

NANO 360[®] Metal

Nano Circular Twist-Lock

Optional IP68 Rating



Electrical-Mechanical Specifications

- Performance: _____ Product family tested to and passed or exceeded the performance specifications of Table VIII of MIL-DTL-32139
- Contact Resistance: _____ 71 Milliohm Max (71mV Drop Max) @ 1.0 Amps per MIL-DTL-32139
- Current Rating: _____ 1 Amp per MIL-DTL-32139
- Operating Temperature: _____ -55°C to 125°C (200°C with High Temp Epoxy)
IP68 overmold -55°C to 85°C
- Durability: _____ >2000 mating cycles min
- Insulation Resistance: _____ 5000 megohms @ 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

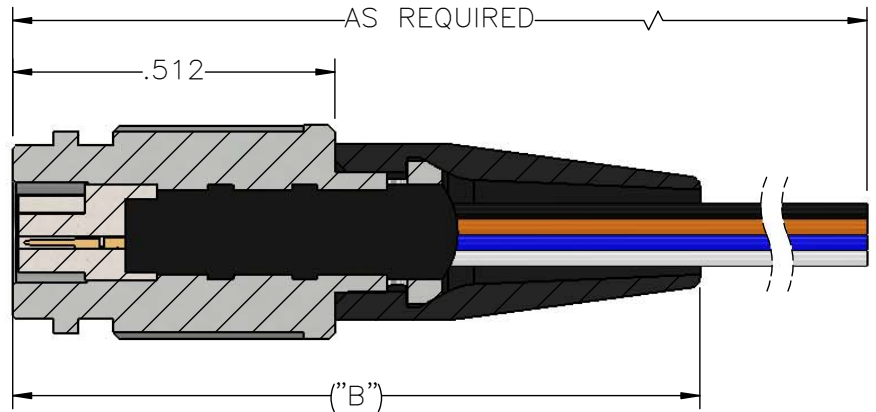
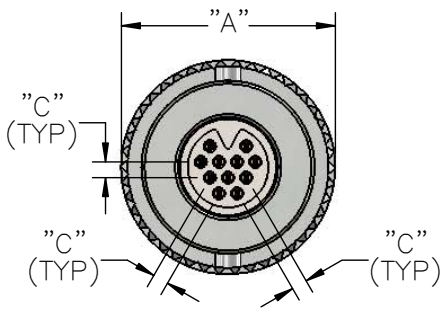
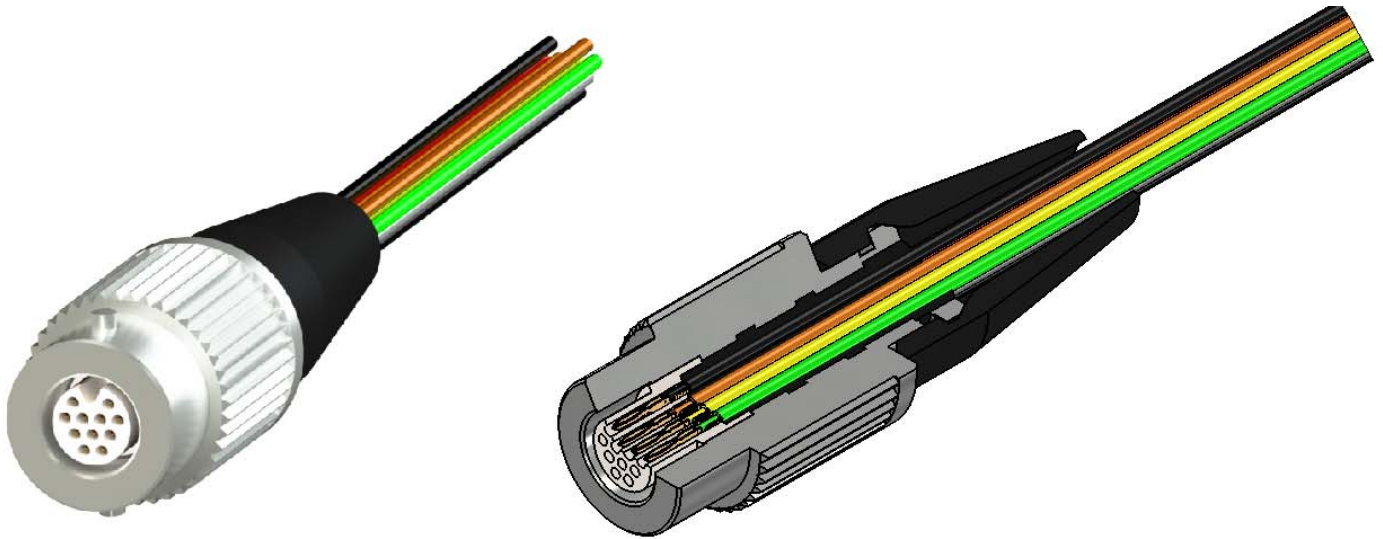
Shell Options

- 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

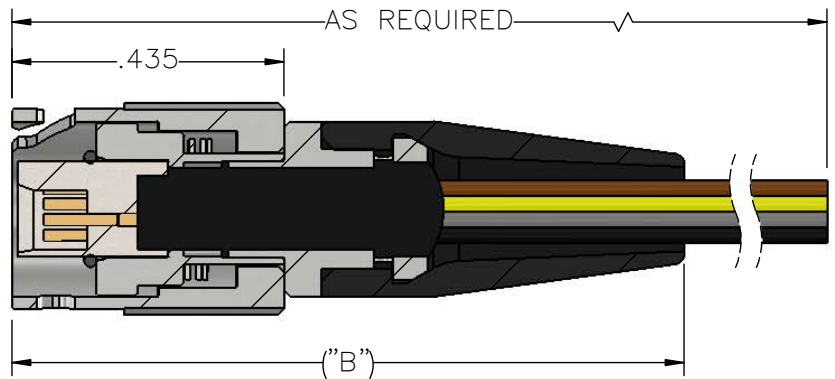
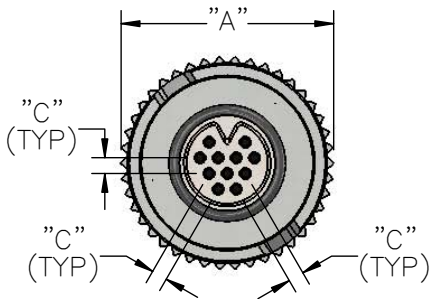
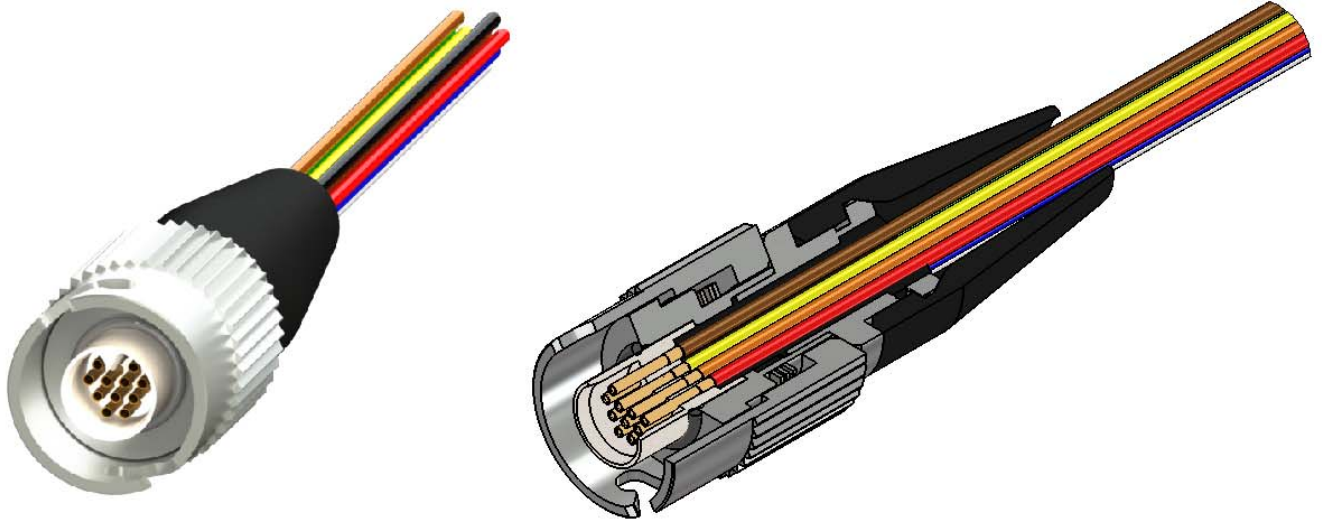
TNCP-WD-IS-SR



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

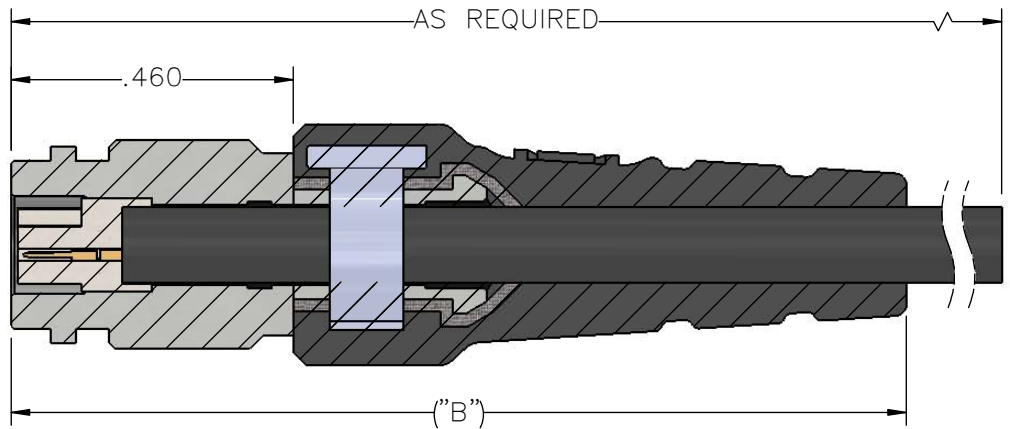
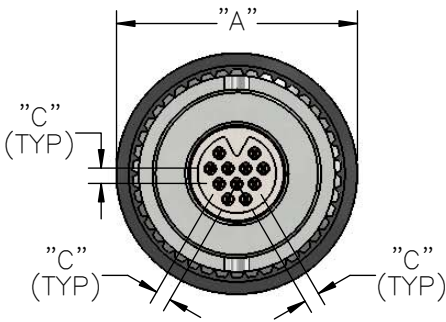
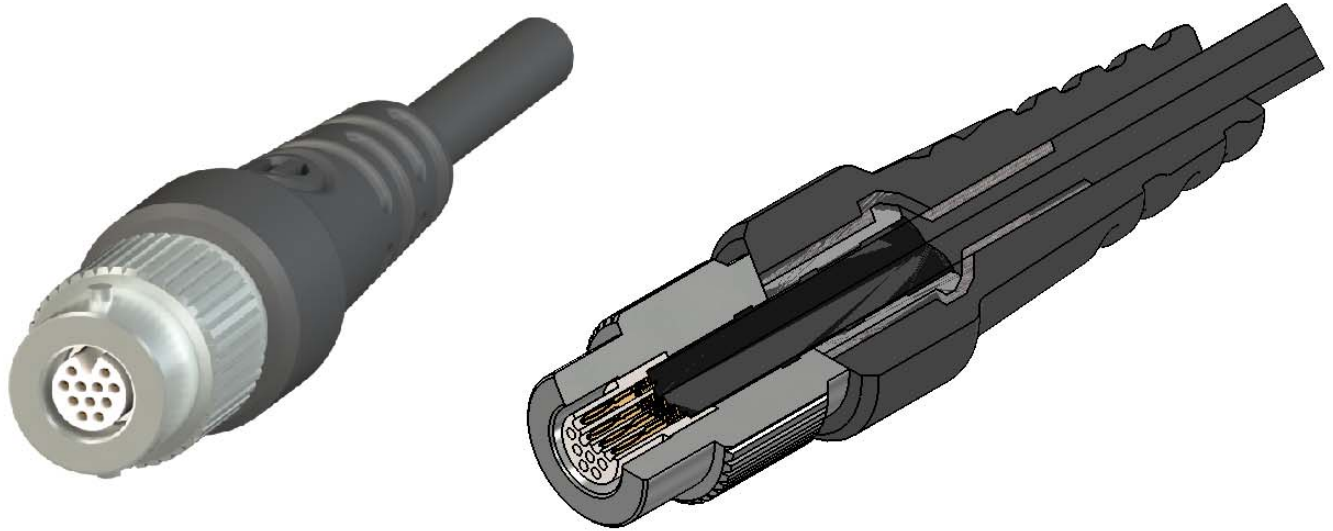
TNCS-WD-IS-SR



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

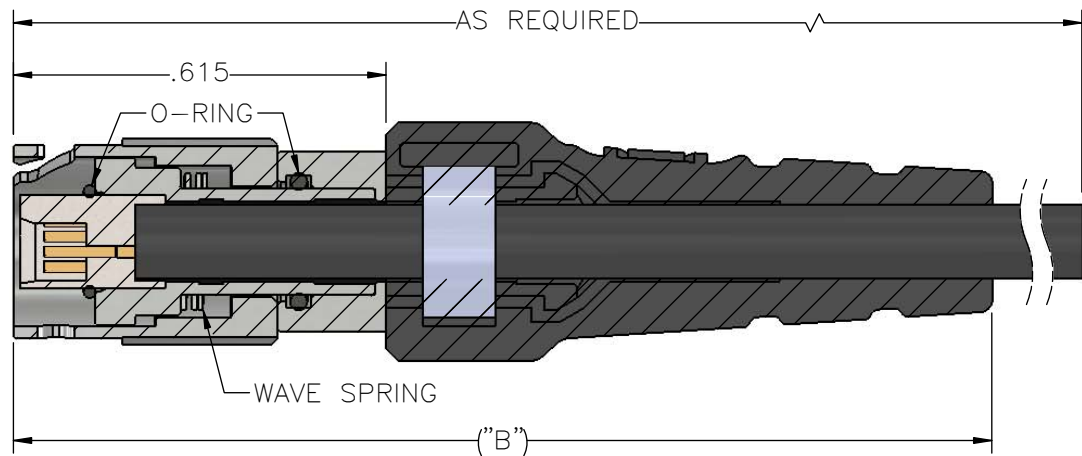
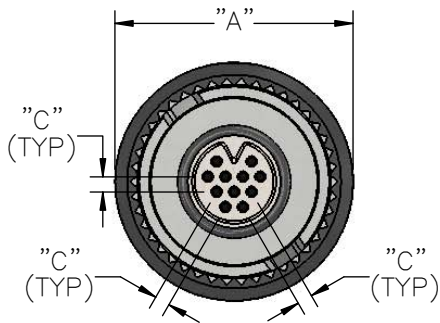
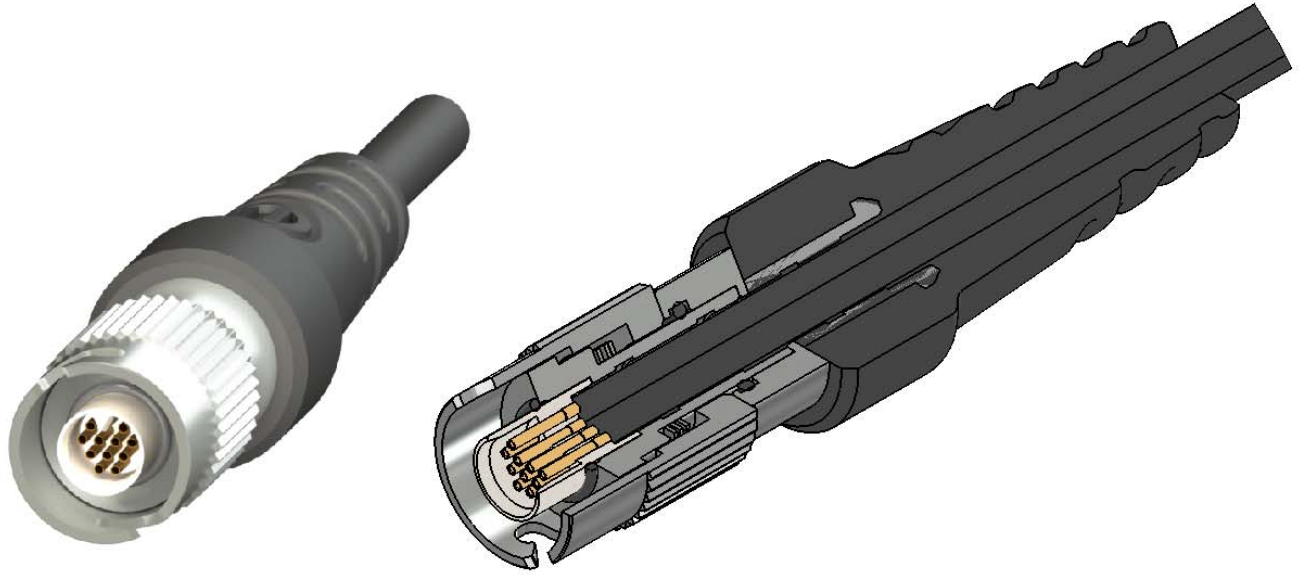
TNCP-WC-OM-IS-IP68



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	1.54		10.67	39.12	
A79337-001	28	0.46	1.60		11.68	40.64	
A79494-001	39	0.55	1.64	0.030	13.97	41.66	0.76





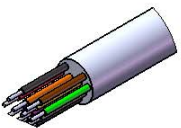







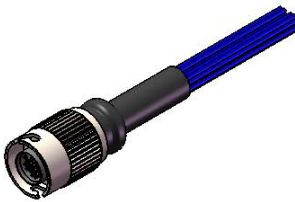

Metal - Socket - Twist-Lock - Cabled - Overmold - Inline - IP68

TNCS-WC-OM-IS-IP68



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

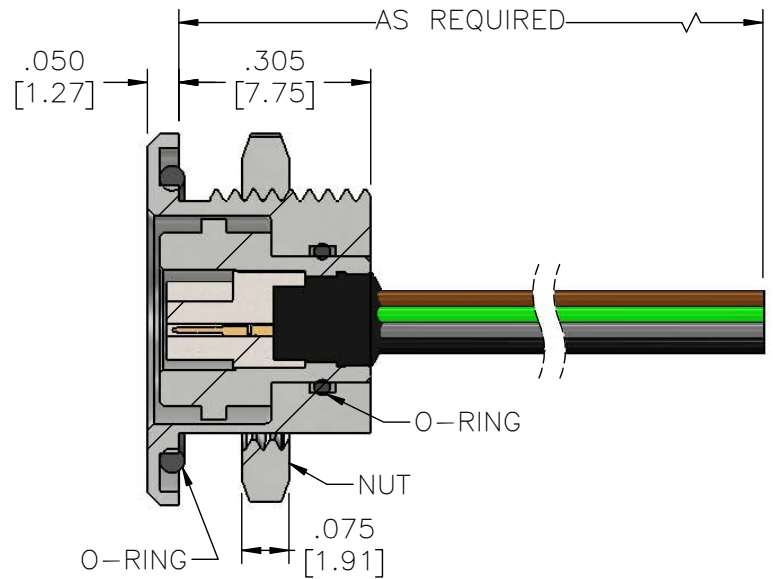
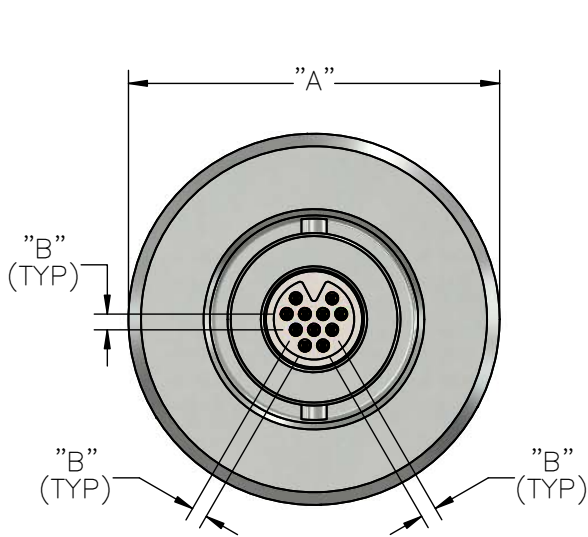
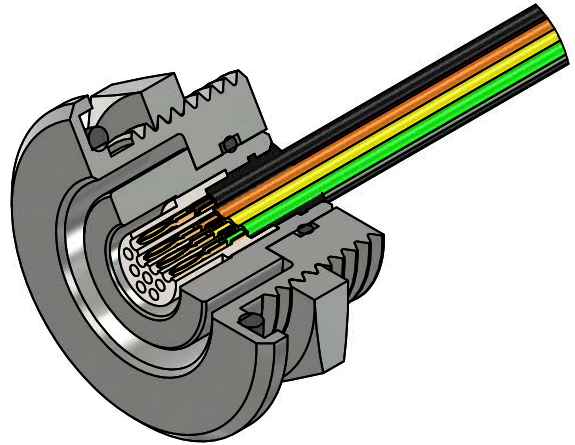
Shell Options

- 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

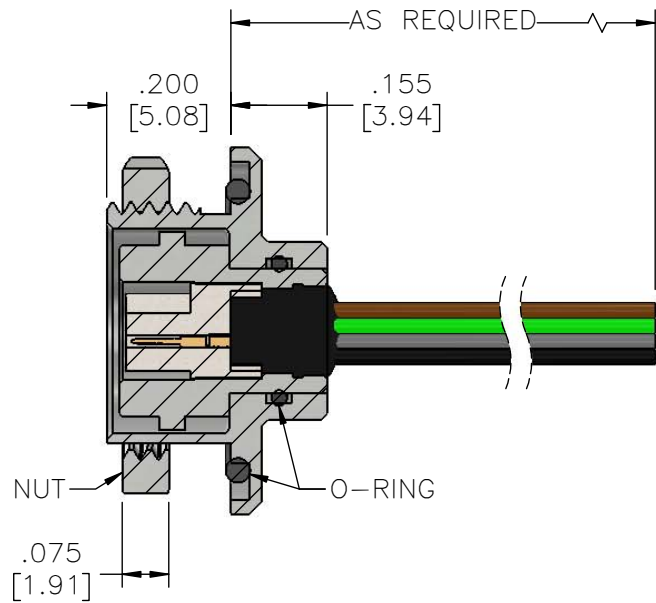
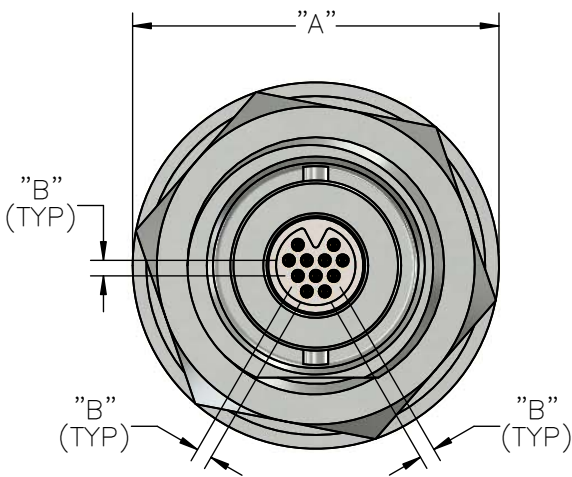
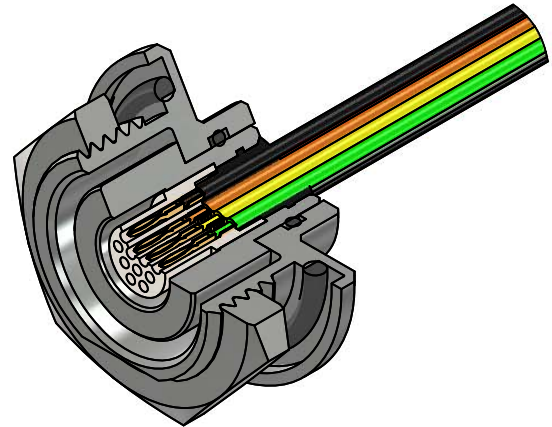
TNCP-WD-FP-IP68



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

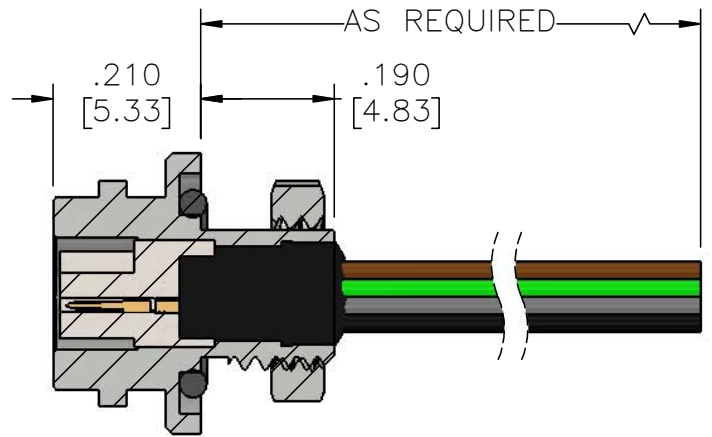
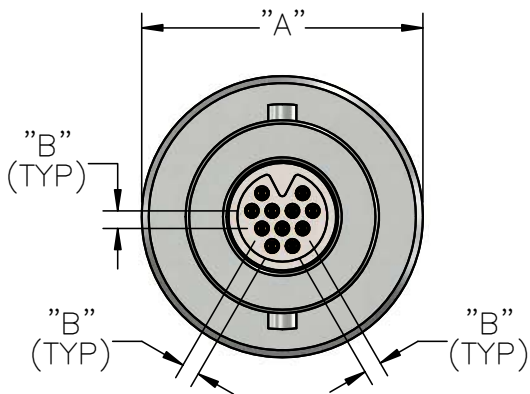
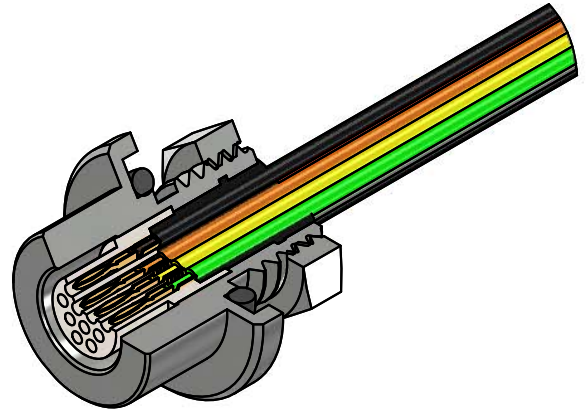
TNCP-WD-RP-IP68



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





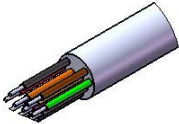








Metal - Pin - Twist-Lock - Wired - Protruding Panel - IP68

TNCP-WD-PP-IP68



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

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

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

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

