

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

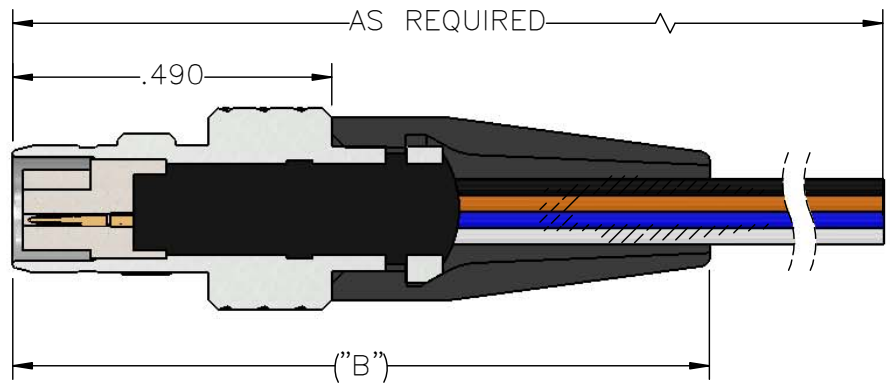
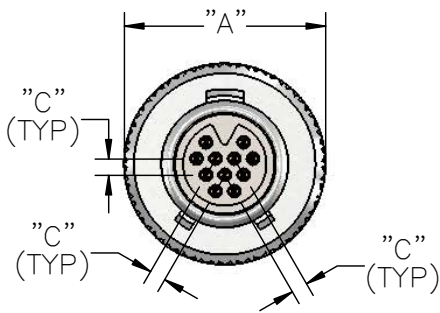
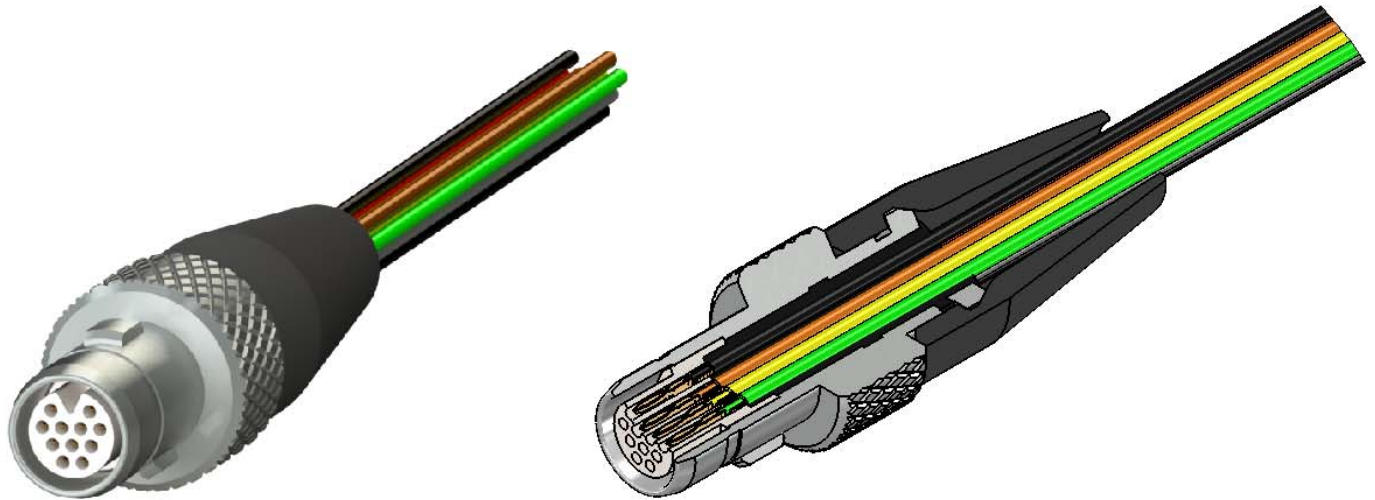
Shell Options

- 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

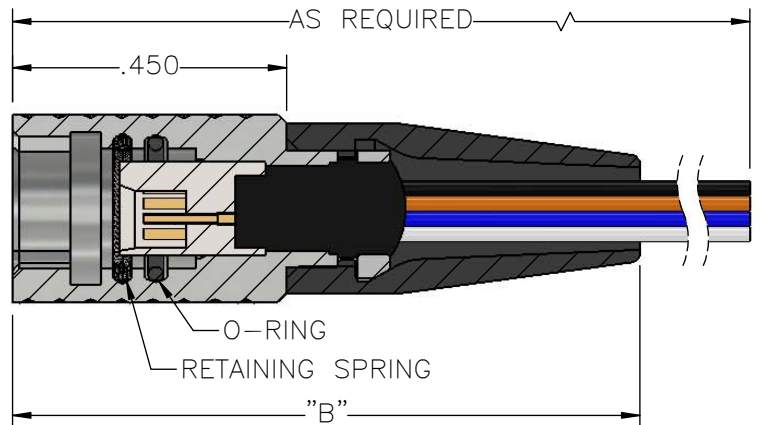
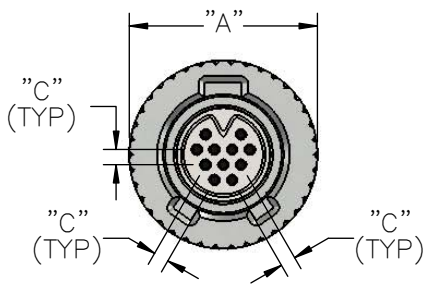
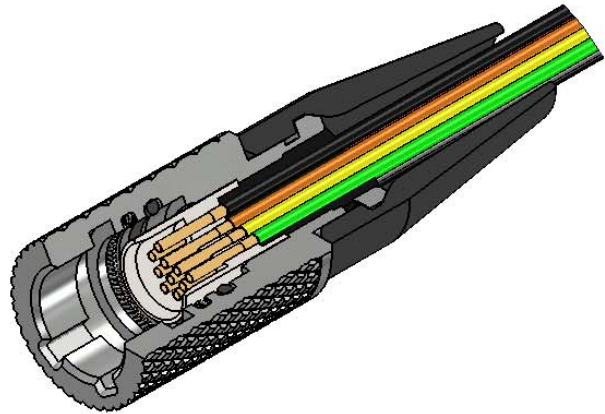
KBNP-WD-IS-SR



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

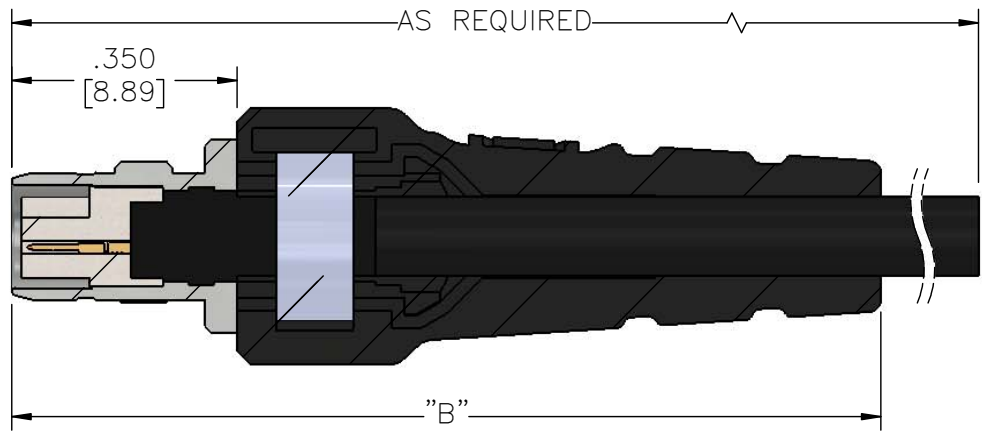
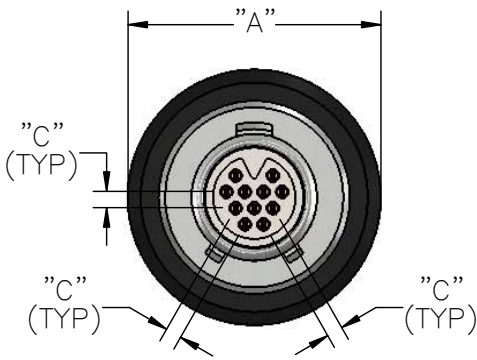
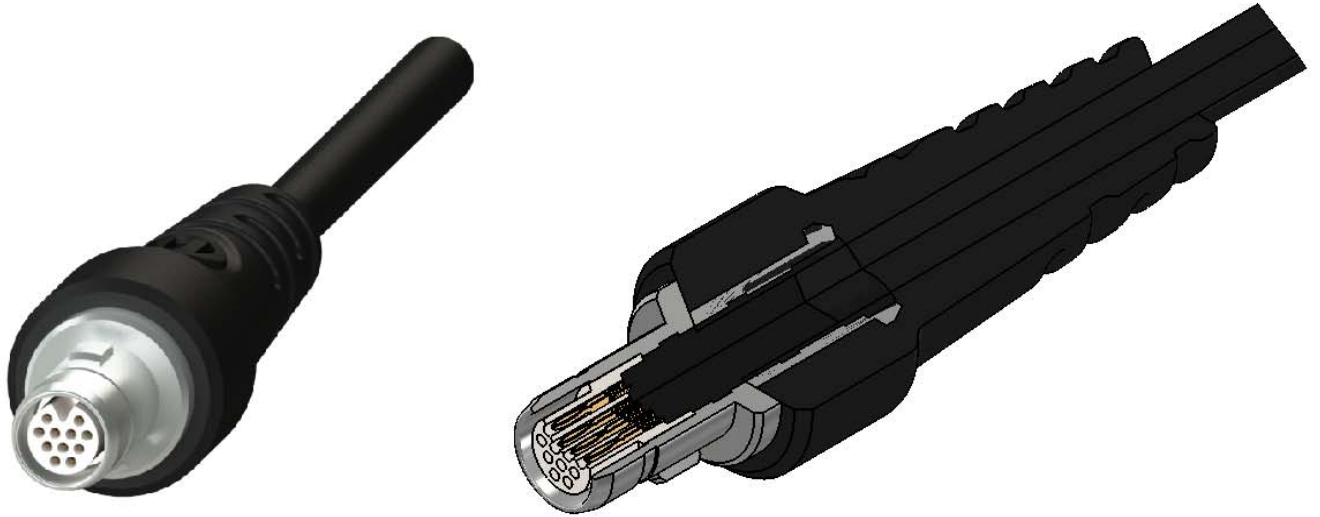
KBNS-WD-IS-SR



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

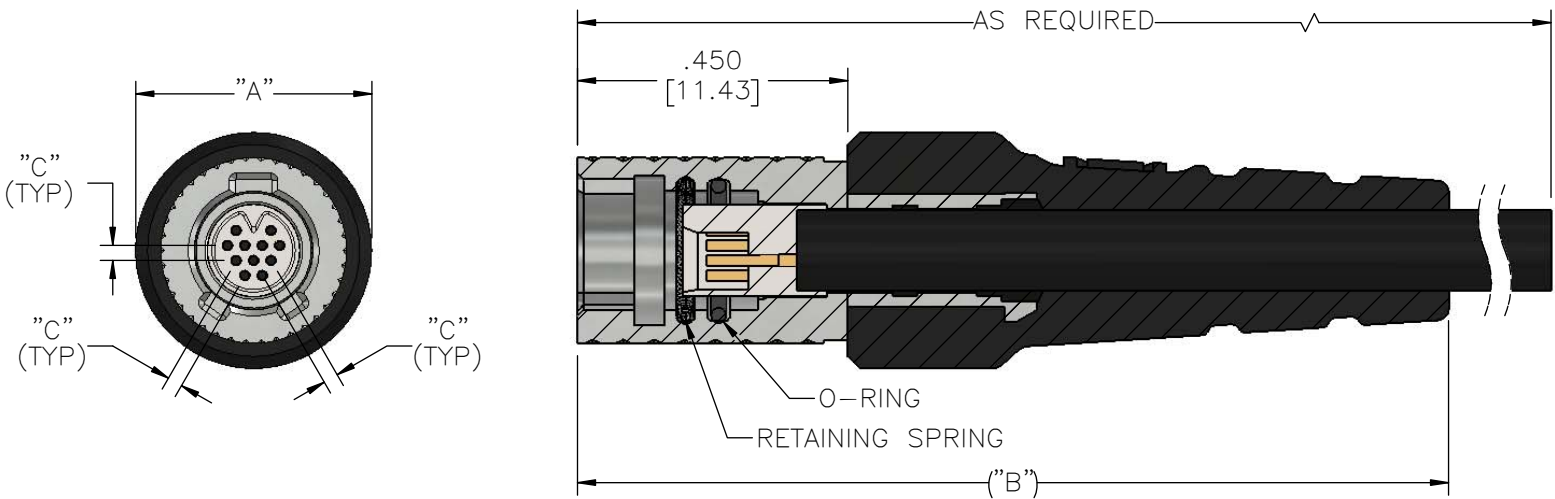
KBNP-WC-OM-IS



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

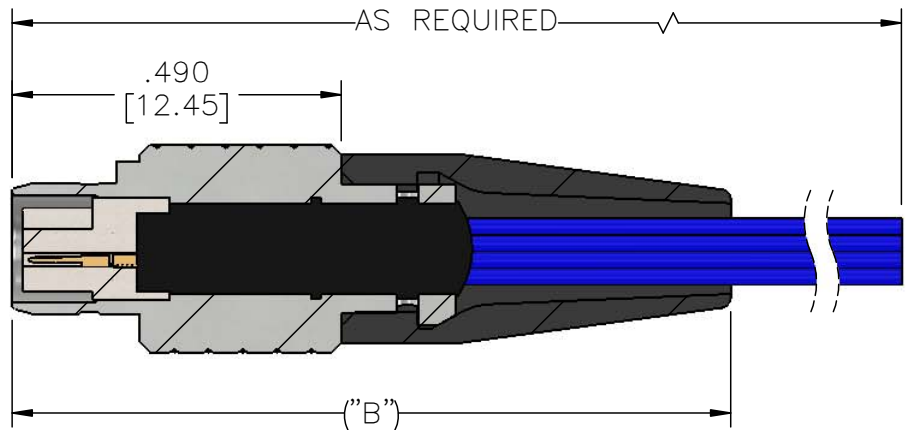
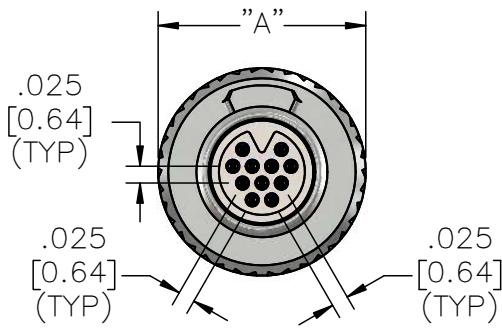
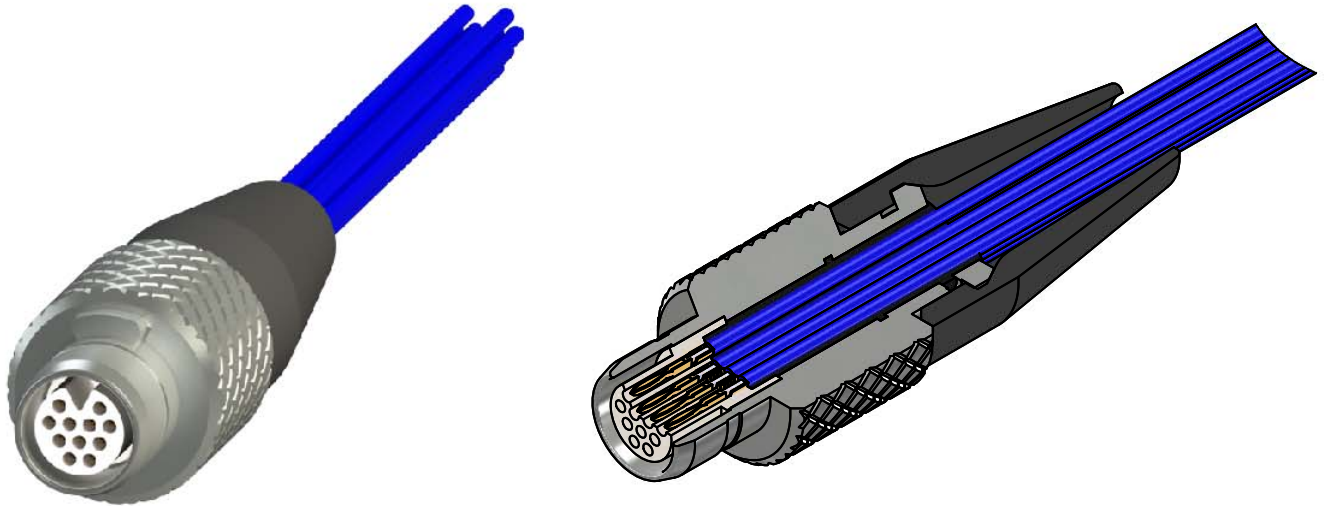
KBNS-WC-OM-IS



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		0.76

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

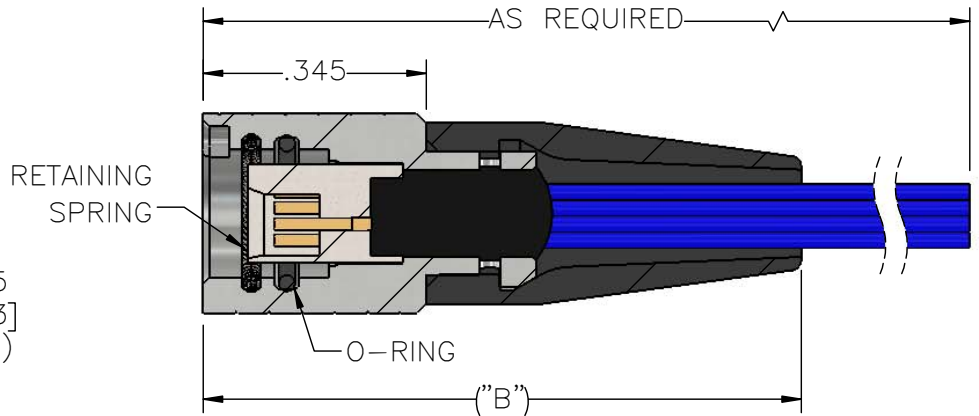
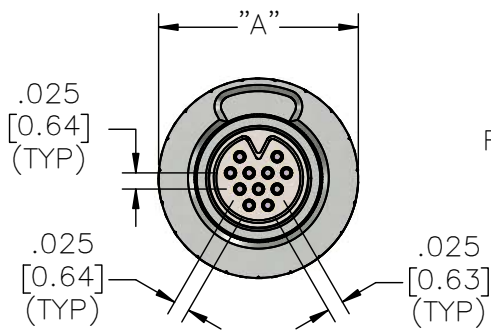
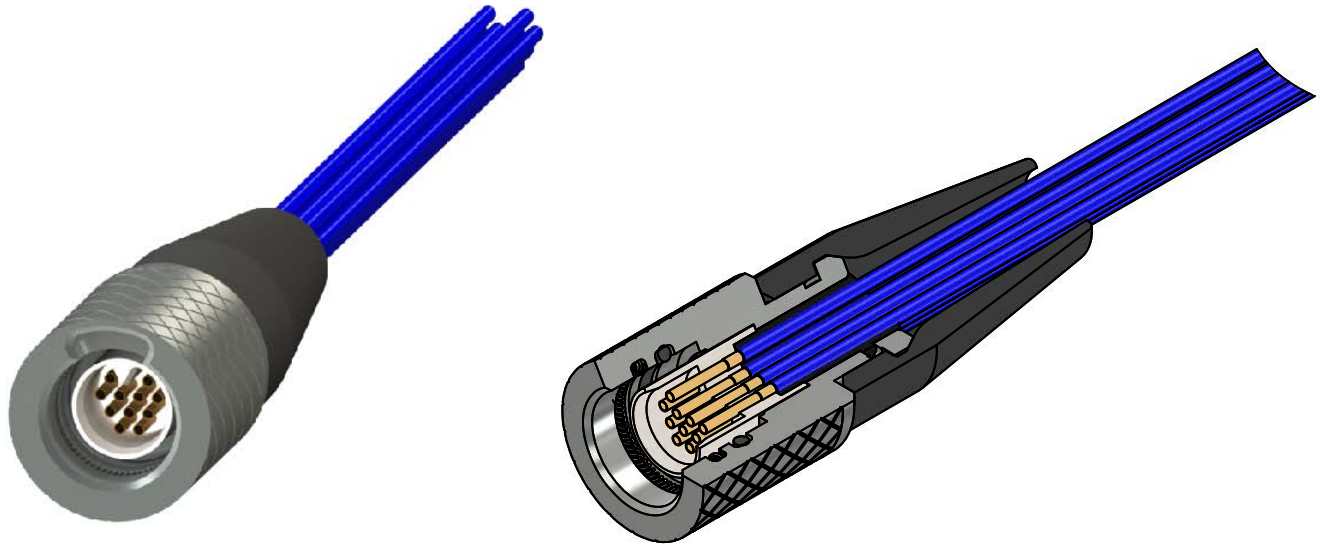
BANP-WD-IS-SR



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

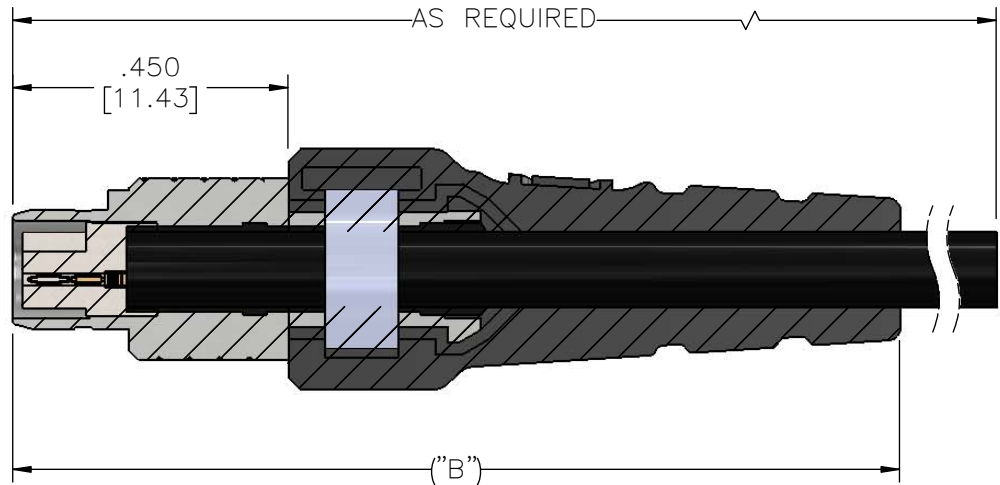
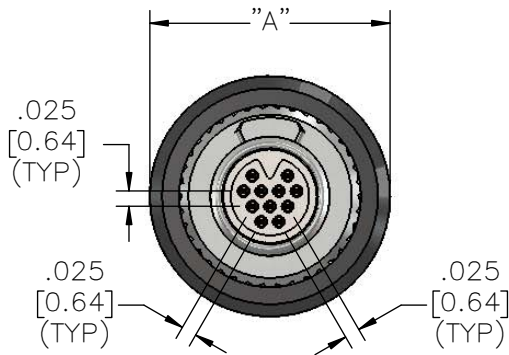
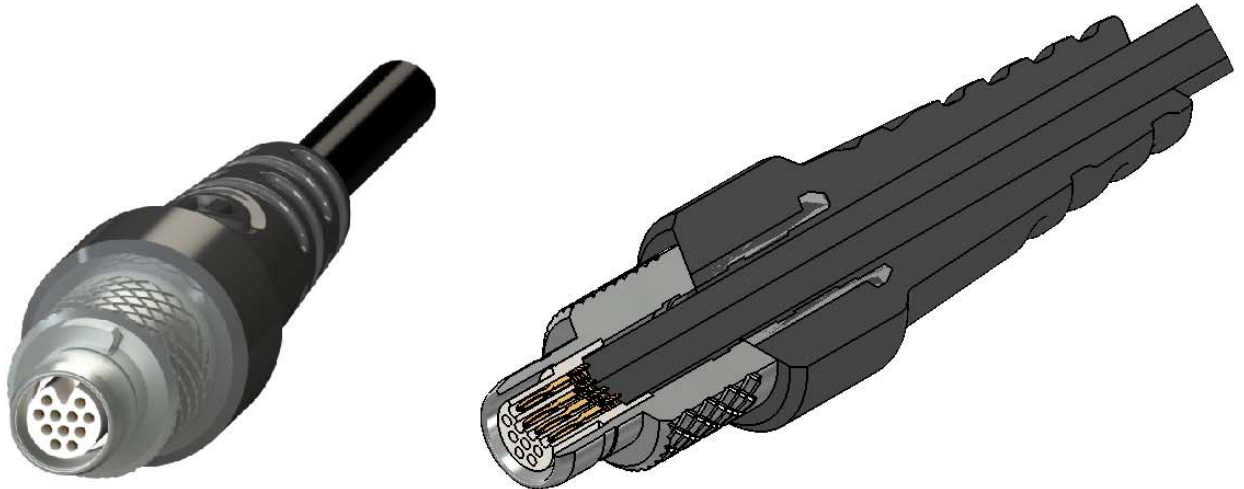
BANS-WD-IS-SR



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

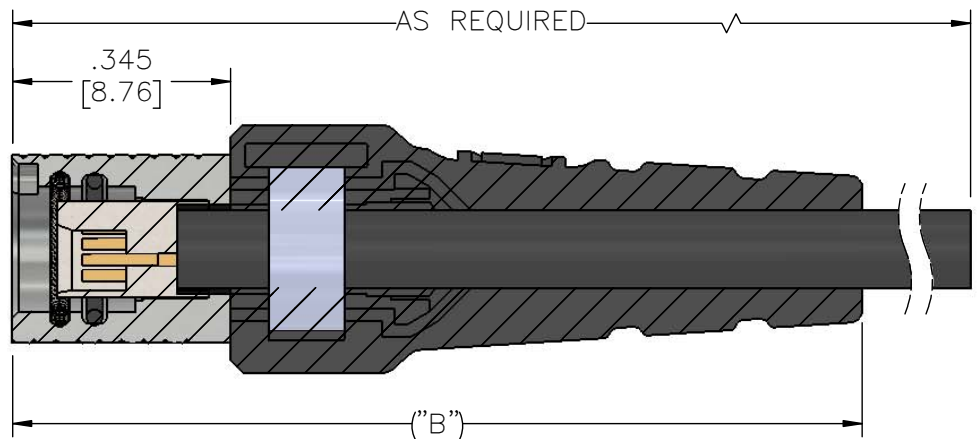
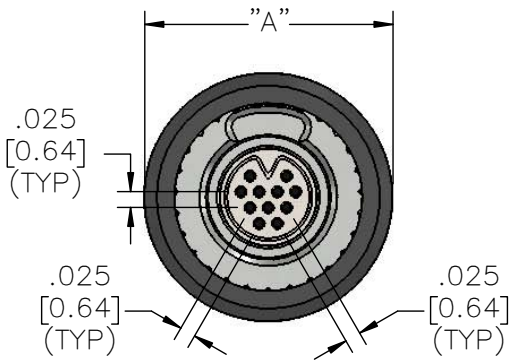
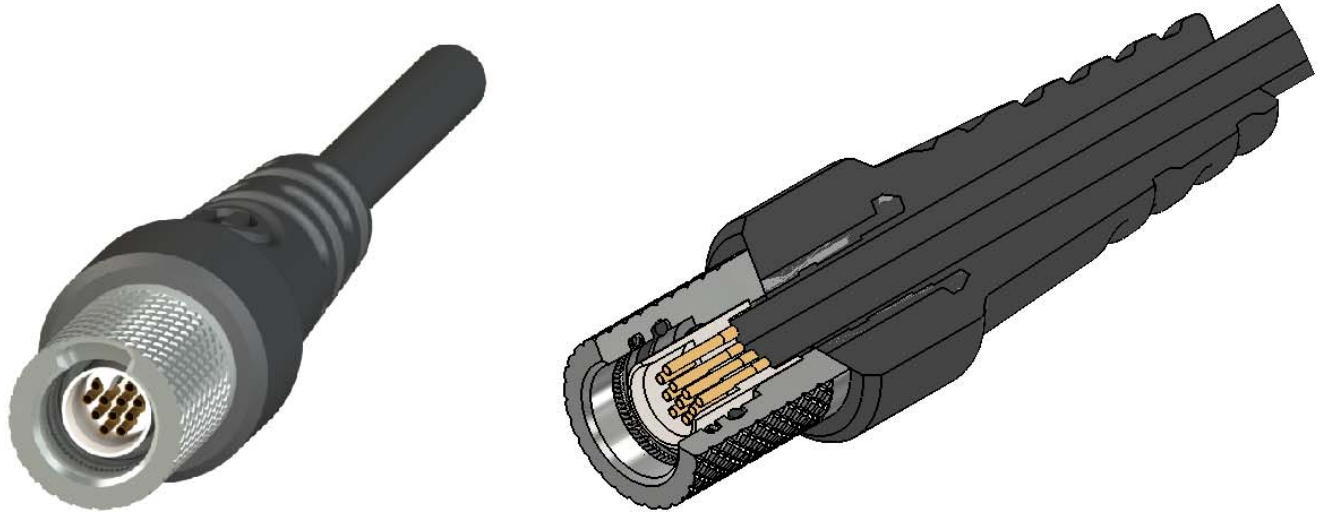
Metal - Pin - Break Away - Cabled - Overmold - Inline

BANP-WC-OM-IS










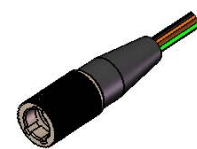









Part #	Contacts	English (IN)		Metric (MM)	
		A	B	A	B
A79335-001	6	0.36	1.450	9.14	36.83
A79331-001	11	0.39		9.91	
A79327-001	16	0.42	1.530	10.67	38.86
A79323-001	28	0.46	1.630	11.68	41.40

**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 11 16	WD: Discrete Lead Wire	Standard N: Nickel Plated Brass	IS: Inline Shell Female	C Color Coded
BAN (Standard Break Away)	28 39				
Male (P - Pin)		WC: Cable	Non-Standard Options BN: Black Nickel Plated Brass	Male	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" 32 AWG Max	P: Passivated Stainless Steel	SR: Inline Shell w/ Strain Relief	OR O-Ring
					
			OX: Black Oxide Finished Steel	ST: Inline Shell w/ Shrink Tube	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

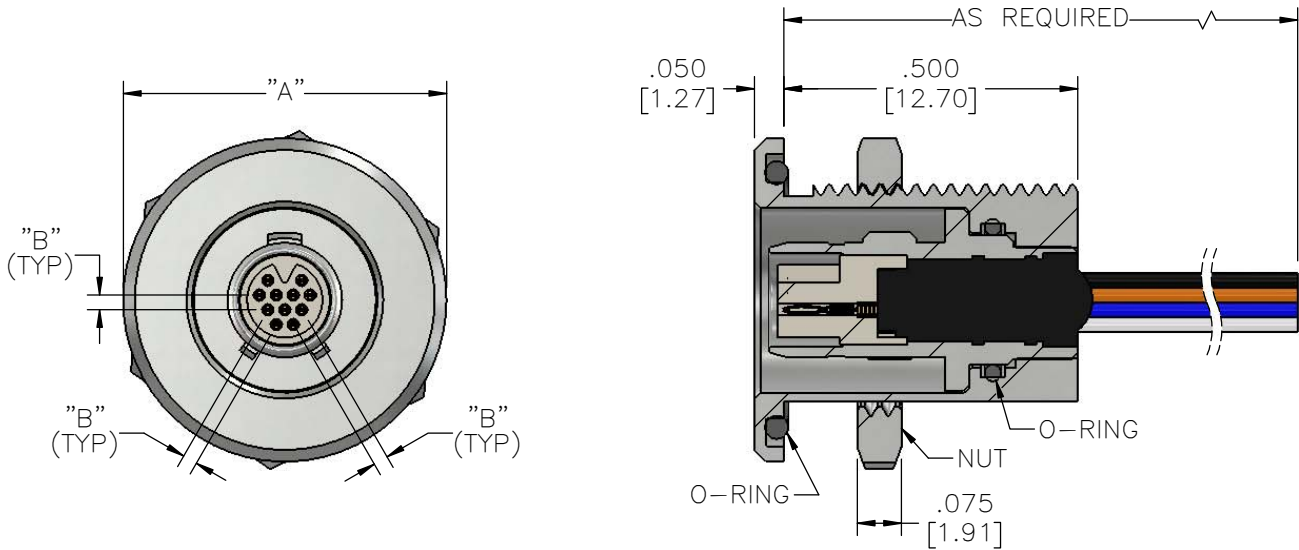
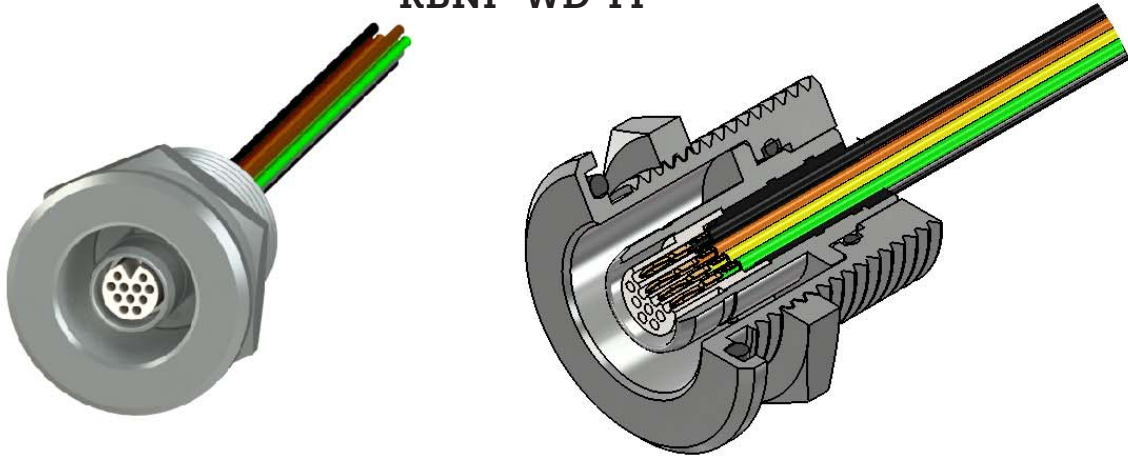
Shell Options

- 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

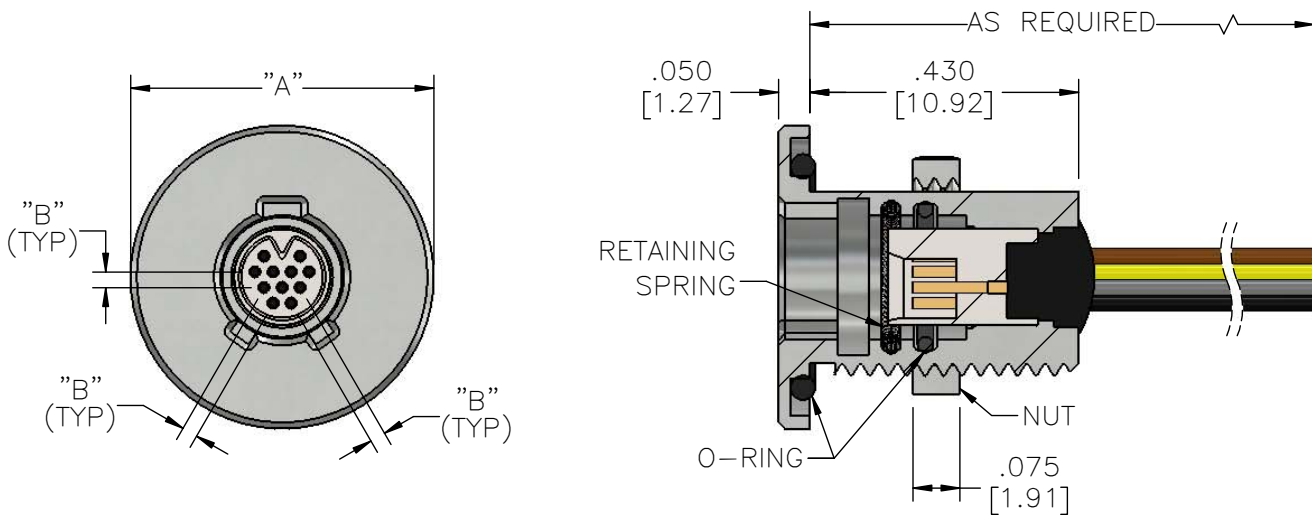
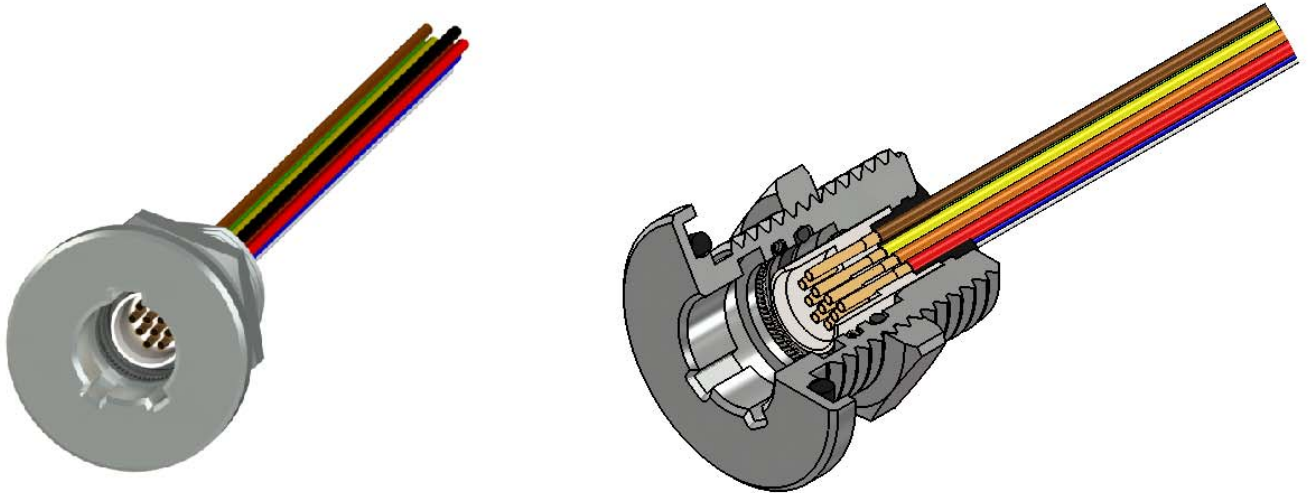
KBNP-WD-FP



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

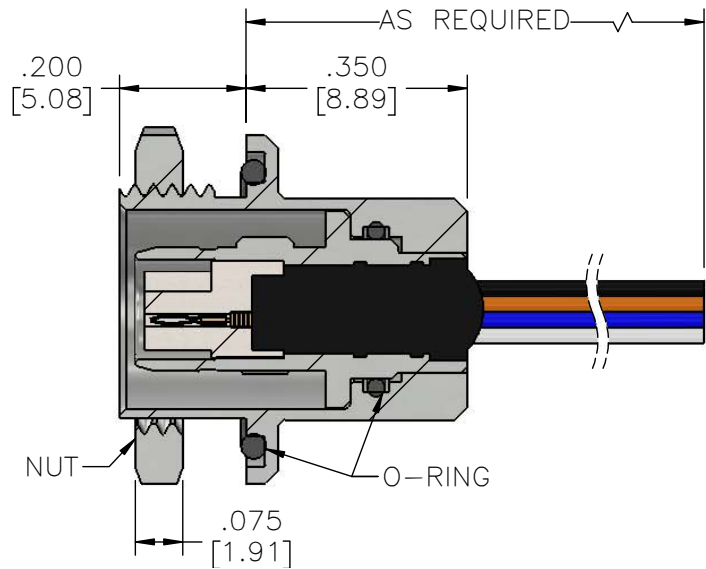
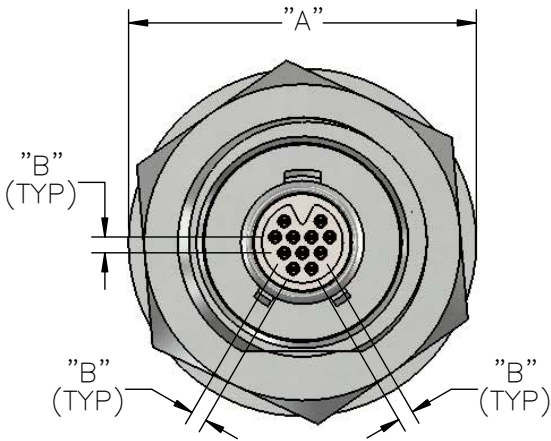
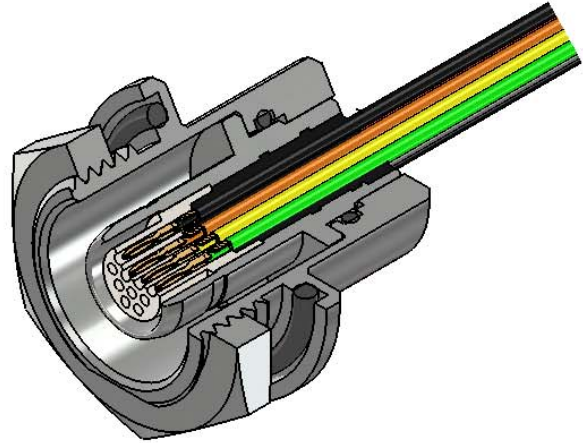
KBNS-WC/WD-FP



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

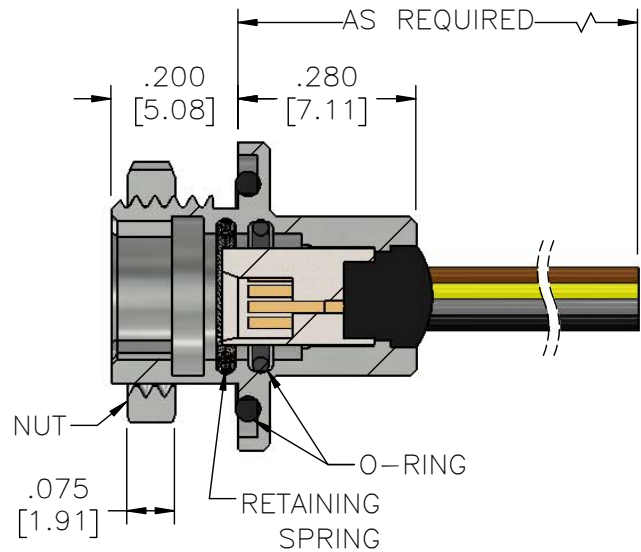
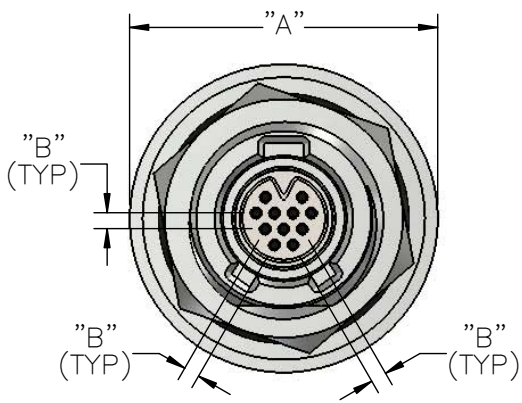
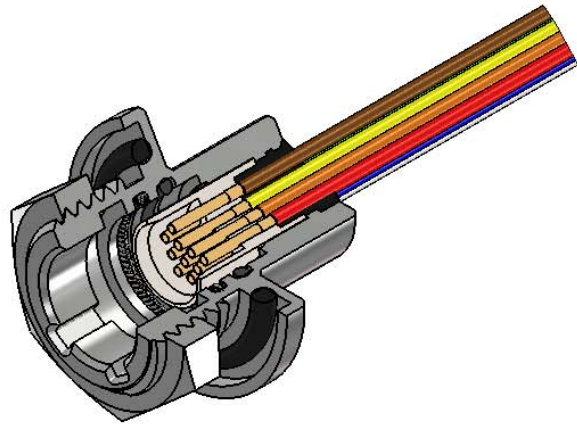
KBNP-WD-RP-IP68



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

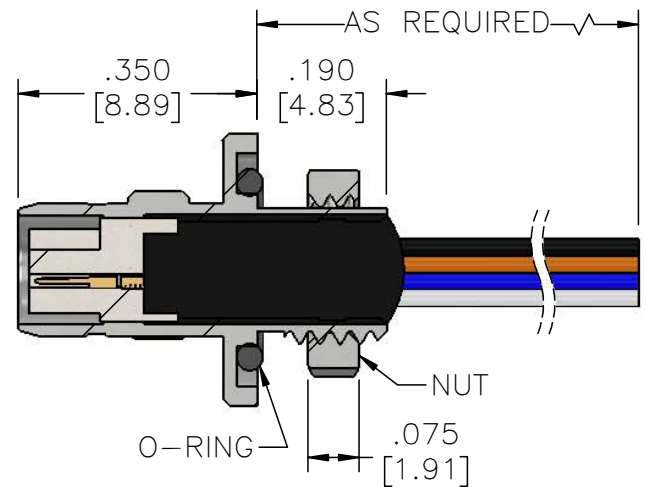
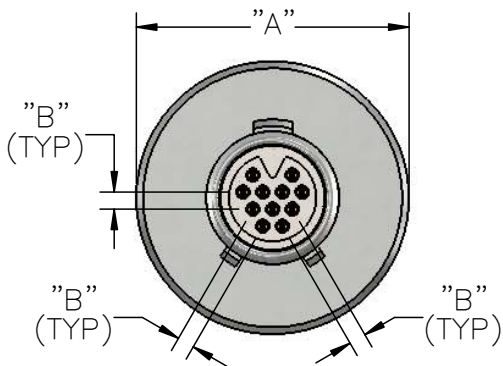
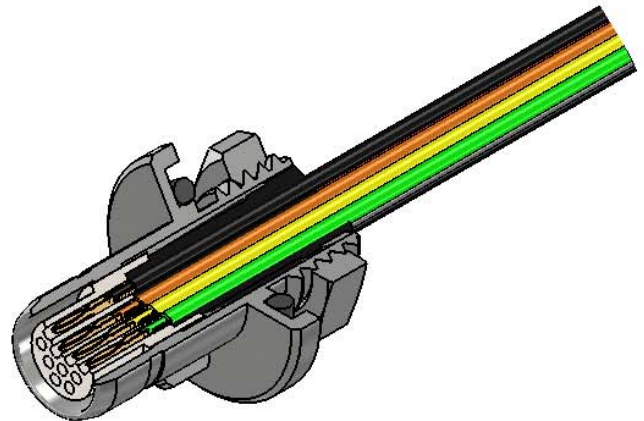
KBNS-WC/WD-RP



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

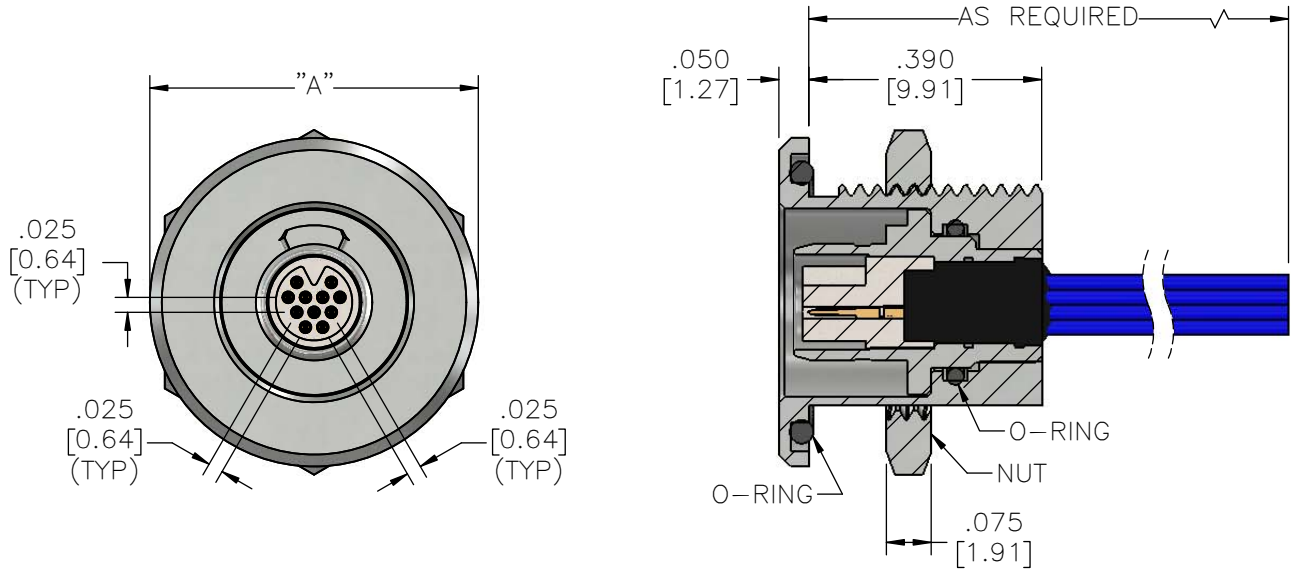
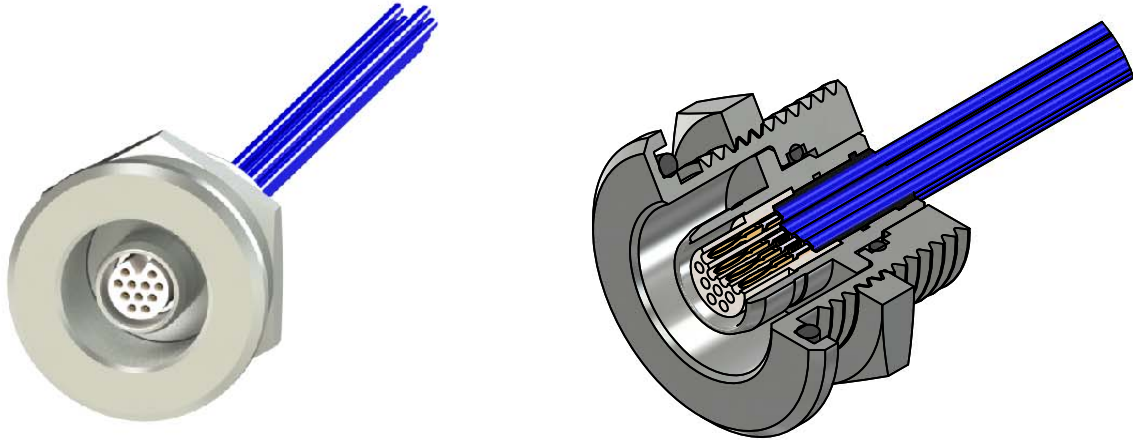
KBNP-WD-PP-IP68



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

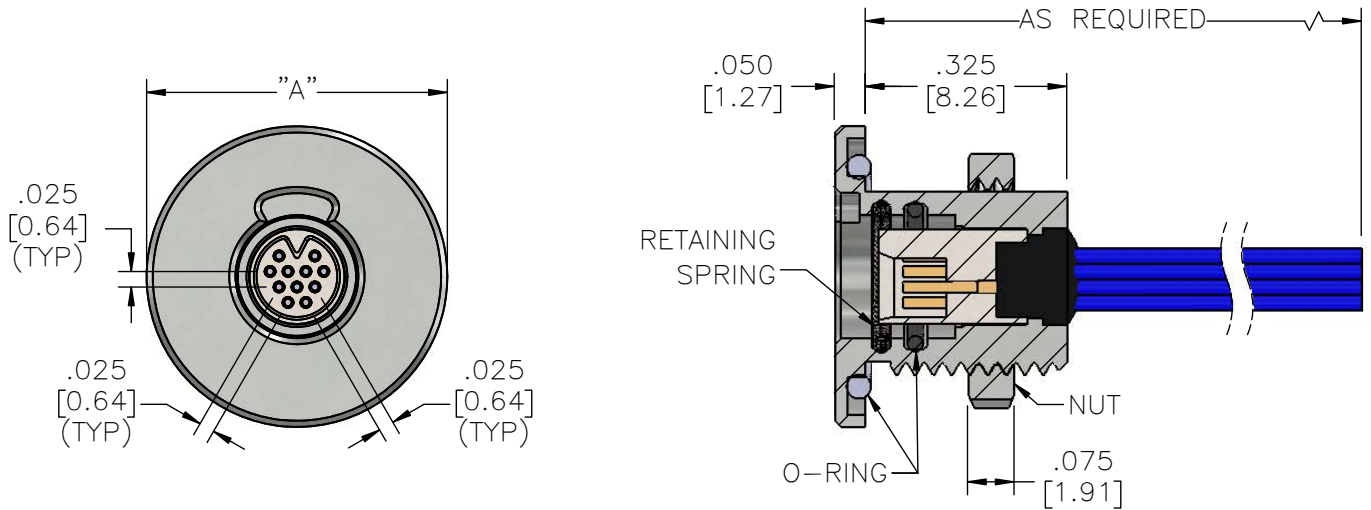
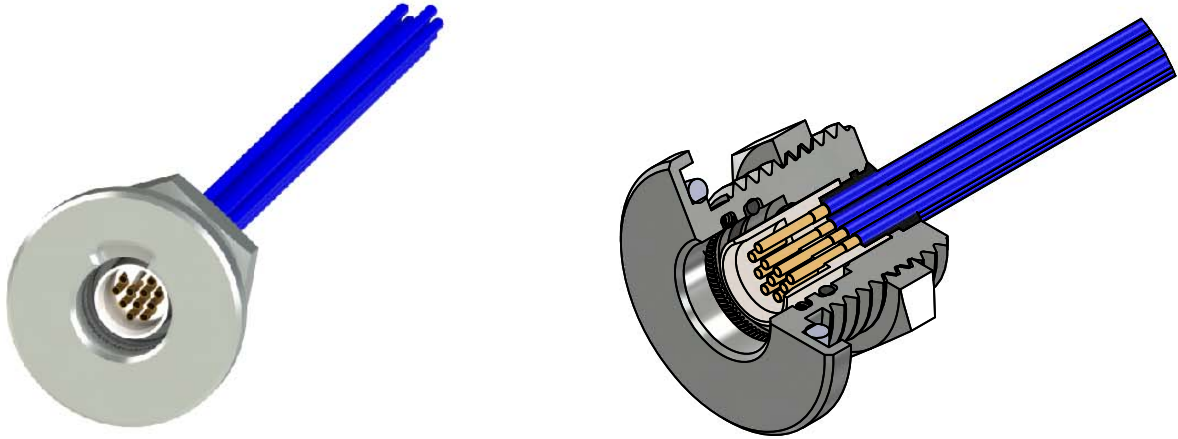
BANP-WD-FP



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		13.97	
A79226-001	16	0.590		14.99	
A79233-001	28	0.515	0.325	13.08	8.26

Metal - Socket - Break Away - Wired - Front Panel

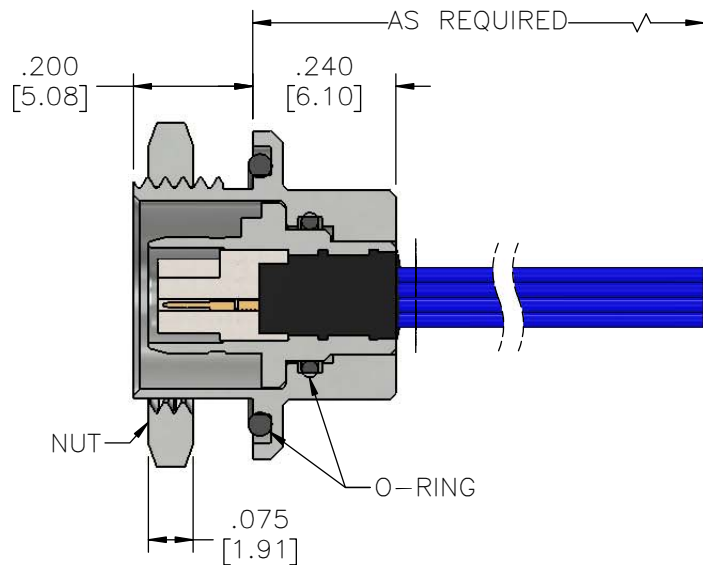
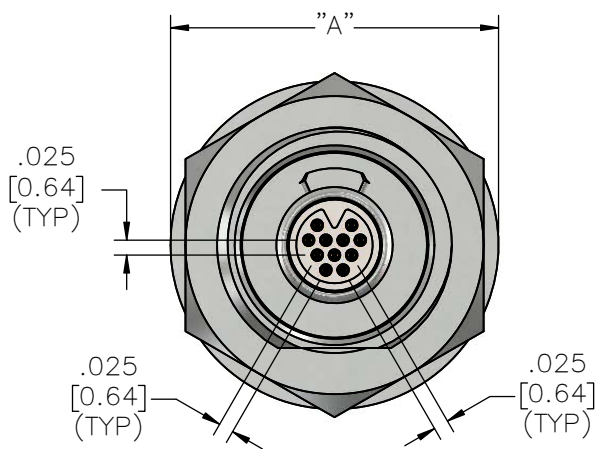
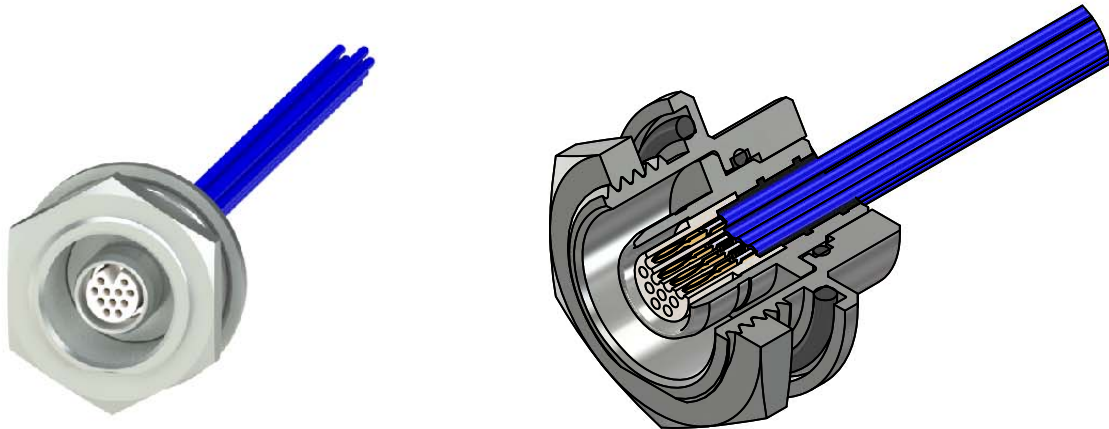
BANS-WD-FP



Part #	Contacts	English (IN)	Metric (MM)
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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

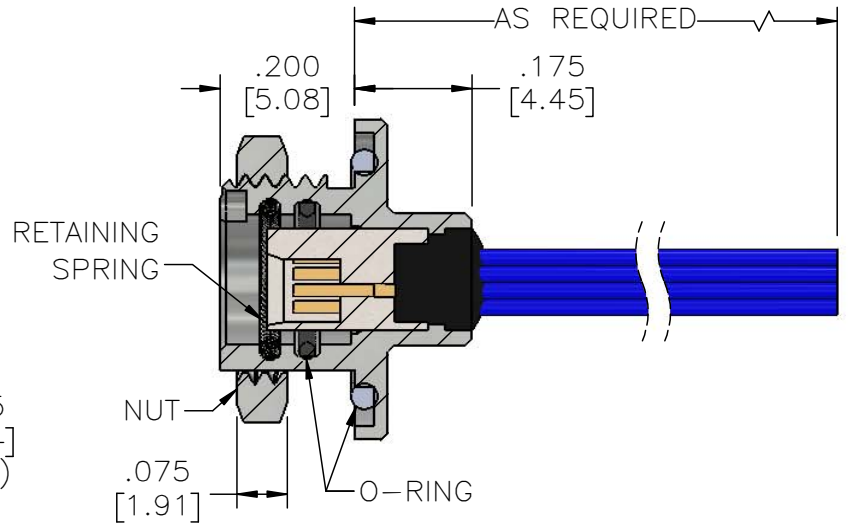
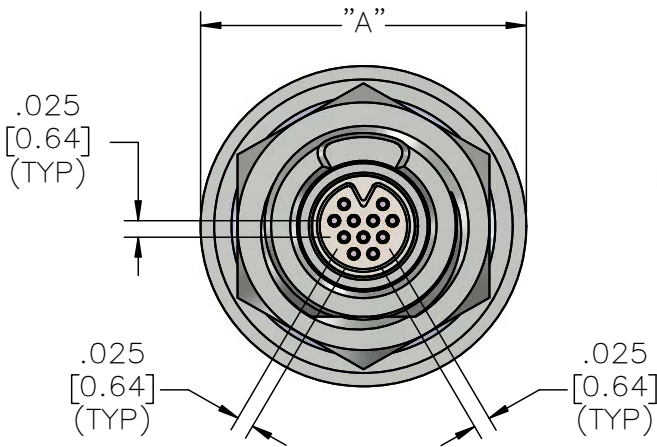
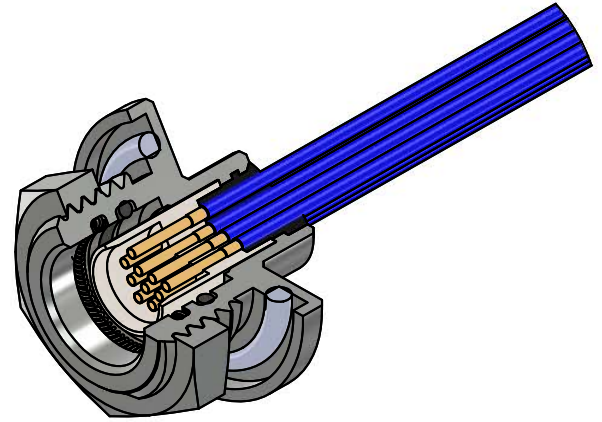


English (IN) Metric (MM)

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

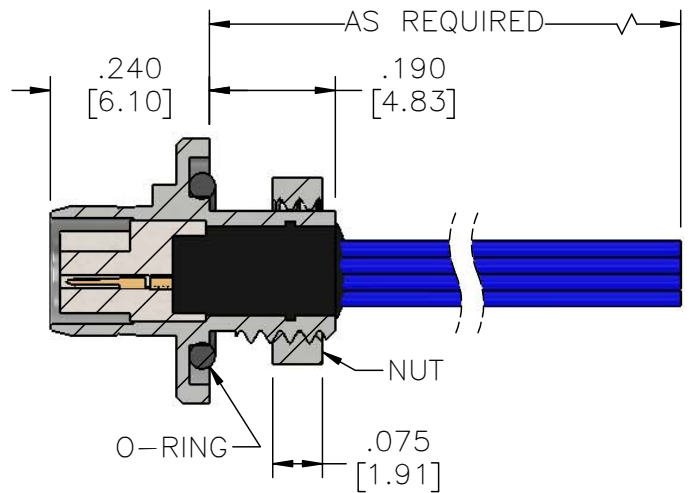
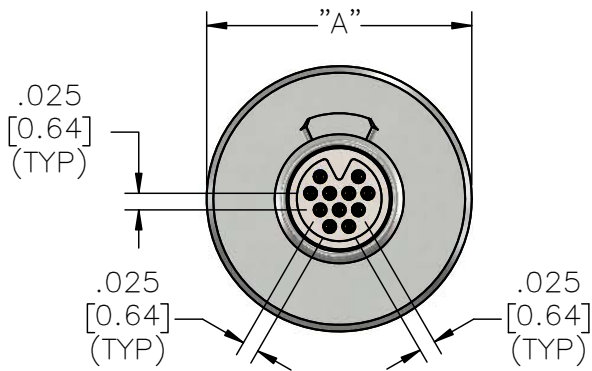
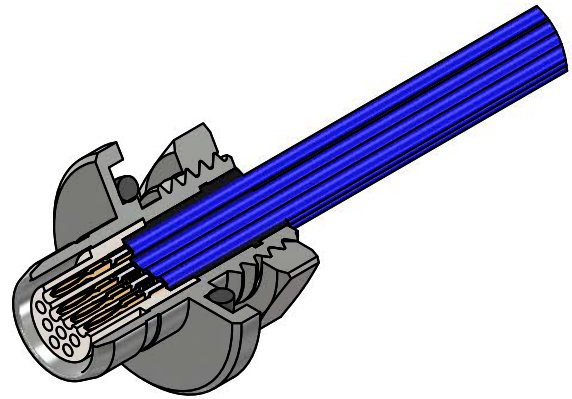


English (IN) Metric (MM)

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



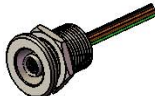













BANP-WD-PP



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		