

OMNETICS

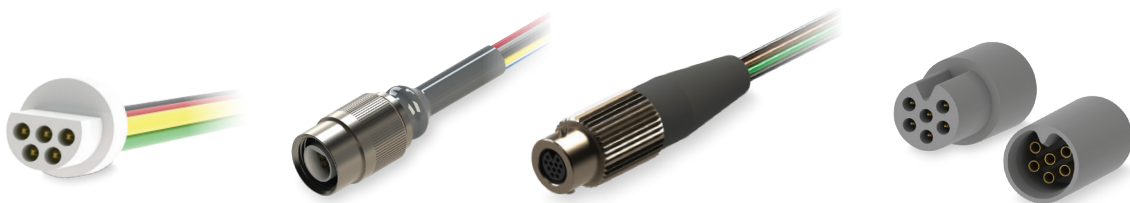
CONNECTOR CORPORATION

Circular Catalog



MICRO 360[®] & NANO 360[®]

INTERCONNECT SYSTEMS CATALOG



Omnetics Connector Corporation is a privately held connector design and manufacturing company with over 30 years of experience. Omnetics manufactures and designs compact ultra lightweight Micro-miniature, Nano-miniature, high temperature, and Hybrid connectors, wire harnesses, and cable assembly solutions for the toughest, smallest, and highest speed applications. These rugged miniature and ultra-miniature Mil-Spec based Circular and Hybrid Circular connector solutions are available in a variety of sizes and layouts featuring ratcheting, threaded, twist-lock, and breakaway coupling configurations. Omnetics' rugged Nano-miniature and Micro-miniature circular connectors are available with EMI shielding and IP68 sealing, and aid in the interconnect and SWaP design requirements of your battlefield communications, computing, and other high performance devices. Omnetics connectors are optimized for high speed compact circuitry in mission critical harsh environment applications.

With a rich history of designing and manufacturing high quality Micro and Nano connectors, our interconnect solutions are used in a variety of challenging application environments including Military, Aerospace, Medical, Petroleum, Test and Measurement, Robotics, and Research.

In addition to maintaining a large off-the-shelf (COTs) inventory,

Omnetics Connector Corporation

7260 Commerce Circle East

Minneapolis, MN 55432

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sales@omnetics.com

Tel (763) 572 0656

Toll Free (800) 343 0025

Omnetics offers a wide range of standard designs and specializes in application-specific high reliability miniature and ultra-miniature interconnect solutions. The Omnetics product portfolio includes:

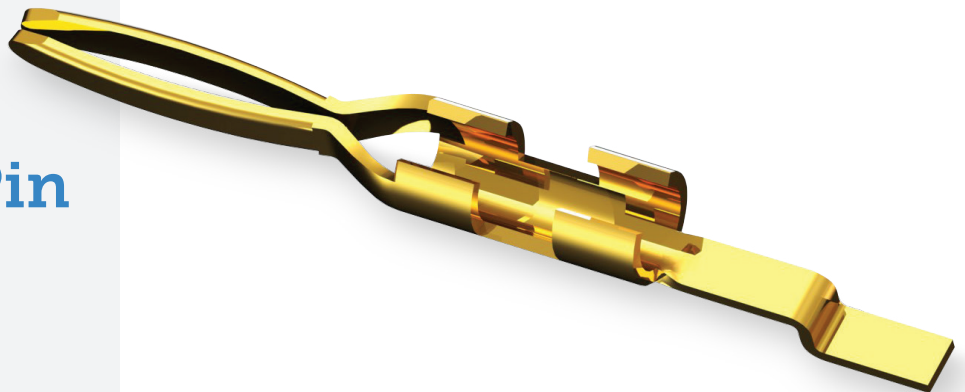
- Micro and Nano Circular connectors
- Micro and Nano Strip connectors
- Polarized Nano (PZN) connectors
- MIL-DTL-83513 Micro-D connectors
- Commercial Micro-D connectors
- Latching Micro-D connectors
- MIL-DTL-32139 Nano-D connectors
- Commercial Nano-D / Bi-Lobe connectors
- Latching Nano-D / Bi-Lobe connectors
- Hybrid connector configurations
- Cable Assemblies

Omnetics products are designed and assembled in Minneapolis, MN, U.S. The facility includes in-house automatic machining and over-molding equipment. Omnetics has a worldwide distribution and sales team that are experienced in supporting both standard and customized designs for connector miniaturization to form, fit, and function.



Omnetics' Flex Pin

Designed for
High Shock and
Vibration.



Omnetics' Flex Pin contact is ideal for withstanding high shock and vibration situations. It meets and exceeds standards for MIL-DTL-83513 for Micro (0.050 in. pitch) connectors and the MIL-DTL-32139 for Nano (0.025 in. pitch) connectors. This simple, one-piece design is stamped from ASTM B194 Beryllium Copper.

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Specification Sheets

Space Level Screening

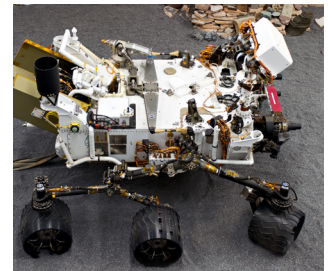
Per EEE-INST-002



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)


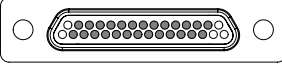
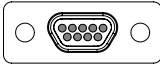
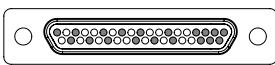
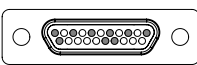



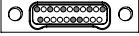
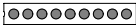









Inspection/Test	Micro (.050" center)		Nano (.025" center)	
	Level 1 Com'l/SCD	Level 2 Com'l/SCD	Level 1 Com'l/SCD	Level 2 Com'l/SCD
Visual	100%	100%	100%	100% 100%
Mechanical	2 (0)	2 (0)	2 (0)	2 (0)
Voltage Rating (DWV)	100%	2 (0)	100%	2 (0)
Insulation Resistance	2 (0)	2 (0)	2 (0)	2 (0)
Temperature Cycling	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.

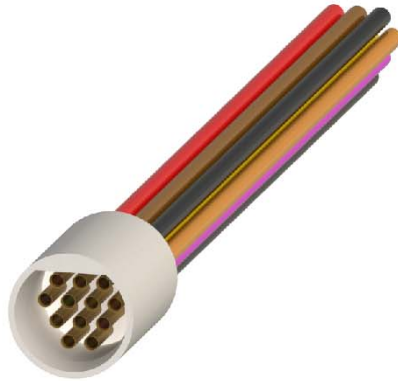
When necessary, measurements were taken on the Omnetics connectors and directly compared to commercially available connectors. In these cases, Omnetics connectors outperformed the commercial connectors, yielding lower loss values across the critical frequencies.

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)



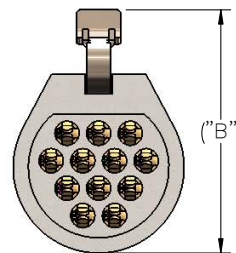
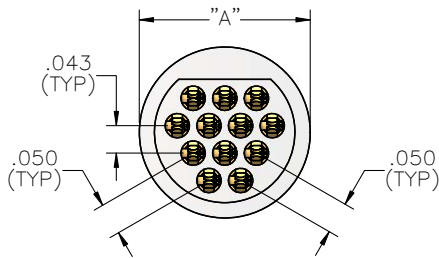
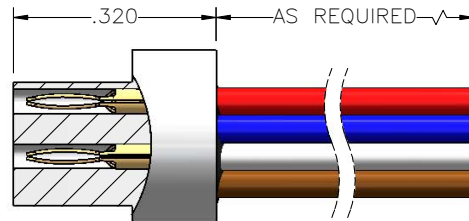
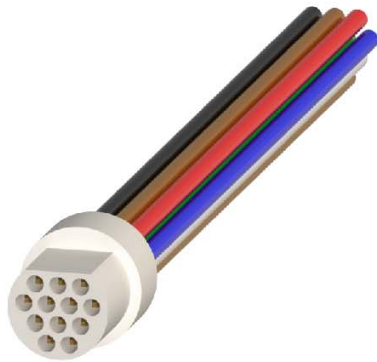
Electrical-Mechanical Specifications

- 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

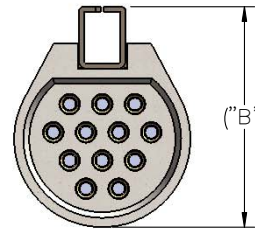
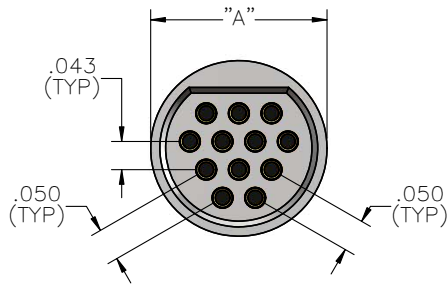
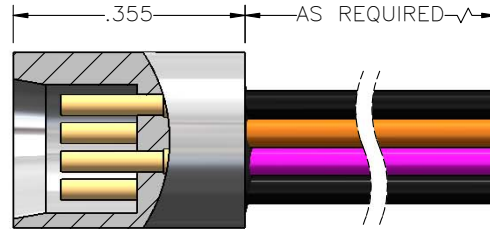


Part #	Contacts	English	Metric
		(IN)	(MM)
A22002-001	5	A	A
A22006-001	12	0.220	5.59
A22034-001	16	0.270	6.86
A22008-001	27	0.325	8.26
A22008-001	27	0.395	10.03
A22388-001	39	0.445	11.56

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



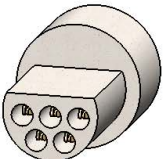
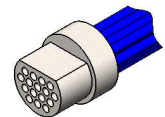
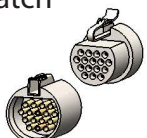
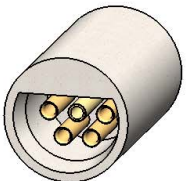




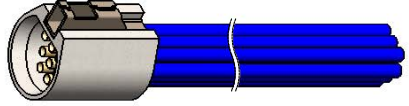


Part #	Contacts	English	Metric
		(IN)	(MM)
		A	A
A22003-001	5	0.220	5.59
A22007-001	12	0.270	6.86
A22035-001	16	0.325	8.26
A22009-001	27	0.395	10.03
A22396-001	39	0.445	11.56

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

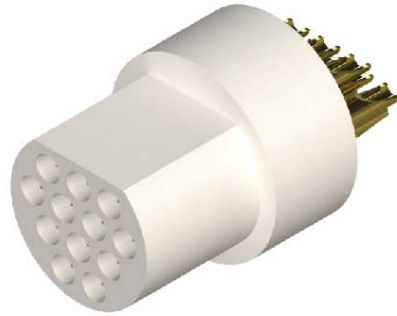
MICRO CIRCULAR DISCRETE WIRE/CABLE (TYPE WD/WC)

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 
			RH RoHS COMPLIANT 
			ST: Inline w/ Shrink Tube 
			

EXAMPLE:
MCS-12-WD-10.0-LT

MICRO 360[®] Plastic

Micro Circular Solder Cup (Type SS)



Electrical-Mechanical Specifications

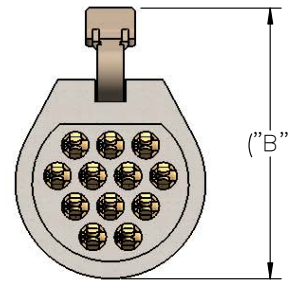
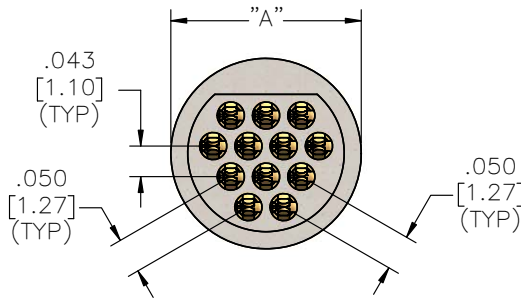
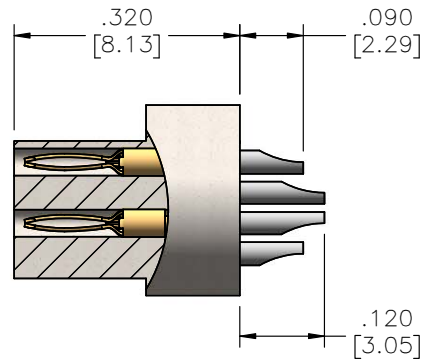
- Operating Temperature: _____ -55°C to 125°C (200°C w/ High Temp Epoxy)
- Dielectric Withstand Voltage: _____ 600 VAC RMS @sea level
- Contact Resistance: _____ 26 milliohms(65 mV) Max @2.5 Amps
- Current Rating: _____ 3 Amps per contact
- Durability: _____ >2000 Mating Cycles min
- Insulation Resistance: _____ 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

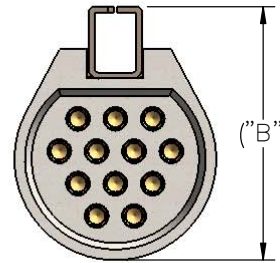
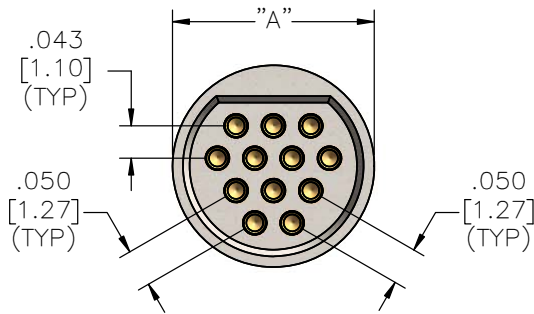
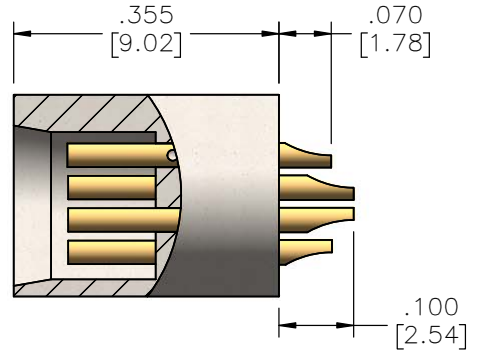
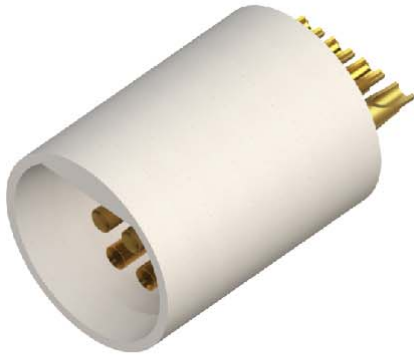
LATCHING OPTION

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

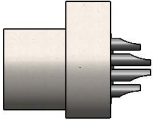
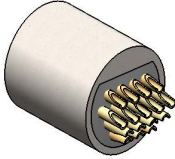



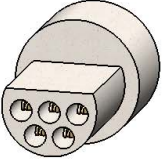
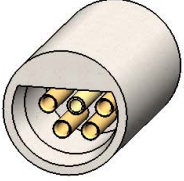
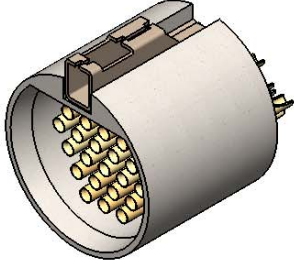


Part #	Contacts	English	Metric
		(IN)	(MM)
A22001-001	5	A	A
A22005-001	12	0.220	5.59
A22033-001	16	0.270	6.86
A22013-001	27	0.325	8.26
A22402-001	39	0.395	10.03
		0.445	11.30

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

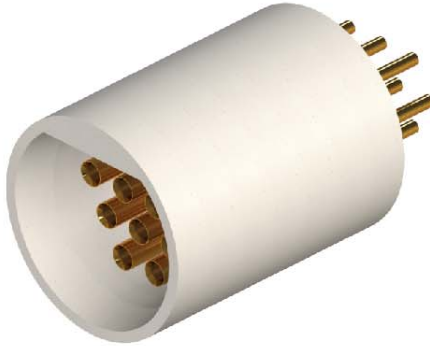
MICRO CIRCULAR SOLDER CUP (TYPE SS)

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

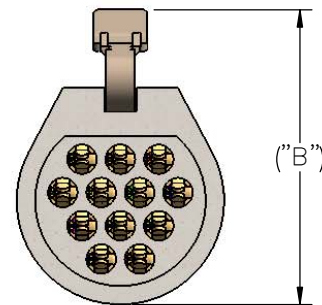
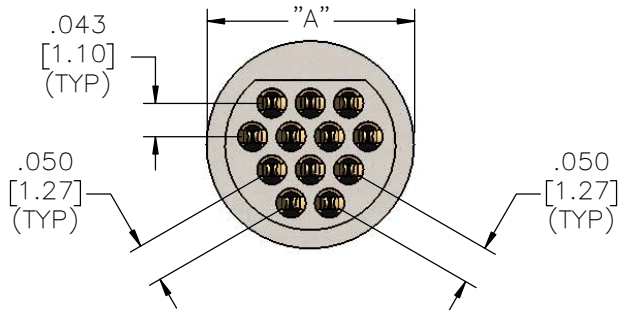
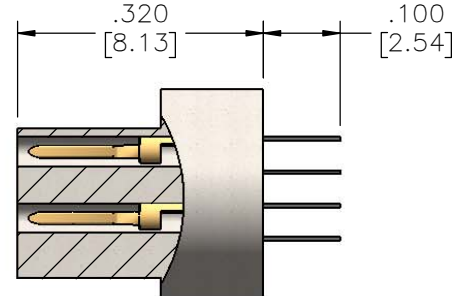
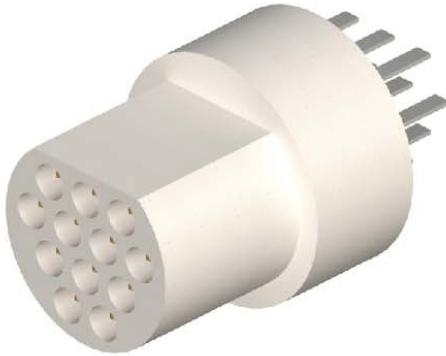
-
- Operating Temperature: _____ -55°C to 125°C (200°C w/ High Temp Epoxy)
 - Dielectric Withstand Voltage: _____ 600 VAC RMS @sea level
 - Contact Resistance: _____ 26 milliohms(65 mV) Max @2.5 Amps
 - Current Rating: _____ 3 Amps per contact
 - Durability: _____ >2000 Mating Cycles min
 - Insulation 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

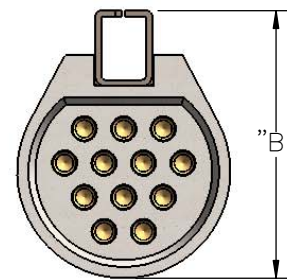
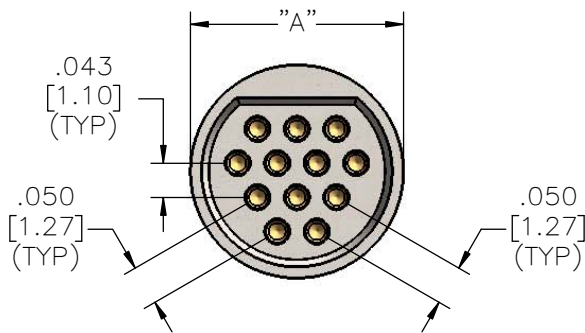
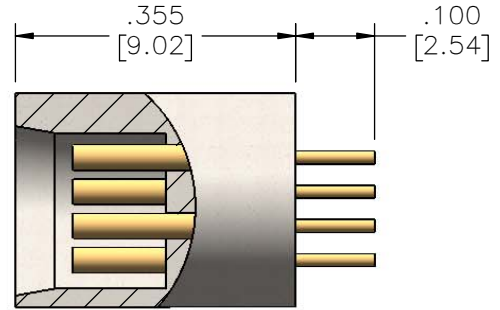
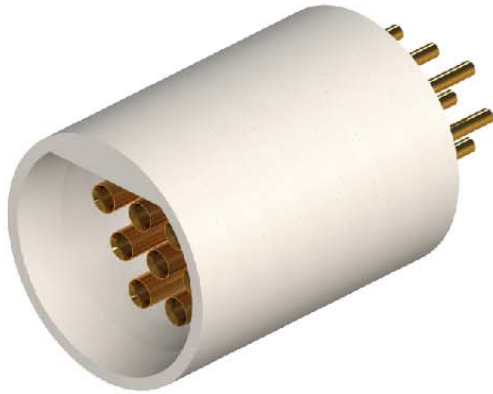
LATCHING OPTION

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



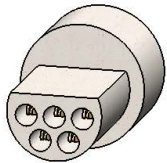
Part #	Contacts	English	Metric
		(IN)	(MM)
A22014-001	5	A	A
A22016-001	12	0.220	5.59
A22037-001	16	0.270	6.86
A22018-001	27	0.325	8.26
A22018-001	27	0.395	10.03
A22400-001	39	0.445	11.30

LATCHING OPTION

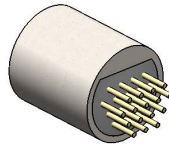
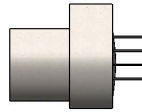
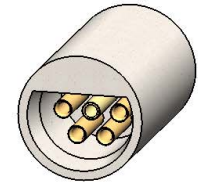
Part #	Contacts	English	Metric
		(IN)	(MM)
A22045-001	5	B	B
A22069-001	7	0.310	7.87
A22047-001	12	0.340	8.64
A22047-001	12	0.380	9.65
A22051-001	16	0.410	10.41
A22049-001	27	0.480	12.19

MICRO CIRCULAR STRAIGHT THRU-HOLE TAIL (TYPE DD)

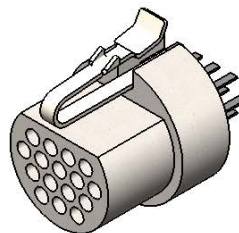
Series	# of Contacts	Termination Type	Options
MC	5	DD: Straight Thru-Hole	LT Latch
	7		
Male (P - Pin)	12		
	16		
	27		
	39		
Female (S - Socket)			RH RoHS COMPLIANT



Female
(S - Socket)

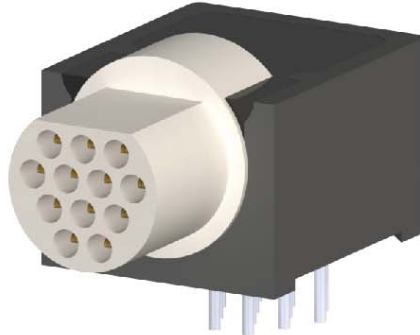


EXAMPLE:
MCP-16-DD-LT



MICRO 360[®] Plastic

Micro Circular Right Angle Thru-Hole (Type RA)



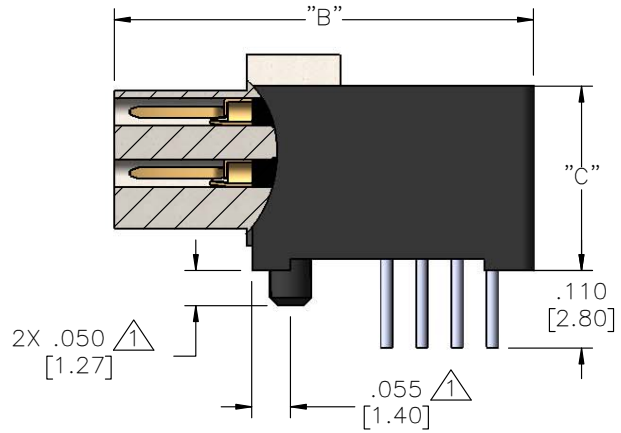
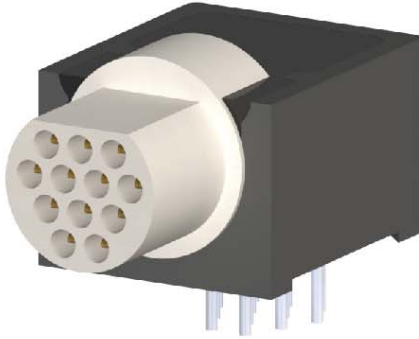
Electrical-Mechanical Specifications

- 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

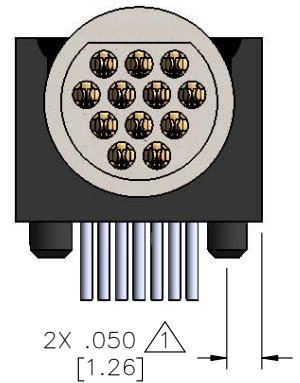
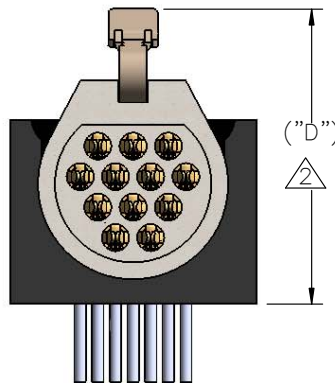
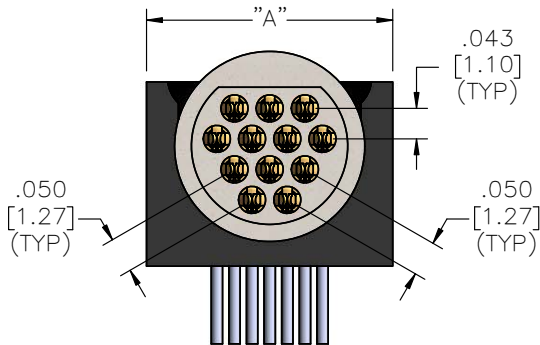
- Contact: _____ Copper Alloy per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519

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



① OPTIONAL MOUNTING POSTS

② OPTIONAL LATCH



English (IN)

Metric (MM)

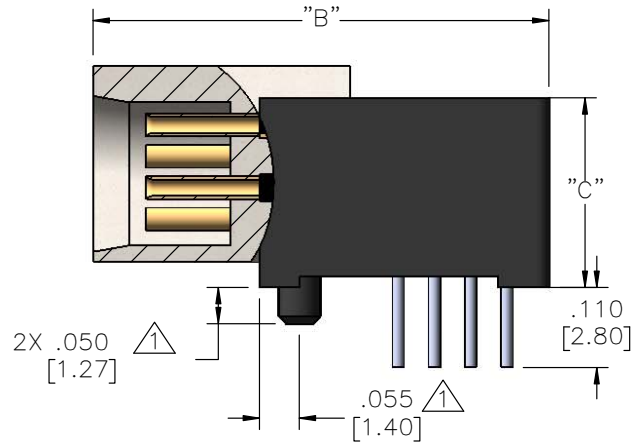
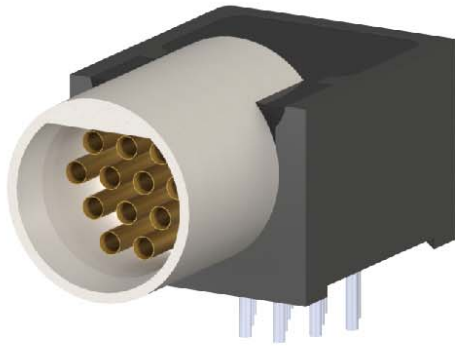
Part #	Contacts	A	B	C	A	B	C
A22052-001	5	0.300	0.495	0.232	7.62	12.57	5.89
A22053-001	12	0.350	0.595	0.262	8.89	15.11	6.65
A22054-001	16	0.411		0.294	10.44		7.47

LATCHING OPTION

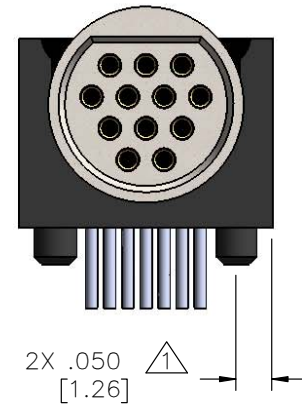
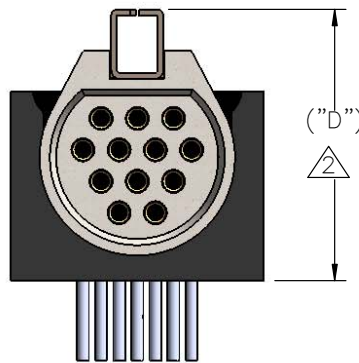
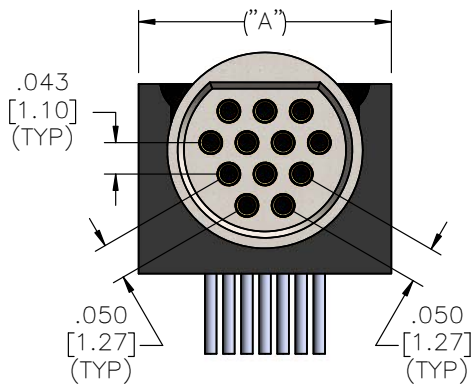
English (IN) **Metric (MM)**

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



- ① OPTIONAL MOUNTING POSTS
- ② OPTIONAL LATCH BOX

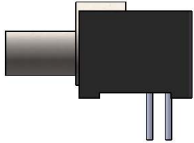


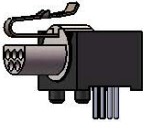
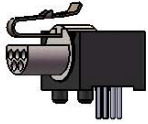



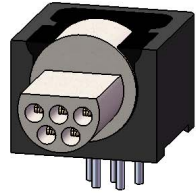
Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A22060-001	5	0.300	0.530	0.232	7.62	13.46	5.89
A22061-001	12	0.350	0.630	0.262	8.89	16.00	6.65
A22354-001	16	0.411		0.294	10.44		7.47

LATCHING OPTION

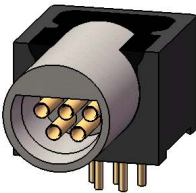
Part #	Contacts	English (IN)	Metric (MM)
		D	D
A22062-001	5	0.300	7.62
A22063-001	12	0.370	9.40
A22355-001	16	0.400	10.16

MICRO CIRCULAR RIGHT ANGLE THRU-HOLE (TYPE RA)

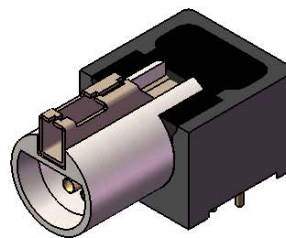
Series	# of Contacts	Termination Type	Options
MC	5 12 16	RA: Right Angle Thru-Hole	LT Latch
Male (P - Pin)			 
Female (S - Socket)			MP Mounting Posts 
			RH RoHS COMPLIANT 



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

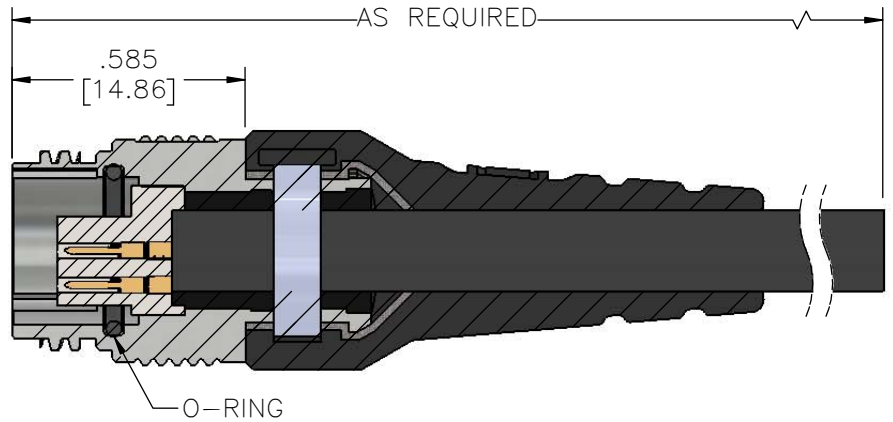
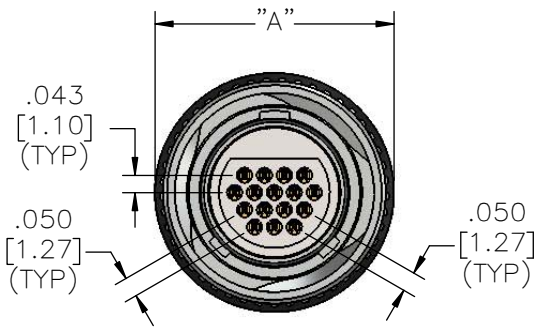
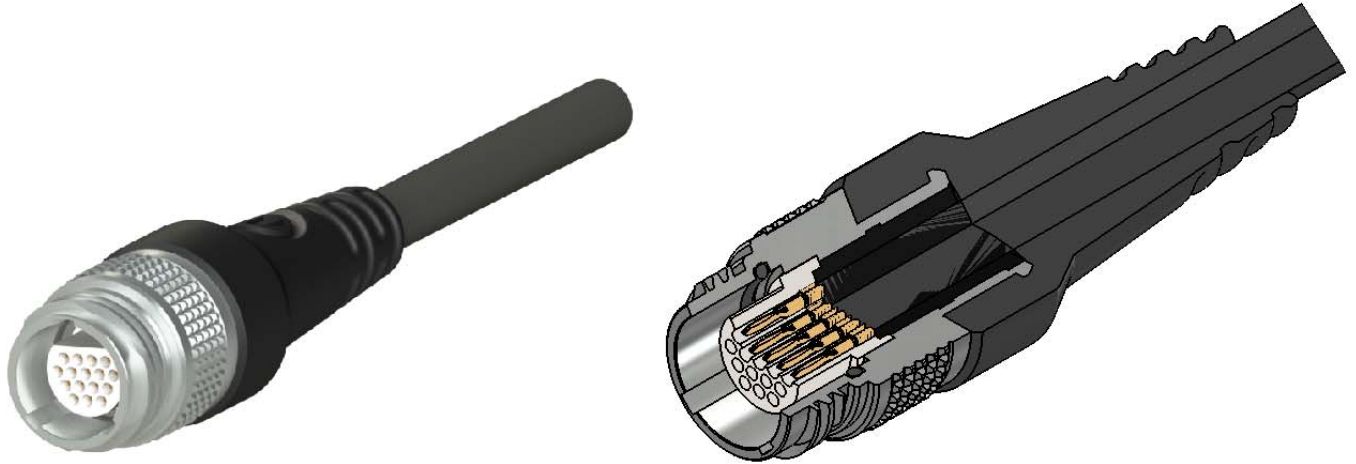
Shell Options

- 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

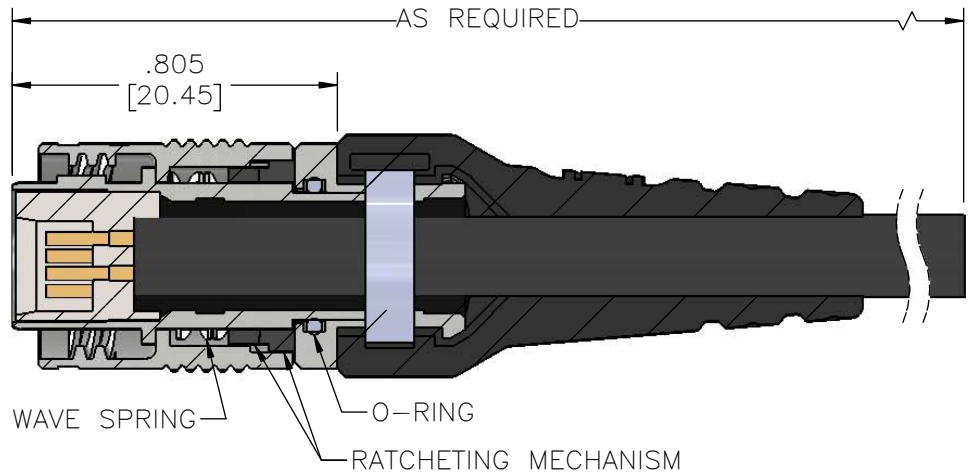
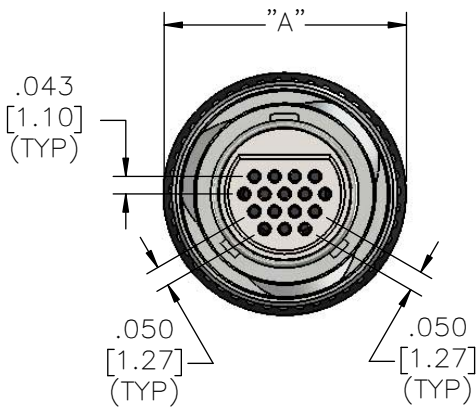
RMCP-WC-OM-IS-IP68



English (IN) Metric (MM)

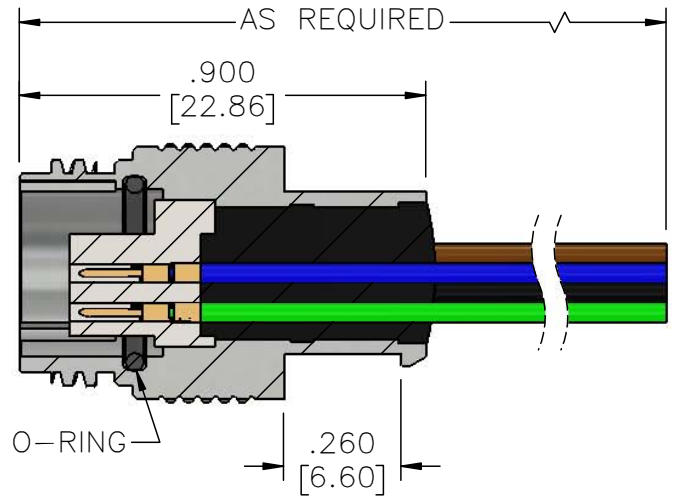
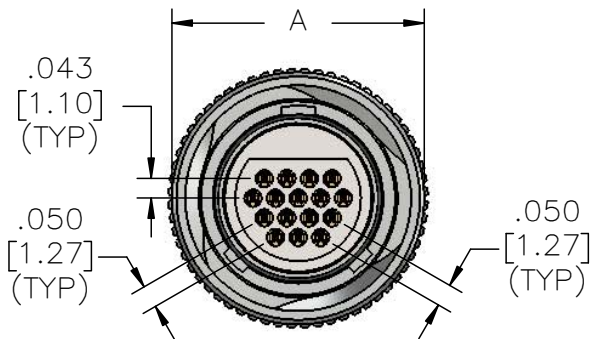
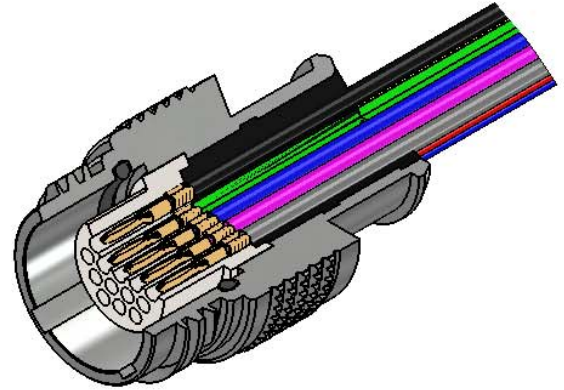
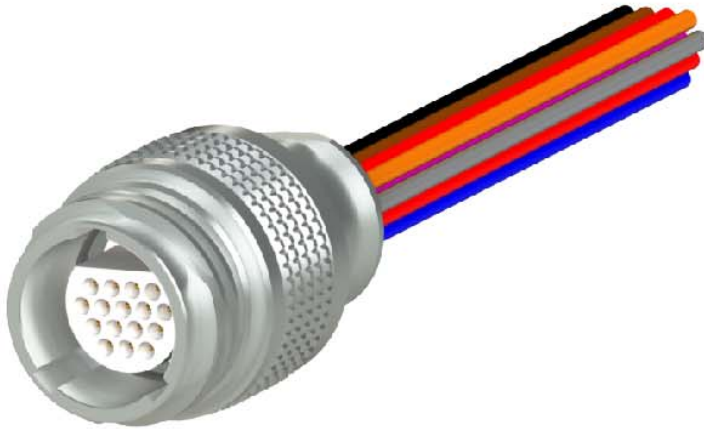
Part #	Contacts	A	A
A22493-001	5	0.510	12.95
A22500-001	12	0.550	13.97
A22507-001	16	0.600	15.24
A22514-001	27	0.670	17.02
A22557-001	39	0.780	19.81

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



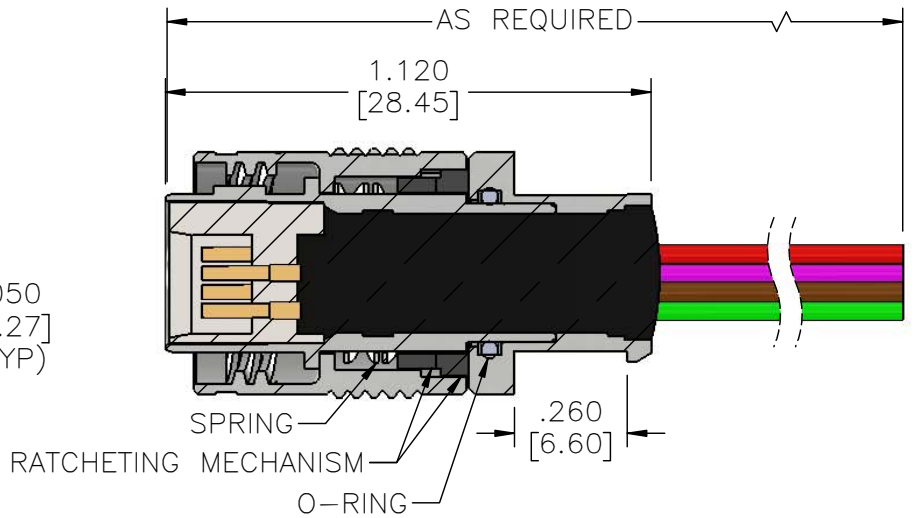
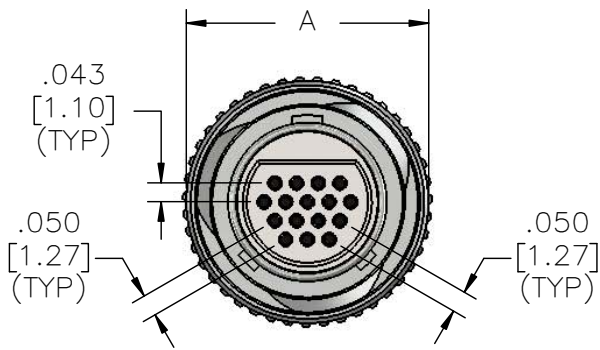
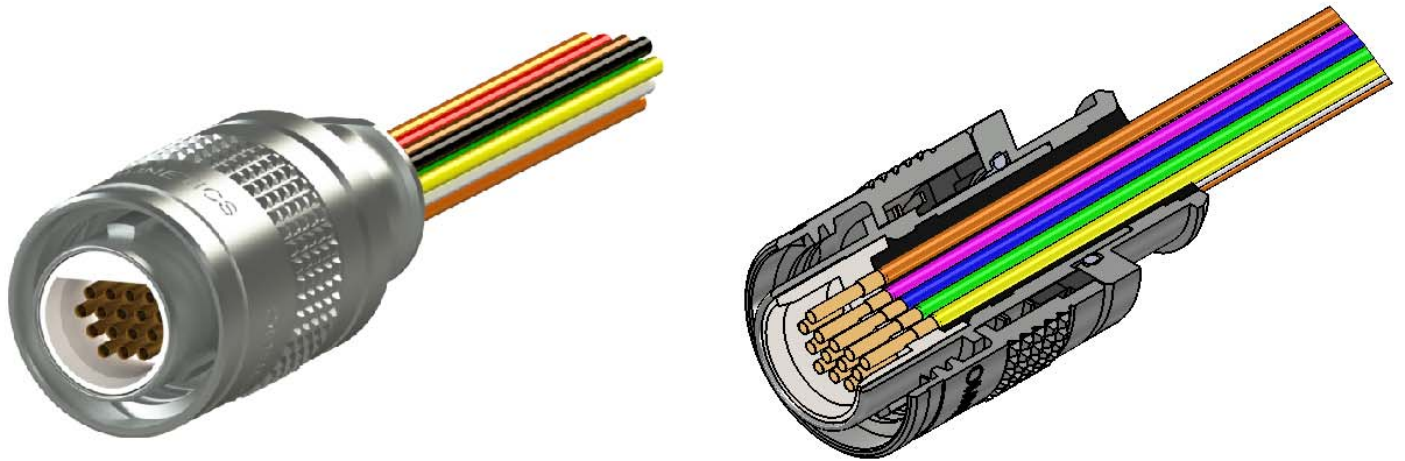
Part #	Contacts	English	Metric
		(IN)	(MM)
A22492-001	5	A	A
A22499-001	12	0.510	12.95
A22506-001	16	0.550	13.97
A22513-001	27	0.600	15.24
A22559-001	39	0.670	17.02
		0.780	19.81

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

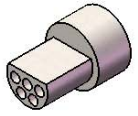
Metal - Socket - Ratcheting - Wired RMCS-WD



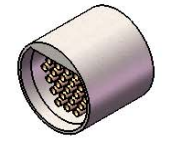
Part #	Contacts	English	Metric
		(IN)	(MM)
A22490-001	5	A	A
A22497-001	12	0.470	11.94
A22504-001	16	0.520	13.21
A22511-001	27	0.570	14.48
A22558-001	39	0.640	16.26

MICRO CIRCULAR RATCHETING

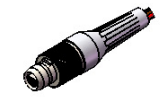
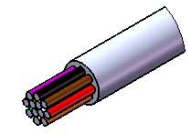
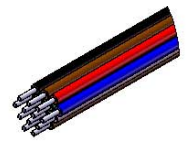
Series	# of Contacts	Termination Type	Shell Material and Finish	Shell Type	Options, cont.
RMC Male (P - Pin)	5	WD: Discrete Lead Wire	Standard N: Nickel Plated Aluminum	SR: Inline Shell w/ Strain Relief	C Color Coded
	12				
Female (S - Socket)	16	WC: Cable	Non-Standard Options BN: Black Nickel Plated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



Female (S - Socket)



*Insulator colors may be black or off-white

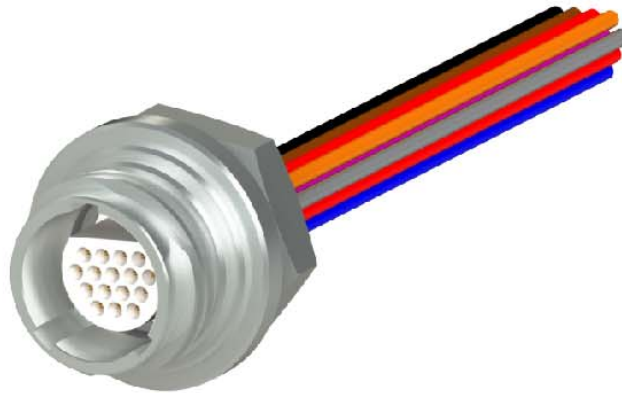


EXAMPLE:
RMCS-16-WC-18.0-C-IS-N-OM-IP68



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

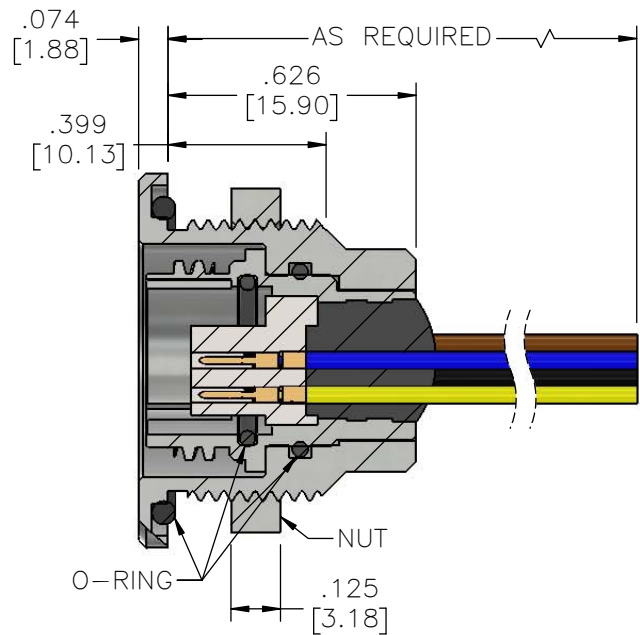
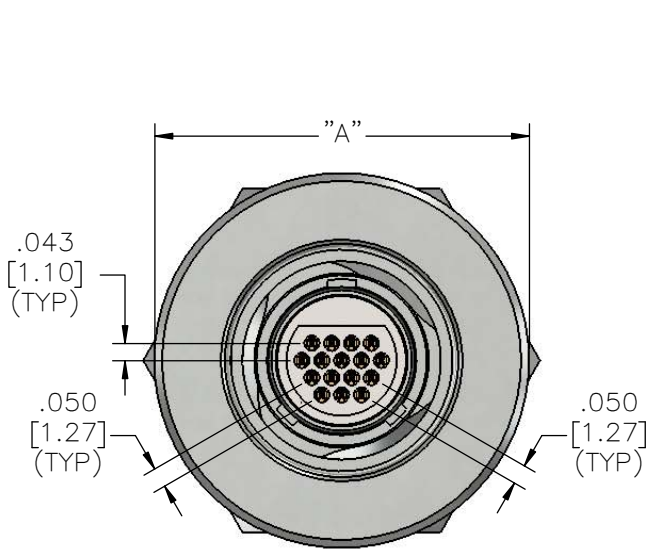
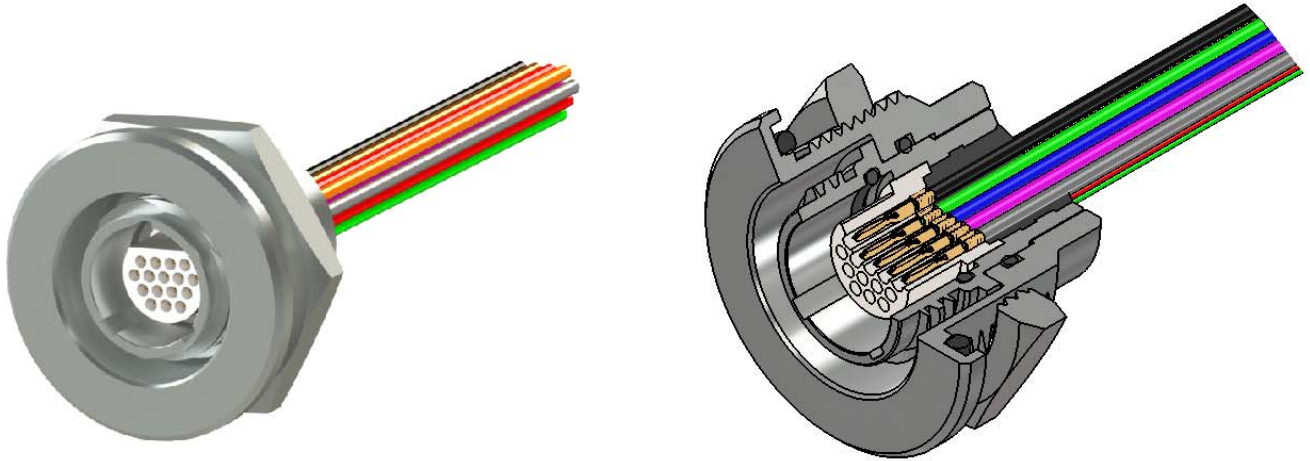
Shell Options

- 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

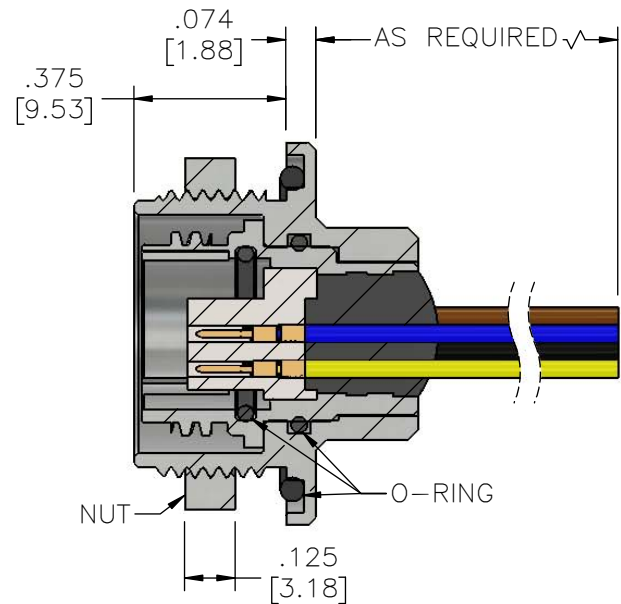
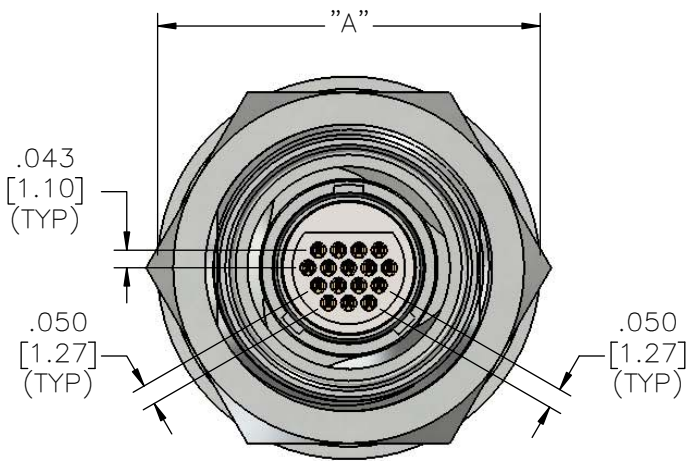
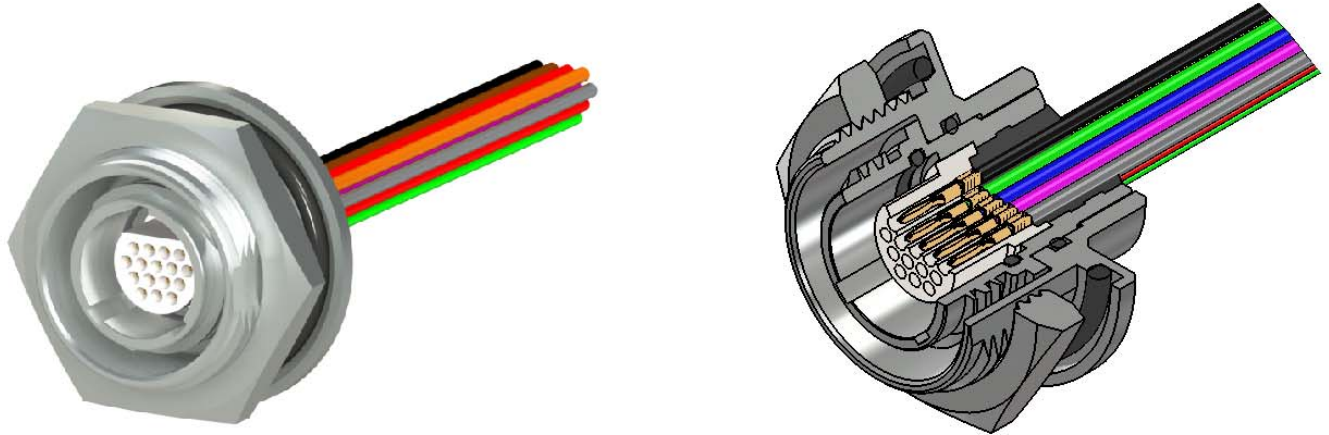
RMCP-FP



Part #	Contacts	English	Metric
		(IN)	(MM)
A22495-001	5	A	A
A22502-001	12	0.820	20.83
A22509-001	16	0.900	22.86
A22516-001	27	0.950	24.13
A22516-001	27	1.020	25.91
A22553-001	39	1.130	28.70

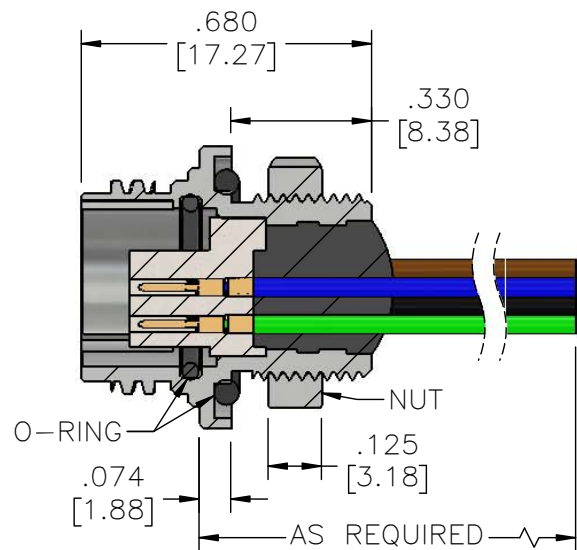
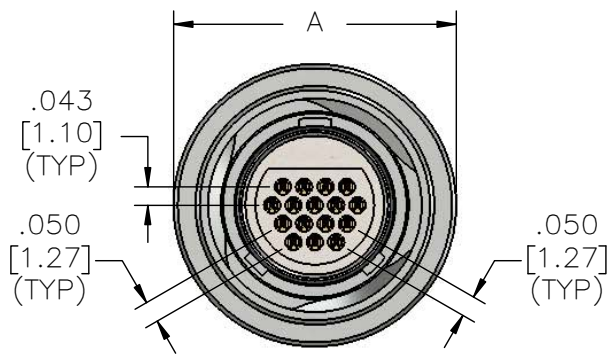
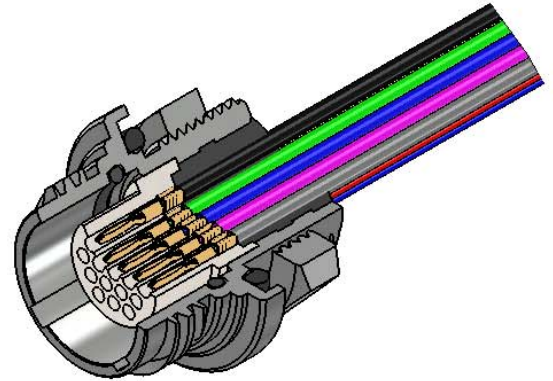
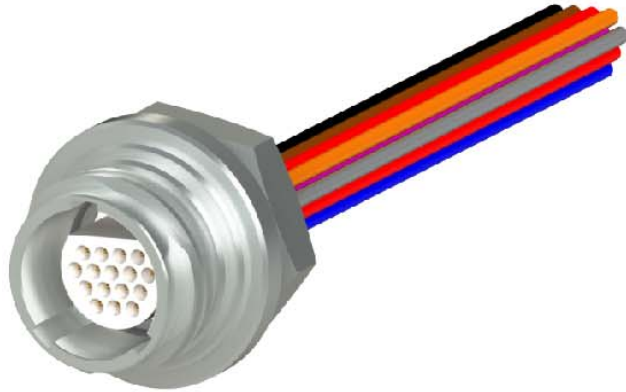
Metal - Pin - Ratcheting - Rear Panel

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
A22517-001	27	1.020	25.91
A22554-001	39	1.130	28.70

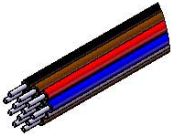













Metal - Pin - Ratcheting - Protruding Panel RMCP-PP



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

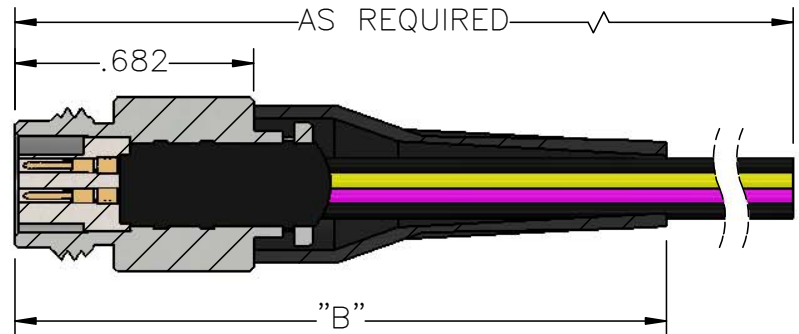
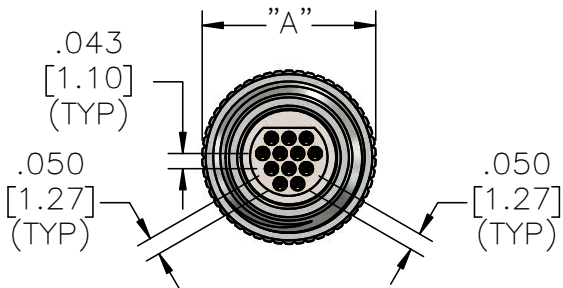
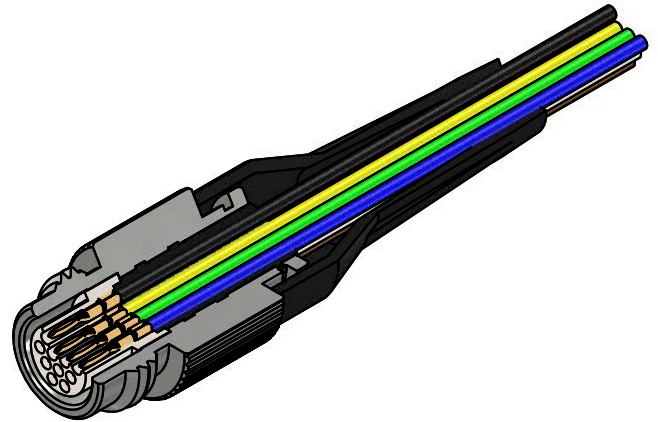
- Contact: _____ Copper Alloy Per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 26 AWG, (7-34)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

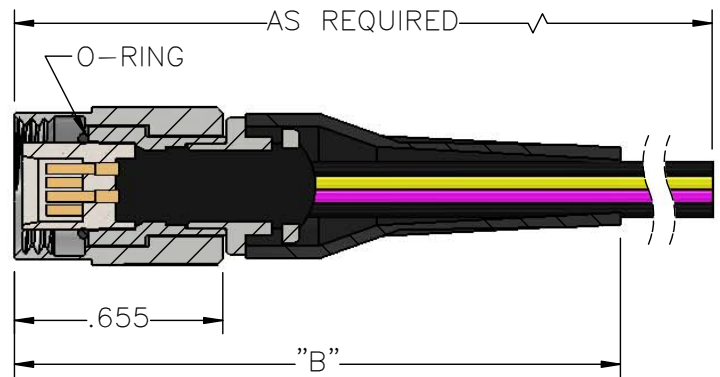
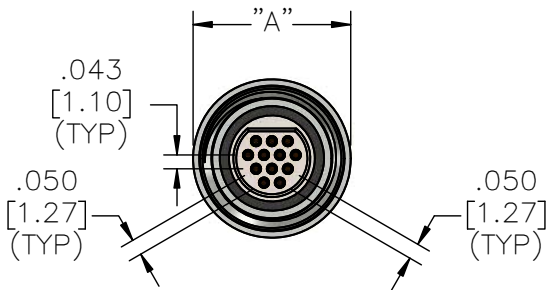
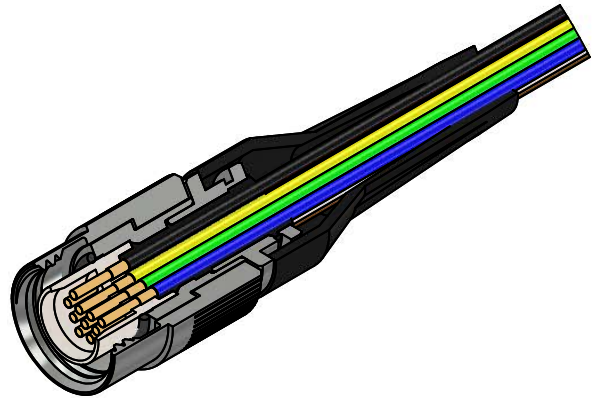
**Metal - Pin - Threaded -
Wired - Inline - Strain Relief**
MMCP-WD-IS-SR



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

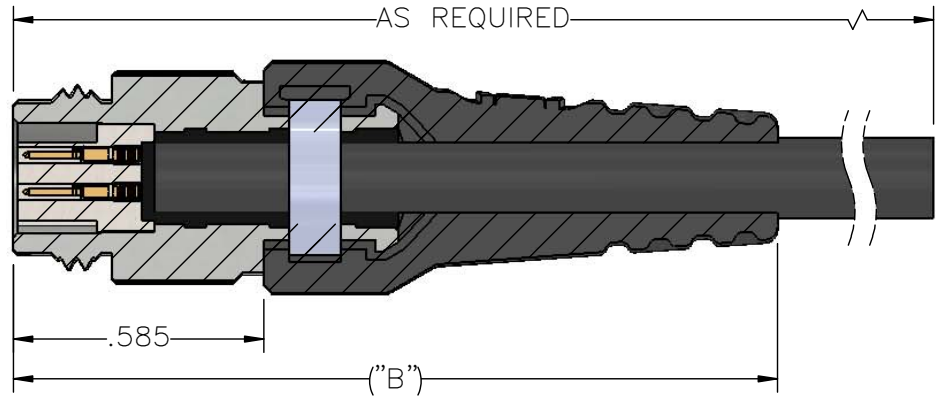
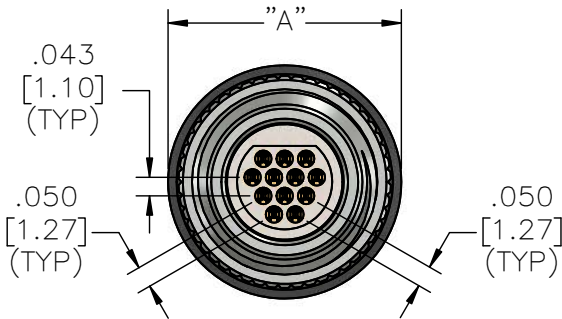
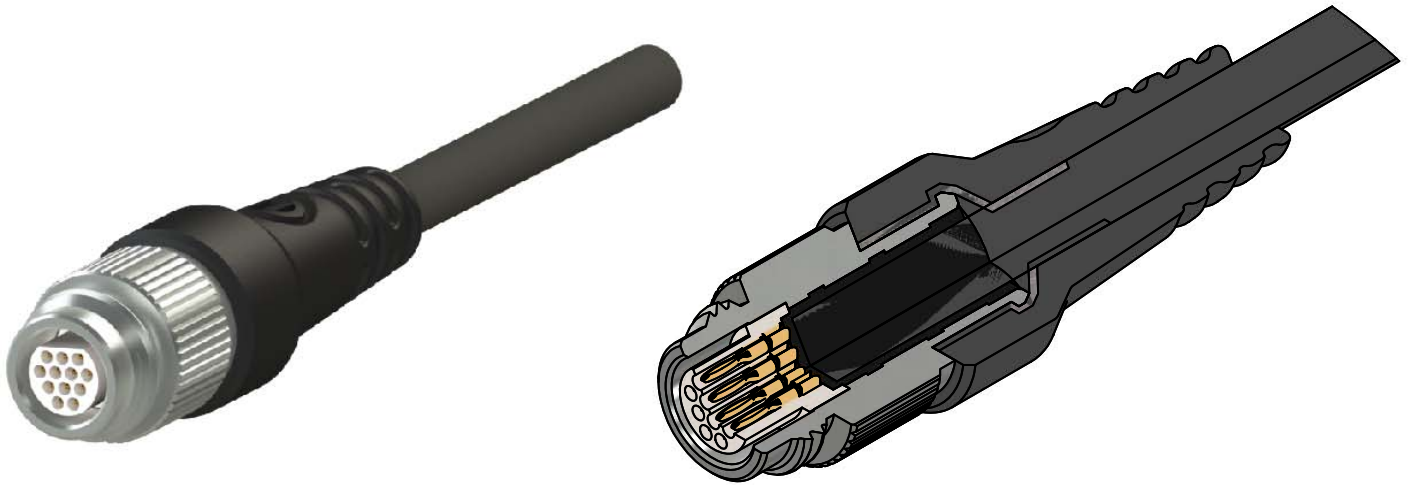
Metal - Socket - Threaded - Wired - Inline - Strain Relief

MMCS-WD-IS-SR



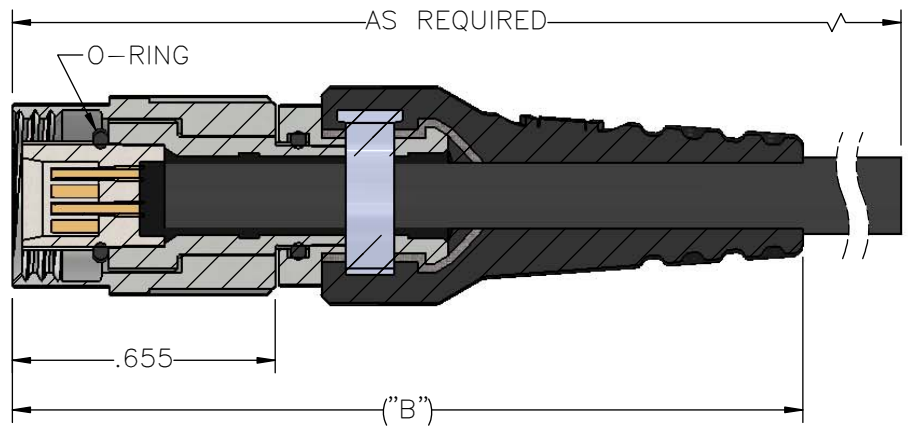
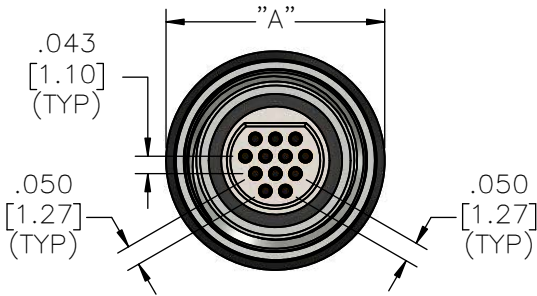
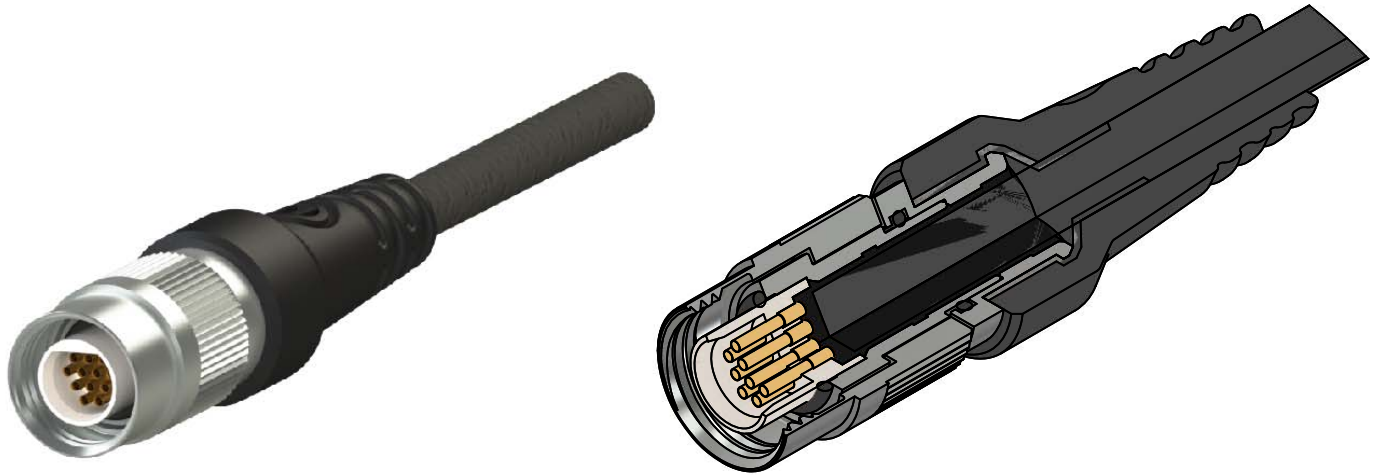
Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A22372-001	5	0.420	1.900	10.67	48.26
A22377-001	12	0.500		12.70	
A22382-001	16	0.560		14.22	
A22387-001	27	0.610	2.100	15.49	53.34
A22488-001	39	0.680	2.400	17.27	60.96

**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				
	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					

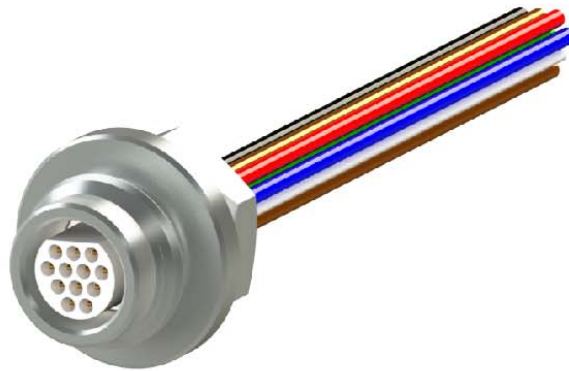
METAL MICRO CIRCULAR KITS

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

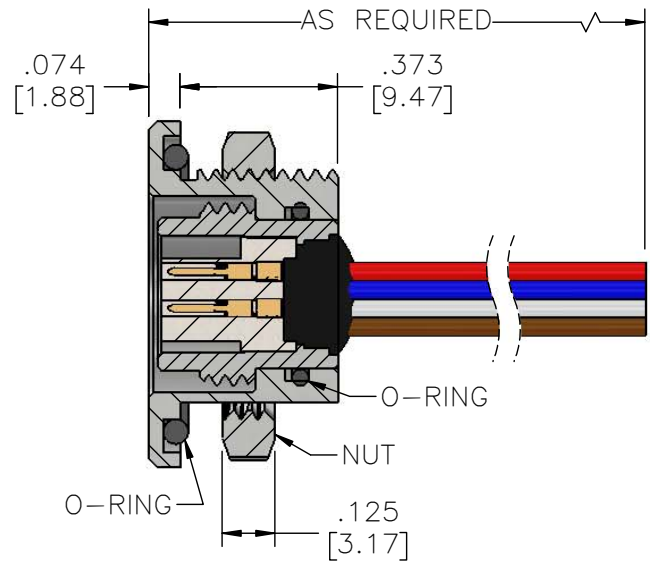
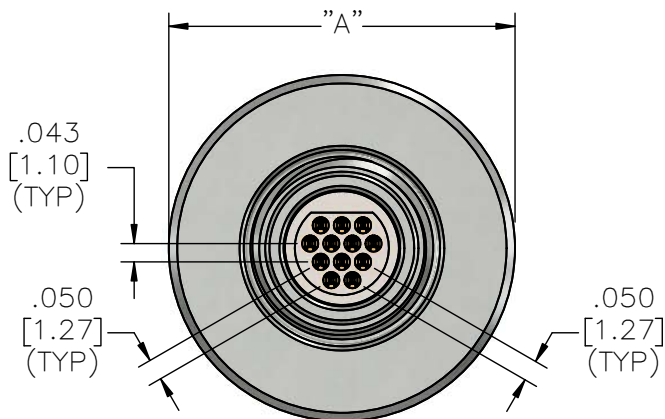
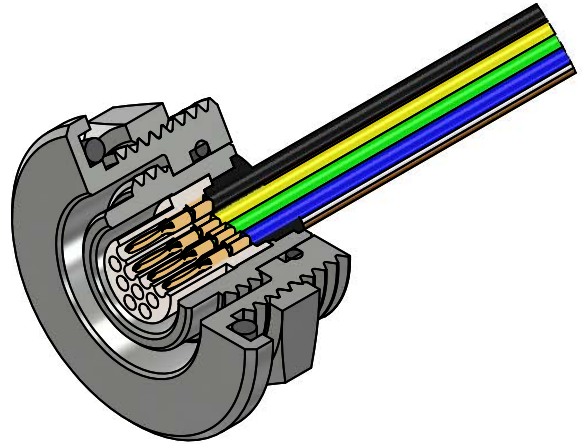
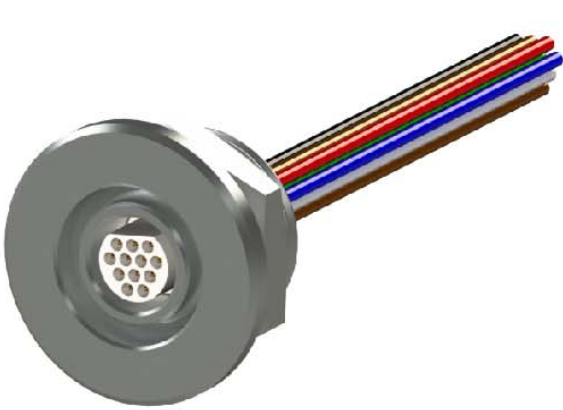
- Contact: _____ Copper Alloy Per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 26 AWG, (7-34)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

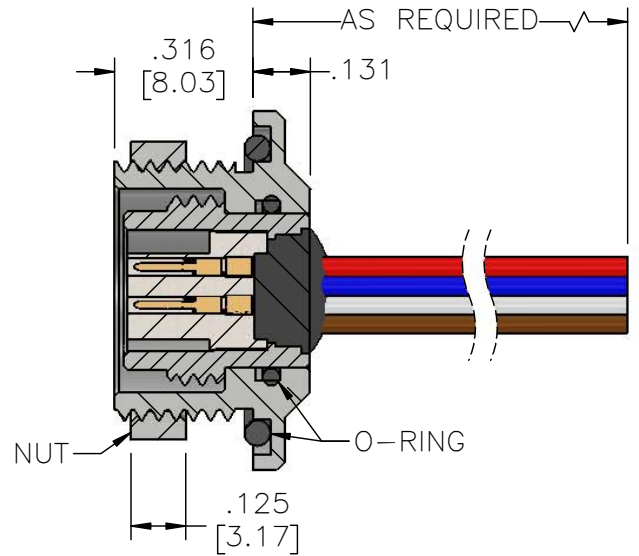
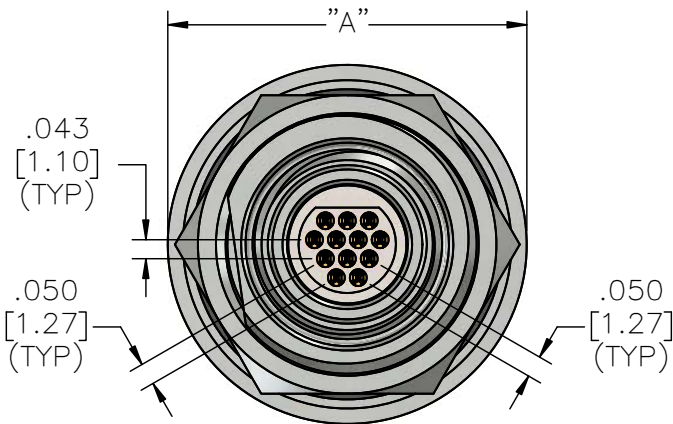
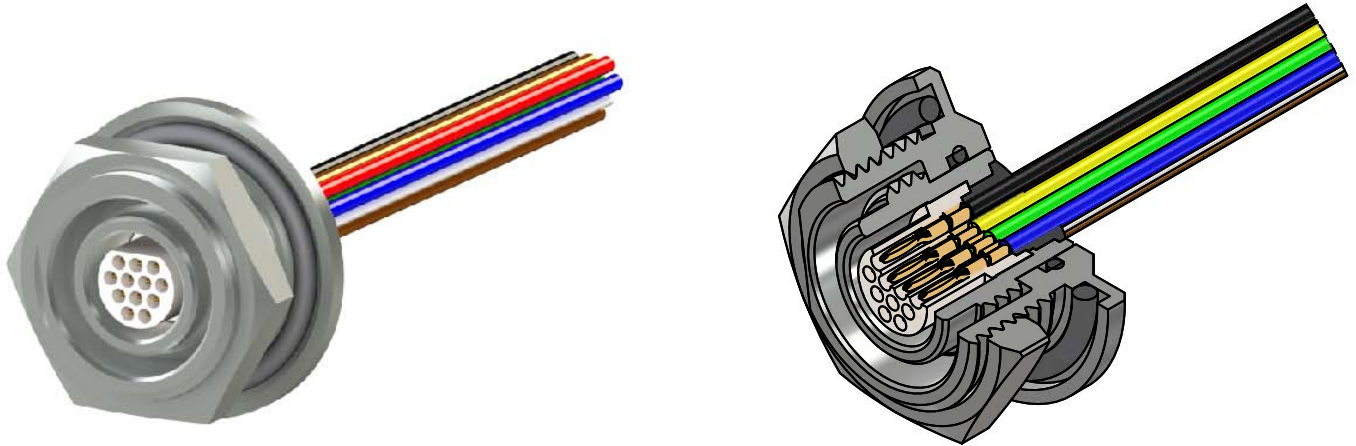
Metal - Pin - Threaded - Wired - Front Panel MMCP-WD-FP



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

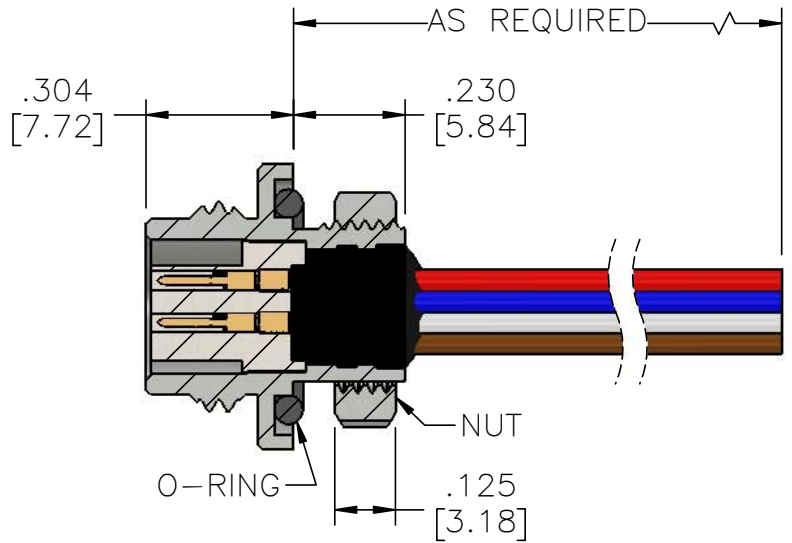
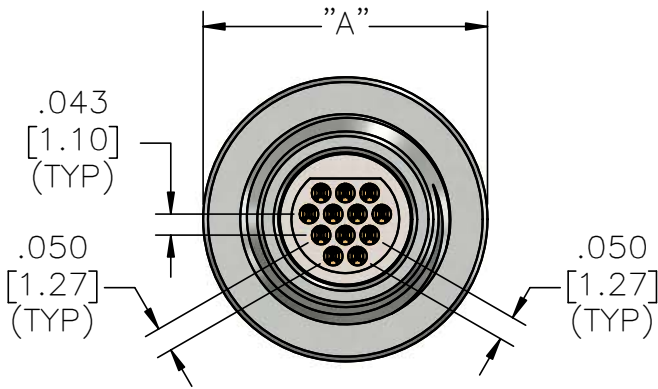
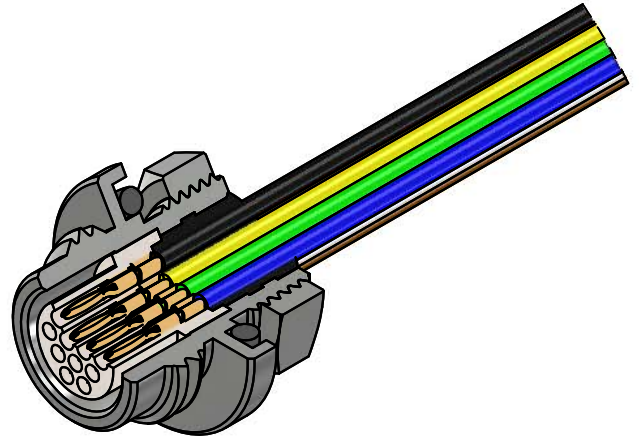
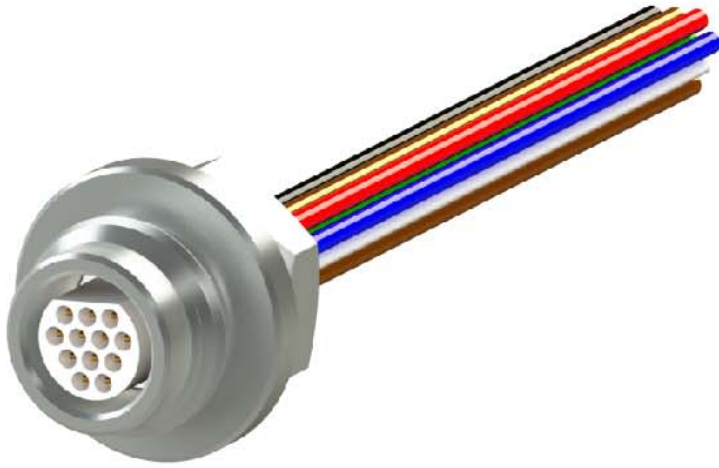
Part #	Contacts	A	A
A22128-001	5	0.750	19.05
A22129-001	12	0.820	20.83
A22130-001	16	0.875	22.23
A22131-001	27	0.990	25.15
A22483-001	39	1.100	27.94

**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

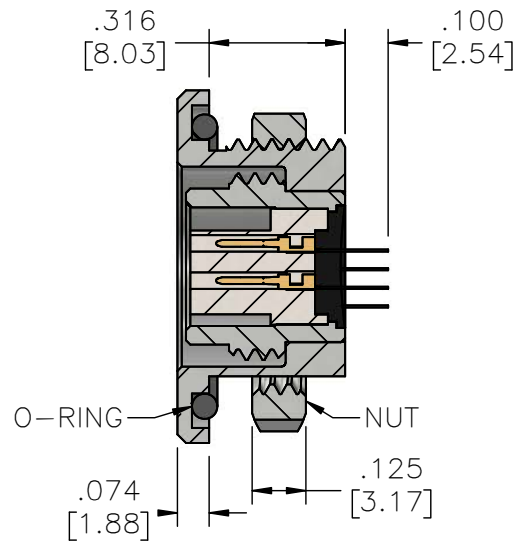
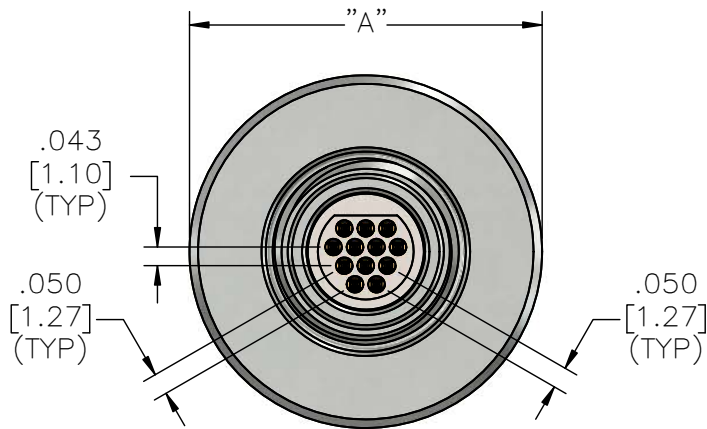
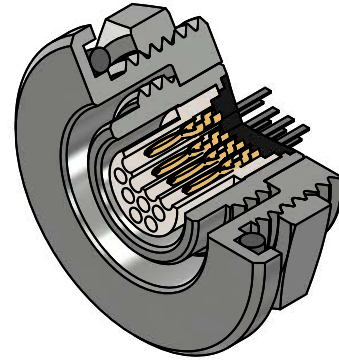
Metal - Pin - Threaded - Wired - Protruding Panel MMCP-WD-PP



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

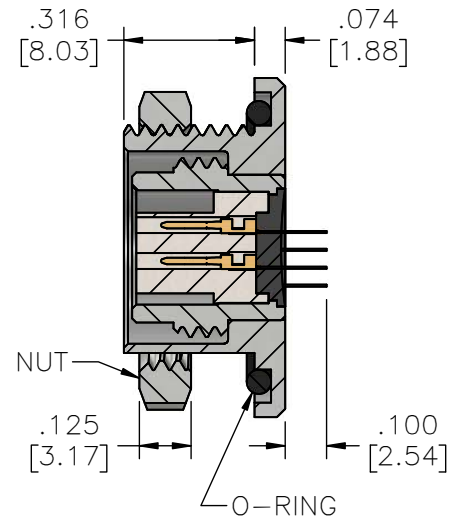
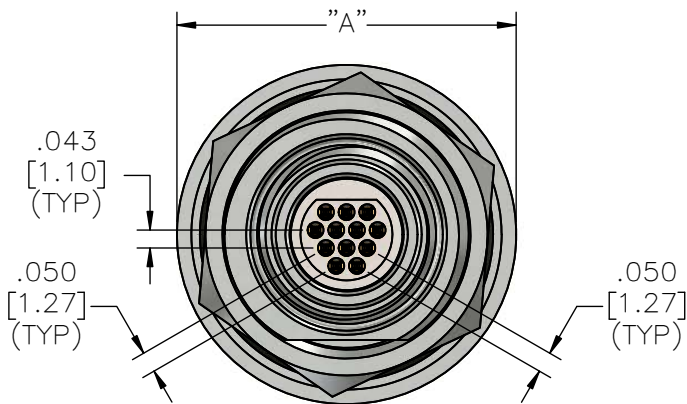
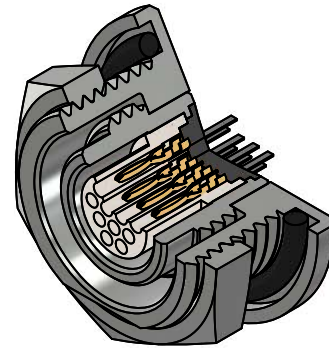
Metal - Pin - Straight Tail - Front Panel

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

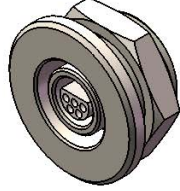
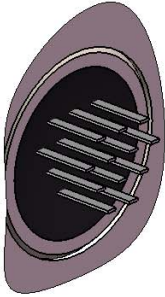
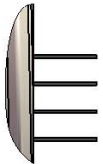


	English (IN)	Metric (MM)
Contacts	A	A
5	0.750	19.05
12	0.820	20.83
16	0.875	22.23
27	0.990	25.15
39	1.100	27.94

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	DD: Straight Thru-Hole	Standard N: Nickel Plated Brass	FP: Front Panel Mount	OR O-Ring
	12				
	16 27				



Non-Standard Options
BN: Black Nickel Plated Brass



RP: Rear Panel Mount



IP68

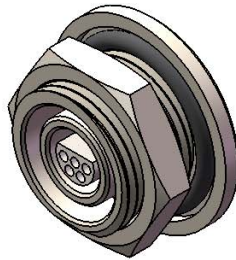
RH
RoHS
COMPLIANT



P: Passivated Stainless Steel



OX: Black Oxide Finished Steel



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

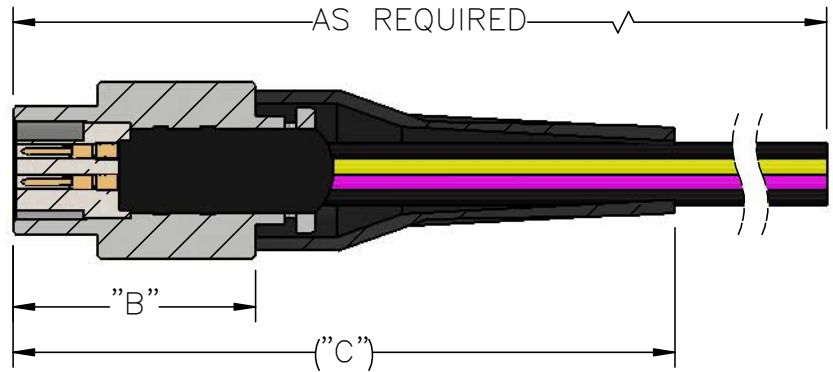
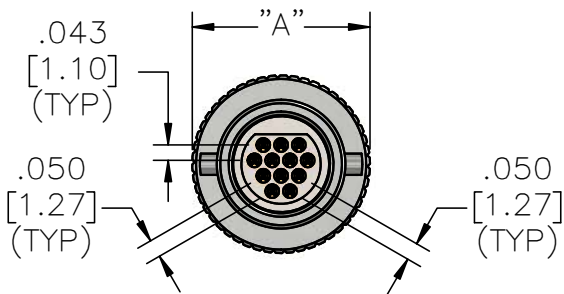
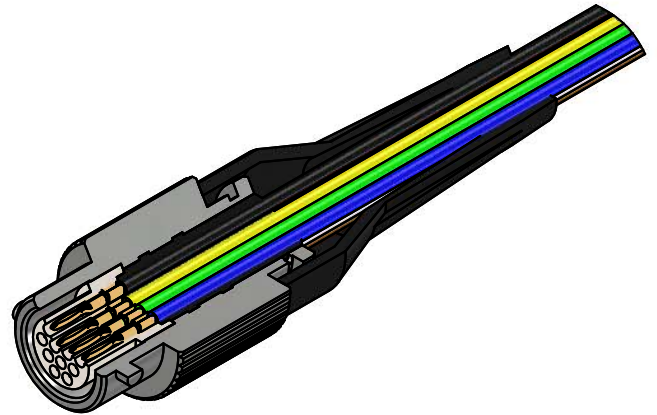
Shell Options

- 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.

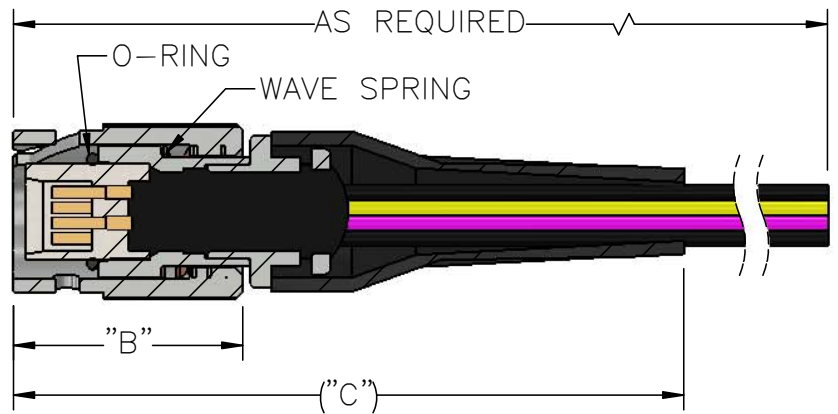
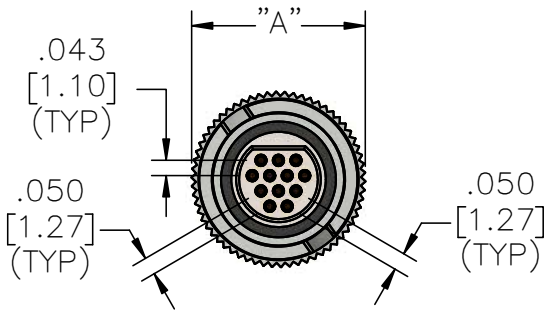
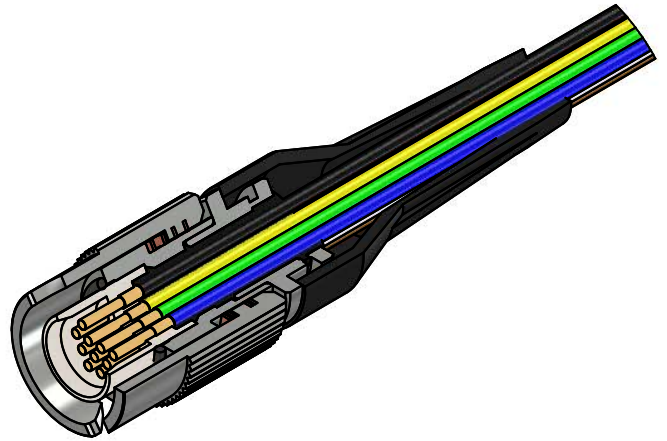
Metal - Pin - Twist-Lock - Wired - Inline - Strain Relief

TMCP-WD-IS-SR



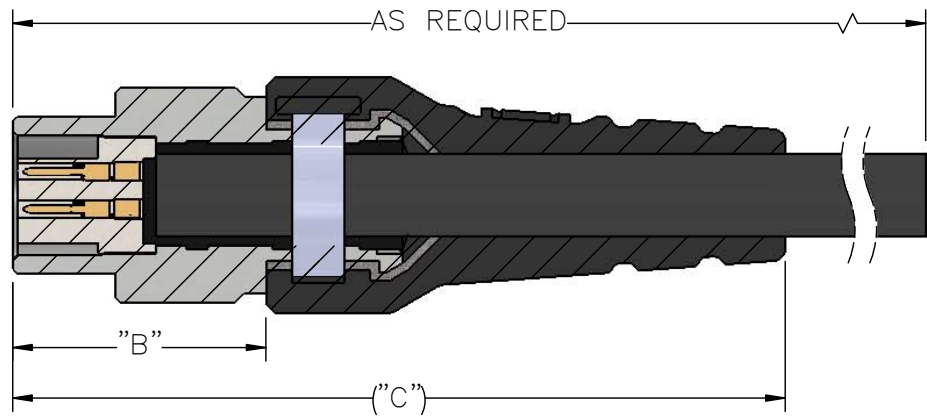
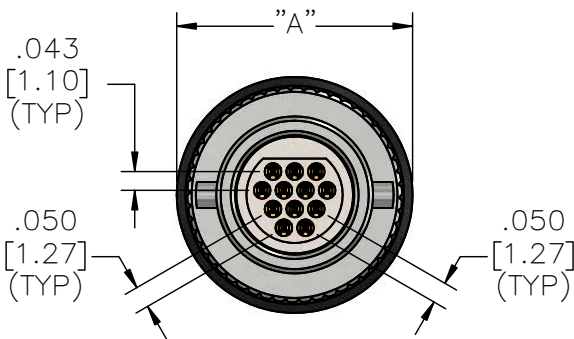
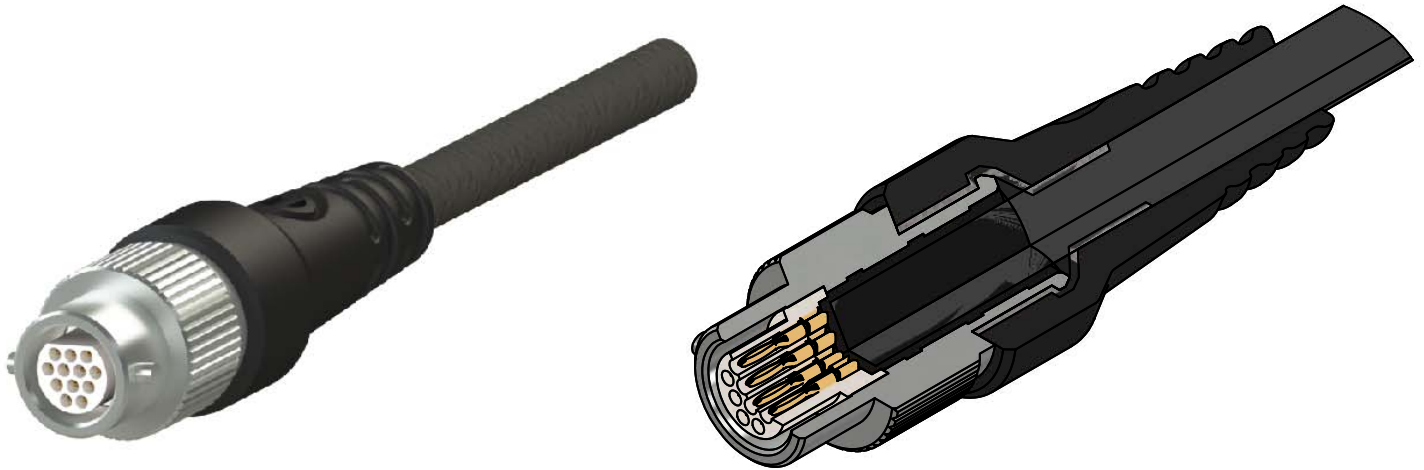
Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A22228-001	5	0.450	0.680	1.900	11.43	17.27	48.26
A22230-001	12	0.500			12.70		
A22232-001	16	0.560			14.22		
A22234-001	27	0.610			15.49		
A22523-001	39	0.650	0.585	2.200	16.51	14.86	55.88

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



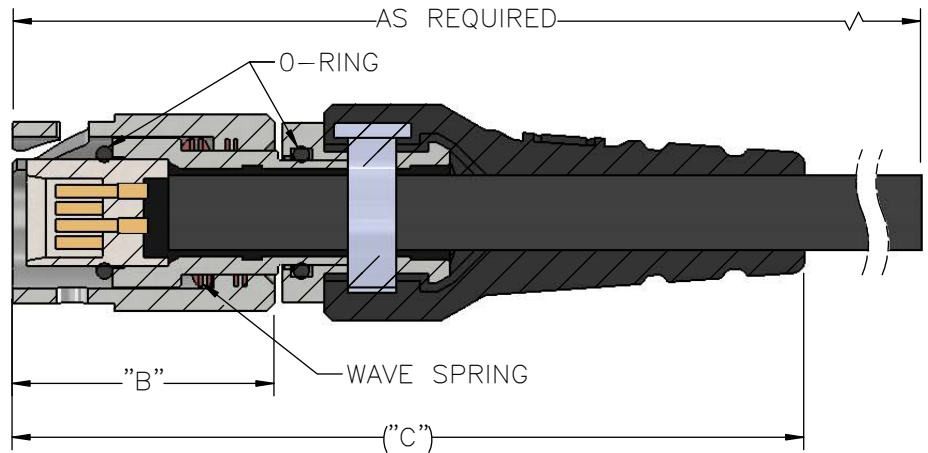
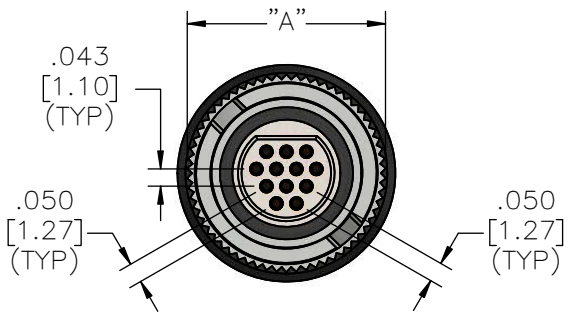
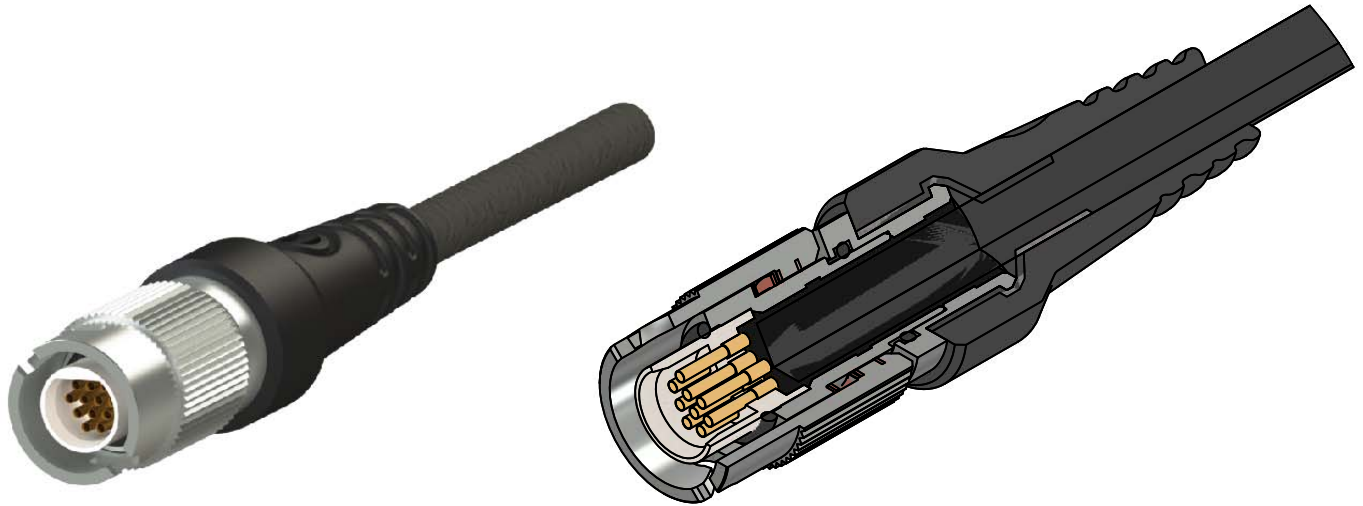
Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A22229-001	5	0.450	0.660	1.900	11.43	16.76	48.26
A22231-001	12	0.500			12.70		
A22233-001	16	0.560			14.22		
A22235-001	27	0.620	0.630	2.100	15.75	16.00	53.34
A22533-001	39	0.670			17.02		

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



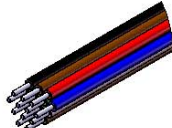











Part #	Contacts	English (IN)			Metric (MM)		
		A	B	C	A	B	C
A22352-001	5	0.510	0.590	1.740	12.95	14.99	44.20
A22350-001	12	0.550		1.790	13.97		45.47
A22348-001	16	0.600		1.890	15.24		48.01
A22346-001	27	0.670	0.580	1.980	17.02	14.73	50.29
-	39	Contact Omnetics for dimensions					

**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)	27	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 
	39				
			OX: Black Oxide Finished Steel 		RH RoHS COMPLIANT 
					<i>Non-Standard Option</i> OM Overmold (Contact Omnetics for Overmold Information & Availability) 

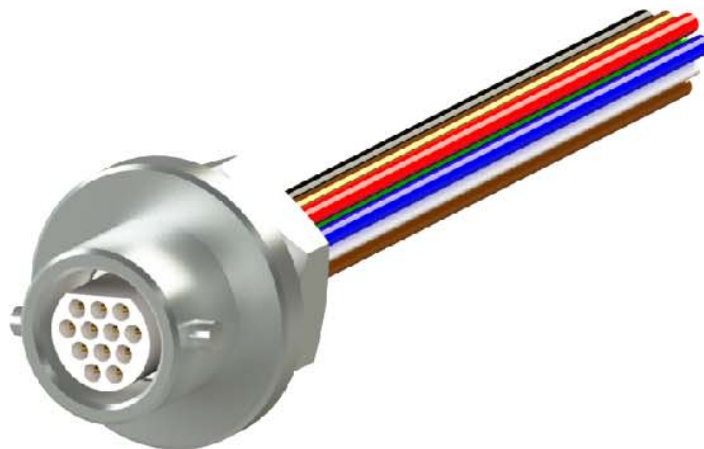
EXAMPLE:
TMCS-12-WD-10.0-C-IS-N-ST-OR



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

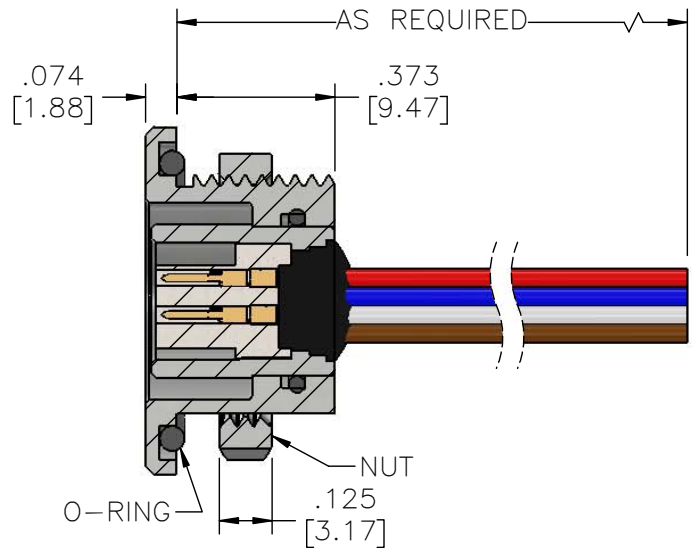
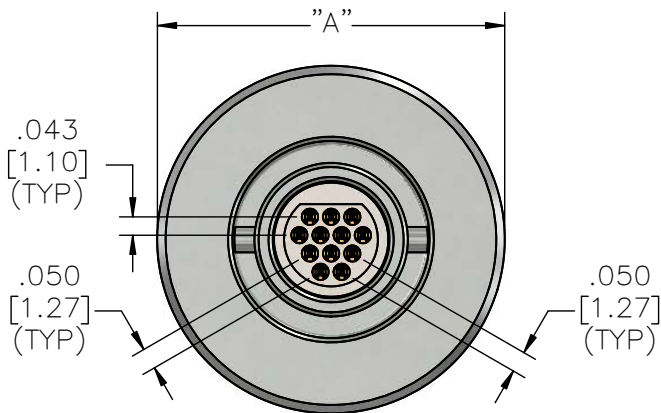
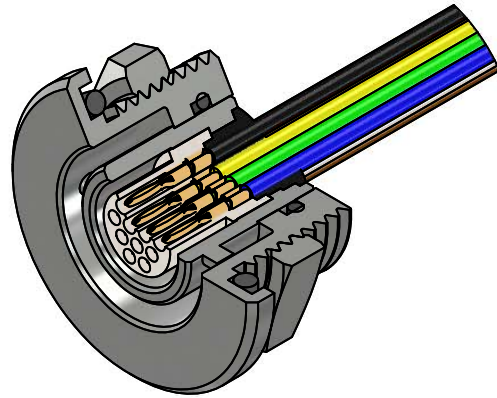
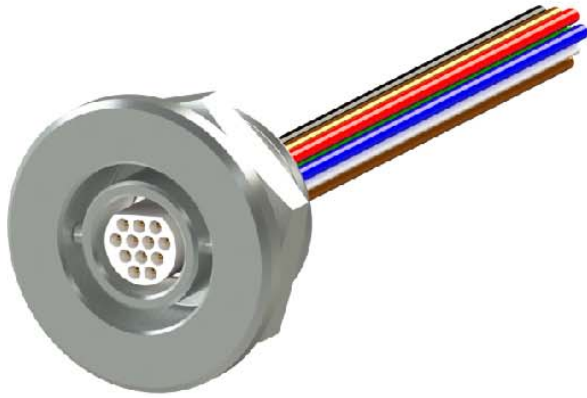
- Contact: _____ Copper Alloy Per MIL-DTL-83513
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- Overmold: _____ Black Thermoplastic Polyurethane
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 26 AWG, (7-34)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

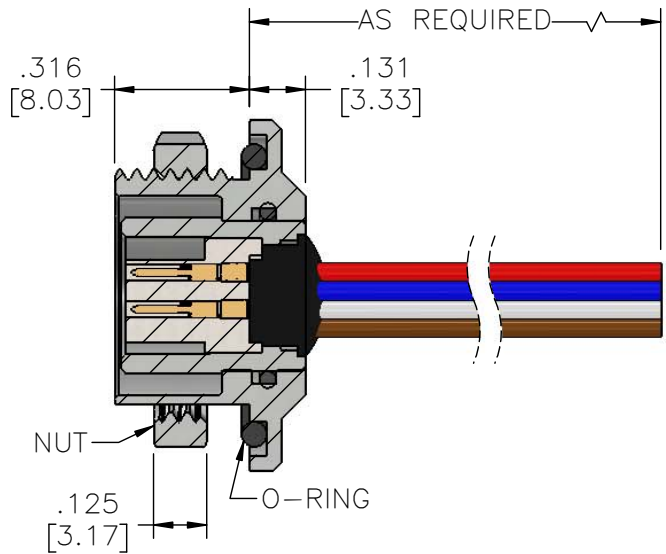
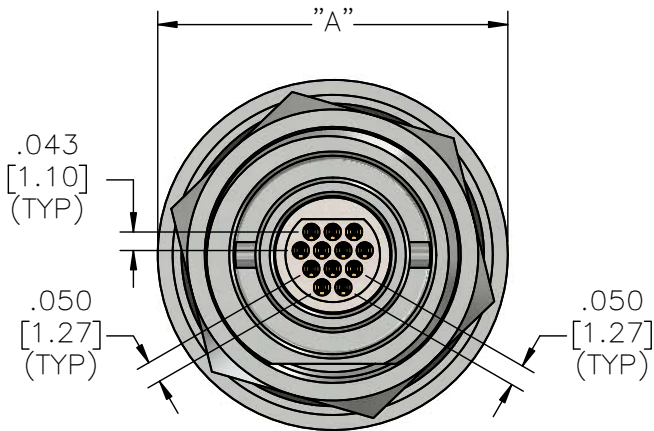
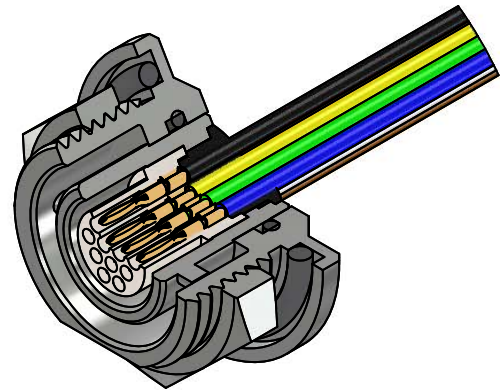
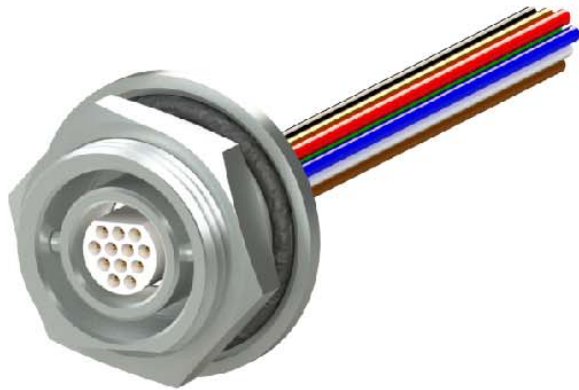
* less resistance to salt spray test.

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

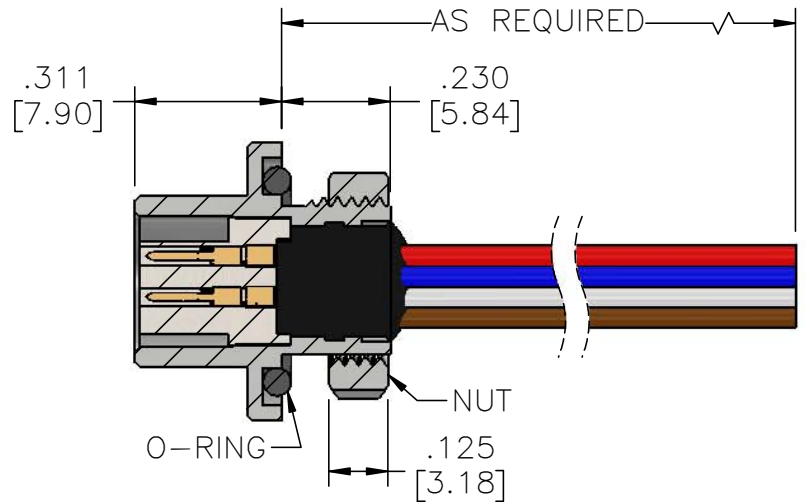
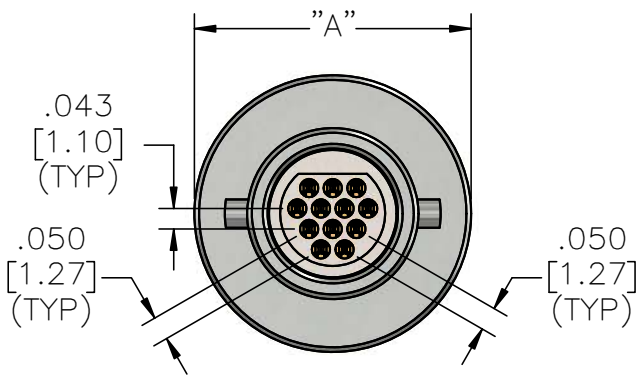
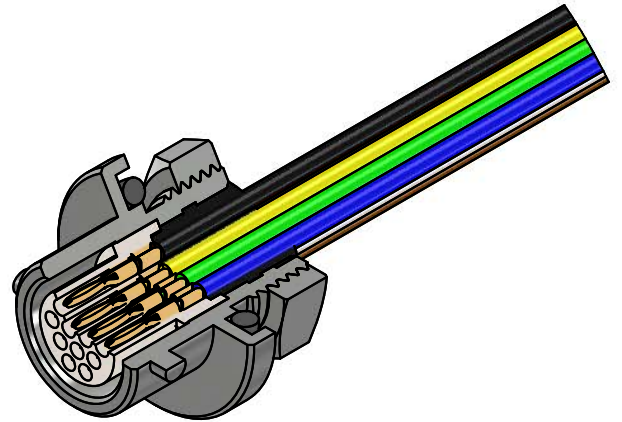
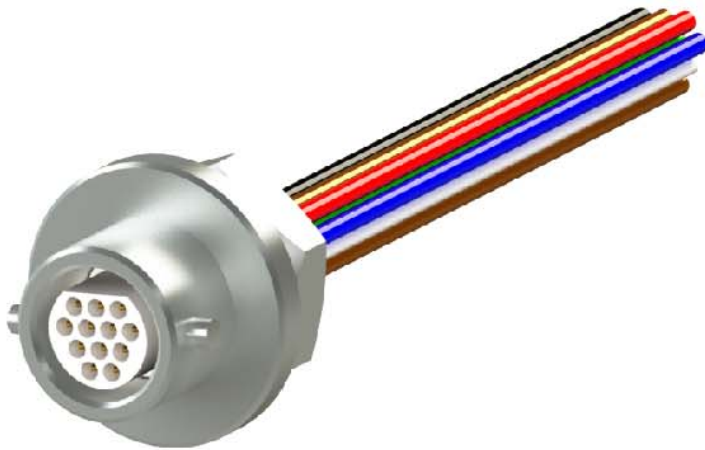
Metal - Pin - Twist-Lock - Cable - Rear Panel - IP68
TMCP-WD-RP-IP68



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

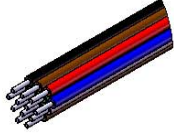






Metal - Pin - Twist-Lock - Wired - Protruding Panel - IP68

TMCP-WD-PP-IP68



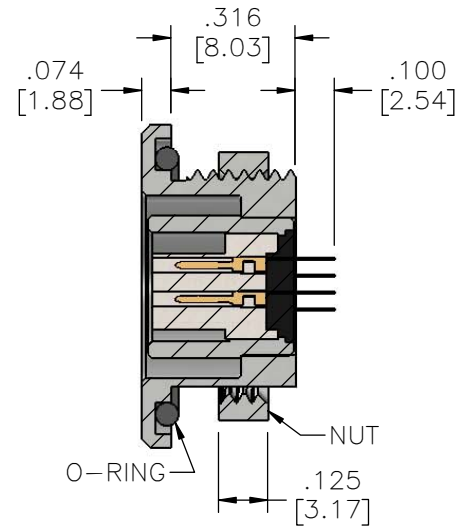
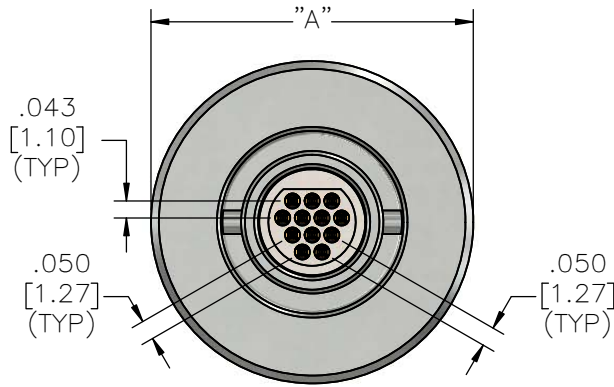
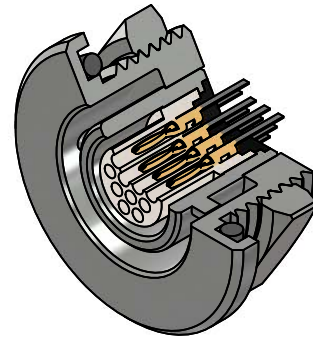
Part #	Contacts	English	Metric
		(IN)	(MM)
A22367-001	5	A	A
A22366-001	12	0.541	13.74
A22365-001	16	0.586	14.88
A22364-001	27	0.662	16.81
-	39	Contact Omnetics for dimensions	

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 
	29		OX: Black Oxide Finished Steel 			
	39					
		EXAMPLE: TMCP-12-WC-10.0-N-RP-C-OR-ROHS				

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

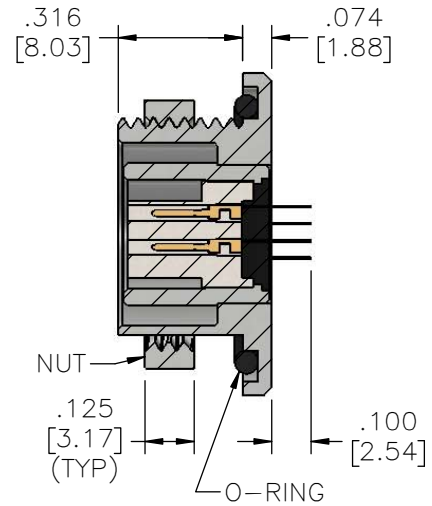
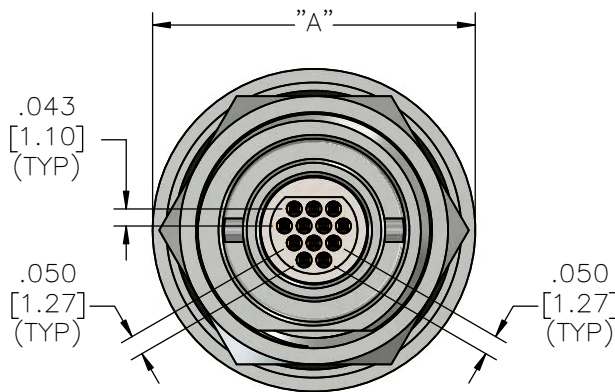
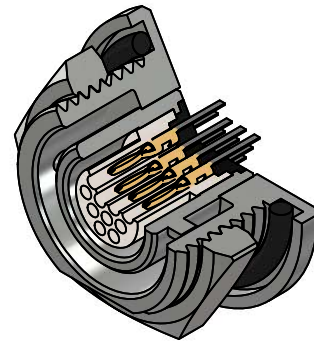
TMCP-DD-FP



	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	



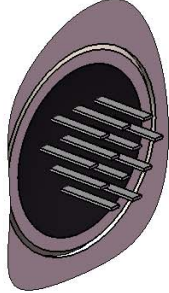







Metal - Pin - Twist-Lock - Straight Tail - Rear Panel

TMCP-DD-RP

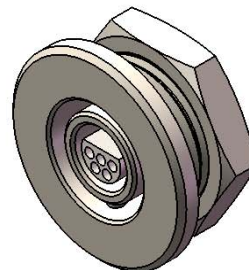


	English (IN)	Metric (MM)
Contacts	A	A
5	0.750	19.05
12	0.820	20.83
16	0.875	22.23
27	0.990	25.15
39	Contact Omnetics for dimensions	

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				
39	P: Passivated Stainless Steel 	RH RoHS Compliant 			
	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

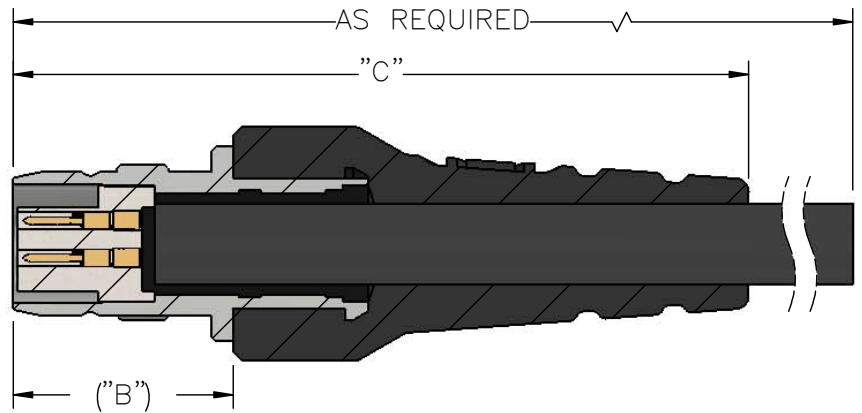
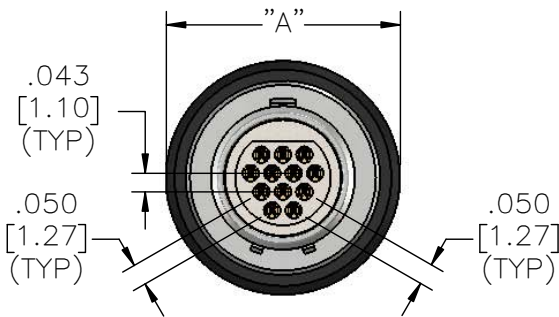
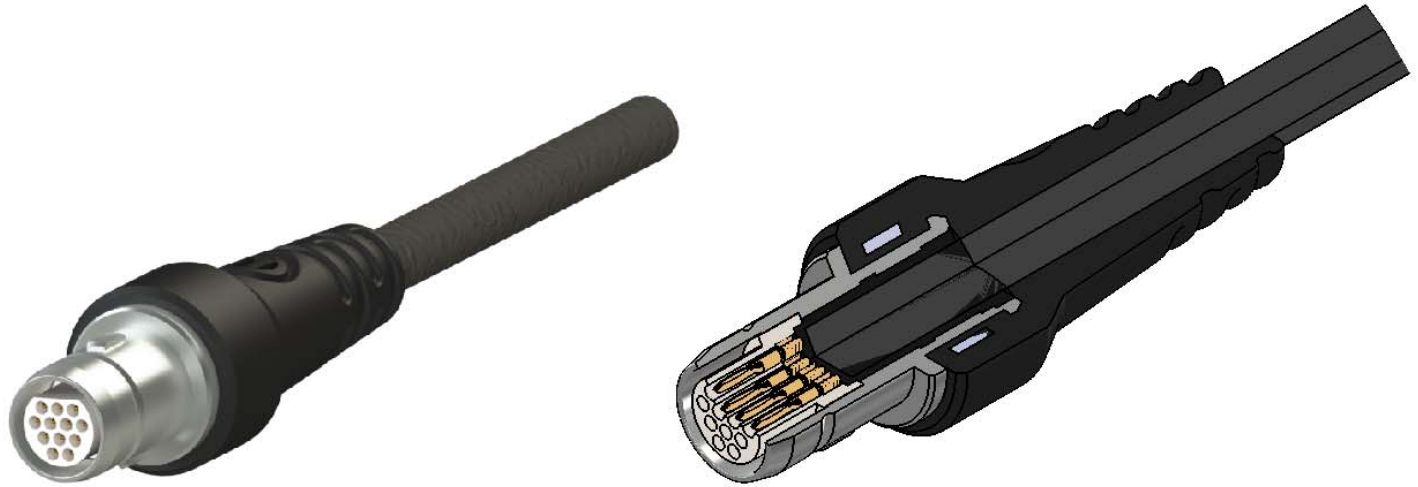
Shell Options

- 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.

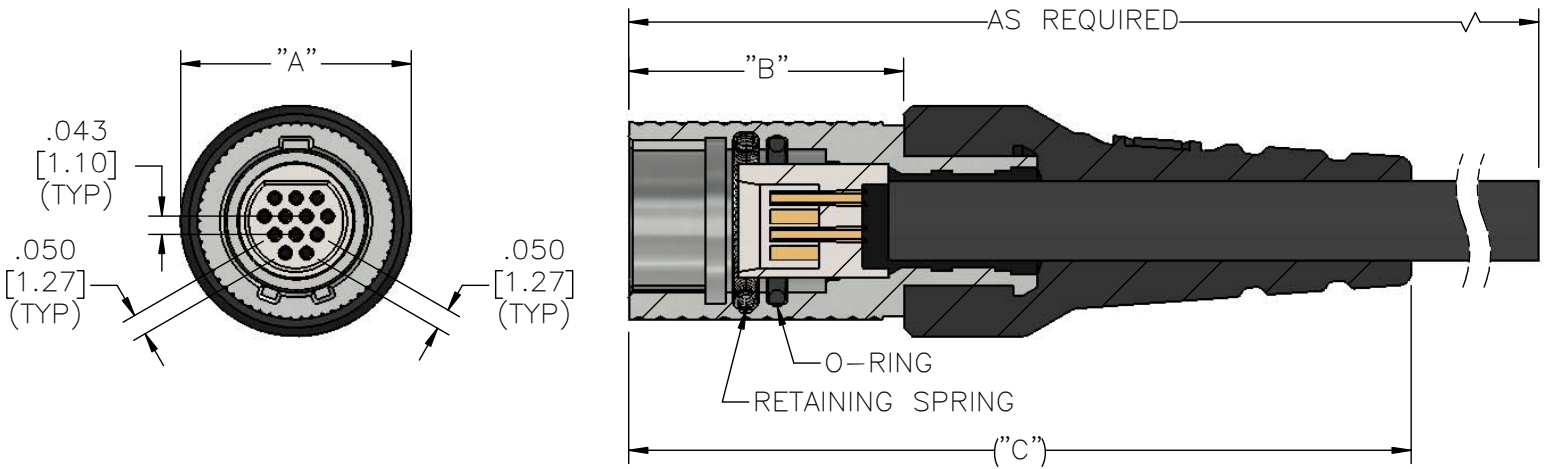
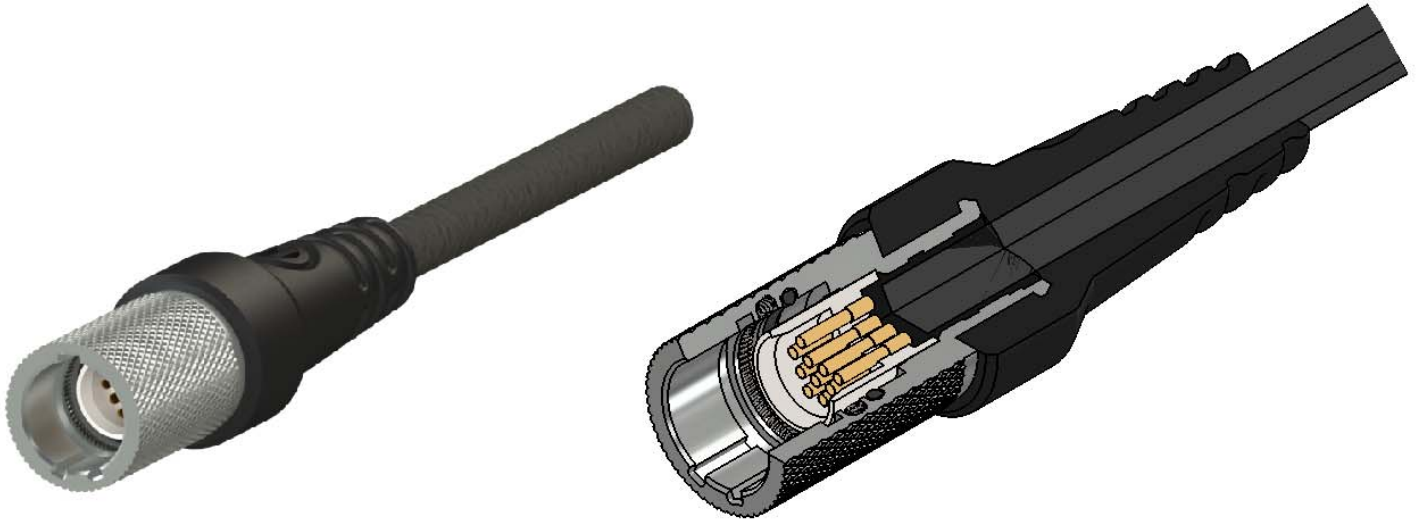
Metal - Pin - Keyed Break Away - Cabled - Overmold - Inline

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			

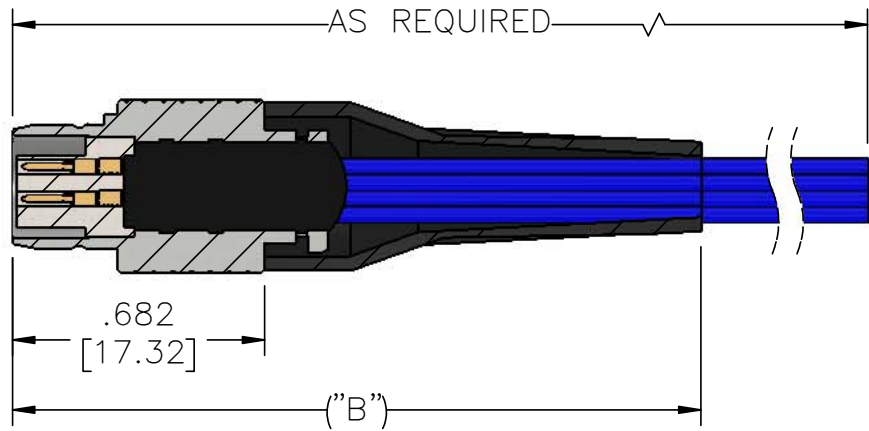
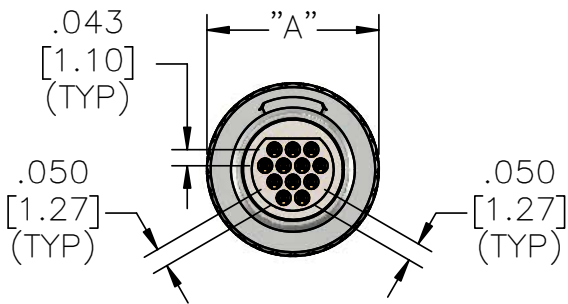
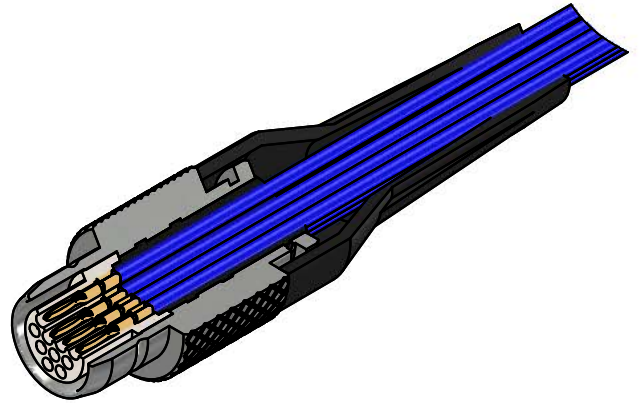
**Metal - Socket - Keyed Break Away -
Cabled - Overmold - Inline**
KBMS-WC-OM-IS



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			

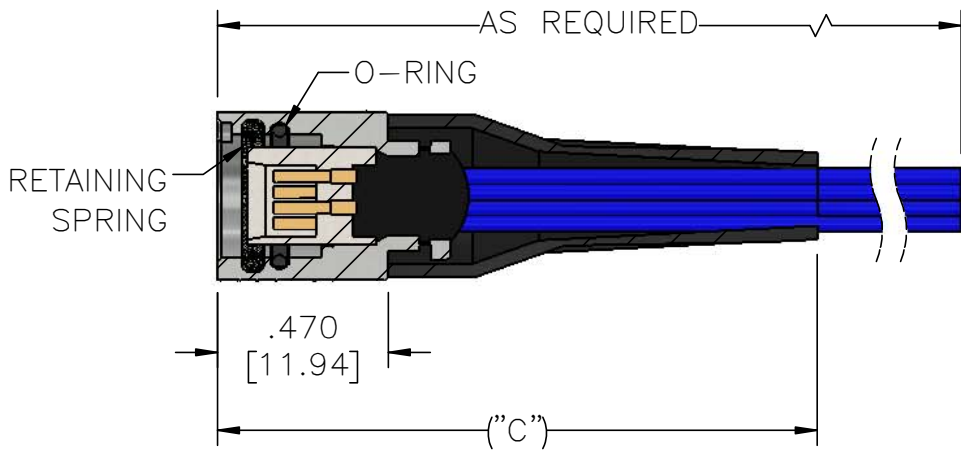
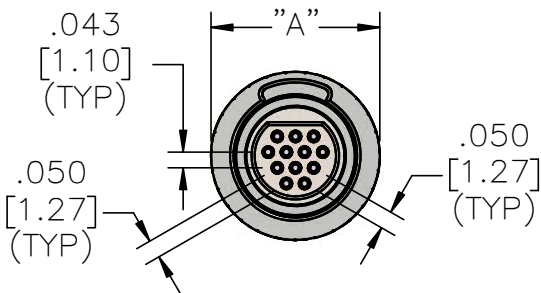
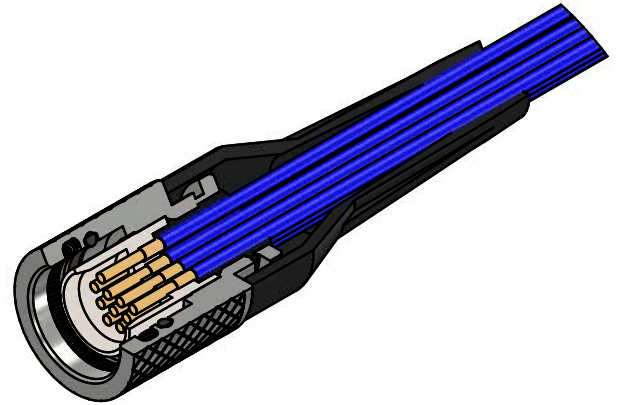
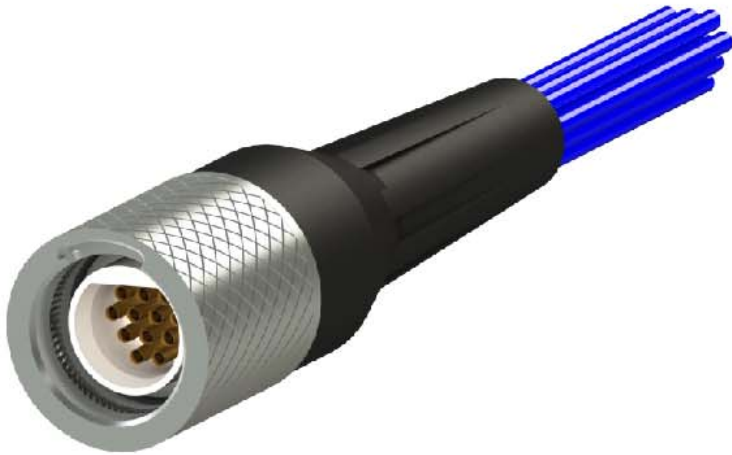
Metal - Pin - Break Away - Wired - Inline - Strain Relief

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

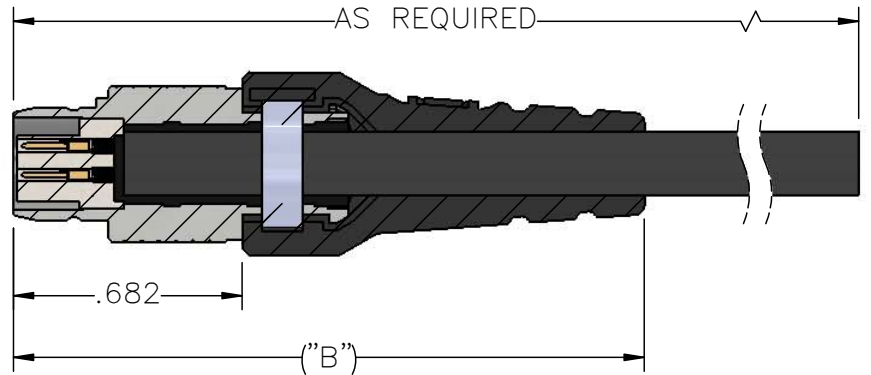
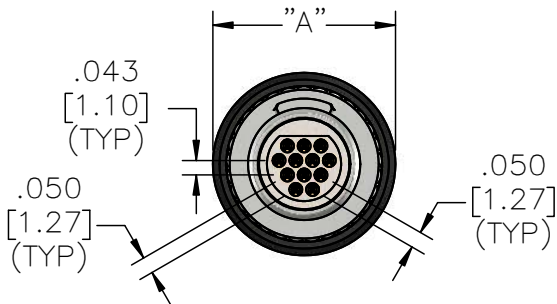
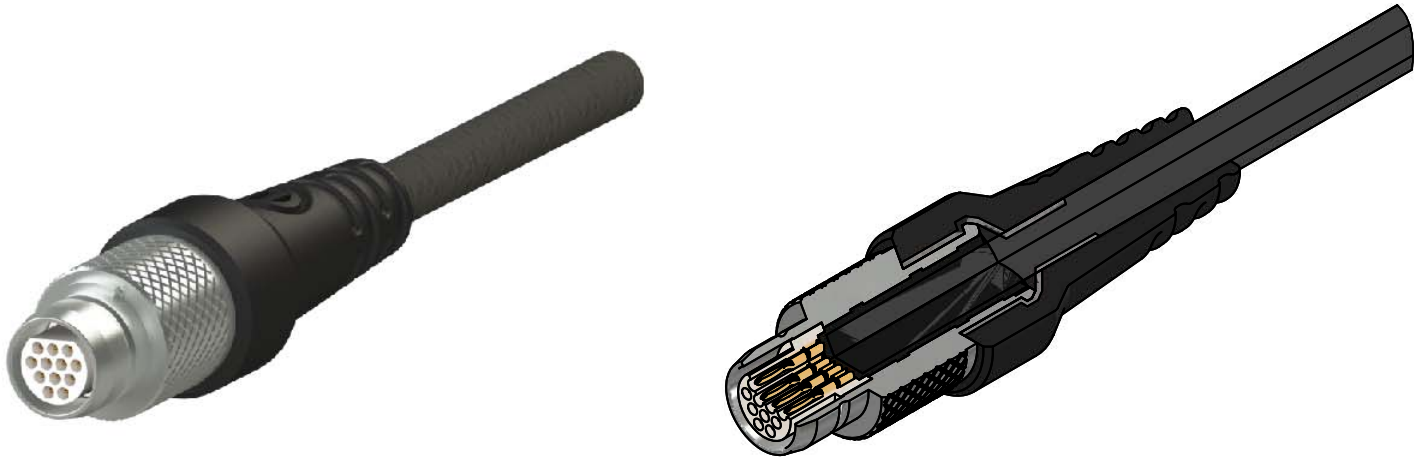
**Metal - Socket - Break Away -
Wired - Inline - Strain Relief**
BAMS-WD-IS-SR



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

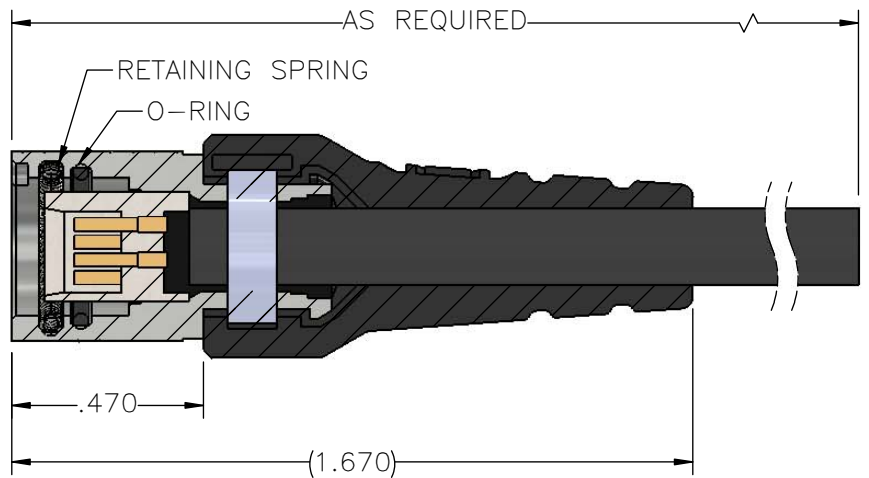
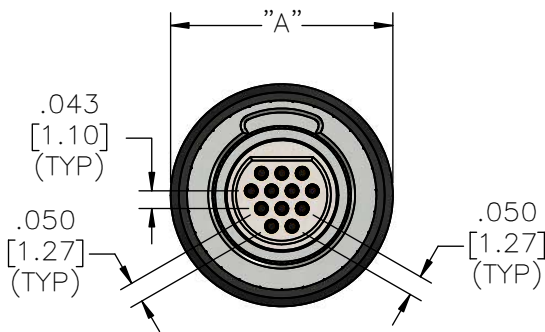
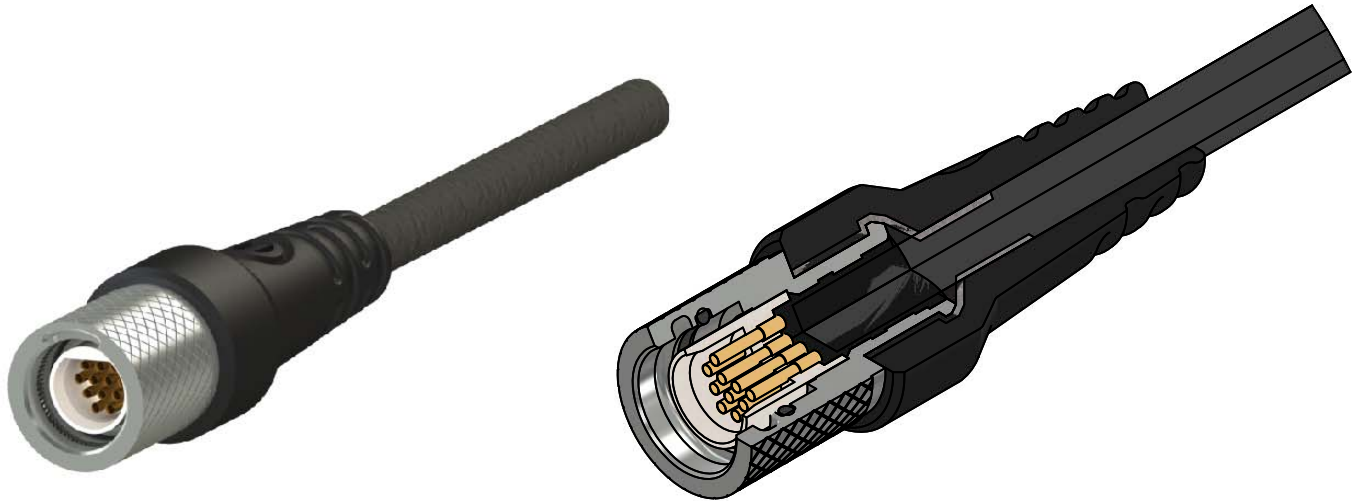
Metal - Pin - Break Away - Cable - Overmold - Inline - IP68

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	

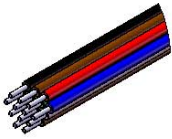



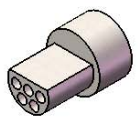




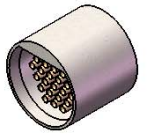

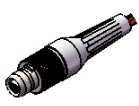




**Metal - Socket - Break Away -
Cable - Overmold - Inline - IP68**
BAMS-WC-OM-IS-IP68



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

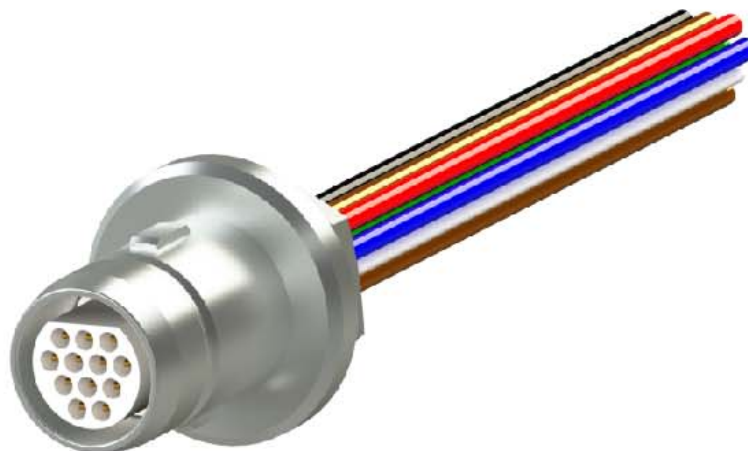
QUICK DISCONNECT BREAK AWAY MICRO CIRCULAR DISCRETE LEADWIRE/CABLE (TYPE WD/WC)

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

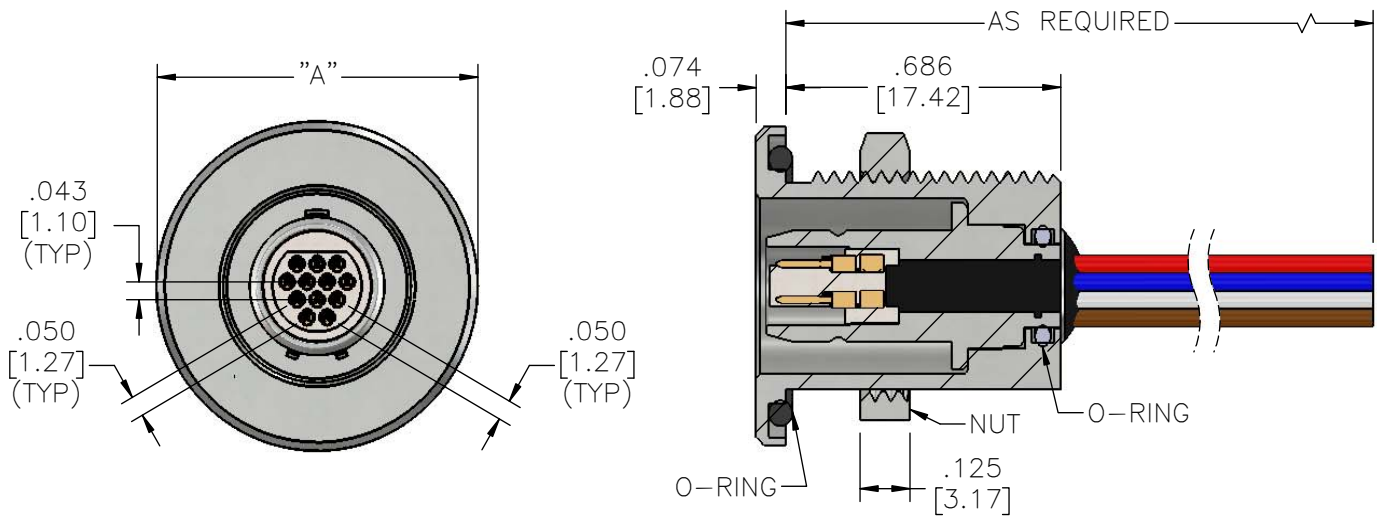
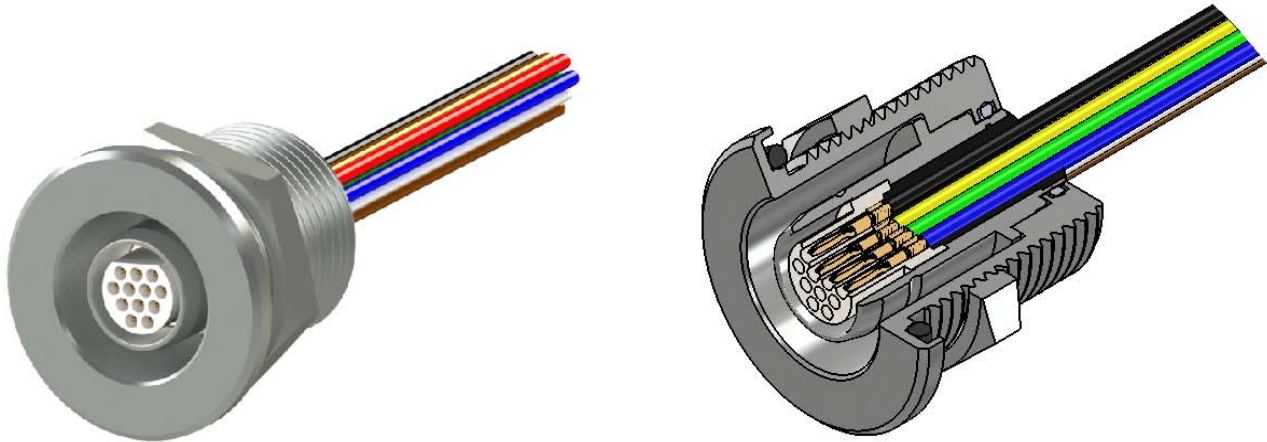
Shell Options

- 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

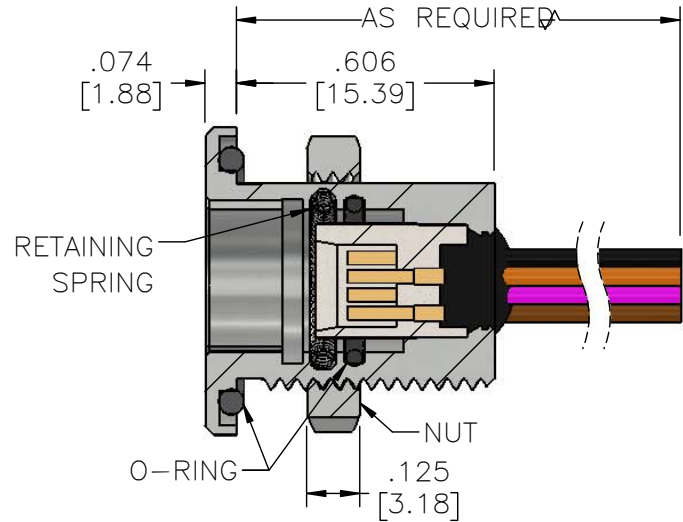
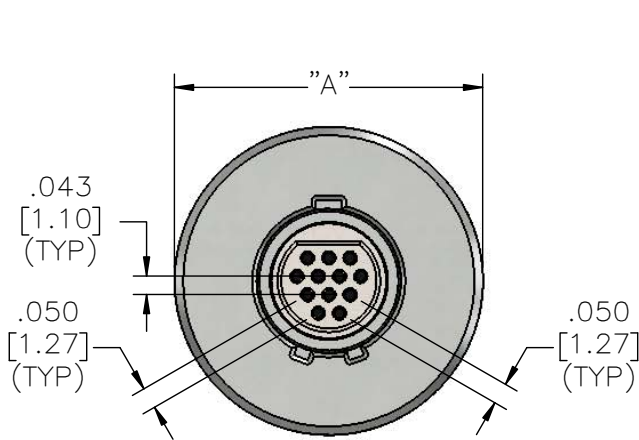
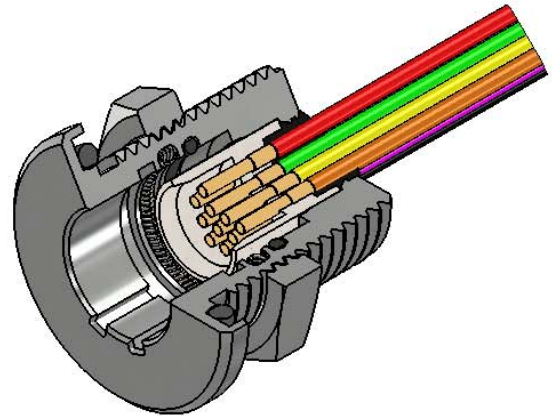
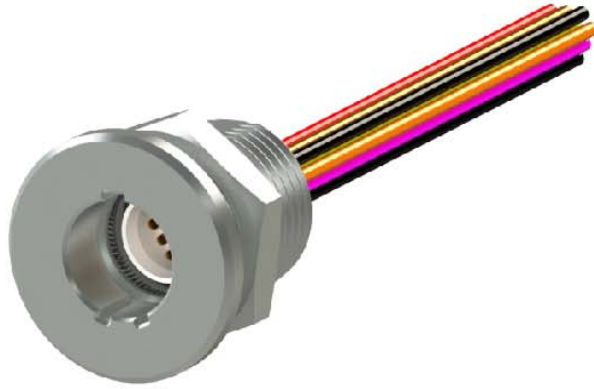


English (IN) Metric (MM)

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

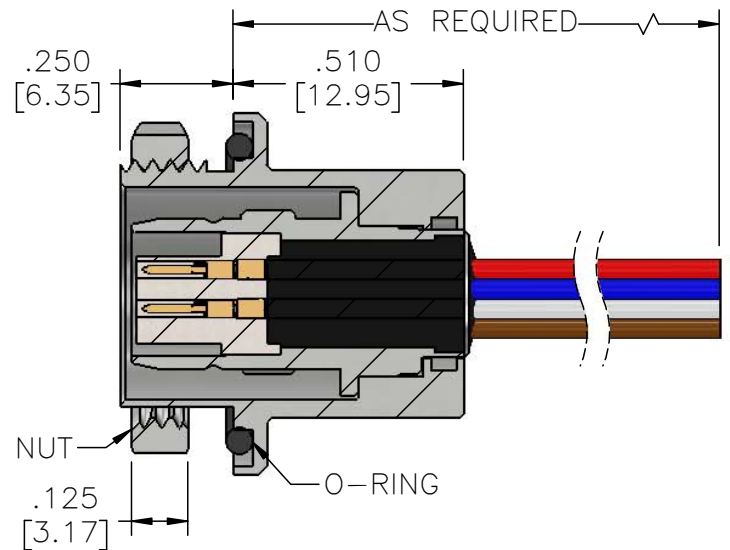
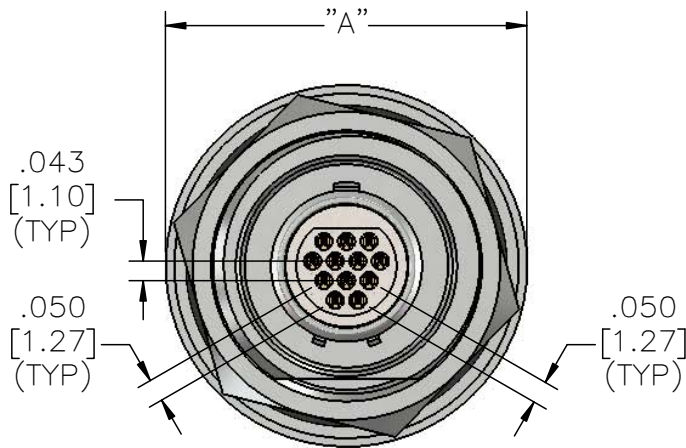
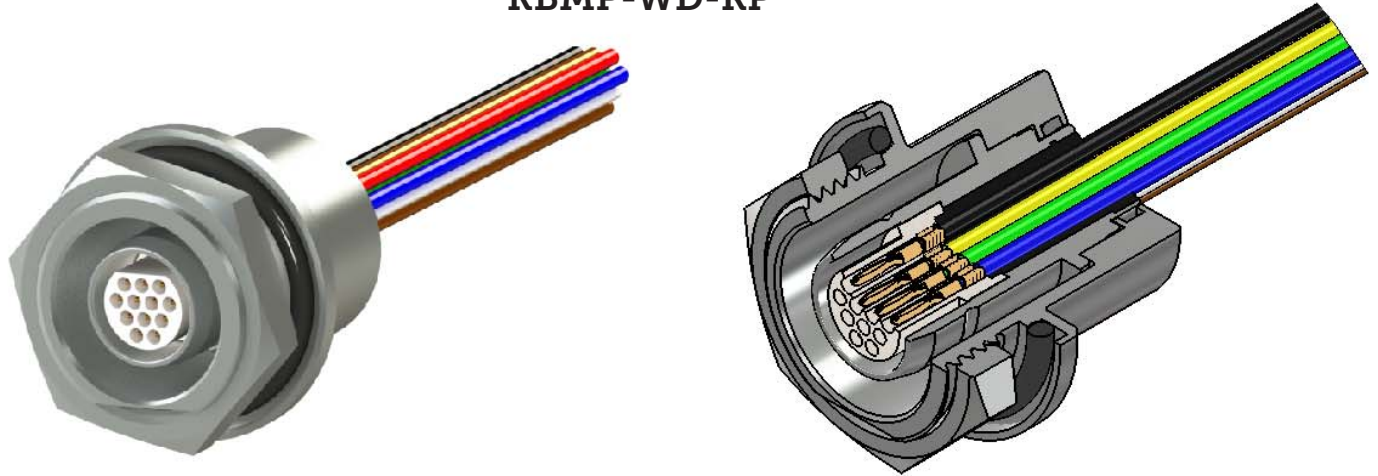


English (IN) Metric (MM)

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

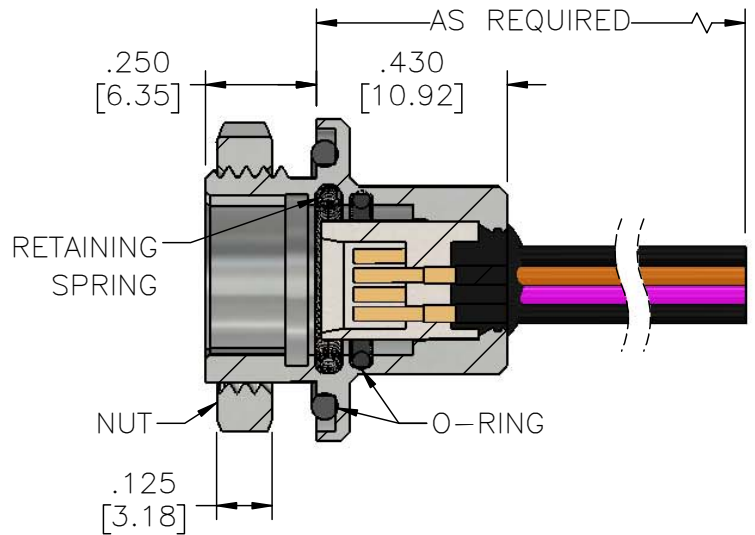
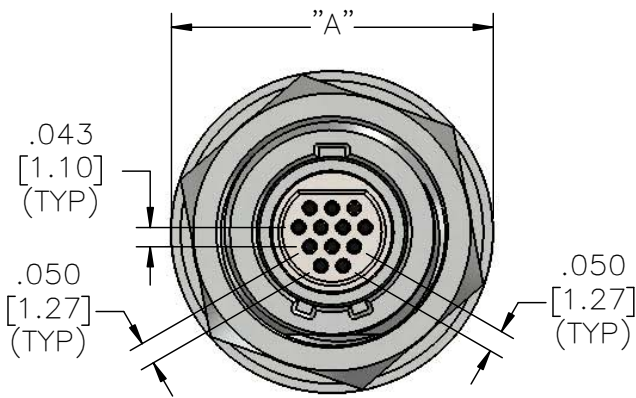
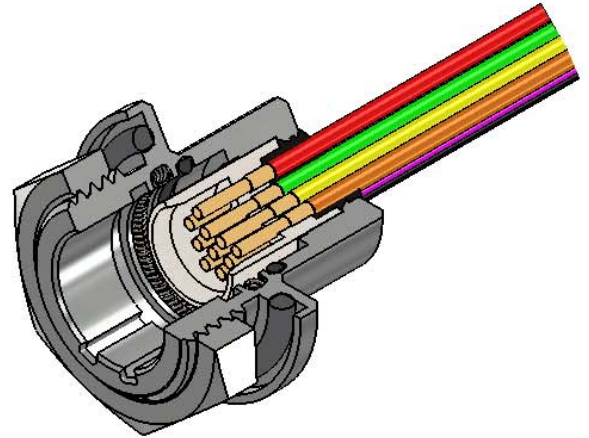
KBMP-WD-RP



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

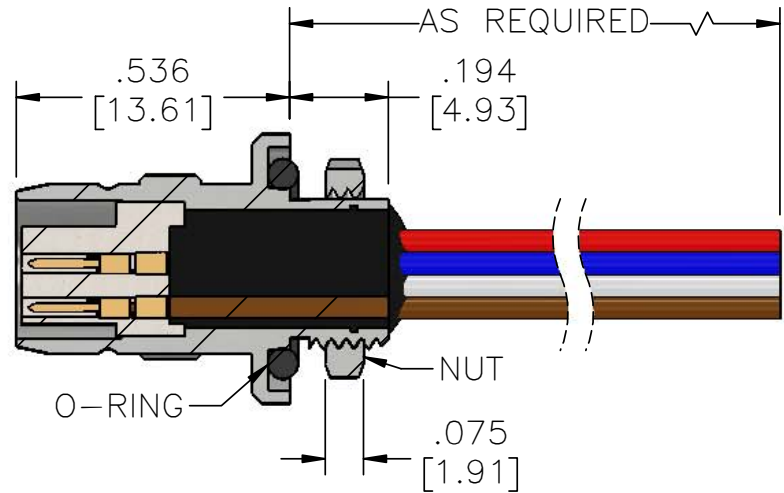
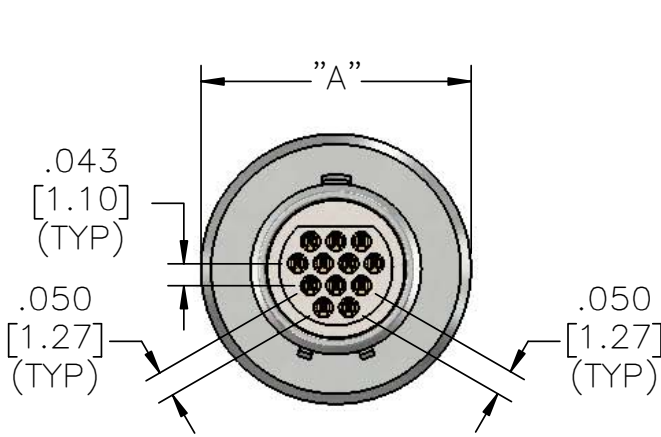
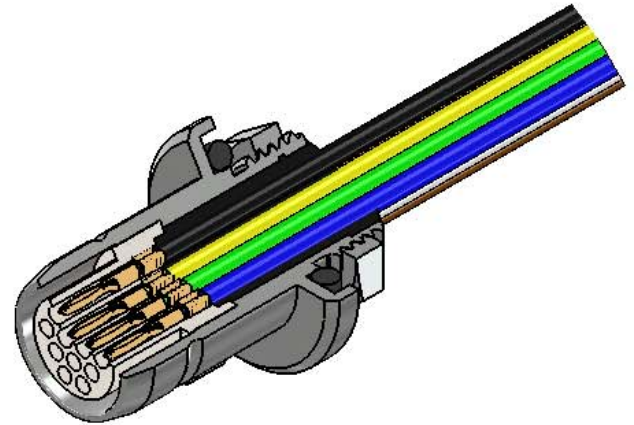
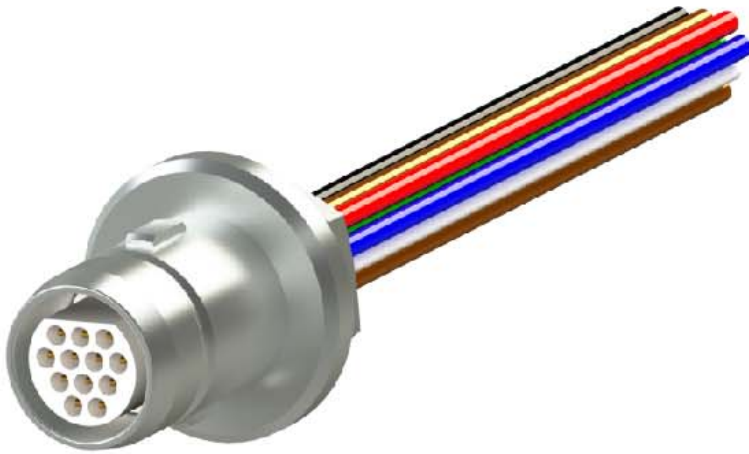


English (IN) Metric (MM)

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

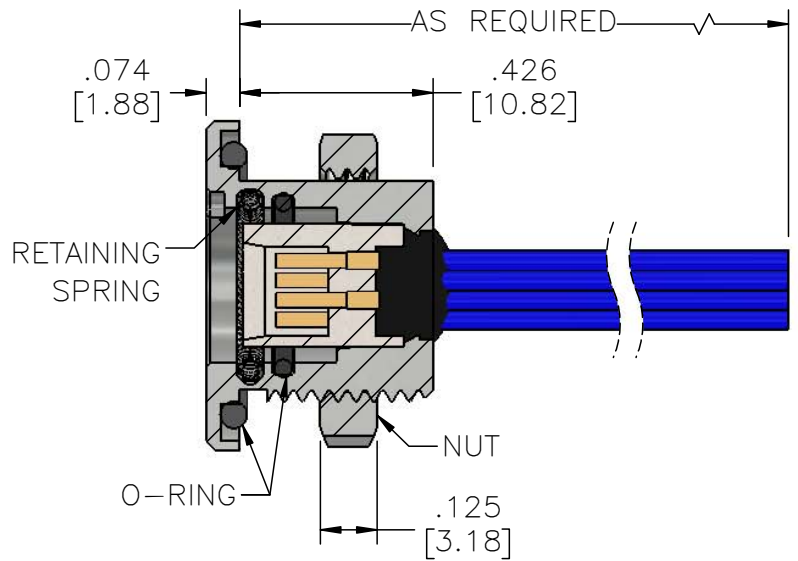
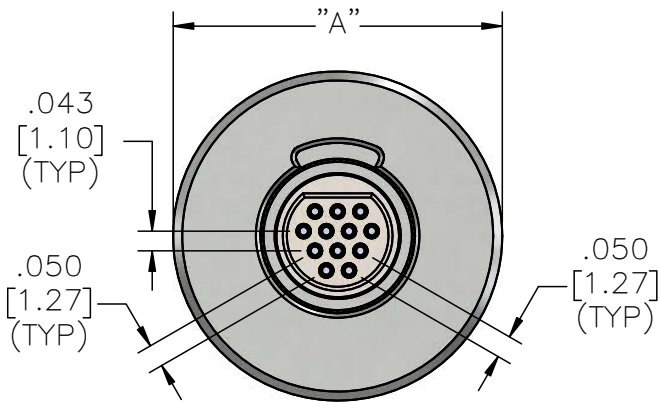
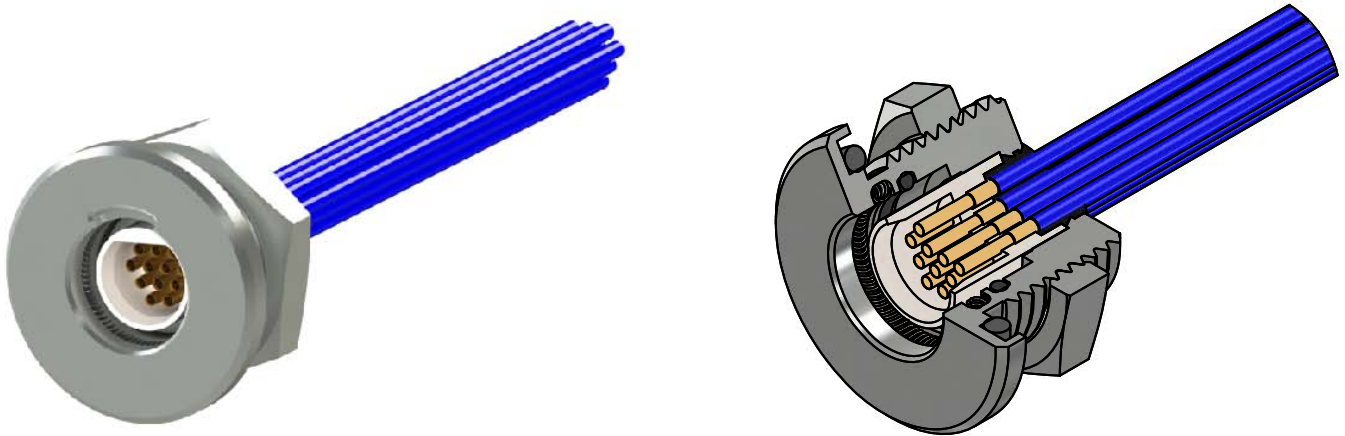


English (IN) Metric (MM)

Part #	Contacts	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

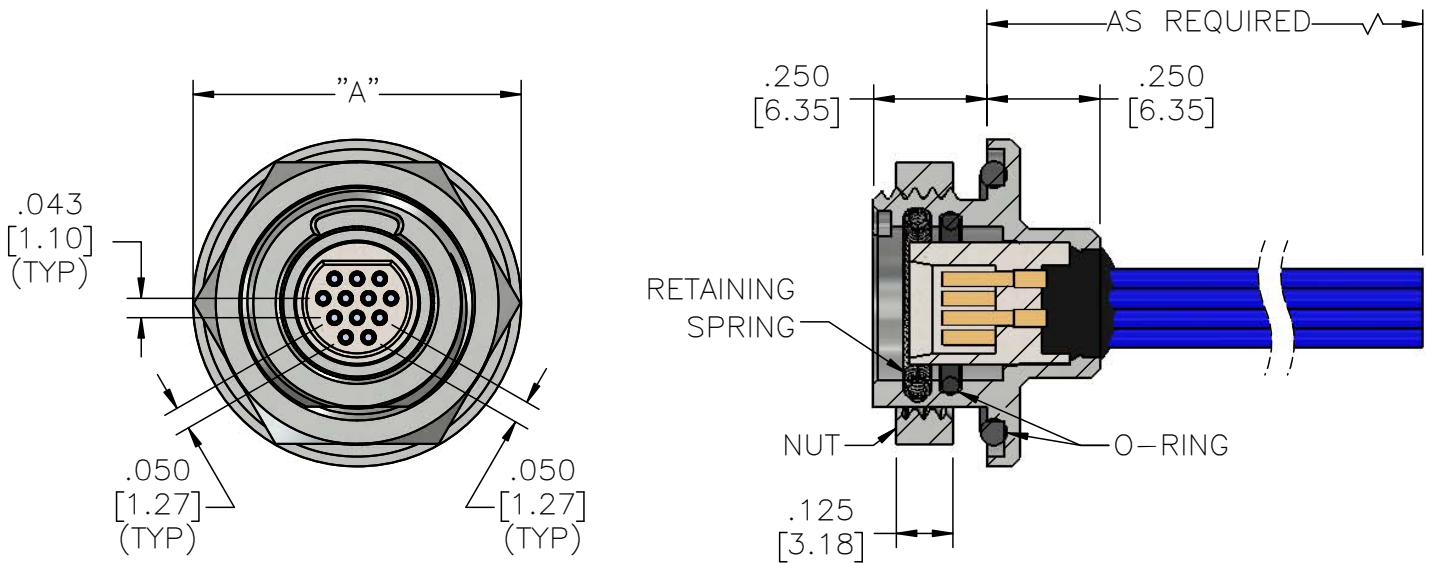
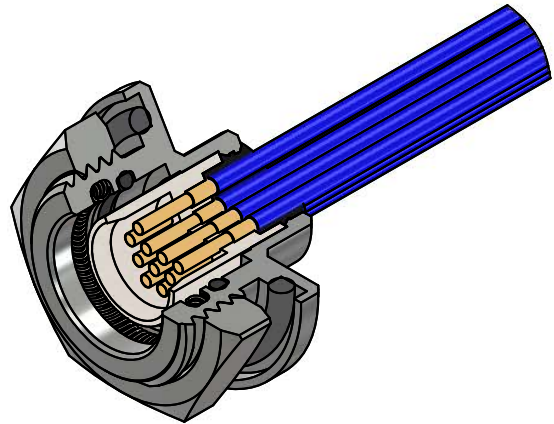
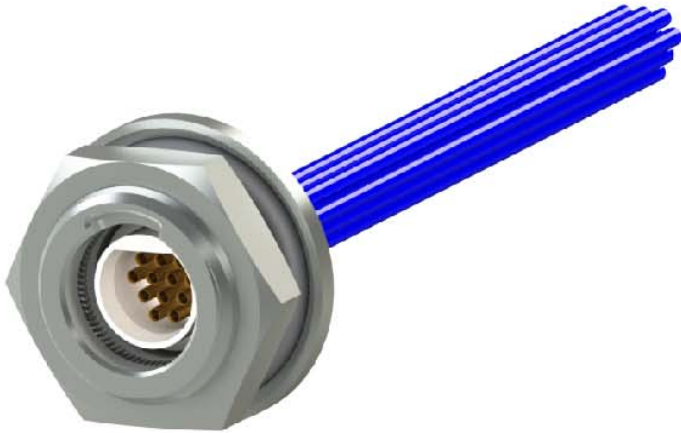
BAMS-WD-FP



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

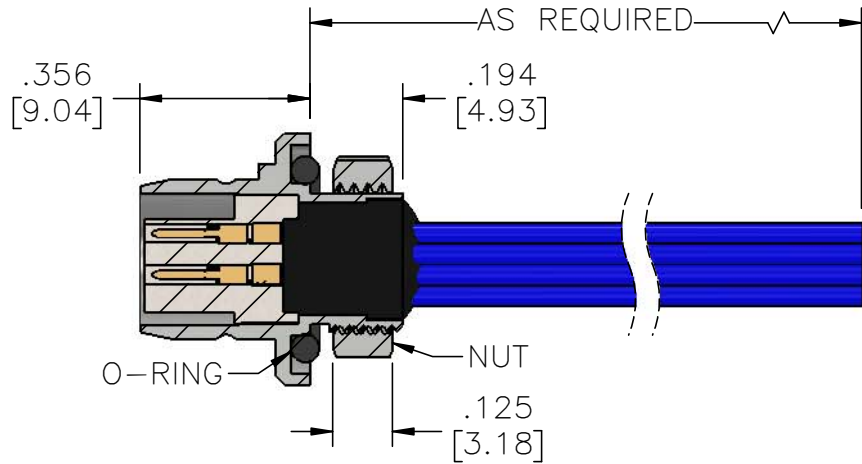
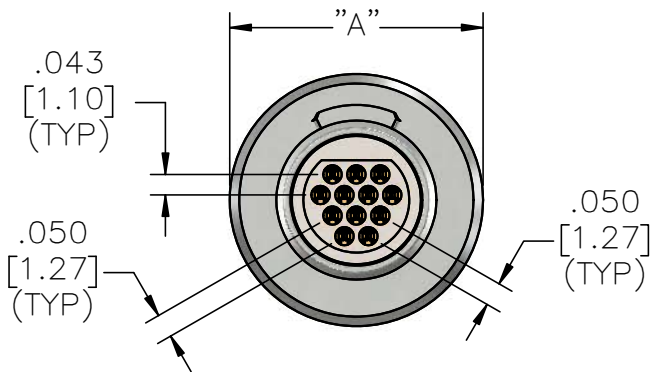
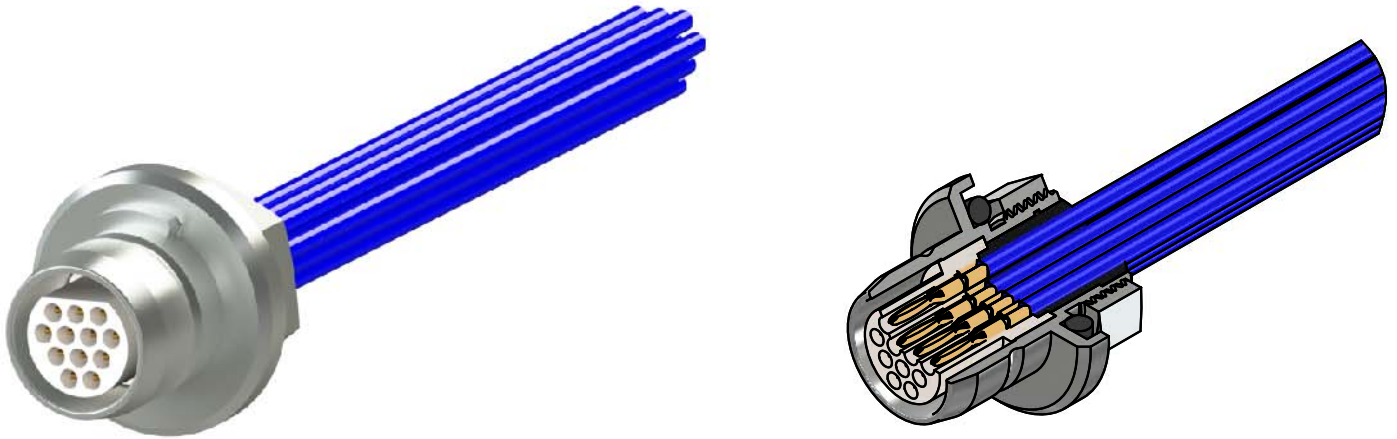
Metal - Socket - Break Away - Wired - Rear Panel BAMS-WD-RP



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

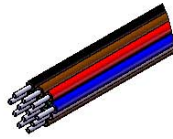








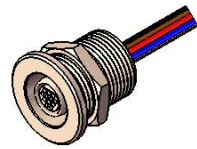
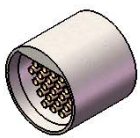






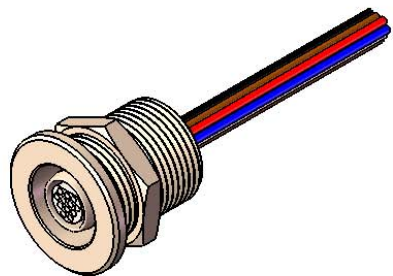
**Metal - Pin - Break Away -
Wired - Protruding Panel**
BAMP-WD-PP



English (IN) Metric (MM)

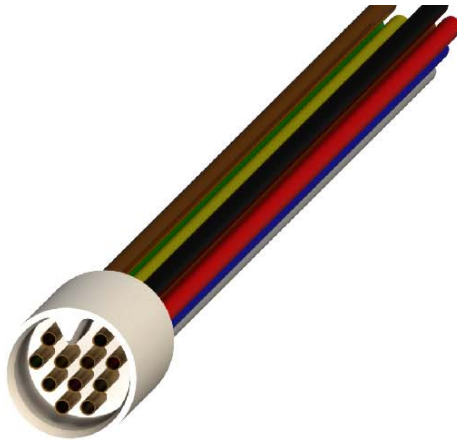
Part #	Contacts	A	A
A22435-001	5	0.490	12.45
A22440-001	12	0.530	13.46
A22445-001	16	0.620	15.75
A22450-001	27	0.655	16.64
A22537-001	39	0.745	18.92

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)



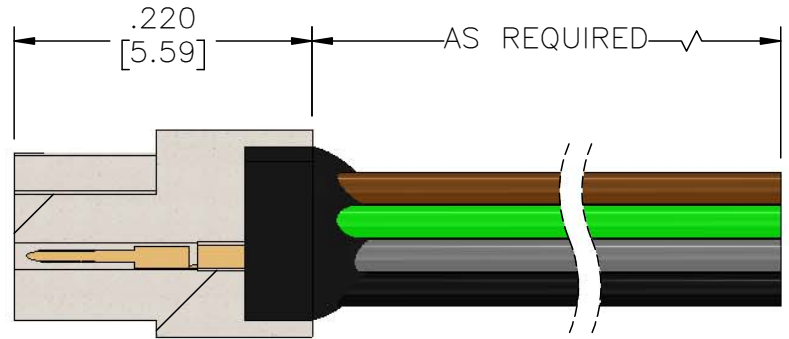
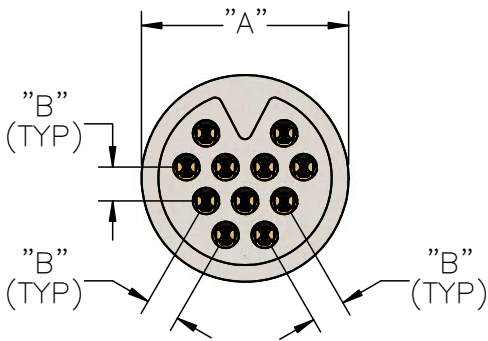
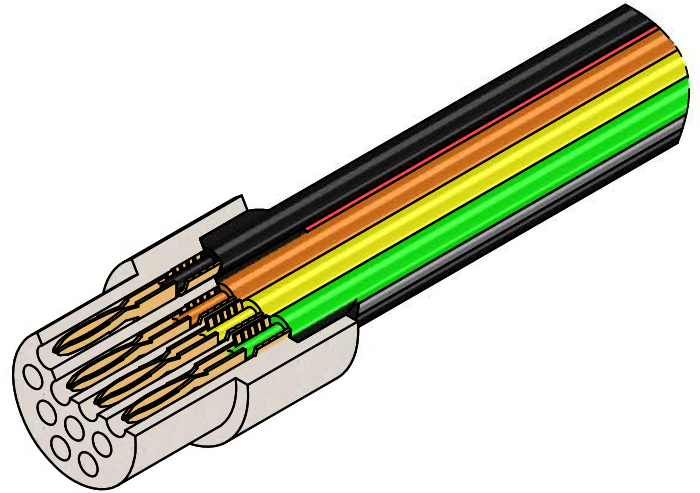
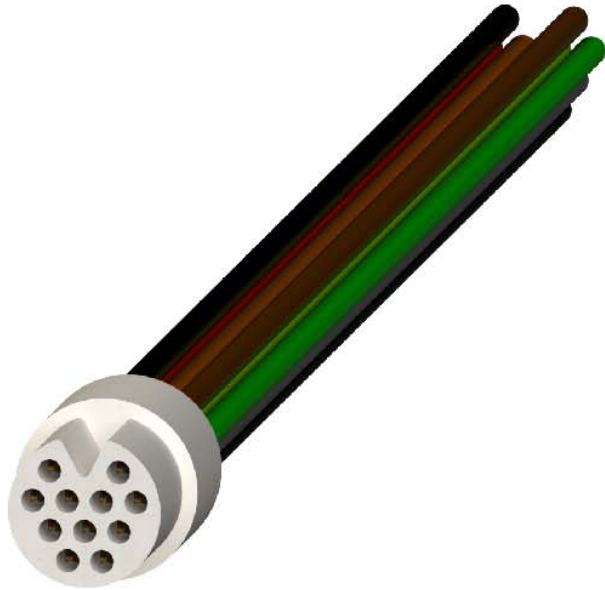
Electrical-Mechanical Specifications

- 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

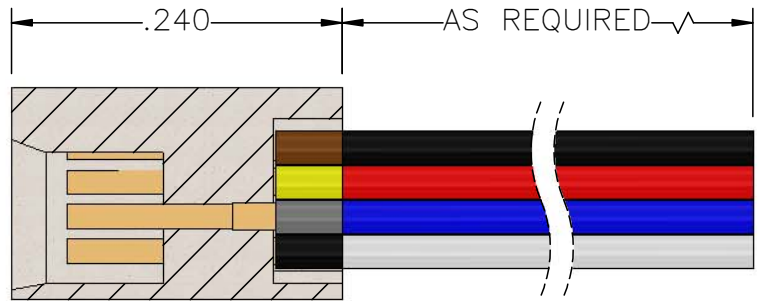
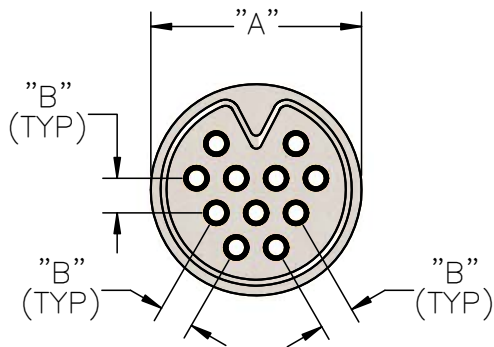
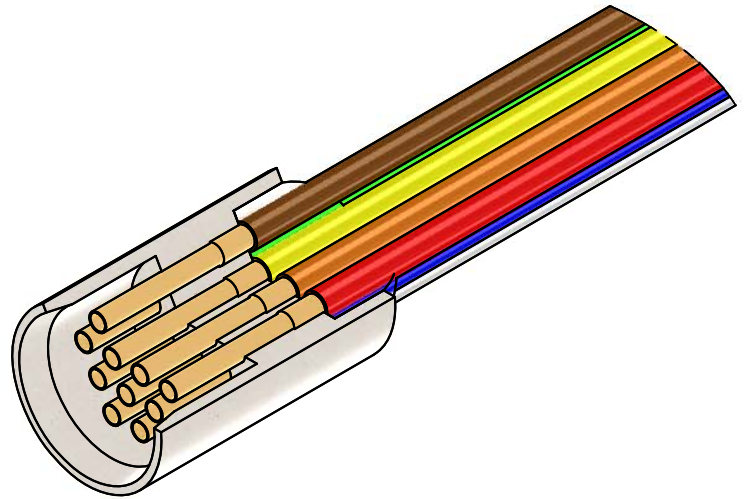
Plastic - Pin - Wired NCP-WD



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	16	0.181		4.60	
A79106-001	28	0.217		5.51	
A79120-001	39	0.305	0.035	7.75	0.89

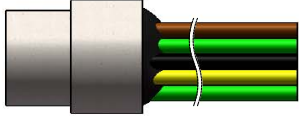


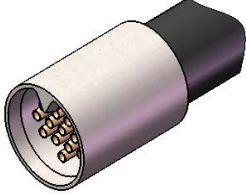




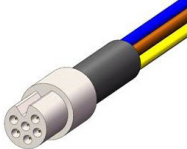
Plastic - Socket - Wired

NCS-WD

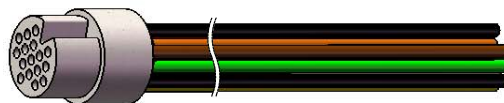


Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79101-001	6	0.122	0.025	3.10	0.64
A79103-001	11	0.153		3.89	
A79105-001	16	0.181		4.60	
A79107-001	28	0.217		5.51	
A79121-001	39	0.305	0.035	7.75	0.89

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

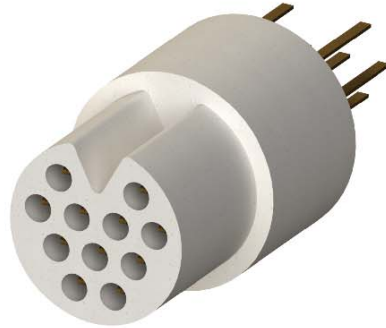
Series	# of Contacts	Termination Type	Options
NC	6	WD: Discrete Lead Wire	C Color Coded
	11		
Male (P - Pin)	16		
	28		
	39		
Female (S - Socket)		WC: Cable	CLIP Locking Clip
			
			
			Rn RoHS COMPLIANT
			
		Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 32 AWG Max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

EXAMPLE:
NCP-16-WD-12.0-C



NANO 360[®] Plastic

Nano Circular Straight Thru-Hole Tail



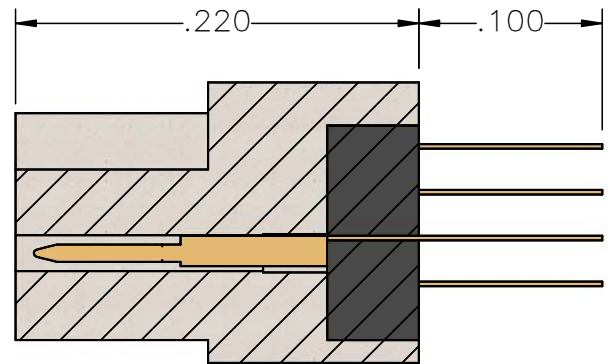
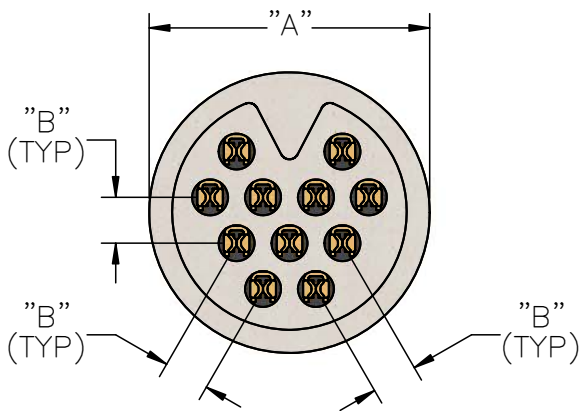
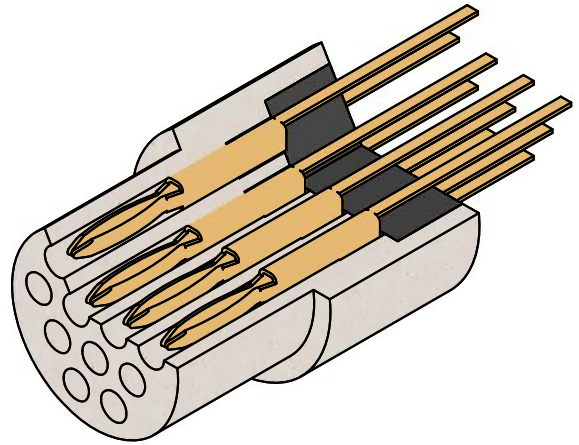
Electrical-Mechanical Specifications

- 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

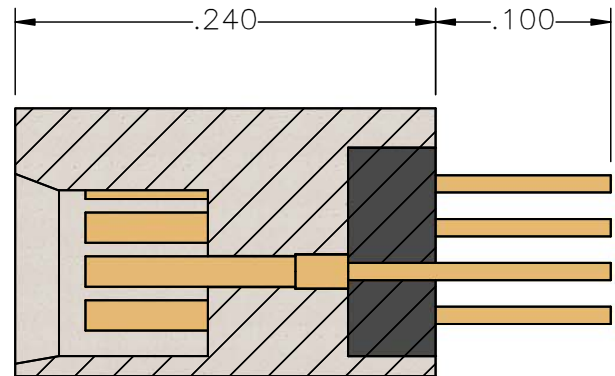
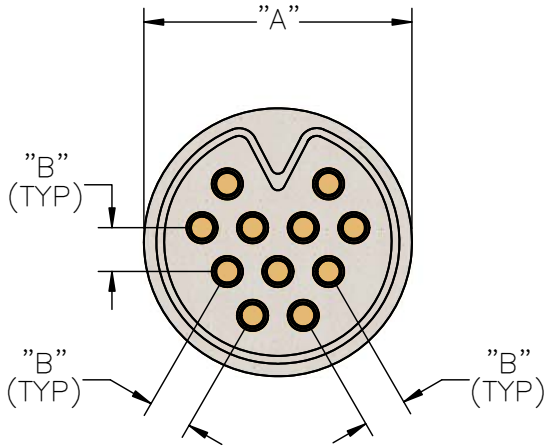
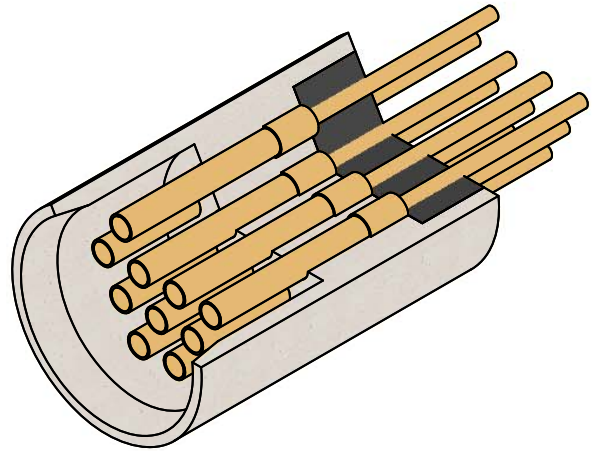
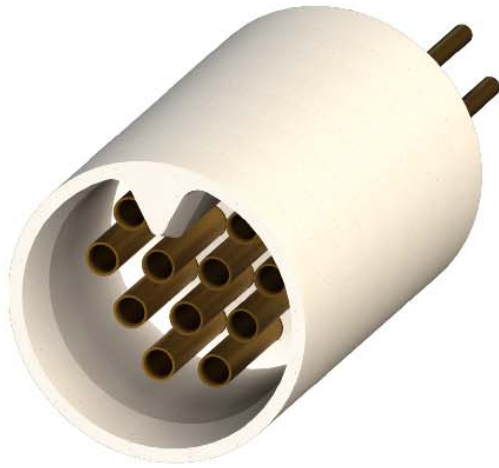
- Contact: _____ Copper Alloy per MIL-DTL-32139
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C
Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519

Plastic - Pin - Straight Tail NCP-DD



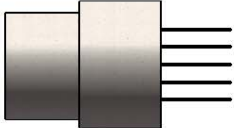

Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79108-001	6	0.122	0.025	3.10	0.64
A79110-001	11	0.153		3.89	
A79112-001	16	0.181		4.60	
A79114-001	28	0.217		5.51	
A79122-001	39	0.305	0.035	7.75	0.89

Plastic - Socket - Straight Tail NCS-DD



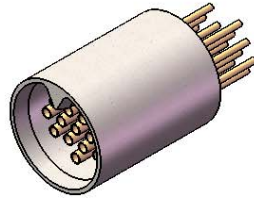
Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79109-001	6	0.122	0.025	3.10	0.64
A79111-001	11	0.153		3.89	
A79113-001	16	0.181		4.60	
A79115-001	28	0.217		5.51	
A79123-001	39	0.305	0.035	7.75	0.89

NANO CIRCULAR STRAIGHT THRU-HOLE TAIL (TYPE DD)

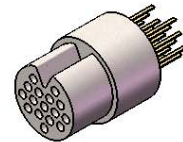
Series	# of Contacts	Termination Type	Options
NC	6 11 16	DD: Straight Thru-Hole	RH RoHS COMPLIANT
Male (P - Pin)	28 39		



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 @ 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
- 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

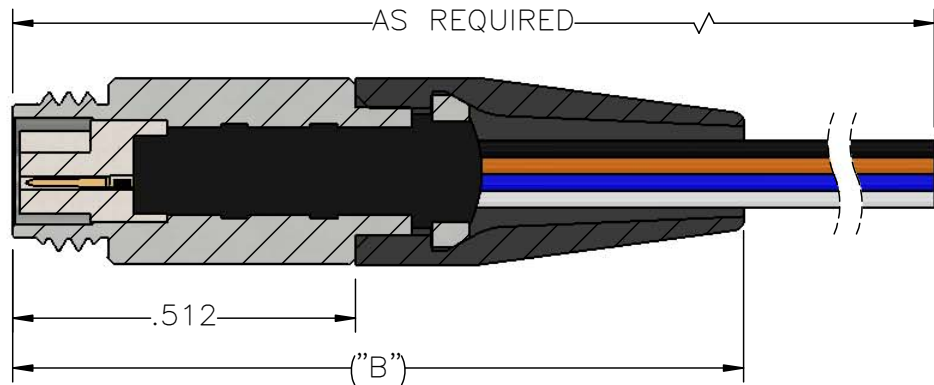
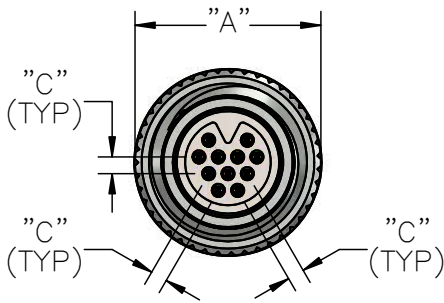
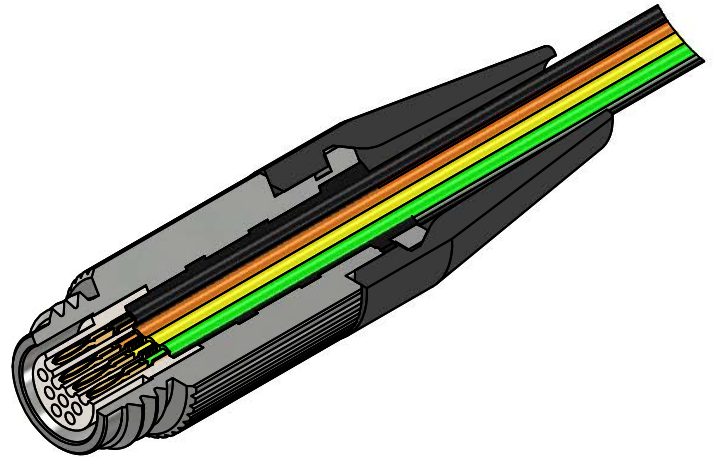
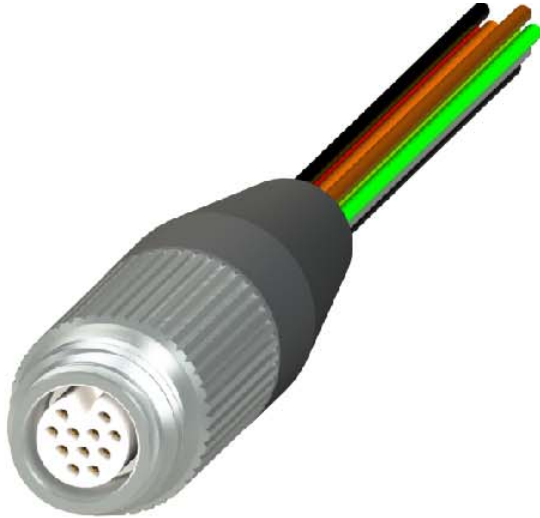
Shell Options

- 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.

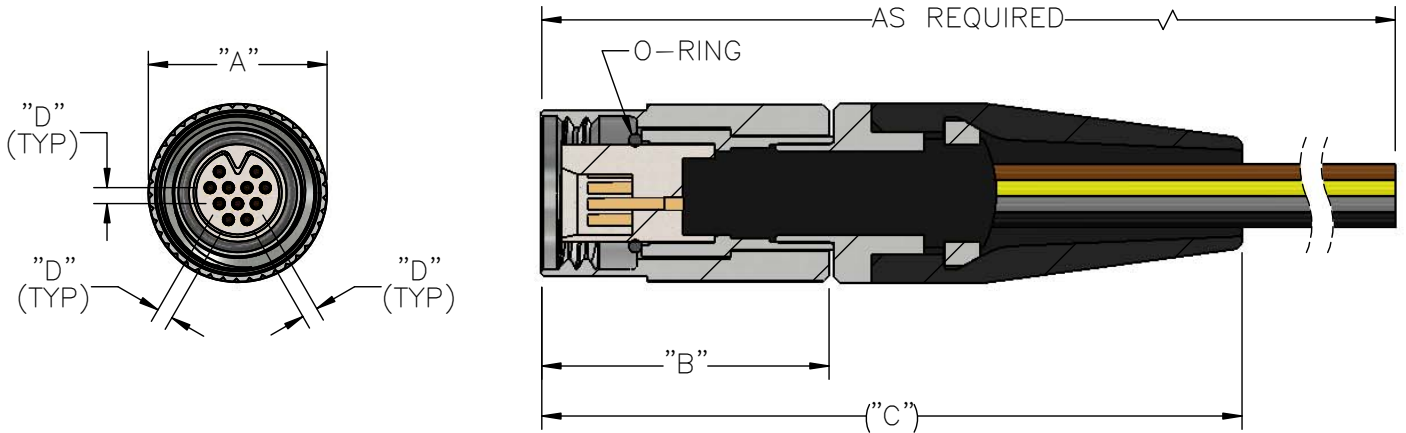
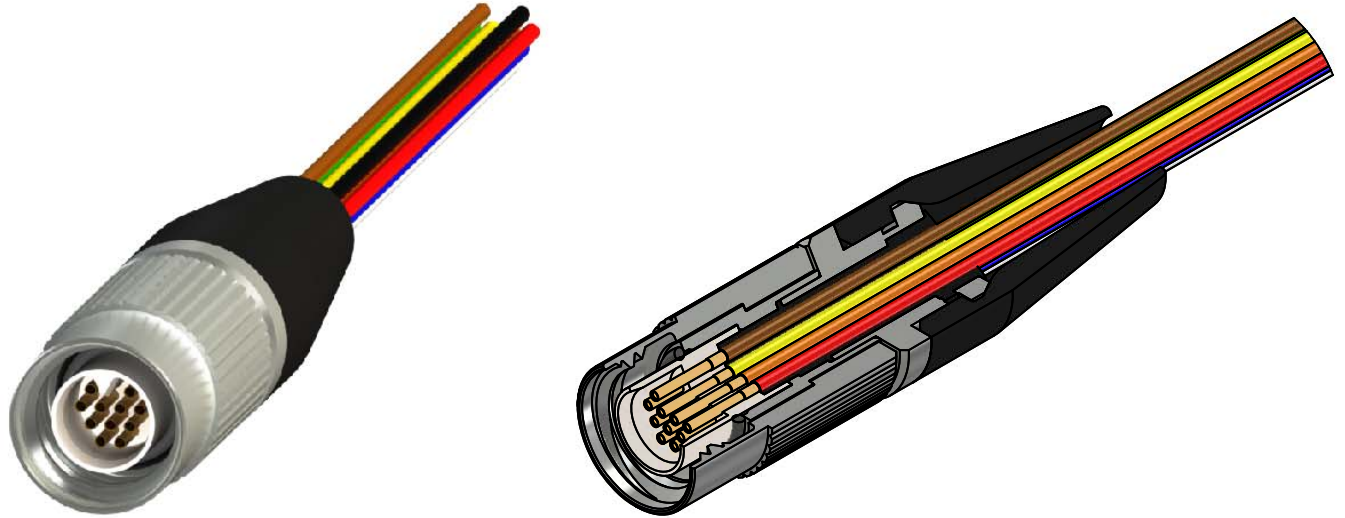
Metal - Pin - Threaded - Wired - Inline - Strain Relief

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

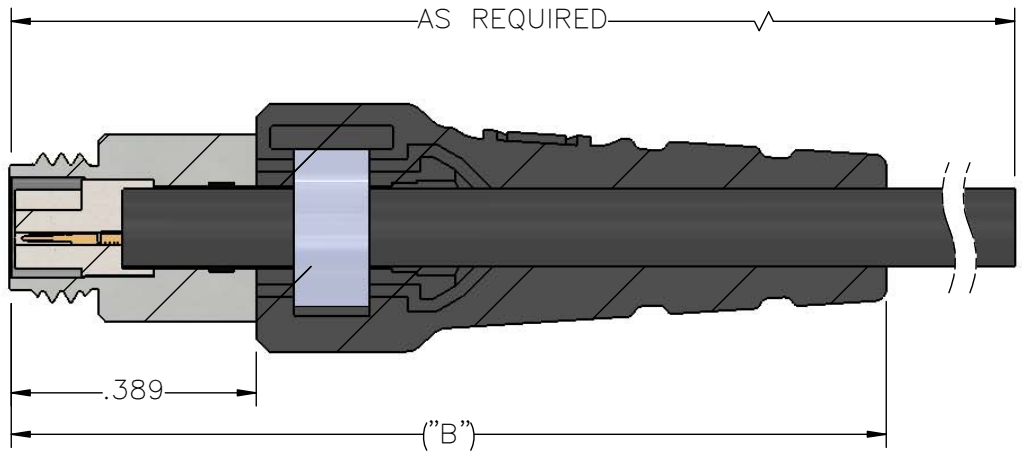
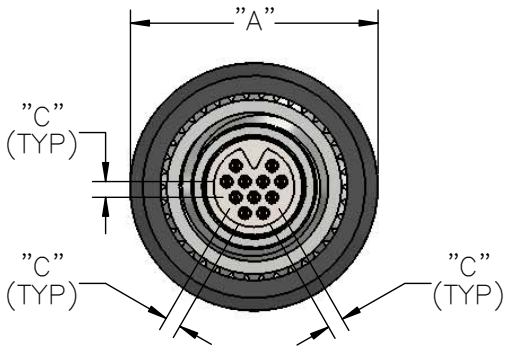
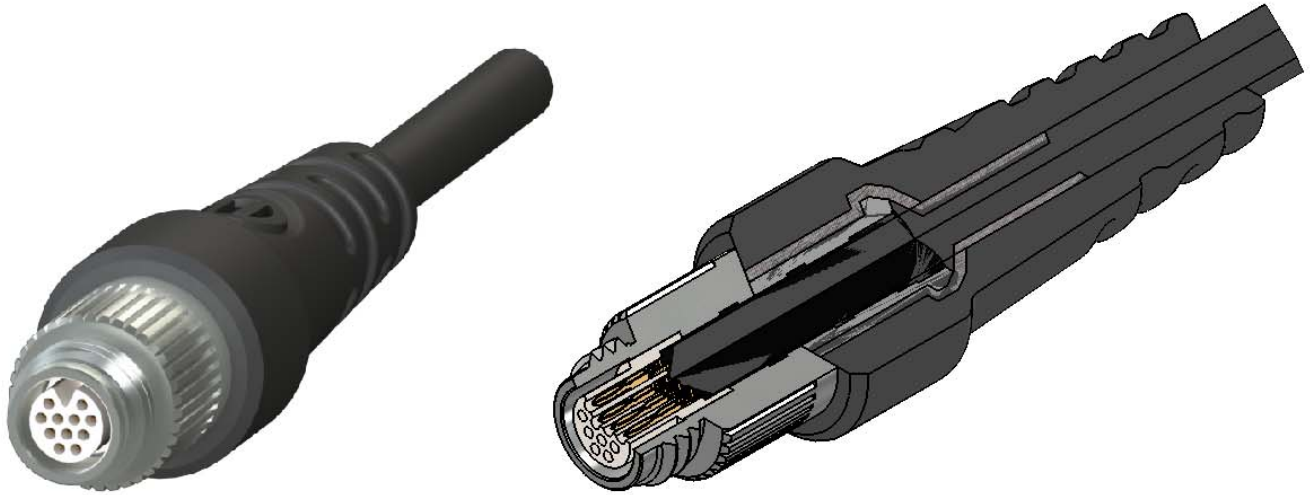
Metal - Socket - Threaded - Wired - Inline - Strain Relief MNCS-WD-IS-SR



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		1.6		8.38	7.11		
A79157-001	28	0.37	0.51	1.6	0.030	9.40	9.45	40.64	0.76
A79156-001	39	0.37				9.40	11.4		

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

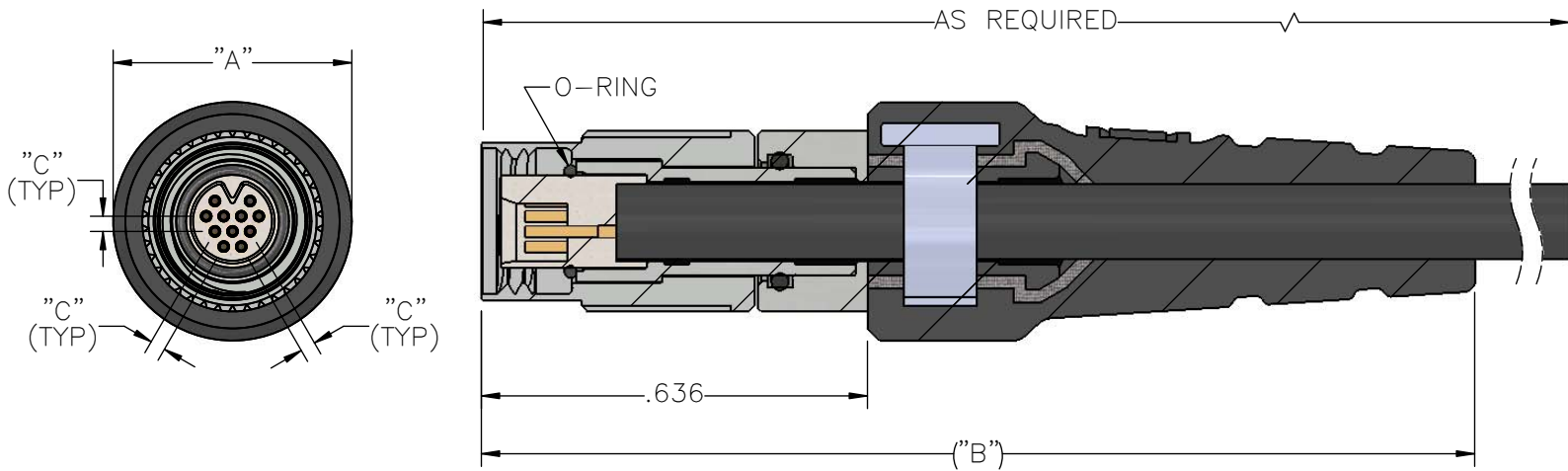
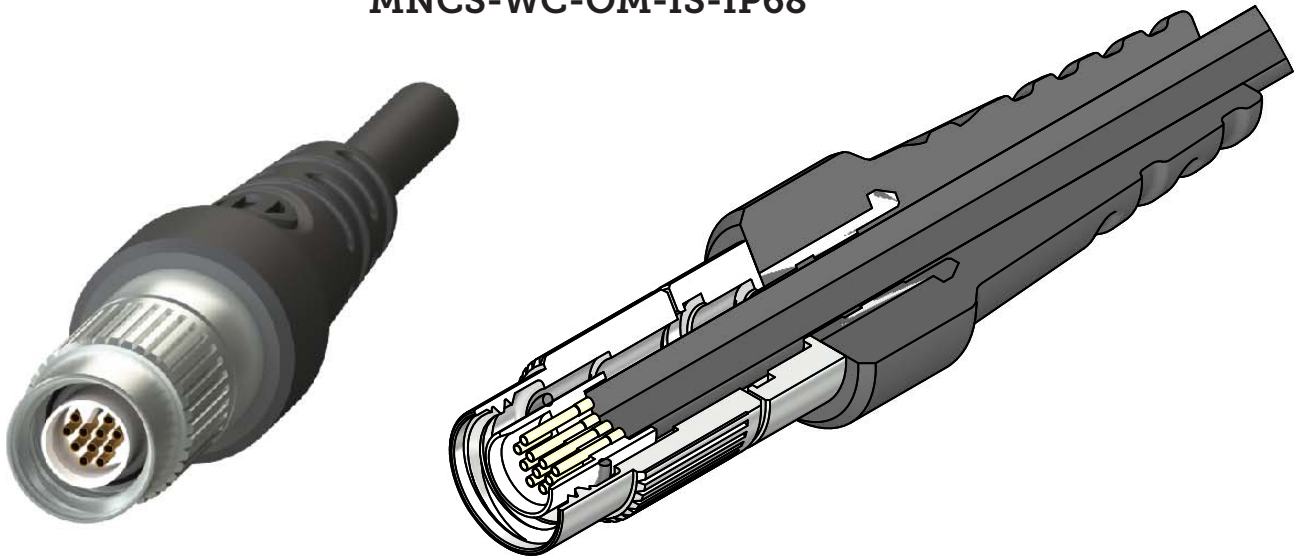
MNCP-WC-OM-IS-IP68



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





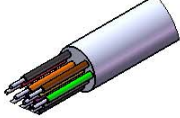








Metal - Socket - Threaded - Cabled - Overmold - Inline - IP68

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)		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 IP68
			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 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 @ 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
- 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

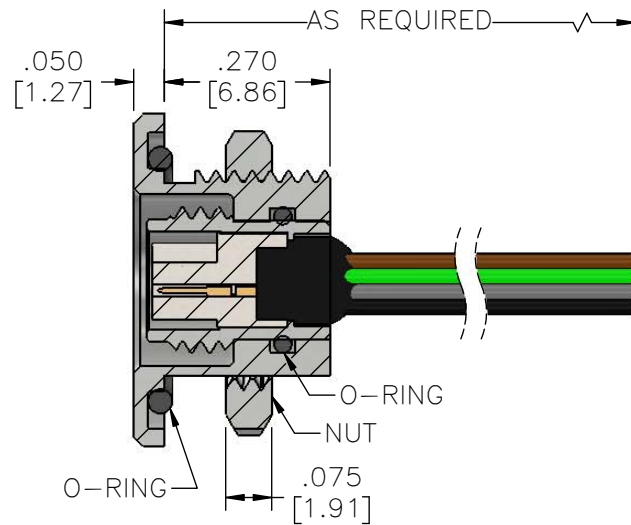
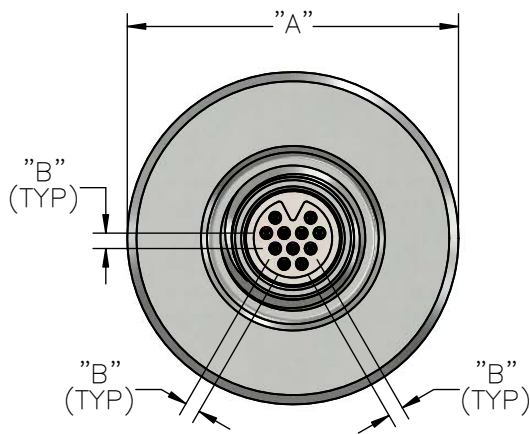
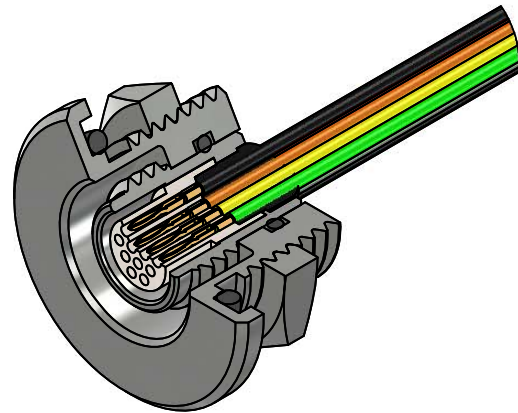
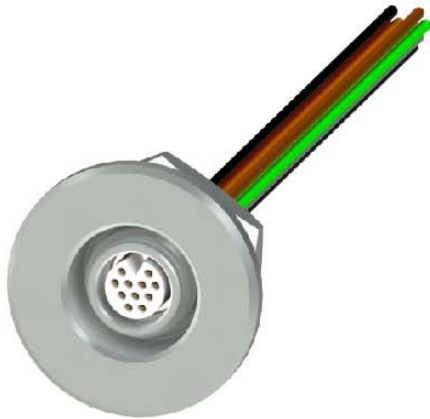
Shell Options

- 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

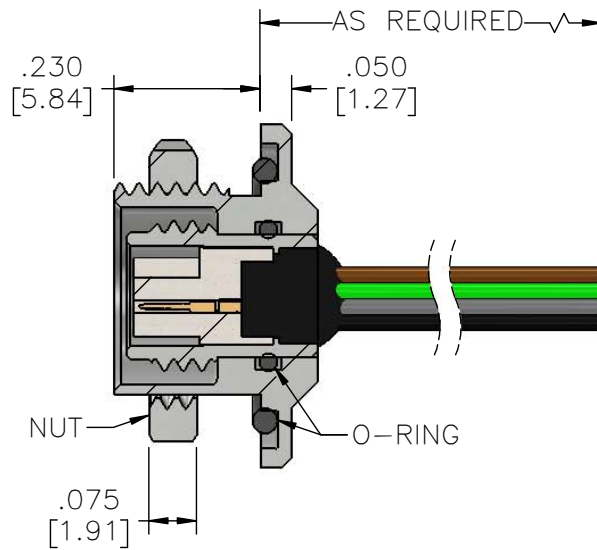
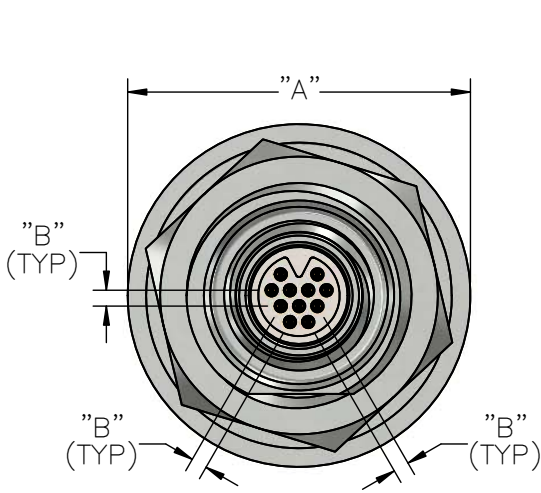
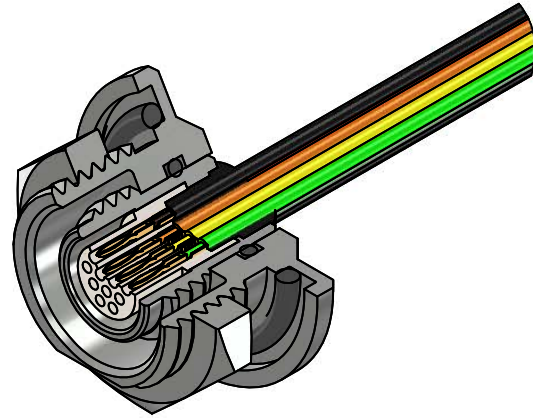
MNCP-WD-FP-IP68



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

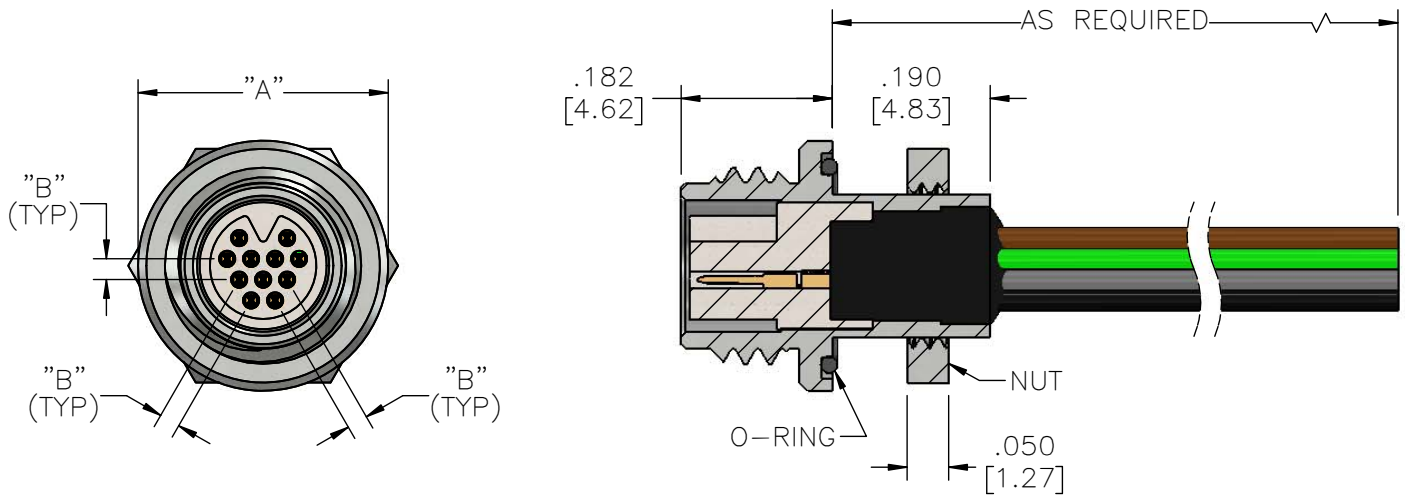
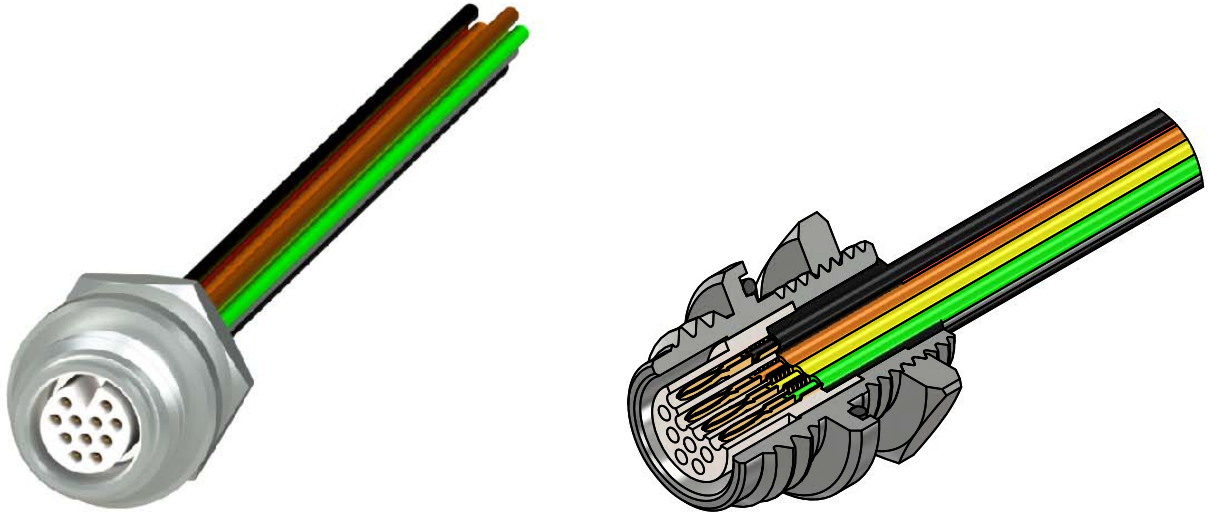
MNCP-WD-RP-IP68



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














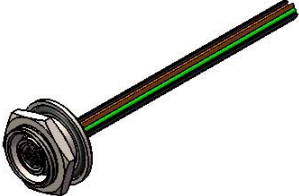
Metal - Pin - Threaded - Wired - Protruding Panel - IP68

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  WC: Cable  Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 32 AWG Max	Standard N: Nickel Plated Brass 	FP: Front Panel Mount (male only) 	C Color Coded 
	11 16 28 39		Non-Standard Options BN: Black Nickel Plated Brass 	RP: Rear Panel Mount (male only) 	OR O-Ring 
			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 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 @ 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
- 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

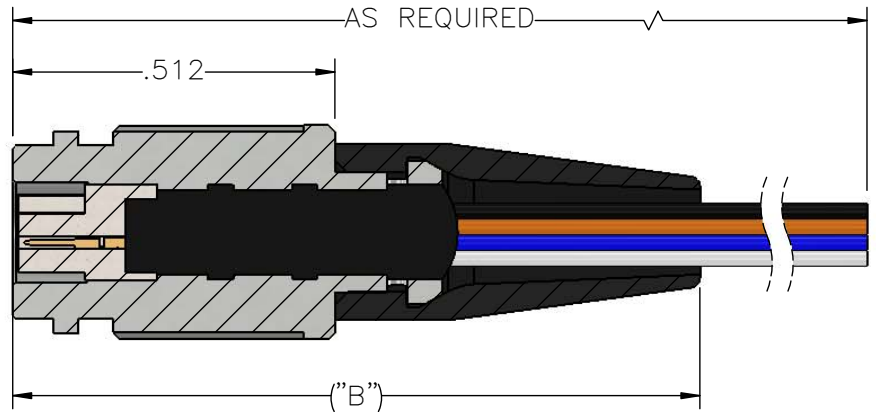
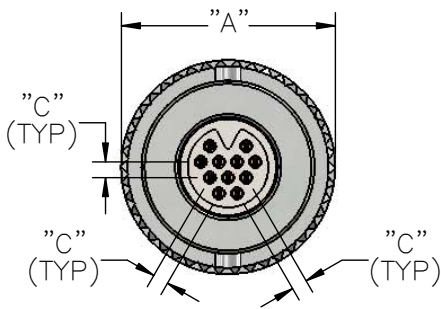
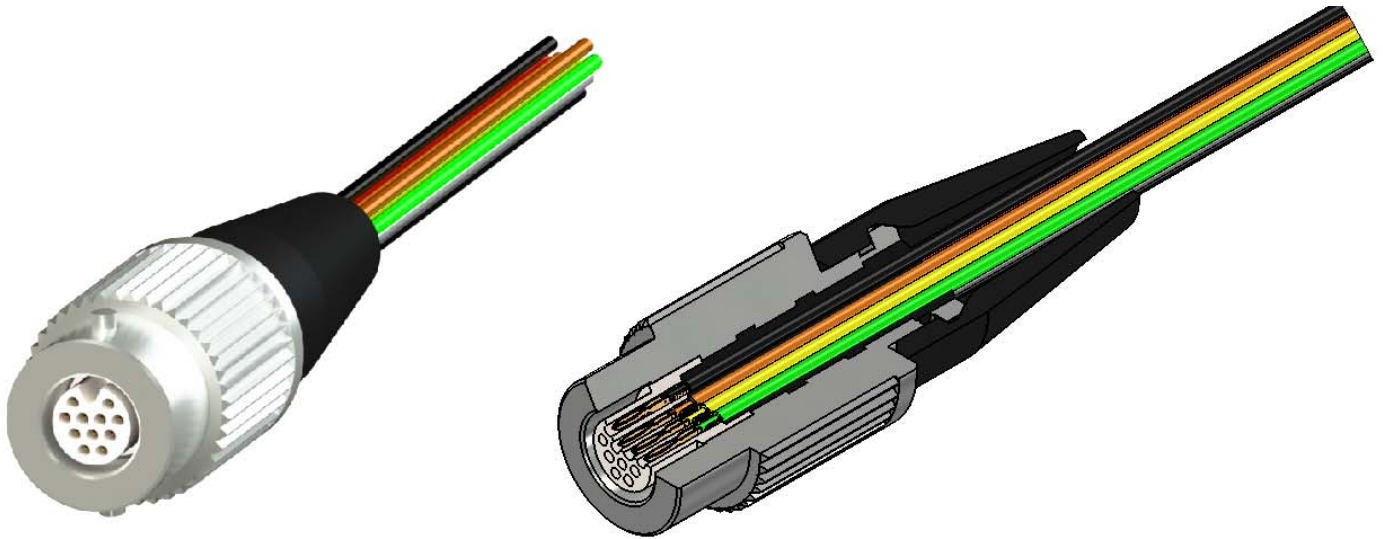
Shell Options

- 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.

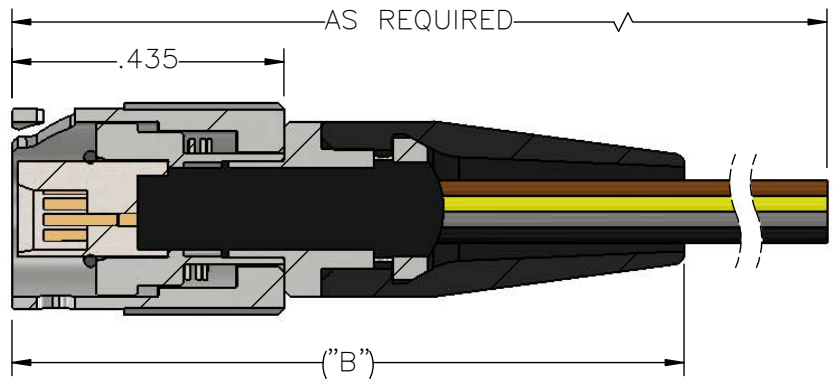
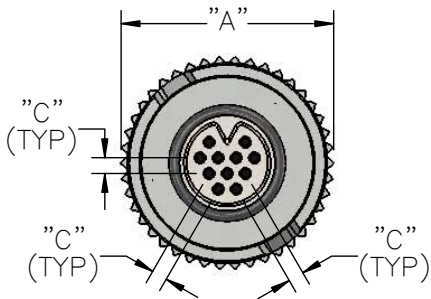
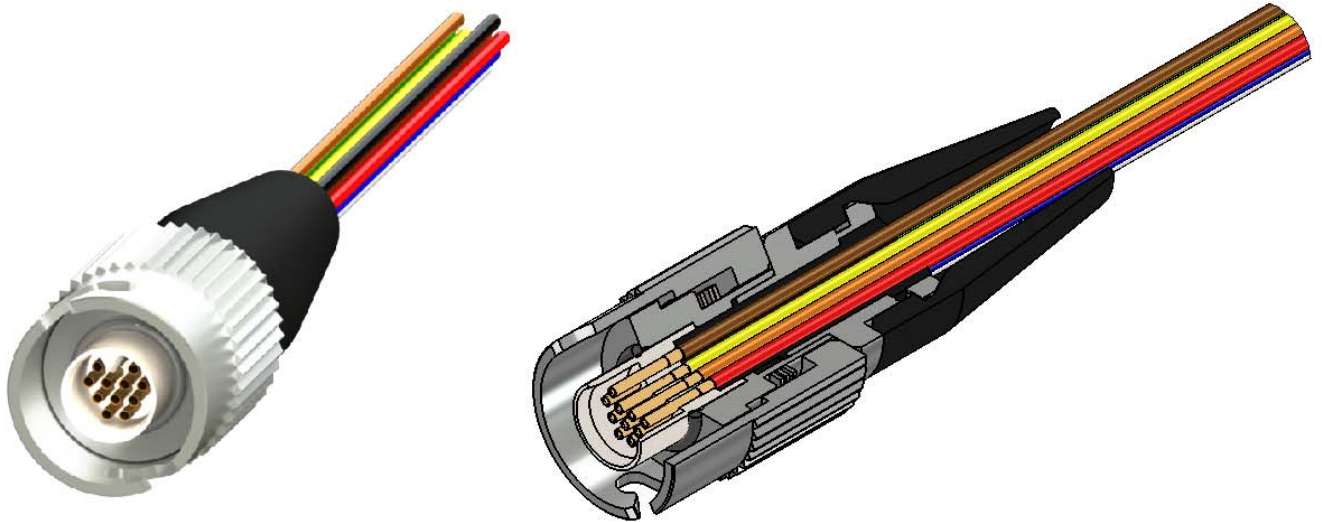
Metal - Pin - Twist-Lock - Wired - Inline - Strain Relief

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

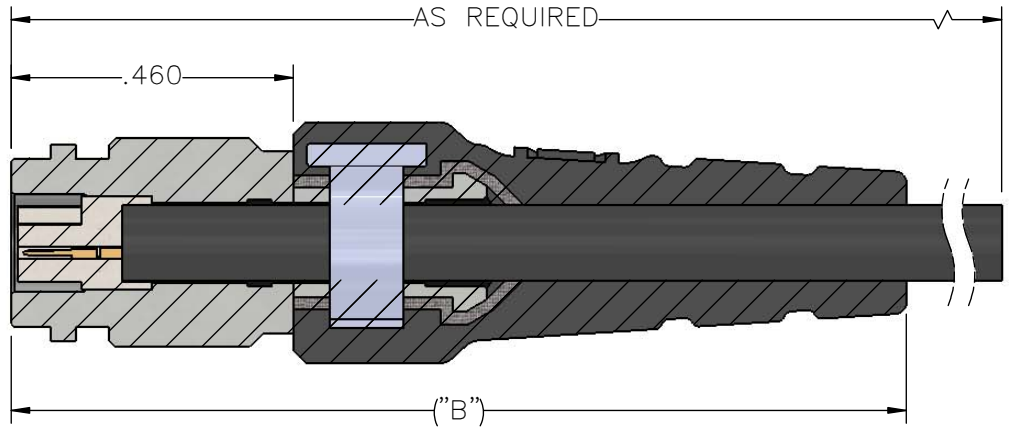
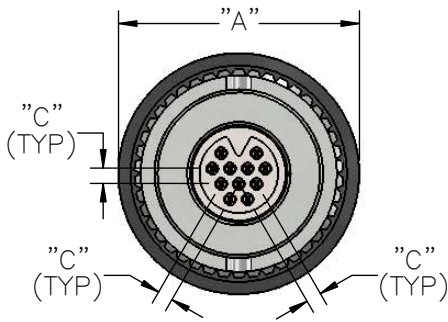
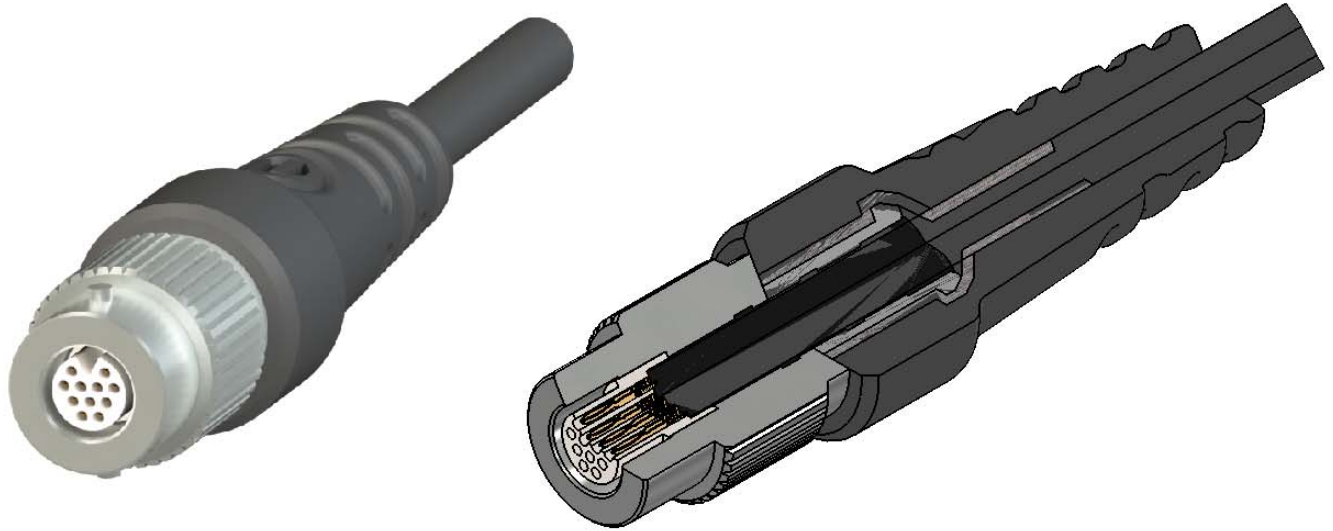
**Metal - Socket - Twist-Lock -
Wired - Inline - Strain Relief**
TNCS-WD-IS-SR



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

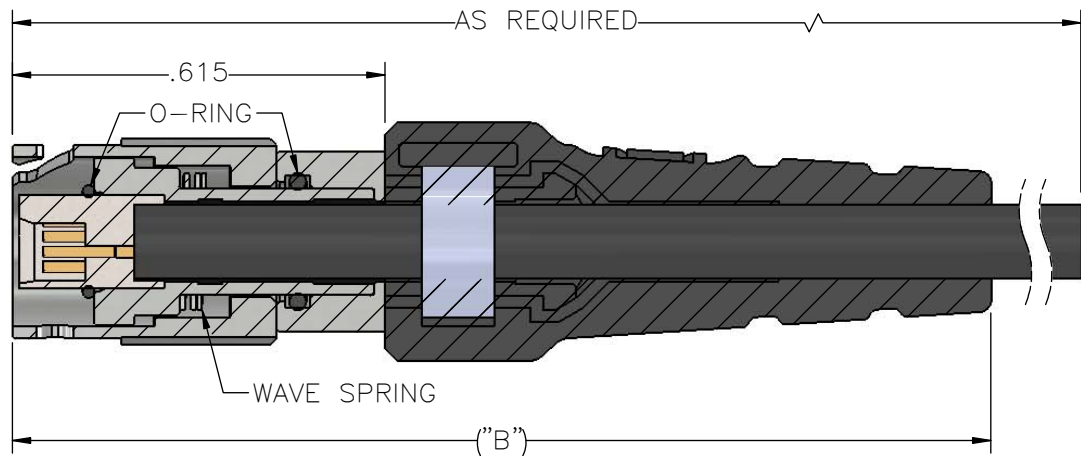
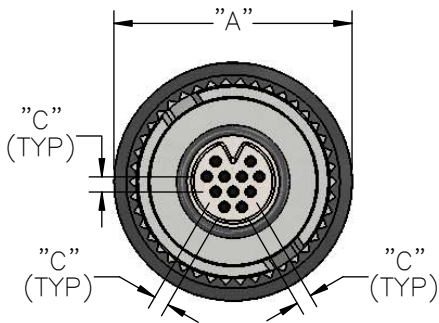
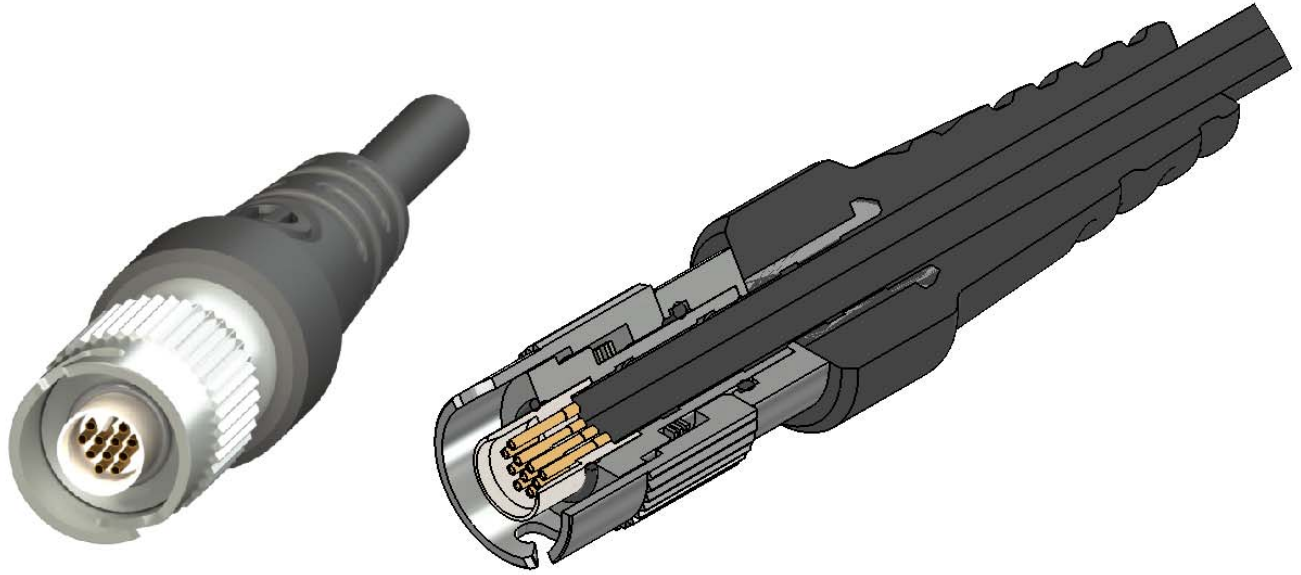
TNCP-WC-OM-IS-IP68



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	10.67				
A79337-001	28	0.46	11.68				
A79494-001	39	0.55	1.64	0.030	13.97	41.66	0.76





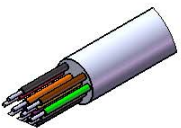

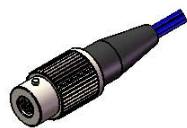





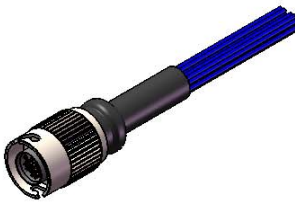

Metal - Socket - Twist-Lock - Cabled - Overmold - Inline - IP68

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	0.030	11.68	45.72	0.76
A79495-001	39	0.55			13.97		

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 @ 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
- 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

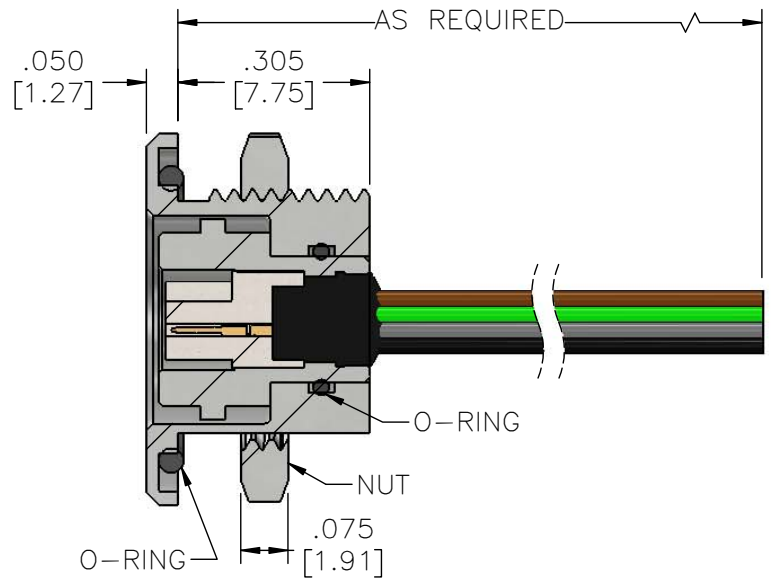
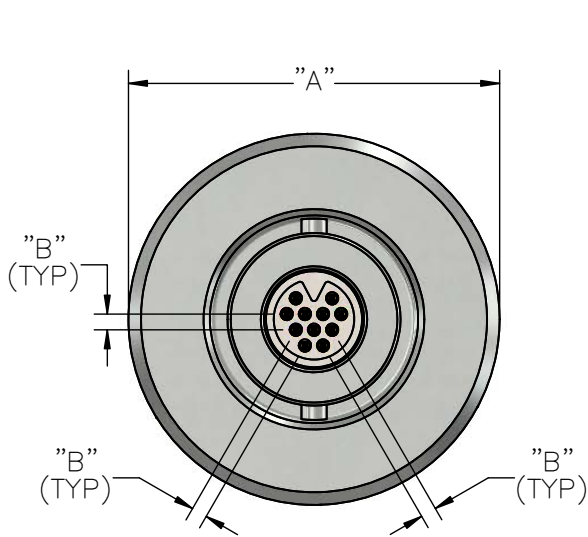
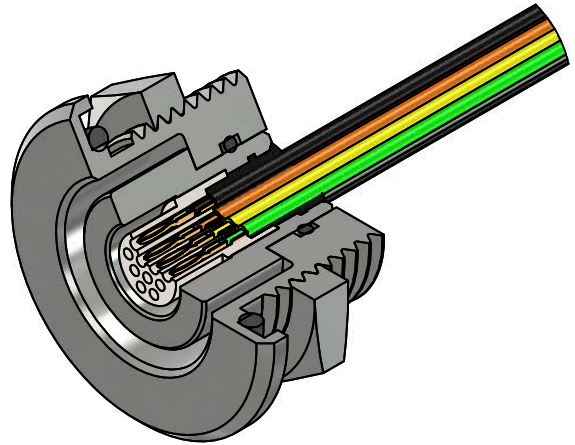
Shell Options

- 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

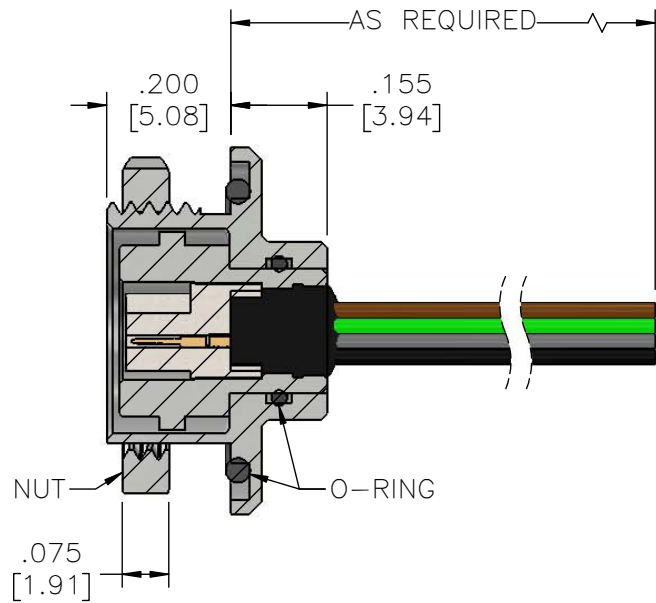
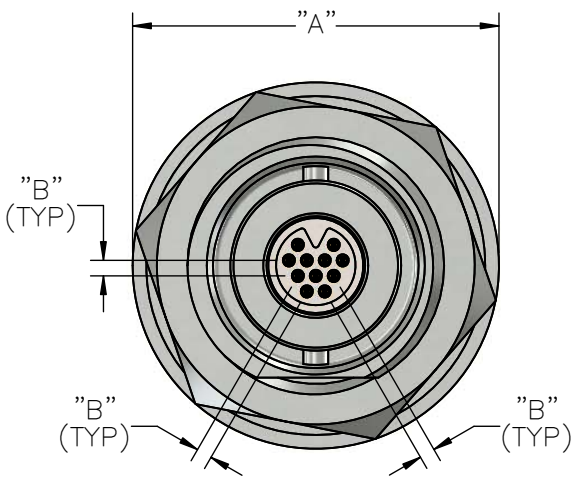
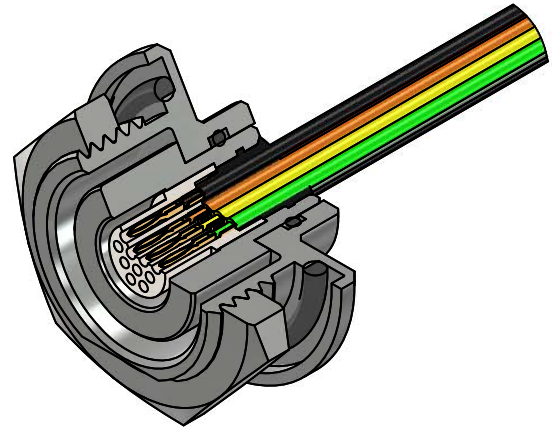
TNCP-WD-FP-IP68



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

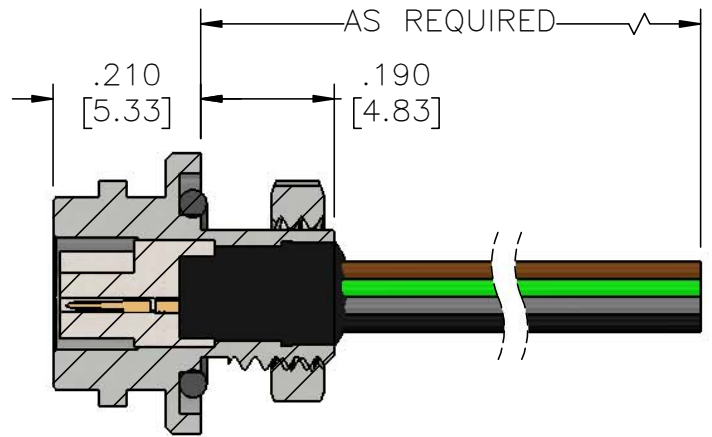
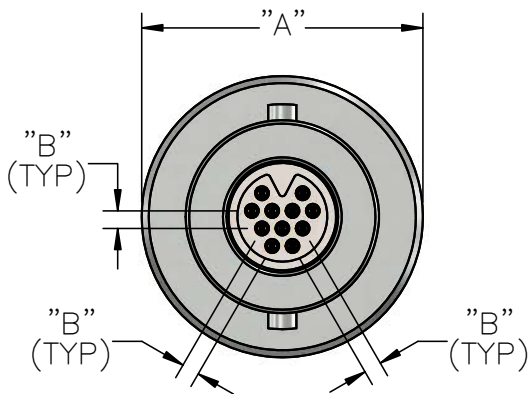
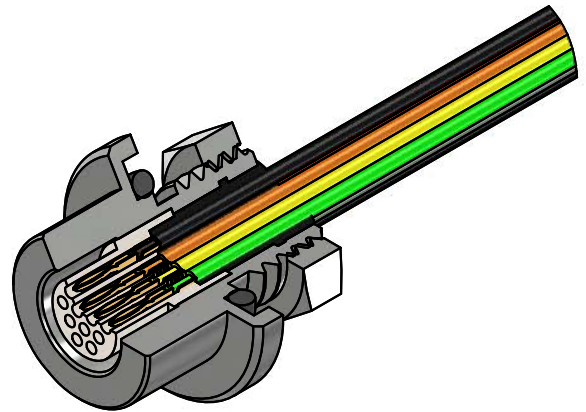


English (IN) Metric (MM)

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





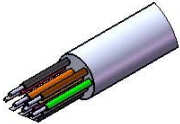





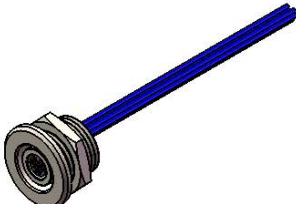
Metal - Pin - Twist-Lock - Wired - Protruding Panel - IP68

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				
	OX: Black Oxide Finished Steel 				
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 @ 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 (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

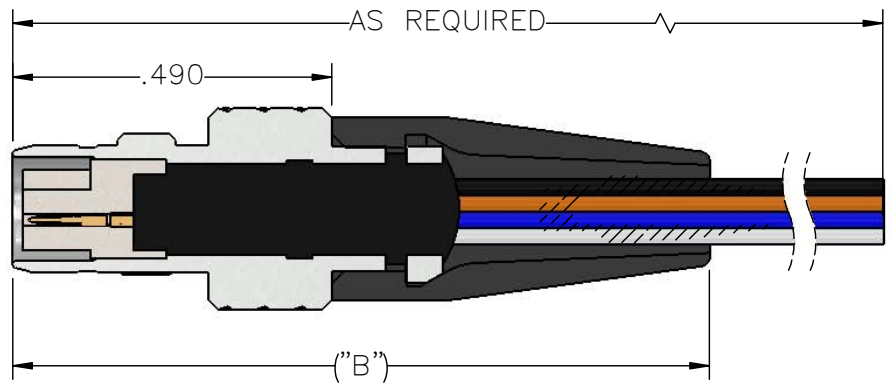
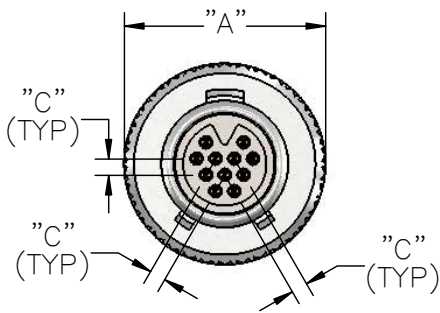
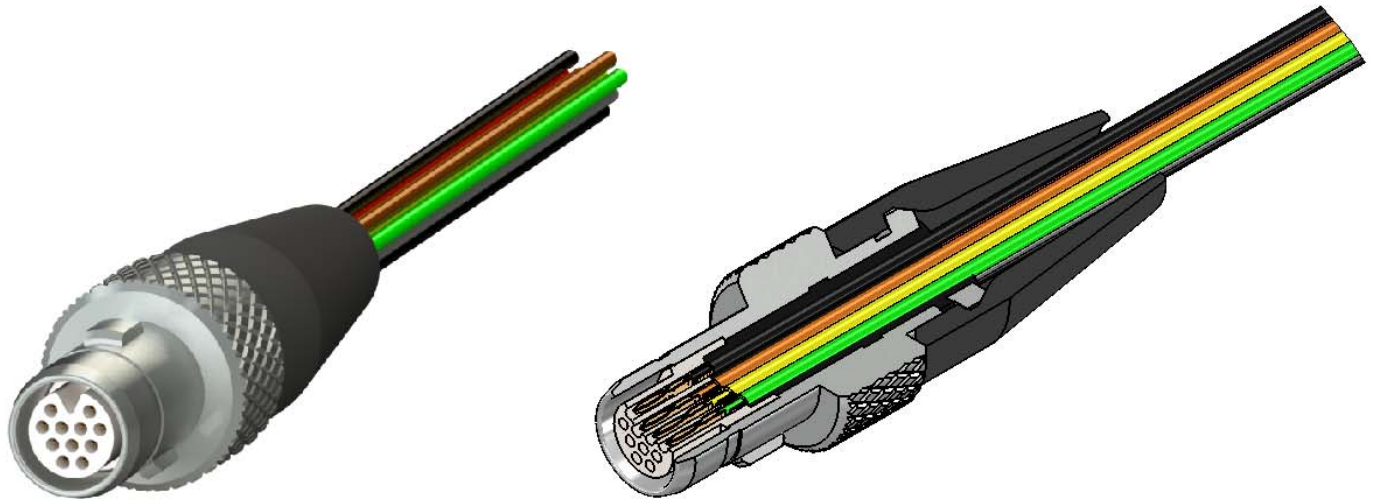
Shell Options

- 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

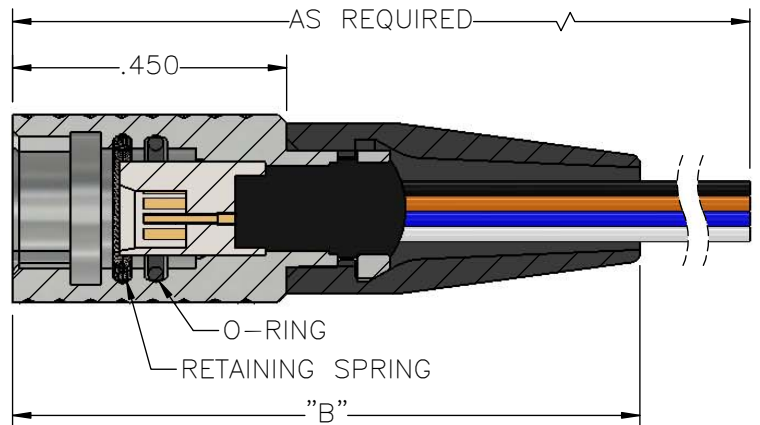
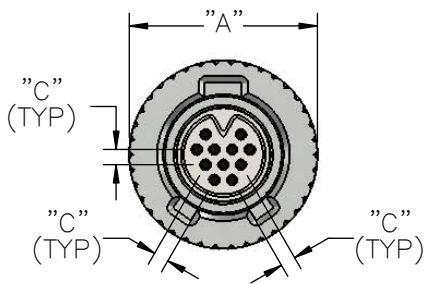
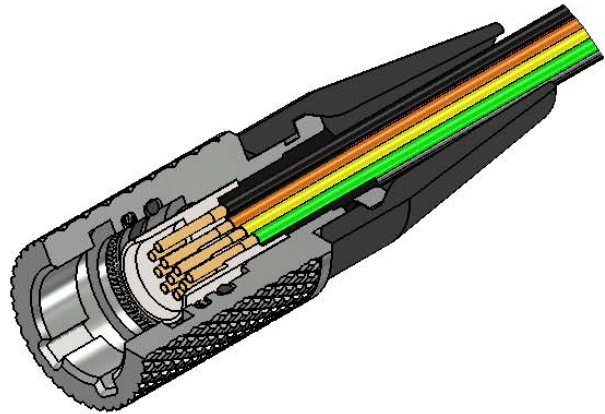
KBNP-WD-IS-SR



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

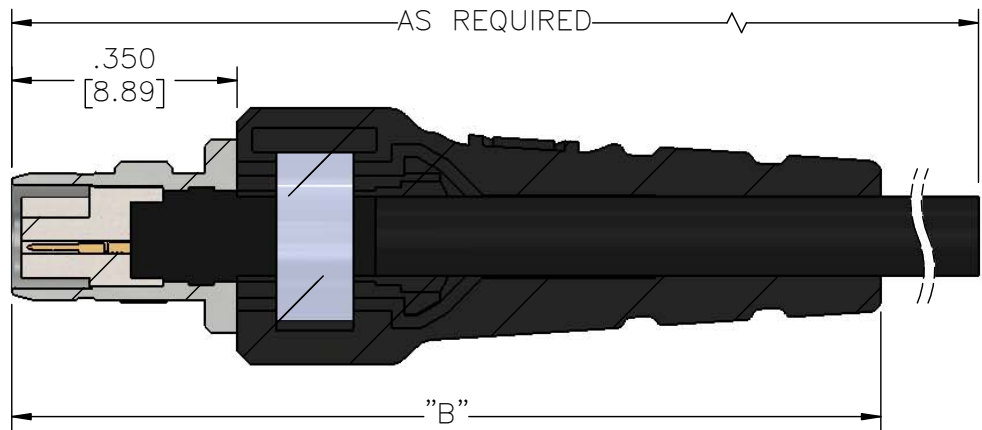
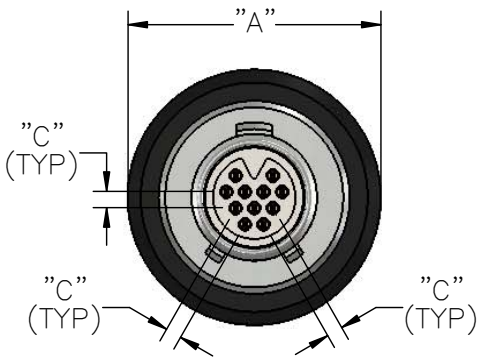
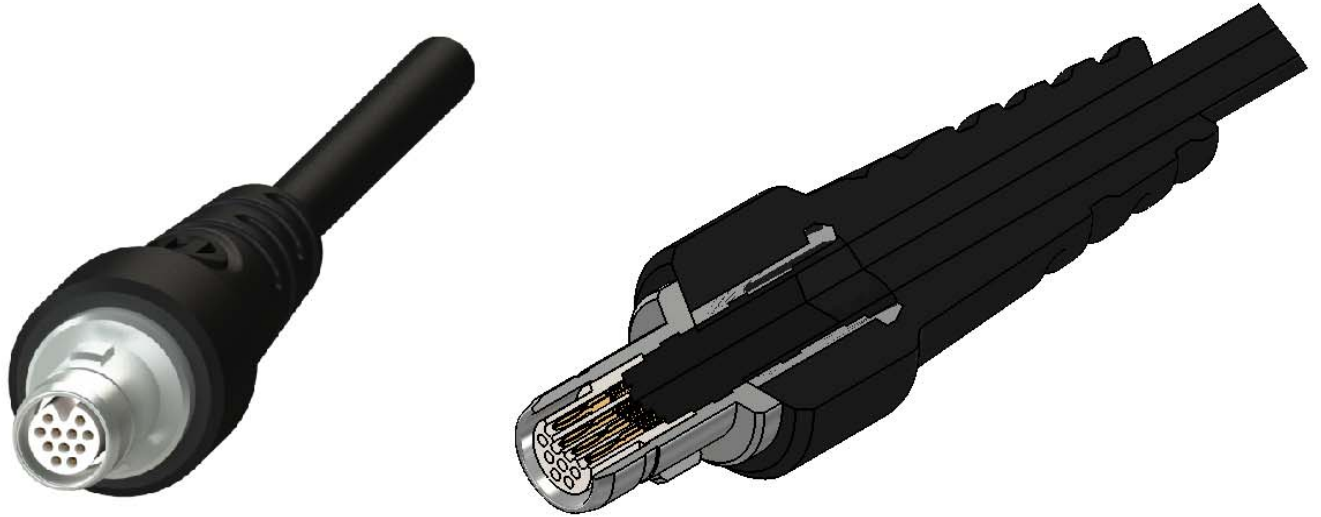
KBNS-WD-IS-SR



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

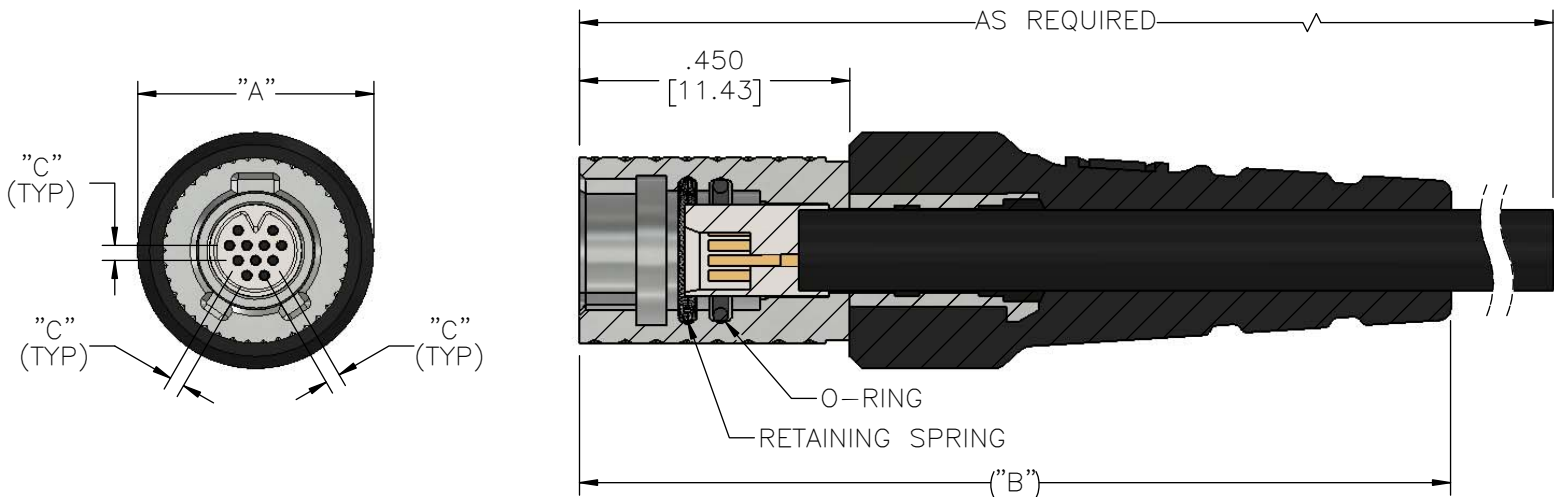
KBNP-WC-OM-IS



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	0.030	11.68	41.40	0.76
A79457-001	39	0.550			13.97		

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

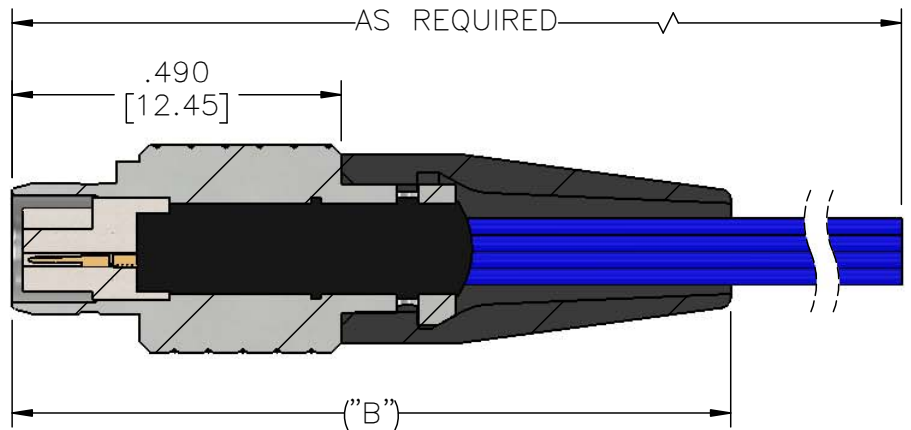
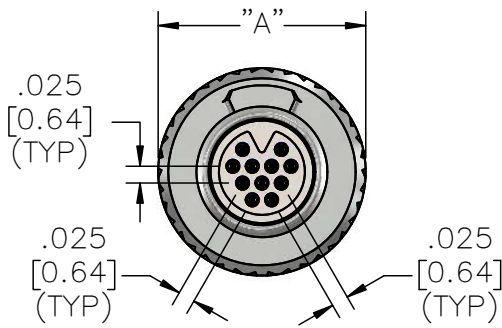
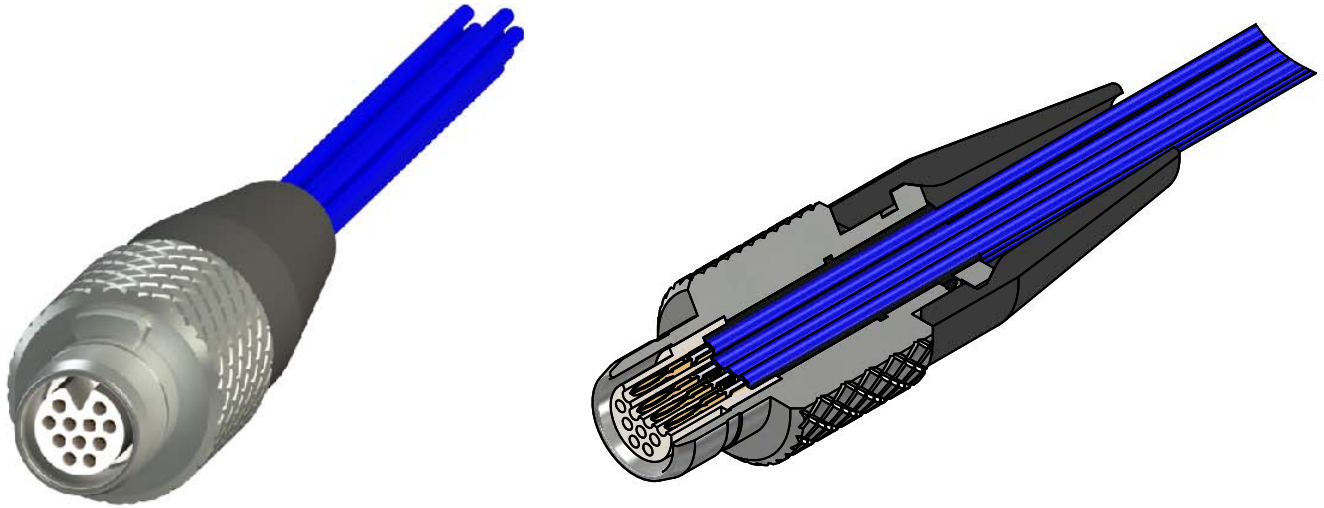
KBNS-WC-OM-IS



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

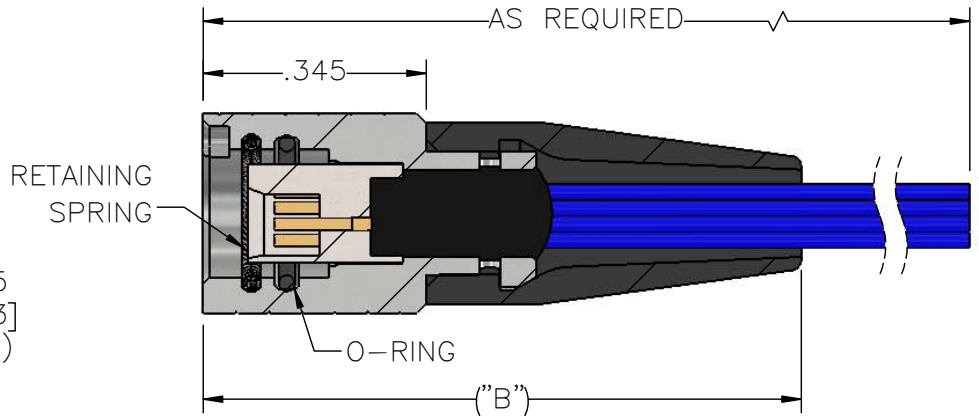
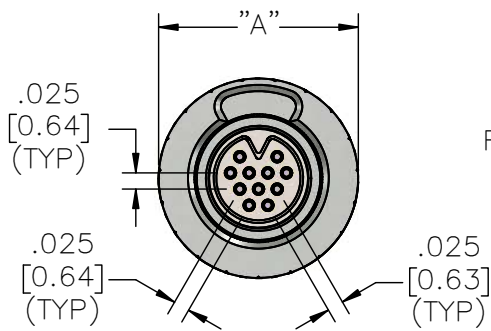
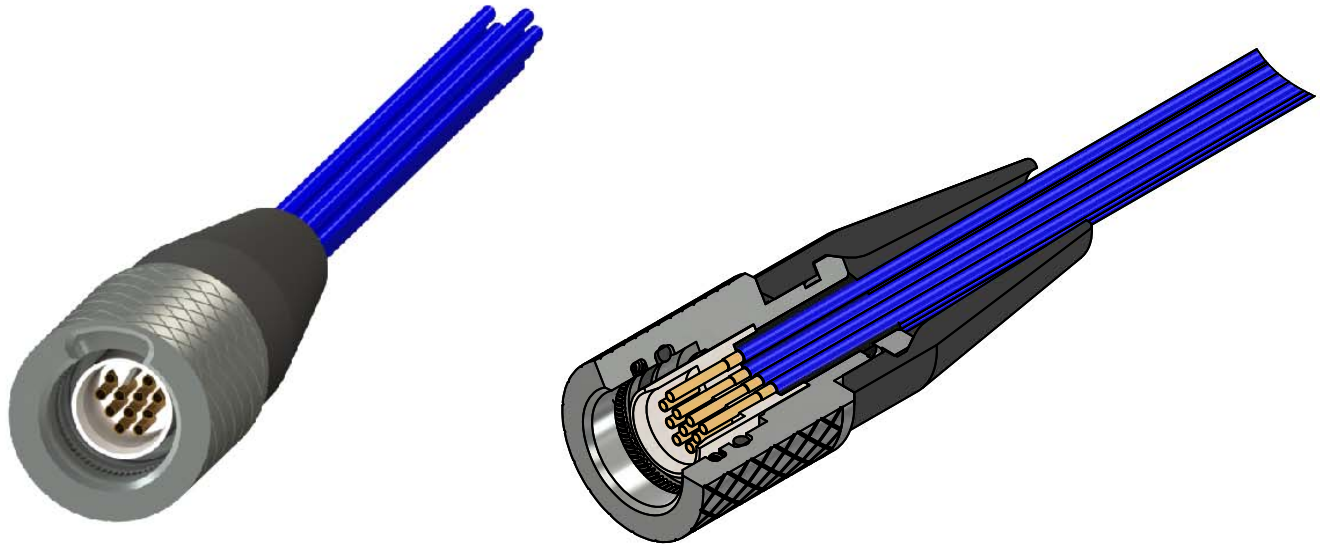
BANP-WD-IS-SR



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

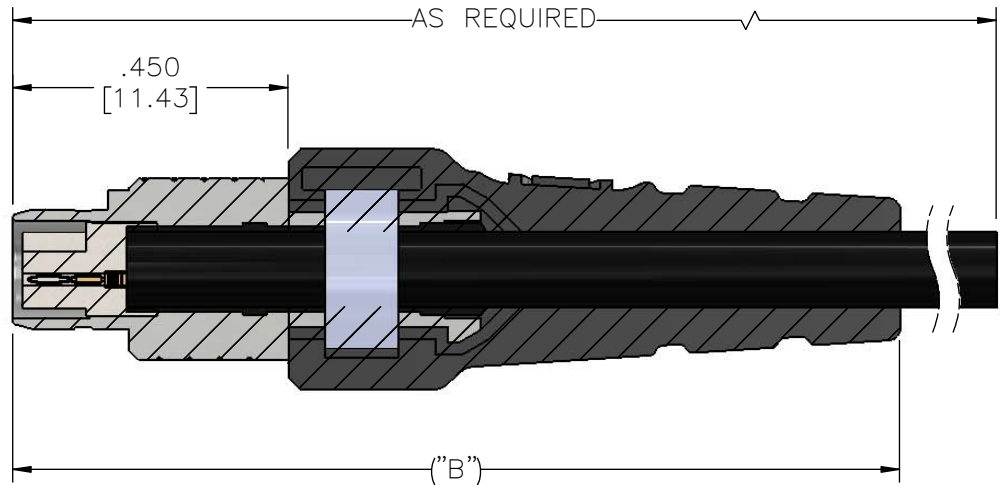
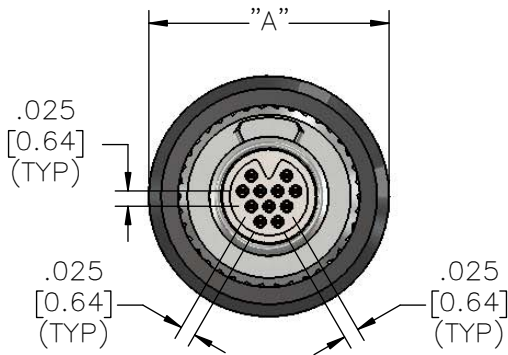
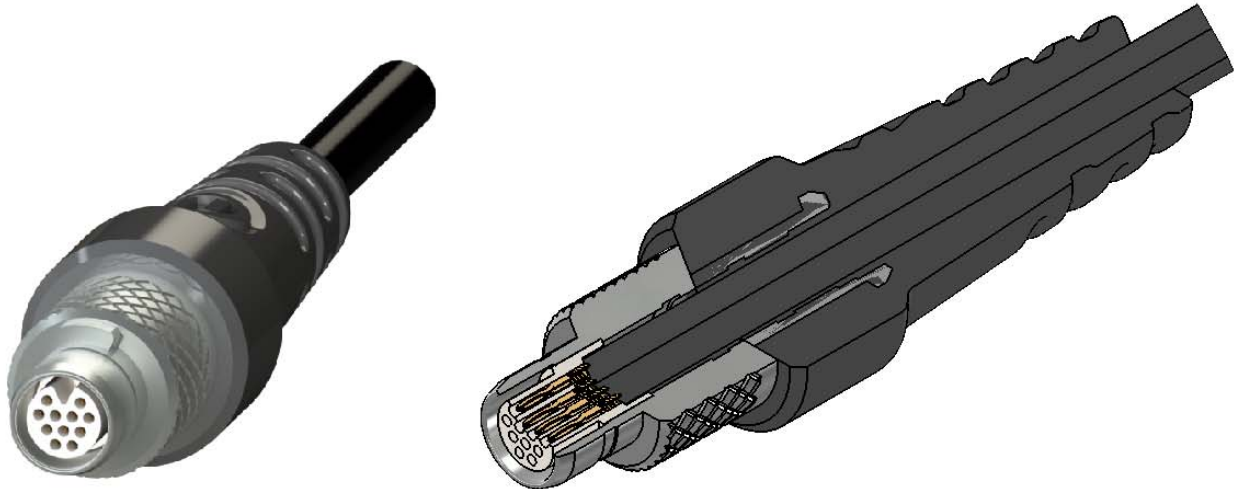
BANS-WD-IS-SR



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

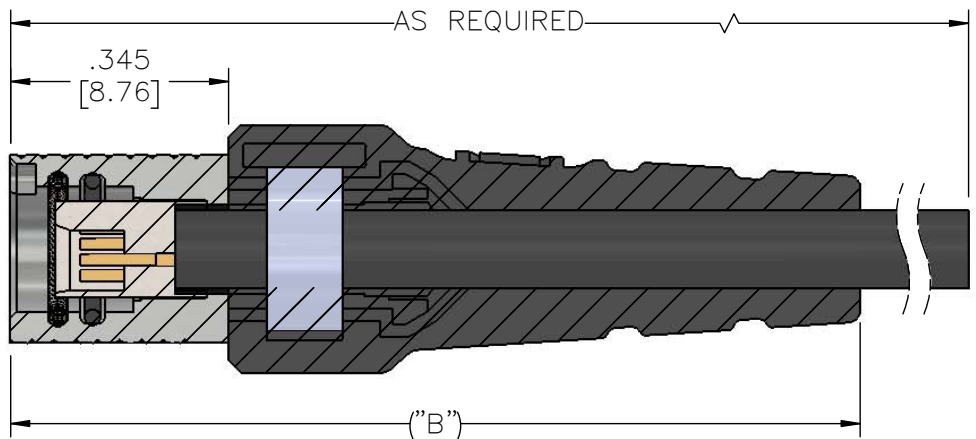
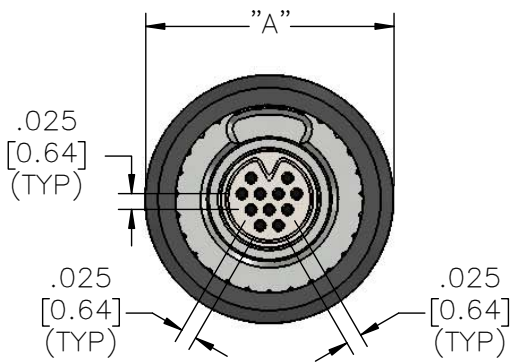
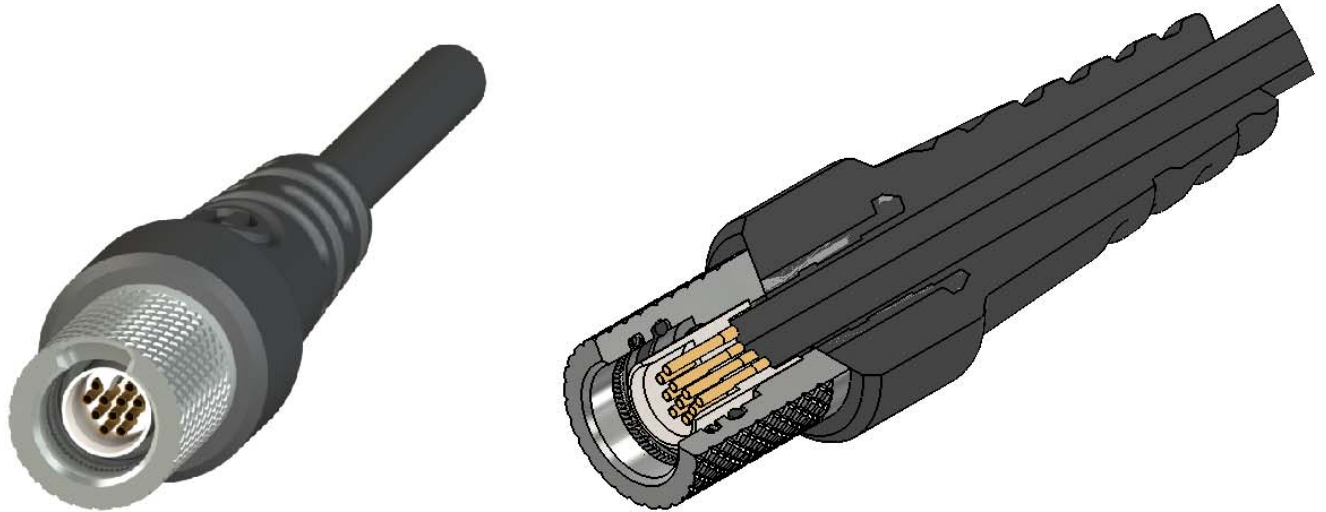
Metal - Pin - Break Away - Cabled - Overmold - Inline

BANP-WC-OM-IS








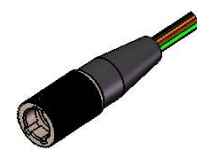









Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79335-001	6	0.36	1.450	9.14	36.83
A79331-001	11	0.39		9.91	
A79327-001	16	0.42	1.530	10.67	38.86
A79323-001	28	0.46	1.630	11.68	41.40

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	Male	OM Overmold (Contact Omnetics for Overmold Information & Availability)
Male (P - Pin)			BN: Black Nickel Plated Brass		
		Wire/Cable Length: 18.0=18.0" Standard Option "XX.X" = Custom Length i.e. 23.4" 32 AWG Max		SR: Inline Shell w/ Strain Relief	
Female (S - Socket)			P: Passivated Stainless Steel		
				ST: Inline Shell w/ Shrink Tube	OR O-Ring
			OX: Black Oxide Finished Steel		
					
					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 @ 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
- 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

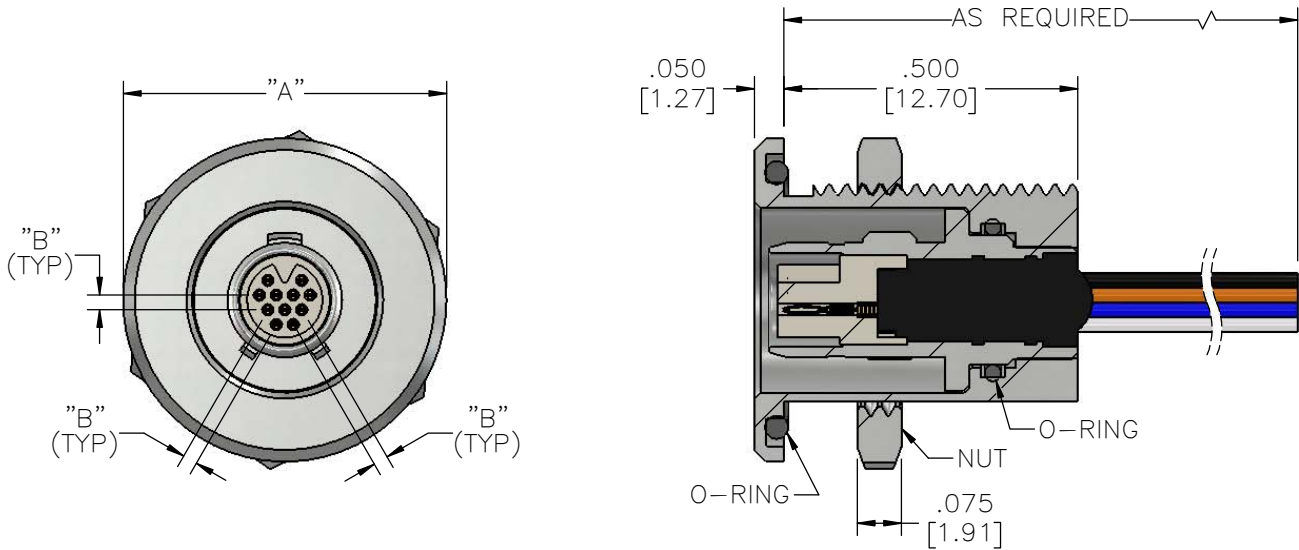
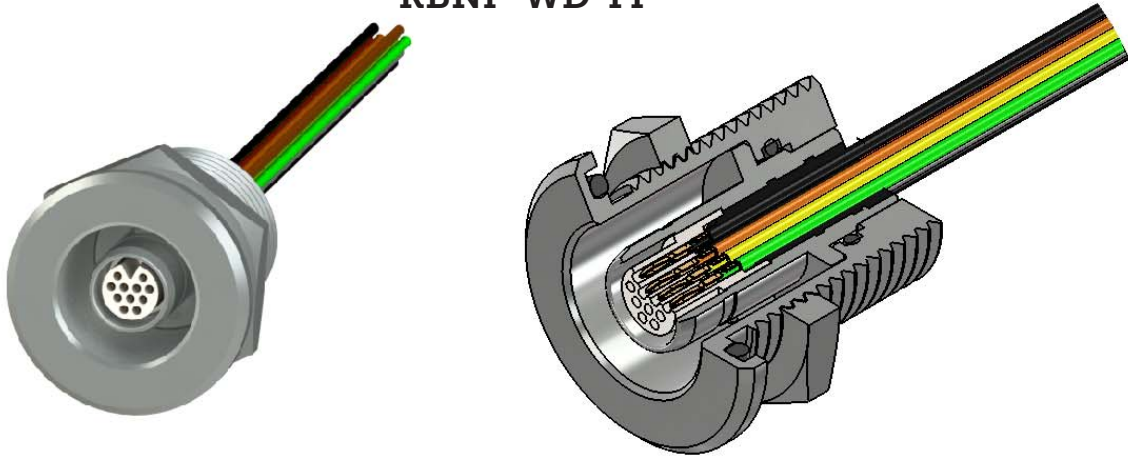
Shell Options

- 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

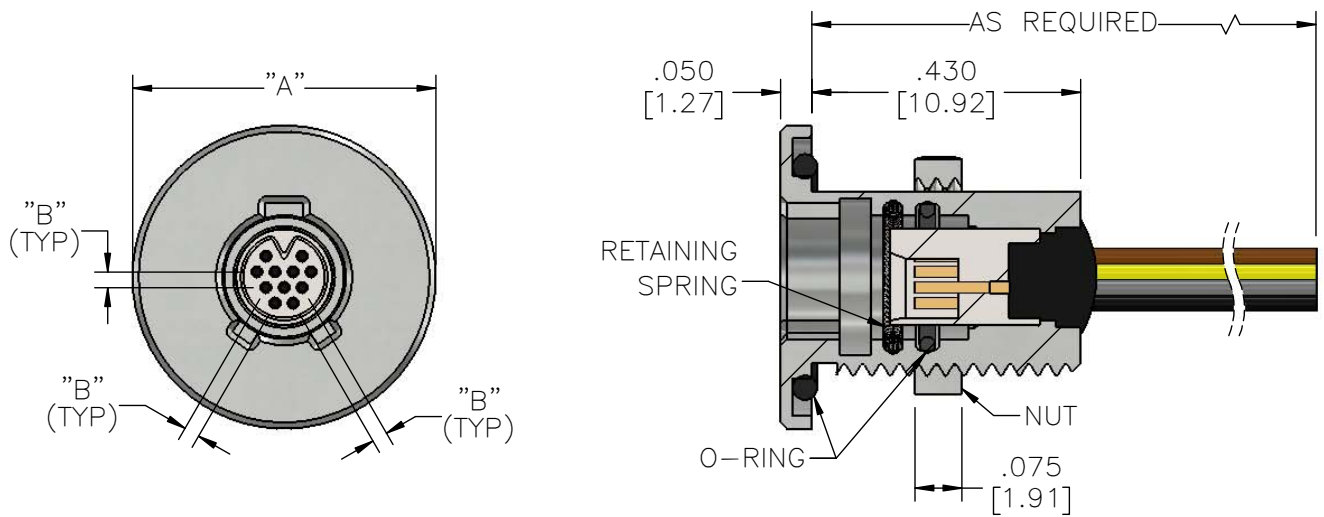
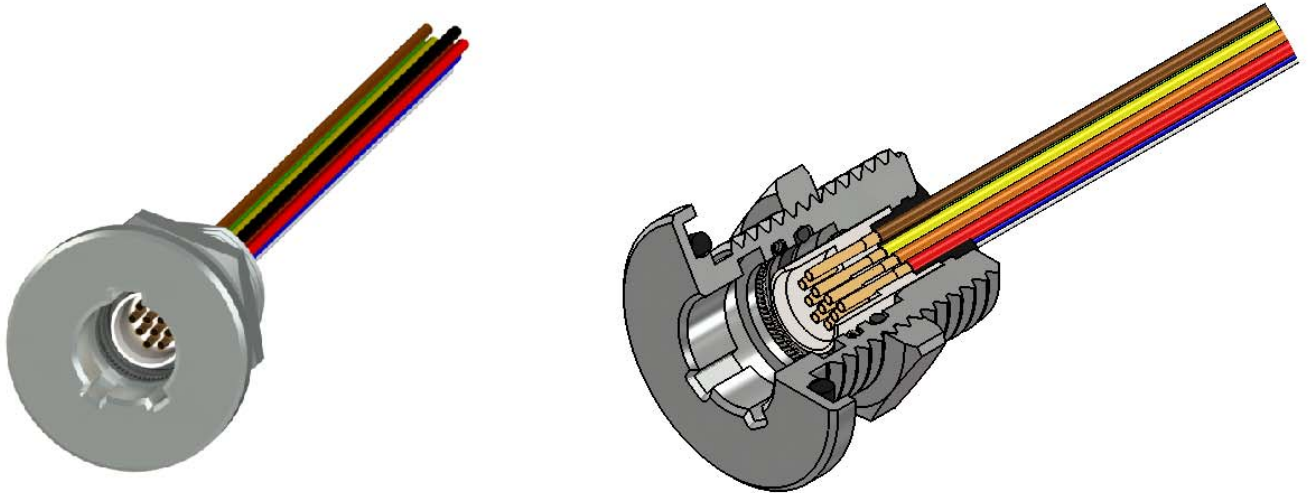
KBNP-WD-FP



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

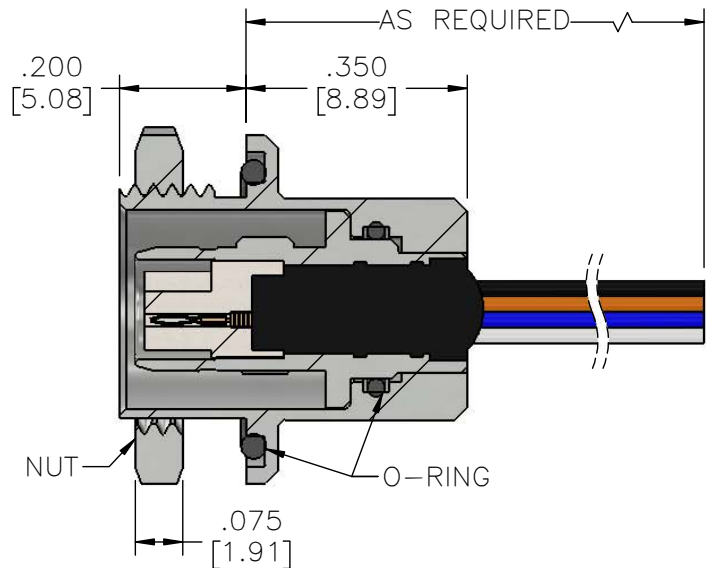
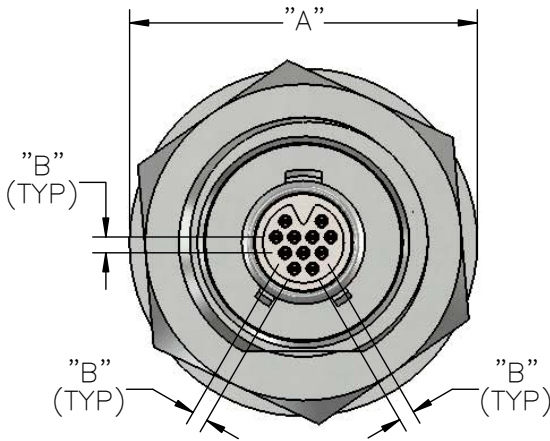
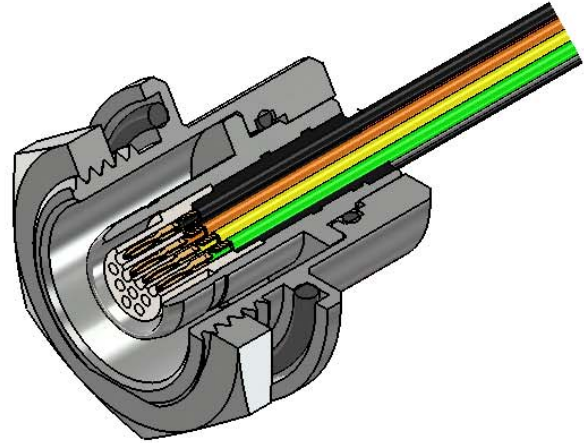
KBNS-WC/WD-FP



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

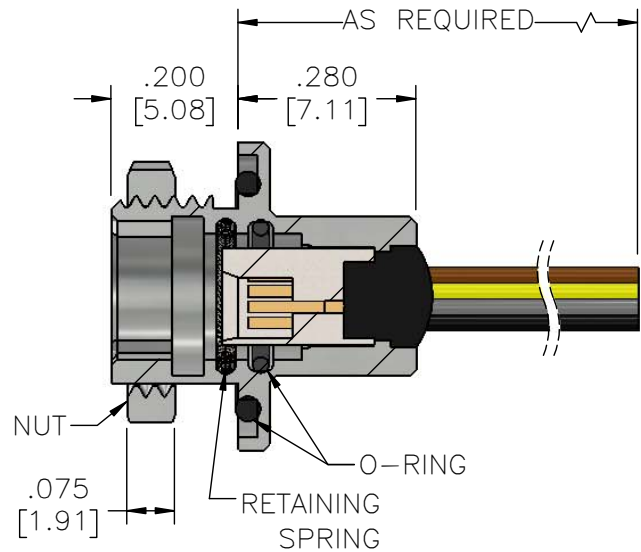
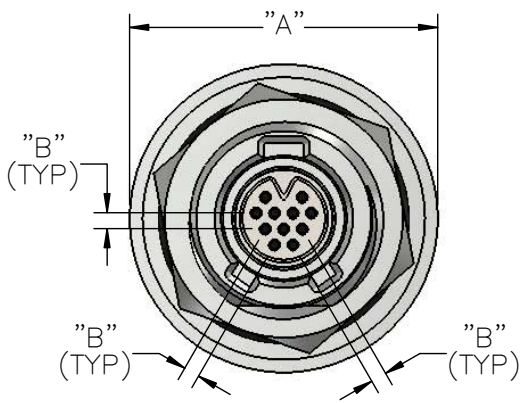
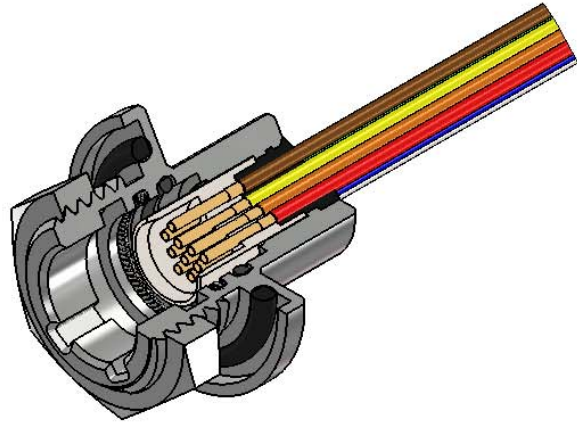
KBNP-WD-RP-IP68



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

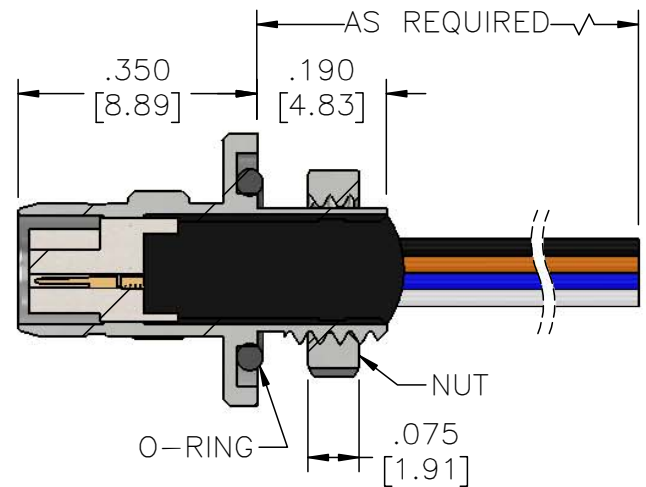
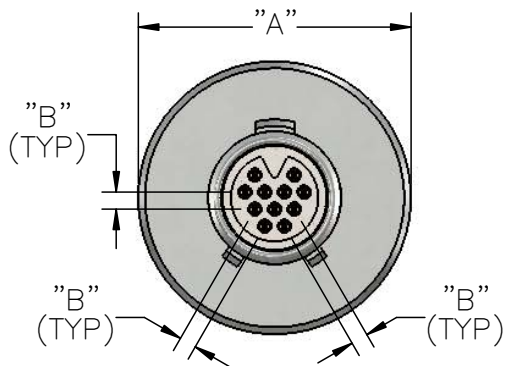
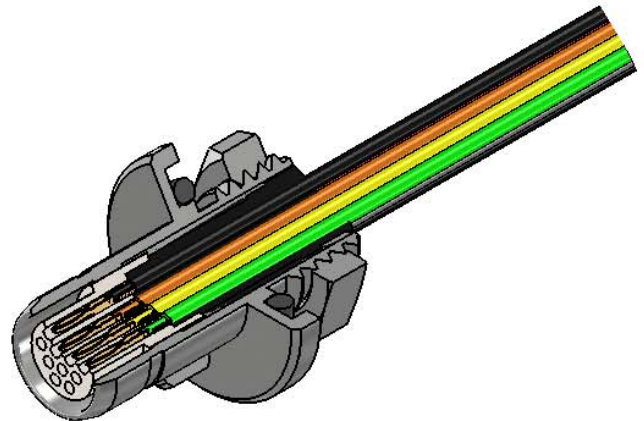
KBNS-WC/WD-RP



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

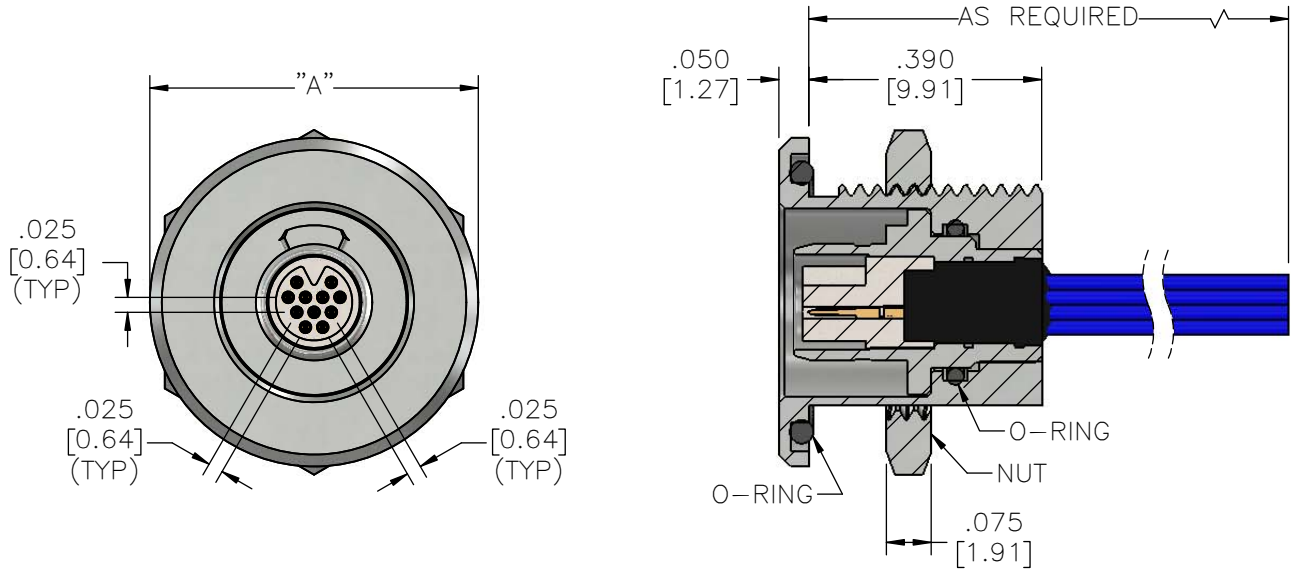
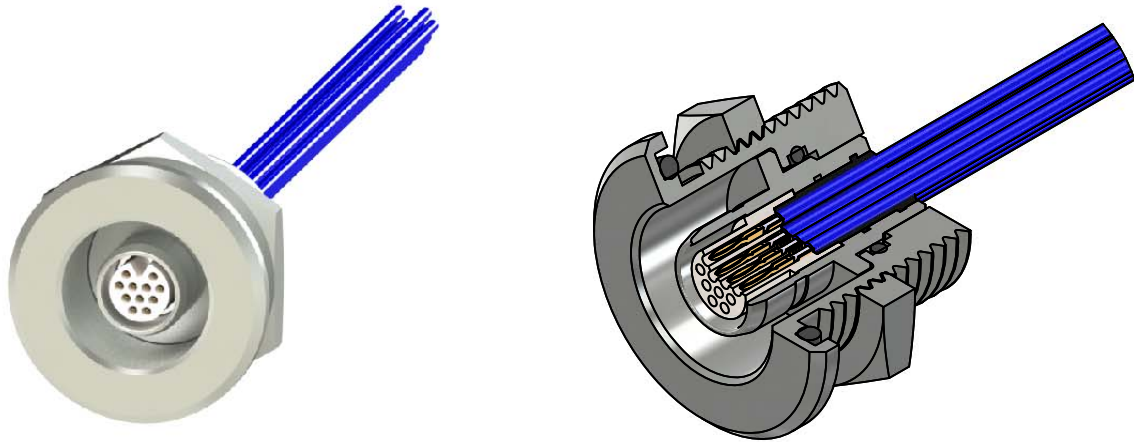
KBNP-WD-PP-IP68



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

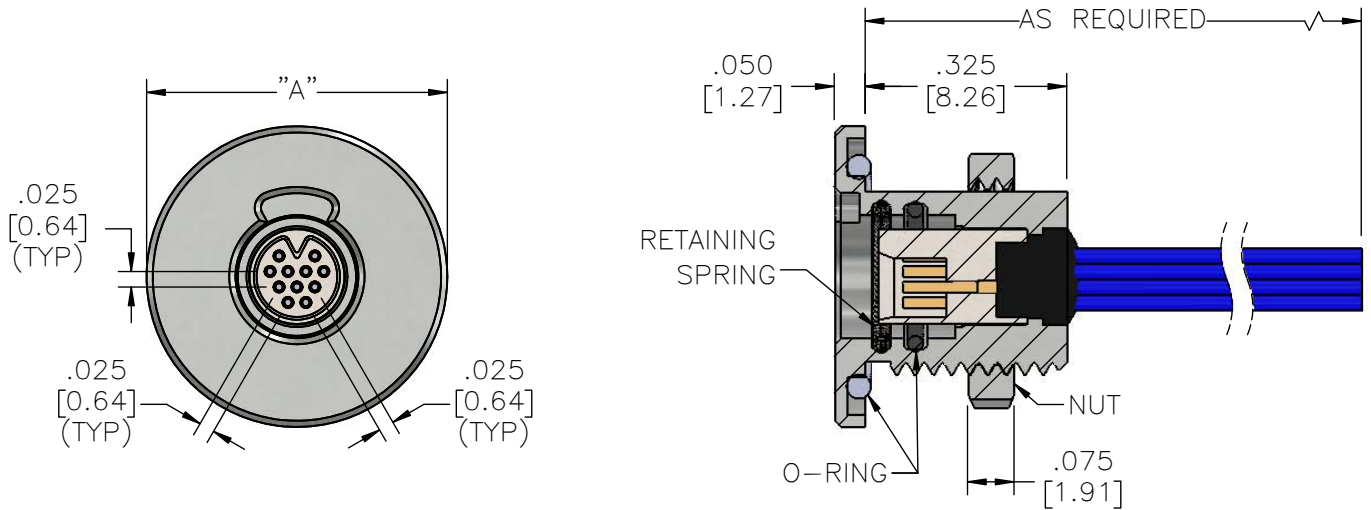
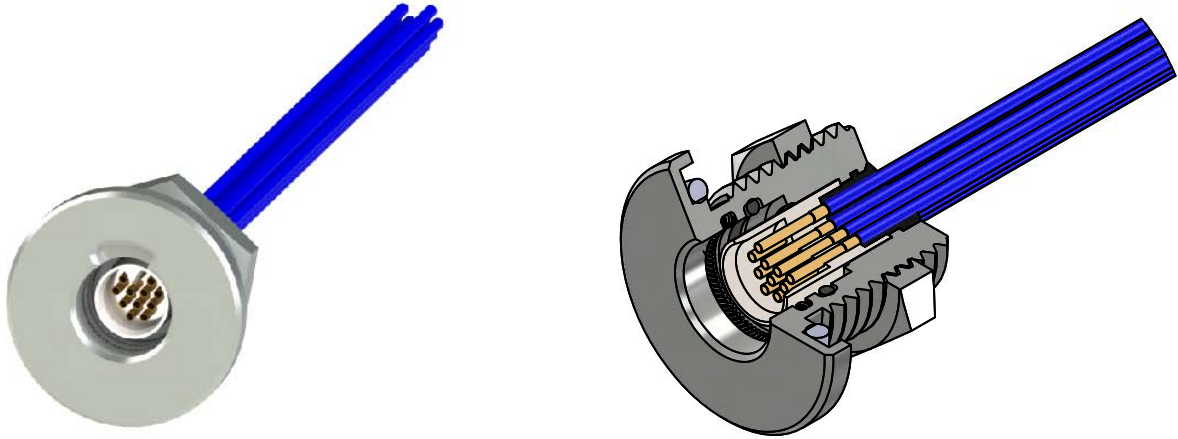
BANP-WD-FP



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

Metal - Socket - Break Away - Wired - Front Panel

BANS-WD-FP

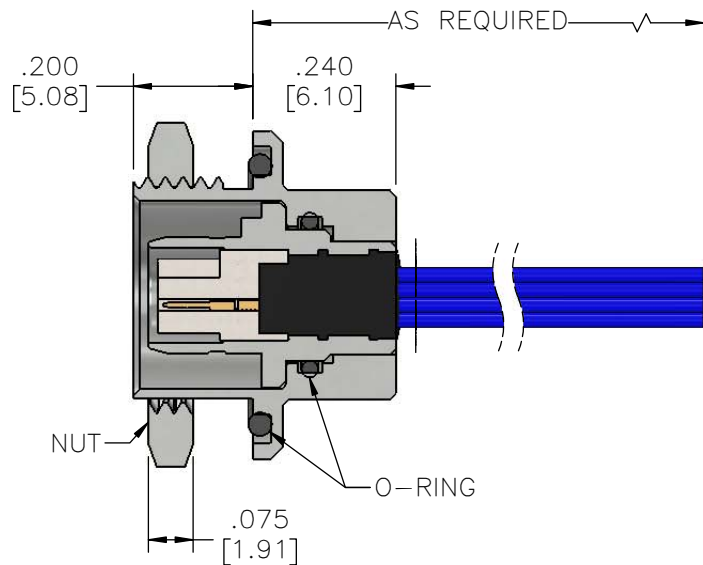
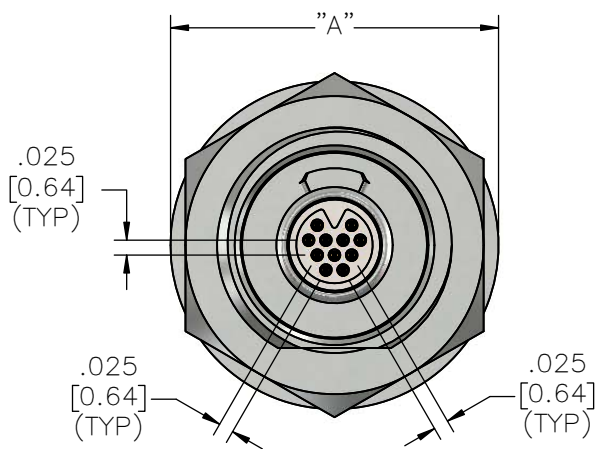
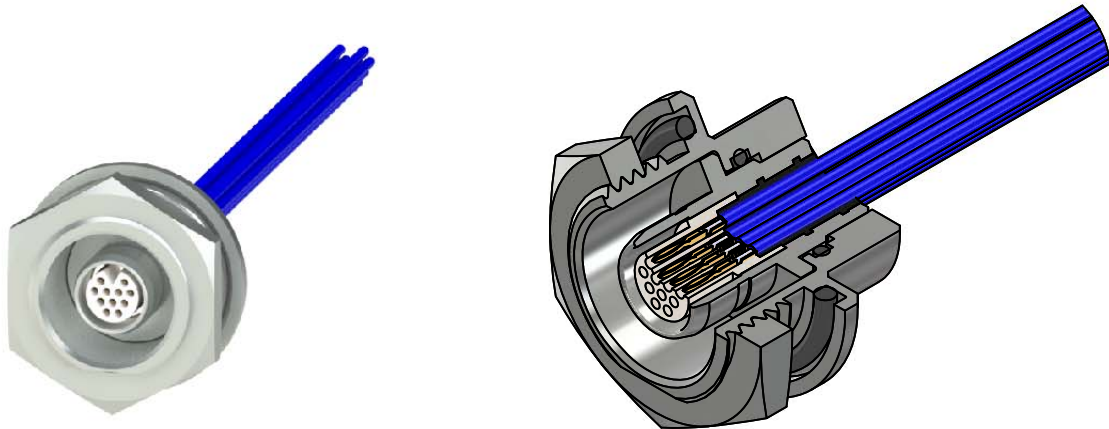


English (IN) Metric (MM)

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

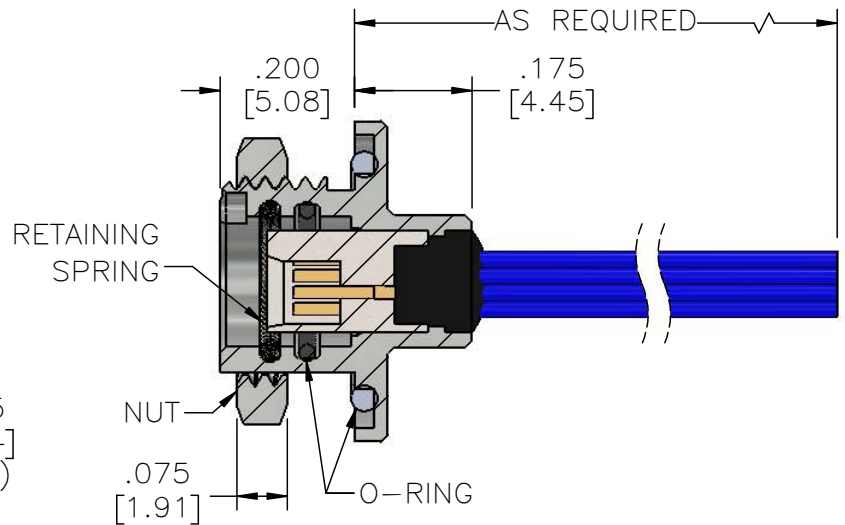
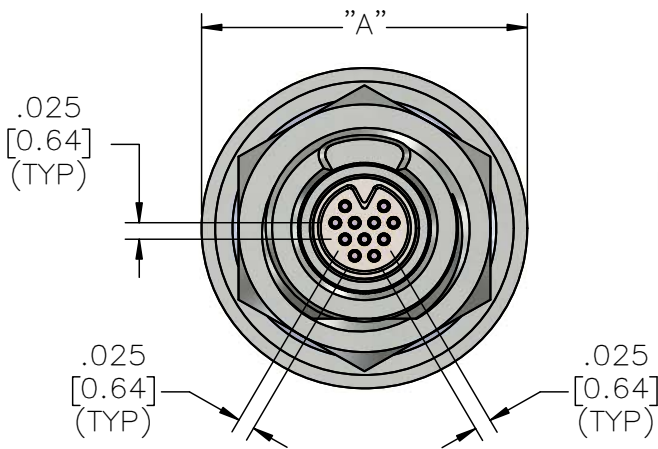
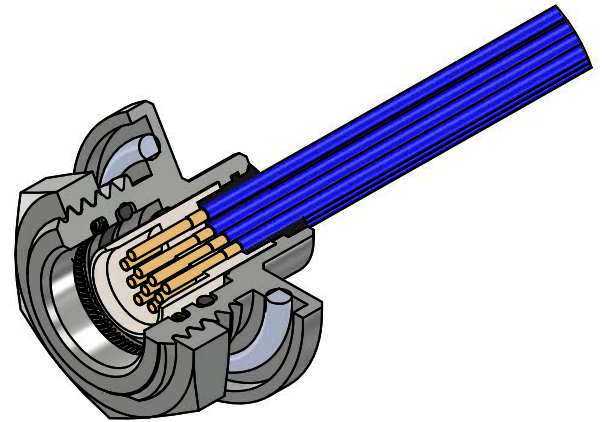


English (IN) Metric (MM)

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

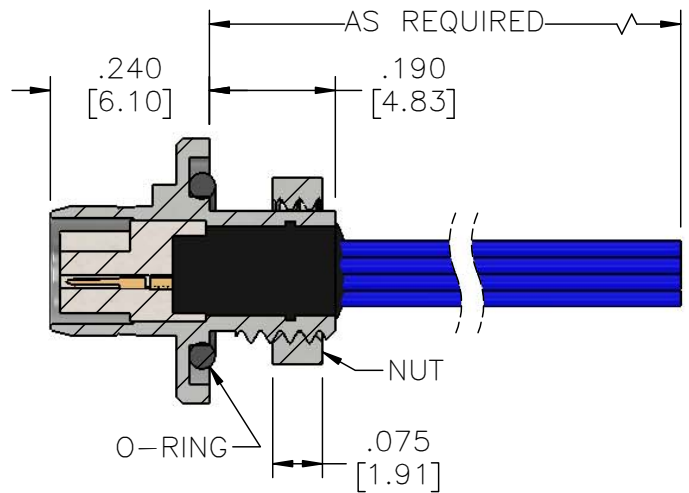
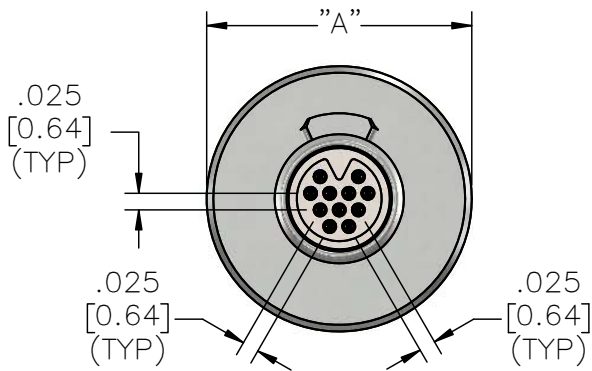
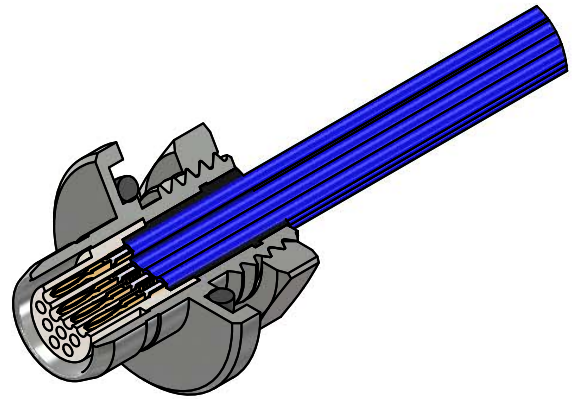


English (IN) Metric (MM)

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



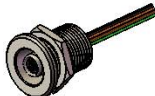














BANP-WD-PP



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 	IP68 	
			OX: Black Oxide Finished Steel 	PP: Protruding Panel Mount (Male Only) 	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

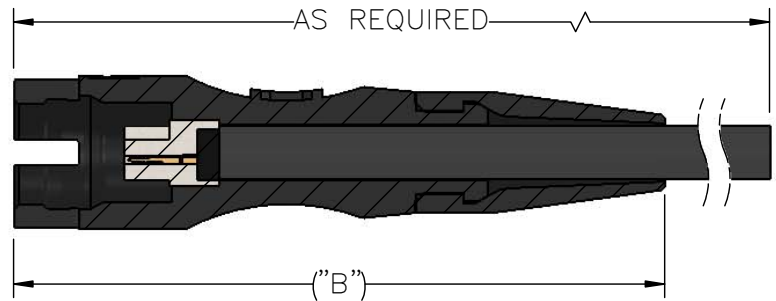
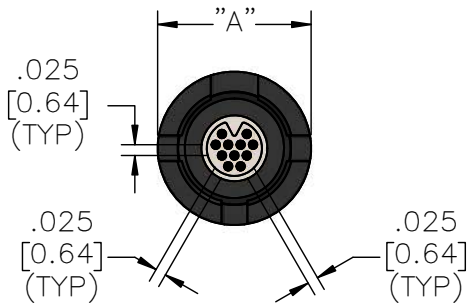
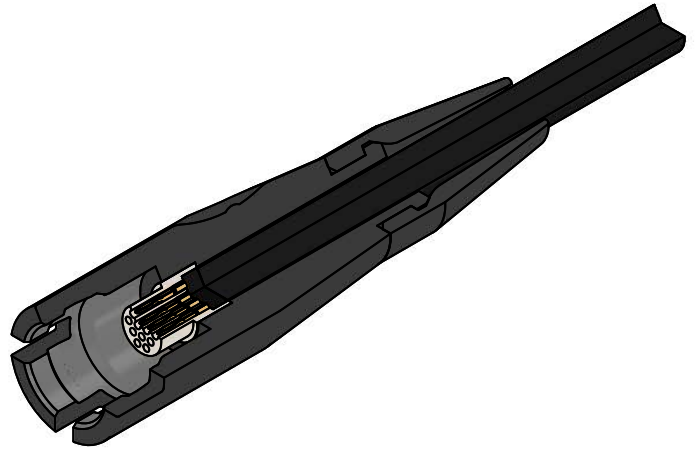
- Contact: _____ Copper Alloy per MIL-DTL-32139
- Contact Finish: _____ Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
- Insulator: _____ Thermoplastic per MIL-M-24519
- O-Ring: _____ BUNA-N
- Cable (Shielded): _____ 32 AWG, (7-40) tinned copper, PFA color coded Black polyurethane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

Shell Specifications

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

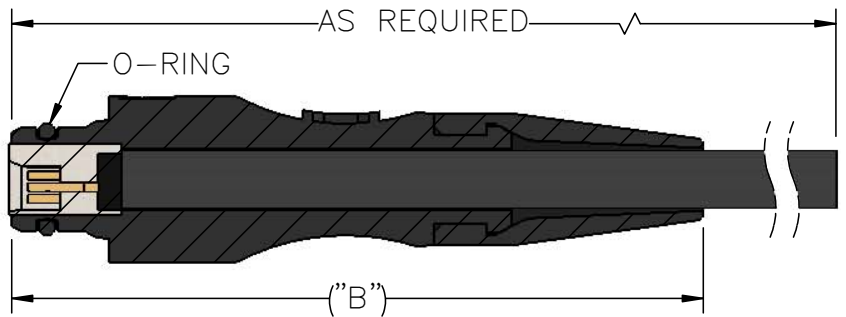
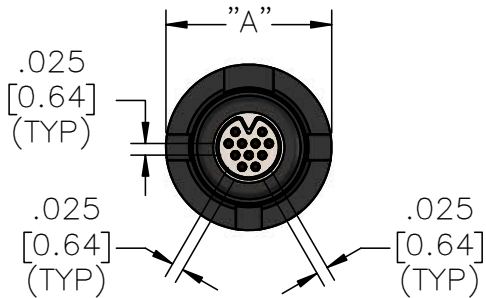
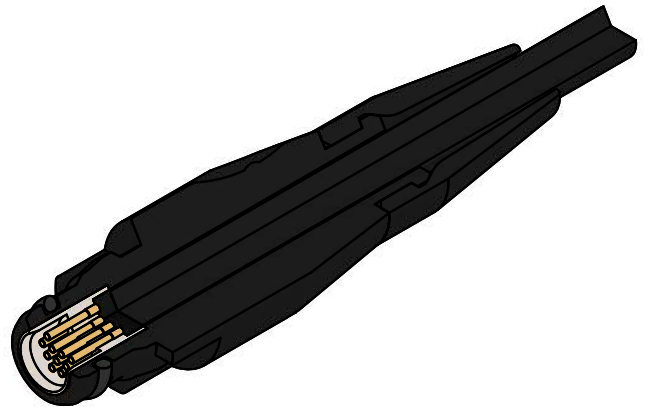
* less resistance to salt spray test.

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



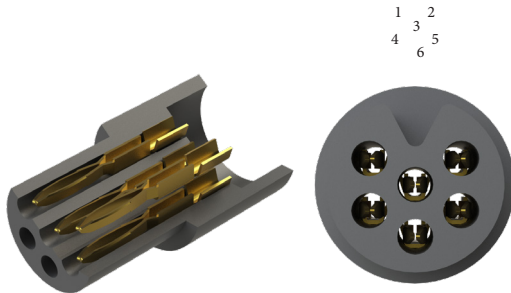
Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79300-001	6	0.325	1.250	8.26	31.75
A79303-001	11	0.356	1.510	9.04	38.35
A79306-001	16	0.384	1.890	9.75	48.01

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

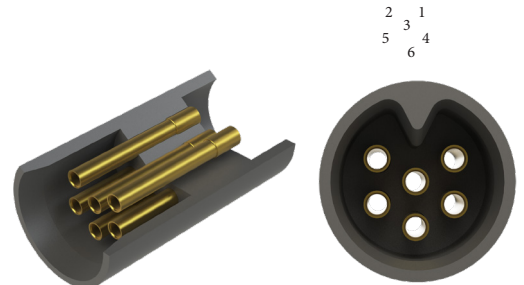


Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79301-001	6	0.330	1.460	8.38	37.08
A79304-001	11	0.360	1.490	9.14	37.85
A79307-001	16	0.380	1.670	9.65	42.42

SureCon 360° IP68

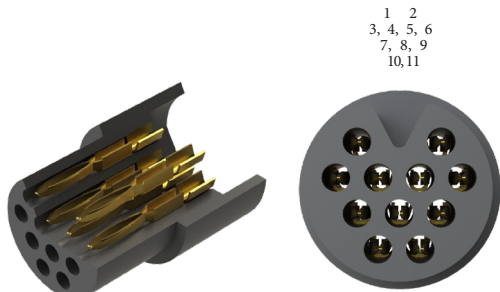


6 Pin Connector

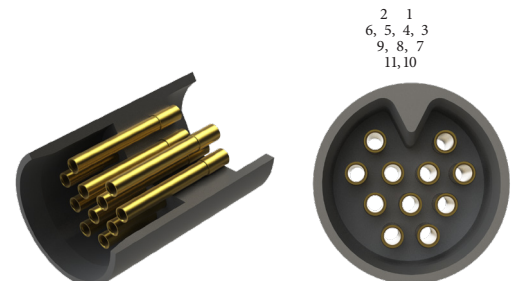


6 Socket Connector

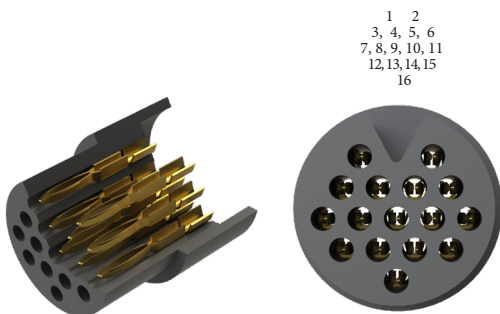
28-Contact PFA Color Code	
Socket #	Color
1	Black
2	Brown
3	Red
4	Orange
5	Yellow
6	Green
7	Blue
8	Violet
9	Gray
10	White
11	White/Black
12	White/Brown
13	White/Red
14	White/Orange
15	White/Yellow
16	White/Green



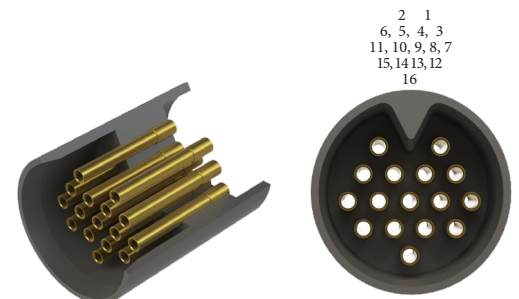
11 Pin Connector



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 11 16	WC Cable	IS Inline Shell (Male)	Standard: Plastic Overmold	OM Overmolded Strain Relief
Male (P - Pin)					
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



Didn't find what you were looking for?

Omnetics provides a wide range of capabilities to design and create connectors that fit your individual needs!



CUSTOM OVERMOLDS

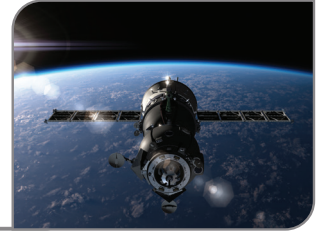
INDUSTRIAL

New connector designs and materials are focused on small size and rugged superiority to meet the extreme reliability demands placed on petroleum electronics, including high temperatures, shock, and vibration.



SPACE

Omnetics Connector Corporation has a rich history of supporting orbital and deep space projects. We offer multiple levels of space screening to complement our highly rugged, durable, and light-weight connectors.



MEDICAL

Medical companies and researchers have relied on Omnetics' high quality Micro and Nano connectors for a variety of challenging applications. Omnetics is capable of building samples and prototypes for initial test, biocompatibility, and FDA approval, in addition to operating a 10,000 clean room system as an added value service.



AVIATION

Reliable and durable connectors are needed to keep planes, helicopters, and unmanned aerial systems running smoothly and safely. Omnetics helps aviation applications deliver information and power in small and light-weight form factors.



DEFENSE

Military applications rely on Omnetics connectors to deliver information safely and reliably in the most demanding and ruggedized environments. Omnetics connectors can help reduce size and weight while meeting and exceeding military standards.



ROBOTICS

As the robotics industry matures and evolves, Omnetics' reliable, durable, and light-weight connectors are becoming more important for delivering data and electrical signals to robotic systems.



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OMNETICS

CONNECTOR CORPORATION