27	0.325	8.26
A22018-001	27	0.395	10.03
A22400-001	39	0.445	11.30

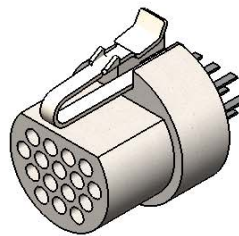
LATCHING OPTION

Part #	Contacts	English	Metric
		(IN)	(MM)
A22045-001	5	B	B
A22069-001	7	0.310	7.87
A22047-001	12	0.340	8.64
A22047-001	12	0.380	9.65
A22051-001	16	0.410	10.41
A22049-001	27	0.480	12.19

MICRO CIRCULAR STRAIGHT THRU-HOLE TAIL (TYPE DD)

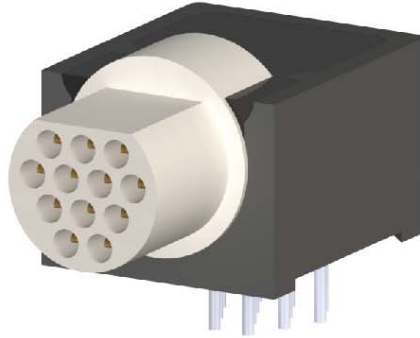
Series	# of Contacts	Termination Type	Options	
MC	5	DD: Straight Thru-Hole	LT	
	7		Latch	
Male (P - Pin)	12			
	16			
	27			
	39		RH RoHS COMPLIANT	
Female (S - Socket)				

EXAMPLE:
MCP-16-DD-LT



MICRO 360[®] Plastic

Micro Circular Right Angle Thru-Hole (Type RA)



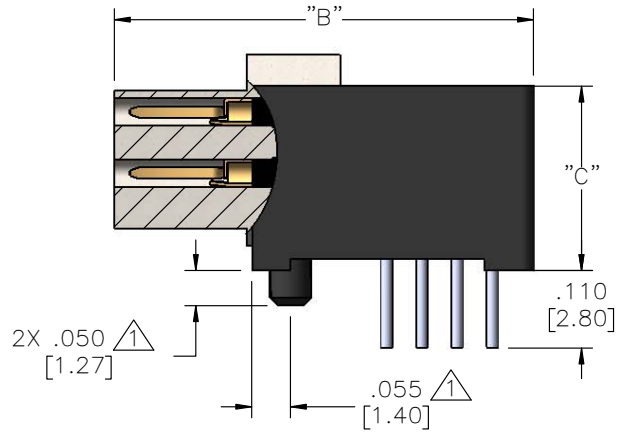
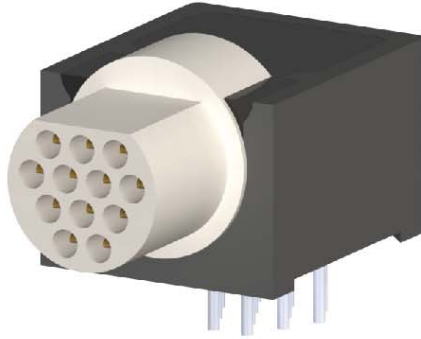
Electrical-Mechanical Specifications

- Operating Temperature: _____ -55°C to 125°C
- Dielectric Withstand Voltage: _____ 600 VAC RMS @sea level
- Contact Resistance: _____ 26 milliohms(65 mV) Max @2.5 Amps
- Current Rating: _____ 3 Amps per contact
- Durability: _____ >2000 Mating Cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 50 g's with no discontinuities > 1 microsecond
- Vibration: _____ 20 g's with no discontinuities > 1 microsecond
- Thermal Vacuum Outgassing (Space Class): _____ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: _____ 3 oz (85 g) typical per contact

Material Specifications

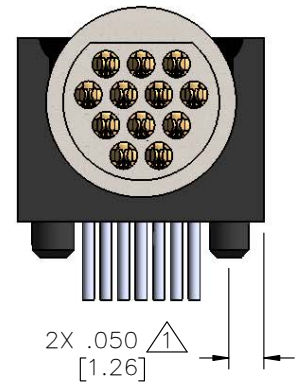
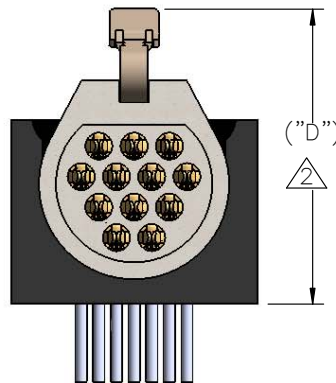
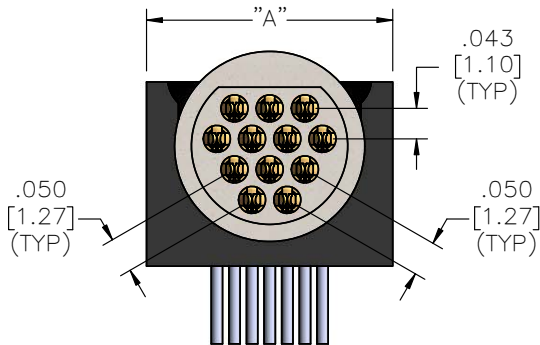
- Contact: _____ Copper Alloy per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519

Plastic - Pin - Right Angle Thru-Hole MCP-RA



△ 1 OPTIONAL MOUNTING POSTS

△ 2 OPTIONAL LATCH



English (IN)

Metric (MM)

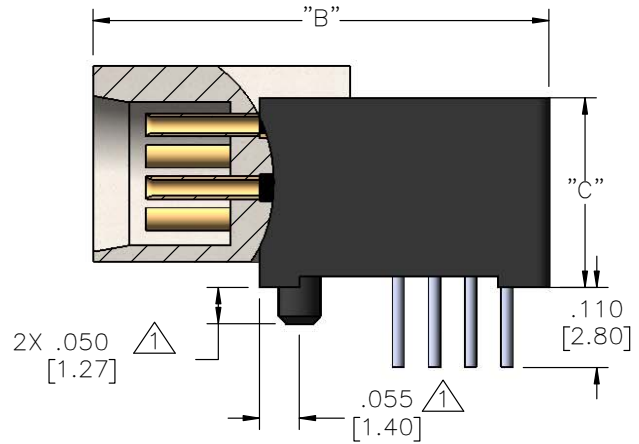
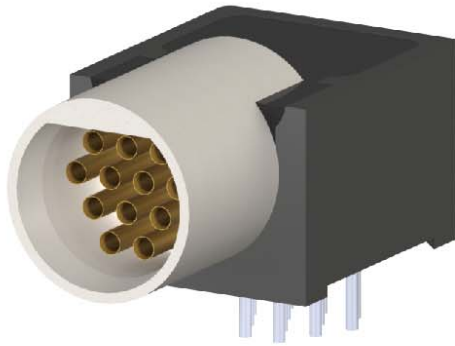
Part #	Contacts	A	B	C	A	B	C
A22052-001	5	0.300	0.495	0.232	7.62	12.57	5.89
A22053-001	12	0.350	0.595	0.262	8.89	15.11	6.65
A22054-001	16	0.411		0.294	10.44		7.47

LATCHING OPTION

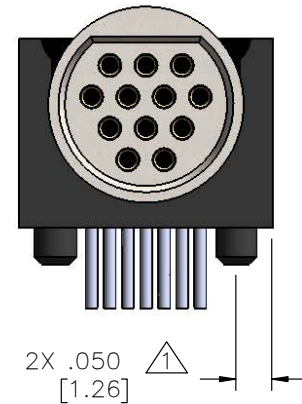
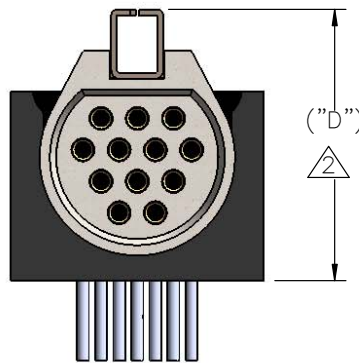
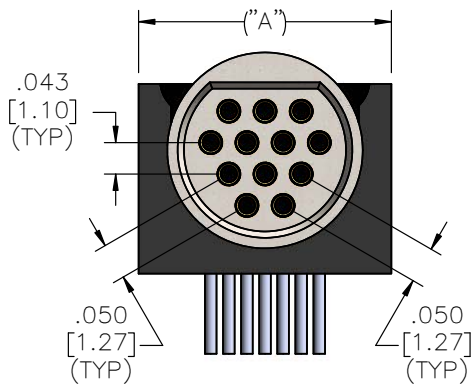
English (IN) **Metric (MM)**

Part #	Contacts	D	D
A22056-001	5	0.340	8.64
A22058-001	12	0.420	10.67
A22353-001	16	0.450	11.43

Plastic - Socket - Right Angle Thru-Hole MCS-RA



- $\triangle 1$ OPTIONAL MOUNTING POSTS
- $\triangle 2$ OPTIONAL LATCH BOX

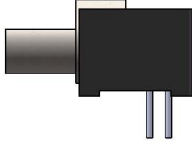
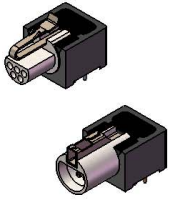
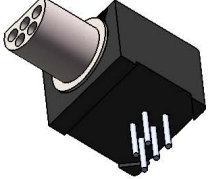




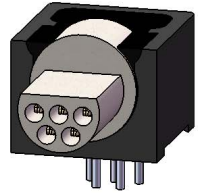
Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A22060-001	5	0.300	0.530	0.232	7.62	13.46	5.89
A22061-001	12	0.350	0.630	0.262	8.89	16.00	6.65
A22354-001	16	0.411		0.294	10.44		7.47

LATCHING OPTION

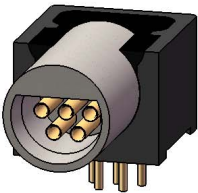
Part #	Contacts	English (IN)	Metric (MM)
		D	D
A22062-001	5	0.300	7.62
A22063-001	12	0.370	9.40
A22355-001	16	0.400	10.16

MICRO CIRCULAR RIGHT ANGLE THRU-HOLE (TYPE RA)

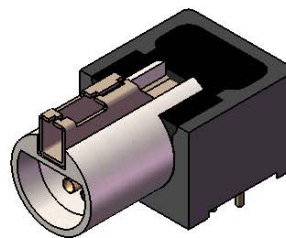
Series	# of Contacts	Termination Type	Options
MC	5 12 16	RA: Right Angle Thru-Hole	LT Latch
Male (P - Pin)			
Female (S - Socket)			MP Mounting Posts 
			RH RoHS COMPLIANT 



Female
(S - Socket)



EXAMPLE:
MCS-05-RA-LT



MICRO 360[®] Metal

Micro Circular Ratcheting

Optional IP68 rating



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-83513
- Contact Resistance: _____ 26 Milliohm Max (65mV Drop Max) @ 2.5 Amps per MIL-DTL-83513
- Current Rating: _____ 3 Amps per MIL-DTL-83513
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ >2000 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 50 g's with no discontinuities > 1 microsecond
- Vibration: _____ 20 g's with no discontinuities > 1 microsecond
- Mating/Unmating Force: _____ 3 oz (85 g) typical per contact
- Thermal Vacuum Outgassing (Space Class): _____ NASA SP-R-0022

Material Specifications

- Contact: _____ Copper Alloy Per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 26 AWG, (7-34) Tinned Copper, PFA Color Coded, Black Polyurethane Jacket

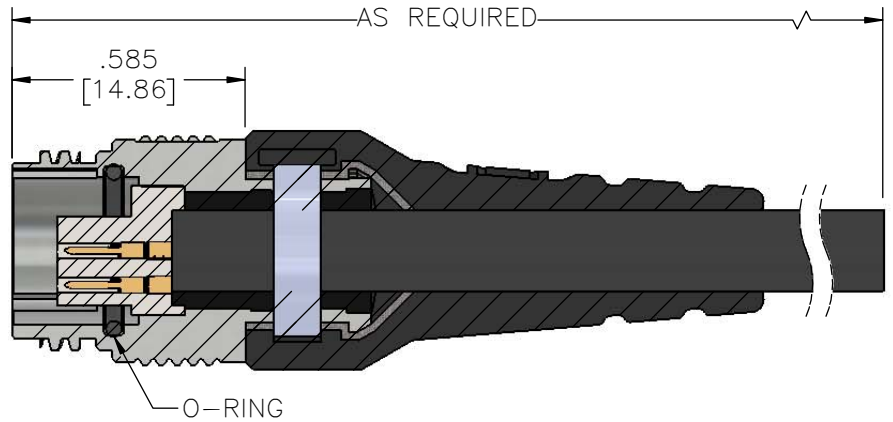
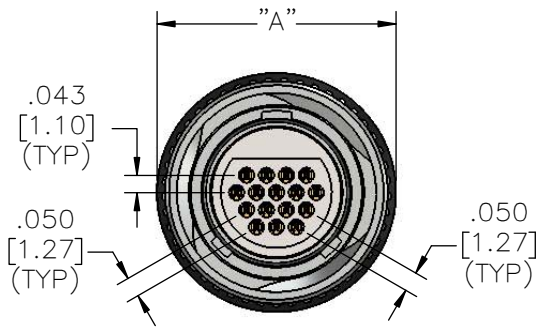
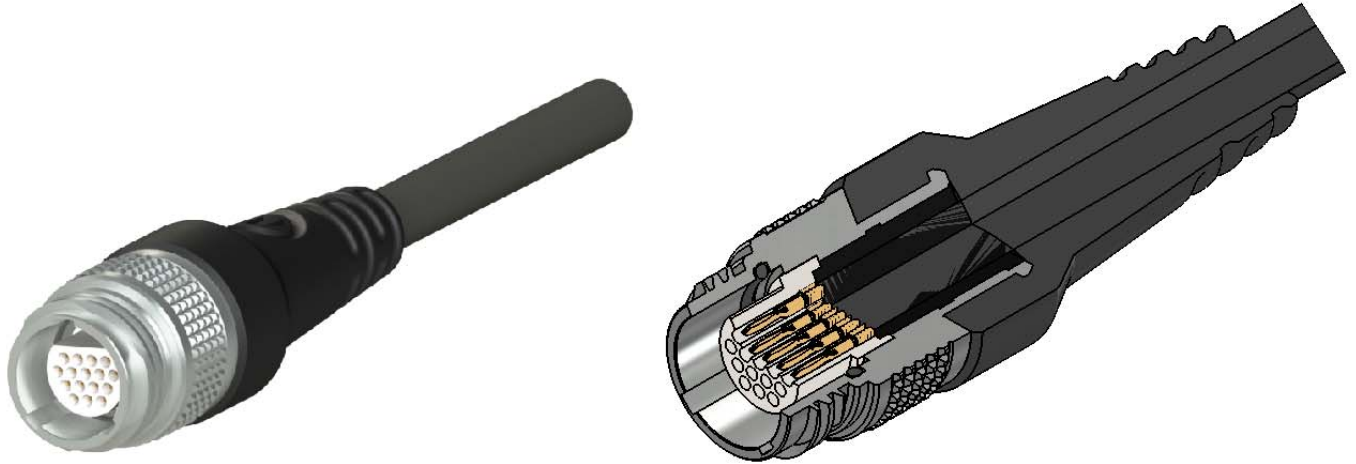
Shell Options

- Aluminum 6061: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*, Passivated per SAE-AMS-2700

* less resistance to salt spray test.

Metal - Pin - Ratcheting - Cabled - Inline - IP68

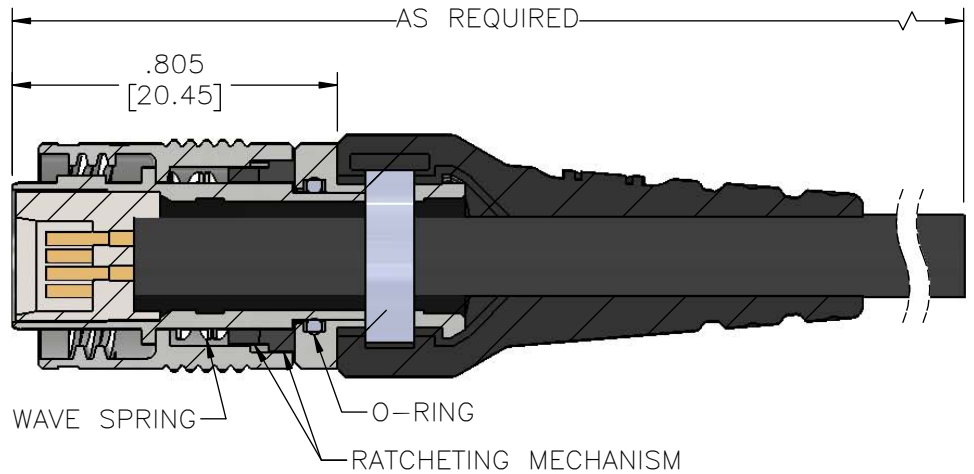
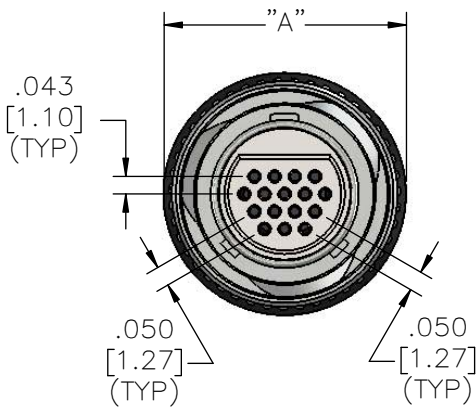
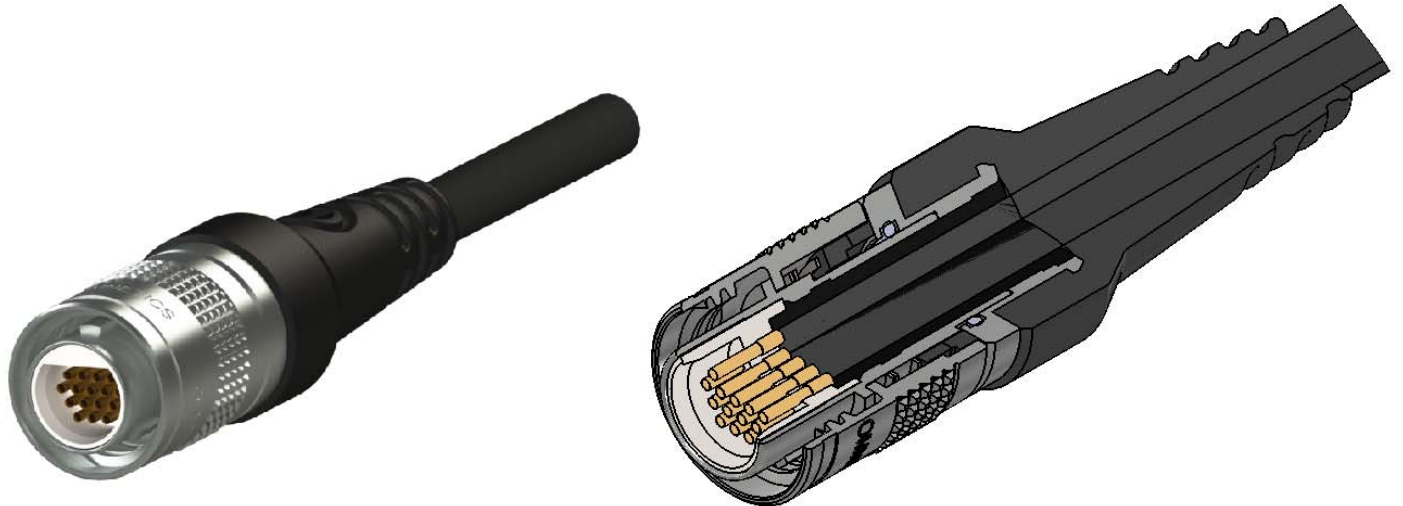
RMCP-WC-OM-IS-IP68



English (IN) Metric (MM)

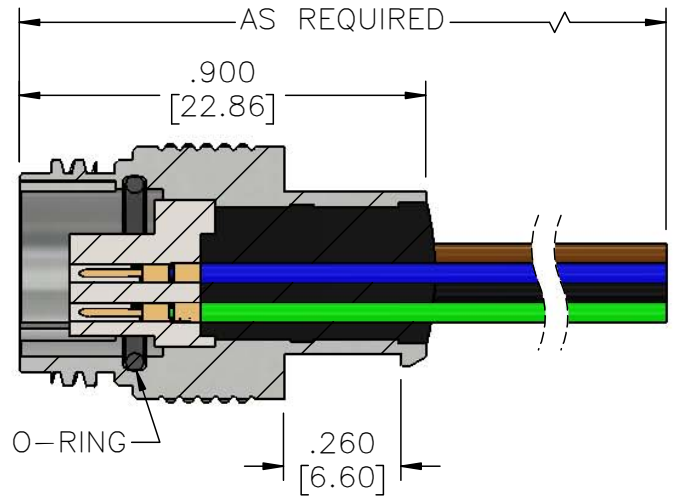
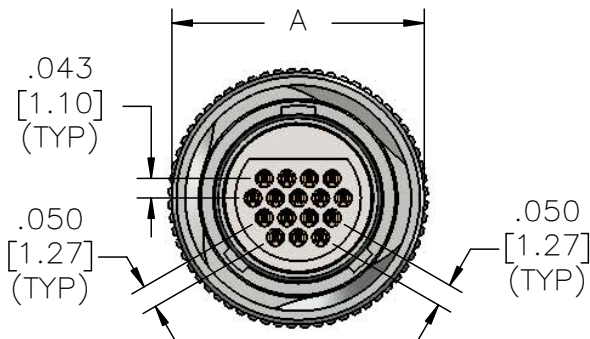
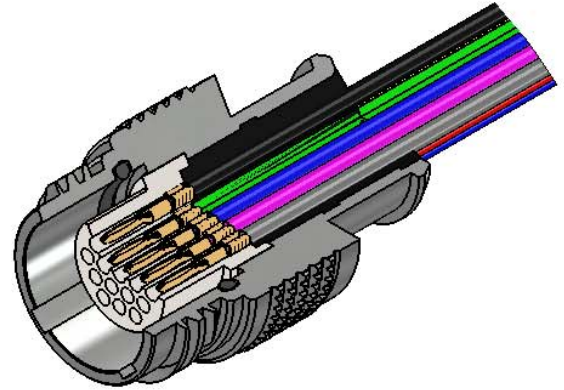
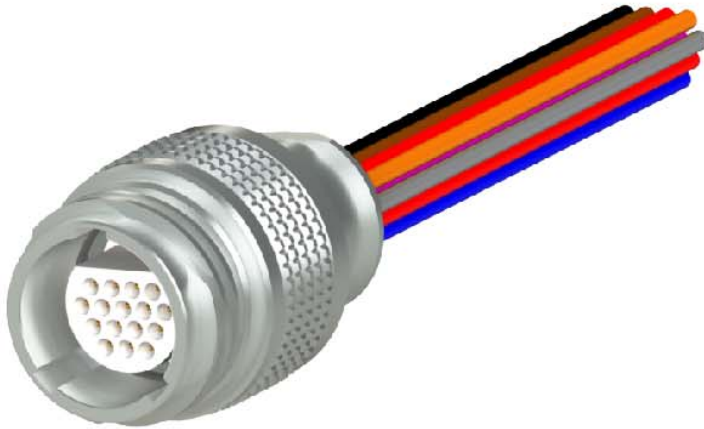
Part #	Contacts	A	A
A22493-001	5	0.510	12.95
A22500-001	12	0.550	13.97
A22507-001	16	0.600	15.24
A22514-001	27	0.670	17.02
A22557-001	39	0.780	19.81

**Metal - Socket - Ratcheting -
Cabled - Inline - IP68**
RMCS-WC-OM-IS-IP68



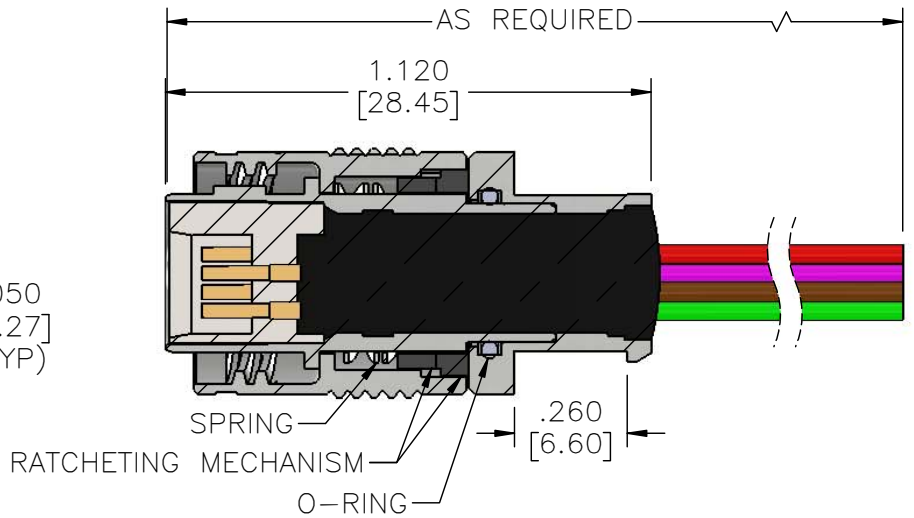
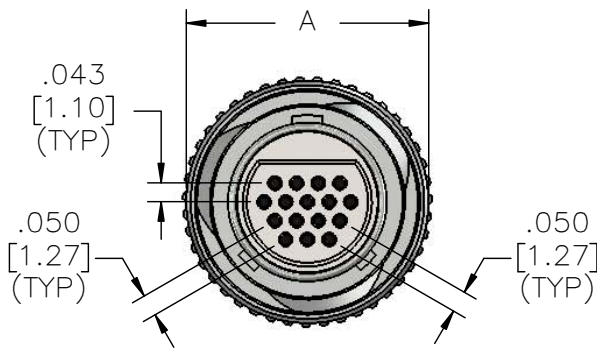
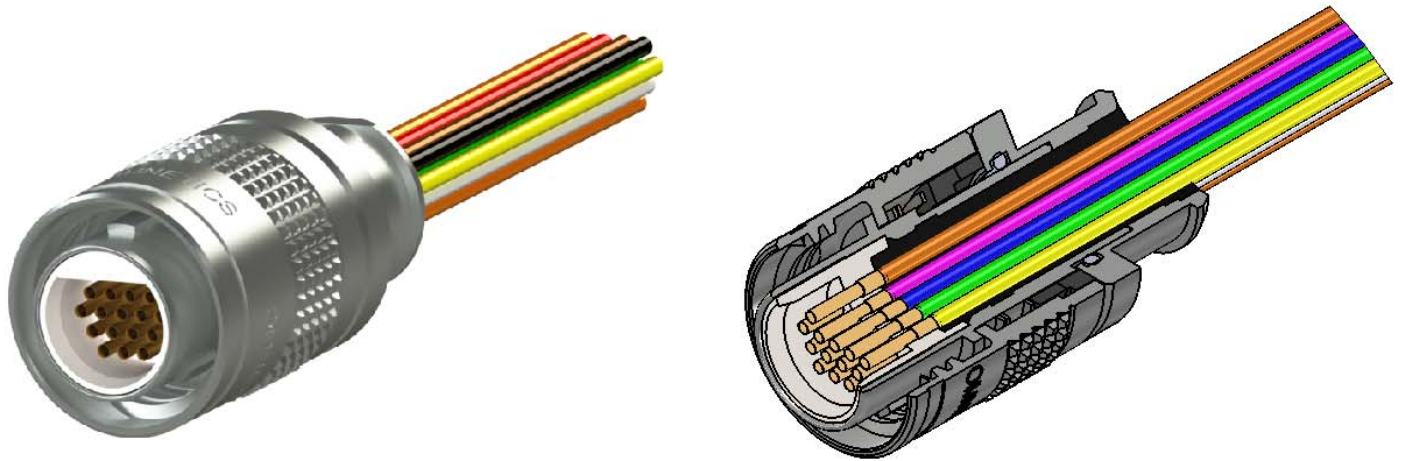
Part #	Contacts	English	Metric
		(IN)	(MM)
A22492-001	5	A	A
A22499-001	12	0.510	12.95
A22506-001	16	0.550	13.97
A22513-001	27	0.600	15.24
A22559-001	39	0.670	17.02
		0.780	19.81

Metal - Pin - Ratcheting - Wired RMCP-WD



Part #	Contacts	English	Metric
		(IN)	(MM)
A22491-001	5	A	A
A22498-001	12	0.470	11.94
A22505-001	16	0.520	13.21
A22512-001	27	0.570	14.48
A22556-001	39	0.640	16.26
		0.710	18.03

Metal - Socket - Ratcheting - Wired RMCS-WD



Part #	Contacts	English	Metric
		(IN)	(MM)
A22490-001	5	A	A
A22497-001	12	0.470	11.94
A22504-001	16	0.520	13.21
A22511-001	27	0.570	14.48
A22558-001	39	0.640	16.26

MICRO CIRCULAR RATCHETING

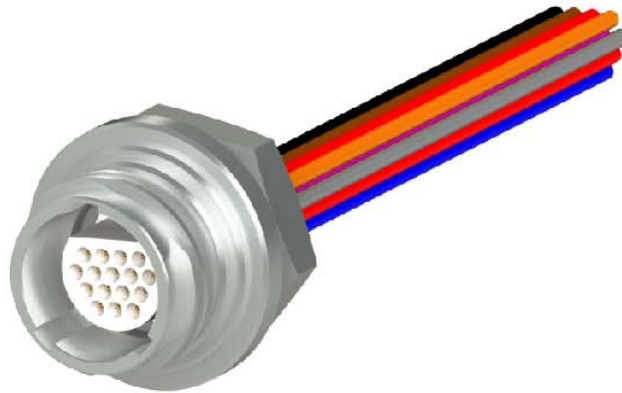
Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options, cont.
RMC Male (P - Pin)	5	WD: Discrete Lead Wire	Standard N: Nickel Plated Aluminum	SR: Inline Shell w/ Strain Relief	C Color Coded
	12				
Female (S - Socket)	16	WC: Cable	Non-Standard Options BN: Black Nickel Plated Aluminum	ST: Inline Shell w/ Shrink Tube	OM Inline Shell w/ Overmold
	27				
	39	Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 26 AWG Max	P: Passivated Stainless Steel	IS: Inline Shell (Shell only)	OR O-Ring
			OX: Black Oxide Finished Steel		IP68
					RH RoHS COMPLIANT

EXAMPLE:
RMCS-16-WC-18.0-C-IS-N-OM-IP68



MICRO 360[®] Metal

Micro Circular Ratcheting Panel Mount *Optional IP68 Rating*



Electrical-Mechanical Specifications

- Operating Temperature: _____ -55°C to 125°C
- Dielectric Withstand Voltage: _____ 600 VAC RMS @sea level
- Contact Resistance: _____ 26 milliohms(65 mV) Max @2.5 Amps
- Current Rating: _____ 3 Amps per contact
- Durability: _____ 500 Mating Cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 50 g's with no discontinuities > 1 microsecond
- Vibration: _____ 20 g's with no discontinuities > 1 microsecond
- Thermal Vacuum Outgassing (Space Class): _____ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: _____ 3 oz (85 g) per contact

Material Specifications

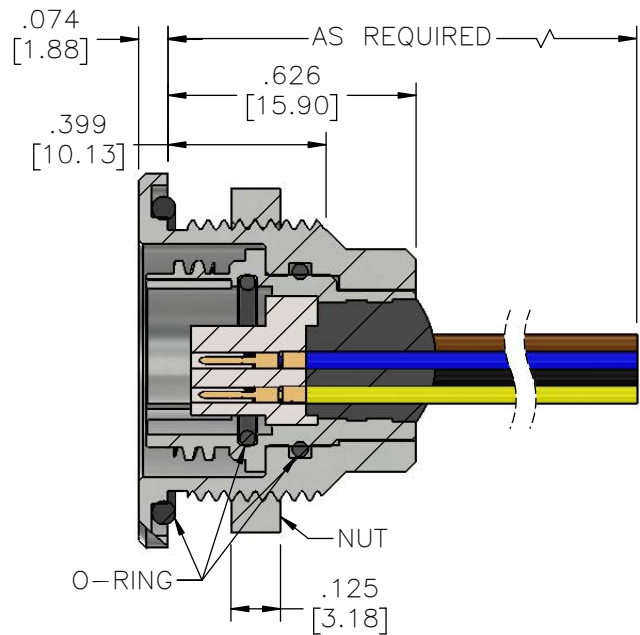
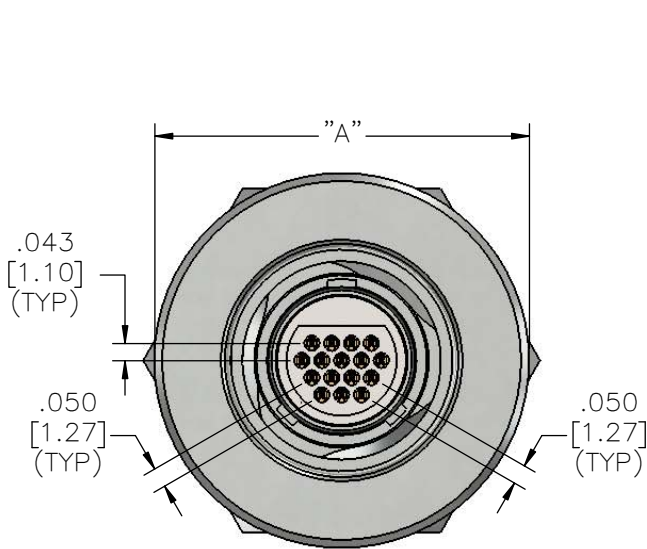
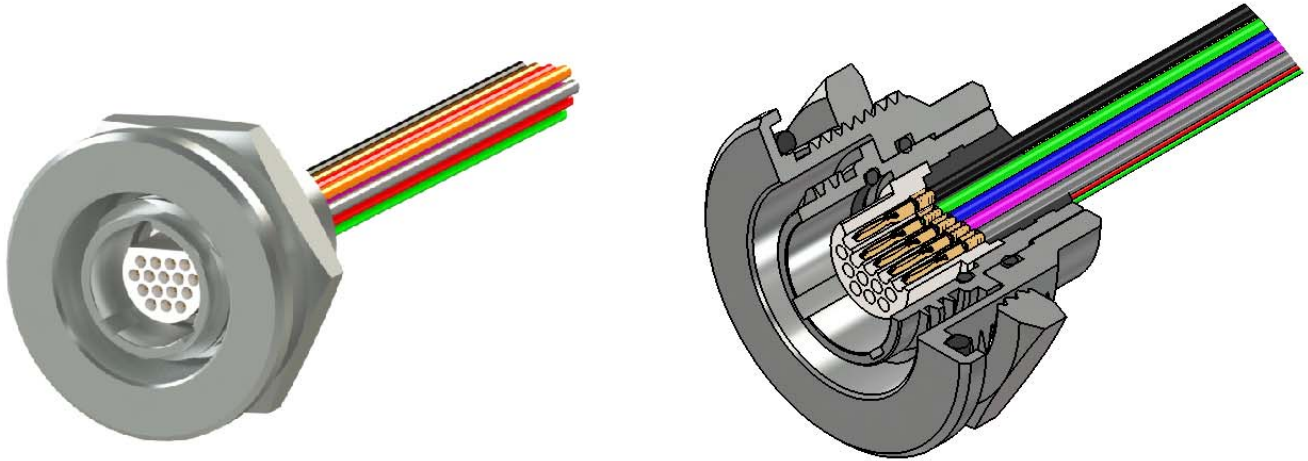
- Contact: _____ Copper Alloy per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Wire: _____ 26 AWG (7-34) PTFE, color coded

Shell Options

- Brass Alloy 360 1/2 Hard: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*,
Passivated per SAE-AMS-2700

* less resistance to salt spray test.

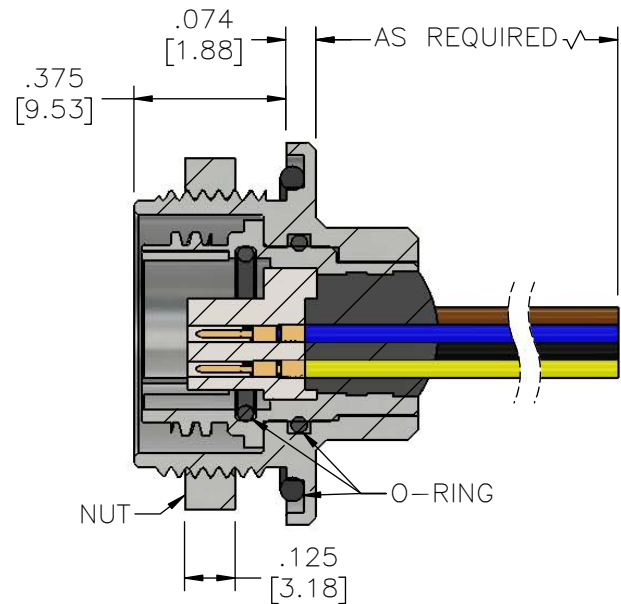
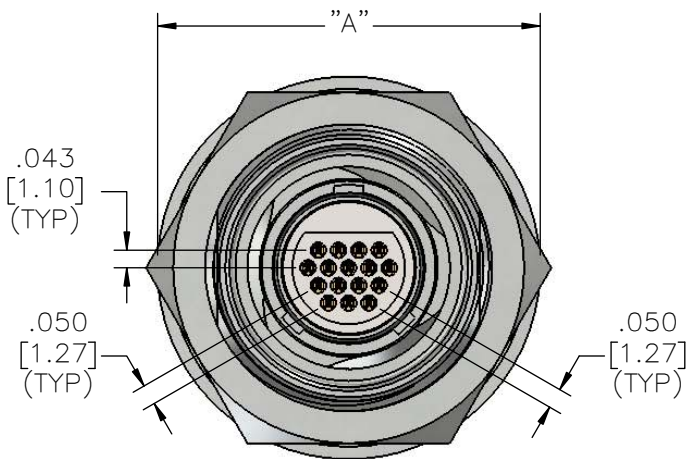
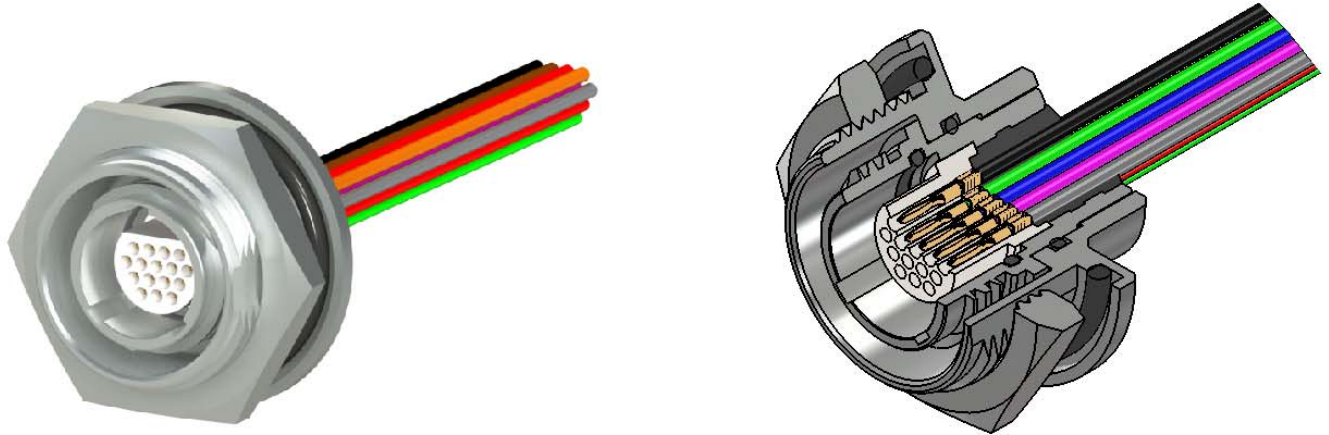
Metal - Pin - Ratcheting - Front Panel RMCP-FP



Part #	Contacts	English	Metric
		(IN)	(MM)
A22495-001	5	A	A
A22502-001	12	0.820	20.83
A22509-001	16	0.950	24.13
A22516-001	27	1.020	25.91
A22553-001	39	1.130	28.70

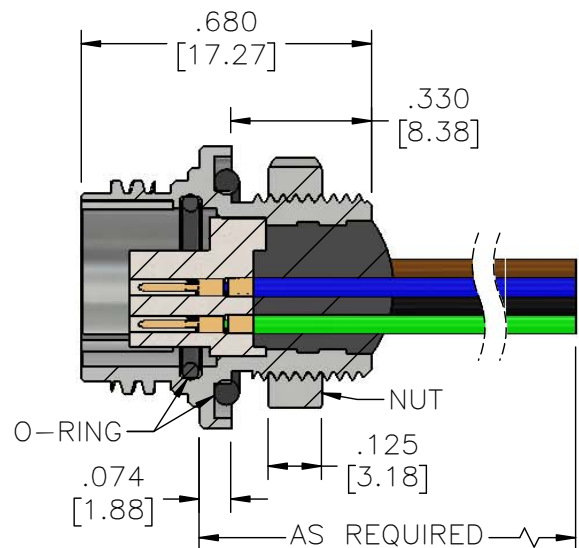
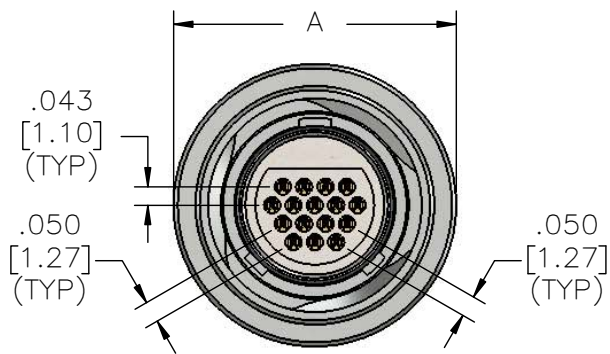
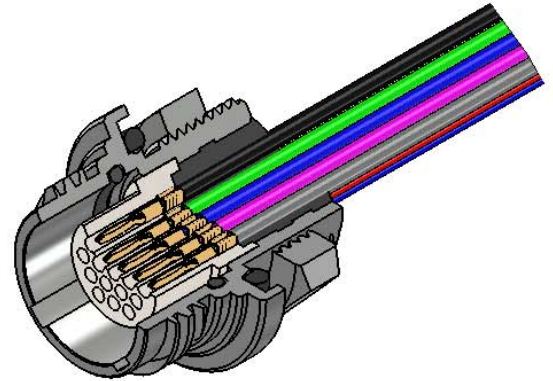
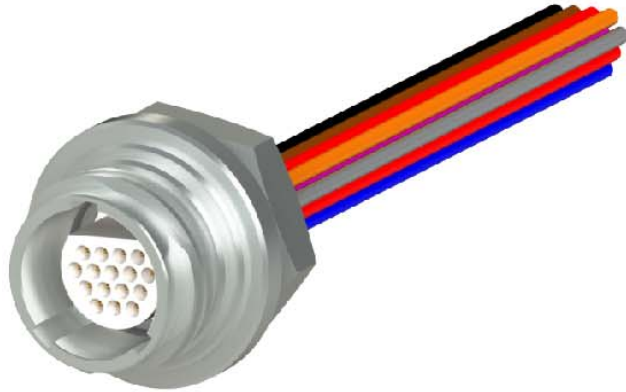
Metal - Pin - Ratcheting - Rear Panel

RMCP-RP



Part #	Contacts	English	Metric
		(IN)	(MM)
A22496-001	5	A	A
A22503-001	12	0.820	20.83
A22510-001	16	0.900	22.86
A22517-001	27	0.950	24.13
A22554-001	39	1.020	25.91
		1.130	28.70

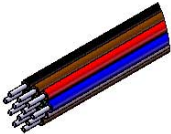













Metal - Pin - Ratcheting - Protruding Panel RMCP-PP



English (IN) **Metric (MM)**

Part #	Contacts	A	A
A22494-001	5	0.528	13.41
A22501-001	12	0.578	14.68
A22508-001	16	0.662	16.81
A22515-001	27	0.732	18.59
A22555-001	39	0.810	20.57

RATCHETING MICRO CIRCULAR PANEL MOUNT

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options
RMC	5	WD: Discrete Lead Wire 	Standard N: Nickel Plated Aluminum 	FP: Front Panel Mount (Male Only) 	C Color Coded 
	12				
Male (P - Pin)	16	WC: Cable 	Non-Standard Options BN: Black Nickel Plated Aluminum 	RP: Rear Panel Mount (Male Only) 	OR O-Ring 
	27				
	39				
Female (S - Socket)		Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 26 AWG Max	P: Passivated Stainless Steel 	PP: Protruding Panel Mount (Male Only) 	IP68 
			OX: Black Oxide Finished Steel 		RH RoHS COMPLIANT 
					

EXAMPLE:
RMCP-16-WD-10.0-C-FP-N-OR

MICRO 360[®] Metal

Micro Circular Threaded

Optional IP68 Rating



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-83513
- Contact Resistance: _____ 26 Milliohm Max (65mV Drop Max) @ 2.5 Amps per MIL-DTL-83513
- Current Rating: _____ 3 Amps per MIL-DTL-83513
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ >2000 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 50 g's with no discontinuities > 1 microsecond
- Vibration: _____ 20 g's with no discontinuities > 1 microsecond
- Mating/Unmating Force: _____ 3 oz (85 g) typical per contact
- Thermal Vacuum Outgassing (Space Class): _____ NASA SP-R-0022

Material Specifications

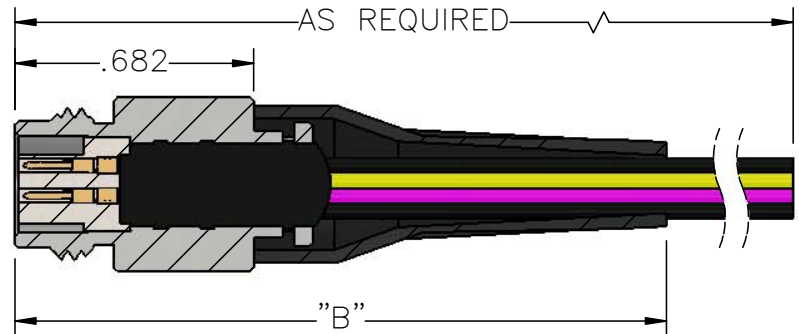
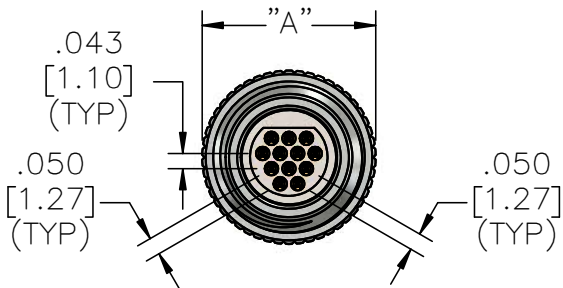
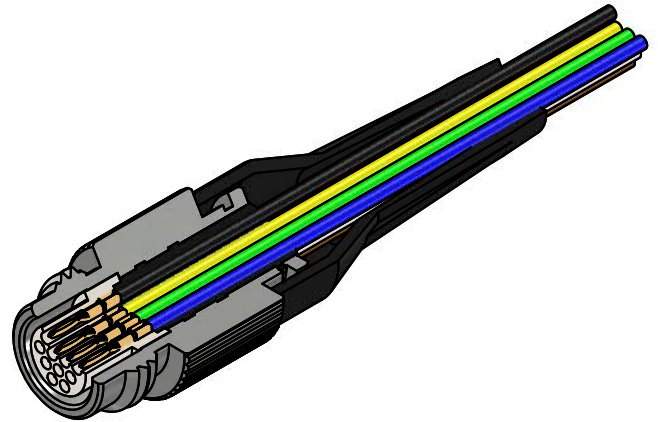
- Contact: _____ Copper Alloy Per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 26 AWG, (7-34) Tinned Copper, PFA color coded, Black
Polyurethane Jacket
- Wire: _____ 26 AWG (7-34) PTFE, color coded

Shell Options

- Brass Alloy 360 1/2 Hard: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*, Passivated per SAE-AMS-2700

* less resistance to salt spray test.

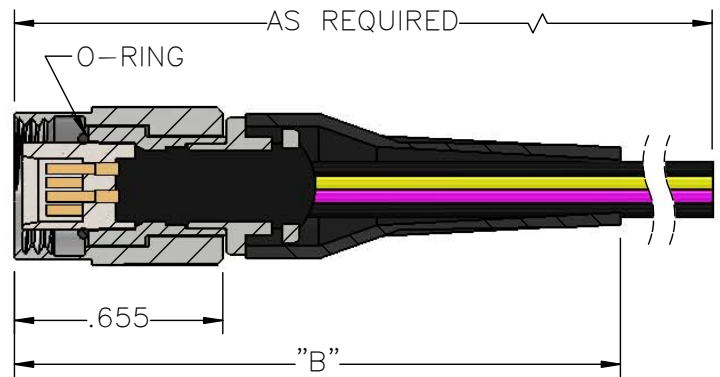
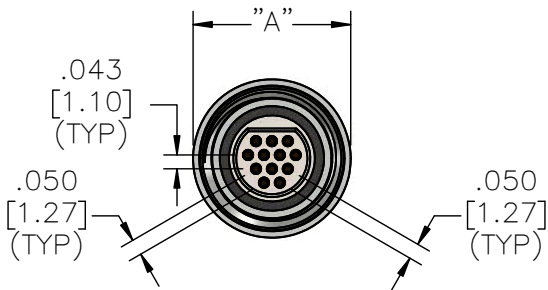
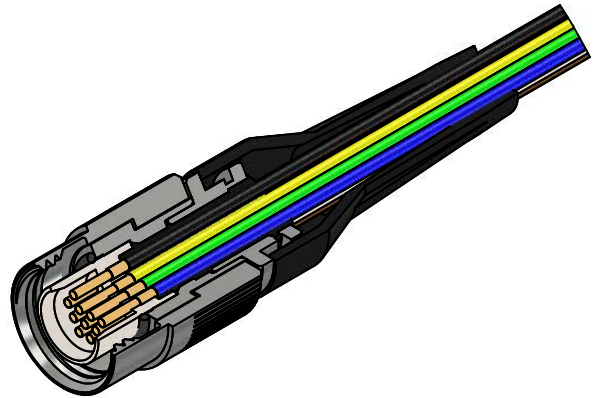
**Metal - Pin - Threaded -
Wired - Inline - Strain Relief**
MMCP-WD-IS-SR



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A22368-001	5	0.420	1.900	10.67	48.26
A22373-001	12	0.500		12.70	
A22378-001	16	0.560		14.22	
A22383-001	27	0.610	2.100	15.49	53.34
A22486-001	39	0.650	2.300	16.51	58.42

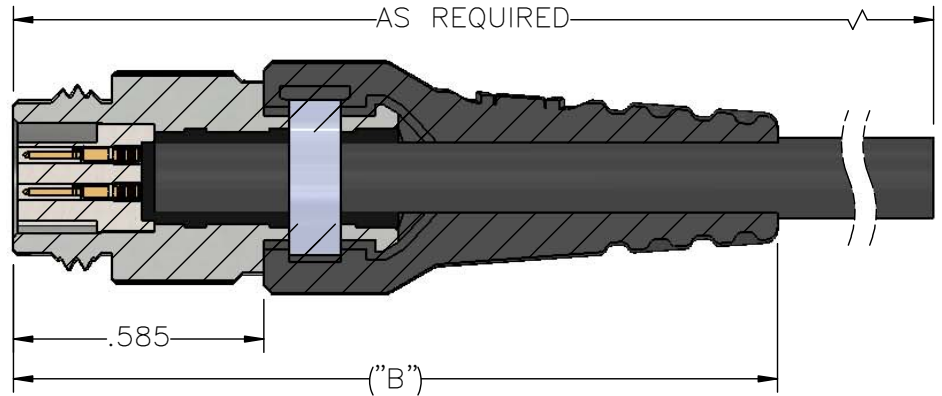
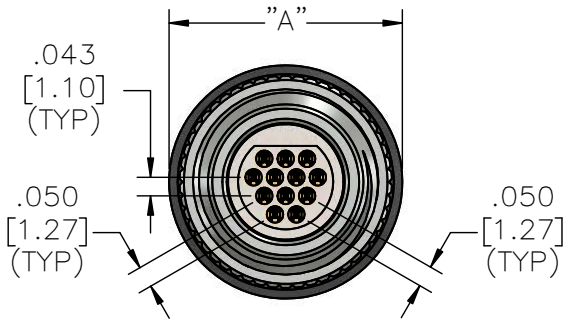
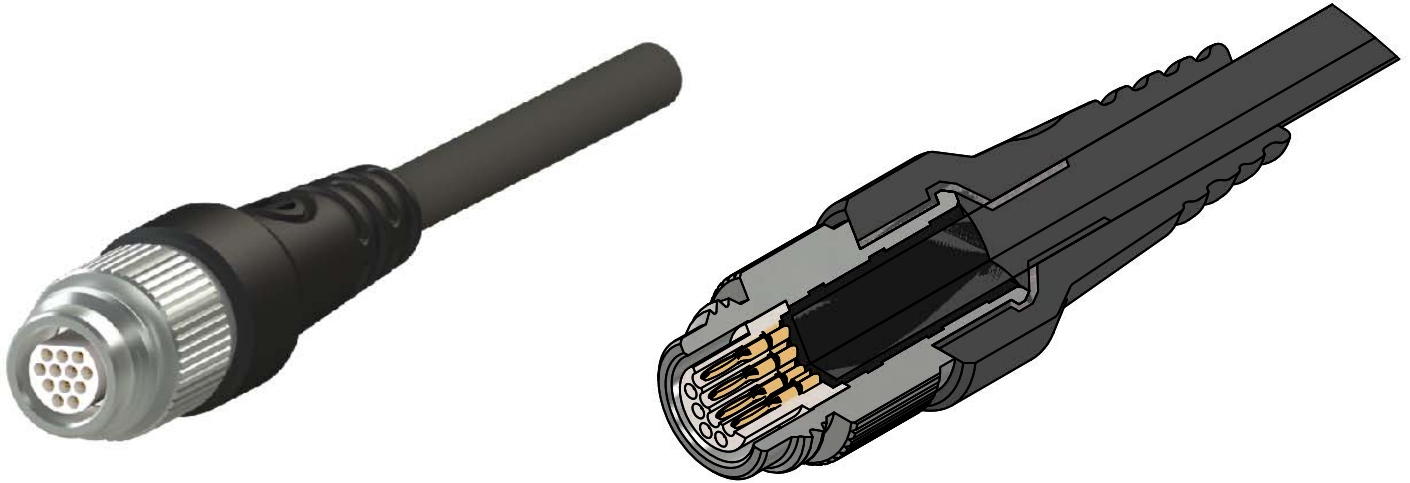
Metal - Socket - Threaded - Wired - Inline - Strain Relief

MMCS-WD-IS-SR



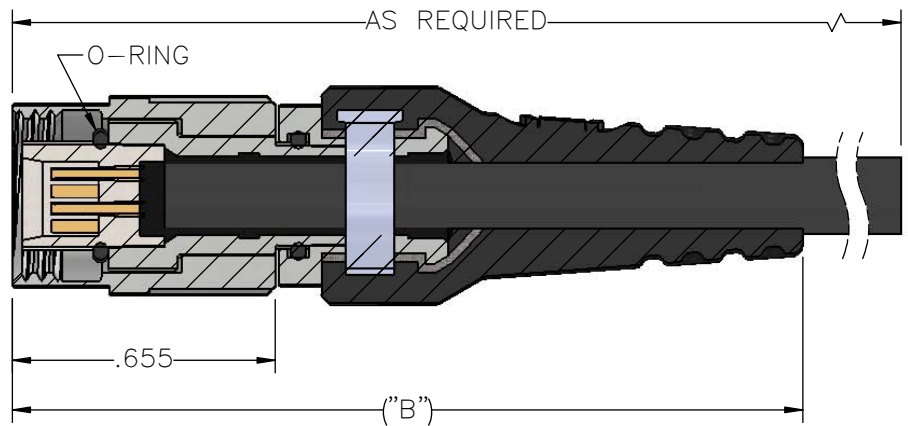
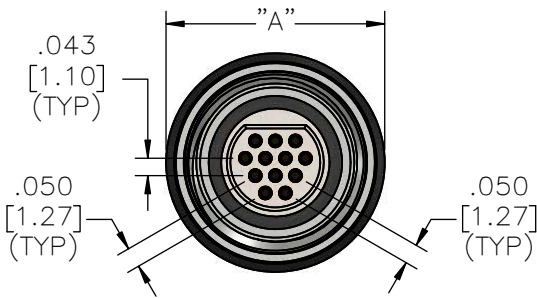
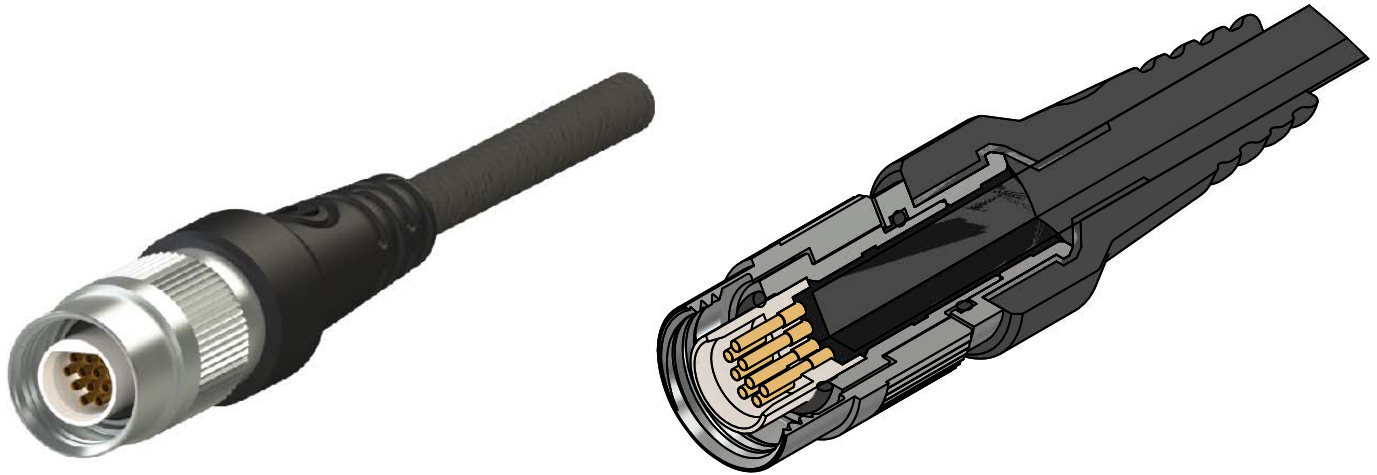
Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A22372-001	5	0.420	1.900	10.67	48.26
A22377-001	12	0.500		12.70	
A22382-001	16	0.560		14.22	
A22387-001	27	0.610	2.100	15.49	53.34
A22488-001	39	0.680	2.400	17.27	60.96

**Metal - Pin - Threaded -
Cabled - Overmold - Inline
MMCP-WC-OM-IS**



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A22336-001	5	0.510	1.740	12.95	44.20
A22334-001	12	0.550	1.790	13.97	45.47
A22332-001	16	0.600	1.890	15.24	48.01
A22330-001	27	0.670	2.080	17.02	52.83
A22487-001	39	0.720		18.29	

**Metal - Socket - Threaded -
Cabled - Overmold - Inline**
MMCS-WC-OM-IS



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A22335-001	5	0.510	1.920	12.95	48.77
A22333-001	12	0.550	1.970	13.97	50.04
A22331-001	16	0.600	2.070	15.24	52.58
A22329-001	27	0.670	2.160	17.02	54.86
A22489-001	39	0.720		18.29	

METAL MICRO CIRCULAR THREADED DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options, cont.
MMC	5	WD: Discrete Lead Wire 	Standard N: Nickel Plated Brass 	IS: Inline Shell (shell only) 	C Color Coded 
	12				
Male (P - Pin)	16	WC: Cable 	Non-Standard Options BN: Black Nickel Plated Brass 	Options SR: Inline Shell w/ Strain Relief 	OR O-Ring 
	27				
	39				
Female (S - Socket)		Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 26 AWG Max	P: Passivated Stainless Steel 	ST: Inline Shell w/ Shrink Tube 	IP68 
			OX: Black Oxide Finished Steel 		RH RoHS COMPLIANT 
					OM Overmold (Contact Omnetics for Overmold Information & Availability) 
EXAMPLE: MMCS-12-WD-10.0-C-IS-N-SR-OR					

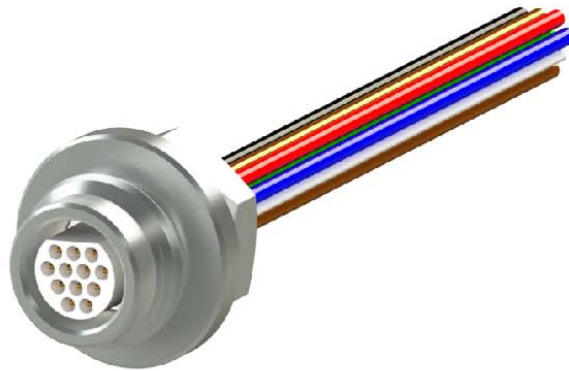
METAL MICRO CIRCULAR KITS

BODY SIZES	CONTACT TYPE	KIT CONTENTS	
<u>BODY SIZES</u> 05, 12, 16 OR 27	<u>GENDER</u> MALE OR FEMALE	<u>CONTENTS</u> WITH OR WITHOUT SOLDER CUP CONNECTOR	
05 	MALE 	WITH CONNECTOR: A22110-001 W/O CONNECTOR: A22100-001	
	FEMALE 	WITH CONNECTOR: A22111-001 W/O CONNECTOR: A22101-001	
	12 	MALE 	WITH CONNECTOR: A22112-001 W/O CONNECTOR: A22104-001
		FEMALE 	WITH CONNECTOR: A22113-001 W/O CONNECTOR: A22105-001
16 	MALE 	WITH CONNECTOR: A22114-001 W/O CONNECTOR: A22108-001	
	FEMALE 	WITH CONNECTOR: A22115-001 W/O CONNECTOR: A22109-001	
	27 	MALE 	WITH CONNECTOR: A22116-001 W/O CONNECTOR: A22106-001
		FEMALE 	WITH CONNECTOR: A22117-001 W/O CONNECTOR: A22107-001
MMCP KIT W/O CONNECTOR CONTAINS: (1) METAL SHELL (1) STRAIN RELIEF (1) ASSEMBLY INSTRUCTION SHEET			
MMCP KIT W/ CONNECTOR CONTAINS: (1) CONNECTOR W/ SOLDER CUPS (1) METAL SHELL (1) STRAIN RELIEF (1) ASSEMBLY INSTRUCTION SHEET			
MMCS KIT W/O CONNECTOR CONTAINS: (1) O-RING (1) METAL SHELL ASSEMBLY (1) STRAIN RELIEF (1) ASSEMBLY INSTRUCTION SHEET			
MMCS KIT W/ CONNECTOR CONTAINS: (1) CONNECTOR W/ SOLDER CUPS (1) O-RING (1) METAL SHELL ASSEMBLY (1) STRAIN RELIEF (1) ASSEMBLY INSTRUCTION SHEET			

MICRO 360[®] Metal

Micro Circular Threaded Panel Mount

Optional IP68 rating



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-83513
- Contact Resistance: _____ 26 Milliohm Max (65mV Drop Max) @ 2.5 Amps per MIL-DTL-83513
- Current Rating: _____ 3 Amps per MIL-DTL-83513
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ >2000 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 50 g's with no discontinuities > 1 microsecond
- Vibration: _____ 20 g's with no discontinuities > 1 microsecond
- Mating/Unmating Force: _____ 3 oz (85 g) typical per contact
- Thermal Vacuum Outgassing (Space Class): _____ NASA SP-R-0022

Material Specifications

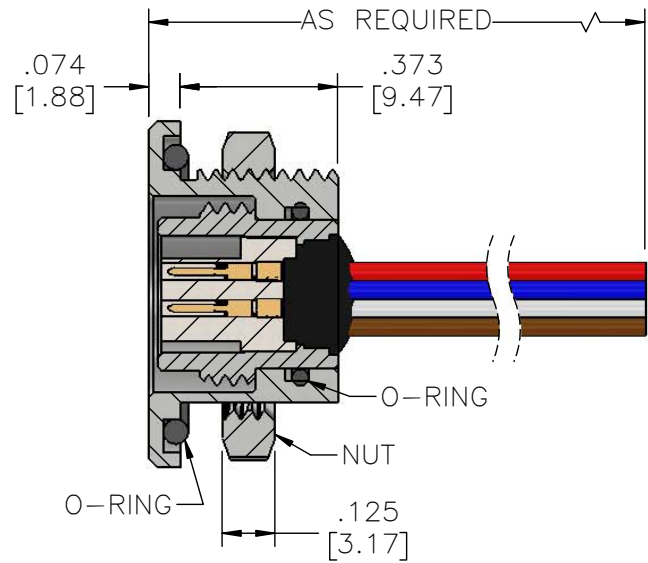
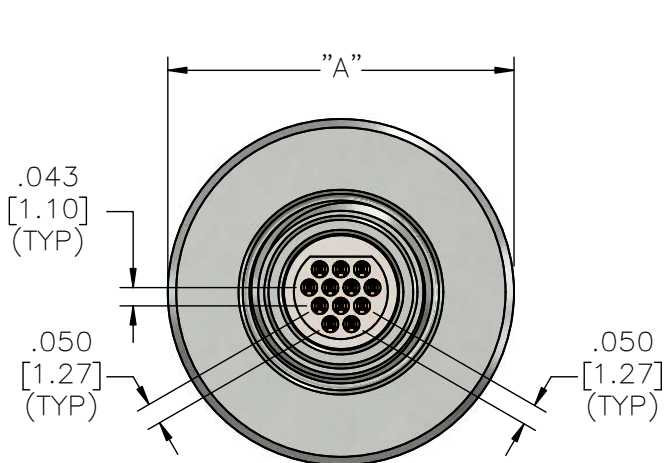
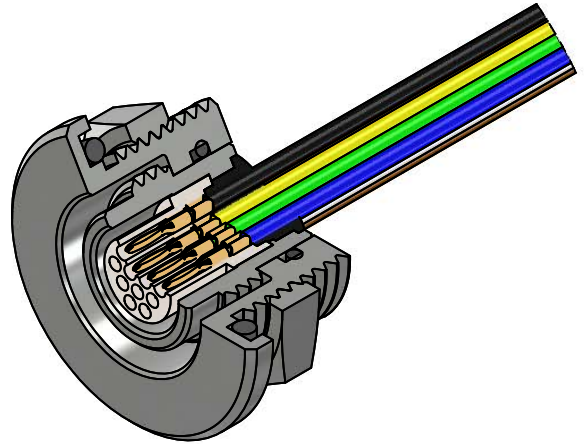
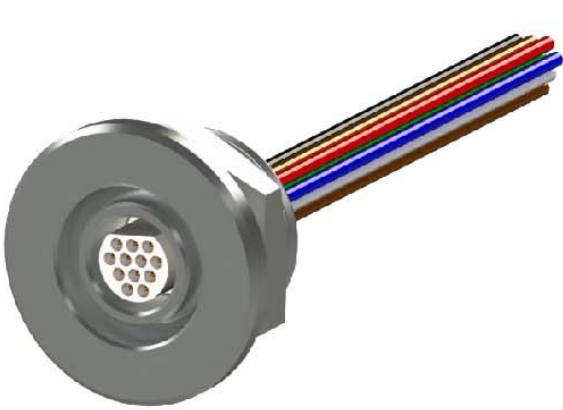
- Contact: _____ Copper Alloy Per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 26 AWG, (7-34) Tinned Copper, PFA color coded, Black
Polyurethane Jacket
- Wire: _____ 26 AWG (7-34) PTFE, color coded

Shell Options

- Brass Alloy 360 1/2 Hard: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*, Passivated
per SAE-AMS-2700

* less resistance to salt spray test.

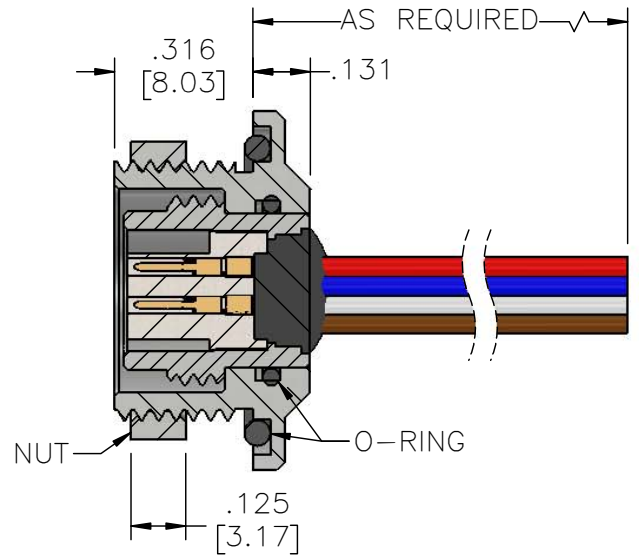
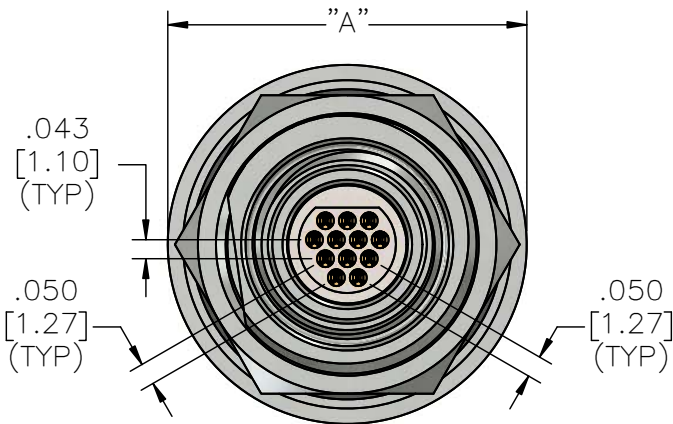
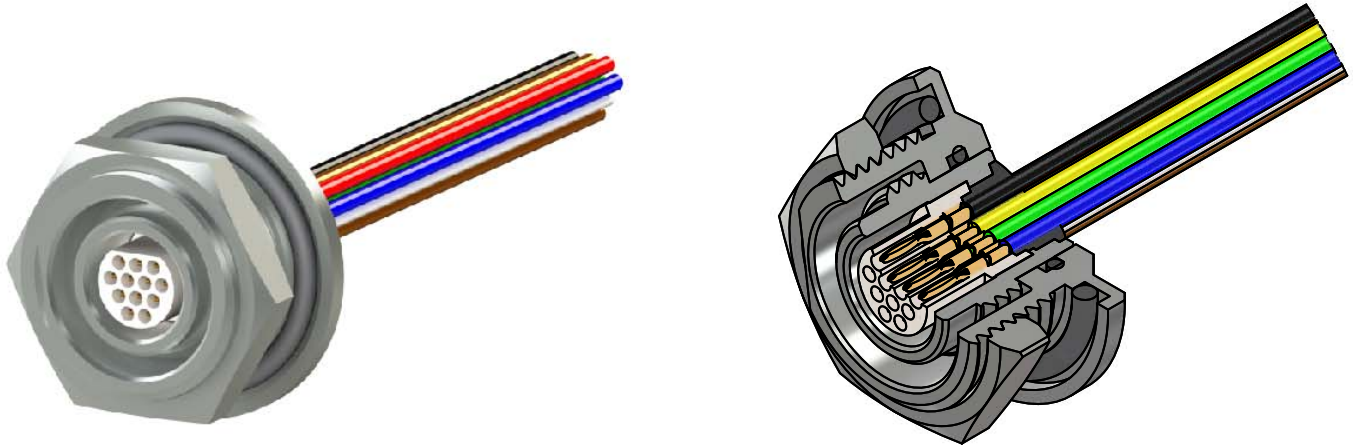
Metal - Pin - Threaded - Wired - Front Panel MMCP-WD-FP



English (IN) **Metric (MM)**

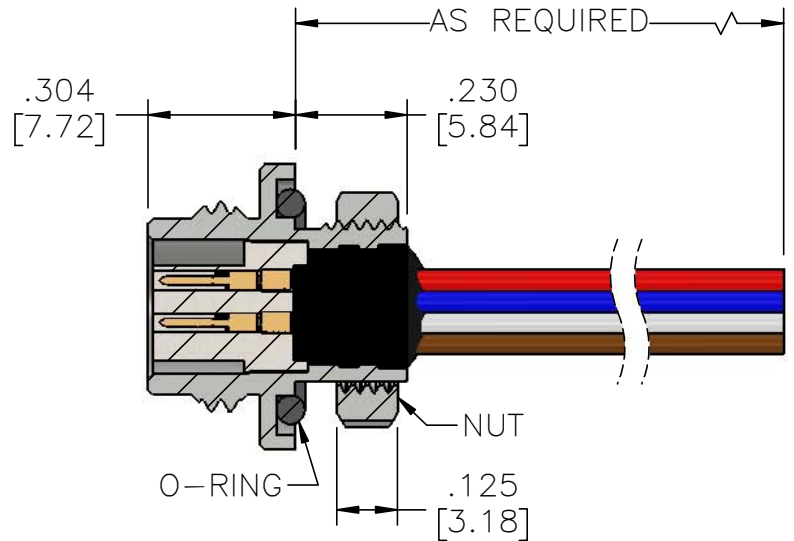
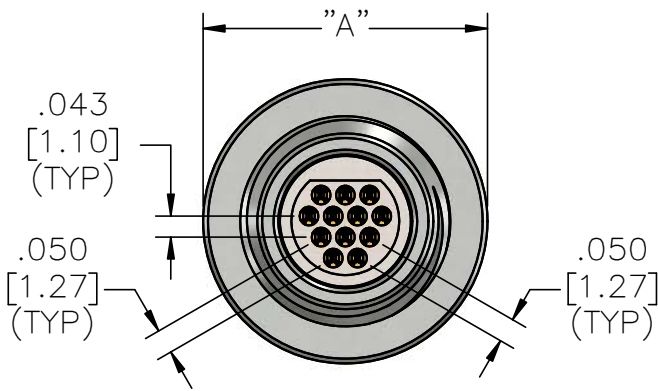
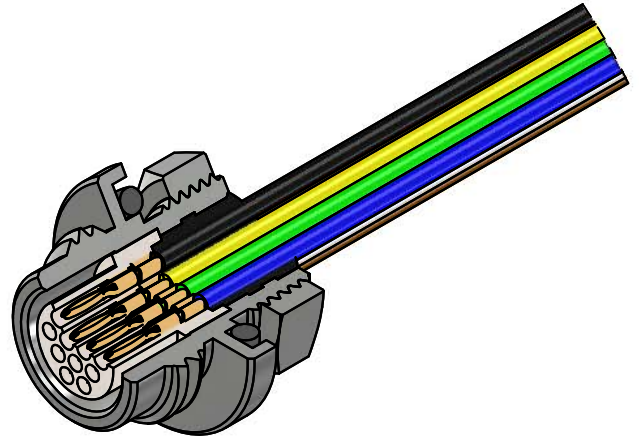
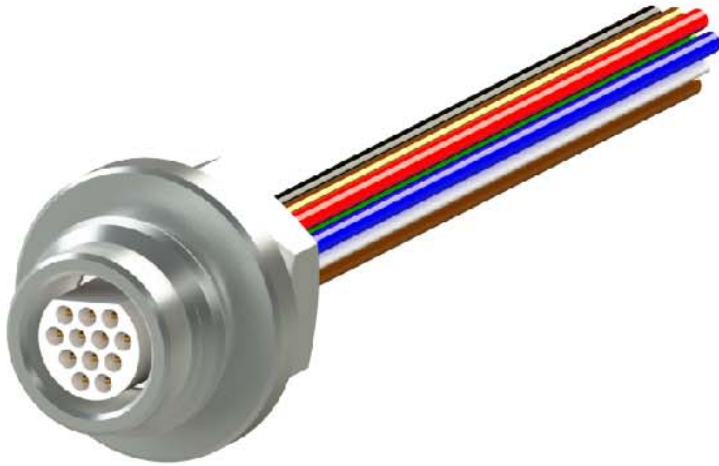
Part #	Contacts	A	A
A22128-001	5	0.750	19.05
A22129-001	12	0.820	20.83
A22130-001	16	0.875	22.23
A22131-001	27	0.990	25.15
A22483-001	39	1.100	27.94

**Metal - Pin - Threaded -
Wired/Cable - Rear Panel
MMCP-WC/WD-RP**




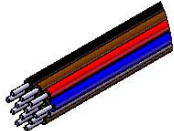












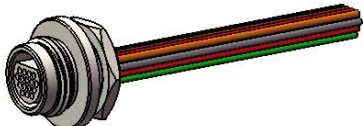
		English (IN)	Metric (MM)
Part #	Contacts	A	A
A22132-001	5	0.750	19.05
A22133-001	12	0.820	20.83
A22134-001	16	0.875	22.23
A22135-001	27	0.990	25.15
A22484-001	39	1.100	27.94

Metal - Pin - Threaded - Wired - Protruding Panel MMCP-WD-PP



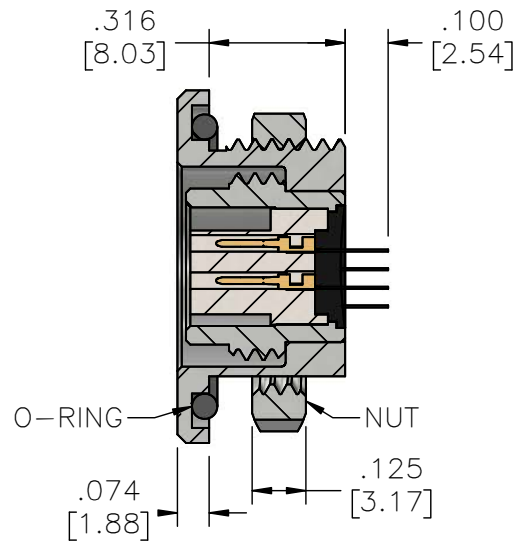
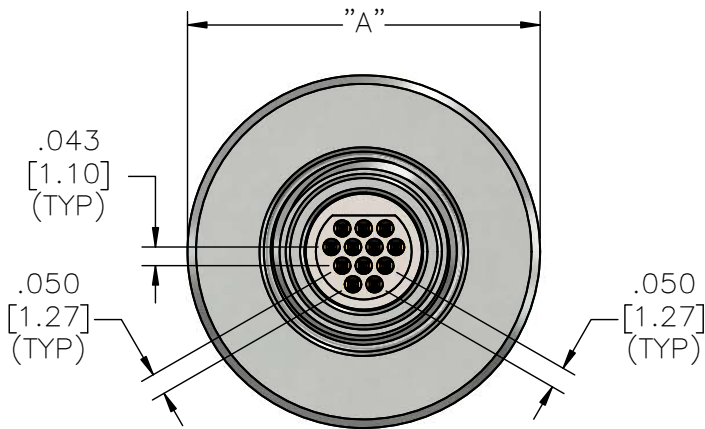
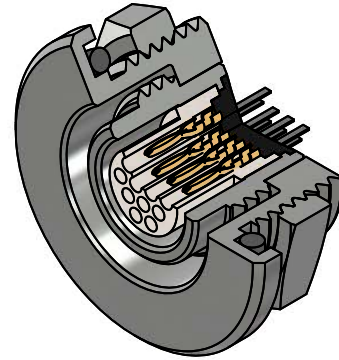
Part #	Contacts	English	Metric
		(IN)	(MM)
A22371-001	5	A	A
A22376-001	12	0.541	13.74
A22381-001	16	0.586	14.88
A22386-001	27	0.662	16.81
A22386-001	27	0.742	18.85
A22485-001	39	0.821	20.85

METAL MICRO CIRCULAR THREADED DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options
MMC Male (P - Pin) 	5	WD: Discrete Lead Wire 	Standard	FP: Front Panel Mount (Male Only) 	C Color Coded 
	12		N: Nickel Plated Brass 		
	16	WC: Cable 	Non-Standard Options	RP: Rear Panel Mount (Male Only) 	OR O-Ring 
	27		BN: Black Nickel Plated Brass 		
39	Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 26 AWG Max	P: Passivated Stainless Steel 	PP: Protruding Panel Mount (Male Only) 	IP68 	
	OX: Black Oxide Finished Steel 	RH RoHS COMPLIANT 			
EXAMPLE: MMCP-16-WD-10.0-C-PP-N-OR					

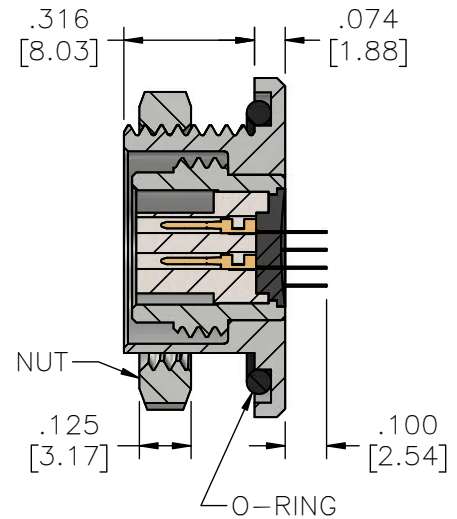
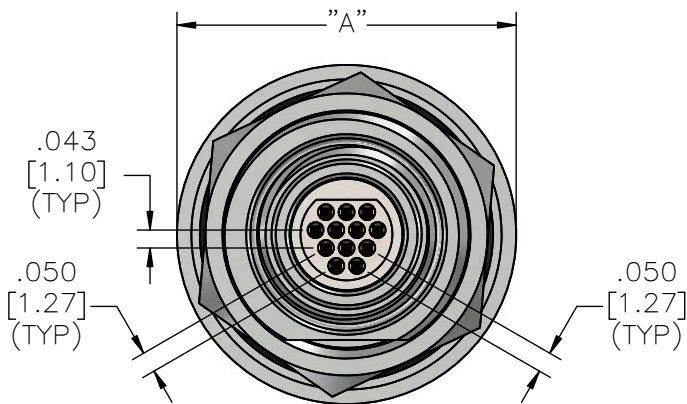
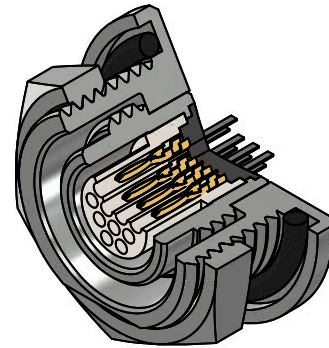
Metal - Pin - Straight Tail - Front Panel

MMCP-DD-FP



	English (IN)	Metric (MM)
Contacts	A	A
5	0.750	19.05
12	0.820	20.83
16	0.875	22.23
27	0.990	25.15
39	1.100	27.94

Metal - Pin - Threaded - Straight Tail - Rear Panel
MMCP-DD-RP




	English (IN)	Metric (MM)
Contacts	A	A
5	0.750	19.05
12	0.820	20.83
16	0.875	22.23
27	0.990	25.15
39	1.100	27.94

METAL MICRO CIRCULAR STRAIGHT THRU-HOLE TAIL (TYPE DD)

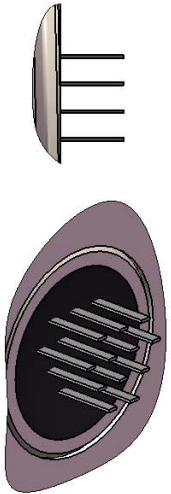
Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options
--------	---------------	------------------	---------------------------	------------	---------

MMC
Male
(P - Pin)



5
12
16
27

DD: Straight Thru-Hole



Standard
N: Nickel Plated Brass



Non-Standard Options
BN: Black Nickel Plated Brass



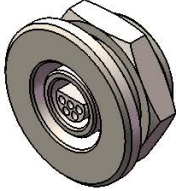
P: Passivated Stainless Steel



OX: Black Oxide Finished Steel



FP: Front Panel Mount



RP: Rear Panel Mount



OR
O-Ring



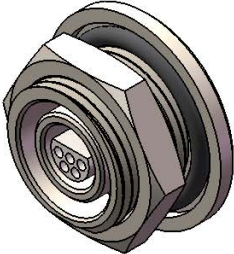
IP68



RH
RoHS
COMPLIANT



EXAMPLE:
MMCP-05-DD-RP-N-OR



MICRO 360[®] Metal

Micro Circular Twistlock *Optional IP68 Rating*



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-83513
- Contact Resistance: _____ 26 Milliohm Max (65mV Drop Max) @ 2.5 Amps per MIL-DTL-83513
- Current Rating: _____ 3 Amps per MIL-DTL-83513
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ >2000 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 50 g's with no discontinuities > 1 microsecond
- Vibration: _____ 20 g's with no discontinuities > 1 microsecond
- Mating/Unmating Force: _____ 3 oz (85 g) typical per contact
- Thermal Vacuum Outgassing (Space Class): _____ NASA SP-R-0022

Material Specifications

- Contact: _____ Copper Alloy Per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 26 AWG, (7-34) Tinned Copper, PFA color coded, Black
Polyurethane Jacket
- Wire: _____ 26 AWG (7-34) PTFE, color coded

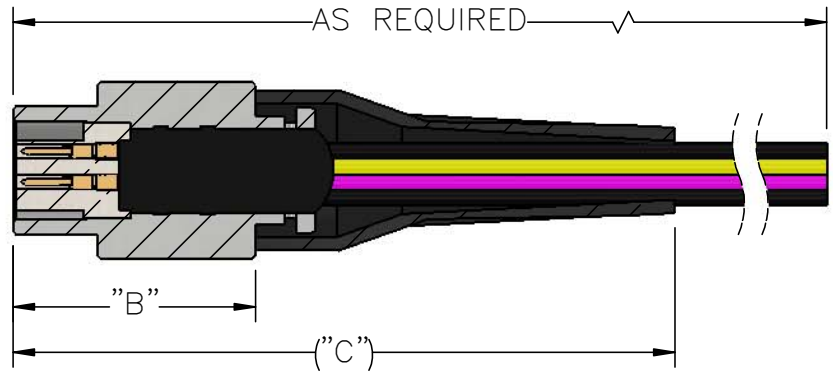
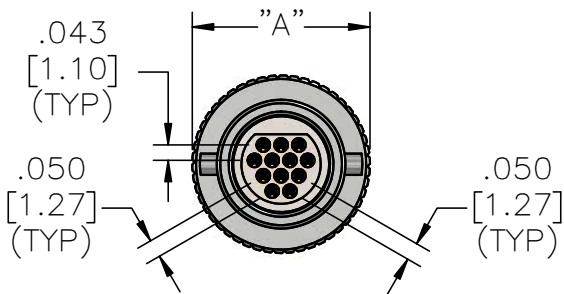
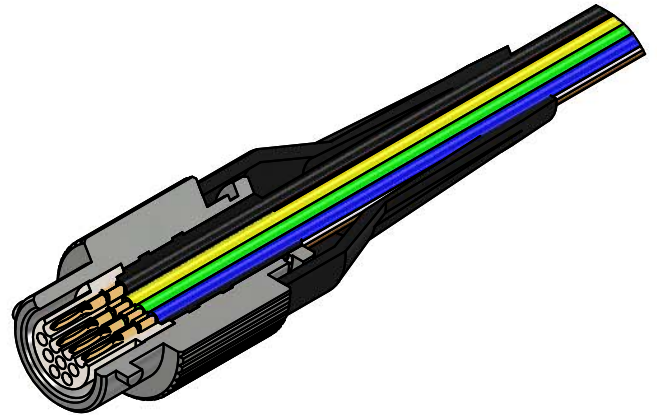
Shell Options

- Brass Alloy 360 1/2 Hard: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*, Passivated per SAE-AMS-2700

* less resistance to salt spray test.

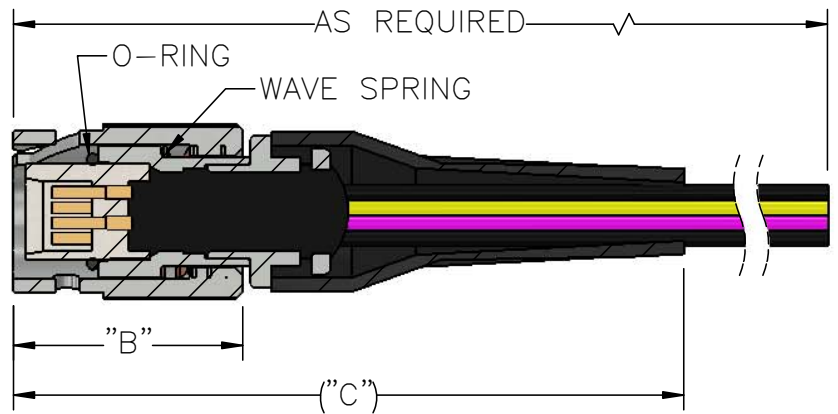
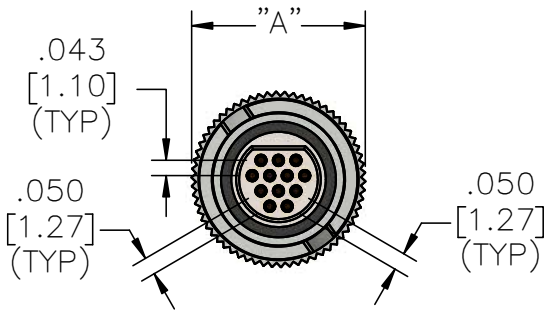
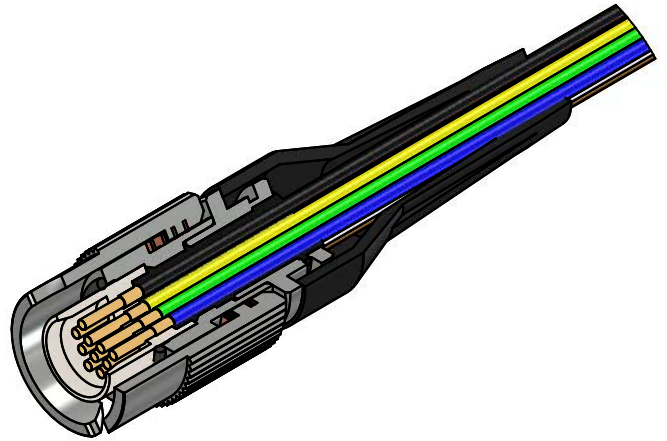
Metal - Pin - Twist-Lock - Wired - Inline - Strain Relief

TMCP-WD-IS-SR



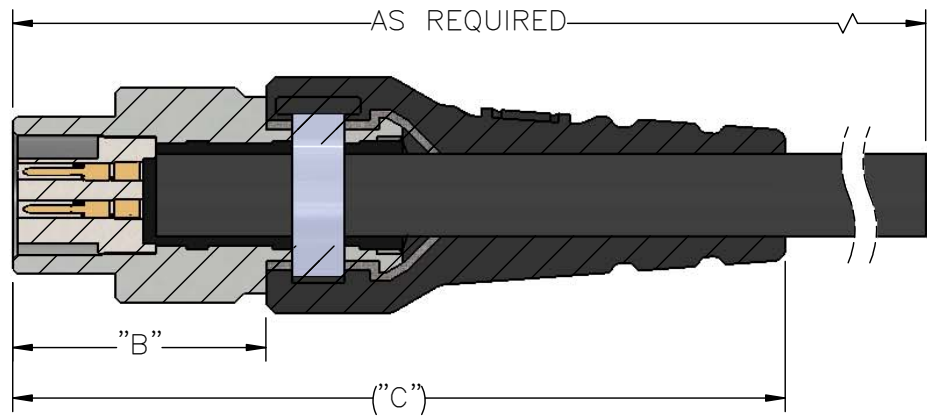
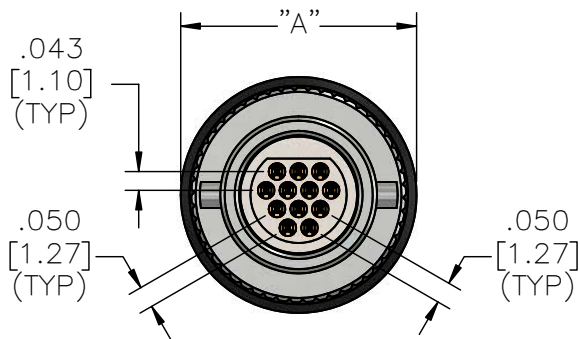
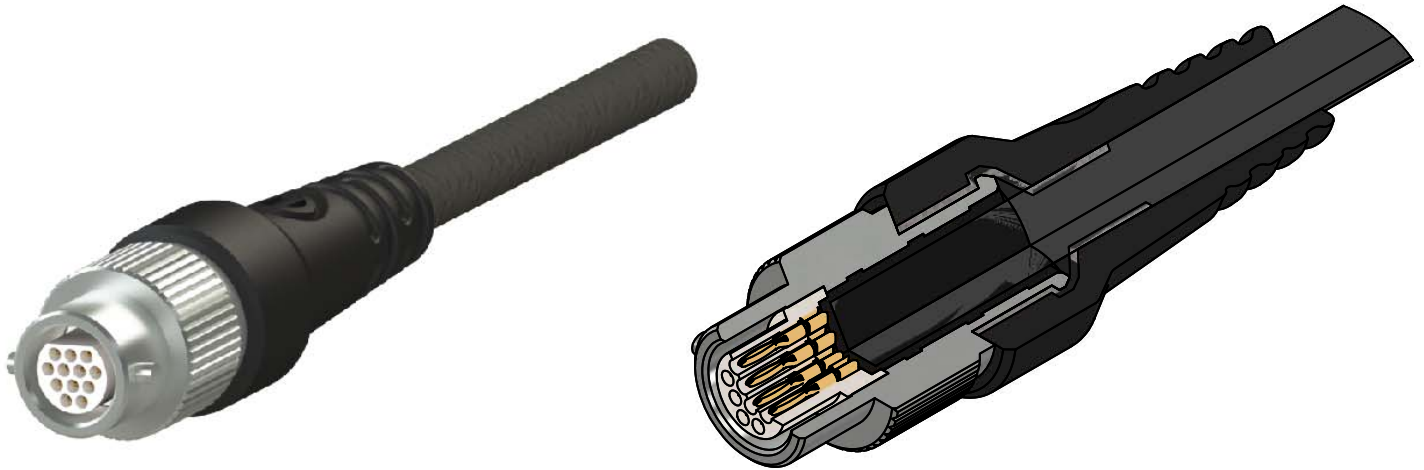
Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A22228-001	5	0.450	0.680	1.900	11.43	17.27	48.26
A22230-001	12	0.500			12.70		
A22232-001	16	0.560			14.22		
A22234-001	27	0.610			15.49		
A22523-001	39	0.650	0.585	2.200	16.51	14.86	55.88

Metal - Socket - Twist-Lock - Wired - Inline - Strain Relief TMCS-WD-IS-SR



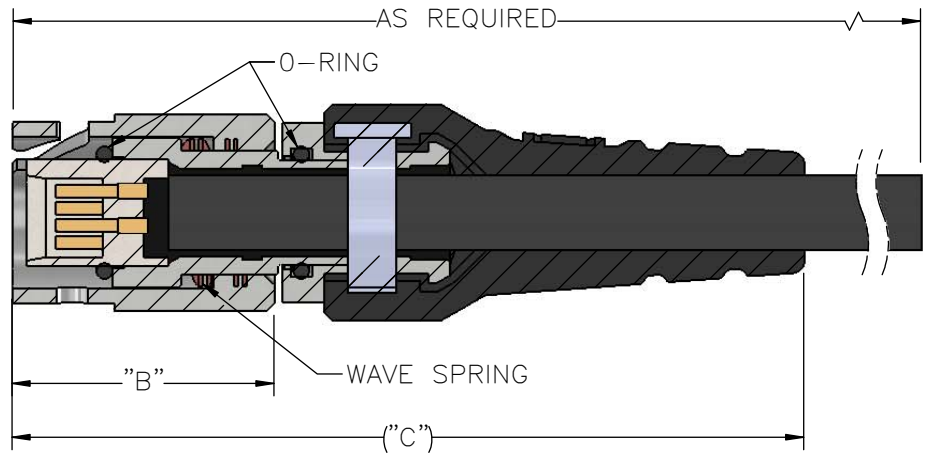
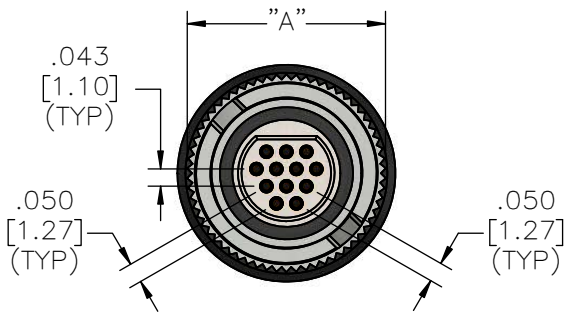
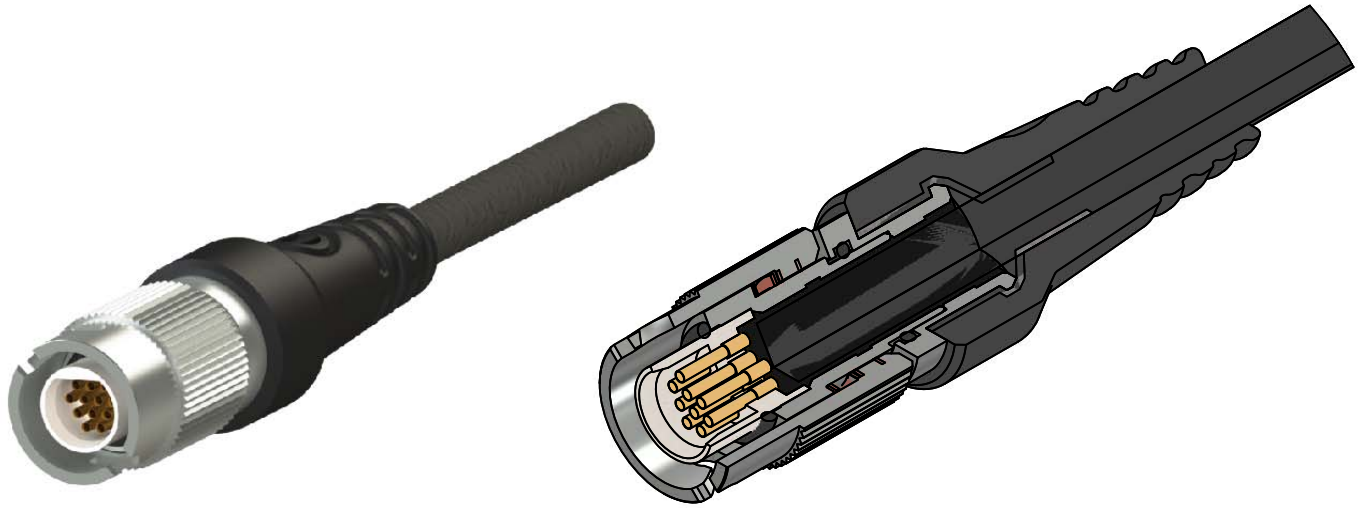
Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A22229-001	5	0.450	0.660	1.900	11.43	16.76	48.26
A22231-001	12	0.500			12.70		
A22233-001	16	0.560			14.22		
A22235-001	27	0.620	0.630	2.100	15.75	16.00	53.34
A22533-001	39	0.670					

**Metal - Pin - Twist-Lock - Cabled -
Overmold - Inline
TMCP-WC-OM-IS**



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A22352-001	5	0.510	0.590	1.740	12.95	14.99	44.20
A22350-001	12	0.550		1.790	13.97		45.47
A22348-001	16	0.600		1.890	15.24		48.01
A22346-001	27	0.670	0.580	1.980	17.02	14.73	50.29
-	39	Contact Omnetics for dimensions					

**Metal - Socket - Twist-Lock - Cable -
Overmold - Inline
TMCS-WC-OM-IS**



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A22351-001	5	0.510	0.660	1.930	12.95	16.76	49.02
A22349-001	12	0.550		1.980	13.97		50.29
A22347-001	16	0.600		2.060	15.24		52.32
A22345-001	27	0.670	0.630	2.150	17.02	16.00	54.61
-	39	Contact Omnetics for dimensions					

TWIST LOCK MICRO CIRCULAR DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options, cont.
TMC	5	WD: Discrete Lead Wire 	Standard N: Nickel Plated Brass 	IS: Inline Shell (Shell Only) 	C Color Coded 
	12				
Male (P - Pin)	16	WC: Cable 	Non-Standard Options BN: Black Nickel Plated Brass 	Options SR: Inline Shell w/ Strain Relief 	OR O-Ring 
	27				
Female (S - Socket)	39	Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 26 AWG Max	P: Passivated Stainless Steel 	ST: Inline Shell w/ Shrink Tube 	IP68 
			OX: Black Oxide Finished Steel 		RH RoHS COMPLIANT 

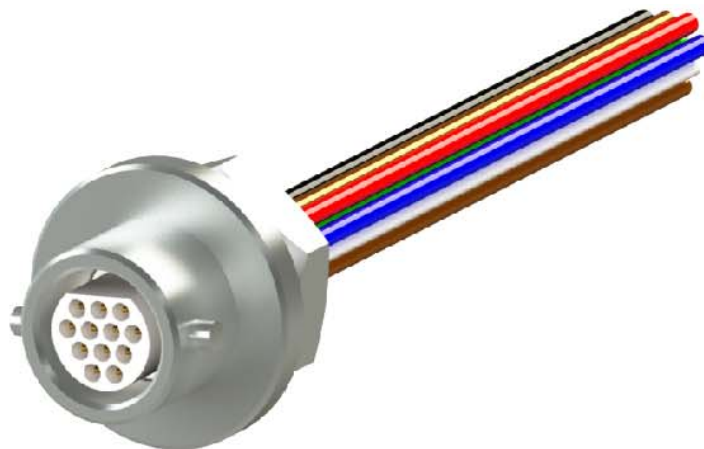
EXAMPLE:
TMCS-12-WD-10.0-C-IS-N-ST-OR



MICRO 360[®] Metal

Micro Circular Twist-Lock Panel Mount

Optional IP68 Rating



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-83513
- Contact Resistance: _____ 26 Milliohm Max (65mV Drop Max) @ 2.5 Amps per MIL-DTL-83513
- Current Rating: _____ 3 Amps per MIL-DTL-83513
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ >2000 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 50 g's with no discontinuities > 1 microsecond
- Vibration: _____ 20 g's with no discontinuities > 1 microsecond
- Mating/Unmating Force: _____ 3 oz (85 g) typical per contact
- Thermal Vacuum Outgassing (Space Class): _____ NASA SP-R-0022

Material Specifications

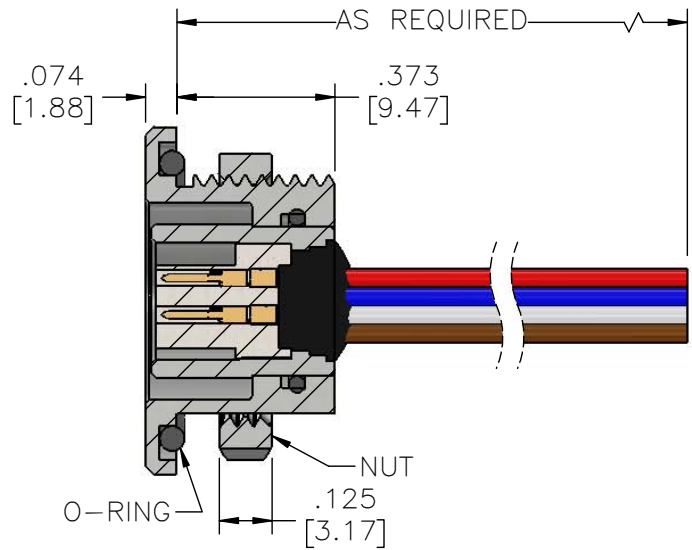
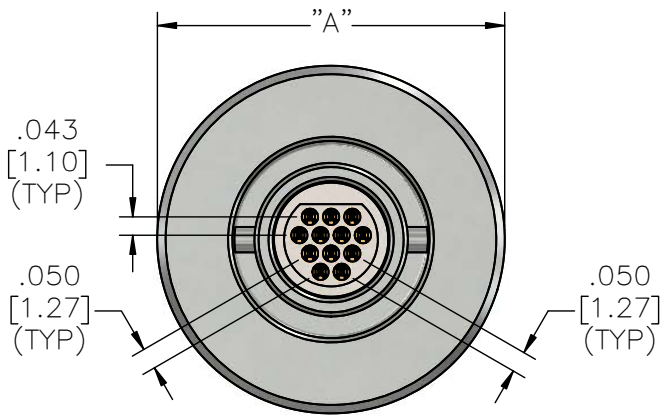
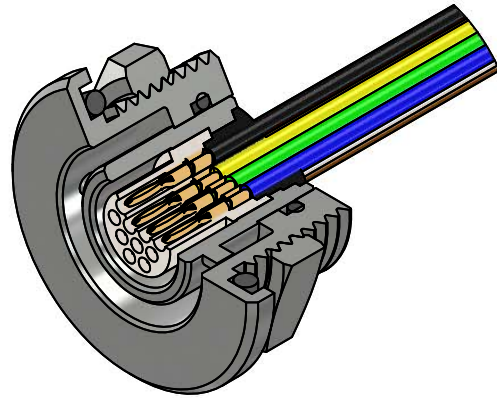
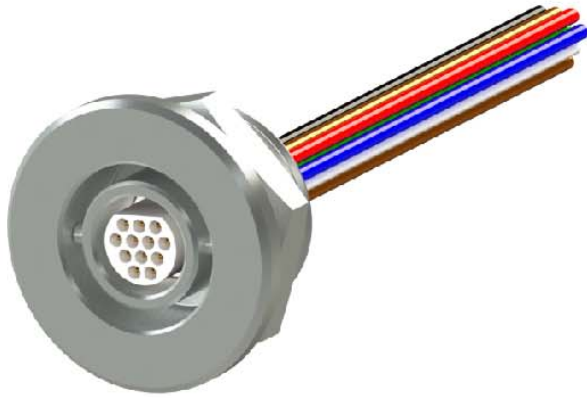
- Contact: _____ Copper Alloy Per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 26 AWG, (7-34) Tinned Copper, PFA color coded, Black
Polyurethane Jacket
- Wire: _____ 26 AWG (7-34) PTFE, color coded

Shell Options

- Brass Alloy 360 1/2 Hard: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*, Passivated
per SAE-AMS-2700

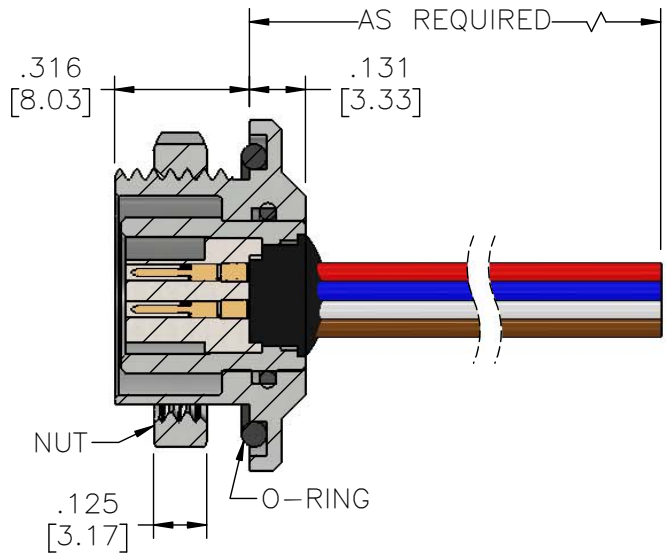
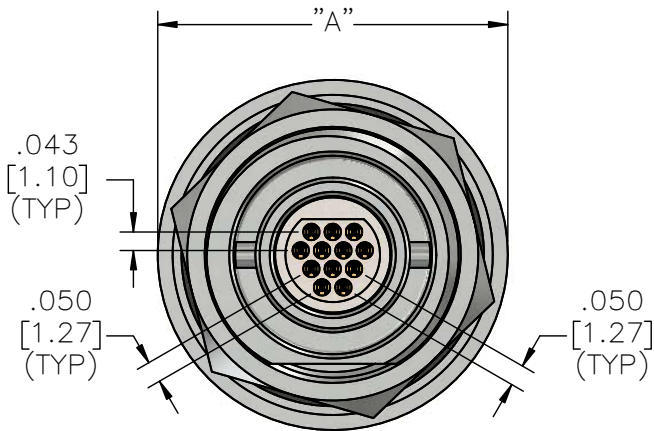
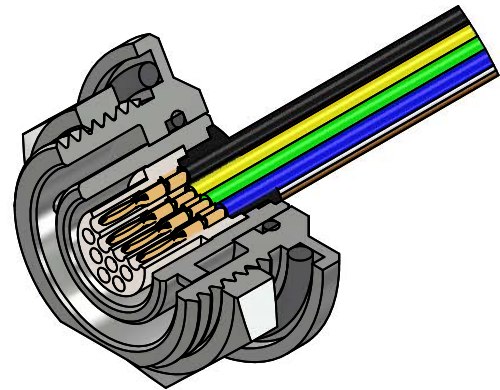
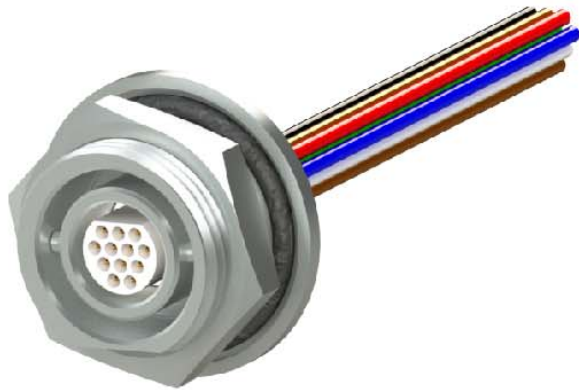
* less resistance to salt spray test.

Metal - Pin - Twist-Lock - Wired - Front Panel - IP68 TMCP-WD-FP-IP68



Part #	Contacts	English	Metric
		(IN)	(MM)
A22359-001	5	A	A
A22358-001	12	0.750	19.05
A22357-001	16	0.820	20.83
A22356-001	27	0.875	22.23
A22356-001	27	0.990	25.15
A22520-001	39	1.100	27.94

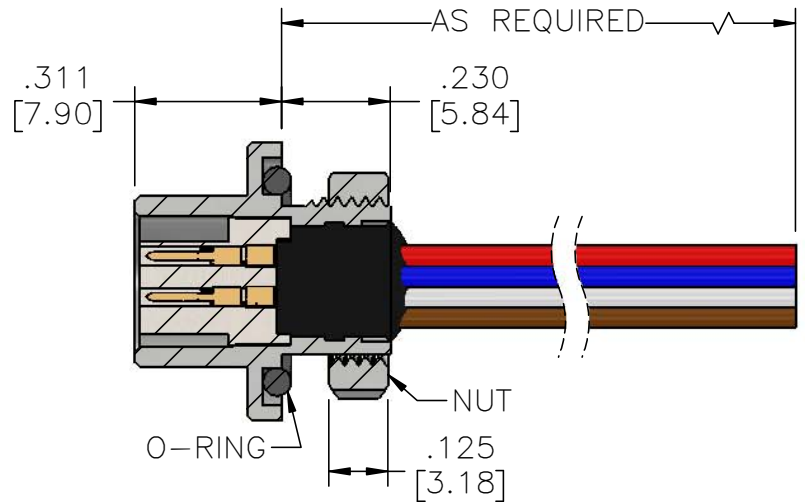
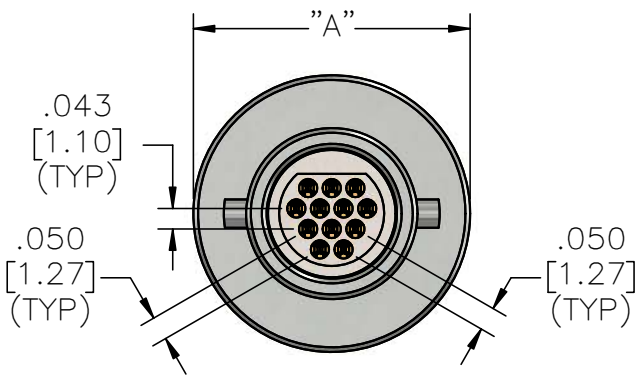
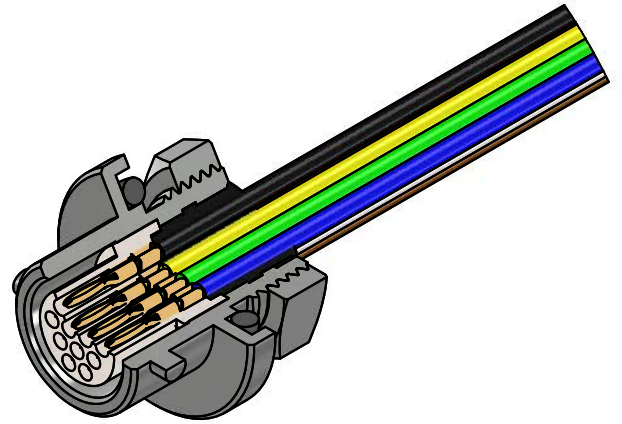
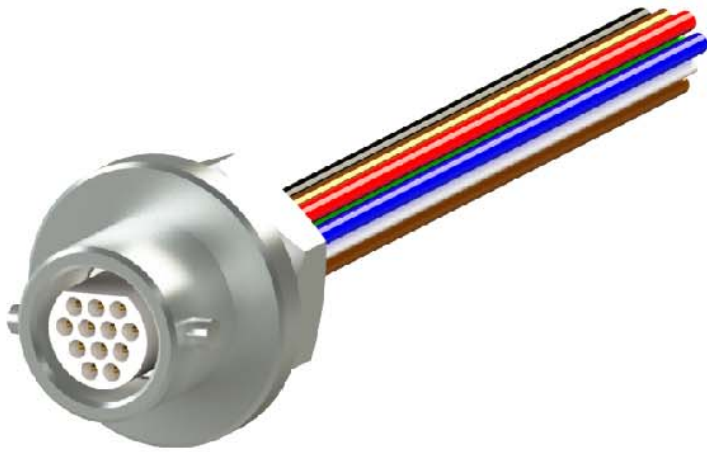
Metal - Pin - Twist-Lock - Cable - Rear Panel - IP68
TMCP-WD-RP-IP68



Part #	Contacts	English	Metric
		(IN)	(MM)
A22363-001	5	A	A
A22362-001	12	0.750	19.05
A22361-001	16	0.820	20.83
A22360-001	27	0.875	22.23
A22360-001	27	0.990	25.15
A22521-001	39	1.100	27.94





Metal - Pin - Twist-Lock - Wired - Protruding Panel - IP68

TMCP-WD-PP-IP68



Part #	Contacts	English	Metric
		(IN)	(MM)
A22367-001	5	A	A
A22366-001	12	0.541	13.74
A22365-001	16	0.586	14.88
A22364-001	27	0.662	16.81
-	39	Contact Omnetics for dimensions	

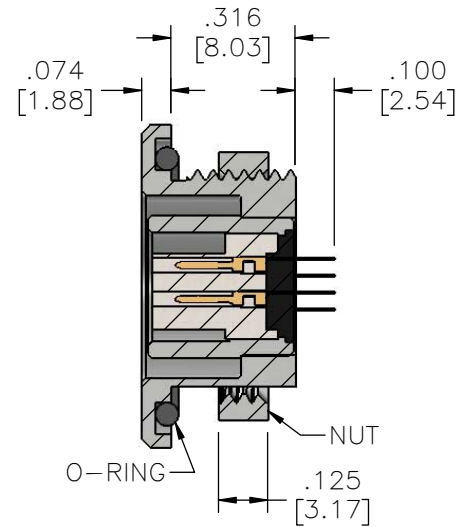
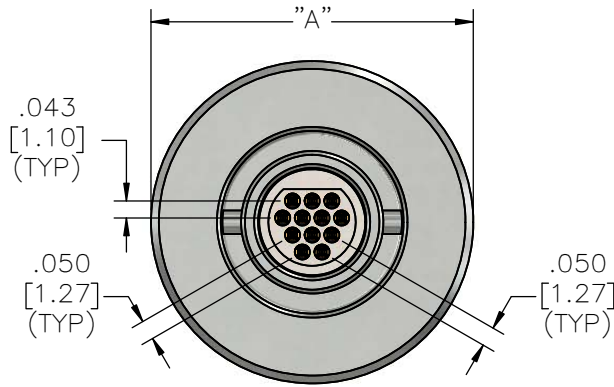
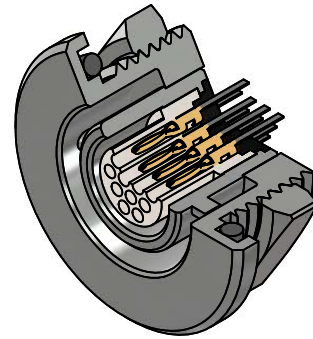
TWIST-LOCK MICRO CIRCULAR DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options	
TMC Male (P - Pin)	5	WD: Discrete Lead Wire  WC: Cable 	Standard	FP: Front Panel Mount (Male Only) 	C Color Coded  OR O-Ring 	
	12		N: Nickel Plated Brass 			RP: Rear Panel Mount (Male Only) 
	16	Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 26 AWG Max	Non-Standard Options	PP: Protruding Panel Mount (Male Only) 	IP68 IP68 RH RoHS COMPLIANT 	
	27		BN: Black Nickel Plated Brass 			P: Passivated Stainless Steel 
	39		OX: Black Oxide Finished Steel 			

EXAMPLE:
TMCP-12-WC-10.0-N-RP-C-OR-ROHS

Metal - Pin - Twist-Lock - Straight Tail - Front Panel

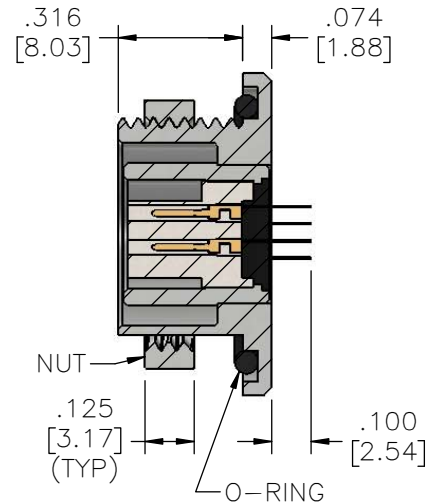
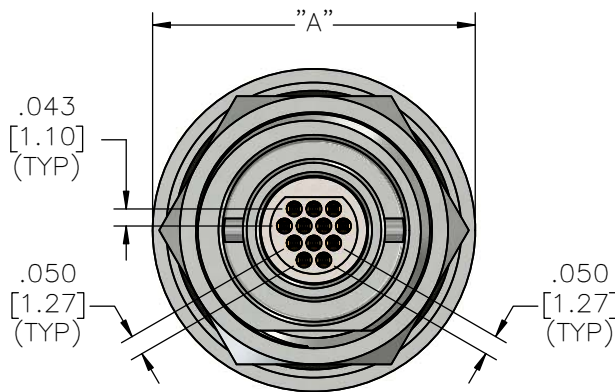
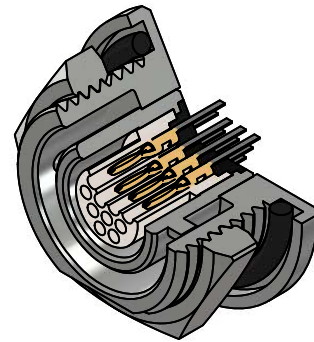
TMCP-DD-FP



	English (IN)	Metric (MM)
Contacts	A	A
5	0.750	19.05
12	0.820	20.83
16	0.875	22.23
27	0.990	25.15
39	Contact Omnetics for dimensions	



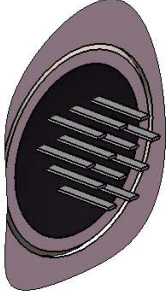
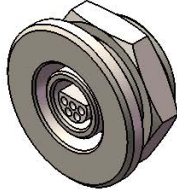






Metal - Pin - Twist-Lock - Straight Tail - Rear Panel

TMCP-DD-RP

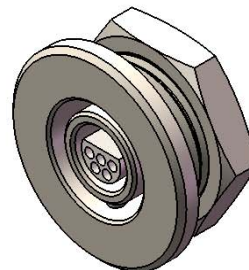


	English (IN)	Metric (MM)
Contacts	A	A
5	0.750	19.05
12	0.820	20.83
16	0.875	22.23
27	0.990	25.15
39	Contact Omnetics for dimensions	

TWIST-LOCK MICRO CIRCULAR STRAIGHT THRU-HOLE (TYPE DD)

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options
TMC Male (P - Pin) 	5	DD: Straight Thru-Hole  	Standard	FP: Front Panel Mount 	OR O-Ring 
	12		N: Nickel Plated Brass 		
	16		Non-Standard Options	RP: Rear Panel Mount 	IP68 IP68
	27		BN: Black Nickel Plated Brass 		
39	P: Passivated Stainless Steel 				
			OX: Black Oxide Finished Steel 		

EXAMPLE:
TMCP-05-DD-FP-N-OR



MICRO 360[®] Metal

Micro Circular Break Away *Optional IP68 Rating*



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-83513
- Contact Resistance: _____ 26 Milliohm Max (65mV Drop Max) @ 2.5 Amps per MIL-DTL-83513
- Current Rating: _____ 3 Amps per MIL-DTL-83513
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ 500 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 50 g's with no discontinuities > 1 microsecond
- Vibration: _____ 20 g's with no discontinuities > 1microsecond
- Mating/Unmating Force: _____ 3 oz (85 g) typical per contact
- Thermal Vacuum Outgassing (Space Class): _____ NASA SP-R-0022

Material Specifications

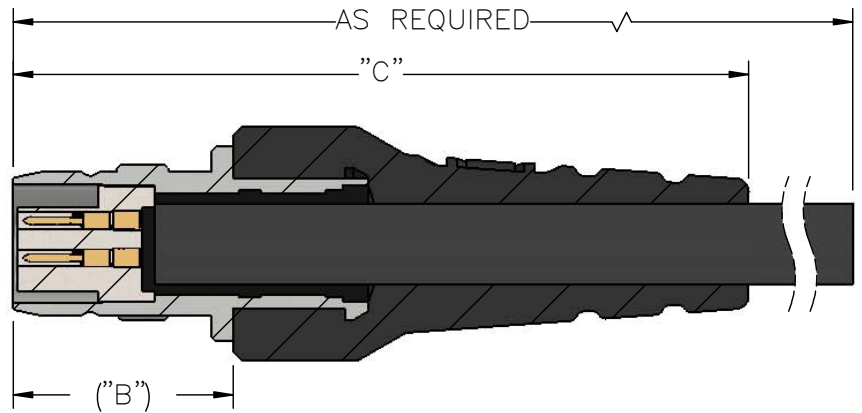
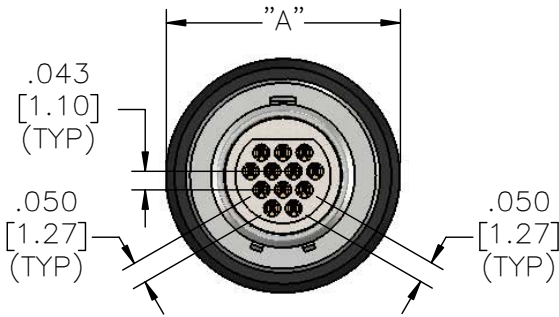
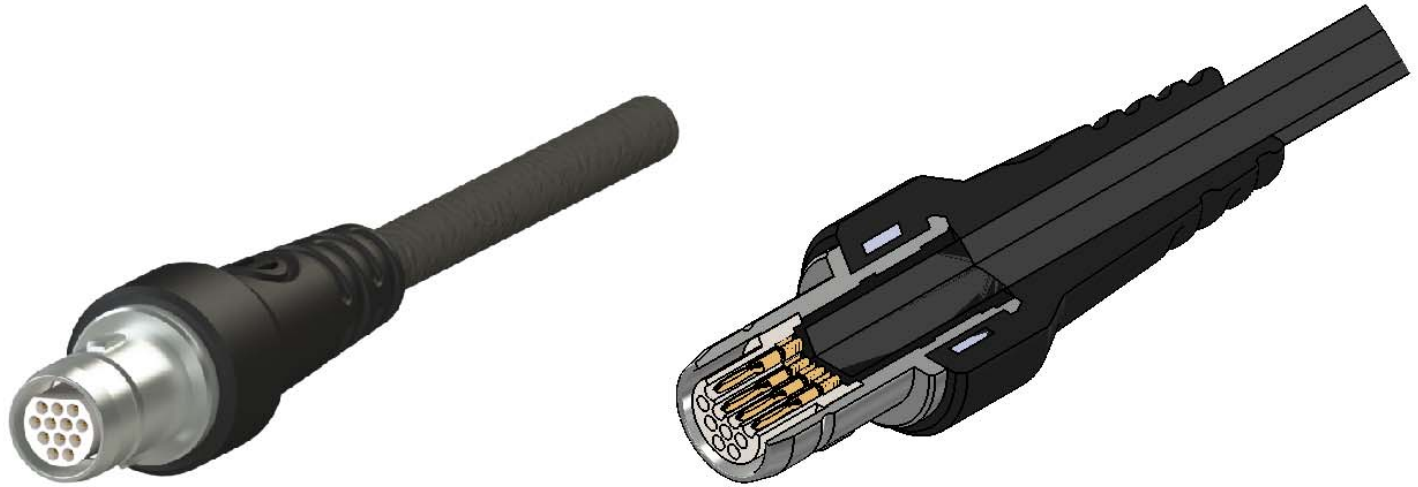
- Contact: _____ Copper Alloy Per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 26 AWG, (7-34) Tinned Copper, PFA color coded, Black
Polyurethane Jacket
- Wire: _____ 26 AWG (7-34) PTFE, color coded

Shell Options

- Brass Alloy 360 1/2 Hard: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*, Passivated
per SAE-AMS-2700

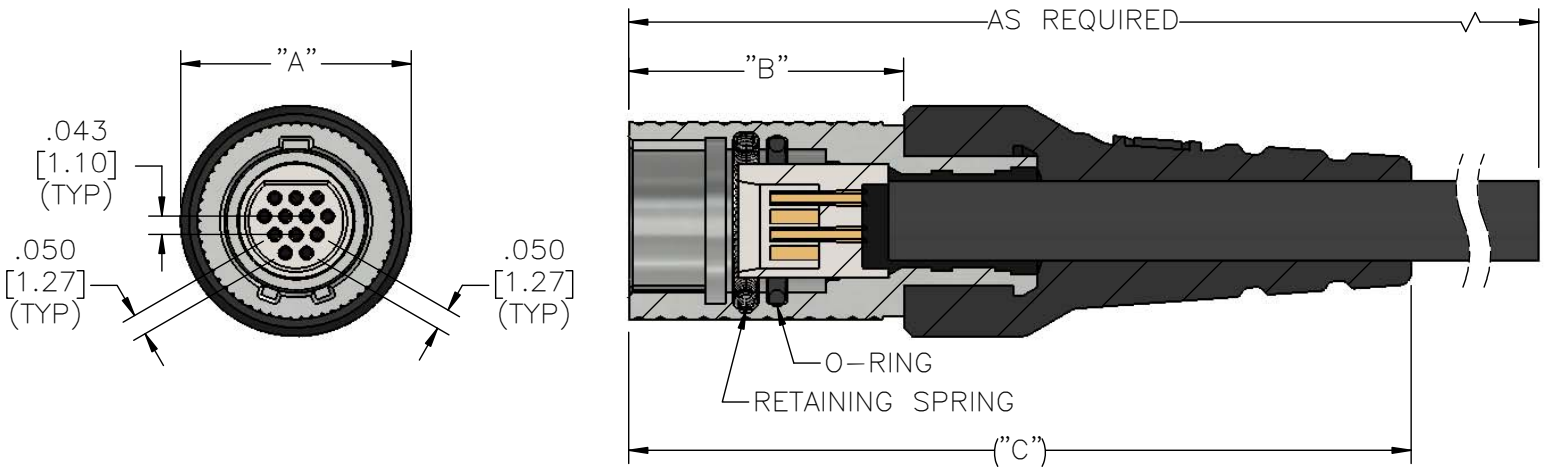
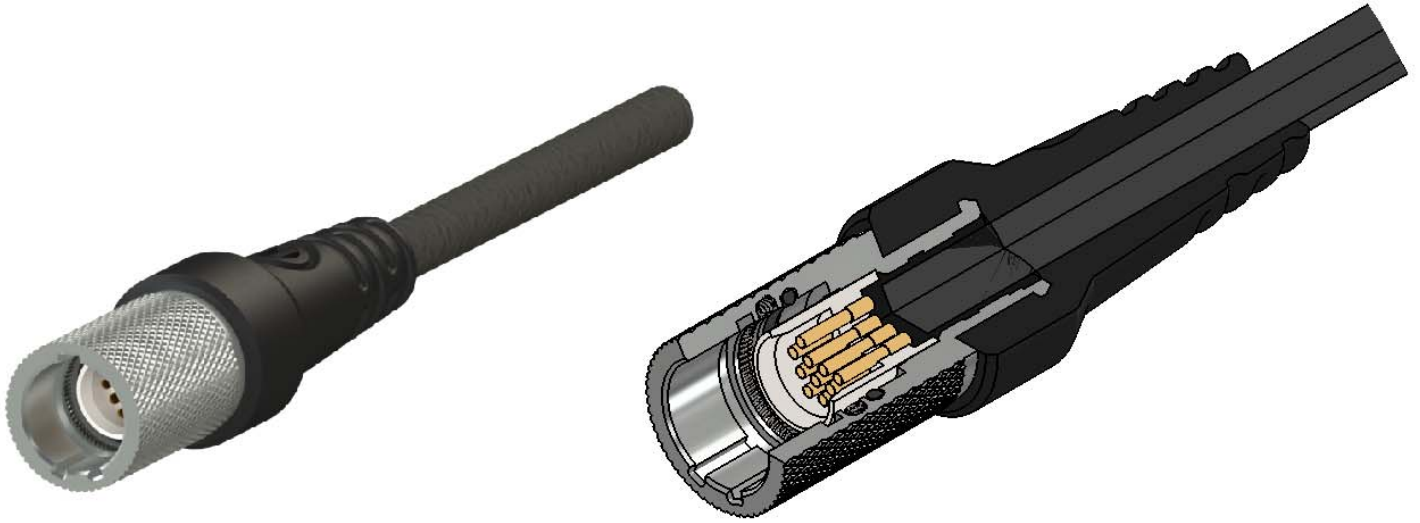
* less resistance to salt spray test.

Metal - Pin - Keyed Break Away - Cabled - Overmold - Inline KBMP-WC-OM-IS



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A22458-001	5	0.510	0.510	1.660	12.95	12.95	42.16
A22465-001	12	0.550		1.710	13.97		43.43
A22472-001	16	0.600		1.810	15.24		45.97
A22479-001	27	0.670	0.500	1.900	17.02	12.70	48.26
A22548-001	39	0.720		18.29			

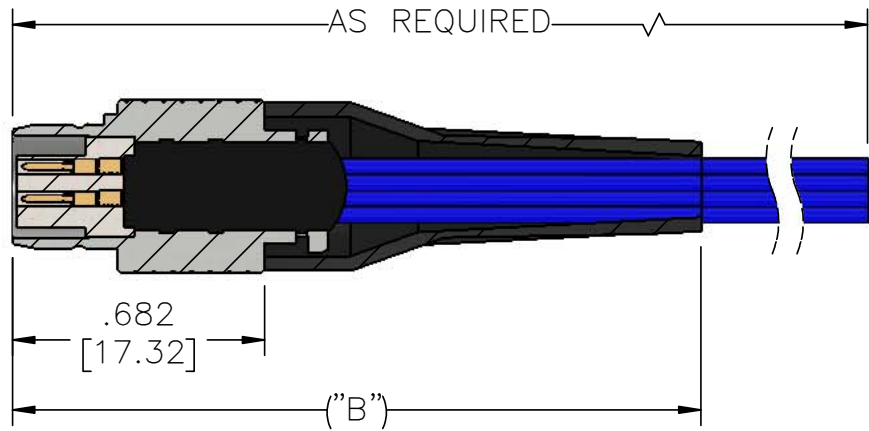
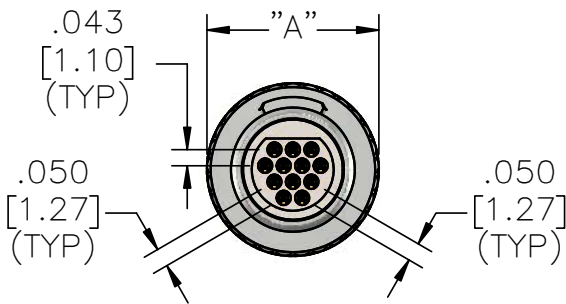
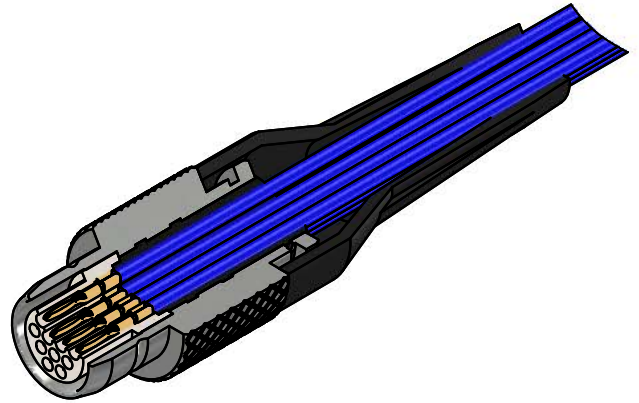
**Metal - Socket - Keyed Break Away -
Cabled - Overmold - Inline**
KBMS-WC-OM-IS



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A22455-001	5	0.510	0.650	1.800	12.95	16.51	45.72
A22462-001	12	0.550		1.850	13.97		46.99
A22469-001	16	0.600		1.950	15.24		49.53
A22476-001	27	0.670	0.640	2.040	17.02	16.26	51.82
A22552-001	39	0.720		18.29			

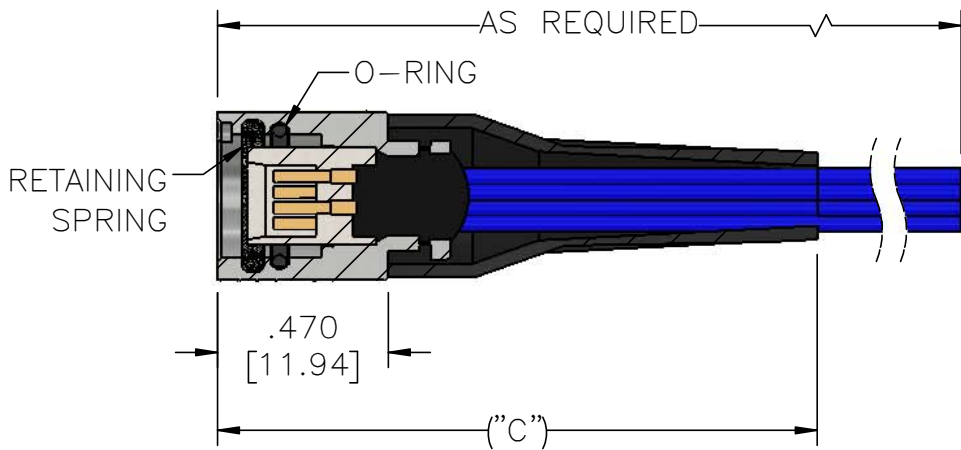
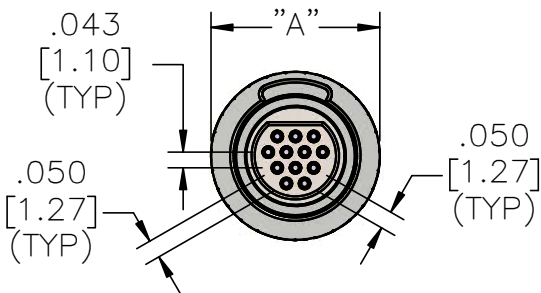
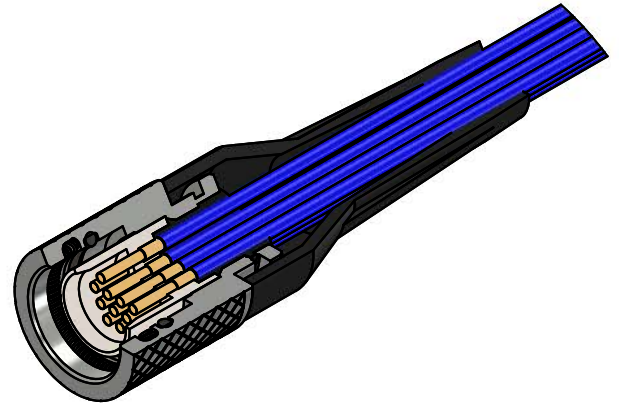
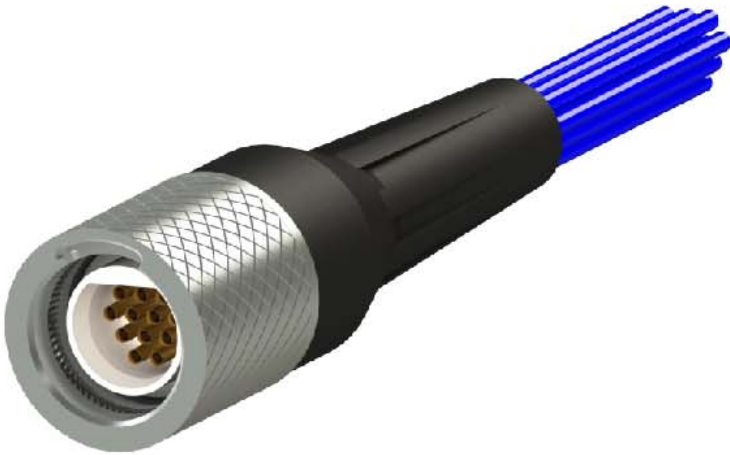
Metal - Pin - Break Away - Wired - Inline - Strain Relief

BAMP-WD-IS-SR



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A22304-001	5	0.430	1.900	10.92	48.26
A22311-001	12	0.470		11.94	
A22318-001	16	0.530		13.46	
A22325-001	27	0.610	2.100	15.49	53.34
A22538-001	39	0.650	2.300	16.51	58.42

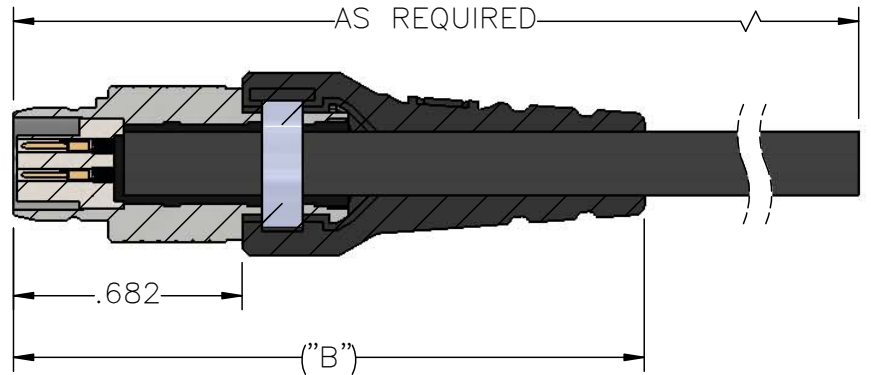
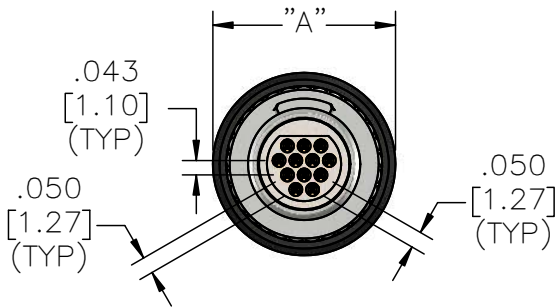
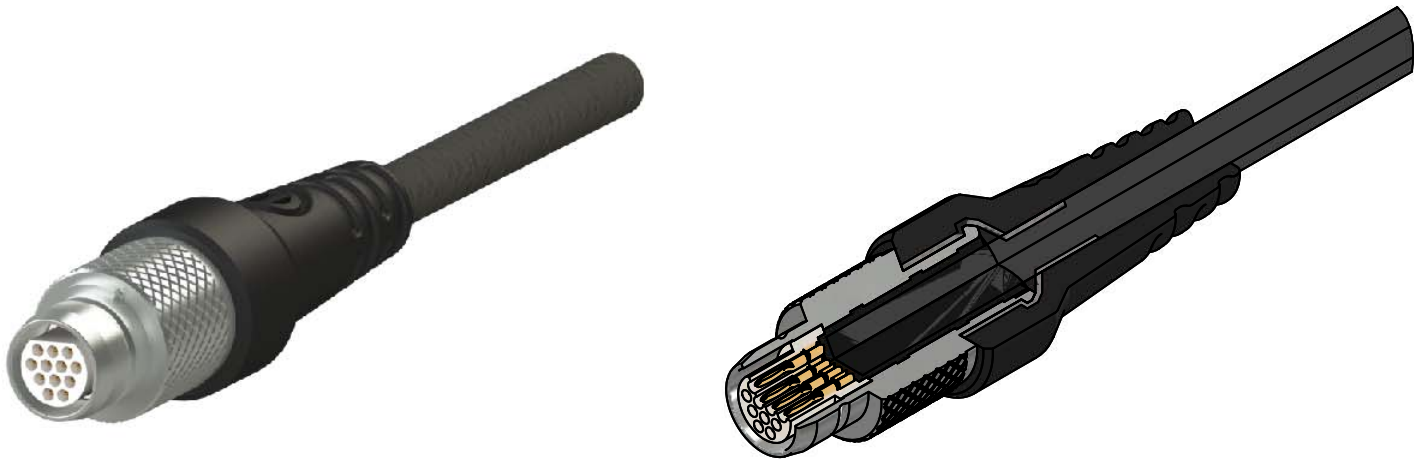
**Metal - Socket - Break Away -
Wired - Inline - Strain Relief**
BAMS-WD-IS-SR



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A22301-001	5	0.430	1.700	10.92	43.18
A22308-001	12	0.460	0.470	11.68	11.94
A22315-001	16	0.530	1.700	13.46	43.18
A22322-001	27	0.610	1.900	15.49	48.26
A22542-001	39	0.650	2.100	16.51	53.34

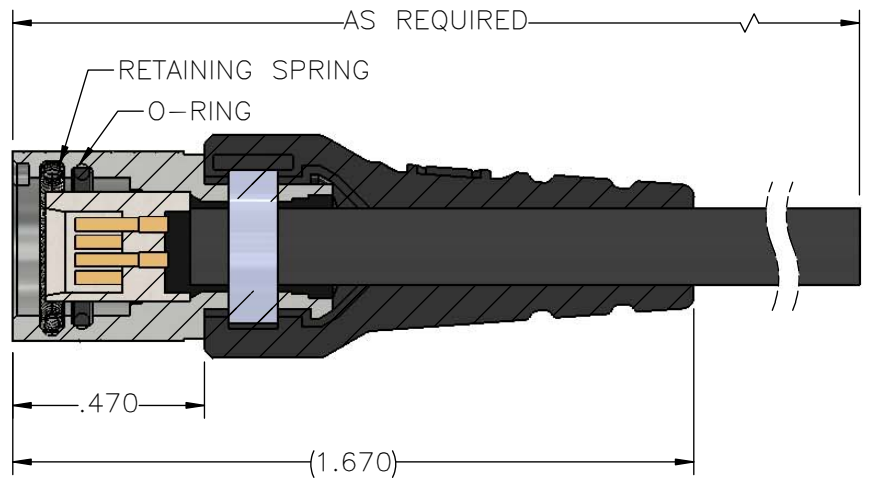
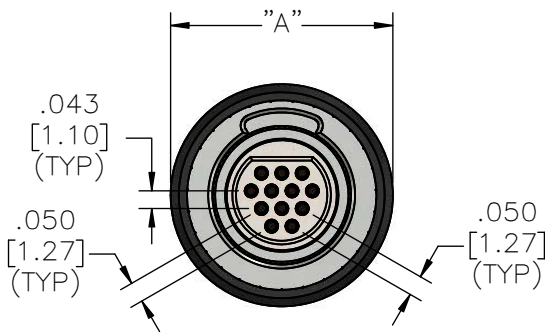
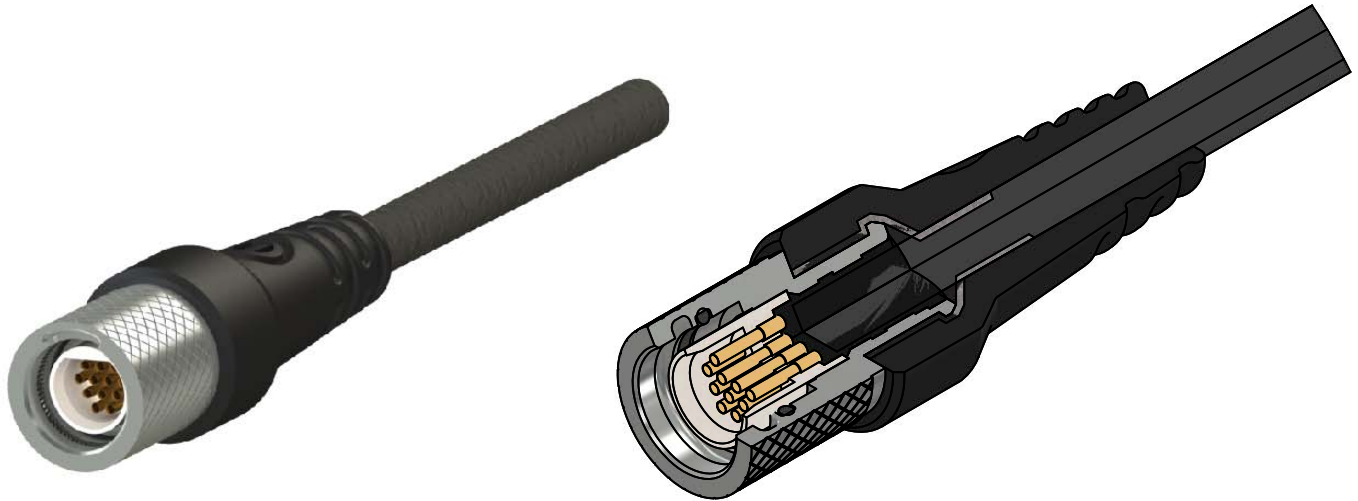
Metal - Pin - Break Away - Cable - Overmold - Inline - IP68

BAMP-WC-OM-IS-IP68



		English (IN)	Metric (MM)
Part #	Contacts	A	A
A22344-001	5	0.510	12.95
A22342-001	12	0.550	13.97
A22340-001	16	0.600	15.24
A22338-001	27	0.670	17.02
-	39	Contact Omnetics for dimensions	

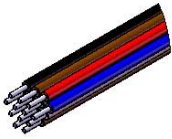



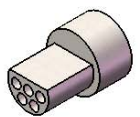




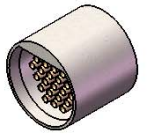

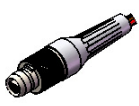




**Metal - Socket - Break Away -
Cable - Overmold - Inline - IP68**
BAMS-WC-OM-IS-IP68



English (IN) Metric (MM)

Part #	Contacts	A	A
A22343-001	5	0.510	12.95
A22341-001	12	0.550	13.97
A22339-001	16	0.600	15.24
A22337-001	27	0.670	17.02
-	39	0.720	18.29

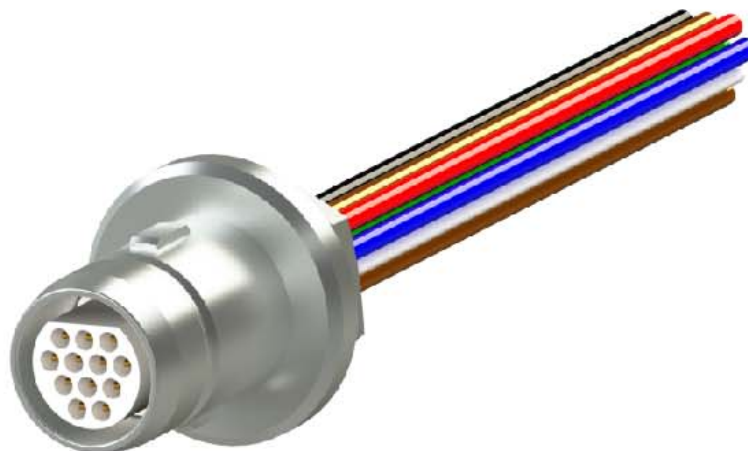
QUICK DISCONNECT BREAK AWAY MICRO CIRCULAR DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options
KBM (Keyed Break Away)	5 12	WD: Discrete Lead Wire	Standard N: Nickel Plated Brass	IS: Inline Shell (Shell Only) Male	C Color Coded
BAM (Standard Break Away)	16 27 39				
Male (P - Pin)		WC: Cable	Non-Standard Options BN: Black Nickel Plated Brass	Female	OM Overmold (Contact Omnetics for Overmold Information & Availability)
					
Female (S - Socket)		Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 26 AWG Max	P: Passivated Stainless Steel	SR: Inline Shell w/ Strain Relief	
					IP68
			OX: Black Oxide Finished Steel	ST: Inline Shell w/ Shrink Tube	IP68
					RH RoHS COMPLIANT
					

EXAMPLE:
KBMS-16-WC-10.0-C-N-IS-OM-IP68

Micro Circular Break Away Panel Mount

Optional IP68 Rating



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-83513
- Contact Resistance: _____ 26 Milliohm Max (65mV Drop Max) @ 2.5 Amps per MIL-DTL-83513
- Current Rating: _____ 3 Amps per MIL-DTL-83513
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ 500 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 50 g's with no discontinuities > 1 microsecond
- Vibration: _____ 20 g's with no discontinuities > 1 microsecond
- Mating/Unmating Force: _____ 3 oz (0.085 kg) max per contact
- Thermal Vacuum Outgassing (Space Class): _____ NASA SP-R-0022

Material Specifications

- Contact: _____ Copper Alloy Per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 26 AWG, (7-34) Tinned Copper, PFA color coded, Black Polyurethane Jacket
- Wire: _____ 26 AWG (7-34) PTFE, color coded

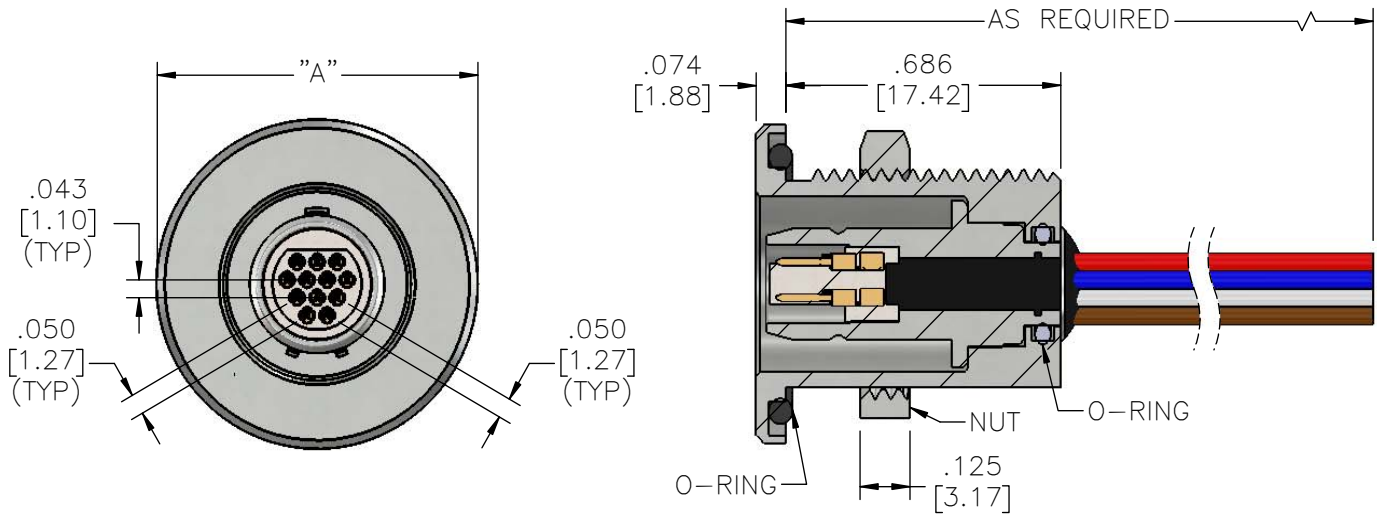
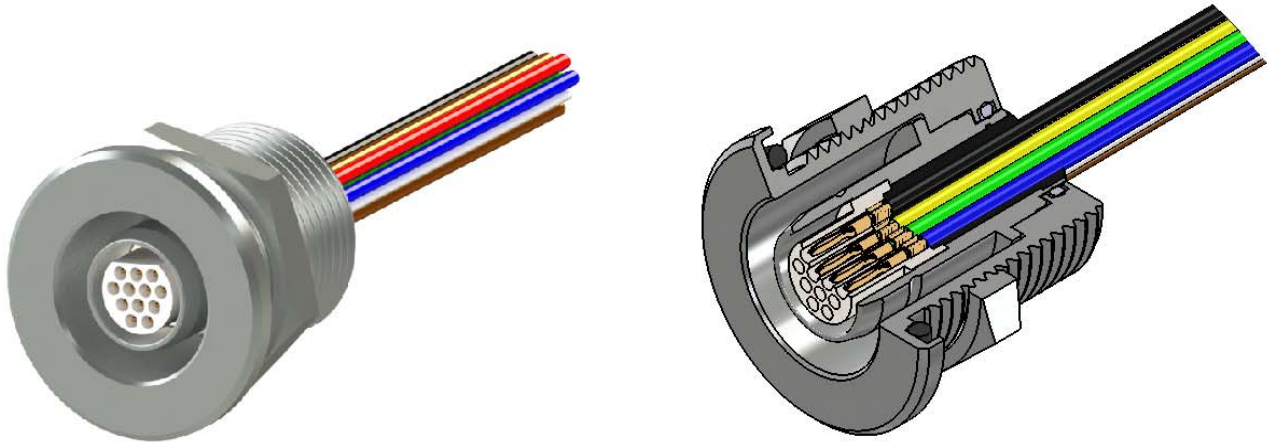
Shell Options

- Brass Alloy 360 1/2 Hard: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*, Passivated per SAE-AMS-2700

* less resistance to salt spray test.

Metal - Pin - Keyed Break Away - Wired - Front Panel

KBMP-WD-FP

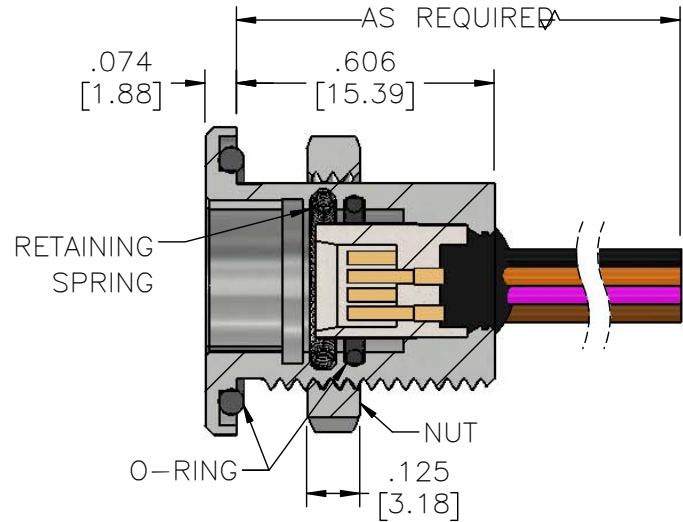
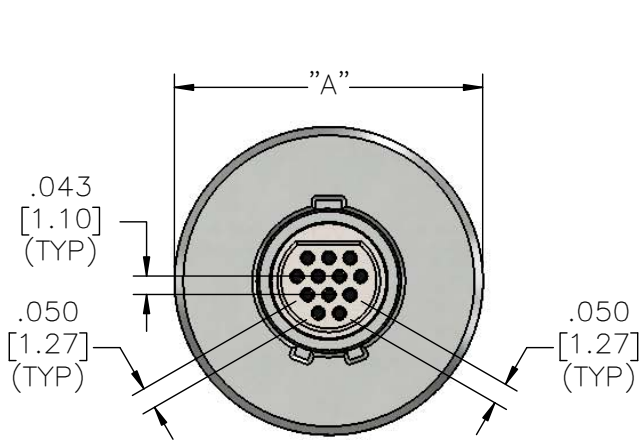
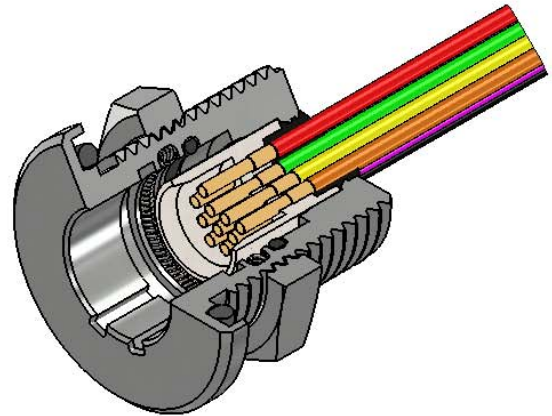
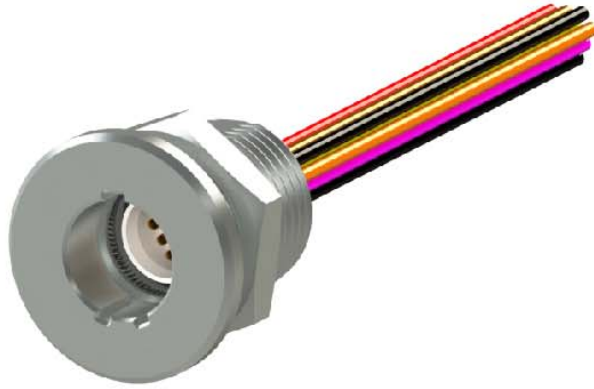


English (IN) Metric (MM)

Part #	Contacts	A	A
A22460-001	5	0.765	19.43
A22467-001	12	0.800	20.32
A22474-001	16	0.865	21.97
A22481-001	27	0.945	24.00
A22544-001	39	1.000	25.40

Metal - Socket - Keyed Break Away - Wired- Front Panel

KBMS-WD-FP

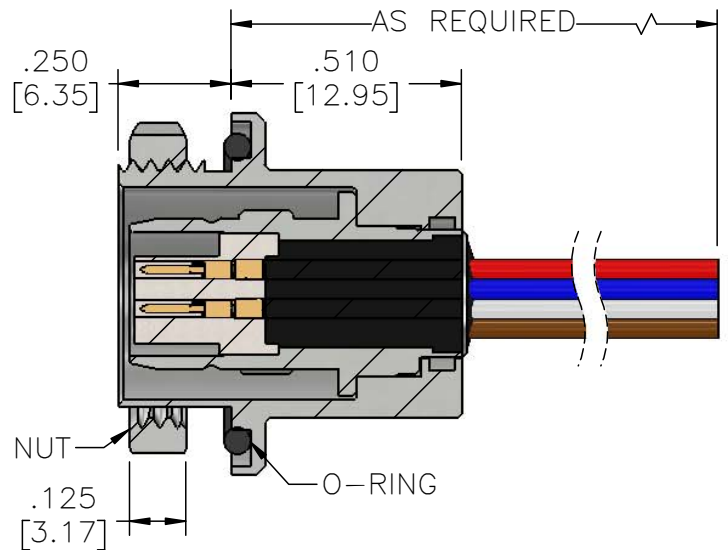
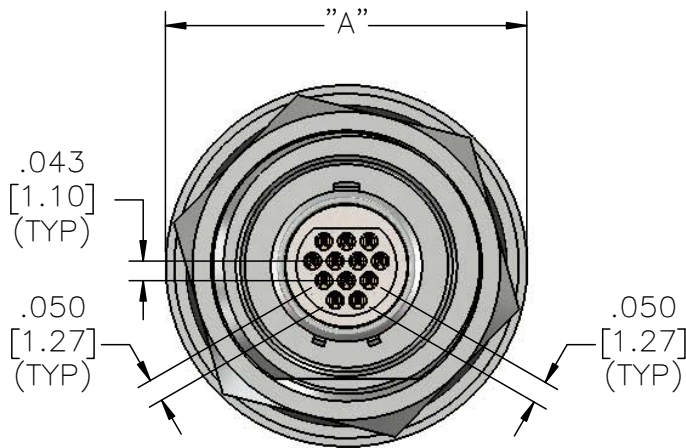
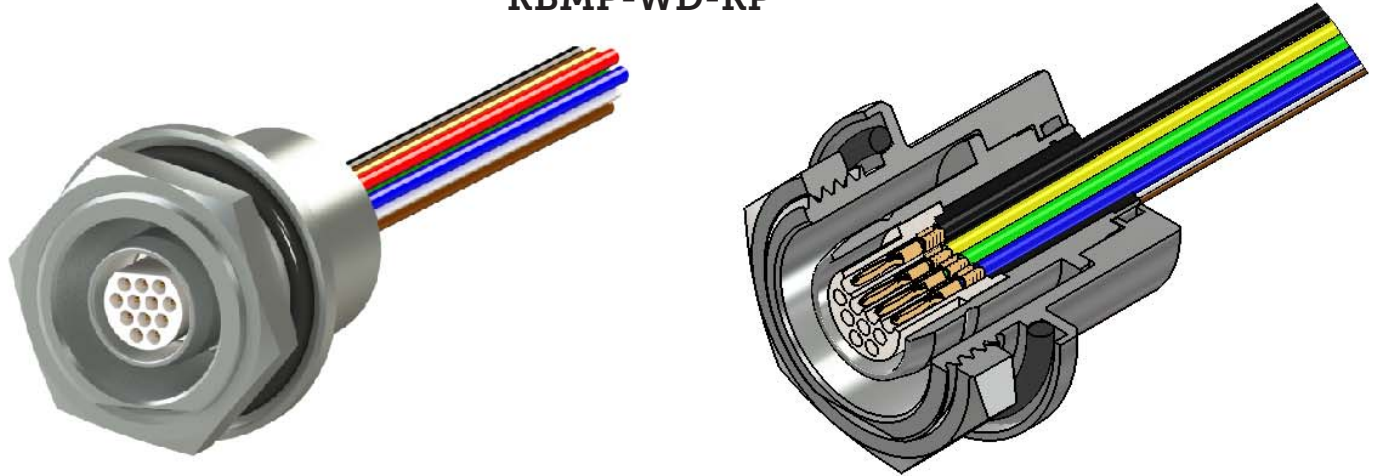


English (IN) Metric (MM)

Part #	Contacts	A	A
A22456-001	5	0.680	17.27
A22463-001	12	0.725	18.42
A22470-001	16	0.765	19.43
A22477-001	27	0.865	21.97
A22549-001	39	0.950	24.13

Metal - Pin - Keyed Break Away - Wired - Rear Panel

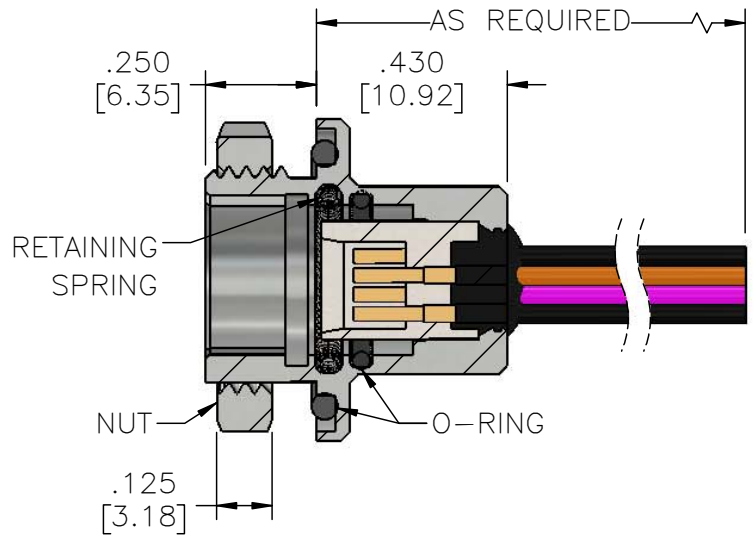
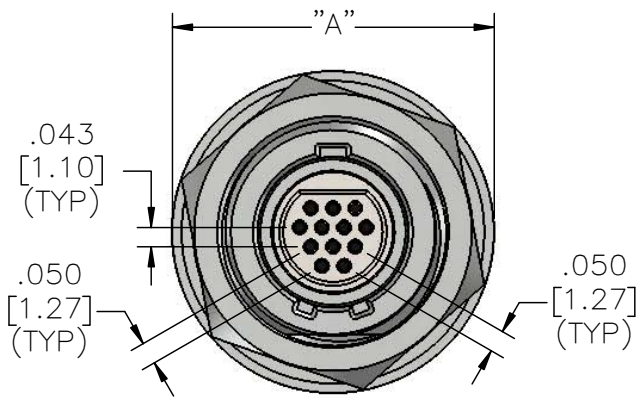
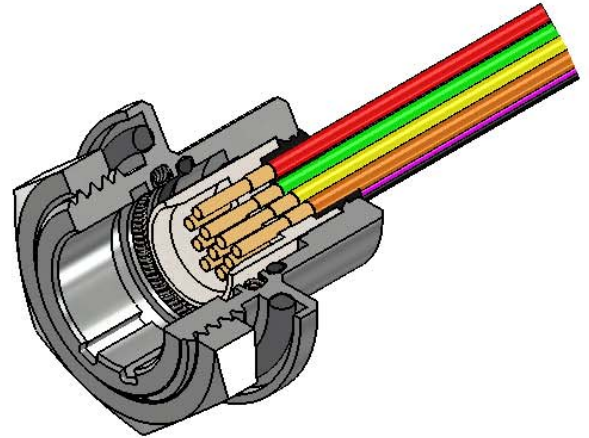
KBMP-WD-RP



Part #	Contacts	English (IN)	Metric (MM)
		A	A
A22461-001	5	0.765	19.43
A22468-001	12	0.800	20.32
A22475-001	16	0.865	21.97
A22482-001	27	0.945	24.00
A22545-001	39	1.000	25.40

Metal - Socket - Keyed Break Away - Wired - Rear Panel

KBMS-WD-RP

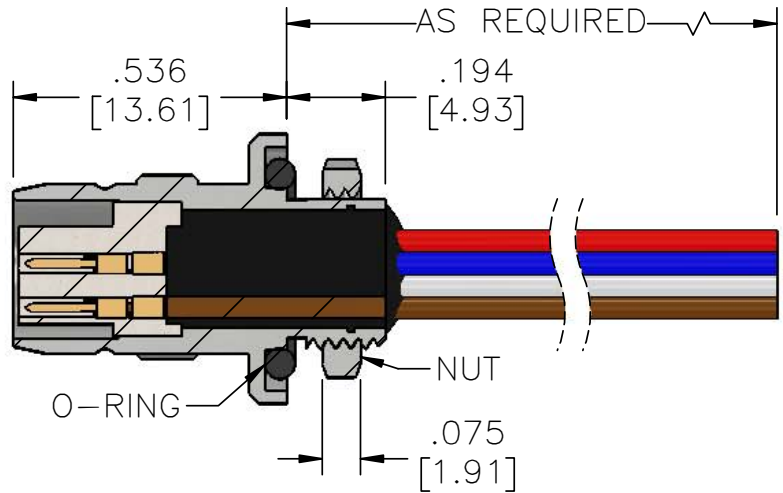
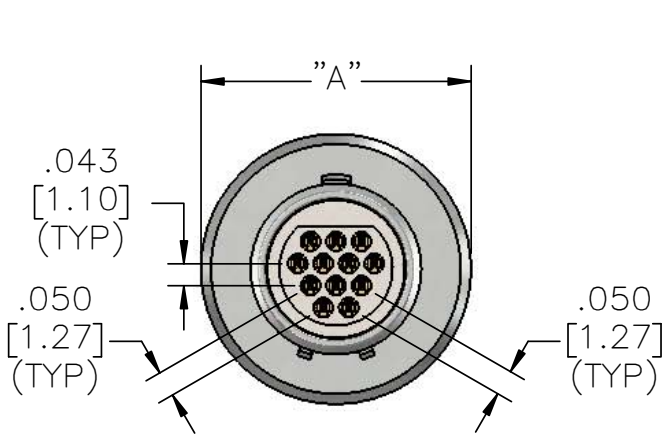
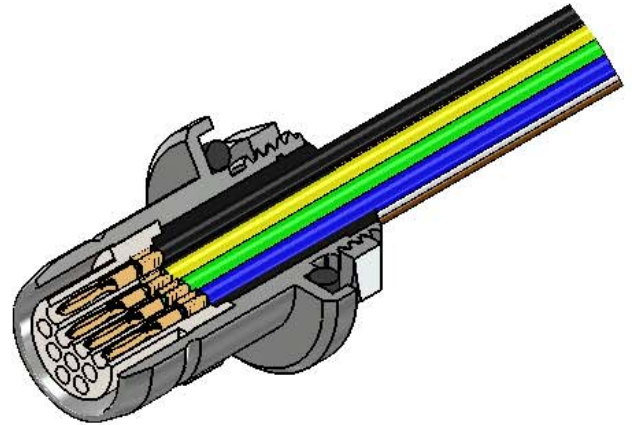
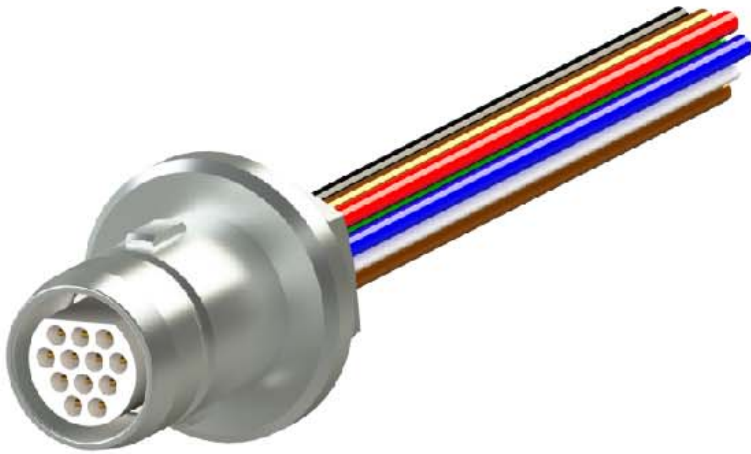


English (IN) Metric (MM)

Part #	Contacts	A	A
A22457-001	5	0.680	17.27
A22464-001	12	0.725	18.42
A22471-001	16	0.765	19.43
A22478-001	27	0.865	21.97
A22550-001	39	0.950	24.13

Metal - Pin - Keyed Break Away - Wired - Protruding Panel

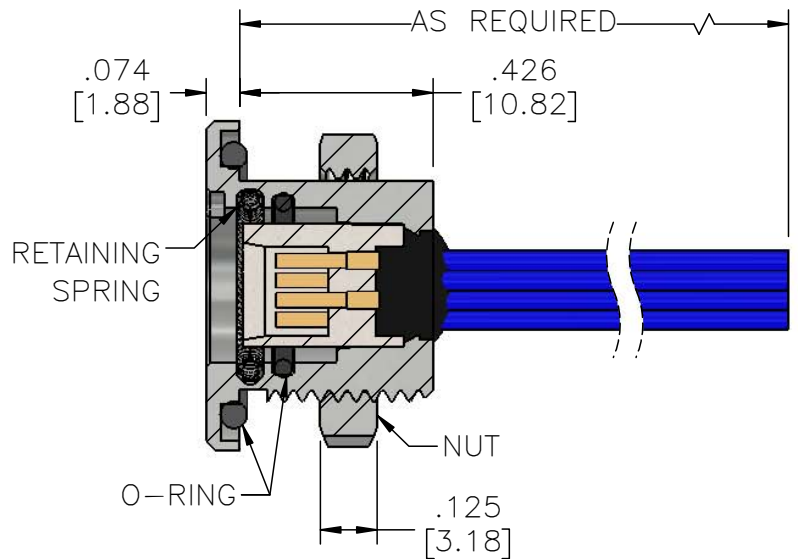
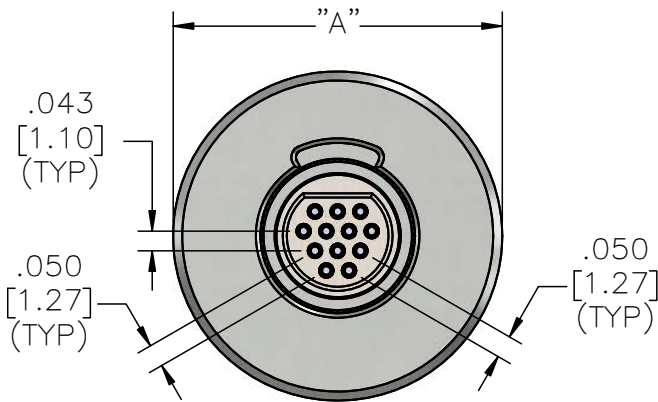
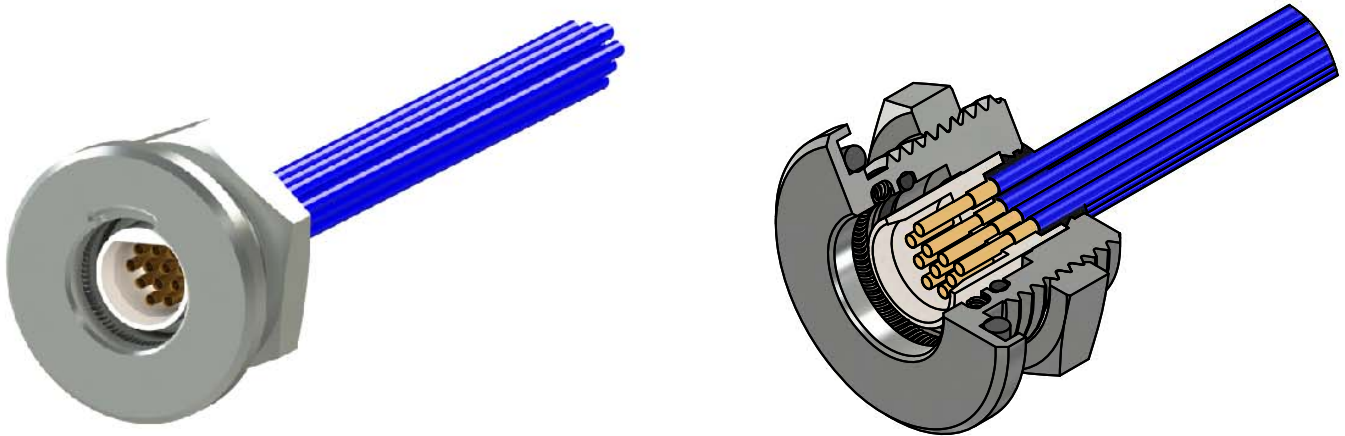
KBMP-WD-PP



Part #	Contacts	English (IN) Metric (MM)	
		A	A
A22459-001	5	0.490	12.45
A22466-001	12	0.530	13.46
A22473-001	16	0.620	15.75
A22480-001	27	0.655	16.64
A22546-001	39	0.735	18.67

Metal - Socket - Break Away - Wired - Front Panel

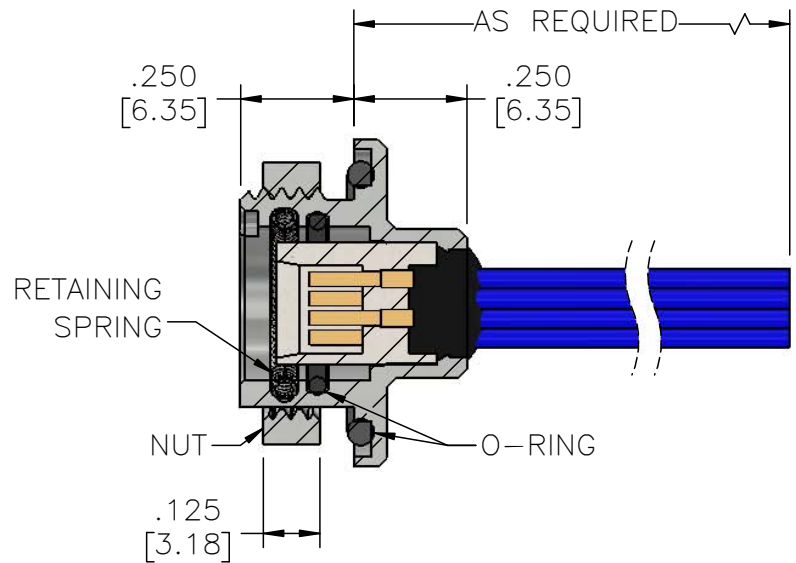
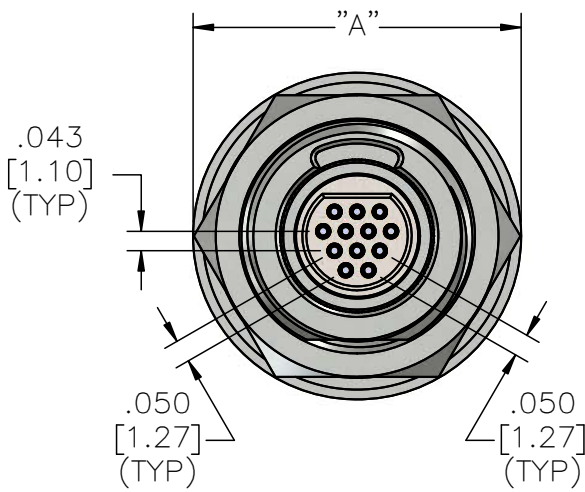
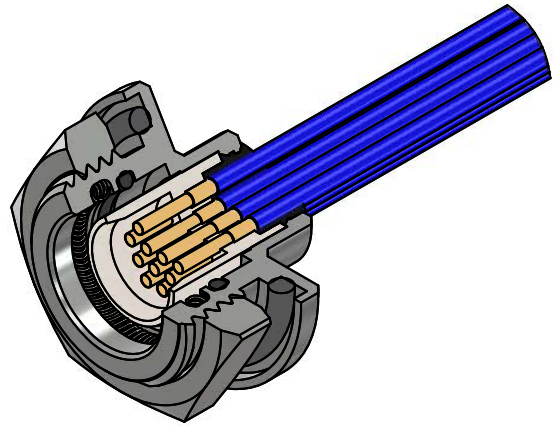
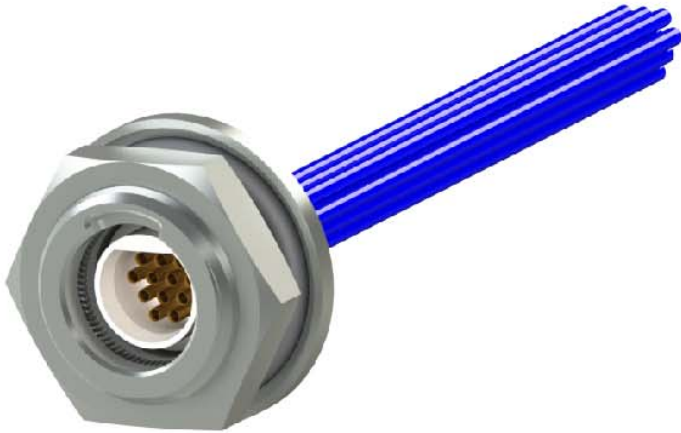
BAMS-WD-FP



English (IN) Metric (MM)

Part #	Contacts	A	A
A22431-001	5	0.680	17.27
A22436-001	12	0.725	18.42
A22441-001	16	0.765	19.43
A22446-001	27	0.865	21.97
A22540-001	39	0.945	24.00

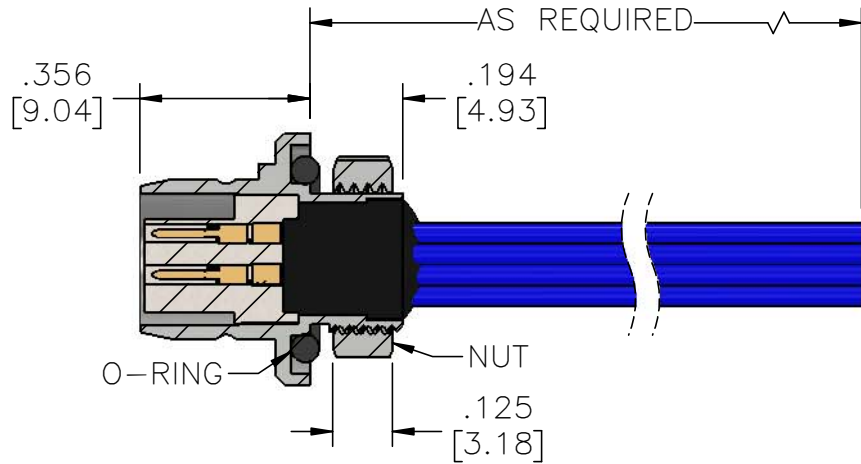
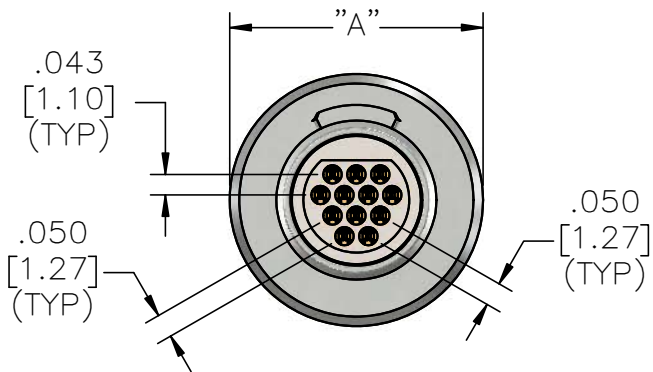
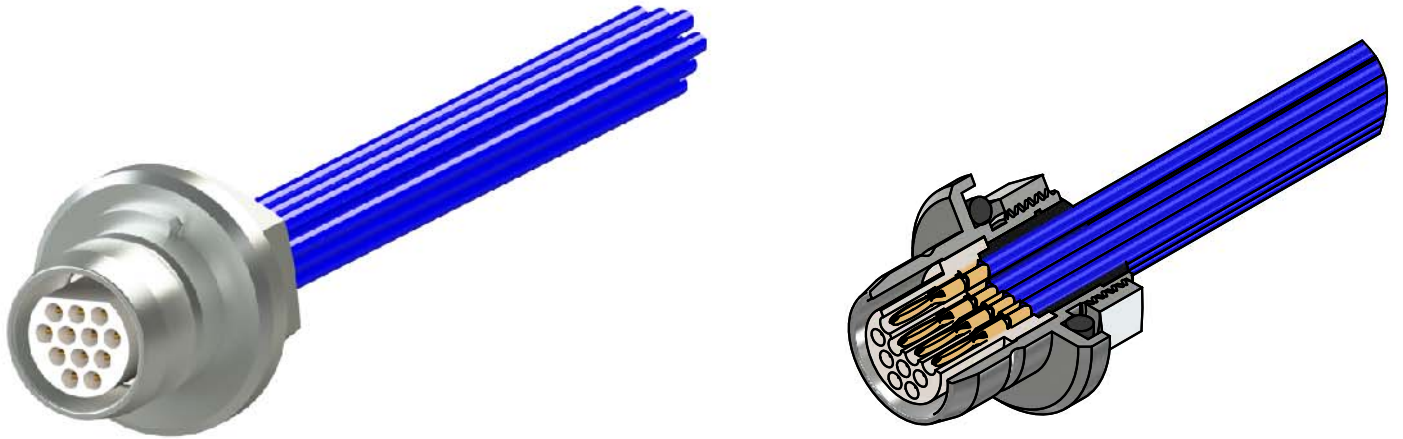
Metal - Socket - Break Away - Wired - Rear Panel BAMS-WD-RP



English (IN) Metric (MM)

Part #	Contacts	A	A
A22432-001	5	0.680	17.27
A22437-001	12	0.725	18.42
A22442-001	16	0.765	19.43
A22447-001	27	0.865	21.97
A22541-001	39	0.915	23.24

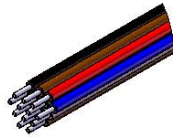








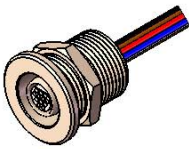
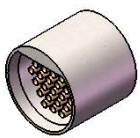






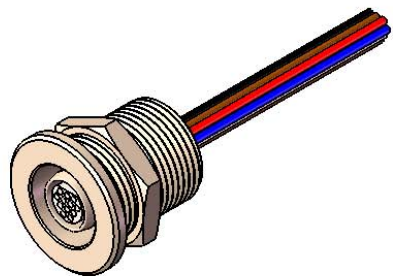
**Metal - Pin - Break Away -
Wired - Protruding Panel**
BAMP-WD-PP



English (IN) Metric (MM)

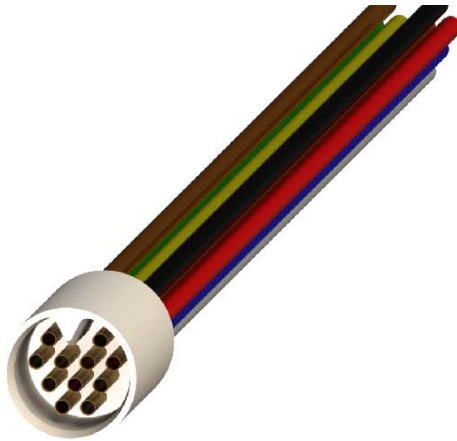
Part #	Contacts	A	A
A22435-001	5	0.490	12.45
A22440-001	12	0.530	13.46
A22445-001	16	0.620	15.75
A22450-001	27	0.655	16.64
A22537-001	39	0.745	18.92

BREAK AWAY MICRO CIRCULAR DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options
KBM (Keyed Break Away)	5 12 16	WD: Discrete Lead Wire	Standard N: Nickel Plated Brass	RP: Rear Panel Mount	C Color Coded
BAM (Standard Break Away)	27 39				
Male (P - Pin)		WC: Cable	Non-Standard Options BN: Black Nickel Plated Brass		OR O-Ring
				FP: Front Panel Mount	
Female (S - Socket)		Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 26 AWG Max	P: Passivated Stainless Steel		RH RoHS COMPLIANT
					
			OX: Black Oxide Finished Steel	PP: Protruding Panel Mount (male only)	IP68
					
					
		EXAMPLE: KBMP-12-WD-10.0-C-FP-N-OR			

NANO 360[®] Plastic

Nano Circular Discrete Leadwire/ Cable (Type WD/WC)



Electrical-Mechanical Specifications

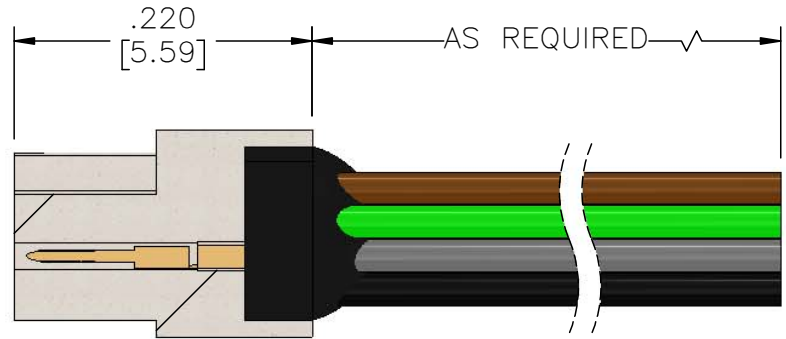
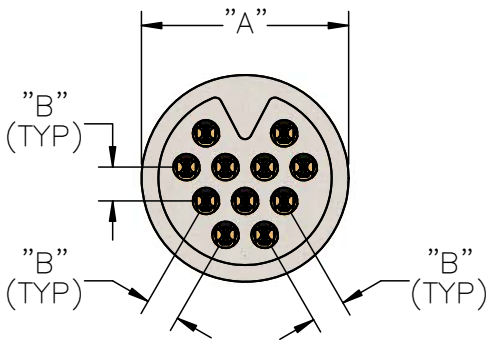
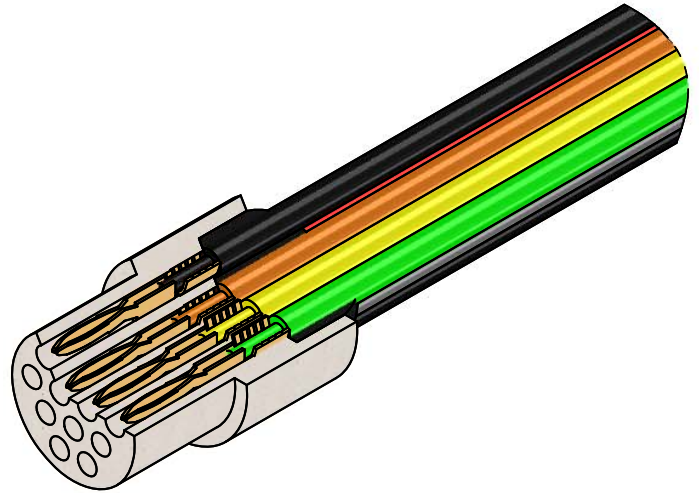
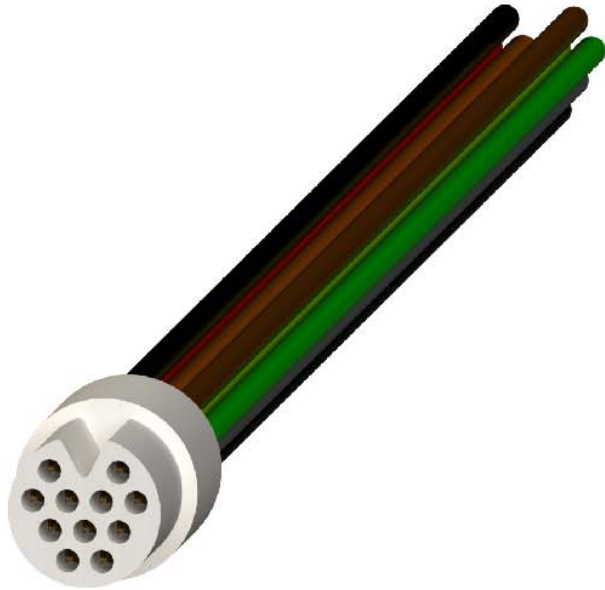
- Operating Temperature: _____ -55°C to 125°C
- Dielectric Withstand Voltage: _____ 250 VAC RMS @sea level
- Contact Resistance: _____ 71 milliohms(71 mV) Max @1 Amps
- Current Rating: _____ 1 Amps per contact
- Durability: _____ >2000 Mating Cycles min
- Insulation Resistance: _____ 5000 megohms @ 100 VDC
- Shock: _____ 100 g's with no discontinuities > 10 nanosecond
- Vibration: _____ 20 g's with no discontinuities > 10 nanosecond
- Thermal Vacuum Outgassing (Space Class): _____ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: _____ 2.5 oz (71 g) typical per contact

Material Specifications

- Contact: _____ Copper Alloy per MIL-DTL-32139
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Wire: _____ 32 AWG (7-40) PTFE, color coded

Plastic - Pin - Wired

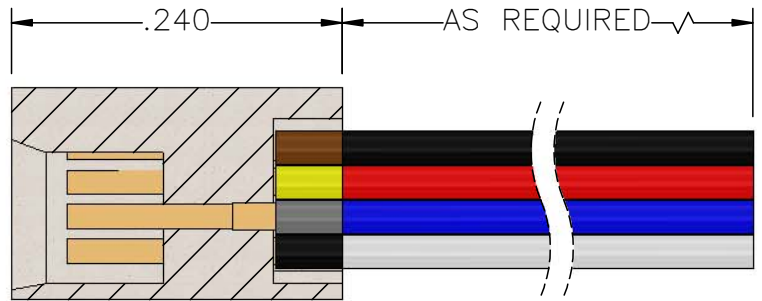
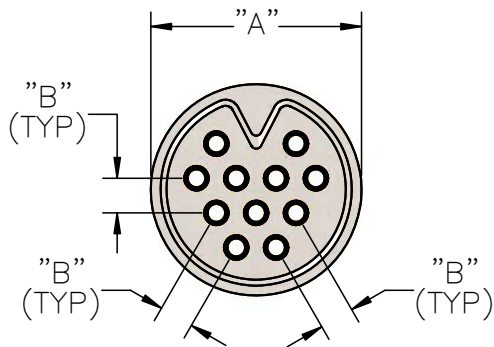
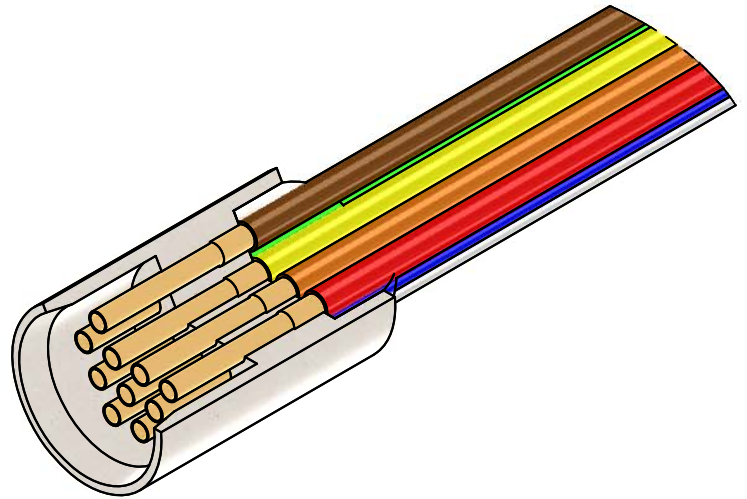
NCP-WD



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79100-001	6	0.122	0.025	3.10	0.64
A79102-001	11	0.153		3.89	
A79104-001	15	0.181		4.60	
A79106-001	28	0.217		5.51	
A79120-001	39	0.305	0.035	7.75	0.89

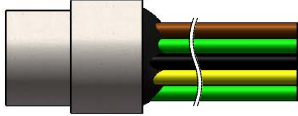


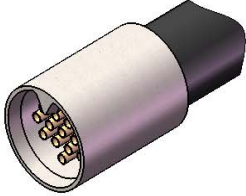



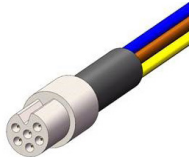
Plastic - Socket - Wired

NCS-WD



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79101-001	6	0.122	0.025	3.10	0.64
A79103-001	11	0.153		3.89	
A79105-001	15	0.181		4.60	
A79107-001	28	0.217		5.51	
A79121-001	39	0.305	0.035	7.75	0.89

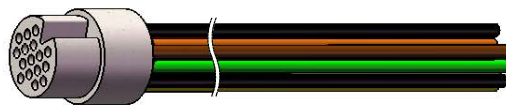
NANO CIRCULAR DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Options
NC	6 11 16 28 39	WD: Discrete Lead Wire	C Color Coded
Male (P - Pin)			
Female (S - Socket)		WC: Cable	CLIP Locking Clip
			
		Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 32 AWG Max	RH RoHS COMPLIANT 
			ST: Inline Shell w/ Shrink Tube 

Non-Standard Option
OM
Overmold (Contact Omnetics for Overmold Information & Availability)

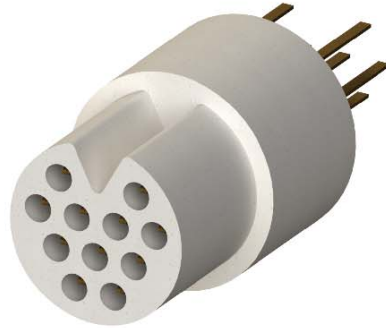


EXAMPLE:
NCP-16-WD-12.0-C



NANO 360[®] Plastic

Nano Circular Straight Thru-Hole Tail



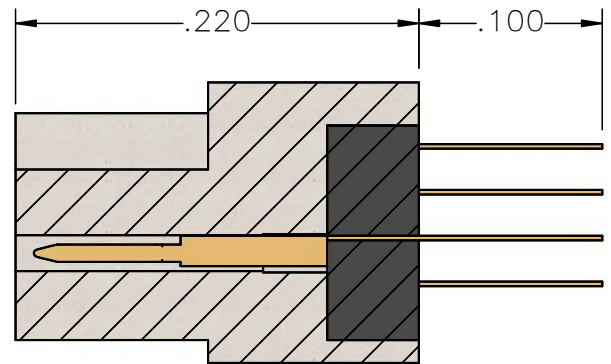
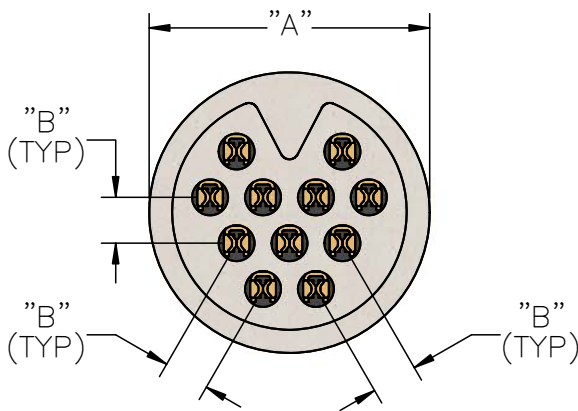
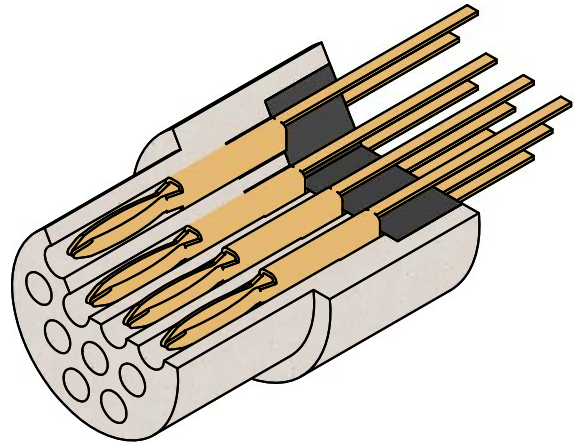
Electrical-Mechanical Specifications

- Operating Temperature: _____ -55°C to 125°C
- Dielectric Withstand Voltage: _____ 250 VAC RMS @sea level
- Contact Resistance: _____ 71 milliohms(71 mV) Max @1 Amps
- Current Rating: _____ 1 Amps per contact
- Durability: _____ >2000 Mating Cycles min
- Insulation Resistance: _____ 5000 megohms @ 100 VDC
- Shock: _____ 100 g's with no discontinuities > 10 nanosecond
- Vibration: _____ 20 g's with no discontinuities > 10 nanosecond
- Thermal Vacuum Outgassing (Space Class): _____ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: _____ 2.5 oz (71 g) typical per contact

Material Specifications

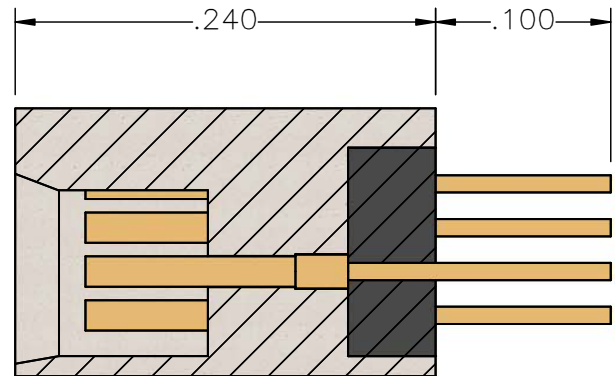
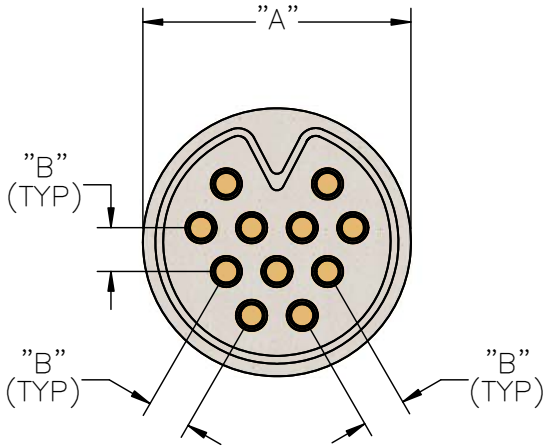
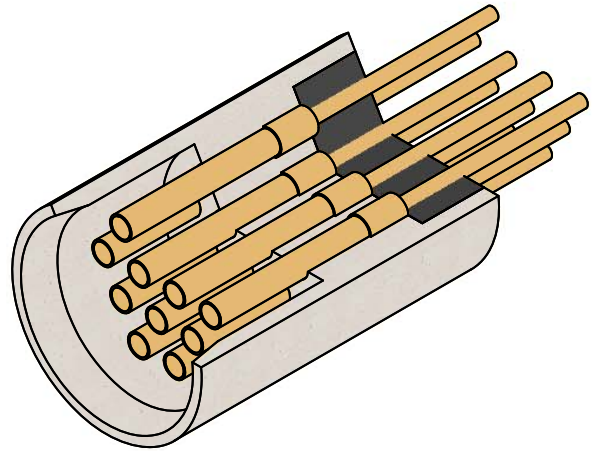
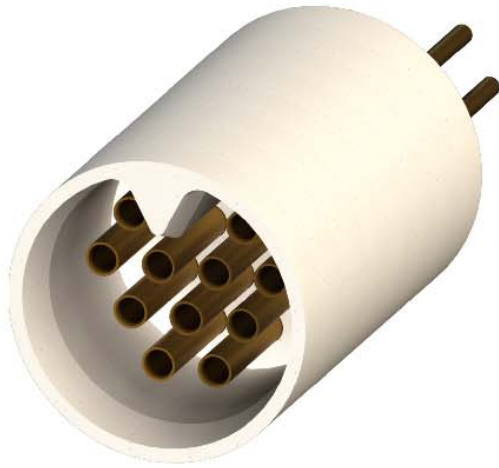
- Contact: _____ Copper Alloy per MIL-DTL-32139
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519

Plastic - Pin - Straight Tail NCP-DD



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79108-001	6	0.122	0.025	3.10	0.64
A79110-001	11	0.153		3.89	
A79112-001	16	0.181		4.60	
A79114-001	28	0.217		5.51	
A79122-001	39	0.305	0.035	7.75	0.89

Plastic - Socket - Straight Tail NCS-DD



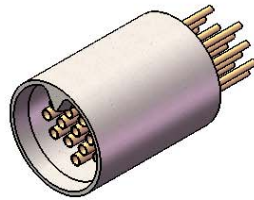
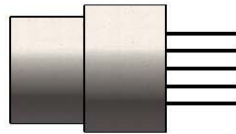
Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79109-001	6	0.122	0.025	3.10	0.64
A79111-001	11	0.153		3.89	
A79113-001	16	0.181		4.60	
A79115-001	28	0.217		5.51	
A79123-001	39	0.305	0.035	7.75	0.89

NANO CIRCULAR STRAIGHT THRU-HOLE TAIL (TYPE DD)

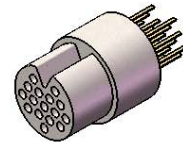
Series	# of Contacts	Termination Type	Options
NC	6 11 16 28 39	DD: Straight Thru-Hole	RH RoHS COMPLIANT



Female
(S - Socket)



EXAMPLE:
NCP-16-DD-RoHS



NANO 360[®] Metal

Nano Circular Threaded

Optional IP68 rating



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-32139
- Contact Resistance: _____ 71 Milliohm Max (71mV Drop Max) @ 1.0 Amps per MIL-DTL-32139
- Current Rating: _____ 1 Amp per MIL-DTL-32139
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ >2000 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 100 g's with no discontinuities > 10 nanosecond
- Vibration: _____ 20 g's with no discontinuities > 10 nanosecond
- Thermal Vacuum Outgassing (Space Class): _____ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: _____ 2.5 oz (71 g) typical per contact

Material Specifications

- Contact: _____ Copper Alloy Per MIL-DTL-32139
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 32 AWG, (7-40) tinned copper, PFA color coded, Black polyurethane jacket
- Wire: _____ 32 AWG (7-40) PTFE, color coded

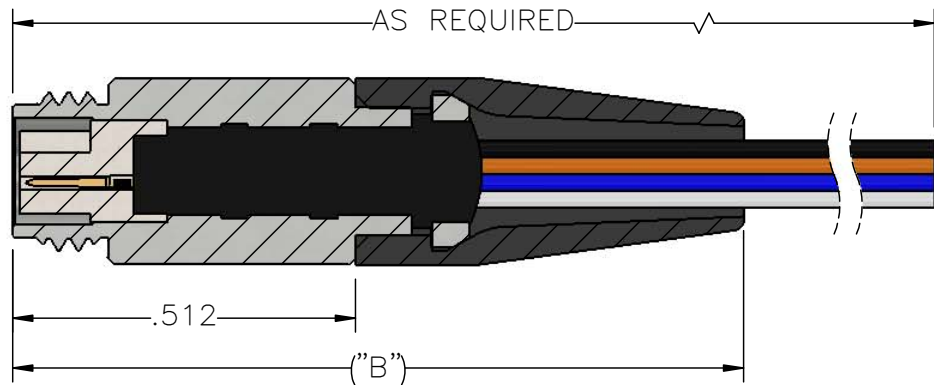
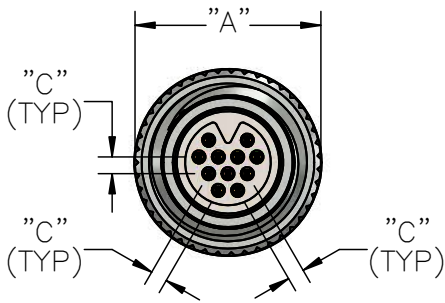
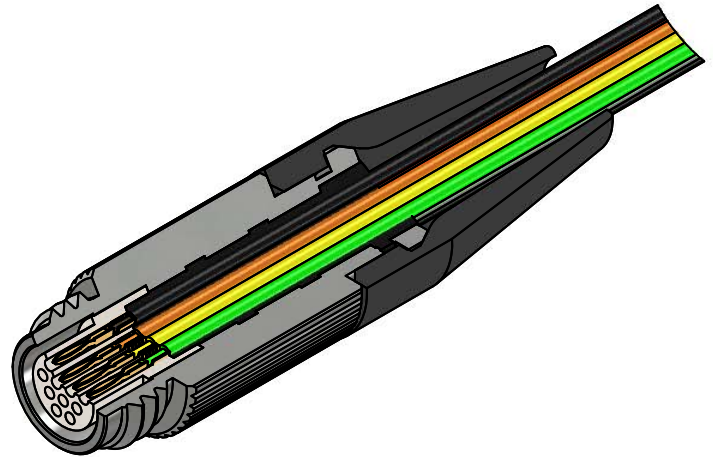
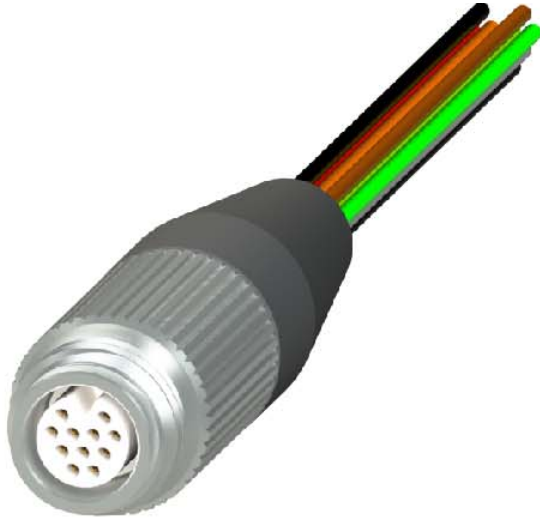
Shell Options

- Brass Alloy 360 1/2 Hard: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*, Passivated per SAE-AMS-2700

* less resistance to salt spray test.

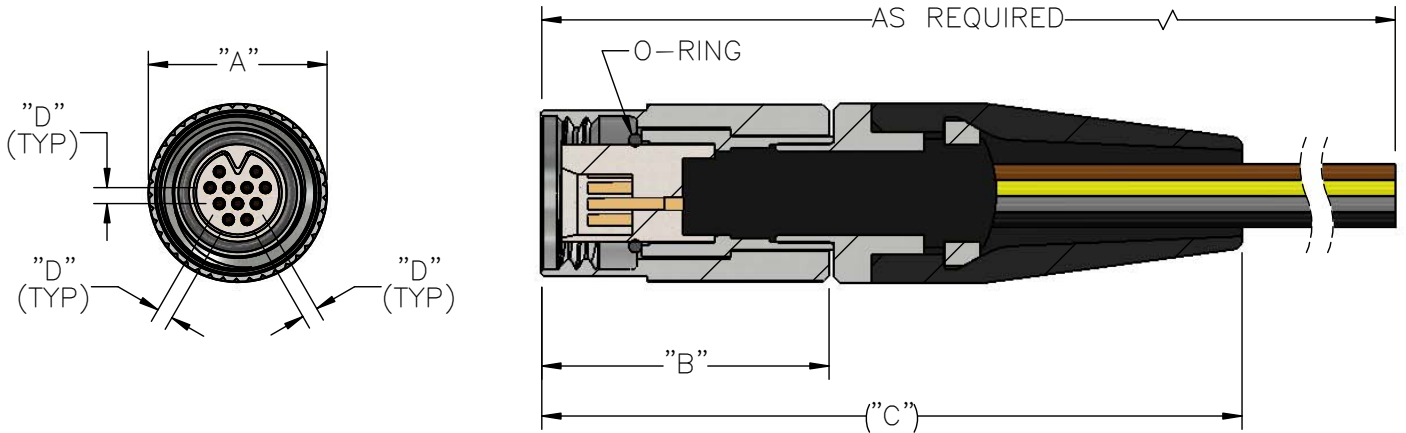
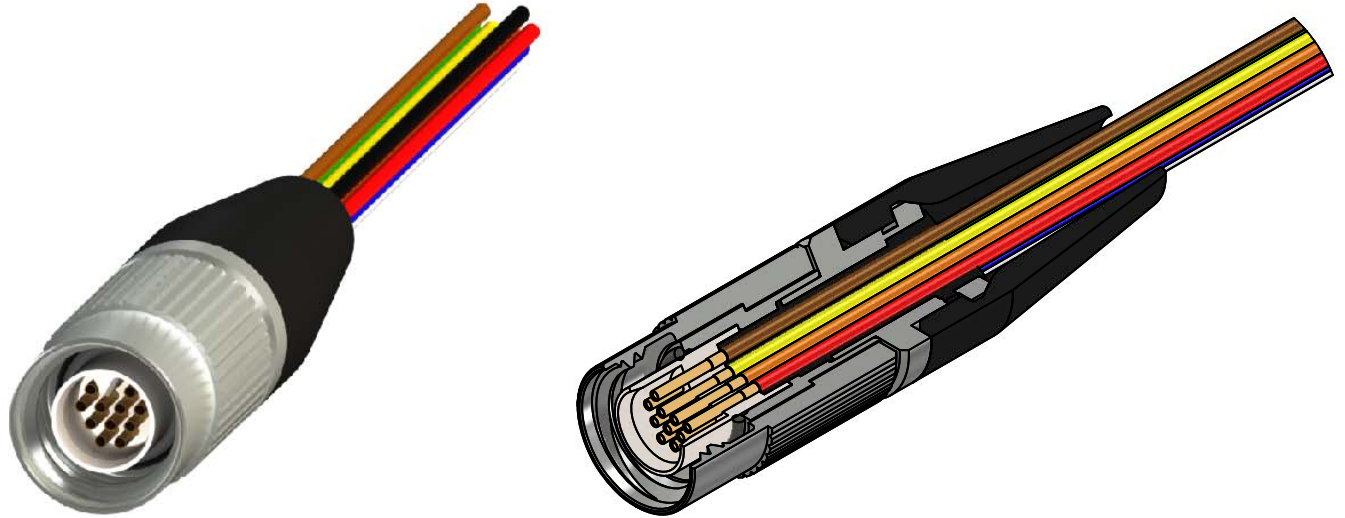
Metal - Pin - Threaded - Wired - Inline - Strain Relief

MNCP-WD-IS-SR



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A79150-001	6	0.25	1.1	0.025	6.35	27.94	0.64
A79152-001	11	0.28			7.11		
A779154-001	16	0.32	1.3		8.13	33.02	
A79156-001	28	0.37	1.6		9.40	40.64	
A79465-001	39	0.47	1.7	0.030	11.81	43.18	0.76

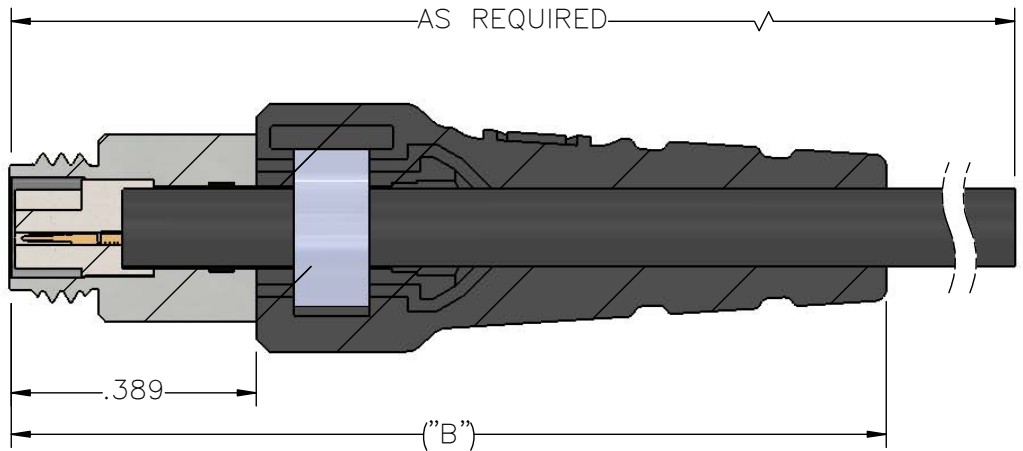
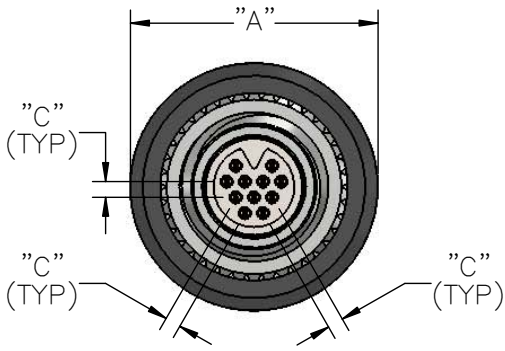
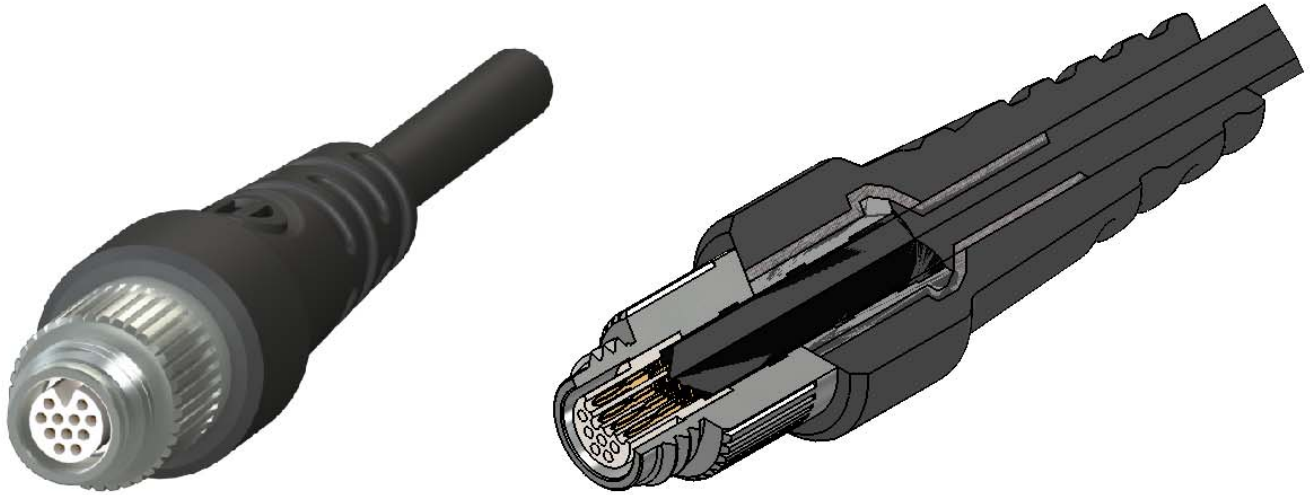
Metal - Socket - Threaded - Wired - Inline - Strain Relief MNCS-WD-IS-SR



Part #	Contacts	English (IN)				Metric (MM)			
		A	B	C	D	A	B	C	D
A79151-001	6	0.25	0.45	1.1	0.025	6.35	7.11	27.94	0.64
A79153-001	11	0.28		1.3		7.11	7.11		
A79155-001	16	0.33	0.51	1.6	0.030	8.38	7.11	33.02	0.76
A79157-001	28	0.37				9.40	9.45		
A79156-001	39	0.37				9.40	11.4		

Metal - Pin - Threaded - Cabled - Overmold - Inline - IP68

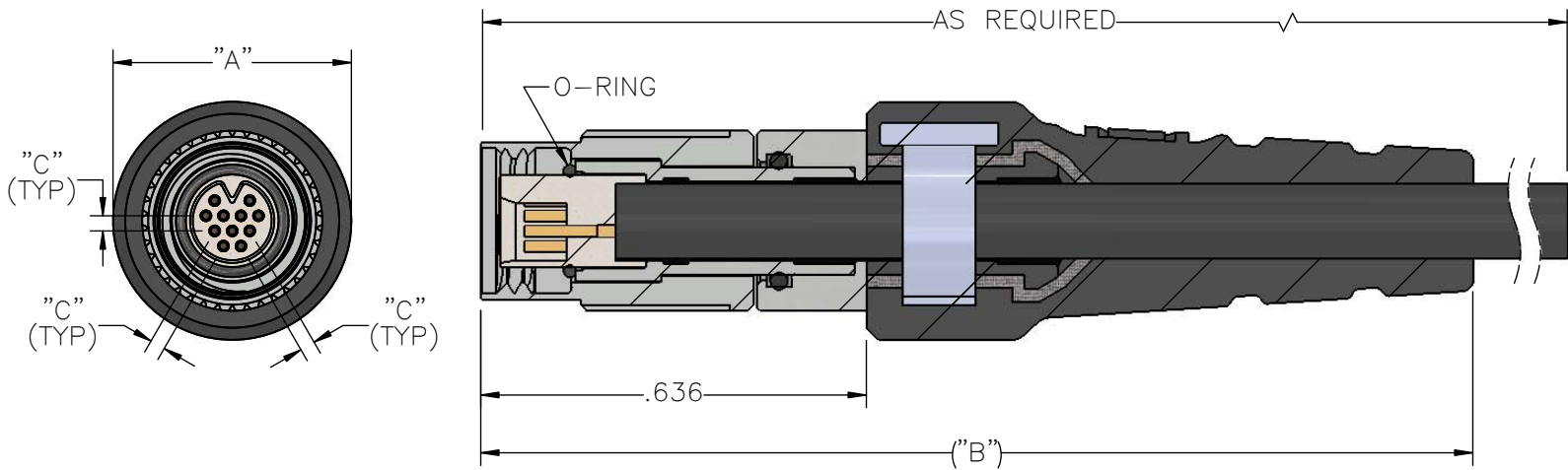
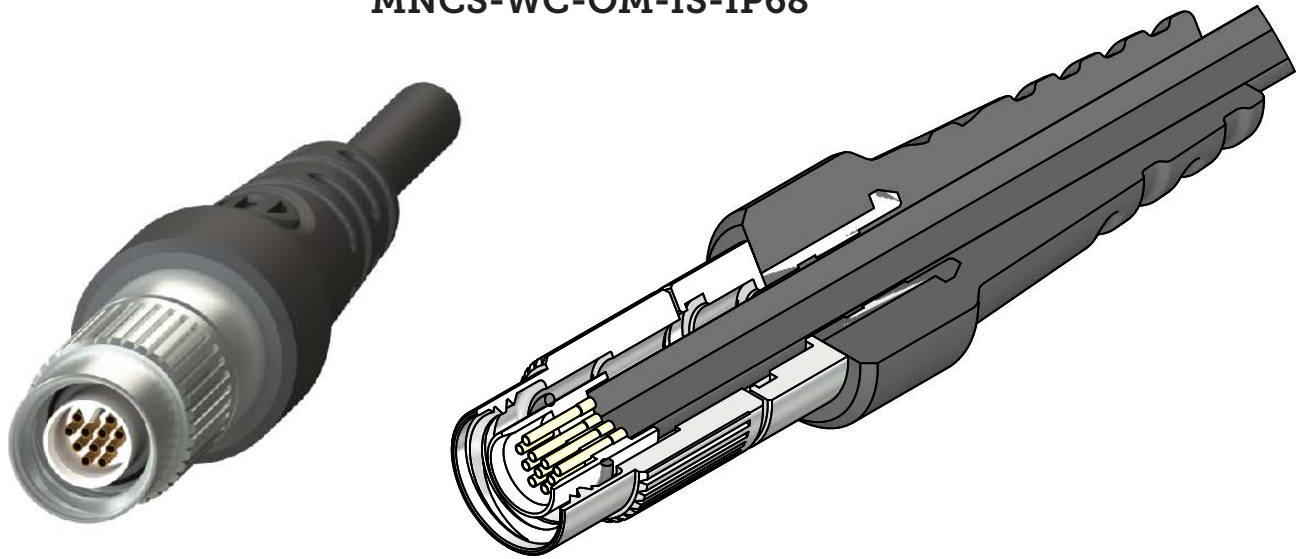
MNCP-WC-OM-IS-IP68



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A79333-001	6	0.36	1.39	0.025	9.14	35.31	0.64
A79329-001	11	0.39			9.91		
A79325-001	16	0.42	1.47		10.67	37.34	
A79321-001	28	0.46	1.57		11.68	39.88	
A79482-001	39	0.55		0.030	13.97		0.76





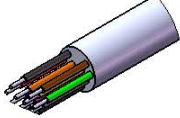








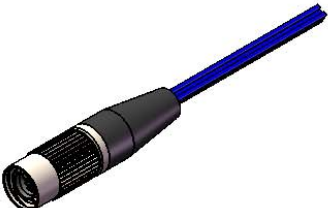
Metal - Socket - Threaded - Cabled - Overmold - Inline - IP68

MNCS-WC-OM-IS-IP68



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A79332-001	6	0.36	1.640	0.025	9.14	41.66	0.64
A79328-001	11	0.39			9.91		
A79324-001	16	0.42	1.710		10.67	43.43	
A79320-001	28	0.46	1.820	0.030	11.68	46.23	0.76
A79483-001	39	0.55			13.97		

METAL NANO CIRCULAR THREADED DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options
MNC	6	WD: Discrete Lead Wire 	Standard N: Nickel Plated Brass 	IS: Inline Shell 	C Color Coded 
	11				
Male (P - Pin)	16	WC: Cable 	Non-Standard Options BN: Black Nickel Plated Brass 	SR: Inline Shell w/ Strain Relief 	OR O-Ring 
	28				
	39				
Female (S - Socket)			P: Passivated Stainless Steel 	ST: Inline Shell w/ Shrink Tube 	IP68 
		Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 32 AWG Max	OX: Black Oxide Finished Steel 		RH RoHS COMPLIANT 
					OM Overmold (Contact Omnetics for Overmold Information & Availability) 
					

EXAMPLE:
MNCS-11-WD-10.0-C-IS-N-SR-OR

NANO 360[®] Metal

Nano Threaded Panel Mount

Optional IP68 Rating



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-32139
- Contact Resistance: _____ 71 Milliohm Max (71mV Drop Max) @ 1.0 Amps per MIL-DTL-32139
- Current Rating: _____ 1 Amp per MIL-DTL-32139
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ >2000 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 100 g's with no discontinuities > 10 nanosecond
- Vibration: _____ 20 g's with no discontinuities > 10 nanosecond
- Thermal Vacuum Outgassing (Space Class): _____ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: _____ 2.5 oz (71 g) typical per contact

Material Specifications

- Contact: _____ Copper Alloy Per MIL-DTL-32139
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 32 AWG, (7-40) tinned copper, PFA color coded, Black polyurethane jacket
- Wire: _____ 32 AWG (7-40) PTFE, color coded

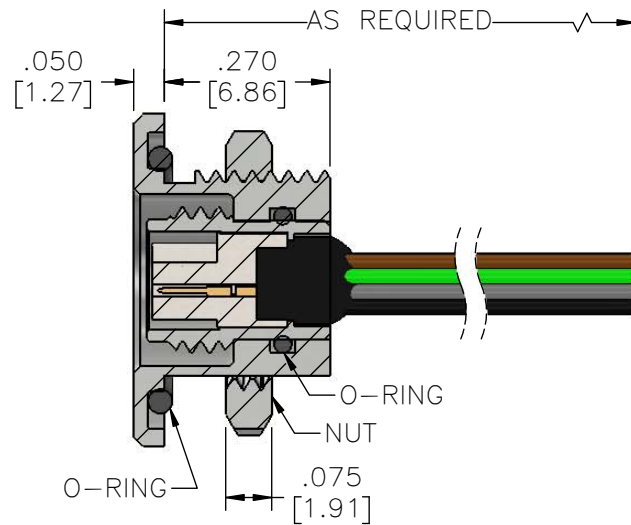
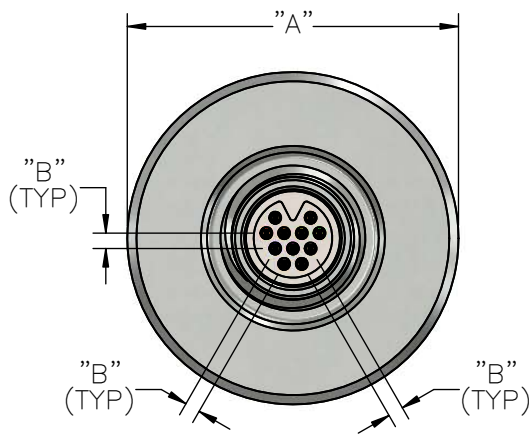
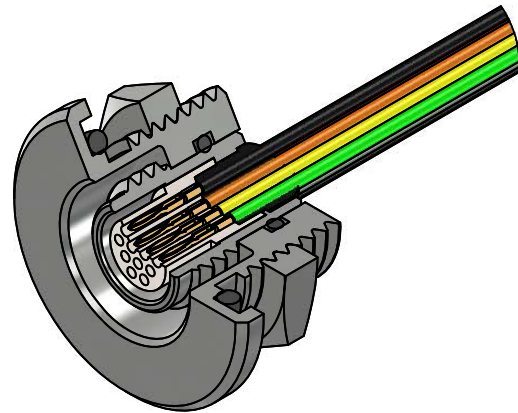
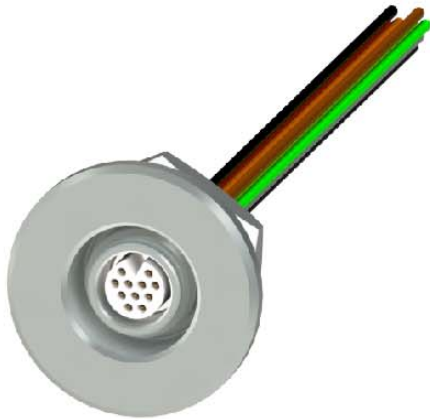
Shell Options

- Brass Alloy 360 1/2 Hard: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*, Passivated per SAE-AMS-2700

* less resistance to salt spray test.

Metal - Pin - Threaded - Wired - Front Panel - IP68

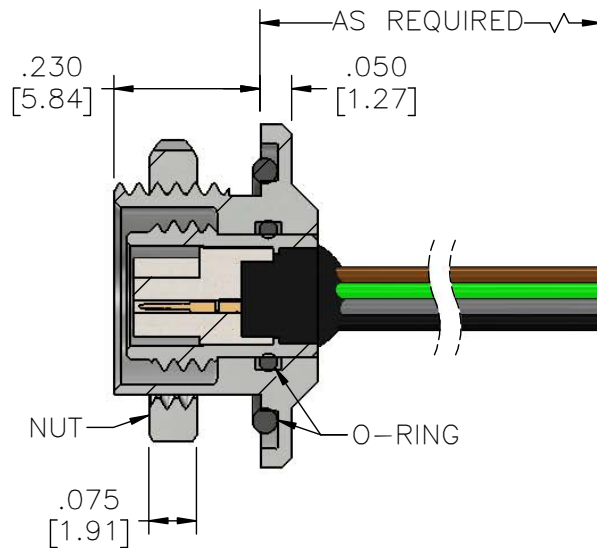
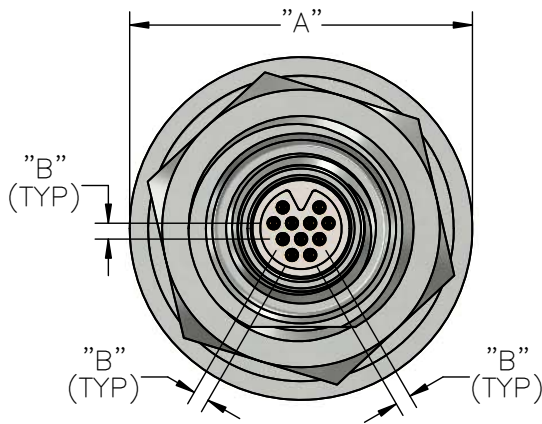
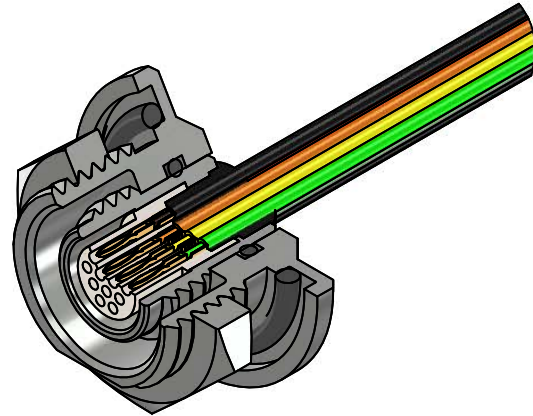
MNCP-WD-FP-IP68



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79280-001	6	0.495	0.025	12.57	0.64
A79281-001	11	0.540		13.72	
A79282-001	16	0.580		14.73	
A79283-001	28	0.615		15.62	
A79484-001	39	0.735	0.030	18.67	0.76

Metal - Pin - Threaded - Wired - Rear Panel - IP68

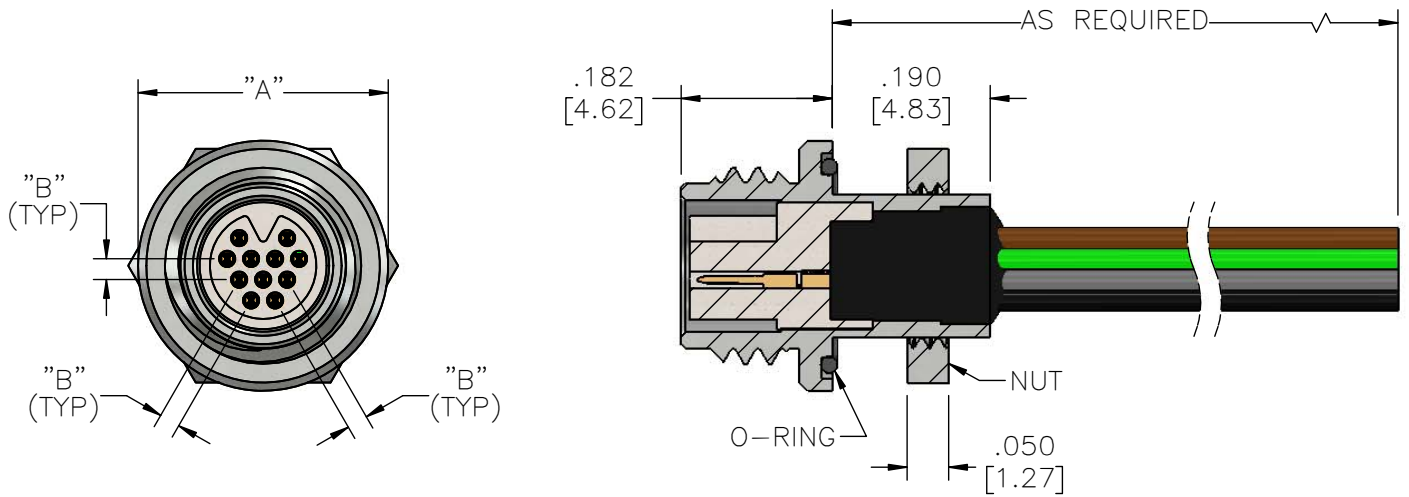
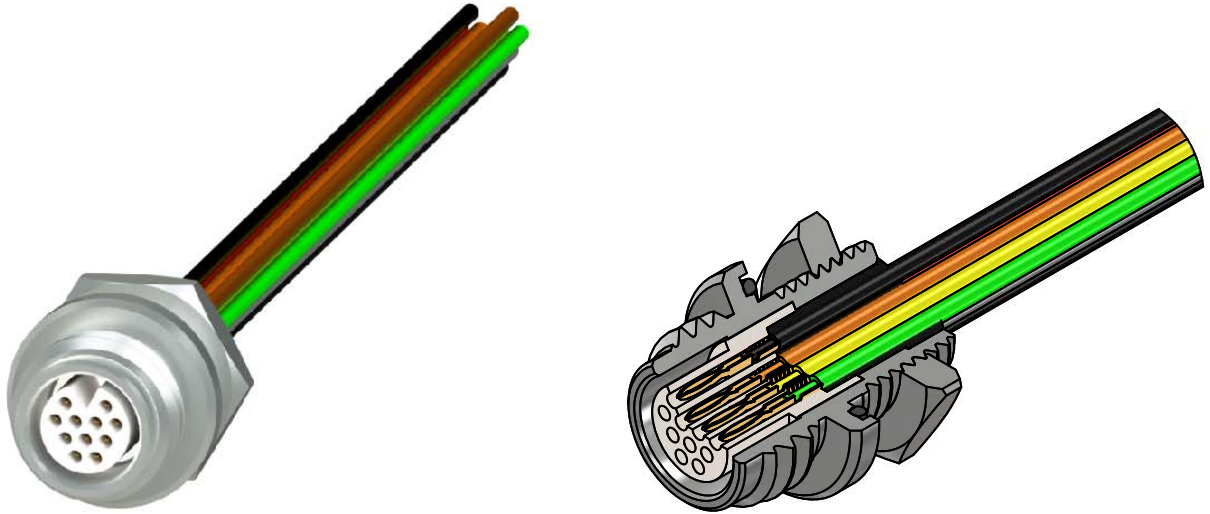
MNCP-WD-RP-IP68



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79284-001	6	0.495	0.025	12.57	0.64
A79285-001	11	0.540		13.72	
A79286-001	16	0.580		14.73	
A79287-001	28	0.615		15.62	
A79485-001	39	0.735	0.030	18.67	0.76














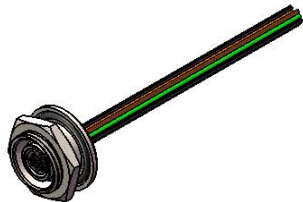
Metal - Pin - Threaded - Wired - Protruding Panel - IP68

MNCP-WD-PP-IP68



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79288-001	6	0.330	0.025	8.38	0.64
A79289-001	11	0.400		10.16	
A79290-001	16	0.415		10.54	
A79291-001	28	0.460		11.68	
A79486-001	39	0.575	0.30	14.61	0.76

METAL NANO CIRCULAR THREADED DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options
MNC Male (P - Pin)	6	WD: Discrete Lead Wire 	Standard N: Nickel Plated Brass 	FP: Front Panel Mount (male only) 	C Color Coded 
	11				
	16	WC: Cable 	Non-Standard Options BN: Black Nickel Plated Brass 	RP: Rear Panel Mount (male only) 	OR O-Ring 
	28				
	39	Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 32 AWG Max	P: Passivated Stainless Steel 	PP: Protruding Panel Mount (male only) 	IP68 
			OX: Black Oxide Finished Steel 		RH RoHS COMPLIANT 
					

EXAMPLE:
MNC-16-WD-10.0-N-RP-C-OR

NANO 360[®] Metal

Nano Circular Twist-Lock *Optional IP68 Rating*



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-32139
- Contact Resistance: _____ 71 Milliohm Max (71mV Drop Max) @ 1.0 Amps per MIL-DTL-32139
- Current Rating: _____ 1 Amp per MIL-DTL-32139
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ >2000 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 100 g's with no discontinuities > 10 nanosecond
- Vibration: _____ 20 g's with no discontinuities > 10 nanosecond
- Thermal Vacuum Outgassing (Space Class): _____ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: _____ 2.5 oz (71 g) typical per contact

Material Specifications

- Contact: _____ Copper Alloy Per MIL-DTL-32139
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 32 AWG, (7-40) tinned copper, PFA color coded, Black polyurethane jacket
- Wire: _____ 32 AWG (7-40) PTFE, color coded

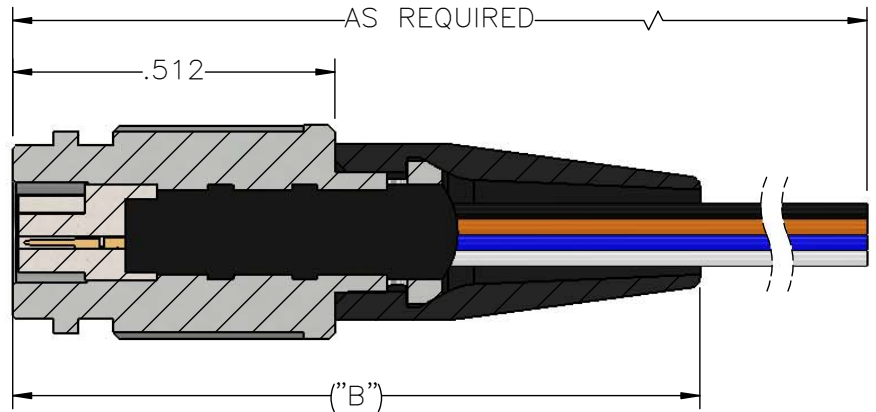
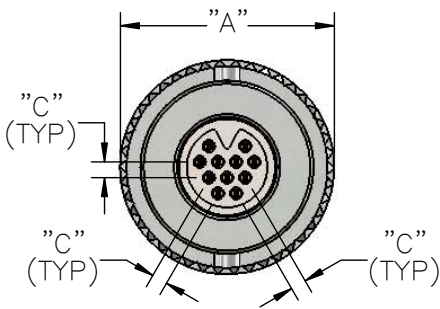
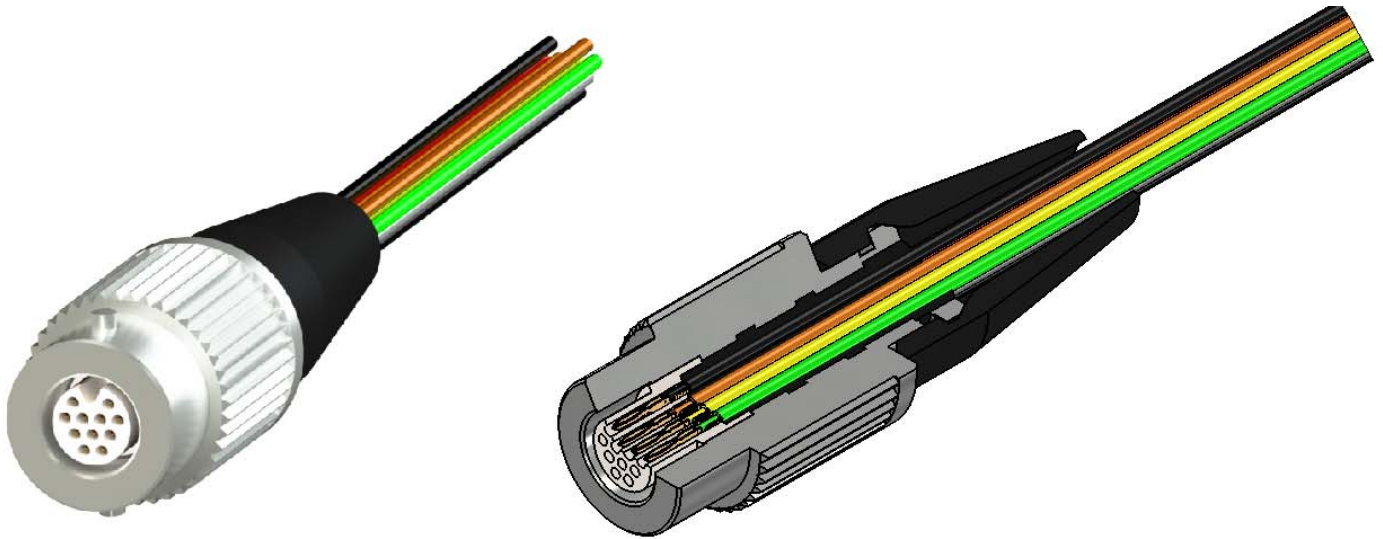
Shell Options

- Brass Alloy 360 1/2 Hard: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*, Passivated per SAE-AMS-2700

* less resistance to salt spray test.

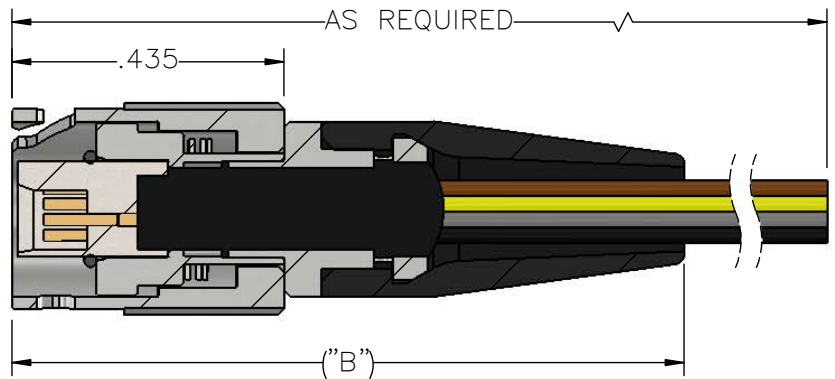
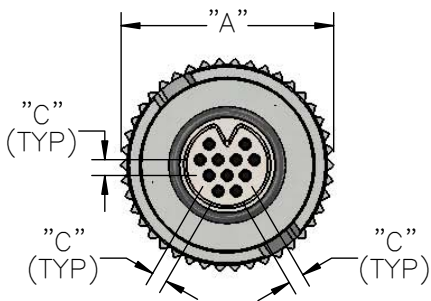
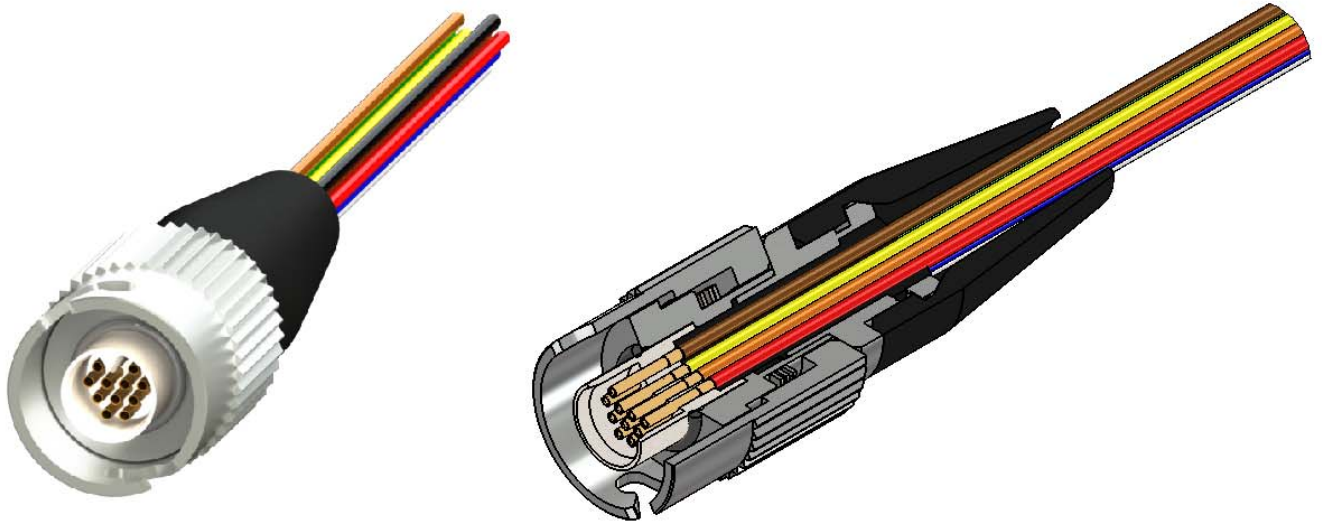
Metal - Pin - Twist-Lock - Wired - Inline - Strain Relief

TNCP-WD-IS-SR



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A79237-001	6	0.320	1.100	0.025	8.13	27.94	0.64
A79242-001	11	0.340			8.64		
A79247-001	16	0.370	1.300		9.40	33.02	
A79252-001	28	0.400	1.600	10.16	40.64		
A79477-001	39	0.496	1.700	0.030	12.60	43.18	0.76

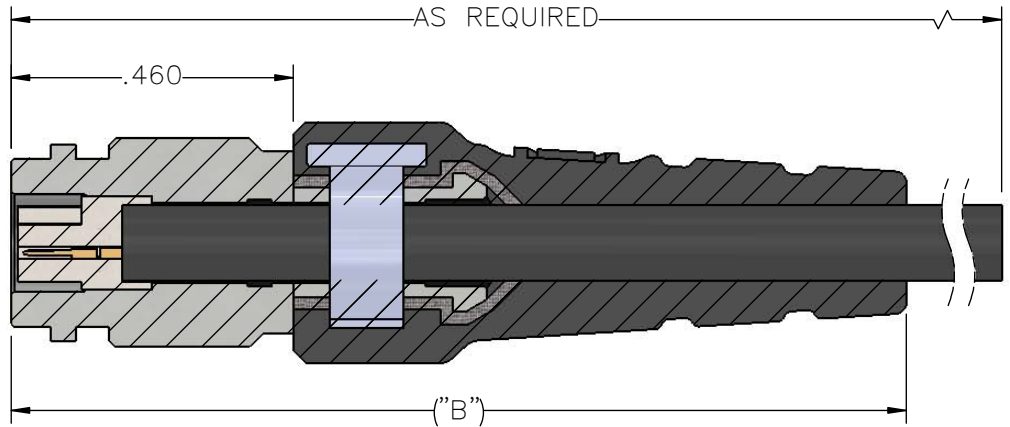
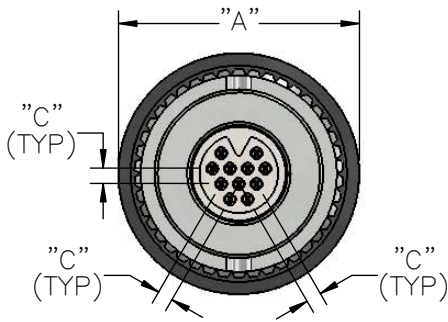
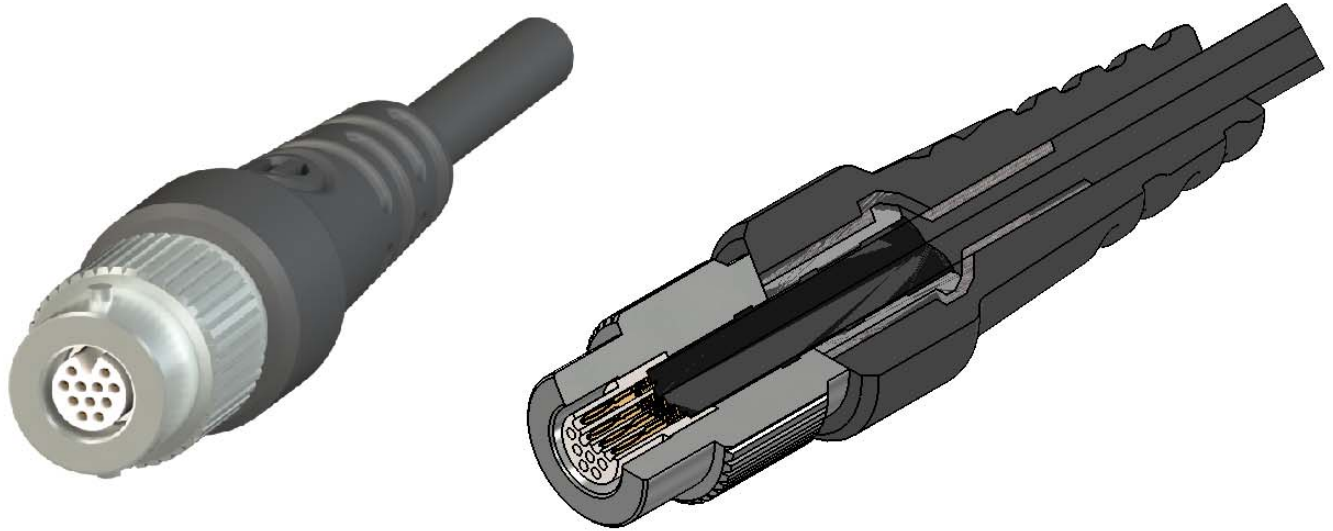
**Metal - Socket - Twist-Lock -
Wired - Inline - Strain Relief**
TNCS-WD-IS-SR



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A79236-001	6	0.320	1.100	0.025	8.13	27.94	0.64
A79241-001	11	0.340			8.64		
A79246-001	16	0.370	1.300		9.40	33.02	
A79251-001	28	0.400	1.600		10.16	40.64	
A79478-001	39	0.500	1.700	0.030	12.70	43.18	0.76

Metal - Pin - Twist-Lock - Cabled - Overmold - Inline - IP68

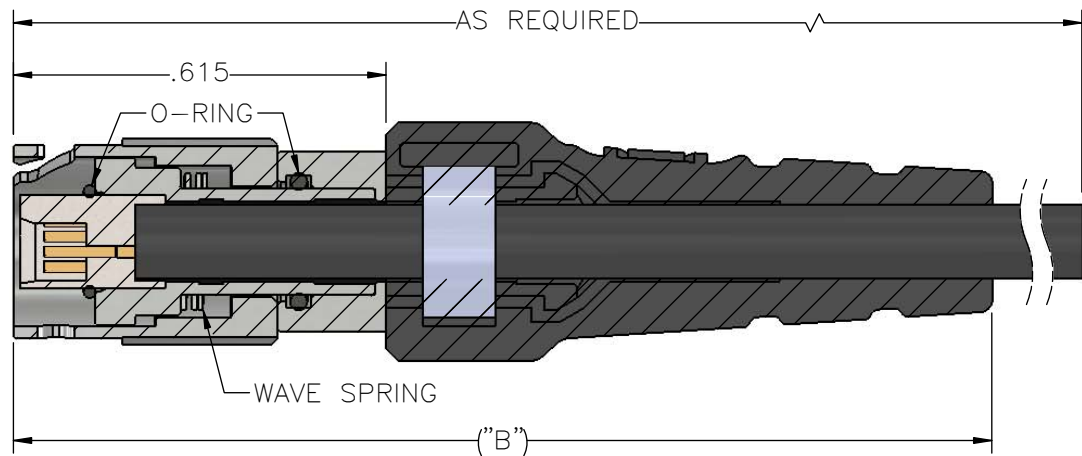
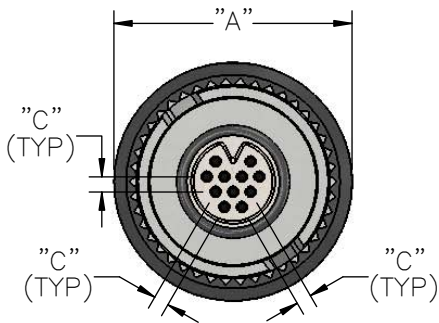
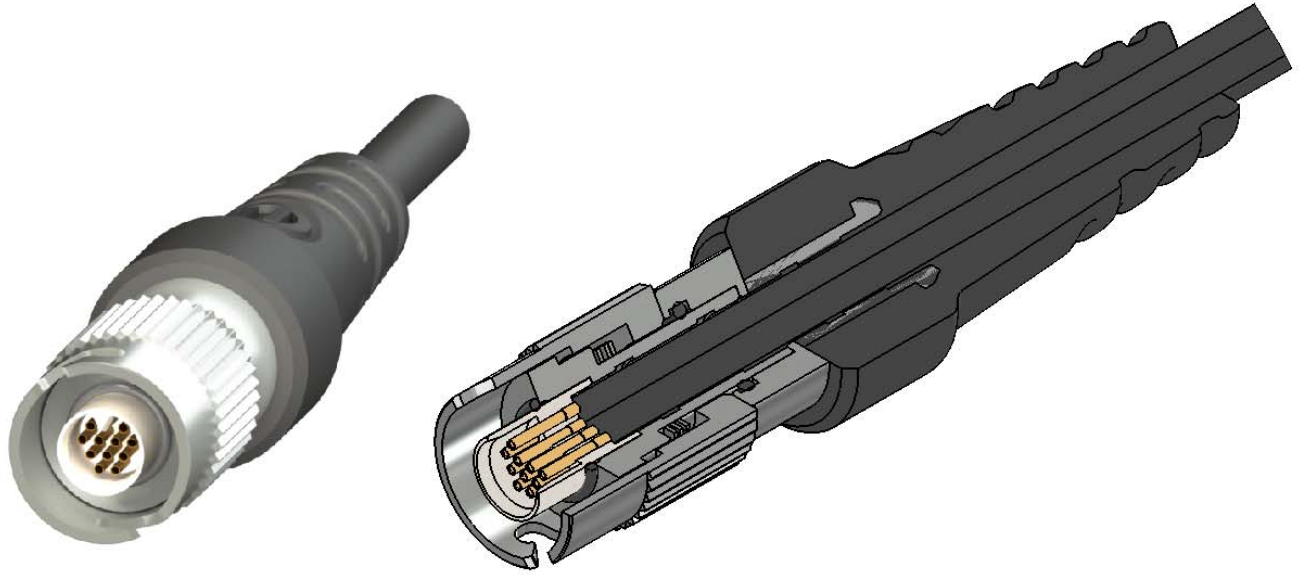
TNCP-WC-OM-IS-IP68



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A79343-001	6	0.36	1.46	0.025	9.14	37.08	0.64
A79341-001	11	0.39			9.91		
A79339-001	16	0.42	1.54		10.67	39.12	
A79337-001	28	0.46	1.60		11.68	40.64	
A79494-001	39	0.55	1.64	0.030	13.97	41.66	0.76





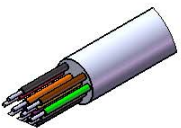

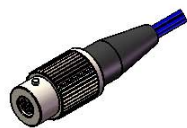





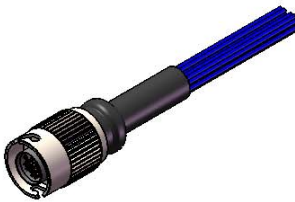

Metal - Socket - Twist-Lock - Cabled - Overmold - Inline - IP68

TNCS-WC-OM-IS-IP68



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A79342-001	6	0.36	1.600	0.025	9.14	40.64	0.64
A79340-001	11	0.39			9.91		
A79338-001	16	0.42	1.700		10.67	43.18	
A79336-001	28	0.46	1.800		11.68	45.72	
A79495-001	39	0.55		0.030	13.97		0.76

TWIST LOCK NANO CIRCULAR DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options
TNC	6	WD: Discrete Lead Wire	Standard N: Nickel Plated Brass	IS: Inline Shell	C Color Coded
	11				
Male (P - Pin)	16				
	28				
	39				
Female (S - Socket)	6	WC: Cable	Non-Standard Options BN: Black Nickel Plated Brass	SR: Inline Shell w/ Strain Relief	OR O-Ring
Female (S - Socket)	16				
	28				
Female (S - Socket)	39	Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 32 AWG Max	P: Passivated Stainless Steel	ST: Inline Shell w/ Shrink Tube	IP68
	6				
Female (S - Socket)	11				RH RoHS COMPLIANT
	16				
Female (S - Socket)	28		OX: Black Oxide Finished Steel		
	39				
					OM Overmold (Contact Omnetics for Overmold Information & Availability)
					

EXAMPLE:
TNCS-28-WD-18.0-N-IS-ST-C-OR-ROHS

Nano Circular Twist-Lock Panel Mount

Optional IP68 Rating



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-32139
- Contact Resistance: _____ 71 Milliohm Max (71mV Drop Max) @ 1.0 Amps per MIL-DTL-32139
- Current Rating: _____ 1 Amp per MIL-DTL-32139
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ >2000 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 100 g's with no discontinuities > 10 nanosecond
- Vibration: _____ 20 g's with no discontinuities > 10 nanosecond
- Thermal Vacuum Outgassing (Space Class): _____ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: _____ 2.5 oz (71 g) typical per contact

Material Specifications

- Contact: _____ Copper Alloy Per MIL-DTL-32139
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 32 AWG, (7-40) tinned copper, PFA color coded, Black polyurethane jacket
- Wire: _____ 32 AWG (7-40) PTFE, color coded

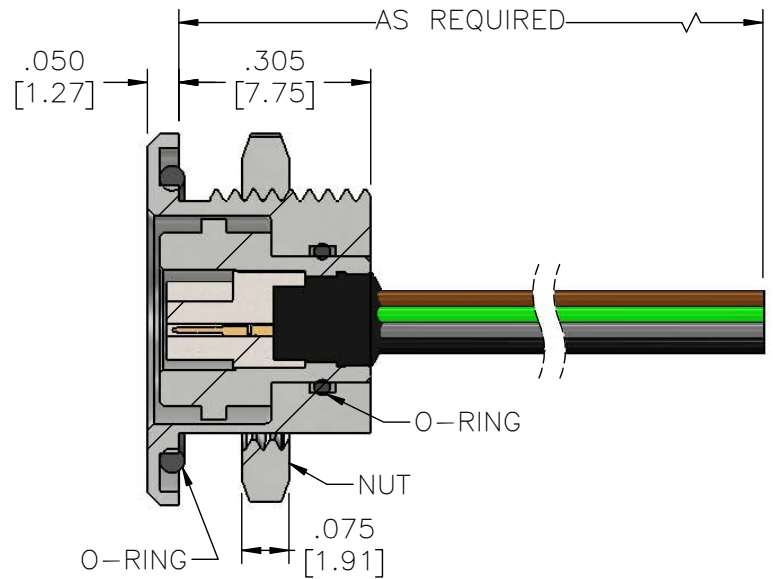
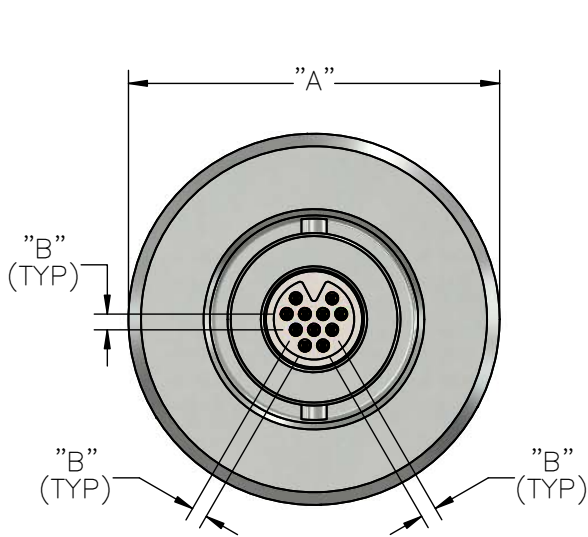
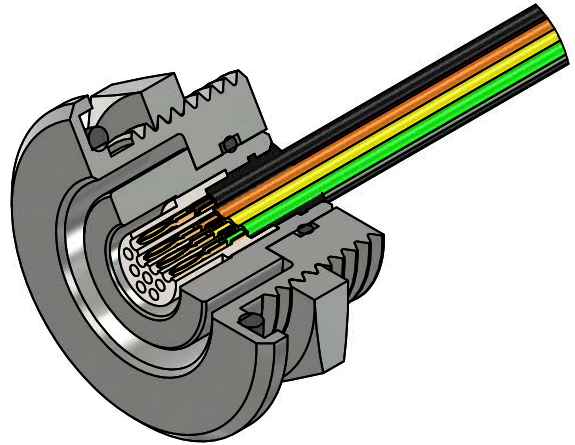
Shell Options

- Brass Alloy 360 1/2 Hard: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*, Passivated per SAE-AMS-2700

* less resistance to salt spray test.

Metal - Pin - Twist-Lock - Wired - Front Panel - IP68

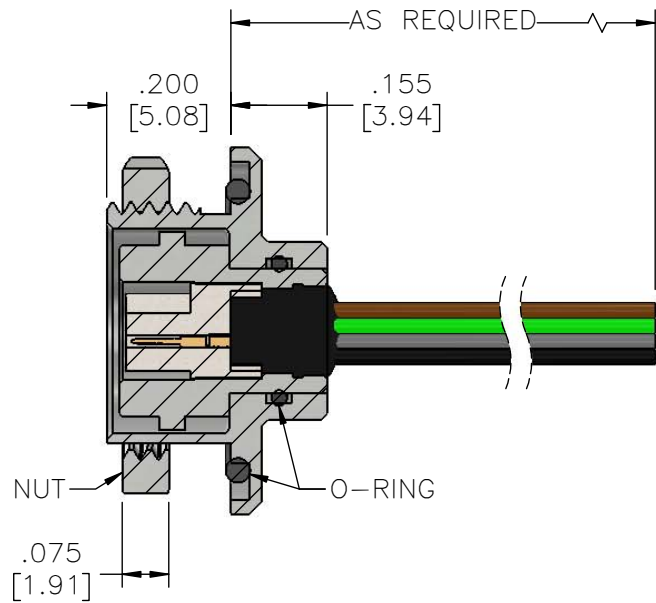
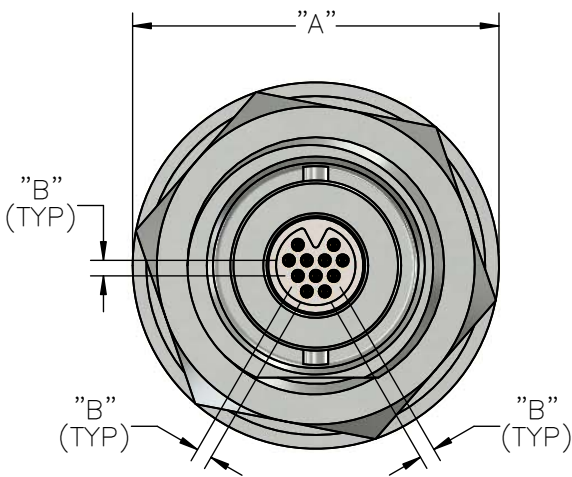
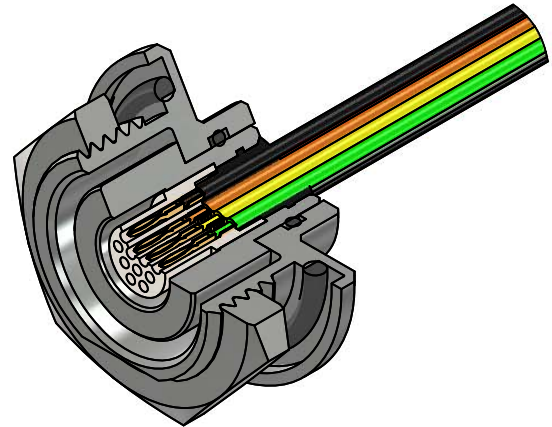
TNCP-WD-FP-IP68



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79408-001	6	0.580	0.025	14.73	0.64
A79409-001	11	0.590		14.99	
A79410-001	16	0.625		15.88	
A79411-001	28	0.650		16.51	
A79496-001	39	0.775	0.030	19.69	0.76

Metal - Pin - Twist-Lock - Wired - Rear Panel - IP68

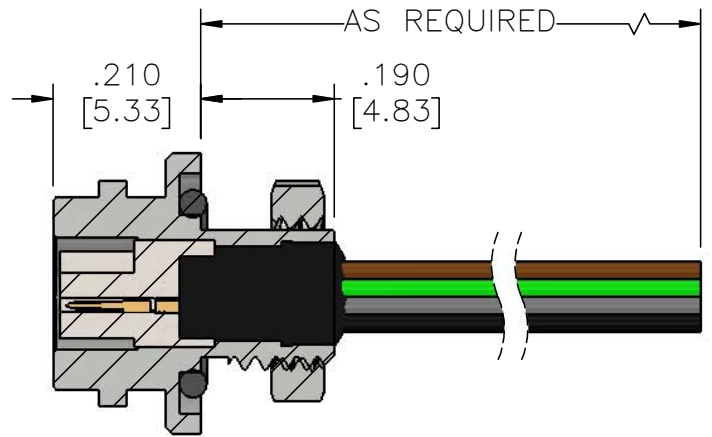
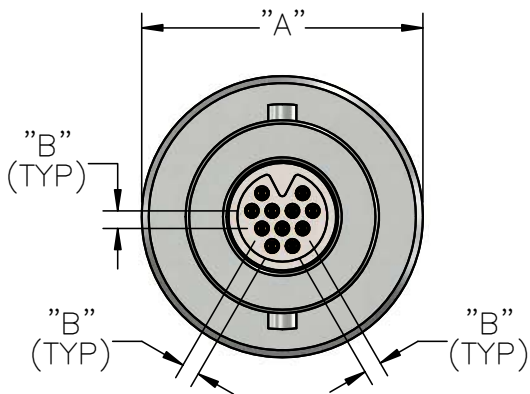
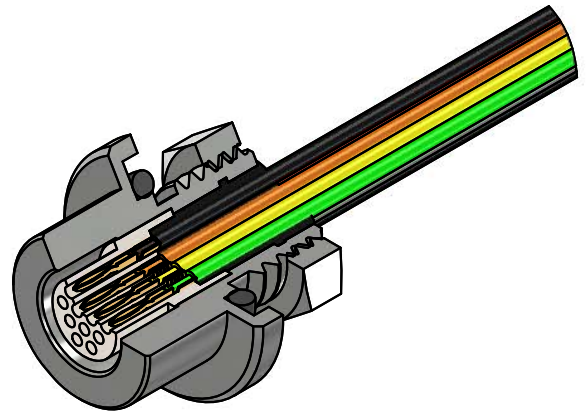
TNCP-WD-RP-IP68



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79412-001	6	0.590	0.025	14.99	0.64
A79413-001	11			15.88	
A79414-001	16	0.625		16.51	
A79415-001	28	0.650			
A79497-001	39	0.775	0.030	19.69	0.76





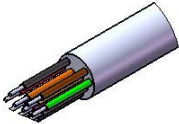








Metal - Pin - Twist-Lock - Wired - Protruding Panel - IP68

TNCP-WD-PP-IP68

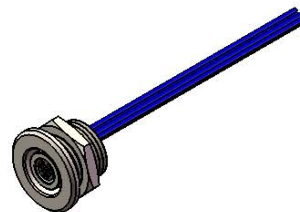


Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79240-001	6	0.330	0.025	8.38	0.64
A79245-001	11	0.400		10.16	
A79250-001	16	0.415		10.54	
A79255-001	28	0.460		11.68	
A79481-001	39	0.575	0.030	14.61	0.76

TWIST LOCK NANO CIRCULAR DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options
TNC Male (P - Pin)	6	WD: Discrete Lead Wire 	Standard N: Nickel Plated Brass 	FP: Front Panel Mount (Male Only) 	C Color Coded 
	11				
TNC Female (P - Pin)	16	WC: Cable 	Non-Standard Options BN: Black Nickel Plated Brass 	RP: Rear Panel Mount (Male Only) 	OR O-Ring 
	28				
	39				
		Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 32 AWG Max	P: Passivated Stainless Steel 	PP: Protruding Panel Mount (Male Only) 	IP68 
			OX: Black Oxide Finished Steel 		RH RoHS COMPLIANT 

EXAMPLE:
TNC-11-WD-18.0-N-FP-C-OR-IP68



NANO 360[®] Metal

Nano Circular Break Away

Optional IP68 rating



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-32139
- Contact Resistance: _____ 71 Milliohm Max (71mV Drop Max) @ 1.0 Amps per MIL-DTL-32139
- Current Rating: _____ 1 Amp per MIL-DTL-32139
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ 500 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 100 g's with no discontinuities > 10 nanosecond
- Vibration: _____ 20 g's with no discontinuities > 10 nanosecond
- Thermal Vacuum Outgassing (Space Class): _____ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: _____ 2.5 oz (71g) typical per contact

Material Specifications

- Contact: _____ Copper Alloy Per MIL-DTL-32139
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 32 AWG, (7-40) tinned copper, PFA color coded, Black polyurethane jacket
- Wire: _____ 32 AWG (7-40) PTFE, color coded

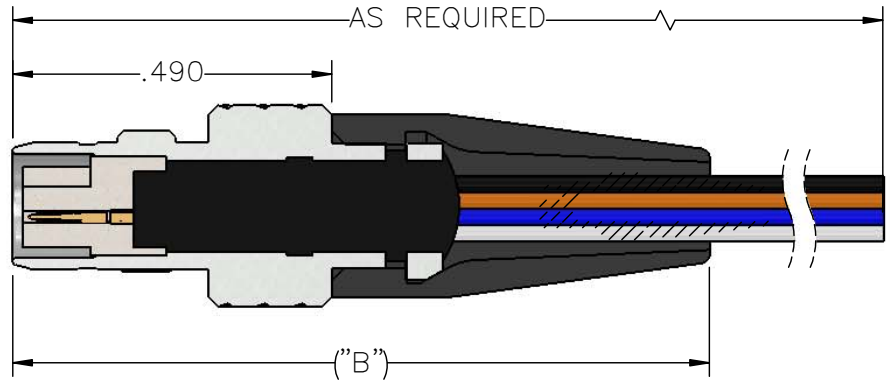
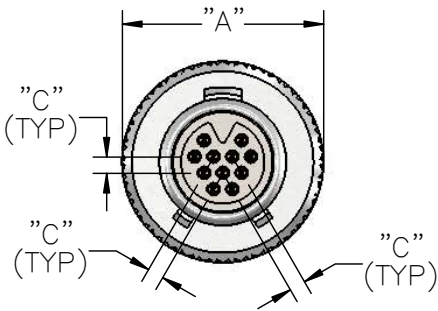
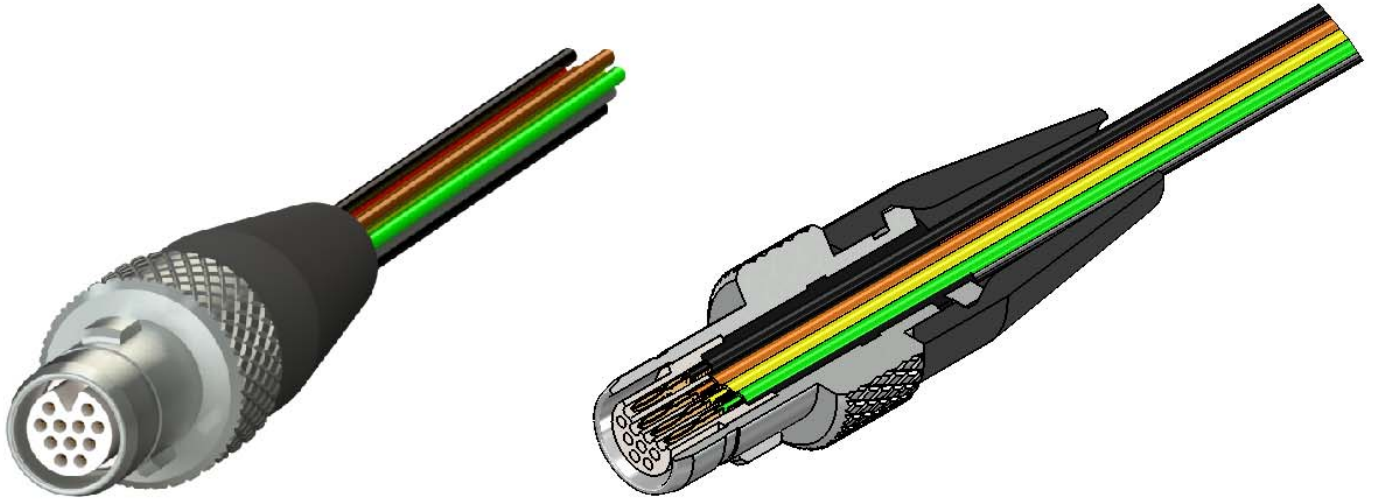
Shell Options

- Brass Alloy 360 1/2 Hard: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*, Passivated per SAE-AMS-2700

* less resistance to salt spray test.

Metal - Pin - Keyed Break Away - Wired - Inline - Strain Relief

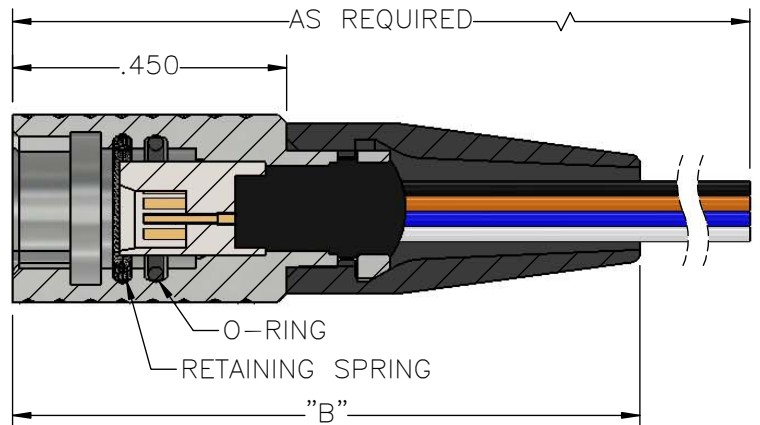
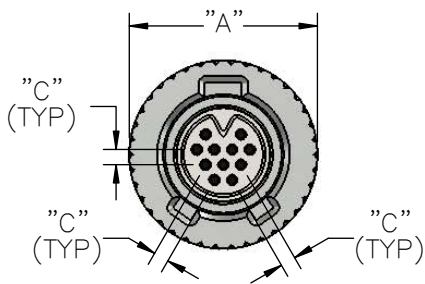
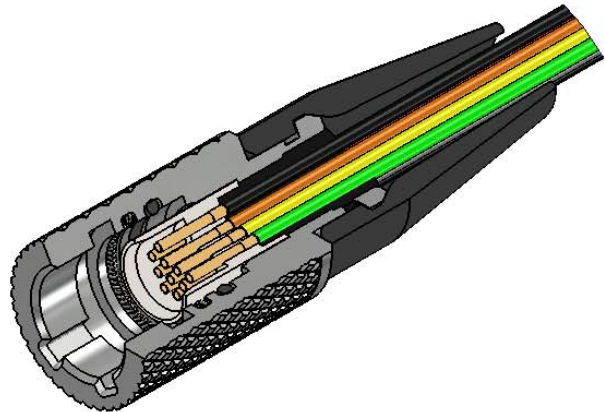
KBNP-WD-IS-SR



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A79424-001	6	0.28	1.000	0.025	7.11	25.40	0.64
A79433-001	11	0.31	1.100		7.87	27.94	
A79442-001	16	0.34	1.300		8.64	33.02	
A79451-001	28	0.39	1.500		9.91	38.10	
A79460-001	39	0.46	1.700	0.03	11.68	43.18	0.76

Metal - Socket - Keyed Break Away - Wired - Inline - Strain Relief

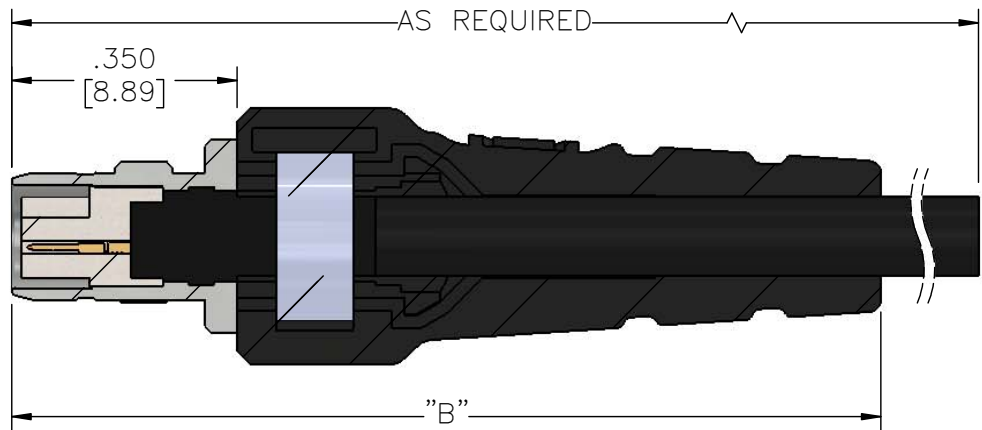
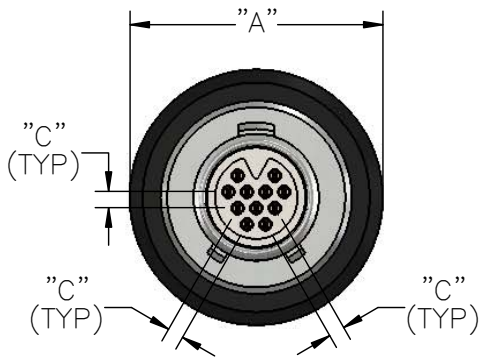
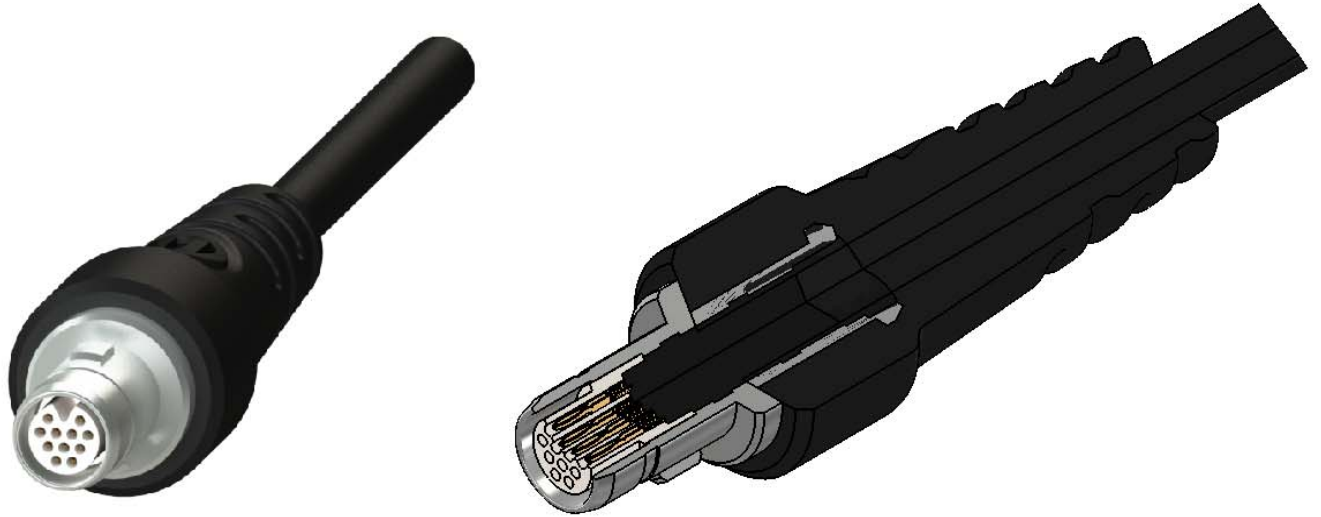
KBNS-WD-IS-SR



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A79420-001	6	0.28	1.000	0.025	7.11	25.40	0.64
A79429-001	11	0.31	1.030		7.87	26.16	
A79438-001	16	0.34	1.210		8.64	30.73	
A79447-001	28	0.39	1.500		9.91	38.10	
A79456-001	39	0.47	1.630	0.03	11.94	41.40	0.76

Metal - Pin - Keyed Break Away - Cabled - Overmold - Inline

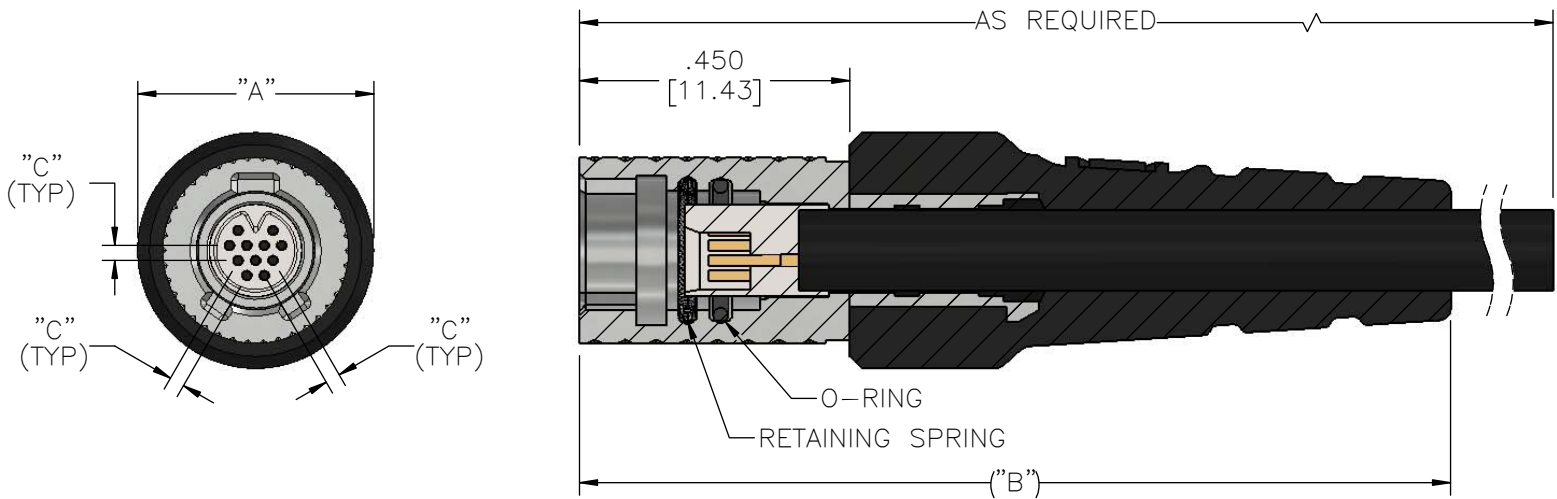
KBNP-WC-OM-IS



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A79421-001	6	0.360	1.450	0.025	9.14	36.83	0.64
A79430-001	11	0.393			9.98		
A79439-001	16	0.420	1.530		10.67	38.86	
A79448-001	28	0.460	1.630		11.68	41.40	
A79457-001	39	0.550		0.030	13.97		0.76

Metal - Socket - Keyed Break Away - Cable - Overmold - Inline

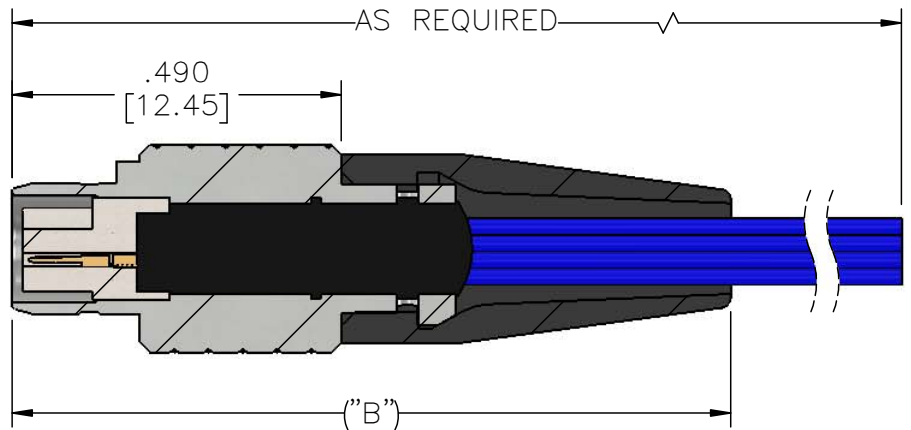
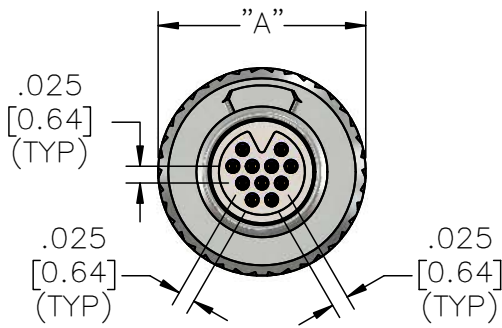
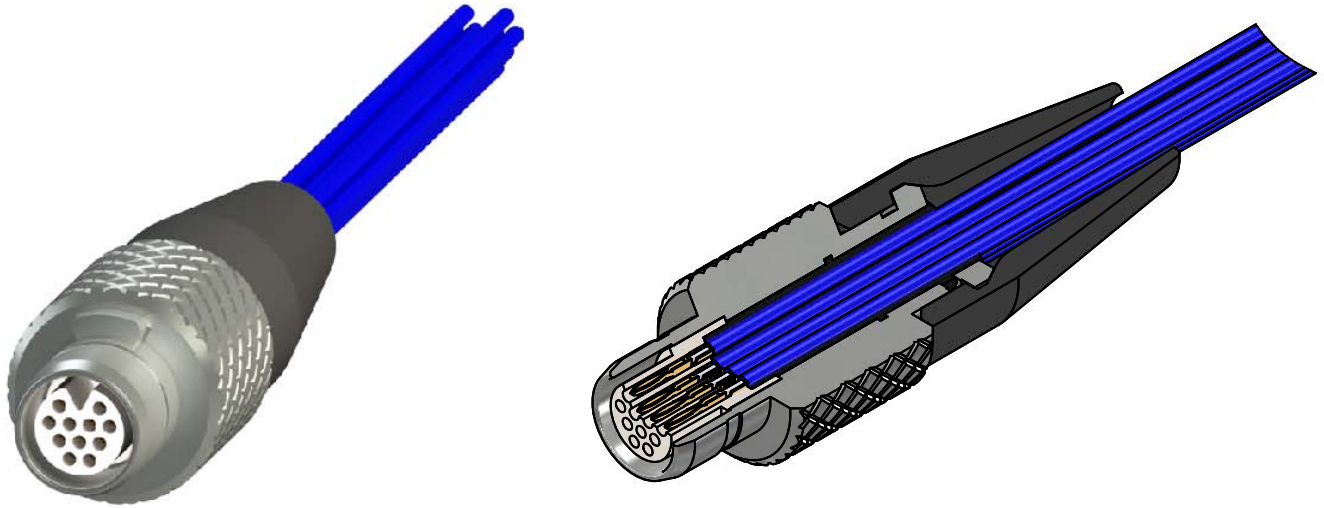
KBNS-WC-OM-IS



Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A79425-001	6	0.360	1.350	0.025	9.14	34.29	0.64
A79434-001	11	0.390			9.91		
A79443-001	16	0.420	1.430		10.67	36.32	
A79452-001	28	0.460	1.530		11.68	38.86	
A79461-001	39	0.550		0.03	13.97		

Metal - Pin - Break Away - Wired - Inline - Strain Relief

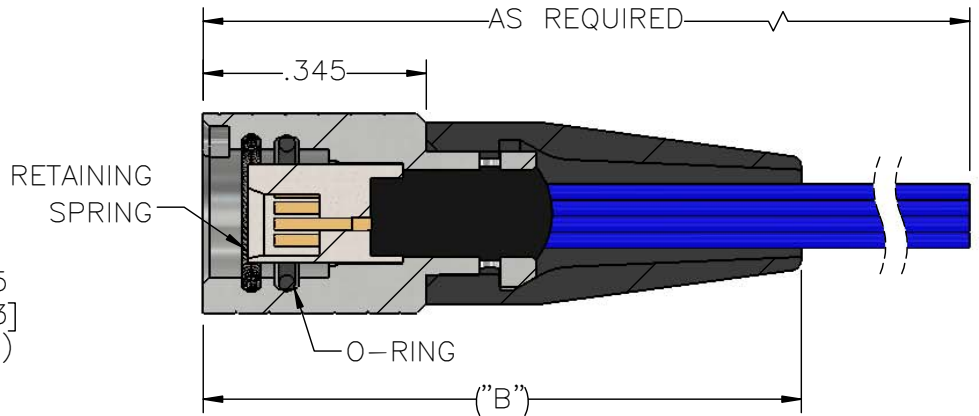
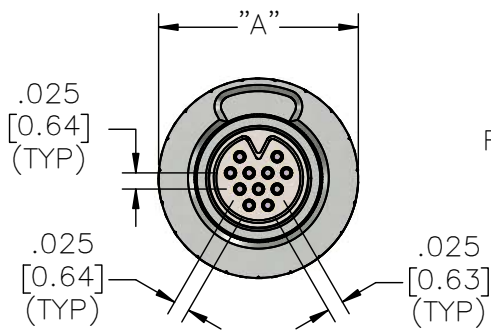
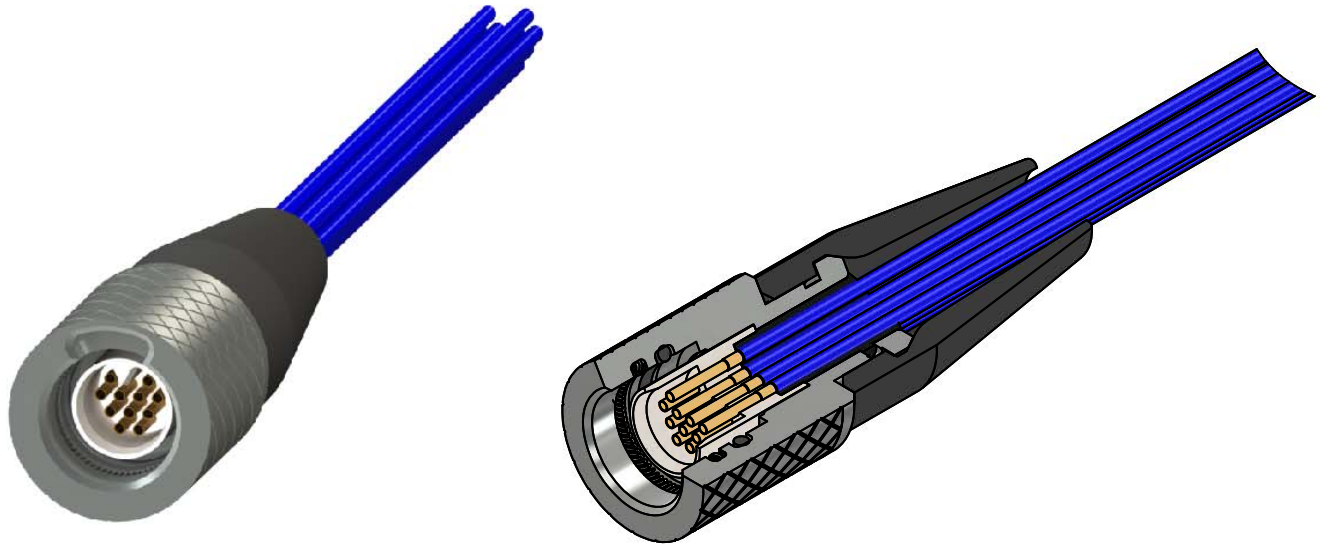
BANP-WD-IS-SR



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79211-001	6	0.28	1.000	7.11	25.40
A79218-001	11	0.31	1.100	7.87	27.94
A79225-001	16	0.34	1.300	8.64	33.02
A79232-001	28	0.39	1.500	9.91	38.10

Metal - Socket - Break Away - Wired - Inline - Strain Relief

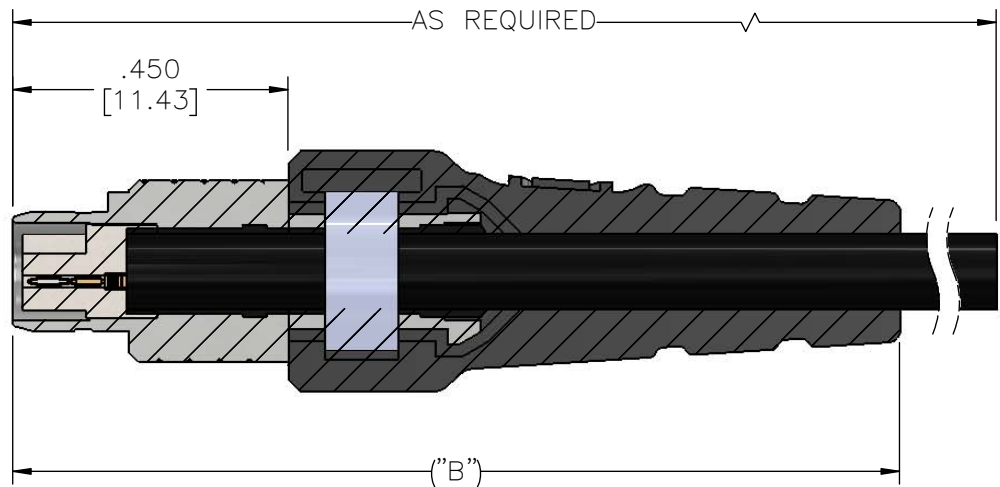
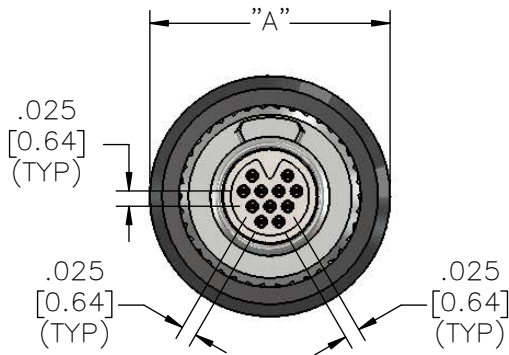
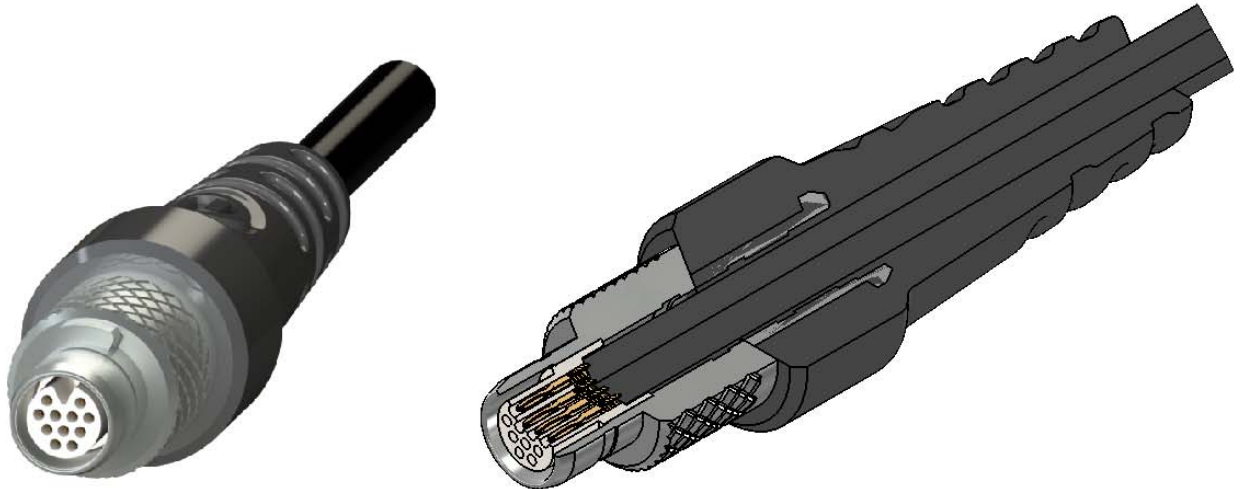
BANS-WD-IS-SR



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79208-001	6	0.28	0.900	7.11	22.86
A79215-001	11	0.31		7.87	
A79222-001	16	0.34	1.100	8.64	27.94
A79229-001	28	0.39	1.400	9.91	35.56

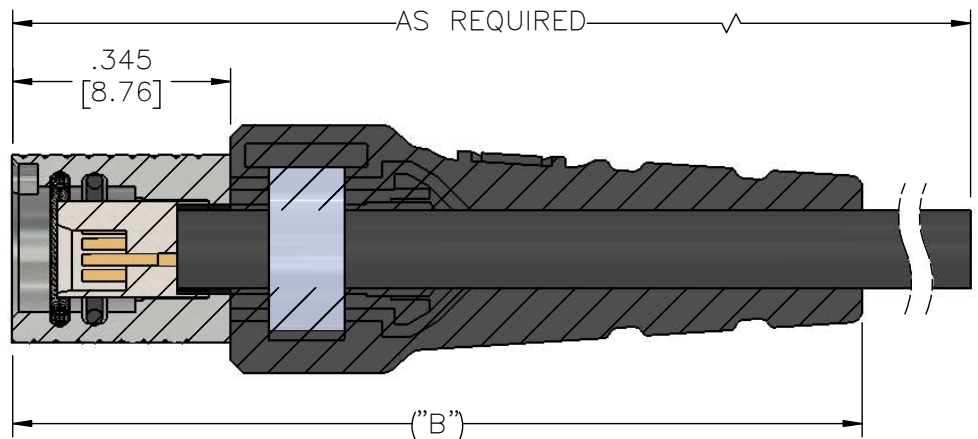
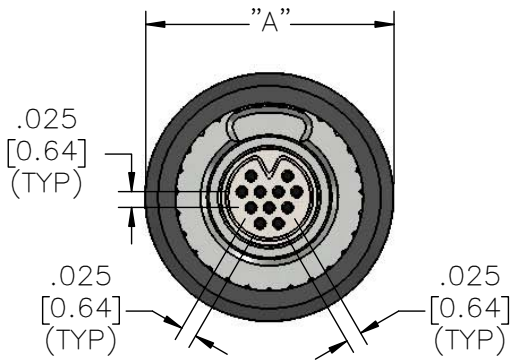
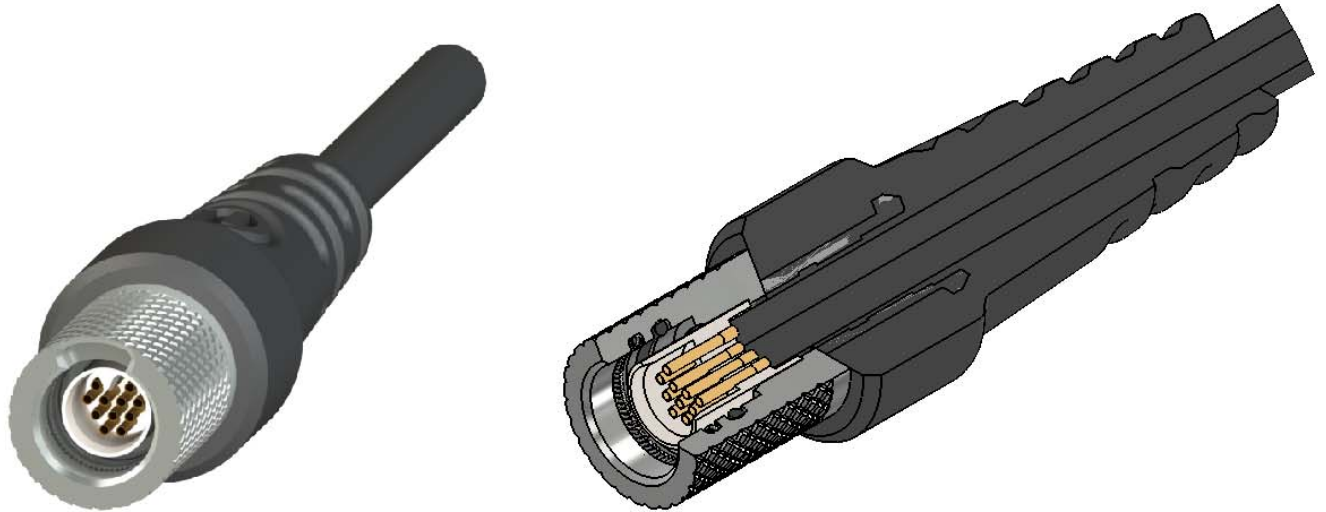
Metal - Pin - Break Away - Cabled - Overmold - Inline

BANP-WC-OM-IS









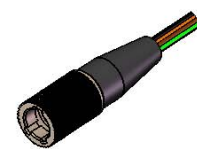







Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79335-001	6	0.36	1.450	9.14	36.83
A79331-001	11	0.39		9.91	
A79327-001	16	0.42	1.530	10.67	38.86
A79323-001	28	0.46	1.630	11.68	41.40

Metal - Socket - Break Away - Cabled - Overmold - Inline BANS-WC-OM-IS



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79334-001	6	0.36	1.350	9.14	34.29
A79330-001	11	0.39		9.91	
A79326-001	16	0.42	1.420	10.67	36.07
A79322-001	28	0.46	1.530	11.68	38.86

QUICK DISCONNECT BREAK AWAY NANO CIRCULAR DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options
KBN (Keyed Break Away)	6	WD: Discrete Lead Wire	Standard N: Nickel Plated Brass	IS: Inline Shell Female	C Color Coded
	11				
BAN (Standard Break Away)	16				
	28				
	39	WC: Cable	Non-Standard Options BN: Black Nickel Plated Brass	Male	OM Overmold (Contact Omnetics for Overmold Information & Availability)
Male (P - Pin)					
					
Female (S - Socket)					
		Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 32 AWG Max	P: Passivated Stainless Steel	SR: Inline Shell w/ Strain Relief	
					
			OX: Black Oxide Finished Steel	ST: Inline Shell w/ Shrink Tube	OR O-Ring
					
					IP68
					IP68
					RH RoHS COMPLIANT
					
EXAMPLE: KBNP-11-WC-12.0-N-IS-OM-IP68					

NANO 360[®] Metal

Nano Break Away Panel Mount



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-32139
- Contact Resistance: _____ 71 Milliohm Max (71mV Drop Max) @ 1.0 Amps per MIL-DTL-32139
- Current Rating: _____ 1 Amp per MIL-DTL-32139
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ 500 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 500 VDC
- Shock: _____ 100 g's with no discontinuities > 10 nanosecond
- Vibration: _____ 20 g's with no discontinuities > 10 nanosecond
- Thermal Vacuum Outgassing (Space Class): _____ 1.0% max TML, 0.03% max CVCM
- Mating/Unmating Force: _____ 2.5 oz (71 g) typical per contact

Material Specifications

- Contact: _____ Copper Alloy Per MIL-DTL-32139
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 32 AWG, (7-40) tinned copper, PFA color coded, Black polyurethane jacket
- Wire: _____ 32 AWG (7-40) PTFE, color coded

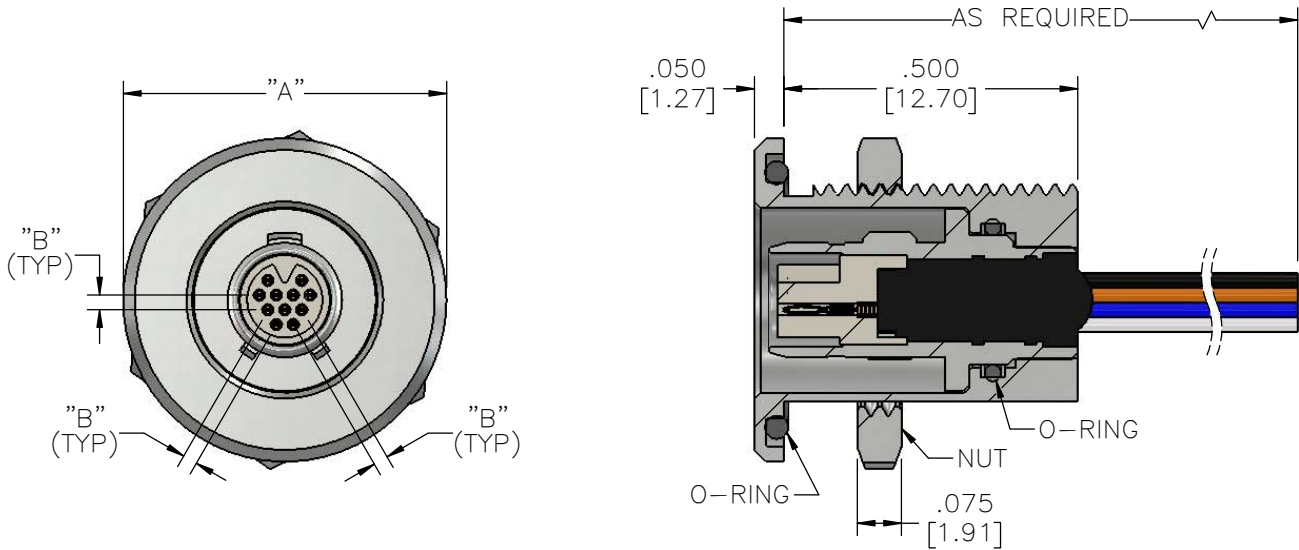
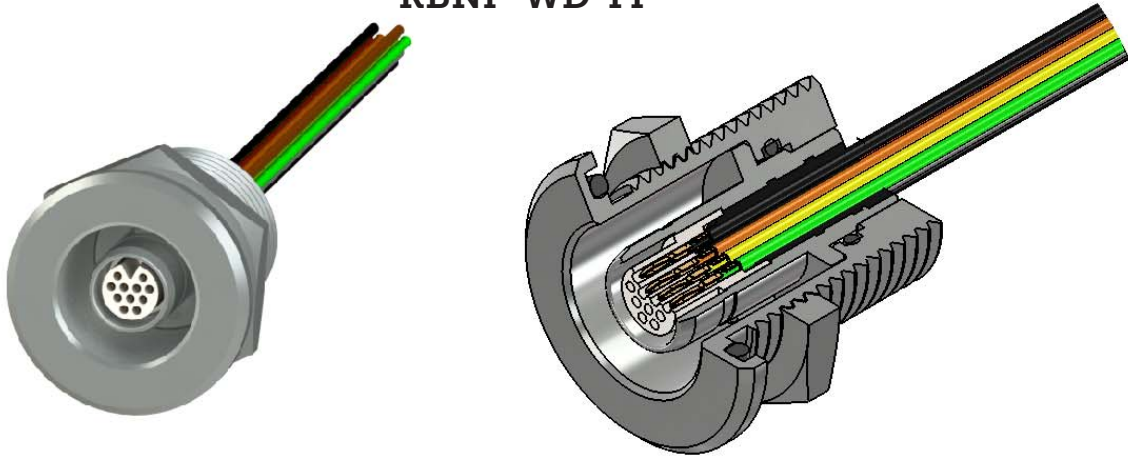
Shell Options

- Brass Alloy 360 1/2 Hard: _____ Electroless Nickel per SAE-AMS-2404
Black Nickel per MIL-P-18317
- Stainless Steel, 300 Series: _____ Passivated per SAE-AMS-2700
Black Oxide Finish per MIL-DTL-13924, Class 4*, Passivated per SAE-AMS-2700

* less resistance to salt spray test.

Metal - Pin - Keyed Break Away - Wired - Front Panel

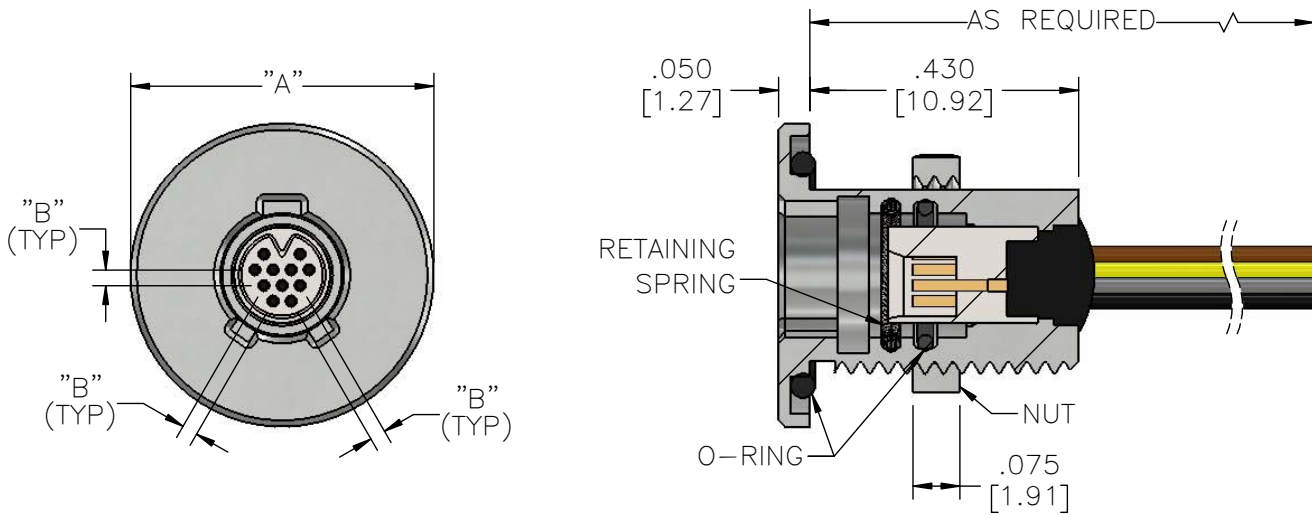
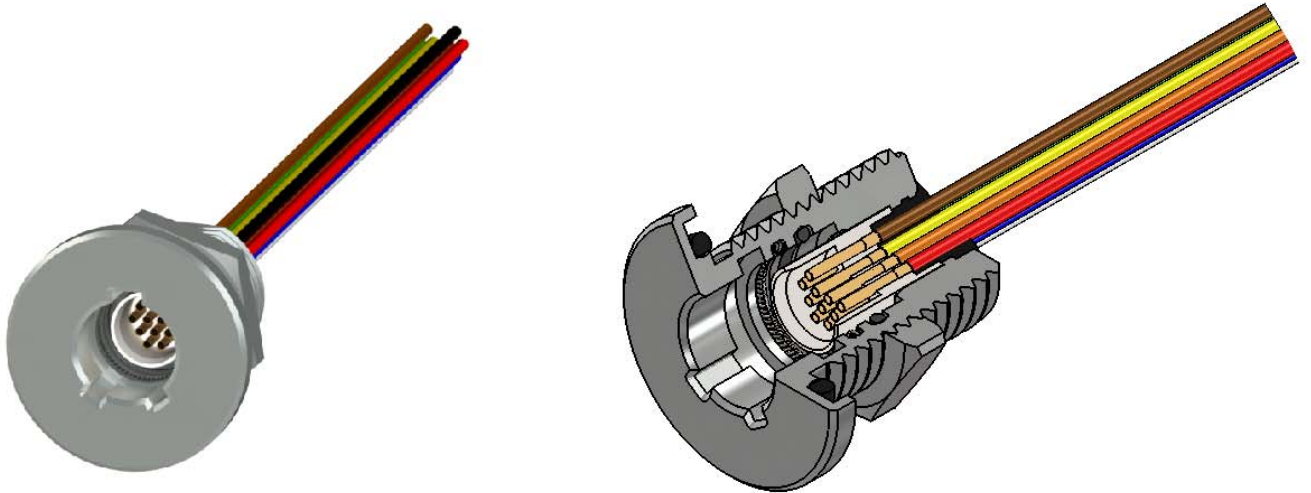
KBNP-WD-FP



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79426-001	6	0.510	0.025	12.95	0.64
A79435-001	11	0.550		13.97	
A79444-001	16	0.590		14.99	
A79453-001	28	0.635		16.13	
A79462-001	39	0.765	0.030	19.43	0.76

Metal - Socket - Keyed Break Away - Wired/Cable - Front Panel

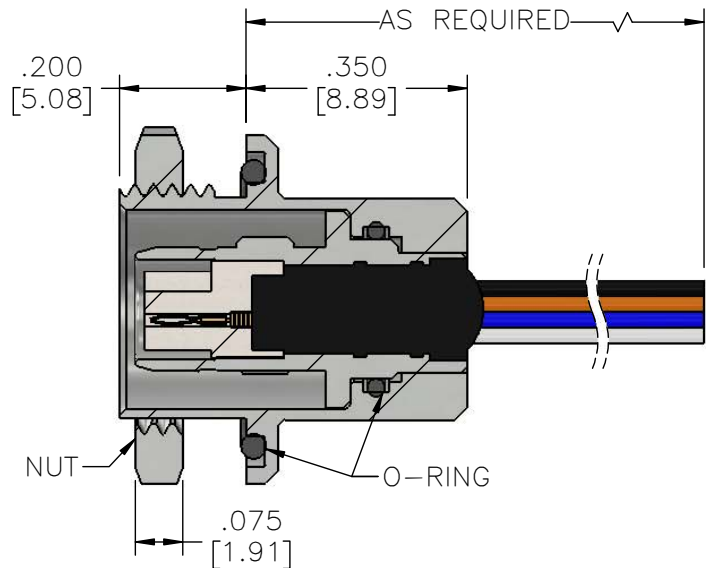
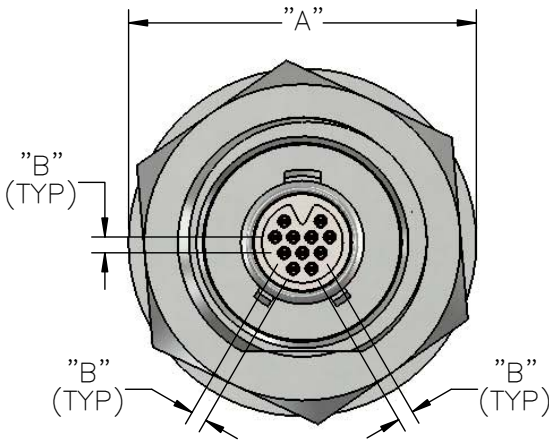
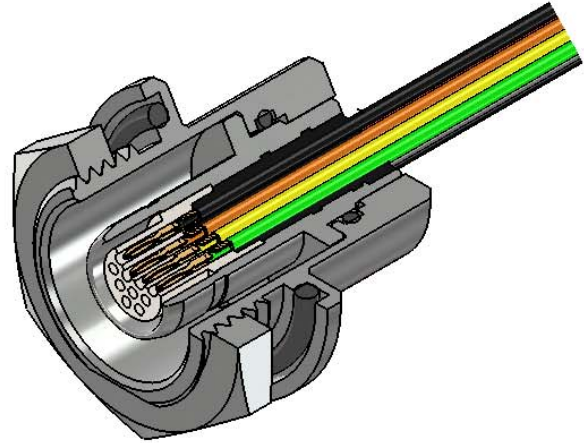
KBNS-WC/WD-FP



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79422-001	6	0.465	0.025	11.81	0.64
A79431-001	11	0.485		12.32	
A79440-001	16	0.515		13.08	
A79449-001	28	0.550		13.97	
A79458-001	39	0.690	0.030	17.53	0.76

Metal - Pin - Keyed Break Away - Wired - Rear Panel - IP68

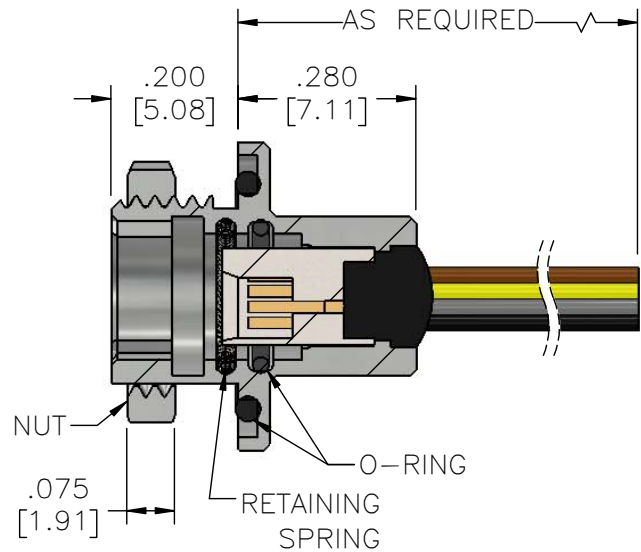
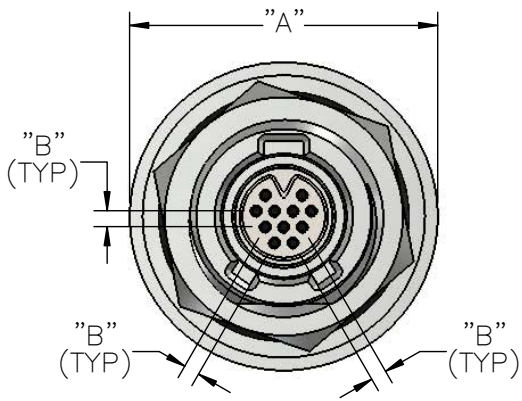
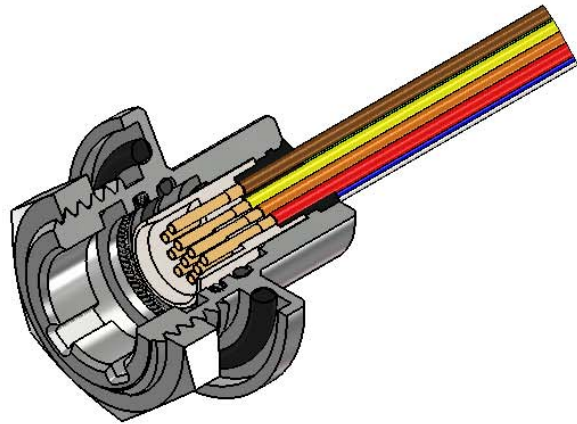
KBNP-WD-RP-IP68



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79427-001	6	0.510	0.025	12.95	0.64
A79436-001	11	0.550		13.97	
A79445-001	16	0.590		14.99	
A79454-001	28	0.635		16.13	
A79463-001	39	0.765	0.030	19.43	0.76

Metal - Socket - Keyed Break Away - Wired/Cable - Rear Panel

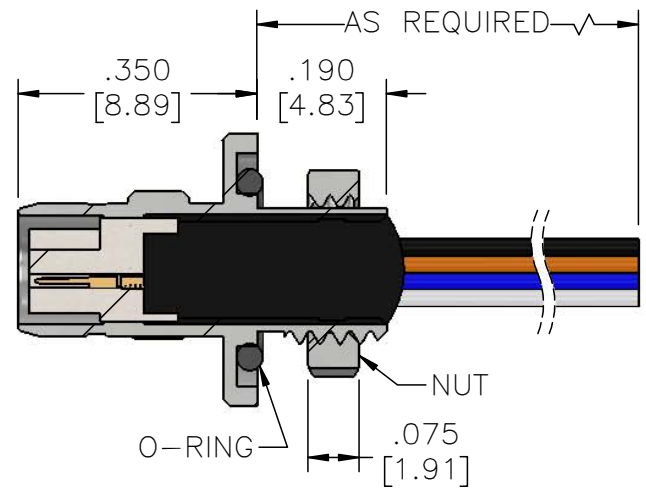
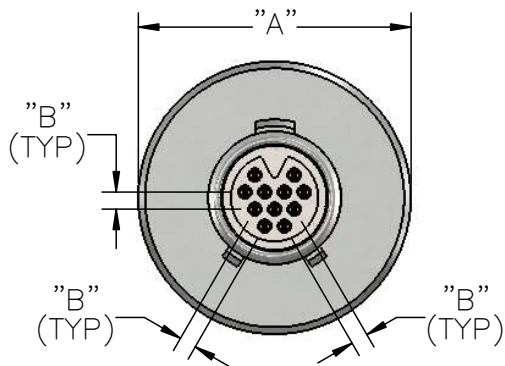
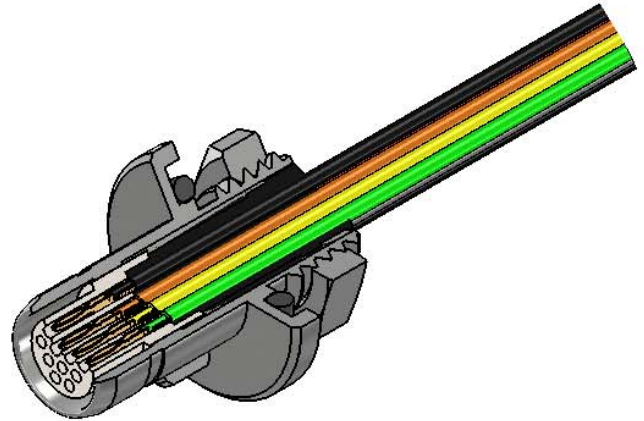
KBNS-WC/WD-RP



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79423-001	6	0.465	0.025	11.81	0.64
A79432-001	11	0.485		12.32	
A79441-001	16	0.515		13.08	
A79450-001	28	0.590		14.99	
A79459-001	39	0.650	0.030	16.51	0.76

Metal - Pin - Keyed Break Away - Wired - Protruding Panel - IP68

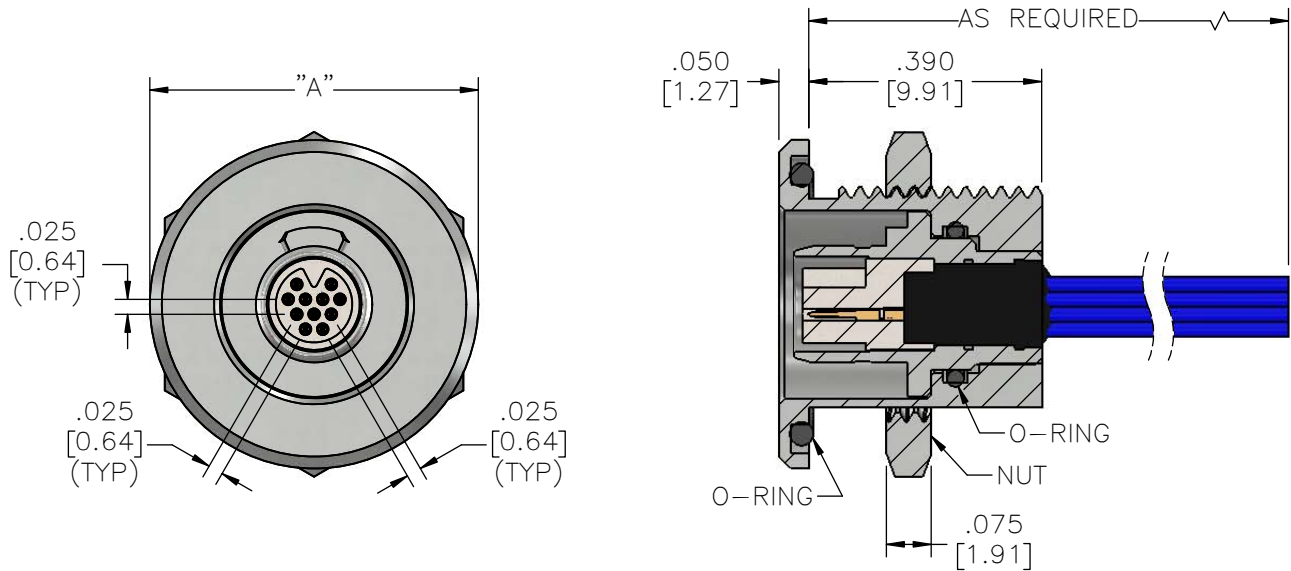
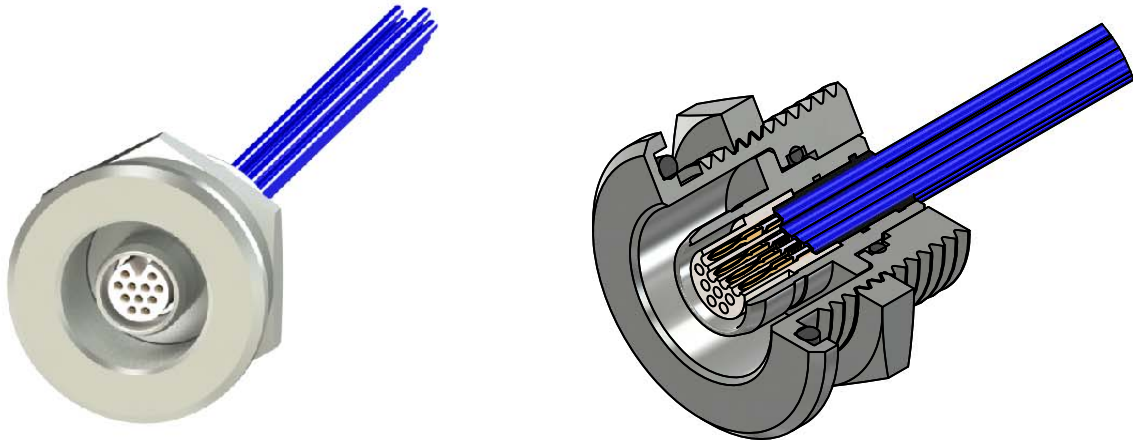
KBNP-WD-PP-IP68



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79428-001	6	0.330	0.025	8.38	0.64
A79437-001	11	0.400		10.16	
A79446-001	16	0.415		10.54	
A79455-001	28	0.460		11.68	
A79464-001	39	0.575	0.030	14.61	0.76

Metal - Pin - Break Away - Wired - Front Panel

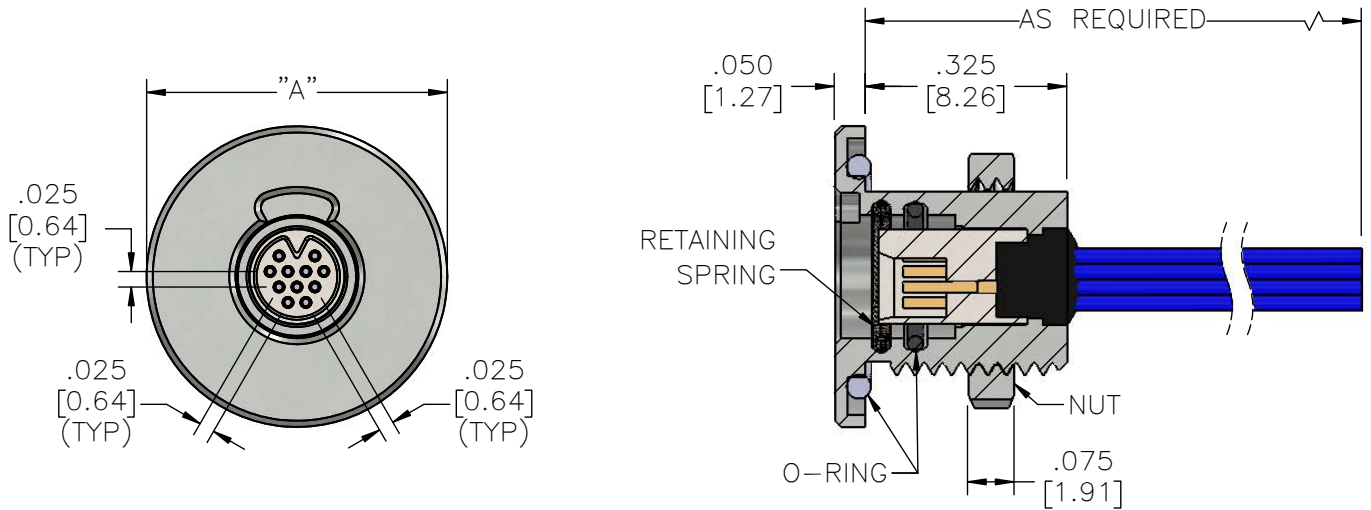
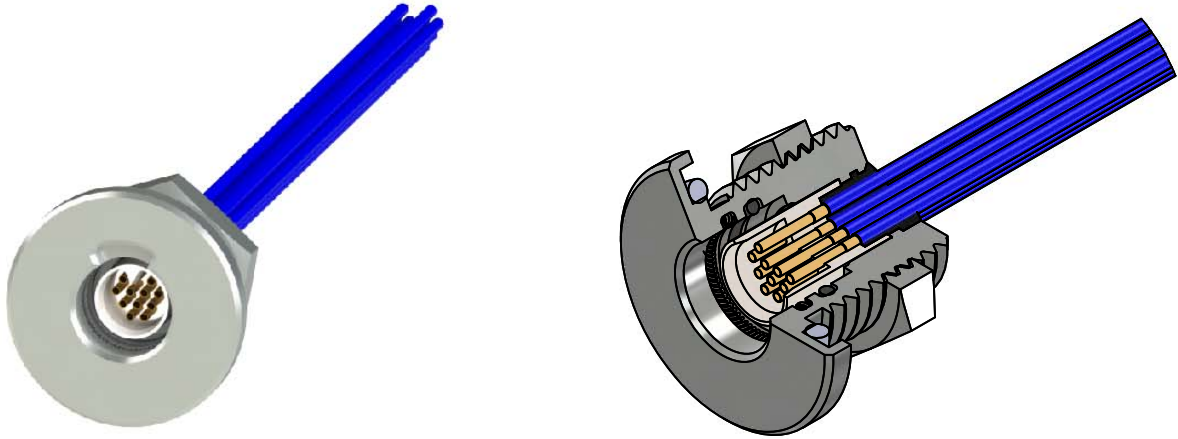
BANP-WD-FP



Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79212-001	6	0.510		12.95	
A79219-001	11	0.550	0.305	13.97	7.75
A79226-001	16	0.590		14.99	
A79233-001	28	0.515	0.325	13.08	8.26

Metal - Socket - Break Away - Wired - Front Panel

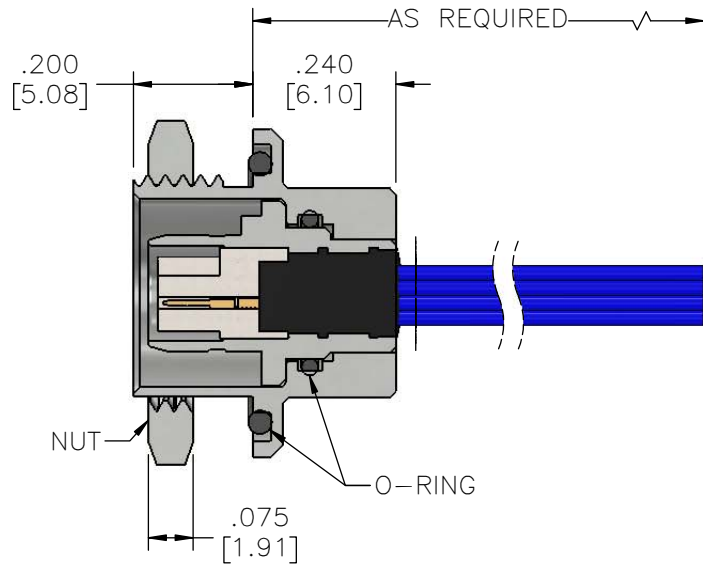
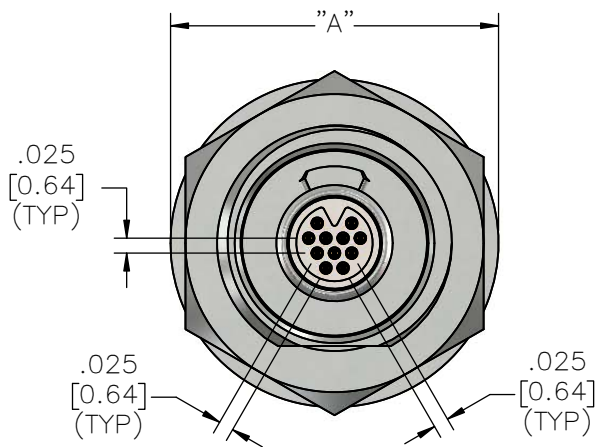
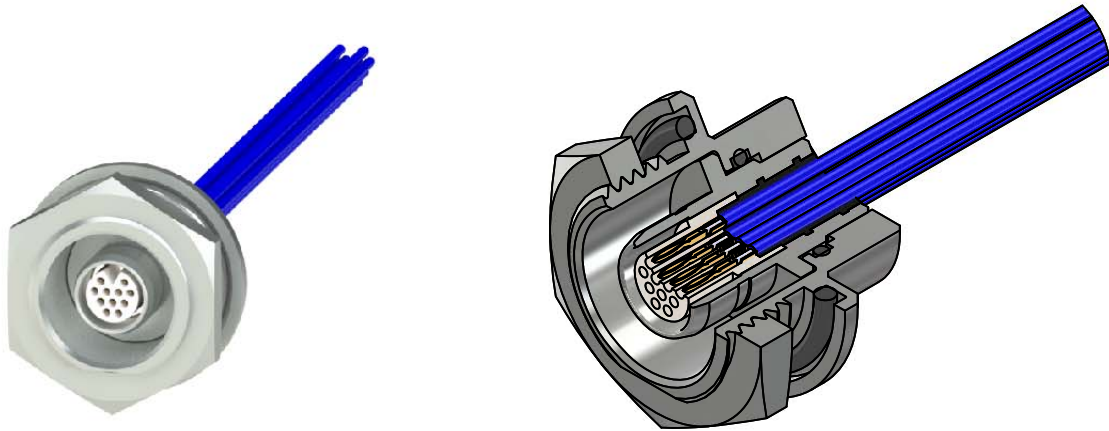
BANS-WD-FP



		English (IN)	Metric (MM)
Part #	Contacts	A	A
A79209-001	6	0.465	11.81
A79216-001	11	0.485	12.32
A79223-001	16	0.515	13.08
A79230-001	28	0.550	13.97

Metal - Pin - Break Away - Wired - Rear Panel

BANP-WD-RP

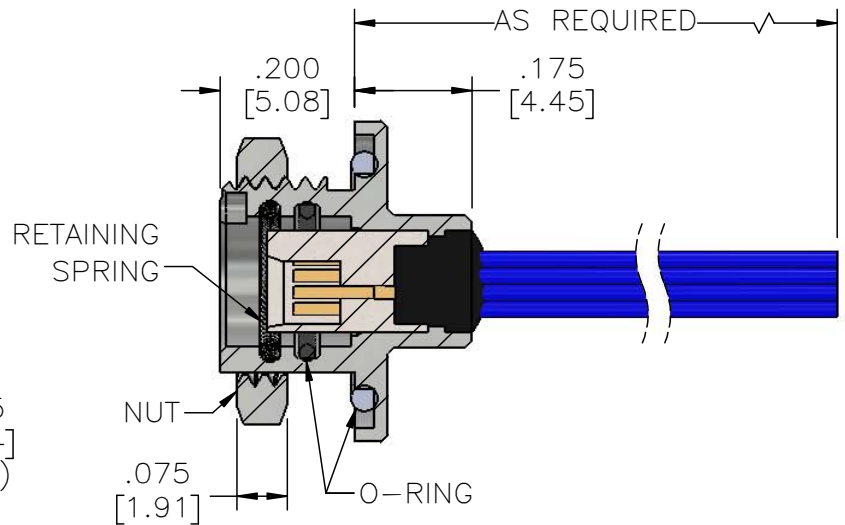
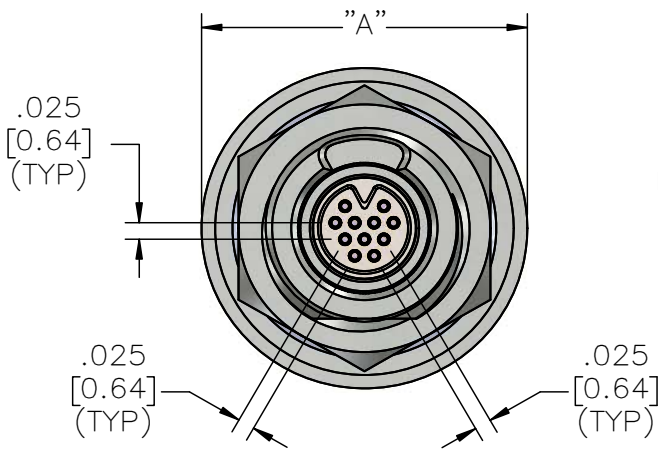
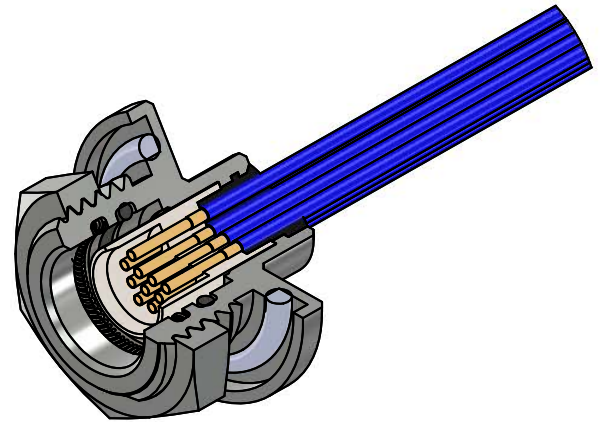


English (IN) Metric (MM)

Part #	Contacts	A	A
A79213-001	6	0.510	12.95
A79220-001	11	0.550	13.97
A79227-001	16	0.590	14.99
A79234-001	28	0.635	16.13

Metal - Socket - Break Away - Wired - Rear Panel

BANS-WD-RP

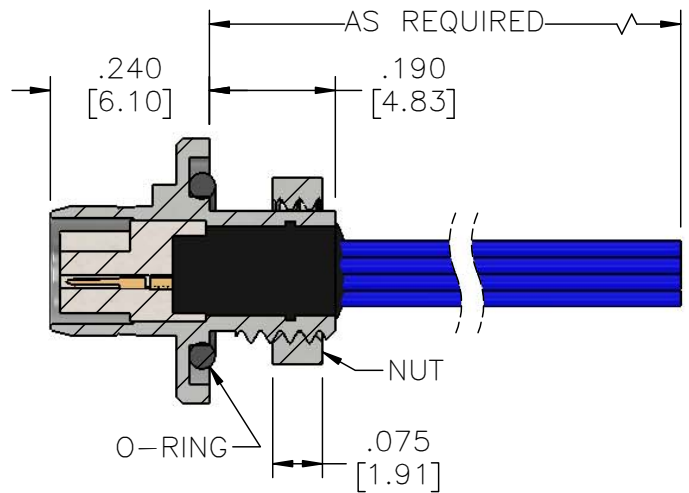
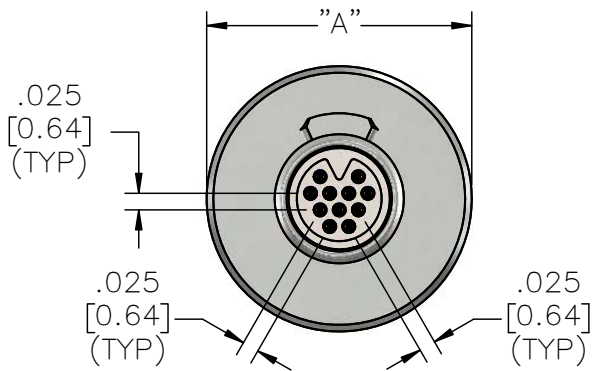
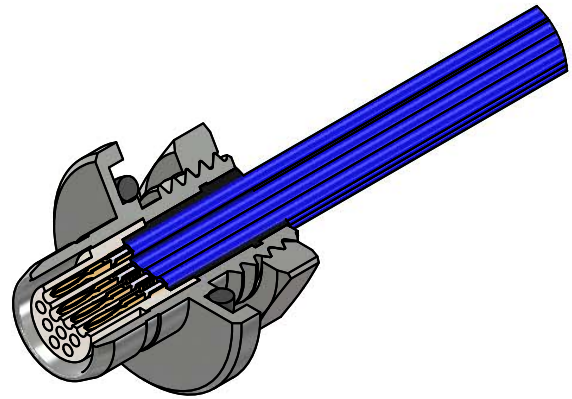


English (IN) Metric (MM)

Part #	Contacts	A	A
A79210-001	6	0.465	11.81
A79217-001	11	0.485	12.32
A79224-001	16	0.515	13.08
A79231-001	28	0.550	13.97

Metal - Pin - Break Away - Wired - Protruding Panel



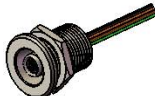














BANP-WD-PP



English (IN) Metric (MM)

Part #	Contacts	A	A
A79214-001	6	0.330	8.38
A79221-001	11	0.400	10.16
A79228-001	16	0.415	10.54
A79235-001	28	0.460	11.68

BREAK AWAY NANO CIRCULAR DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options
KBN (Keyed Break Away)	6 11 16	WD: Discrete Lead Wire 	Standard N: Nickel Plated Brass 	FP: Front Panel Mount 	C Color Coded 
BAN (Standard Break Away)	28 39				
Male (P - Pin) 		WC: Cable 	Non-Standard Options	RP: Rear Panel Mount 	OR O-Ring 
Female (S - Socket) 		Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 32 AWG Max	P: Passivated Stainless Steel 	PP: Protruding Panel Mount (Male Only) 	IP68 
			OX: Black Oxide Finished Steel 		RH RoHS COMPLIANT 
					
		EXAMPLE: KBNS-11-WD-18.0-C-N-RP-IP68			

NANO 360[®] Plastic

SureCon 360° IP68



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-32139A
- Contact Resistance: _____ 71 Milliohm Max (71mV Drop Max) @ 1.0 Amps per MIL-DTL-32139A
- Current Rating: _____ 1 Amps per MIL-DTL-32139A
- Operating Temperature: _____ -55°C to 85°C
- Durability: _____ >2000 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 100 VDC
- Shock: _____ 100 g's with no discontinuities > 1 nanosecond
- Vibration: _____ 20 g's with no discontinuities > 1 nanosecond
- Mating/Unmating Force: _____ 3 oz (0.085 kg) max per contact

Material Specifications

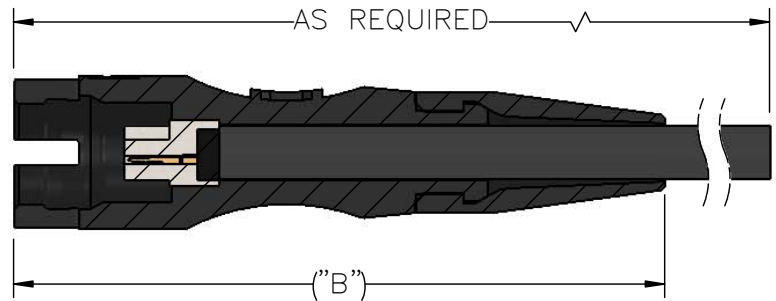
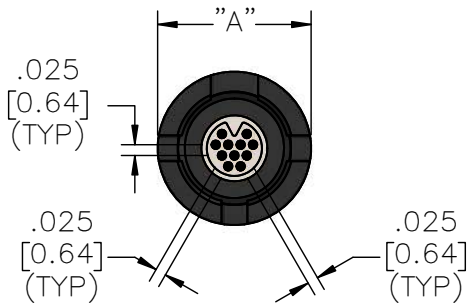
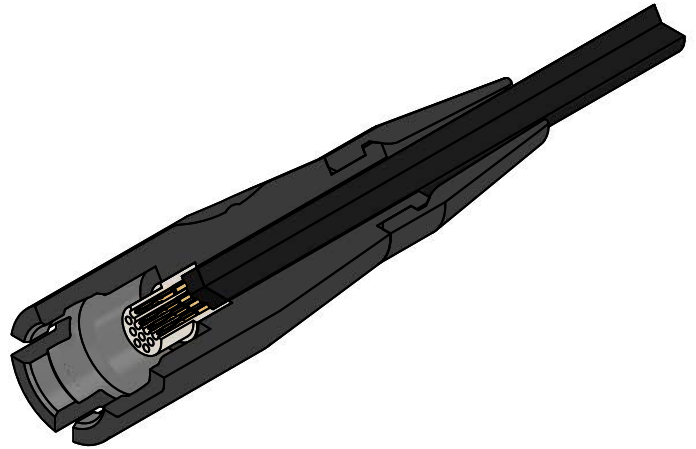
- Contact: _____ Copper Alloy per MIL-DTL-32139
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 32 AWG, (7-40) tinned copper, PFA color coded Black polyurethane jacket

Shell Specifications

- Shell (Overmold): _____ Polyester
- Shell Relief: _____ Thermoplastic Polyurethane

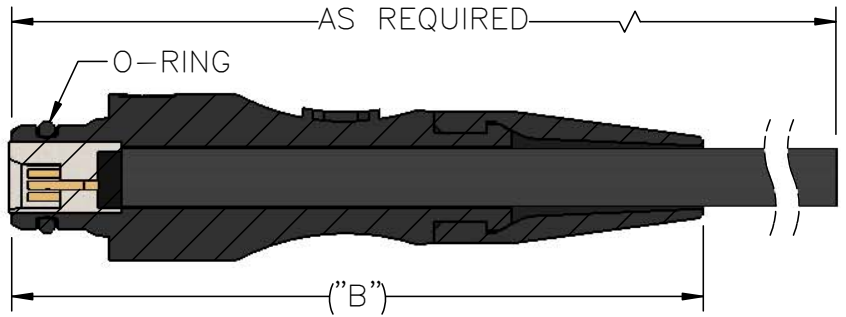
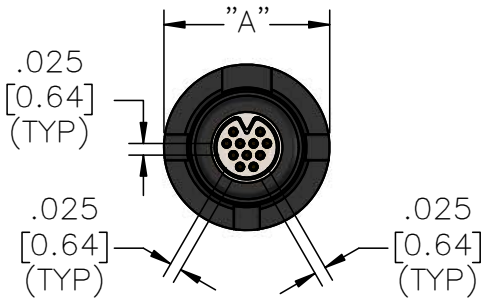
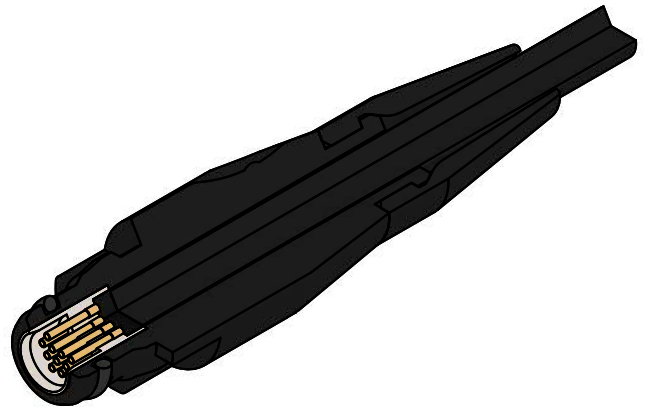
* less resistance to salt spray test.

**Plastic - Pin - SureCon 360° -
Cabled - Overmold - Inline**
ONCP-WC-OM-IS



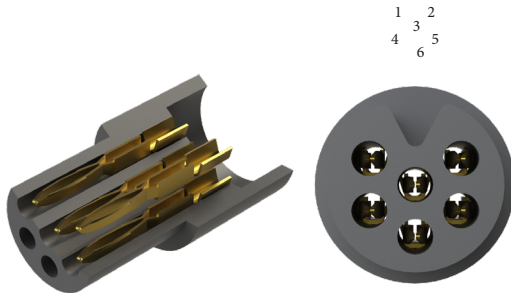
Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79300-001	6	0.325	1.250	8.26	31.75
A79303-001	11	0.356	1.510	9.04	38.35
A79306-001	16	0.384	1.890	9.75	48.01

Plastic - Socket - SureCon 360° - Cabled - Overmold - Inline ONCS-WC-OM-IS

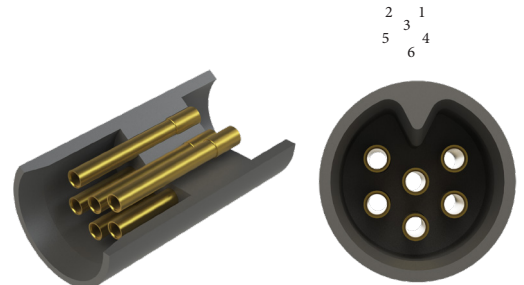


Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79301-001	6	0.330	1.460	8.38	37.08
A79304-001	11	0.360	1.490	9.14	37.85
A79307-001	16	0.380	1.670	9.65	42.42

SureCon 360° IP68

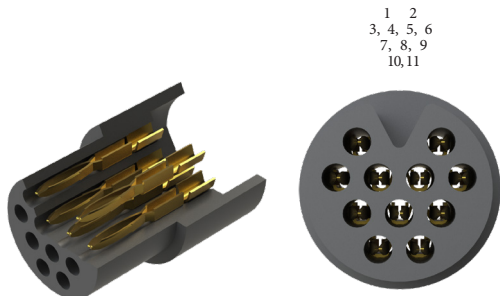


6 Pin Connector

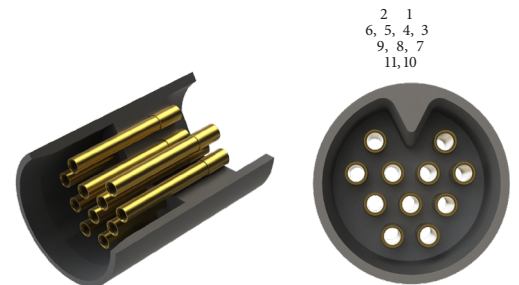


6 Socket Connector

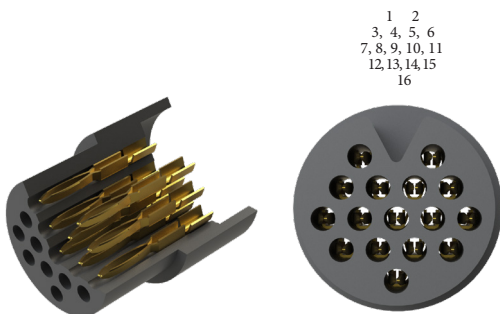
28-Contact PFA Color Code	
Socket #	Color
1	Black
2	Brown
3	Red
4	Orange
5	Yellow
6	Green
7	Blue
8	Violet
9	Gray
10	White
11	White/Black
12	White/Brown
13	White/Red
14	White/Orange
15	White/Yellow
16	White/Green



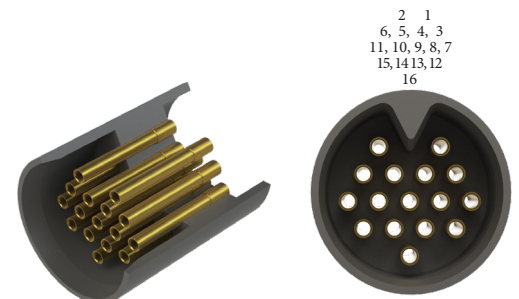
11 Pin Connector



11 Socket Connector



16 Pin Connector



16 Socket Connector

SureCon 360° IP68

Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options
ONC	6	WC	IS	Standard:	OM
Male (P - Pin)	11	Cable	Inline Shell (Male)	Plastic Overmold	Overmolded Strain Relief
	16				
Female (S - Socket)		Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4"	IS Inline Shell (Female)		RH RoHS COMPLIANT
		32 AWG Max			

Example:
ONCS-11-WC-18.0-C-COM

