

CONTACT US:

Amphenol Aerospace
40-60 Delaware Avenue
Sidney, NY 13838-1395

Customer Service: Mon - Fri 8AM - 5PM

Phone: (800) 678-0141

Fax: (607) 563-5157

Online: www.amphenol-aerospace.com



ABOUT AMPHENOL AEROSPACE:

Amphenol Aerospace, a Division of Amphenol Corporation, is one of the largest manufacturers of interconnect products in the world for the Military, Commercial Aerospace and Industrial markets. Amphenol designs, manufactures and markets circular and rectangular, electronic, fiber optic, EMI/EMP filter, and a variety of special applications connectors and interconnect systems.

Our 675,000 square foot facility is nestled at the foothills of the Catskill Mountains in Sidney, NY. The Amphenol complex houses state-of-the-art manufacturing technologies including CNC machining, die-casting, molding, impact and extruding, plating, screw machining and process controls. Our fully equipped material evaluation lab and engineering organization utilize the latest in computer aided design software and analysis tools, allowing us to design, test, and qualify advanced interconnect systems.

Amphenol's interconnect products are supplied to thousands of OEMs worldwide and are supported by our worldwide sales and engineering force, including the largest global network of electronic distributors.



Amphenol Aerospace, Amphenol Commercial Air and Amphenol Industrial Operations Main Facility in Sidney, NY USA



Amphenol Canada Corp. (ACC) in Toronto, ON

Offers a comprehensive range of filtered and rectangular connector products for commercial, military and aerospace applications.



Amphenol Printed Circuit Board Technology (APCBT) in Nashua, NH

Houses the manufacturing, design and engineering of backplane systems.



Amphenol Printed Circuit Board Technology (APCBT) in Nashua, NH

Manufactures, designs and engineers flex circuit products and printed circuit boards.



Amphenol facilities in Nogales, Mexico

Houses the manufacture of several industrial and aerospace product lines.



Amphenol Nexus Technologies in Stamford, CT

Designs and manufactures audio connectors for military, aviation, medical, telecommunications, auto racing, power boats & farm equipment.



Amphenol Borisch in Grand Rapids, MI

A full service electronics manufacturer specializing in defense contractors with wiring harnesses, circuit boards and other electrical hardware.

AMPHENOL AEROSPACE'S PHILOSOPHY

As a basic business philosophy, Amphenol Aerospace is dedicated to concentrating on those advanced and challenging market segments that demand an extraordinary level of supplier support and reaction. Our approach to implement this strategy is based on the following key principles:

FOCUS: Concentrate all resources on serving a limited number of tightly defined markets, and understanding the needs of those markets.

INNOVATION: Provide these markets new, creative solutions in both products and services.

RESPONSIVENESS: Identify and respond to the market and product needs more rapidly than any other supplier.

Performance is the sum of these principles. It is the measure of how well we continually and consistently implement our basic strategy and key principles.

QUALITY ASSURANCE:

Amphenol Aerospace has been awarded both AS9100 - Revision C and ISO9001:2008 Quality Assurance Certifications.

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-ID

Terrapin

Nexus

2M Micro-Miniature Connectors

	Pages
2M801	36-53
2M803	54-66
2M804	67-89
2M805	90-105
Filter	107-118
Accessories	119-138

- 71% in weight savings compared to MIL-DTL-38999
- 52% smaller than MIL-DTL-38999
- Broad family with many styles and options
- Designed for high-reliability aerospace/defense/C4I applications
- For use in harshest environments



HD38999 High Density Connectors

	Pages
Contact Arrangement	126
HD38999 Ordering Guide	127
General Information	128
HD38999 Shell Styles	129-133
Custom Designed HD38999	134

- 30% to 50% more contact density than the highest density Mil-Spec 38999 connector of its size.
- Designed to utilize Mil-Spec 38999 components with the exception of contacts and insert arrangements
- Available in Metal, composite, sealed & filtered versions, hermetic and custom versions



Micro-D Micro Miniature Rectangular

	Pages
Micro-D Innovations	137
Terms, Specs, & Performance	138-143
Micro-D Harnessed Connectors	144-148
Micro-D Printed Circuit Board	149-161
Series 101 Micro-D Plastic	162-168
Micro-D Hardware & Acc	169-177
Strip, Hi-Density, Filter, Custom	178-192
Part Number Cross Reference	193-202

- Small rectangular interconnect with reduced space requirement and reduced weight compared to other rectangulars
- Exceed the requirements of the US military standard M83513



Terrapin Connectors

	Pages
Intro & Mating Options	203-205
Part #, Keyway, Perform, Insert	206-208
Plugs	209-214
Receptacles	215-221
Accessories	222-227

- Miniature Circular interconnects with push-pull termination
- Designed for harsh environments; used extensively in soldier communication applications



Nexus Connectors

	Pages
About Nexus	228
TAC Connectors	229
Watertight Breakaway	230
AP and AJ Series	231

- Designed and manufactured to the exact specifications of MIL-DTL-55116
- Half the size of standard 38999 connectors



HD SIM Rectangular Connectors

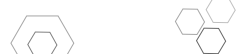
	Pages
EN4165/ARINC 809/SIM	232
EN4165/SIM High Density	232

- Modular interconnects that are lightweight, compact, with easy push-pull termination
- Available in shielded or non-shielded versions
- 7 keying positions
- Filtered with EN4165/SIM Modules



- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

Section	Description	Pages
	2M Table of Contents	6-7
	2M Selection Table	8
	Crimp Contacts, Contact Tools, Crimp Tensile Strength & Torque Values	9
	Assembly Instructions	10-11
	Grommet Sealing Plugs, Spanner Tools for Tightening Jam Nuts, Holding Tool for Backshells	12
	Micro Band Shield Termination Tool & Instructions	13
Insert Arrangements	Insert Arrangement Chart	14
	Insert Arrangement Patterns	15-17
	Straight PCB Footprints	18-28
	Performance Specs, Material & Finishes	29
	Complete Product Specifications	30-35
2M801 Dualok	Dualok New Product Line	36
2M801 Dual Start	2M801 Series General Information	37
	Connector Weights	38
	Ordering Guide for 2M801-007, 008, 009, 010	39
	2M801-007 & 2M801-008	40
	2M801-009-07 & 2M801-010-07	41
	2M801-009-02 & 2M801-010-02	42
	2M801-009-01 & 2M801-010-01	43
	Ordering Guide for 2M801-011, 2M801-033	44-45
2M801 PC Board	Ordering Guide for 2M801-012	46
2M801 Hermetic Recept	Hermetic Jam Nut 2M801-012-07	47
	Hermetic Square Flange 2M801-012-02	48
	Hermetic Weld Mount 2M801-012-03	49
	Right Angle PCB 2M801-023	50
	2M801-023-07 Jam Nut	51
	Ordering Guide for 2M667-217 & 218	52-53
2M803 1/4 Turn Bayonet	General Information	54
	Connector Weights	55
	Ordering Guide for 2M803 Crimp Receptacles & Plugs	56
	2M803-001-06 & 2M803-002-06 Plug	57
	2M803-003-07, 2M803-004-07 Jam Nut	58
	2M803-003-02, 2M803-004-02 Flange Mount	59
	2M803-003-01 & 004-01, In-Line	60
2M803 PC Board Recept	Ordering Guide for 2M803-005, 2M803-015	61-62
2M803 Hermetic Recept	Ordering Guide for 2M803-006 Hermetic	63
	2M803-006-02 & 07 Flange Mount and Jam Nut	64
2M803 Protection	Ordering Guide for 2M660-082 & 2M660-083	65
	Protection Caps	66



Section	Description	Pages	
2M804 Push-Pull	General Information	67	
	Connector Weights	68	
	Ordering Guide for 2M804-001, -002, -003, -004	69	
	2M804-001-06, 2M804-002-06 Plug	70	
	2M804-004-07/-003-07 Jam Nut Rear Panel	71	
	2M804-004-00/-003-00 Jam Nut Front Panel	72	
	2M804-004-01/-003-01 In-Line Recept.	73	
	2M804 PC Board Recept	2M804 Ordering Guide	74
		2M804-005-07, 2M804-020-07 Rear Panel Jam Nut Receptacles	75
		2M804-005-00, 2M804-020-00 Push Pull PCB or Solder Cup	76
		Ordering Guide for 2M804-009, 2M804-021	77
		2M804-009-07, 2M804-021-07 Jam Nut Panel Mount	78
		2M804-009-00, 2M804-021-00 Jam Nut Plug	79
2M804-009-02, 2M804-021-02 Plug Flange Panel Mount		80	
Ordering Guide for 2M804-006 Push-Pull Hermetic Receptacle		81	
2M804-006-07 Rear Panel Jam Nut Hermetic		82	
2M804-006-00 Front Panel Jam Nut Hermetic		83	
2M804 Protection Caps	Ordering Guide for 2M667-202 Protection Caps	84	
	Ordering Guide for 2M809-198 Protection Caps	85	
	2M809-198, 2M667-202	86	
	2M804 Push-Pull Plug Rubber Caps	87-88	
	2M804 Push-Pull Spring-Loaded Caps	89	
2M805 Tri-Start	2M805 General Information	90	
	Connector Weight in Grams	91	
	Ordering Guide for 2M805 Plug & Receptacles	92	
	2M805-001, 2M805-002 Plug	93	
	2M805-003-01/-004-01 In-Line Receptacle	94	
	2M805-003-02/-004-02 Square Flange Receptacle	95	
	2M805-003-07/-004-07 Jam Nut Receptacle	96	
	Ordering Guide for 2M805-005, 2M805-017	97	
	2M805-005-02, 2M805-017-02 PC Tail/Solder Cup Square Flange	98	
	2M805-005-07, 2M805-017-07 PC Tail/Solder Cup Jam Nut	99	
2M805 Hermetic Recept	Order Guide for 2M805-006	100	
	2M805-006-02 Tri-Start Flange Mount Hermetic	101	
	2M805-006-03 Tri-Start Solder Mount Hermetic	102	
	2M805-006-07 Tri-Start Jam Nut Hermetic	103	
2M805 Protection Cap	2M667-261, 2M667-262	104-105	
	2M805 Technology	106	
2M Filter High Density	Filter Advantages & Characteristics	107-118	
Backshells & Accessories	Shrink Boots, Hex Nuts, Flange Gaskets, Strain Relief Clamps, Backshells, Shorting Caps	119-138	



Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-D

Terrapin

Nexus





2M Series Selection Table

2M801, 2M803, 2M804 and 2M805



SERIES	2M801	2M803	2M804	2M805
PAGES	Page 36-53	Pages 54-66	Pages 67-89	Pages 90-105
TYPE	Dual-Start ACME Thread	Bayonet	Push-Pull	Tri-Start ACME Thread
DESCRIPTION	More rugged keys and threads. Faster mating.	Quick-mating, light duty, general purpose. Not rated for immersion, 50 milliohms shell-to-shell resistance.	Breakaway connector for headsets and tactical equipment. Gold-plated spring for long mating life and superior EMI shielding.	"Anti-Decoupling" ratchet mechanism and ground spring for military airframes and avionics boxes. Fast mating.
CONTACTS	1 to 130	1 to 55	1 to 85	1 to 130
COUPLING	Threaded Coupling with 1 1/2 Turns to Full Mate	1/4 turn lock Bayonet	Push, Pull Quick-Disconnect	Tri-Start Thread
WATER IMMERSION, MATED	MIL-STD-810 Method 512 1 Meter for 1 Hour	Splashproof	MIL-STD-810 Method 512 1 Meter for 1 Hour	MIL-STD-810 Method 512 1 Meter for 1 Hour
EMI SHIELDING	Very Good	Fair	Excellent	Excellent
VIBRATION AND SHOCK	43.9 g's Random Vibration, Sine Vibration 60 g; 300 g's Shock	37 g's Random Vibration; 300 g's Shock	37 g's Random Vibration; 300 g's Shock	43.9 g's Random Vibration, Sine Vibration 60 g; 300 g's Shock
MATING CYCLES	2000 Cycles (-16 Plugs) 500 Cycles (-26 Plugs)	1000 Cycles Aluminum 2000 Cycles Stainless Steel	2000 Cycles	500 Cycles
ELECTRICAL PERFORMANCE	#12: 23 AMP, 1800 VAC #16: 13 AMP, 1800 VAC #20: 7.5 AMP, 750 VAC #23: 5 AMP, 500 VAC	#12: 23 AMP, 1800 VAC #16: 13 AMP, 1800 VAC #20: 7.5 AMP, 750 VAC #23: 5 AMP, 500 VAC	#12: 23 AMP, 1800 VAC #16: 13 AMP, 1800 VAC #20: 7.5 AMP, 750 VAC #23: 5 AMP, 500 VAC	#12: 23 AMP, 1800 VAC #16: 13 AMP, 1800 VAC #20: 7.5 AMP, 750 VAC #23: 5 AMP, 500 VAC
FILTERED	See pages 109-118	See pages 109-118	See pages 109-118	See pages 109-118

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

Contacts
& Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter &
Accessories

HD38999

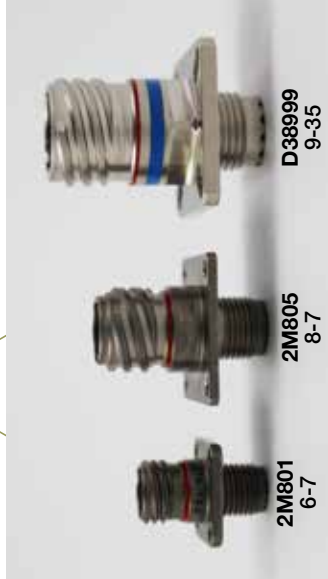
Micro-D

Terrapin

Nexus

Size & Weight Comparison Charts

2M801 & 2M805 VS. D38999 Series III



2M801 Series

Weight Comparison: 2M801 VS. D38999 Series III

2M801 Layout	Number of Contacts	D38999 Layout	Number of Contacts	2M801 Weight	D38999 Aluminum	% Weight Savings	D38999 Composite	% Weight Savings	Cable Plug Diameter			Jam Nut Receptacle Diameter					
									2M801 In. mm.	D38999 In. mm.	% Reduction	2M801 In. mm.	D38999 In. mm.	% Reduction			
5-3	3	9-98	3	7.9	25.3	69%	19.9	60%	.540	13.72	.859	21.82	.575	14.61	1.204	30.58	52%
6-7	7	9-35	6	9.8	26.3	63%	19.9	51%	.600	15.24	.859	21.82	.635	16.13	1.204	30.58	47%
9-19	19	13-35	22	18.8	50.7	63%	38.5	51%	.810	20.57	1.156	29.36	.830	21.08	1.516	38.51	45%
13-37	37	15-35	37	36.0	72.1	50%	57.4	37%	1.050	26.67	1.281	32.54	1.078	27.38	1.641	41.68	34%
16-55	55	17-35	55	49.8	81.6	39%	65.6	24%	1.240	31.50	1.406	35.71	1.264	32.11	1.766	44.86	28%
17-85	85	21-35	79	54.3	119.7	55%	99.1	45%	1.300	33.02	1.641	41.68	1.325	33.66	2.078	52.78	36%
21-130	130	25-35	128	68.7	159.3	57%	136.6	50%	1.550	39.37	1.890	48.01	1.625	41.28	2.323	59.00	30%

Note: Weights shown include contacts and represent a mated pair of plug and jam nut receptacle. Weights are in grams.

Size Comparison: 2M801 VS. D38999 Series III

2M805 Series

Weight Comparison: 2M805 VS. D38999 Series III

2M805 Layout	Number of Contacts	D38999 Layout	Number of Contacts	2M805 Weight	D38999 Aluminum	% Weight Savings	D38999 Composite	% Weight Savings	Maximum Plug Diameter			Maximum Jam Nut Receptacle Diameter					
									2M805 In. mm.	D38999 In. mm.	% Reduction	2M805 In. mm.	D38999 In. mm.	% Reduction			
8-7	7 #23	9-35	6 #20	13.4	26.3	49%	19.9	33%	.707	17.96	.859	21.81	.775	19.69	1.201	30.51	35%
10-13	13 #23	11-35	13 #22D	23.0	35.7	36%	26.8	14%	.804	20.42	.969	24.61	.895	22.73	1.386	30.50	35%
11-19	19 #23	13-35	19 #22D	26.4	50.7	48%	38.5	31%	.933	23.70	1.141	28.98	.960	24.38	1.512	38.40	36%
12-26	26 #23	17-26	26 #20	29.4	58.5	50%	62.6	53%	.999	25.37	1.391	35.33	1.075	27.31	1.764	44.81	39%
15-37	37 #23	15-35	37 #22D	42.7	72.1	41%	57.4	26%	1.113	28.27	1.266	32.16	1.218	30.86	1.638	41.61	26%
18-55	55 #23	17-35	55 #22D	59.6	81.6	27%	65.6	9%	1.308	33.02	1.391	35.33	1.404	35.66	1.764	44.81	20%
19-85	85 #23	21-35	85 #22D	59.8	119.7	50%	99.1	40%	1.328	33.73	1.625	41.27	1.465	37.21	2.075	52.71	29%
23-130	130 #23	25-35	128 #22D	85.5	159.3	46%	136.6	37%	1.577	40.06	1.875	47.63	1.720	43.69	2.323	59.00	26%

Note: Weights shown include contacts and represent a mated pair of plug and jam nut receptacle. Weights are in grams.

Crimp Contacts

Contact Size	Type	AMPS	Wire Size AWG	Part Number	Color Band		
					1st	2nd	3rd
#23	Pin	5	#22-#28	2M809-001	N/A	N/A	N/A
	Pin		#26-#30	2M809-042*	Blue	N/A	N/A
	Socket		#22-#28	2M809-002	N/A	N/A	N/A
	Socket		#26-#30	2M809-043*	Blue	N/A	N/A
#20HD	Pin	7.5	#20-#24	2M809-204	N/A	N/A	N/A
	Socket		#20-#24	2M809-205	N/A	N/A	N/A
#20	Pin	7.5	#20-#24	M39029/58-363	Orange	Blue	Orange
	Socket		#20-#24	M39029/57-357	Orange	Green	Violet
#16	Pin	13	#16-#20	M39029/58-364	Orange	Blue	Orange
	Socket		#16-#20	M39029/57-358	Orange	Green	Gray
#12	Pin	23	#12-#14	M39029/58-365	Orange	Blue	Green
	Socket		#12-#14	M39029/57-359	Orange	Green	White



*Special order please consult Amphenol-Aerospace for information.

Contact Tools

Contact Size	Tooling Part Numbers		
	Crimper	Positioner	Insertion/ Removal Number
#23	M22520/2-01	K1461-1* (Daniels)	DAK225-22* (Daniels Insertion Only)
			2M809-23R (Removal only)
#20HD	M22520/2-01	2M809-206	2M809-20HDR (Removal only)
#20	M22520/1-01	M22520/1-04	M81969/14-10
#16	M22520/1-01	M22520/1-04	M81969/14-03
#12	M22520/1-01	M22520/1-04	M81969/14-04

*Daniels Manufacturing Co. part number

Crimp Tensile Strength

Contact Size	Wire Gage	Silver or Tin Coated Copper Wire	Nickel Coated Copper Wire
#23, #20HD	#22	12	8
#23, #20HD	#24	8	6
#23	#26	5	3
#23	#28	3	2
#23	#30	1.5	1.5

Tensile Strength for size #23 and #20HD only

Values represent minimums and are in pounds

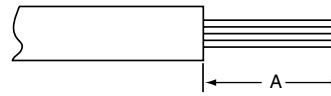
Series 2M Torque Values

SERIES 2M801, 2M803, 2M805 RECOMMENDED TORQUE VALUES

Shell Size Series 2M801, 2M803	Shell Size Series 2M805	Coupling Torque				Jam Nut Tightening				Backshell Tightening			
		In-LBs.		N-m		In-LBs.		N-m		In-LBs.		N-m	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
5	-	25	35	2.8	4.0	20	25	2.2	2.8	13	17	1.5	1.9
6	8	35	40	4.0	4.5	20	25	2.2	2.8	18	22	2.0	2.5
7	9	35	40	4.0	4.5	20	25	2.2	2.8	30	40	3.4	4.5
8	10	40	50	4.5	5.7	20	25	2.2	2.8	30	40	3.4	4.5
9	11	40	50	4.5	5.7	20	25	2.2	2.8	35	45	4.0	5.1
10	12	50	60	5.7	6.8	25	30	2.8	3.3	35	45	4.0	5.1
12, 13	15	50	60	5.7	6.8	25	30	2.8	3.3	35	45	4.0	5.1
14, 16	18	55	65	6.2	7.3	25	30	2.8	3.3	35	45	4.0	5.1
15, 17	19	55	65	6.2	7.3	25	30	2.8	3.3	35	45	4.0	5.1
21	23	55	65	6.2	7.3	25	30	2.8	3.3	35	45	4.0	5.1

Wire Stripping

- Strip wire to required length. (See Figure at right). When using hot wire stripping, do not wipe melted insulation material on wire strands; with mechanical strippers do not cut or nick strands.
- See Table 1 for proper finished outside wire dimensions.
- Twist strands together to form a firm bundle.
- Insert stripped wire into contact applying slight pressure until wire insulation butts against wire well. Check inspection hole to see that wire strands are visible. If there are strayed wire strands, entire wire end should be re-twisted. When wire is stripped and properly installed into contact, the next step is to crimp the wire inside the contact by using the proper crimping tool.



Stripping Dimensions

Wire Size	A
23	.115 (2.92)
20/20HD	.188 (4.77)
16	.188 (4.77)
12	.188 (4.77)

Table 1

Contact Size	Wire Dimension (inches)**	
	Min.	Max.
10	.135	.162
12	.097	.142
16	.065	.109
20/20HD	.040	.077
23	.025	.048

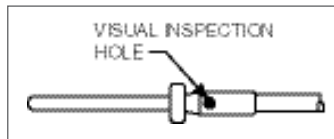
** Min. diameters to insure moisture proof assembly; max. diameters to permit use of metal removal tools.

Crimping

See table on preceding page for more information on crimp contacts, contact tools, and crimp tensile strength



- Insert stripped wire into contact crimp pot. Wire must be visible through inspection hole.
- Using correct crimp tool and locator, cycle the tool once to be sure the indentors are open, insert contact and wire into locator. Squeeze tool handles firmly and completely to insure a proper crimp. The tool will not release unless the crimp indentors in the tool head have been fully actuated.
- Release crimped contact and wire from tool. Be certain the wire is visible through inspection hole in contact.



Examples of M22520 Series Crimping Tools: Shown top: tool used for small size 23 contacts.

Shown bottom: tool used for size 20, 16 or 12 contacts and has a positioner that can be dialed for each contact size.

Contact Insertion

- First remove hardware from the plug and receptacle and slide the hardware over wires in proper sequence.
- Use proper plastic or metal insertion tool for corresponding contact. (Consult Insertion Tool table on preceding page). Slide correct tool (with plastic tool use colored end) over wire insulation and slide forward until tool bottoms against rear contact shoulder.



- Next align the tool and contact up to the properly identified cavity at rear of connector plug. Use firm, even pressure; do not use excessive pressure. It is recommended to start at the center cavity. Contact must be aligned with grommet hole and not inserted at an angle. Push forward until contact is felt to snap into position within insert.



Plastic tool with contact in proper position.



Metal tool with contact.



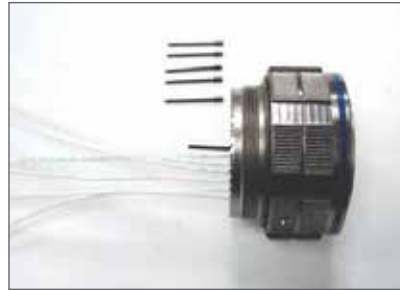
Continued on next page.

Note: All plastic tools are double-ended. The colored side is the insertion tool and the white side is the removal tool.

Assembly Instructions

Contact Insertion, cont.

- Remove tool and pull back lightly on wire, making sure contact stays properly seated and isn't dragged back with the tool. Repeat operation with remainder of contacts to be inserted, beginning with the center cavity and working outward in alternating rows.
- After all contacts are inserted, fill any empty cavities with wire sealing plugs.



- Reassemble plug or receptacle hardware - slide forward and tighten using connector pliers. Connector holding tools are recommended while tightening back accessories. When using strain relief, center wires at bar clamp. Slide clamp grommet into position and tighten clamp bar screws. When tightening screws, pressure should be applied in the same direction that clamp is threaded to rear threads of connector. When not using clamp grommet, build up wire bundle with vinyl tape so clamp bar will maintain pressure on wires.



CAUTION: when inserting or removing contacts, do not spread or rotate tool tips.

Contact Removal

- Remove hardware from plug or receptacle and slide hardware back along wire bundle.
- Use proper plastic or metal removal tool for corresponding contact. Slide correct size tool over wire insulation.
- Insert plastic or metal removal tool into contact cavity until tool tips enter rear grommet and come to a positive stop. Hold tool tip firmly against positive stop on contact shoulder. Grip wire and simultaneously remove tool and contact. (On occasion, it may be necessary to remove tool, rotate 90° and reinsert.)



Use white end of plastic tool for removal of contacts.



Removal of contacts with metal tool.

Grommet Sealing Plugs

Size	Color	Part Number	Military Part Number
#23	Black	2M809-155	(None)
#20	Red	2M859-012	MS27488-20-2
#16	Green	2M859-013	MS27488-16-2
#12	Orange	2M859-014	MS27488-12-2

Spanner Tool for Tightening Series 2M Jam Nuts

Shell Size	Holding Tool Part Number (Add P or R)				
	Series 2M801	Series 2M803	Series 2M804 Style 07	Series 2M804 Style 00	Series 2M805
5	2M600-146-02	2M600-137-05	2M600-146-03	2M600-147-05	
6	2M600-146-03	2M600-137-06	2M600-146-04	2M600-147-06	
7	2M600-146-05	2M600-137-07	2M600-146-06	2M600-147-07	
8	2M600-146-05	2M600-137-08	2M600-146-06	2M600-147-07	2M600-154-08
9	2M600-146-06	2M600-137-09	2M600-146-07	2M600-147-09	2M600-154-09
10	2M600-146-07	2M600-137-10	2M600-146-08	2M600-147-10	2M600-154-09
11					2M600-154-11
12		2M600-137-12	2M600-141-10	2M600-147-12	2M600-154-12
13	2M600-146-10				
14		2M600-137-14	2M600-141-12	2M600-147-14	
15		2M600-137-15	2M600-141-13	2M600-147-15	2M600-154-15
16	2M600-146-13				
17	2M600-146-14				
18					2M600-154-18
19					2M600-154-19
21	2M600-146-17				
23					2M600-154-23

Connector Holding Tool for Tightening Backshells Accessories

Shell Size	Holding Tool Part Number (Add P or R)				
	Series 2M801	Series 2M803	Series 2M804	Series 2M805	
5	2M600MM005-05	• 2M600-140-5	* 2M600-141-5	x	
6	2M600MM005-06	• 2M600-140-6	* 2M600-141-6	x	
7	2M600MM005-07	• 2M600-140-7	* 2M600-141-7	x	
8	2M600MM005-08	• 2M600-140-8	* 2M600-141-8	x	2M600-155-8 x
9	2M600MM005-06	• 2M600-140-9	* 2M600-141-9	x	2M600-155-9 x
10	2M600MM005-10	• 2M600-140-10	* 2M600-141-10	x	2M600-155-10 x
11					2M600-155-11 x
12		2M600-140-12	* 2M600-141-12	x	2M600-155-12 x
13	2M600MM005-13	•			
14		2M600-140-14	* 2M600-141-14	x	
15		2M600-140-15	* 2M600-141-15	x	2M600-155-15 x
16	2M600MM005-16	•			
17	2M600MM005-17	•			
18					2M600-155-18 x
19					2M600-155-19 x
21	2M600MM005-21	•			
23					2M600-155-23 x



- Add P for Plug holder or R for receptacle holder, followed by polarizing position (N, X, Y, Z)
- * Add P for Plug holder or R for Receptacle holder, followed by polarizing position (A, B, C, D).
- x Add P for Plug holder or R for Receptacle holder.

Micro Band Shield Termination System:

Micro Band Termination: For assembling cables to overmolded style 2M connectors or backshells, the Micro Band System offers quick termination of cable shields and flexibility to be utilized on a wide range of parts with just one band size. These rugged straps have passed numerous hazardous environmental testing, including shock and vibration. Approved for use in military and aerospace applications.

MATERIALS:

Micro Band Installation Tool. Use with .120" (3.05 mm) wide bands. 6.75 inches (172 mm.) length, 1.2 pounds (0.6 Kg.)

Micro Band, .120" (3.05 mm) wide. Available in two lengths, flat or pre-coiled. Stainless steel.

Description	Part Number
Micro Band Installation Tool	2M600-061

Length		Part Number	Accommodates Diameter	
inch	mm		inch	mm
8.125	206.38	2M600-057	.88	22.35
14.250	361.95	2M600-083	1.88	47.75



Micro Band Shield Termination Instructions:

1. Prepare cable braid for termination process (Figure 1).
2. Push braid forward over adapter retention lip to the adapter incline point (or .4" [10.2mm] minimum braid length). Milk braid as required to remove slack and winsure a snug fit around the shield termination area (Figure 2).
3. Prepare the band in the following manner: **IMPORTANT:** Due to connector/adaptor circumference, it may be necessary to prepare the band around the cable or retention area.
 - A. Roll band through the buckle slot twice. (Band must be double-coiled!)
 - B. Pull on band until mark (▷) is within approximately .250 inch (6.4mm) of buckle slot (Figure 3). The band may be tightened further if desired.

NOTE: Prepared band should have this (▷) mark visible approximately where shown in Figure 3.

Shield Termination Clamping Process (Figures 4 thru 8)

NOTE: To free tool handles, squeeze handles together and move holding clips to center of tool.

4. Squeeze gray gripper release lever and insert band into the front end opening of the tool. (Circular portion of looped band must always face downward.)

5. Aligning the band and tool with the shield termination area, squeeze blue pull-up handle repeatedly in full strokes until it locks against tool body. (This indicates the band is compressed to the tool precalibrated tension.)
NOTE: To loosen or remove band before locking and cut-off, squeeze gray gripper release lever on tool and pull band out. To loosen or remove band after blue pull-up handle locks against tool body, squeeze pull-up handle and push tension release lever on top of tool forward. Let tension handle return to original position and use the gripper release lever to remove band.
6. Complete the clamping process by squeezing the black cut-off handle to form lock and trim excess band.
7. To remove excess band from tool, squeeze gray gripper release handle, pull out and dispose.
8. Inspect shield termination.

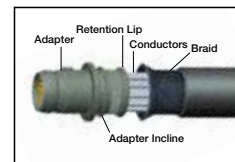


Fig. 1



Fig. 2

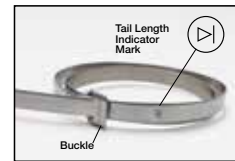


Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



2M Series Contacts and Tools

Inserts Arrangements

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-D

Terrapin

Nexus

SERIES 2M INSERT ARRANGEMENTS

Contact Size	Contact Quantity					Insert Arrangement			
	#23	#20	#20HD	#16	#12	2M801	2M803	2M804	2M805
Size #23 Contacts 5 Amp Max. Current 500 VAC #22-#28 AWG	3					5-3	5-3	5-3	NA
	4					6-4	6-4	6-4	8-4
	6					6-6	6-6	6-6	8-6
	7					6-7	6-7	6-7	8-7
	10					7-10	7-10	7-10	9-10
	13					8-13	8-13	8-13	10-13
	19					9-19	9-19	9-19	11-19
	26					10-26	10-26	10-26	12-26
	37					13-37	12-37	12-37	15-37
	55					16-55	14-55	14-55	18-55
	85					17-85	15-35	15-85	19-85
130					21-130	NA	NA	23-130	
Size #20HD Contacts 7.5 Amp Max. Current 750 VAC #20-#24 AWG.			3			6-23	6-23	6-23	8-23
			5			7-25	7-25	7-25	9-25
			8			8-28	8-28	8-28	10-28
			10			9-210	9-210	9-210	11-210
			20			13-220	12-220	12-220	15-220
			35			16-235	14-235	14-235	18-235
			41			17-241	NA	NA	19-241
		69			21-269	NA	NA	23-269	
Size #16 Contacts 13 Amp Max. Current 1800 VAC #16-#20 AWG				1		6-1	6-1	6-1	8-1
				2		8-2	8-2	8-2	10-2
				4		9-4	9-4	9-4	11-4
				5		10-5	10-5	10-5	12-5
				7		13-7	12-7	12-7	15-7
				12		16-12	14-12	14-12	18-12
				14		17-14	15-14	15-14	19-14
				22		21-22	NA	NA	23-22
Size #12 Contacts 23 Amp Max. Current 1800 VAC #12-14 AWG					1	7-1	7-1	7-1	9-1
					2	10-2	10-2	10-2	12-2
					2	13-2	12-2	12-2	15-2
					3	13-3	12-3	12-3	15-3
					5	16-5	14-5	14-5	18-5
					7	17-7	15-7	15-7	19-7
					12	21-12	NA	NA	23-12
Insert Arrangements with Mixed Size (Combo) Layouts	4	2				8-200	8-200	8-200	10-200
	8	2				9-201	9-201	9-201	11-201
	4			2		9-200	9-200	9-200	11-200
	8			2		10-202	10-202	10-202	12-202
	4				2	10-201	10-201	10-201	12-201
	6				2	13-200	12-200	12-200	15-200
	10				2	13-201	12-201	12-201	15-201
12				1	10-200	10-200	10-200	12-200	

Insert Arrangements

Front face of pin inserts illustrated (Socket Reversed)

CONTACT LEGEND 12 16 20 20HD 20 23

2M801, 2M803, 2M804	5-3	6-1	6-4	6-6	6-7	6-23	7-1	7-10
2M805	NA	8-1	8-4	8-6	8-7	8-23	9-1	9-10
No. of Contacts	3	1	4	6	7	3	1	10
Contact Size	#23	#16	#23	#23	#23	#20HD	#12	#23
DWV Voltage (VAC)	500	1800	500	500	500	750	1800	500
Current Rating (Amps)	5	13	5	5	5	7.5	23	5

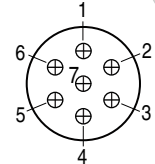
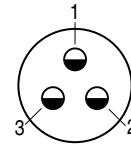
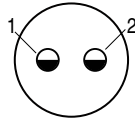
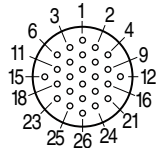
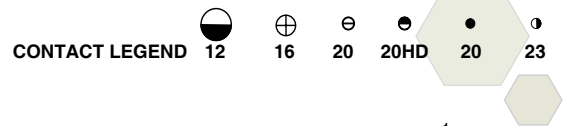
2M801, 2M803, 2M804	7-25	8-2	8-13	8-28	8-200	9-4
2M805	9-25	10-2	10-13	10-28	10-200	11-4
No. of Contacts	5	2	13	8	2 4	4
Contact Size	#20HD	#16	#23	#20HD	#20 #23	#16
DWV Voltage (VAC)	750	1800	500	750	1000 500	1800
Current Rating (Amps)	7.5	13	5	7.5	7 5	13

2M801, 2M803, 2M804	9-19	9-200	9-201	9-210	10-2
2M805	11-19	11-200	11-201	11-210	12-2
No. of Contacts	19	2 4	2 8	10	2
Contact Size	#23	#16 #23	#20 #23	#20HD	#12
DWV Voltage (VAC)	500	1800 500	1000 500	750	1800
Current Rating (Amps)	5	13 5	7.5 5	7.5	23

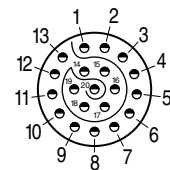
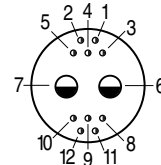
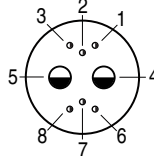
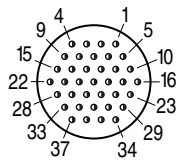
2M801, 2M803, 2M804	10-5	10-201	10-202	10-200
2M805	12-5	12-201	12-202	12-200
No. of Contacts	5	2 4	2 8	1 12
Contact Size	#16	#12 #23	#16 #23	#12 #23
DWV Voltage (VAC)	1800	1800 500	1800 500	1800 500
Current Rating (Amps)	13	23 5	13 5	23 5

Insert Arrangements

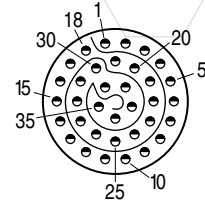
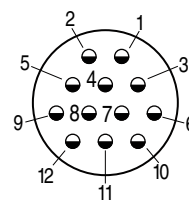
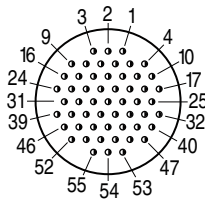
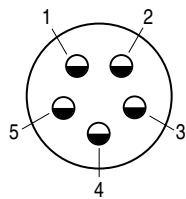
Front face of pin inserts illustrated (Socket Reversed)



2M801	10-26	13-2	13-3	13-7
2M803, 2M804	10-26	12-2	12-3	12-7
2M805	12-26	15-2	15-3	15-7
No. of Contacts	26	2	3	7
Contact Size	#23	#12	#12	#16
DWV Voltage (VAC)	500	1800	1800	1800
Current Rating (Amps)	5	23	23	13



2M801	13-37	13-200	13-201	13-220
2M803, 2M804	12-37	12-200	12-201	12-220
2M805	15-37	15-200	15-201	15-220
No. of Contacts	37	2 6	2 10	20
Contact Size	#23	#12 #23	#12 #23	#20HD
DWV Voltage (VAC)	500	1800 500	1800 500	750
Current Rating (Amps)	5	23 5	23 5	7.5

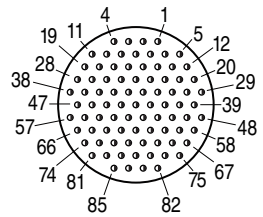
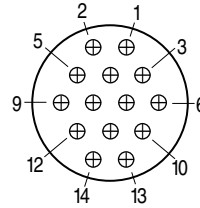
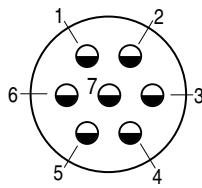


2M801	16-5	16-55	16-12	16-235
2M803, 2M804	14-5	14-55	14-12	14-235
2M805	18-5	18-55	18-12	18-235
No. of Contacts	5	55	12	35
Contact Size	#12	#23	#16	#20HD
DWV Voltage (VAC)	1800	500	1800	750
Current Rating (Amps)	23	5	13	7.5

Insert Arrangements

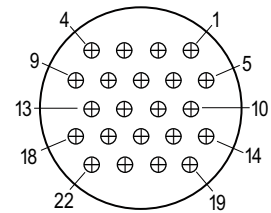
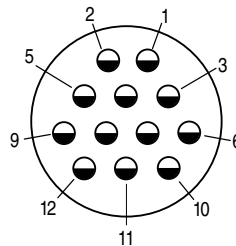
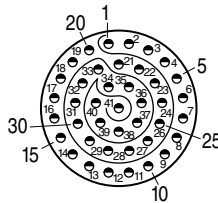
Front face of pin inserts illustrated (Socket Reversed)

CONTACT LEGEND 12 16 20 20HD 20 23



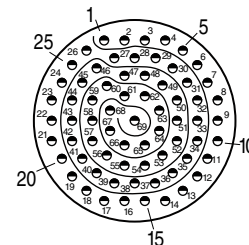
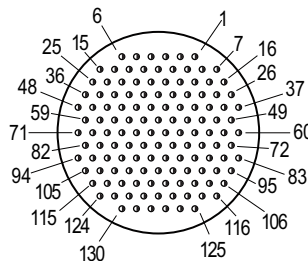
2M801	17-7	17-14	17-85
2M803/804	15-7	15-14	15-85
2M805	19-7	19-14	19-85

No. of Contacts	7	14	85
Contact Size	#12	#16	#23
DWV Voltage (VAC)	1800	1800	500
Current Rating (Amps)	23	13	5



2M801	17-241	21-12	21-22
2M805	19-241	23-12	23-22

No. of Contacts	41	12	22
Contact Size	#20HD	#12	#16
DWV Voltage (VAC)	750	1800	1800
Current Rating (Amps)	7.5	23	13


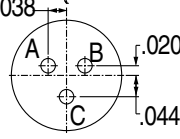
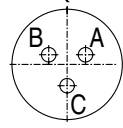

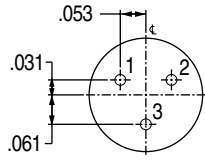
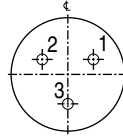

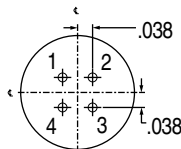
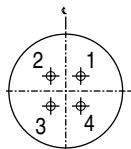

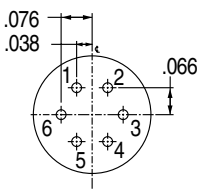
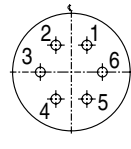

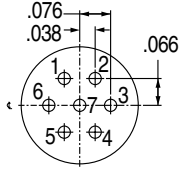
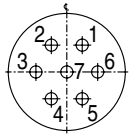
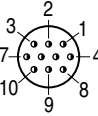
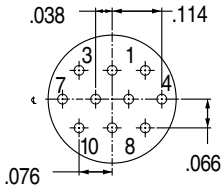
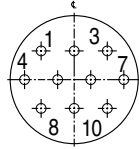


2M801	21-130	21-269
2M805	23-130	23-269

No. of Contacts	130	69
Contact Size	#23	#20HD
DWV Voltage (VAC)	500	750
Current Rating (Amps)	5	7.5

Contacts & Tools
2M Specs
2M801
2M803
2M804
2M805
2M Filter & Accessories
HD38999
Micro-ID
Terrapin
Nexus

Socket inserts are a mirror image of pin side. Socket side shown for cavity locations only, reference pin side for dimensions.

Insert Arrangement	Pin Connector	Socket Connector
 <p>5-3 (3) #23 Contacts .022 Max. Dia Tail</p>		
 <p>6-23, 8-23 (3) #20HD Contacts .023 Max. Dia. Tail</p>		
 <p>6-4, 8-4 (4) #23 Contacts .022 Max. Dia Tail</p>		
 <p>6-6, 8-6 (6) #23 Contacts .022 Max. Dia. Tail</p>		
 <p>6-7, 8-7 (7) #23 Contacts .022 Max. Dia. Tail</p>		
 <p>7-10, 9-10 10 #23 Contacts .022 Max. Dia. Tail</p>		

Straight PCB Footprints

Insert Arrangement	Pin Connector	Socket Connector
<p>7-25, 9-25 (5) #20HD Contacts .028 Max. Dia Tail</p>		
<p>8-2, 10-2 (2) #16 Contacts</p>		
<p>8-28, 10-28 (8) #20HD Contacts</p>		
<p>8-200, 10-200 (2) #20 Contacts (4) #23 Contacts</p>		
<p>8-13, 10-13 (13) #23 Contacts .022 Max. Dia. Tail</p>		
<p>9-4, 11-4 (4) #16 Contacts</p>		

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

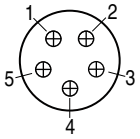
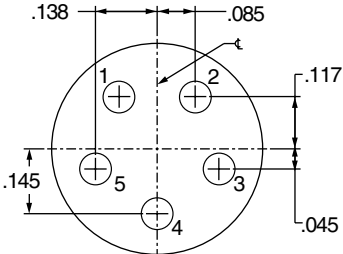
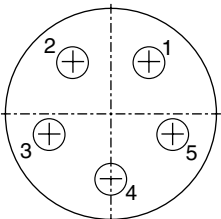
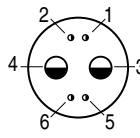
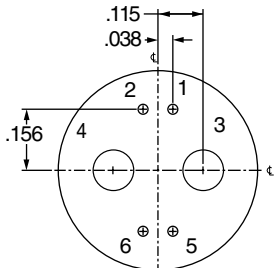
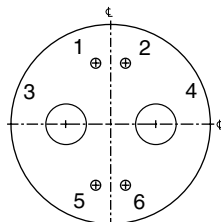

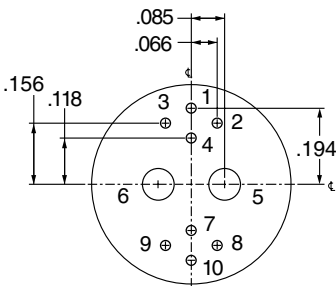
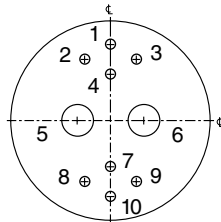
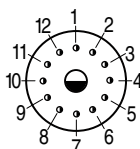
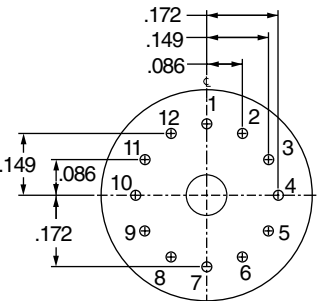
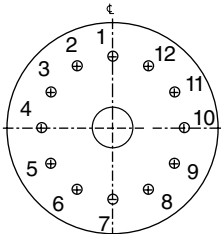
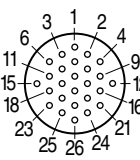
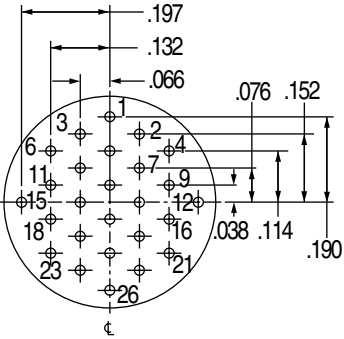
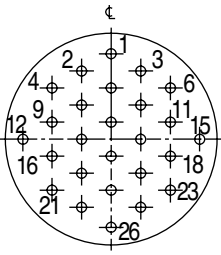
Micro-D

Terrapin

Nexus

Insert Arrangement	Pin Connector	Socket Connector
<p>9-200, 11-200 (4) #23 Contacts (2) #16 Contacts</p>		
<p>9-201, 11-201 (2) #20 Contacts (8) #23 Contacts</p>		
<p>9-210, 11-210 (10) #20HD Contacts</p>		
<p>9-19, 11-19 (19) #23 Contacts .022 Max. Dia Tail</p>		
<p>10-2, 12-2 (2) #12 Contacts</p>		

Straight PCB Footprints

Insert Arrangement	Pin Connector	Socket Connector
 <p>10-5, 12-5 (5) #16 Contacts</p>		
 <p>10-201, 12-201 (2) #12 Contacts (4) #23 Contacts</p>		
 <p>10-202, 12-202 (2) #16 Contacts (8) #23 Contacts</p>		
 <p>10-200, 10-200 (1) #12 Contact (12) #23 Contacts</p>		
 <p>10-26, 12-26 (26) #23 Contacts .022 Max. Dia. Tail</p>		

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

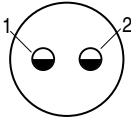
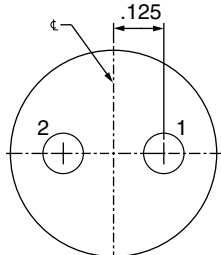
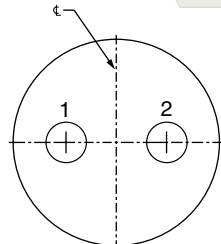
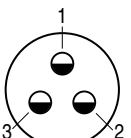
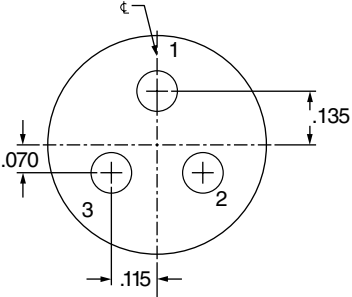
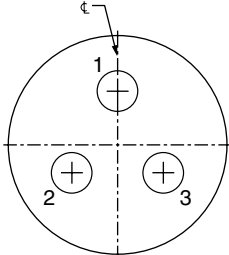
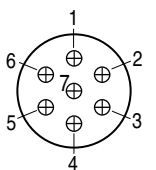
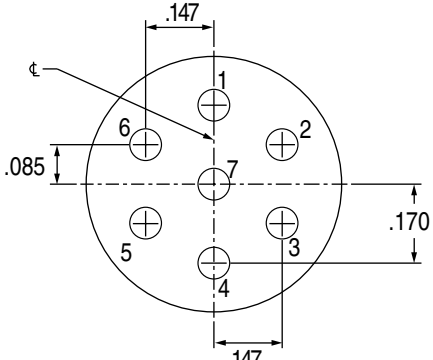
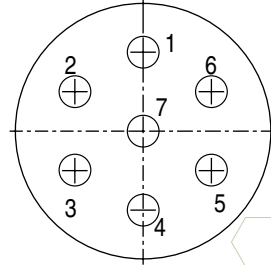
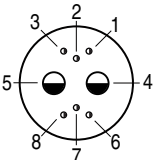
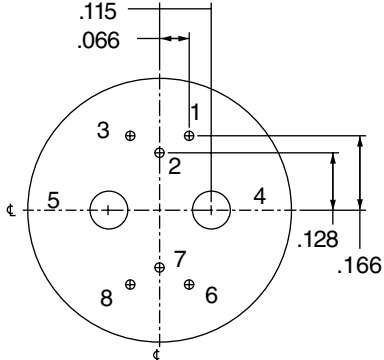
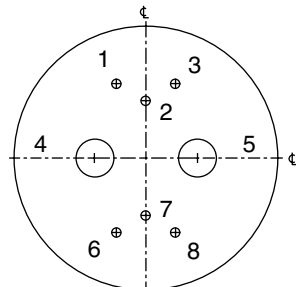
2M Filter & Accessories

HD38999

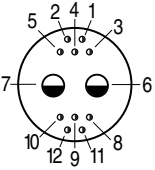
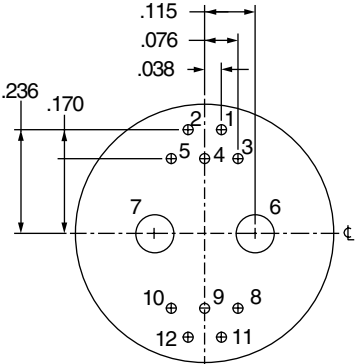
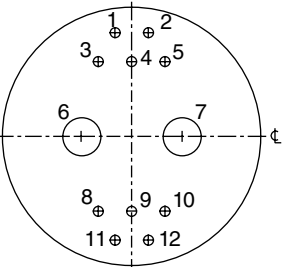
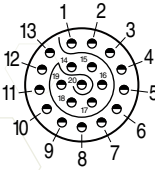
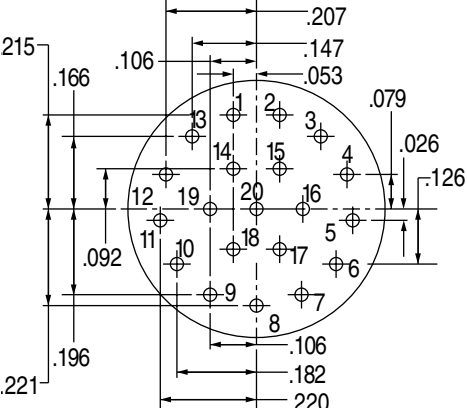
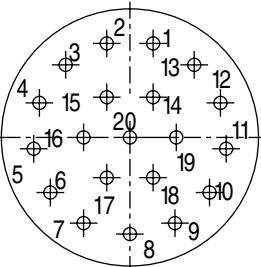
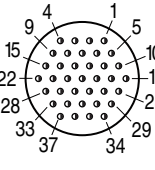
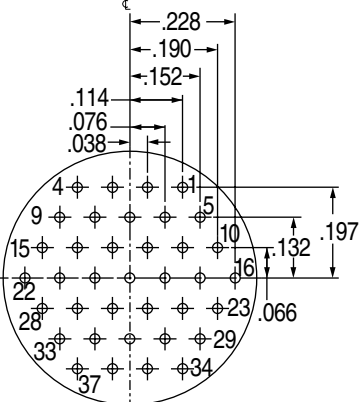
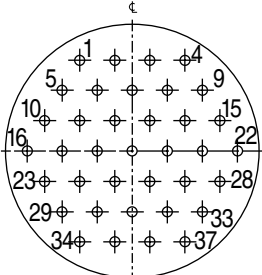
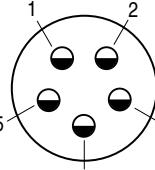
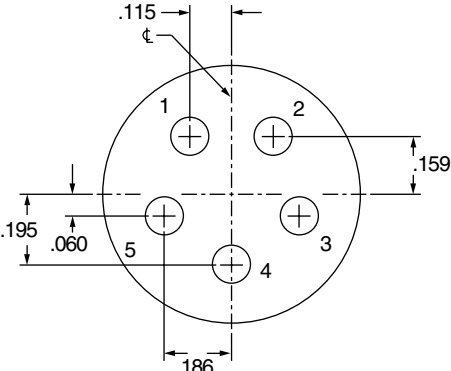
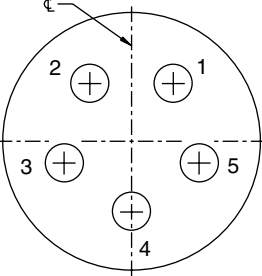
Micro-D

Terrapin

Nexus

Insert Arrangement	Pin Connector	Socket Connector
 <p>12-2, 13-2, 15-2 (2) #12 Contacts</p>		
 <p>12-3, 13-3, 15-3 (3) #12 Contacts</p>		
 <p>12-7, 13-7, 15-7 (7) #16 Contacts</p>		
 <p>12-200, 13-200, 15-200 (2) #12 Contacts (6) #23 Contacts</p>		

Straight PCB Footprints

Insert Arrangement	Pin Connector	Socket Connector
 <p>12-201, 13-201, 15-201 (2) #12 Contacts (10) #23 Contacts</p>		
 <p>12-220, 13-220, 15-220 (20) #20HD Contacts</p>		
 <p>12-37, 13-37, 15-37 (37) #23 Contacts .022 Max. Dia. Tail</p>		
 <p>14-5, 16-5, 18-5 (5) #12 Contacts</p>		

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

Straight PCB Footprints

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

Insert Arrangement	Pin Connector	Socket Connector
<p>14-12, 16-12, 18-12 (12) #16 Contacts</p>		
<p>14-55, 16-55, 18-55 (55) #23 Contacts .022 Max. Dia. Tail</p>		
<p>14-235, 16-235, 18-235 (35) #20HD Contacts .023 Max. Dia. Tail</p>		

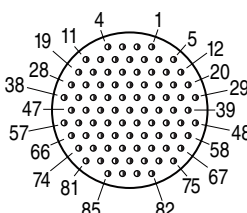
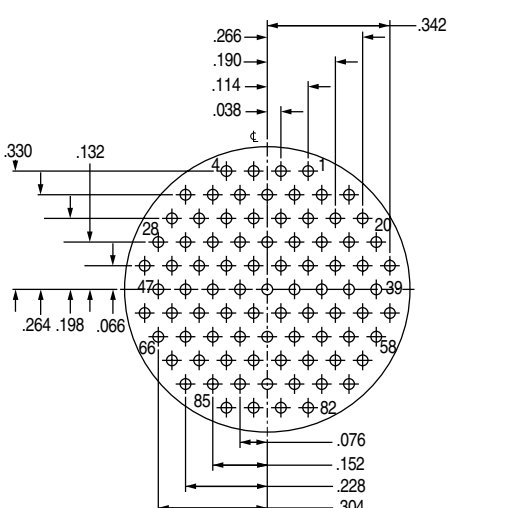
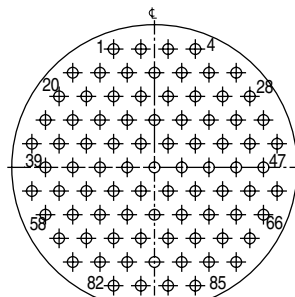
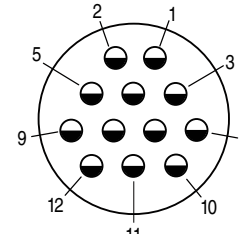
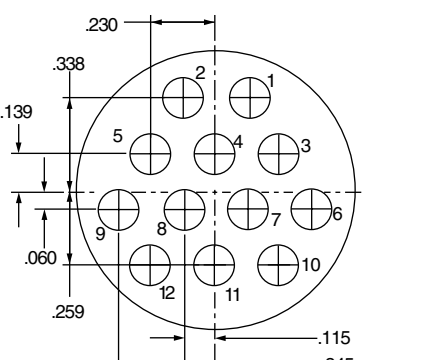
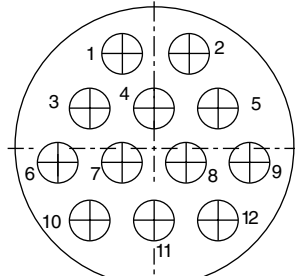
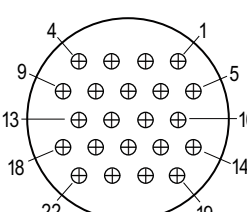
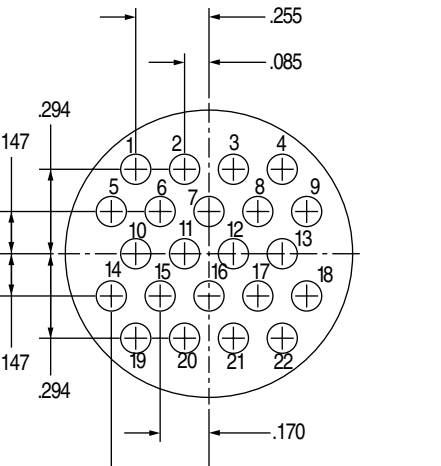
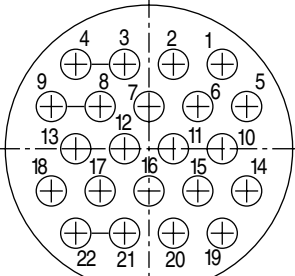
Pin. No.	X		Y		Pin. No.	X		Y		Pin. No.	X		Y	
	in.	mm.	in.	mm.		in.	mm.	in.	mm.		in.	mm.	in.	mm.
1	-.053	-1.35	.301	7.65	13	-.234	-5.94	-.196	-4.98	25	.000	0.00	-.209	-5.31
2	.053	1.35	.301	7.65	14	-.287	-7.29	-.104	-2.64	26	-.100	-2.54	-.172	-4.37
3	.153	3.89	.264	6.71	15	-.305	-7.75	.000	0.00	27	-.181	-4.60	-.104	-2.64
4	.234	5.94	.196	4.98	16	-.287	7.29	.104	2.64	28	-.199	-5.05	.000	0.00
5	.287	7.29	.104	2.64	17	-.234	-5.94	.196	4.98	29	-.181	-4.60	.104	2.64
6	.305	7.75	.000	0.00	18	-.153	-3.89	.264	6.71	30	-.100	-2.54	.172	4.37
7	.287	7.29	-.104	-2.64	19	.000	0.00	.209	5.31	31	-.053	-1.35	.073	1.85
8	.234	5.94	-.196	-4.98	20	.100	2.54	.172	4.37	32	.053	1.35	.073	1.85
9	.153	3.89	-.264	-6.71	21	.181	4.60	.104	2.64	33	.086	2.18	-.028	-0.71
10	.053	1.35	-.301	-7.65	22	.199	5.05	.000	0.00	34	.000	0.00	-.090	-2.29
11	-.053	-1.35	-.301	-7.65	23	.181	4.60	-.104	-2.64	35	-.086	-2.18	-.028	-0.71
12	-.153	-3.89	-.264	-6.71	24	.100	2.54	-.172	-4.37					

Straight PCB Footprints

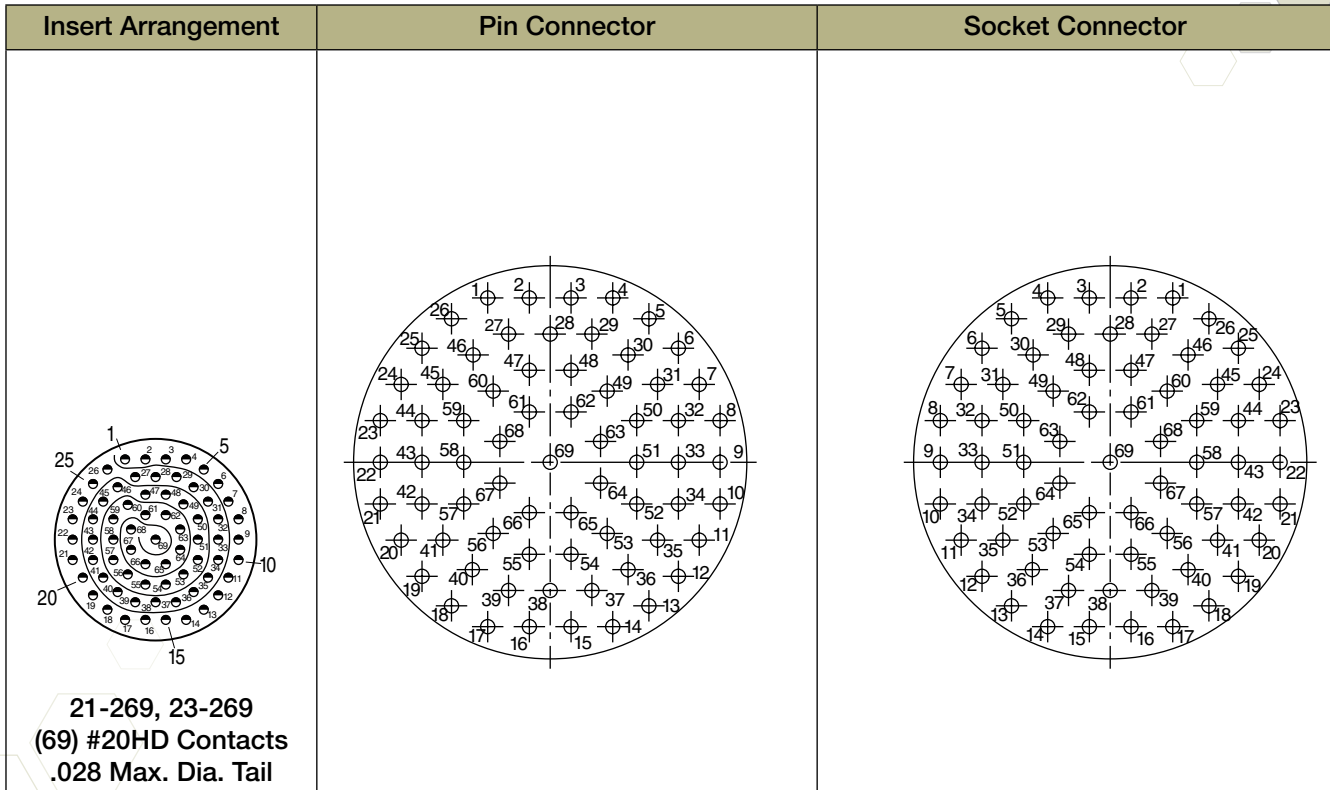
Insert Arrangement	Pin Connector	Socket Connector
<p>15-7, 17-7, 19-7 (7) #12 Contacts</p>		
<p>15-14, 17-14, 19-14 (14) #16 Contacts</p>		
<p>15-241, 16-241, 18-241 (41) #20HD Contacts .028 Max. Dia. Tail</p>		

Pin. No.	X		Y		Pin. No.	X		Y		Pin. No.	X		Y	
	in.	mm.	in.	mm.		in.	mm.	in.	mm.		in.	mm.	in.	mm.
1	-.053	-1.35	.335	8.51	15	-.302	-7.67	-.154	-3.91	29	-.151	-3.84	-.171	-4.34
2	.053	1.35	.335	8.51	16	-.335	-8.51	-.053	-1.35	30	-.213	-5.41	-.081	-2.06
3	.154	3.91	.302	7.67	17	-.335	-8.51	.053	1.35	31	-.226	-5.74	.028	0.71
4	.240	6.10	.240	6.10	18	-.302	-7.67	.154	3.91	32	-.188	-4.78	.130	3.30
5	.302	7.67	.154	3.91	19	-.240	-6.10	.240	6.10	33	-.106	-2.69	.202	5.13
6	.335	8.51	.053	1.35	20	-.154	-3.91	.302	7.67	34	-.053	-1.35	.110	2.79
7	.335	8.51	-.053	-1.35	21	.000	0.00	.228	5.79	35	.053	1.35	.110	2.79
8	.302	7.67	-.154	-3.91	22	.106	2.69	.202	5.13	36	.119	3.02	.027	0.69
9	.240	6.10	-.240	-6.10	23	.188	4.78	.130	3.30	37	.096	2.44	-.076	-1.93
10	.154	3.91	-.302	-7.67	24	.226	5.74	.028	0.71	38	.000	0.00	-.122	-3.10
11	+.053	+1.35	-.335	-8.51	25	.213	5.41	-.081	-2.06	39	-.096	-2.44	-.076	-1.93
12	-.053	-1.35	-.335	-8.51	26	.151	3.84	-.171	-4.34	40	-.119	-3.02	.027	0.69
13	-.154	-3.91	-.302	-7.67	27	.055	1.40	-.222	-5.64	41	.000	0.00	.000	0.00
14	-.240	-6.10	-.240	-6.10	28	-.055	-1.40	-.222	-5.64					

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

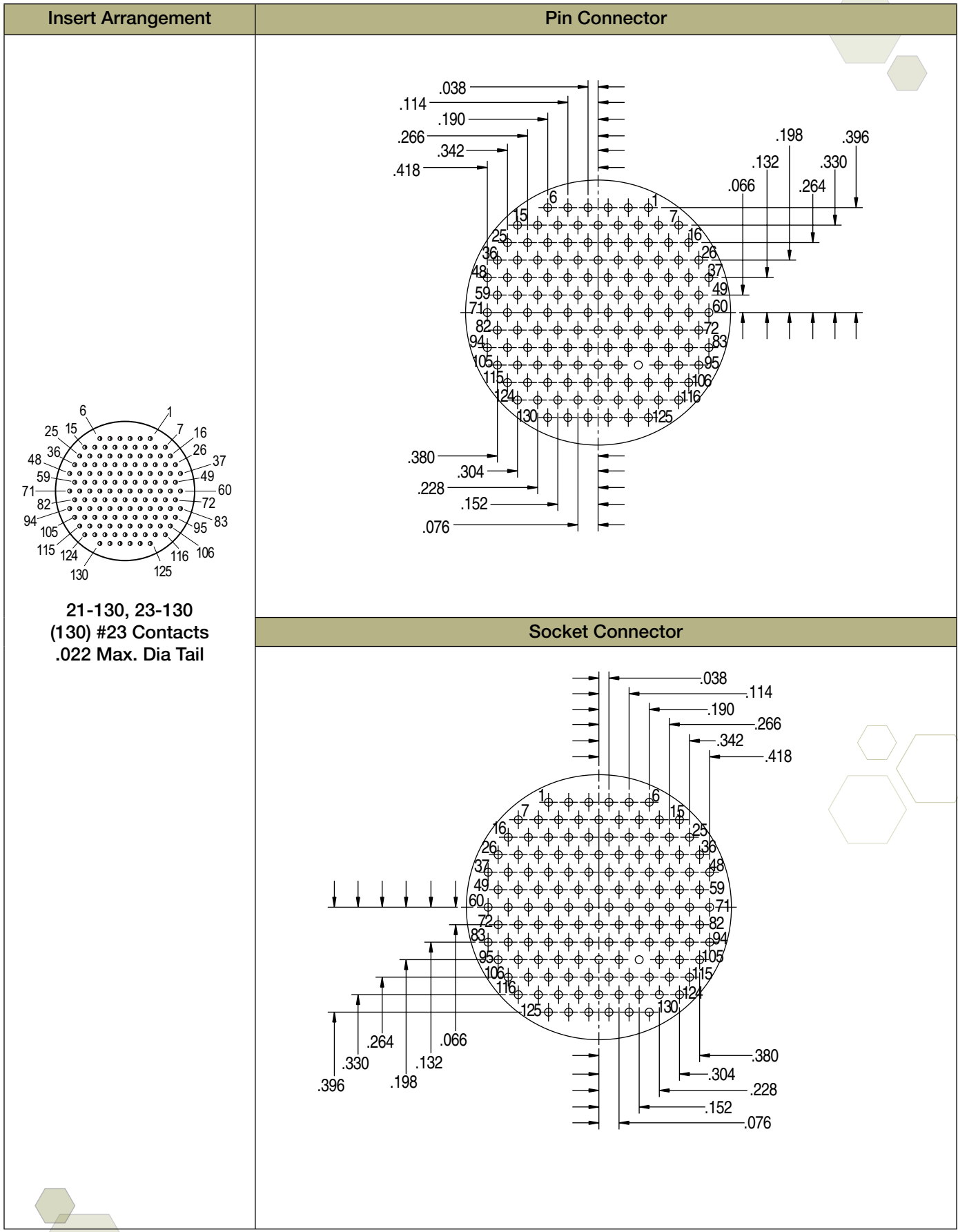
Insert Arrangement	Pin Connector	Socket Connector
 <p>17-85, 19-85 (85) #23 Contacts .022 Max. Dia. Tail</p>		
 <p>21-12, 23-12 (12) #12 Contacts</p>		
 <p>21-22, 23-22 (22) #16 Contacts</p>		

Straight PCB Footprints



Pin. No.	X		Y		Pin. No.	X		Y		Pin. No.	X		Y	
	in.	mm.	in.	mm.		in.	mm.	in.	mm.		in.	mm.	in.	mm.
1	-.159	-4.04	.418	10.62	24	-.379	-9.63	.198	5.03	47	-.053	-1.35	.234	5.94
2	-.053	-1.35	.418	10.62	25	-.326	-8.28	.290	7.37	48	.053	1.35	.234	5.94
3	.053	1.35	.418	10.62	26	-.251	-6.38	.365	9.27	49	.145	3.68	.181	4.60
4	.159	4.04	.418	10.62	27	-.106	-2.69	.326	8.28	50	.220	5.59	.106	2.69
5	.251	6.38	.365	9.27	28	.000	0.00	.326	8.28	51	.220	5.59	.000	0.00
6	.326	8.28	.290	7.37	29	.106	-2.69	.326	8.28	52	.220	5.59	-.106	-2.69
7	.379	9.63	.198	5.03	30	.198	5.03	.273	6.93	53	.145	3.68	-.181	-4.60
8	.432	10.97	.106	2.69	31	.273	6.93	.198	5.03	54	.053	1.35	-.234	-5.94
9	.432	10.97	.000	0.00	32	.326	8.28	.106	2.69	55	-.053	-1.35	-.234	-5.94
10	.432	10.97	-.106	-2.69	33	.326	8.28	.000	0.00	56	-.145	-3.68	-.181	-4.60
11	.379	9.63	-.198	-5.03	34	.326	8.28	-.106	-2.69	57	-.220	-5.59	-.106	-2.69
12	.326	8.28	-.290	-7.37	35	.273	6.93	-.198	-5.03	58	-.220	-5.59	.000	0.00
13	.251	6.38	-.365	-9.27	36	.198	5.03	-.273	-6.93	59	-.220	-5.59	.106	2.69
14	.159	4.04	-.418	-10.62	37	.106	2.69	-.326	-8.28	60	-.145	-3.68	.181	4.60
15	.053	1.35	-.418	-10.62	38	.000	0.00	-.326	-8.28	61	-.053	-1.35	.128	3.25
16	-.053	-1.35	-.418	-10.62	39	-.106	-2.69	-.326	-8.28	62	.053	1.35	.128	3.25
17	-.159	-4.04	-.418	-10.62	40	-.198	-5.03	-.273	-6.93	63	.128	3.25	.053	1.35
18	-.251	-6.38	-.365	-9.27	41	-.273	-6.93	-.198	-5.03	64	.128	3.25	-.053	-1.35
19	-.326	-8.28	-.290	-7.37	42	-.326	-8.28	-.106	-2.69	65	.053	1.35	-.128	-3.25
20	-.379	-9.63	-.198	-5.03	43	-.326	-8.28	.000	0.00	66	-.053	-1.35	-.128	-3.25
21	-.432	-10.97	-.106	-2.69	44	-.326	-8.28	.106	2.69	67	-.128	-3.25	-.053	-1.35
22	.432	-10.97	.000	0.00	45	-.273	-6.93	.198	5.03	68	-.128	-3.25	.053	1.35
23	-.432	-10.97	.106	2.69	46	-.198	-5.03	.273	6.93	69	.000	0.00	.000	0.00

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus



PERFORMANCE SPECIFICATIONS

Current Rating (Maximum)	Size #23 Contact: 5 AMPS. Size #20 contact: 7.5 AMPS. Size #16 contact: 13 AMPS. Size #12 contact: 23 AMPS.
Test Voltage (Dielectric Withstanding Voltage) Mated Connectors	Size #23 contacts: 500 VAC RMS sea level, 100 VAC RMS 40,000 feet Size #20 contacts: 1800 VAC RMS sea level, 325 VAC RMS 40,000 feet Size #20HD contacts: 750 VAC RMS sea level, 150 VAC RMS 40,000 feet Size #16 contacts: 1800 VAC RMS sea level, 1000 VAC RMS 40,000 feet Size #12 contacts: 1800 VAC RMS sea level, 1000 VAC RMS 40,000 feet
Insulation Resistance	5000 megohms minimum
Contact Resistance	Size #23 Contact: 73 millivolt drop at 5 AMPS. test current Size #20 contact: 55 millivolt drop at 7.5 AMPS. test current Size #16 contact: 49 millivolt drop at 13 AMPS. test current Size #12 contact: 42 millivolt drop at 23 AMPS. test current
Operating Temperature	-65° C. to +150° C.
Immersion, Mated	1 meter water immersion for 1 hour (2M803 Series splash proof only)
Magnetic Permeability	2.0 μ maximum
Please refer to the comprehensive 2M Series Product Specification for additional parameters and test methods. Filter and Hermetic designs have different specifications. (Please refer to individual sections)	

MATERIALS AND FINISHES

Aluminum Shell, Barrel, and Coupling Nut	Aluminum alloy 6061 T6
Stainless Steel Shell, Barrel Coupling Nut	Passivated Stainless Steel, 200° C
Front and Rear Inserts	Polyphenylene Sulfide (PPS)
Contact Retention Clip	Beryllium copper, heat-treated
Grommet, Peripheral Seal and Interfacial Seal	Fluorosilicone Rubber
Contacts	Gold Plated Copper alloy
Socket Contact Hood	Passivated Stainless steel
Adhesives	Various Epoxies & RTV's
Potting Compound, PCB and Solder Cup Versions	High Strength Epoxy

Contacts
& Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter &
Accessories

HD38999

Micro-D

Terrapin

Nexus

DESCRIPTION	REQUIREMENT	PROCEDURE
ELECTRICAL		
Contact resistance	SAE AS39029 Table V	EIA-364-06 Test current in amperes. Voltage drop in millivolts. Silver-coated copper wire, +25°C.
	<u>Wire Size</u> <u>Test Current</u> <u>Max Voltage Drop</u>	
	12 23 42	
	14 17 40	
	16 13 49	
	20 7.5 55	
	22 5 73	
	24 3 45	
26 2 52		
28 1.5 54		
Low level contact resistance	<u>Wire Size</u> <u>Max. Milliohms</u>	EIA-364-23 100 milliamperes maximum and 20 millivolts maximum open circuit voltage
	16 5	
	20 9	
	22 15	
	24 20	
	26 31	
28 50		
Insulation resistance	5000 megohms minimum	EIA-364-21 500 volts DC ± 50 volts. Test between adjacent contacts and contacts to shell.
Dielectric withstanding voltage, sea level	No breakdown or flashover	EIA-364-20 AC rms 60 Hz. One minute dwell. Unmated or mated
	#23 contacts 500 volts	
	#20HD contacts 750 volts	
	#16 contacts 1800 volts	
#12 contacts 1800 volts		
Dielectric withstanding voltage, 40,000 feet altitude	No breakdown or flashover	EIA-364-20 AC rms 60 Hz. One minute dwell. mated condition
	#23 contacts 100 volts	
	#20HD contacts 150 volts	
	#16 contacts 1000 volts	
#12 contacts 1000 volts		
Current carrying capacity	<u>Contact Size</u> <u>Max Current</u>	EIA-364-70 Method 1
	12 23	
	16 13	
	20 7.5	
	23 5	

DESCRIPTION	REQUIREMENT	PROCEDURE																															
Shell-to-shell conductivity, Initial	<p>The maximum voltage drop across a mated pair shall not exceed the values shown.</p> <table border="1"> <thead> <tr> <th>Series</th> <th>Voltage Drop</th> </tr> </thead> <tbody> <tr> <td>2M801</td> <td>2.5</td> </tr> <tr> <td>2M803</td> <td>100</td> </tr> <tr> <td>2M804</td> <td>2</td> </tr> <tr> <td>2M805</td> <td>2</td> </tr> </tbody> </table>	Series	Voltage Drop	2M801	2.5	2M803	100	2M804	2	2M805	2	EIA-364-83 Electroless Nickel Plated Connectors																					
Series	Voltage Drop																																
2M801	2.5																																
2M803	100																																
2M804	2																																
2M805	2																																
Shell-to-shell conductivity, after conditioning (48 hours salt spray)	<p>The maximum voltage drop across a mated pair shall not exceed the values shown.</p> <table border="1"> <thead> <tr> <th>Series</th> <th>Voltage Drop</th> </tr> </thead> <tbody> <tr> <td>2M801</td> <td>2.5</td> </tr> <tr> <td>2M803</td> <td>200</td> </tr> <tr> <td>2M804</td> <td>4</td> </tr> <tr> <td>2M805</td> <td>2</td> </tr> </tbody> </table>	Series	Voltage Drop	2M801	2.5	2M803	200	2M804	4	2M805	2	EIA-364-83 Electroless Nickel Plated Connectors																					
Series	Voltage Drop																																
2M801	2.5																																
2M803	200																																
2M804	4																																
2M805	2																																
Shielding effectiveness, low frequency (100MHz-1000 MHz)	<table border="1"> <thead> <tr> <th rowspan="2">Frequency</th> <th colspan="3">dB Min. Attenuation</th> </tr> <tr> <th>Series 2M801</th> <th>Series 2M803</th> <th>Series 2M804, 2M805</th> </tr> </thead> <tbody> <tr> <td>100 MHz</td> <td>75</td> <td>60</td> <td>90</td> </tr> <tr> <td>200 MHz</td> <td>70</td> <td>55</td> <td>88</td> </tr> <tr> <td>300 MHz</td> <td>65</td> <td>55</td> <td>88</td> </tr> <tr> <td>400 MHz</td> <td>63</td> <td>50</td> <td>87</td> </tr> <tr> <td>800 MHz</td> <td>58</td> <td>45</td> <td>85</td> </tr> <tr> <td>1000 MHz</td> <td>55</td> <td>40</td> <td>85</td> </tr> </tbody> </table>	Frequency	dB Min. Attenuation			Series 2M801	Series 2M803	Series 2M804, 2M805	100 MHz	75	60	90	200 MHz	70	55	88	300 MHz	65	55	88	400 MHz	63	50	87	800 MHz	58	45	85	1000 MHz	55	40	85	EIA-364-21 Electroless Nickel Plated Connectors
Frequency	dB Min. Attenuation																																
	Series 2M801	Series 2M803	Series 2M804, 2M805																														
100 MHz	75	60	90																														
200 MHz	70	55	88																														
300 MHz	65	55	88																														
400 MHz	63	50	87																														
800 MHz	58	45	85																														
1000 MHz	55	40	85																														
Shielding effectiveness, high frequency (1Ghz-10GHz)	<table border="1"> <thead> <tr> <th rowspan="2">Frequency</th> <th colspan="2">dB Min. Attenuation</th> </tr> <tr> <th>Series 2M801, 2M804</th> <th>Series 2M805</th> </tr> </thead> <tbody> <tr> <td>1 GHz</td> <td>55</td> <td>85</td> </tr> <tr> <td>3 GHz</td> <td>50</td> <td>69</td> </tr> <tr> <td>5 GHz</td> <td>45</td> <td>66</td> </tr> <tr> <td>19 GHz</td> <td>40</td> <td>65</td> </tr> </tbody> </table>	Frequency	dB Min. Attenuation		Series 2M801, 2M804	Series 2M805	1 GHz	55	85	3 GHz	50	69	5 GHz	45	66	19 GHz	40	65	EIA-364-66 Electroless Nickel Plated Connectors														
Frequency	dB Min. Attenuation																																
	Series 2M801, 2M804	Series 2M805																															
1 GHz	55	85																															
3 GHz	50	69																															
5 GHz	45	66																															
19 GHz	40	65																															

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-D

Terrapin

Nexus



- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

DESCRIPTION	REQUIREMENT	PROCEDURE
MECHANICAL		
Vibration, Sine	No discontinuity of greater than 1 microsecond, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle. Connectors shall meet electrical requirements after vibration test.	MIL-STD-202 Method 204, test Condition G 12 sweep cycles per axes, 20 min. per 10-2000-10Hz @ temp. 2M801/2M805 - 60 g 2M803/2M804 - 30 g
Vibration, Random	No discontinuity of greater than 1 microsecond, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle. Connectors shall meet electrical requirements after vibration test.	EIA-364-28 Test Condition V Letter I 100 milliamp test current 50- 2,000 Hz @ temp. 2M801/2M805 - 43.9 g rms 2M803/2M804 - 37.80 g rms
Gunfire Vibration	No discontinuity of greater than 1 microsecond, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle. Connectors shall meet electrical requirements after vibration test.	MIL-STD-810F Method 519.5
Mechanical Shock	No discontinuity of greater than 1 microsecond, no cracking, breaking or loosening of parts, plug shall not become disengaged from receptacle. Connectors shall meet electrical requirements after shock test.	EIA-364-27 Condition D 300 G, halfsine, 3ms, 3 axes
Mechanical durability, at ambient temperature	No deterioration which will adversely affect the connector after 2000 cycles (where applicable) of mating and unmating. Connectors shall meet contact resistance, insulation resistance, shell-to-shell resistance, DWV, and mating and unmating force.	EIA-364-09
Solderability, PC tail contacts	95% solder coverage. Smooth, bright and even finish.	EIA-364-52 Category 3 8 hours steam aging prior to test 245° C, 4-5 sec. dwell 10X magnification
Resistance To Soldering Heat	No damage to connector. Connectors shall meet insulation resistance and waterproof sealing requirements.	EIA-364-56 260° C, 10 seconds (PC tail)

DESCRIPTION	REQUIREMENT	PROCEDURE																														
Impact	No impairment of function. Connector shall meet contact resistance, insulation resistance and waterproof sealing.	EIA-364-42 1 meter 8 drops																														
Contact retention	<table border="1"> <thead> <tr> <th>Contact Size</th> <th>Min. Pounds</th> <th>Min. Newtons</th> </tr> </thead> <tbody> <tr> <td>23</td> <td>10</td> <td>45</td> </tr> <tr> <td>20</td> <td>15</td> <td>67</td> </tr> <tr> <td>20HD</td> <td>10</td> <td>45</td> </tr> <tr> <td>16</td> <td>25</td> <td>111</td> </tr> <tr> <td>12</td> <td>25</td> <td>111</td> </tr> </tbody> </table>	Contact Size	Min. Pounds	Min. Newtons	23	10	45	20	15	67	20HD	10	45	16	25	111	12	25	111	EIA-364-29												
Contact Size	Min. Pounds	Min. Newtons																														
23	10	45																														
20	15	67																														
20HD	10	45																														
16	25	111																														
12	25	111																														
Contact separation force	<table border="1"> <thead> <tr> <th>Contact Size</th> <th>Min. Ounces</th> <th>Min. Newtons</th> </tr> </thead> <tbody> <tr> <td>23</td> <td>0.5</td> <td>0.14</td> </tr> <tr> <td>20</td> <td>0.7</td> <td>0.19</td> </tr> <tr> <td>16</td> <td>2.0</td> <td>0.56</td> </tr> <tr> <td>12</td> <td>3.0</td> <td>0.83</td> </tr> </tbody> </table>	Contact Size	Min. Ounces	Min. Newtons	23	0.5	0.14	20	0.7	0.19	16	2.0	0.56	12	3.0	0.83	SAE AS39029															
Contact Size	Min. Ounces	Min. Newtons																														
23	0.5	0.14																														
20	0.7	0.19																														
16	2.0	0.56																														
12	3.0	0.83																														
Coupling torque	<p>Threaded coupling connector coupling torque shall not exceed the following requirements.</p> <table border="1"> <thead> <tr> <th colspan="3">Shell Size</th> </tr> <tr> <th>Series 2M801</th> <th>Series 2M805</th> <th>Inch Pounds</th> </tr> </thead> <tbody> <tr> <td>5, 6, 7</td> <td>8, 9</td> <td>8</td> </tr> <tr> <td>8,9</td> <td>10, 11</td> <td>9</td> </tr> <tr> <td>10</td> <td>12</td> <td>12</td> </tr> <tr> <td>12, 13</td> <td>15</td> <td>16</td> </tr> <tr> <td>14, 15</td> <td>18</td> <td>28</td> </tr> <tr> <td>16, 17</td> <td>19</td> <td>24</td> </tr> <tr> <td>21</td> <td></td> <td>32</td> </tr> <tr> <td></td> <td>23</td> <td>36</td> </tr> </tbody> </table>	Shell Size			Series 2M801	Series 2M805	Inch Pounds	5, 6, 7	8, 9	8	8,9	10, 11	9	10	12	12	12, 13	15	16	14, 15	18	28	16, 17	19	24	21		32		23	36	
Shell Size																																
Series 2M801	Series 2M805	Inch Pounds																														
5, 6, 7	8, 9	8																														
8,9	10, 11	9																														
10	12	12																														
12, 13	15	16																														
14, 15	18	28																														
16, 17	19	24																														
21		32																														
	23	36																														
Unmating force (Series 2M804)	<p>Series 2M804 push/pull connectors</p> <table border="1"> <thead> <tr> <th>Contact Arrangement</th> <th>Pounds</th> </tr> </thead> <tbody> <tr> <td>5-3</td> <td>10.6</td> </tr> <tr> <td>6-4</td> <td>10.8</td> </tr> <tr> <td>6-7</td> <td>11.4</td> </tr> <tr> <td>7-10</td> <td>12.0</td> </tr> <tr> <td>8-13</td> <td>12.6</td> </tr> <tr> <td>9-19</td> <td>13.8</td> </tr> <tr> <td>10-26</td> <td>15.2</td> </tr> <tr> <td>12-37</td> <td>17.4</td> </tr> <tr> <td>14-55</td> <td>21.0</td> </tr> </tbody> </table>	Contact Arrangement	Pounds	5-3	10.6	6-4	10.8	6-7	11.4	7-10	12.0	8-13	12.6	9-19	13.8	10-26	15.2	12-37	17.4	14-55	21.0											
Contact Arrangement	Pounds																															
5-3	10.6																															
6-4	10.8																															
6-7	11.4																															
7-10	12.0																															
8-13	12.6																															
9-19	13.8																															
10-26	15.2																															
12-37	17.4																															
14-55	21.0																															

DESCRIPTION	REQUIREMENT	PROCEDURE																																																	
Insert retention	No impairment of function. Connector shall meet contact resistance, insulation resistance and waterproof sealing.	EIA-365-35																																																	
	<table border="1"> <thead> <tr> <th colspan="4">Shell Size</th> </tr> <tr> <th>Series 2M803, 2M804</th> <th>Series 2M801</th> <th>Series 2M805</th> <th>Min. Force in Pounds</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>5</td> <td></td> <td>100</td> </tr> <tr> <td>6</td> <td>6</td> <td>8</td> <td>100</td> </tr> <tr> <td>7</td> <td>7</td> <td>9</td> <td>100</td> </tr> <tr> <td>8</td> <td>8</td> <td>10</td> <td>100</td> </tr> <tr> <td>9</td> <td>9</td> <td>11</td> <td>100</td> </tr> <tr> <td>10</td> <td>10</td> <td>12</td> <td>100</td> </tr> <tr> <td>12</td> <td>13</td> <td>15</td> <td>100</td> </tr> <tr> <td>14</td> <td>16</td> <td>18</td> <td>100</td> </tr> <tr> <td>15</td> <td>17</td> <td>19</td> <td>100</td> </tr> <tr> <td></td> <td>21</td> <td>23</td> <td>100</td> </tr> </tbody> </table>		Shell Size				Series 2M803, 2M804	Series 2M801	Series 2M805	Min. Force in Pounds	5	5		100	6	6	8	100	7	7	9	100	8	8	10	100	9	9	11	100	10	10	12	100	12	13	15	100	14	16	18	100	15	17	19	100		21	23	100	
	Shell Size																																																		
	Series 2M803, 2M804		Series 2M801	Series 2M805	Min. Force in Pounds																																														
	5		5		100																																														
	6		6	8	100																																														
	7		7	9	100																																														
	8		8	10	100																																														
	9		9	11	100																																														
	10		10	12	100																																														
	12		13	15	100																																														
14	16	18	100																																																
15	17	19	100																																																
	21	23	100																																																
Magnetic Permeability	2 μ maximum.	EIA-364-54																																																	

ENVIRONMENTAL

Operating temperature	-65° to +150°C	
Water immersion, mated	No evidence of water penetration into mated connectors. ≥100Ω insulation resistance.	MIL-STD-810F Method 512.4 1 meter immersion 1 hour
Water immersion, open face panel mount receptacles with non-removable printed circuit board or solder cup contacts	Connectors with waterblock potting process. 1 X 10 ⁻⁴ cc/second maximum helium leak rate at 1 atmosphere pressure differential following thermal shock conditioning.	EIA-365-02 3 cycles thermal shock -57°C to +71°C 75 min. dwell 5 minute transfer rate
Humidity, cyclic (damp heat, cyclic) (moisture resistance)	No deterioration which will adversely affect the connector. 100 megohms minimum insulation resistance during the final cycle. Following the recovery period, connectors shall meet contact resistance, shell-to-shell resistance and DWV requirements.	EIA-364-31 Condition B Method III 80-98% RH 10 cycles (10 days) +25° C to +65° C Step 7b vibration deleted. 24 hour recovery period.

DESCRIPTION	REQUIREMENT	PROCEDURE
21 day humidity (damp heat, long term)	No deterioration which will adversely affect the connector. Following the drying period, connectors shall meet 100 megohms minimum, contact resistance, shell-to-shell resistance, DWV, mating and unmating requirements.	EIA-364-31 Condition C Method II 90-95% RH 40° C Apply 100 volts DC during test. 4 hours drying time at ambient temperature prior to final measurements.
Thermal shock	No mechanical damage or loosening of parts. Following thermal shock, connector shall meet contact resistance, DWV, insulation resistance and shell-to-shell resistance requirements.	EIA-364-32 Test Condition IV 5 cycles consisting of -65° C 30 minutes, +25° C 5 minutes max., +150° C 30 minutes, +25° C 5 minutes max.
Corrosion (salt mist)	No exposure of base metal. Connectors shall meet DWV and contact resistance requirements following the test.	EIA-364-26 5% salt solution 35° C Unmated connectors Code C: 48 hours Code M: 48 hours Code MT: 500 hours Code NF: 500 hours Code ZN: 500 hours Code ZNU: 500 hours
Sand and dust	Mated connectors shall withstand the effects of blowing sand and dust	MIL-STD-810F, Method 510.4
Fungus	Connector materials shall be fungus inert.	MIL-STD-810F, Method 508.5
Fluid immersion	No visible damage from immersion in various fuels and oils. Connector shall meet coupling torque and dielectric withstanding voltage requirements.	EIA-364-10 Unmated connectors
Altitude immersion	No evidence of moisture on connector interface or contacts. Connector shall meet dielectric withstanding voltage.	EIA-364-03

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-D

Terrapin

Nexus

Dualok

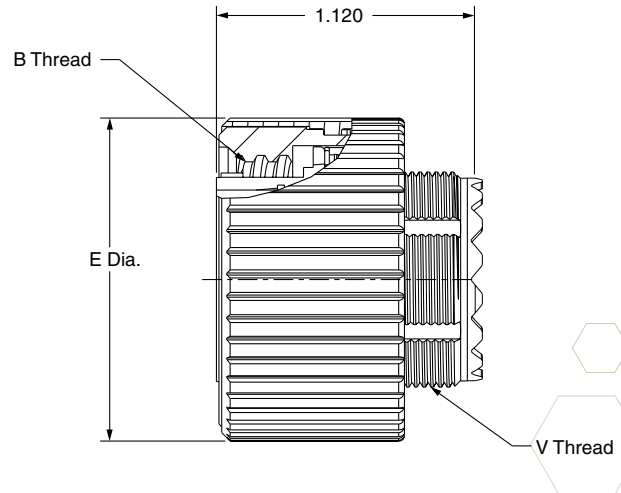
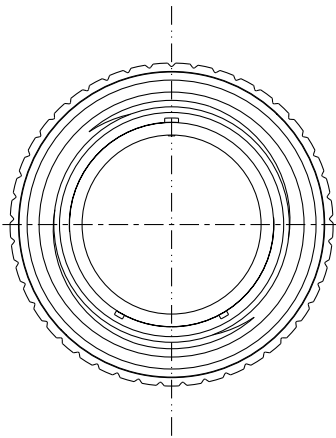
Amphenol now offers a *Dualok* Plug for High Vibration Applications!

Meets or Exceeds MIL-DTL-38999 Series III Vibration Levels

Amphenol's 2M801 DUALOK line is now available for extreme vibration applications. The NEW! 2M DUALOK plug features a newly developed locking mechanism which ensures solid coupling and metal-to-metal bottoming in the most severe vibration environments. Patent pending.

Consult Amphenol Aerospace for ordering information.

NEW!



Shell Size	E DIA.		B Thread	V Thread
	In.	mm.		
5	.653	16.59	.3125-.05P-1L-2B	.2500-32 UNEF-2A
6	.715	18.16	.3750-.05P-1L-2B	.3125-32 UNEF-2A
7	.868	22.05	.4375-.05P-1L-2B	.4375-28 UNEF-2A
8	.930	23.62	.5000-.05P-.1L-2B	.5000-28 UNEF-2A
9	.993	25.22	.5625-.05P-.1L-2B	.5625-24 UNEF-2A
10	1.060	26.92	.6250-.05P-1L-2B	.6250-24 UNEF-2A
13	1.153	29.29	.8125-.1P-.2L-2B	.6875-24 UNEF-2A
16	1.340	34.04	1.0000-.1P-.2L-2B	.9375-20 UNEF-2A
17	1.402	35.61	1.0625-.1P-.2L-2B	.9375-20 UNEF-2A
21	1.653	41.99	1.3125-.1p-.2L-2B	1.1875-18 UNEF-2A

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

2M801 Series Micro-Miniature Connector:

Amphenol's 2M801 Series of connectors is ideal for applications where space is limited or a high density interconnect is needed. The series features Plugs with or without anti-decoupling mechanisms and a Dual- Start ACME thread that provides full mating in 1 ½ turns. Plugs and Receptacles are provided in two different styles to accommodate the attachment of backshell with rear accessory threads or with integral backshell. The integral backshell allows for use of EMI shielding attachments and/or overmolding. Contact termination styles include Crimp, PC Tail, and Solder Cup with others available upon request. Custom and Filter configurations are available, please consult Amphenol Aerospace for ordering information.

2M801 FEATURES INCLUDE:

- Anti-Vibration Self Locking Plugs (-26)
- Dual-Start ACME Thread for 1 ½ Turn Full mating
- Sealed Receptacles:
 - Hermetic (1x10⁻⁸ cc/second)
 - Epoxy Backfilled (1x10⁻⁴ cc/second)
- ROHS Compliant Platings available
- Insert Arrangements up to 130 contacts



2M801 SPECIFICATIONS

Current Rating	See Insert Arrangements (pg. 14-17)	
DWV	See Insert Arrangements (pg. 14-17)	
Insulation Resistance	5000 megohms min.	
Operating Temperature	-65°C to +150°C	
Shock	300 g's	
Vibration	Random: 37.8 g (-16) Plug 43.9 g (-26) Plug	Sine: 30 g (-16) Plug 60 g (-26) Plug
Shielding Effectiveness	55 dB min. from 100MHz to 1000MHz	
Durability	2000 mating cycles (-16) Plug 500 mating cycles (-26) Plug	

2M801 MATERIALS AND FINISHES

Shells	Aluminum Alloy or Stainless Steel
Contacts	Copper Alloy, gold plated
Insulators	Polyphenylene Sulfide (PPS)
Contact Retention	Beryllium Copper Alloy
Grommet, Interfacial Seal, O-Ring	Fluorosilicone Rubber



2M Series 801 Dual-Start Acme Threads

Connector Weights

SERIES 2M801 MAXIMUM CONNECTOR WEIGHT IN GRAMS

Insert Arrg.	Plug	Jam Nut Recept. Crimp	Jam Nut Recept. PCB	Sq. Flange Recept. Crimp	Sq. Flange Recept. PCB	Insert Arrg.	Plug	Jam Nut Recept. Crimp	Jam Nut Recept. PCB	Sq. Flange Recept. Crimp	Sq. Flange Recept. PCB
5-3P	4.4	3.4	3.6	2.0	2.2	10-201S	16.7	13.5	14.4	15.0	11.7
5-3S	4.5	3.5	3.7	2.0	2.4	10-202P	14.9	11.7	12.6	13.2	9.9
6-1P	5.6	4.3	4.6	2.7	2.9	10-202S	16.3	13.1	14.0	14.6	11.3
6-1S	5.9	4.6	4.9	3.0	3.2	13-2P	18.9	17.2	17.2	17.2	15.1
6-4P	5.6	4.3	4.6	2.7	2.9	13-2S	20.4	18.7	18.7	18.7	16.6
6-4S	5.8	4.5	4.7	2.8	3.0	13-3P	19.8	18.1	18.1	18.1	16.0
6-7P	5.4	4.1	4.6	2.9	3.4	13-3S	21.4	19.7	19.7	19.7	17.6
6-7S	5.6	4.4	4.7	3.2	3.5	13-7P	20.0	18.3	18.3	18.3	16.2
7-1P	7.8	6.5	7.2	4.5	5.2	13-7S	22.4	20.7	20.7	20.7	18.6
7-1S	8.3	7.0	7.7	5.0	5.7	13-37P	18.4	16.7	16.7	16.7	14.6
7-10P	7.6	6.3	7.7	4.3	5.0	13-37S	19.9	17.6	17.6	17.6	15.5
7-10S	8.0	6.7	7.0	4.7	5.2	13-200P	19.0	17.3	17.3	17.3	15.2
8-2P	8.9	7.7	7.2	5.6	6.8	13-200S	21.1	19.4	19.4	19.4	17.3
8-2S	9.6	8.4	8.7	6.3	7.5	13-201P	19.1	17.4	17.4	17.4	15.3
8-13P	8.3	7.1	9.4	5.0	6.2	13-201S	21.3	19.6	19.6	19.6	17.5
8-13S	8.9	7.6	8.1	5.6	6.5	16-5P	28.5	22.6	24.4	25.4	23.0
8-200P	9.2	8.0	8.5	5.9	7.1	16-5S	31.2	25.3	28.1	28.1	25.7
8-200S	9.8	8.6	9.0	6.5	7.7	16-12P	29.2	23.3	26.1	26.1	23.7
9-4P	10.9	8.7	10.7	7.6	8.6	16-12S	32.5	26.6	29.4	29.4	27.0
9-4S	11.8	10.6	11.6	8.5	9.5	16-55P	26.5	20.6	24.3	24.3	21.9
9-19P	10.1	7.9	9.2	5.8	7.1	16-55S	29.2	23.3	26.1	26.1	23.7
9-19S	10.9	8.7	9.7	6.6	7.6	17-7P	29.8	27.0	29.4	29.4	25.2
9-200P	10.4	9.2	10.2	7.1	8.1	17-7S	33.0	30.2	32.6	32.6	28.4
9-200S	11.4	10.2	11.2	8.1	9.1	17-14P	32.6	29.8	32.2	32.2	28.0
9-201P	9.6	8.4	9.4	6.6	7.6	17-14S	32.3	29.5	31.9	31.9	27.7
9-201S	11.5	10.3	11.3	8.2	9.2	17-85P	28.1	23.2	29.0	29.0	25.3
10-5P	15.8	12.6	13.5	14.1	12.8	17-85S	31.0	26.2	30.6	30.6	26.4
10-5S	17.1	13.9	14.8	15.4	14.1	21-12P	35.0	31.4	34.4	26.4	31.4
10-26P	14.2	11.0	11.9	12.5	8.7	21-12S	39.6	36.0	39.0	31.0	36.0
10-26S	15.3	12.1	12.5	16.7	9.2	21-22P	37.3	33.7	36.7	28.7	33.7
10-200P	15.0	11.8	12.7	13.3	10.0	21-22S	43.6	40.0	43.0	35.0	40.0
10-200S	16.3	13.1	14.0	14.6	11.3	21-130P	32.9	29.3	32.3	24.3	29.3
10-201P	15.3	12.1	13.3	13.6	10.3	21-130S	39.4	35.8	38.8	30.8	35.8

2M801 Dual-Start ACME Threads



Ordering Guide for 2M801

Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M801-0XX	-16	NF	6-7	P	A

*add "-501" to the suffix of Jam Nut version to include a Hex Nut instead of a Spanner Nut.

SERIES	
2M801-007	Plugs with Integral Backshell
2M801-008	Plugs with Rear Accessory Thread
2M801-009	Receptacle with Integral Backshell
2M801-010	Receptacle with Accessory Thread

SHELL STYLE 2M801-007 2M801-008	
-16	Plug with Anti-Decoupling Spring
-26	Self-Locking Plug with Ratchet Mechanism
SHELL STYLE 2M801-009 2M801-010	
-01	In-Line
-02	Square Flange
-07	Jam Nut*

SERVICE CLASS	
	Finish
C	Aluminum/Black Anodize (Non-Conductive)
M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium with Olive Drab Chromate
MT	Aluminum/Nickel-PTFE (Durmolon)
Z1	Stainless Steel/Passivated
ZM	Stainless Steel/Electroless Nickel
ZN	Aluminum/Zinc-Nickel w/ Olive Drab Chromate
ZNU	Aluminum/Zinc-Nickel with Black Chromate

SHELL SIZE - INSERT ARRANGEMENTS	
See Insert Arrangements on Pages 13-15	

CONTACTS	
P	Pin
S	Socket
A	Pin, less contacts
B	Socket, less contacts



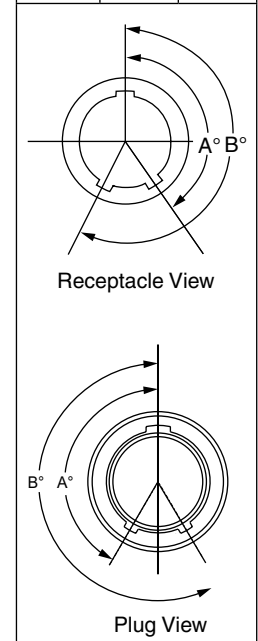
KEYING		
	A°	B°
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

INSERT ARRANGEMENTS

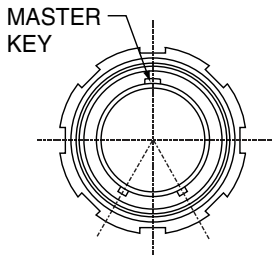
Insert Arrg.	No. of Contacts				
	#23	#20	#20HD	#16	#12
5-3	3				
6-1				1	
6-4	4				
6-6	6				
6-7	7				
6-23			3		
7-1					1
7-10	10				
7-25			5		
8-2				2	
8-13	13				
8-28			8		
8-200	4	2			
9-4				4	
9-19	19				
9-200	4			2	
9-201	8	2			
9-210			10		
10-2					2
10-5				5	
10-26	26				

INSERT ARRANGEMENTS

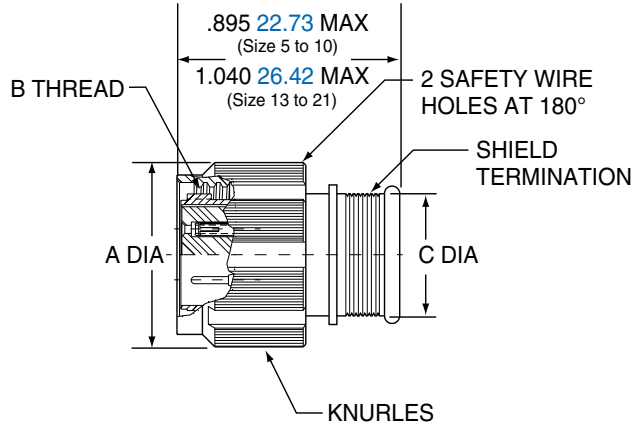
Insert Arrg.	No. of Contacts				
	#23	#20	#20HD	#16	#12
10-200	12				1
10-201	4				2
10-202	8			2	
13-2					2
13-3					3
13-7				7	
13-37	37				
13-200	6				2
13-201	10				2
13-220			20		
16-5					5
16-12				12	
16-55	55				
16-235			35		
17-7					7
17-14				14	
17-85	85				
17-241			41		
21-12					12
21-22				22	
21-130	130				
21-269			69		



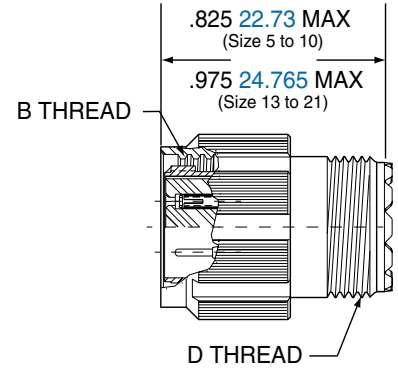
- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus



**2M801-007-16
2M801-007-26**



**2M801-008-16
2M801-008-26**

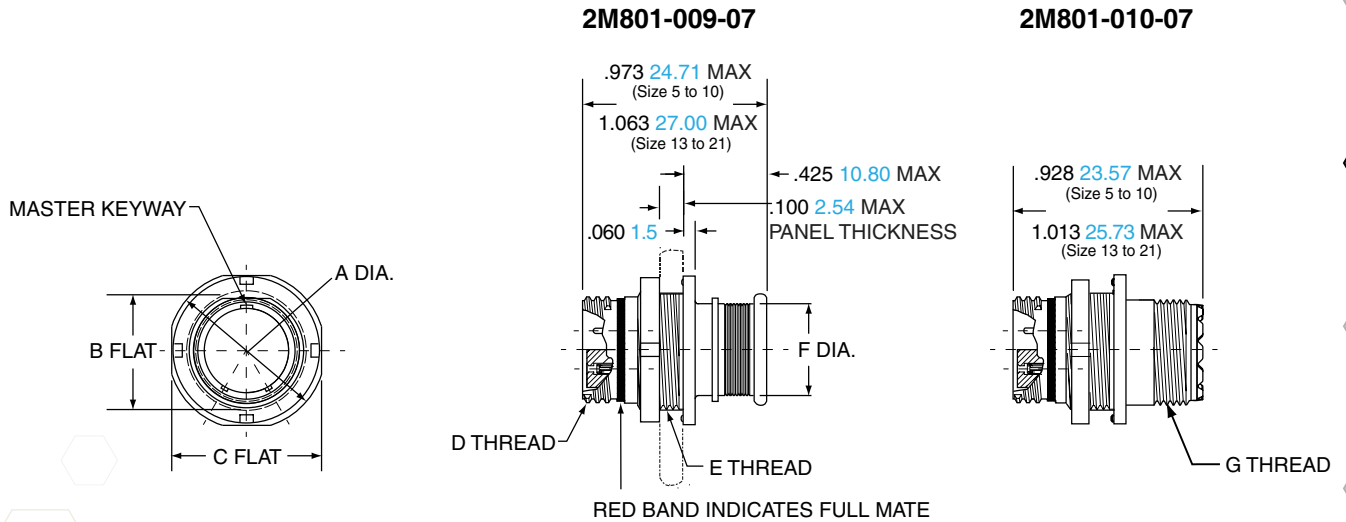


Shell Size	Style 16		Style 26		B Thread	C Dia.		D Thread UNEF-2A
	A Dia.		A Dia.			in.	mm.	
	in.	mm.	in.	mm.				
5	.545	13.84	.660	16.76	.3125-.05P-.1L-2B	.245	6.22	.2500-32
6	.610	15.49	.710	18.03	.3750-.05P-.1L-2B	.290	7.37	.3125-32
7	.695	17.65	.790	20.07	.4375-.05P-.1L-2B	.390	9.91	.4375-28
8	.750	19.05	.860	21.84	.5000-.05P-.1L-2B	.445	11.30	.5000-28
9	.810	20.57	.920	23.37	.5625-.05P-.1L-2B	.500	12.70	.5625-24
10	.890	22.61	.985	25.02	.6250-.05P-.1L-2B	.560	14.22	.6250-24
13	1.060	26.92	1.150	29.21	.8125-.1P-.2L-2B	.650	16.51	.6875-24
16	1.250	31.75	1.345	34.16	1.0000-.1P-.2L-2B	.805	20.45	.9375-20
17	1.310	33.27	1.400	35.56	1.0625-.1P-.2L-2B	.850	21.59	.9375-20
21	1.560	39.62	1.660	42.16	1.3125-.1P-.2L-2B	1.135	28.83	1.1875-18

2M801 Dual-Start ACME Threads Jam Nut



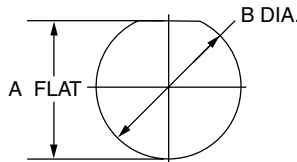
2M801-009-07 and 2M801-010-07

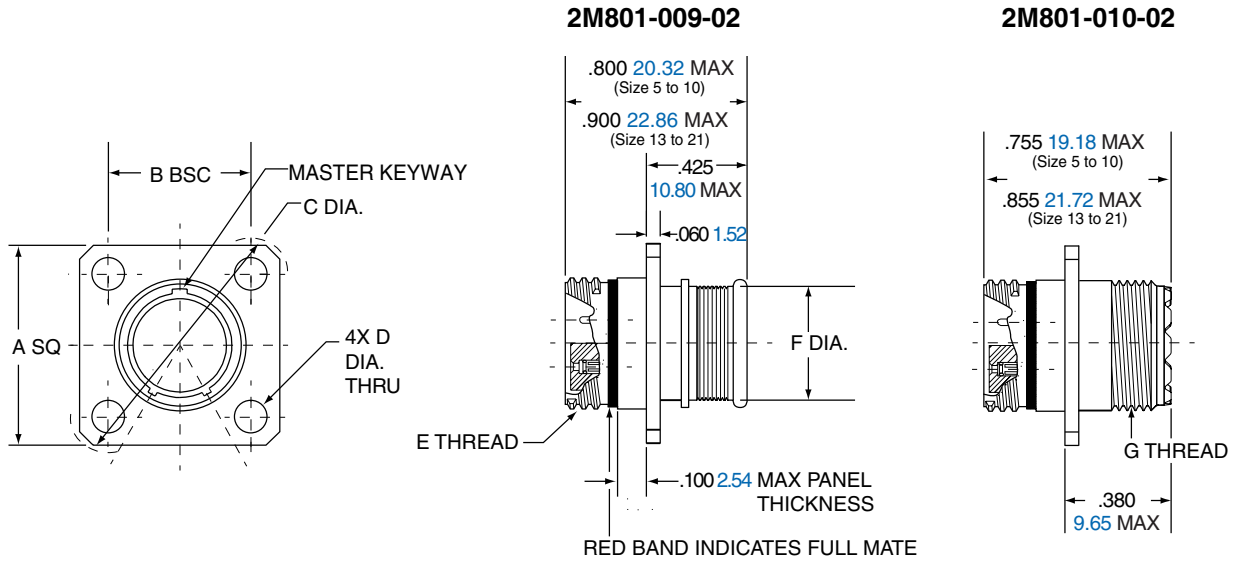


Shell Size	A Dia.		B Flat		C Flat		D Thread	E Thread	F Dia.		G Thread UNEF-2A
	in.	mm.	in.	mm.	in.	mm.			in.	mm.	
5	.575	14.61	.350	8.89	.545	13.84	.3125-.05P-.1L-2A	.3750-28 UN-2A	.245	6.22	.2500-32
6	.635	16.13	.410	10.41	.595	15.11	.3750-.05P-.1L-2A	.4375-28 UNEF-2A	.290	7.37	.3125-32
7	.755	19.18	.536	13.61	.723	18.36	.4375-.05P-.1L-2A	.5625-32 UN-2A	.390	9.91	.4375-28
8	.755	19.18	.536	13.61	.723	18.36	.5000-.05P-.1L-2A	.5625-32 UN-2A	.445	11.30	.5000-28
9	.830	21.08	.596	15.14	.790	20.07	.5625-.05P-.1L-2A	.6250-28 UN-2A	.500	12.70	.5625-24
10	.890	22.61	.658	16.71	.855	21.72	.6250-.05P-.1L-2A	.6875-28 UN-2A	.560	14.22	.6250-24
13	1.078	27.38	.845	21.46	1.044	26.52	.8125-.1P-.2L-2A	.8750-28 UN-2A	.650	16.51	.6875-24
16	1.264	32.11	1.022	25.96	1.230	31.24	1.0000-.1P-.2L-2A	1.0625-20 UN-2A	.805	20.45	.9375-20
17	1.325	33.66	1.096	27.84	1.290	32.77	1.0625-.1P-.2L-2A	1.125-28 UN-2A	.850	21.59	.9375-20
21	1.625	41.28	1.347	34.16	1.577	40.06	1.3125-.1P-.2L-2A	1.375-28 UN-2A	1.135	28.83	1.1875-18

JAM NUT PANEL CUTOUT

Shell Size	A Flat		B Dia.	
	in. ± .002	mm. ± 0.05	in. ± .002	mm. ± 0.05
5	.356	9.04	.385	9.78
6	.416	10.57	.447	11.35
7	.542	13.77	.572	14.53
8	.542	13.77	.572	14.53
9	.602	15.29	.635	16.13
10	.666	16.62	.697	17.70
13	.851	21.62	.885	22.48
16	1.028	26.11	1.075	27.31
17	1.102	27.99	1.135	28.83
21	1.354	34.39	1.385	35.18





Shell Size	A		B BSC		C Dia.		D Dia.		E Thread	F Dia.		G Thread UNEF-2A
	in.	mm.	in.	mm.	in.	mm.	in. ± .003	mm. ± .08		in.	mm.	
5	.530	13.46	.363	9.22	.680	17.27	.093	2.36	.3125-.05P-.1L-2A	.245	6.22	.2500-32
6	.590	14.99	.423	10.74	.750	19.05	.093	2.36	.3750-.05P-.1L-2A	.290	7.37	.3125-32
7	.650	16.51	.483	12.27	.850	21.59	.093	2.36	.4375-.05P-.1L-2A	.390	9.91	.4375-28
8	.712	18.08	.545	13.84	.940	23.88	.093	2.36	.5000-.05P-.1L-2A	.445	11.30	.5000-28
9	.850	21.59	.607	15.42	1.125	28.58	.128	3.25	.5625-.05P-.1L-2A	.500	12.70	.5625-24
10	.890	22.61	.670	17.02	1.190	30.23	.128	3.25	.6250-.05P-.1L-2A	.560	14.22	.6250-24
13	1.030	26.16	.812	20.62	1.375	34.93	.128	3.25	.8125-.1P-.2L-2A	.650	16.51	.6875-24
16	1.219	30.96	.981	24.92	1.625	41.28	.128	3.25	1.0000-.1P-.2L-2A	.805	20.45	.9375-20
17	1.280	32.51	1.060	26.92	1.700	43.18	.128	3.25	1.0625-.1P-.2L-2A	.850	21.59	.9375-20
21	1.430	36.32	1.205	30.61	1.940	49.28	.128	3.25	1.3125-.1P-.2L-2A	1.135	28.83	1.1875-18

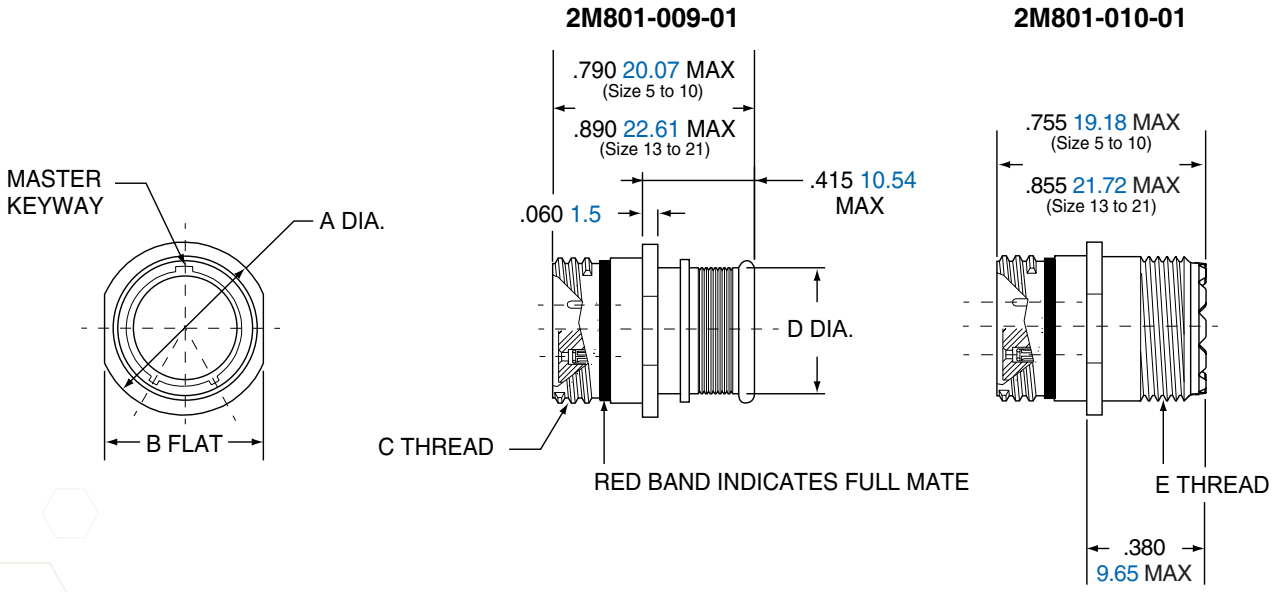
PANEL CUTOUT

Shell Size	A Dia.		B Dia.		C Dia.	
	in.	mm.	in.	mm.	in.	mm.
5	.330	8.38	.363	9.22	.093	2.36
6	.390	9.91	.423	10.74	.093	2.36
7	.450	11.43	.483	12.27	.093	2.36
8	.510	12.95	.545	13.84	.093	2.36
9	.575	14.61	.607	15.42	.128	3.25
10	.640	16.26	.670	17.02	.128	3.25
13	.825	20.96	.812	20.65	.128	3.25
16	1.015	25.78	.981	24.92	.128	3.25
17	1.075	27.31	1.060	26.92	.128	3.25
21	1.325	33.66	1.205	30.61	.128	3.25

2M801 Dual-Start ACME Threads In-Line



2M801-009-01 and 2M801-010-01



Shell Size	A Dia.		B Flat		C Thread	D Dia.		E Thread UNEF-2A
	in.	mm.	in.	mm.		in.	mm.	
5	.355	9.02	.325	8.13	.3125-.05P-.1L-2A	.245	6.22	.2500-32
6	.415	10.54	.385	9.78	.3750-.05P-.1L-2A	.290	7.37	.3125-32
7	.480	12.19	.445	11.30	.4375-.05P-.1L-2A	.390	9.91	.4375-28
8	.540	13.72	.510	12.95	.5000-.05P-.1L-2A	.445	11.30	.5000-28
9	.605	15.37	.575	14.61	.5625-.05P-.1L-2A	.500	12.70	.5625-24
10	.665	16.89	.635	16.13	.6250-.05P-.1L-2A	.560	14.22	.6250-24
13	.855	21.72	.825	20.96	.8125-.1P-.2L-2A	.650	16.51	.6875-24
16	1.040	26.42	1.010	25.65	1.0000-.1P-.2L-2A	.805	20.44	.9375-20
17	1.110	28.19	1.070	27.18	1.0625-.1P-.2L-2A	.850	21.59	.9375-20
21	1.405	35.69	1.385	35.18	1.3125-.1P-.2L-2A	1.135	28.83	1.1875-18

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M801-0XX	-16	NF	6-7	P	A

*add "-501" to the suffix of Jam Nut version to include a Hex Nut instead of a Spanner Nut.

SERIES	
2M801-036	Plugs with Integral Backshell
2M801-039	Plugs with Rear Accessory Thread
2M801-037	Receptacle with Integral Backshell
2M801-040	Receptacle with Accessory Thread

SHELL STYLE	
2M801-007 2M801-008	
-16	Plug with Anti-Decoupling Spring
-26	Self-Locking Plug with Ratchet Mechanism
SHELL STYLE	
2M801-009 2M801-010	
-01	In-Line
-02	Square Flange
-07	Jam Nut*

SERVICE CLASS	
Finish	
C	Aluminum/Black Anodize (Non-Conductive)
M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium with Olive Drab Chromate
MT	Aluminum/Nickel-PTFE (Durmalon)
Z1	Stainless Steel/Passivated
ZM	Stainless Steel/Electroless Nickel
ZN	Aluminum/Zinc-Nickel w/ Olive Drab Chromate
ZNU	Aluminum/Zinc-Nickel with Black Chromate

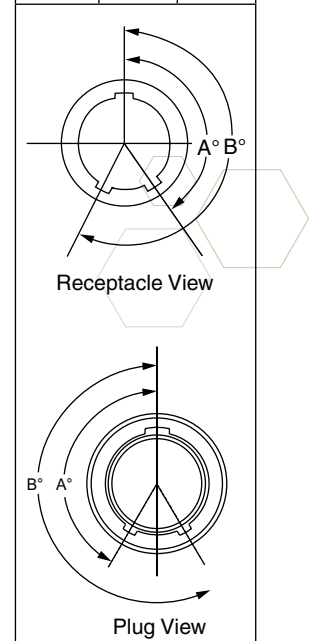
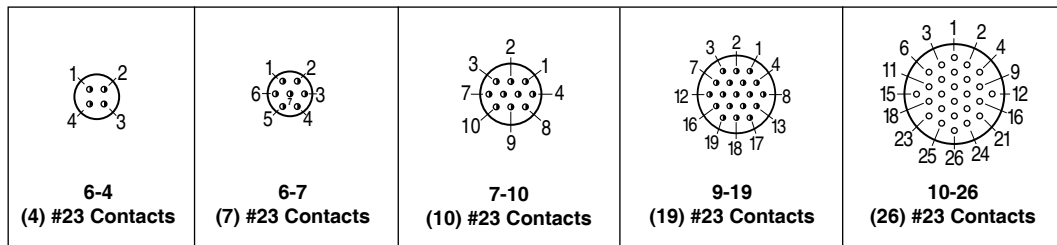
SHELL SIZE - INSERT ARRANGEMENTS	
See Insert Arrangements Below	

CONTACTS	
P	Pin
S	Socket
A	Pin, less contacts
B	Socket, less contacts



KEYING		
	A°	B°
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

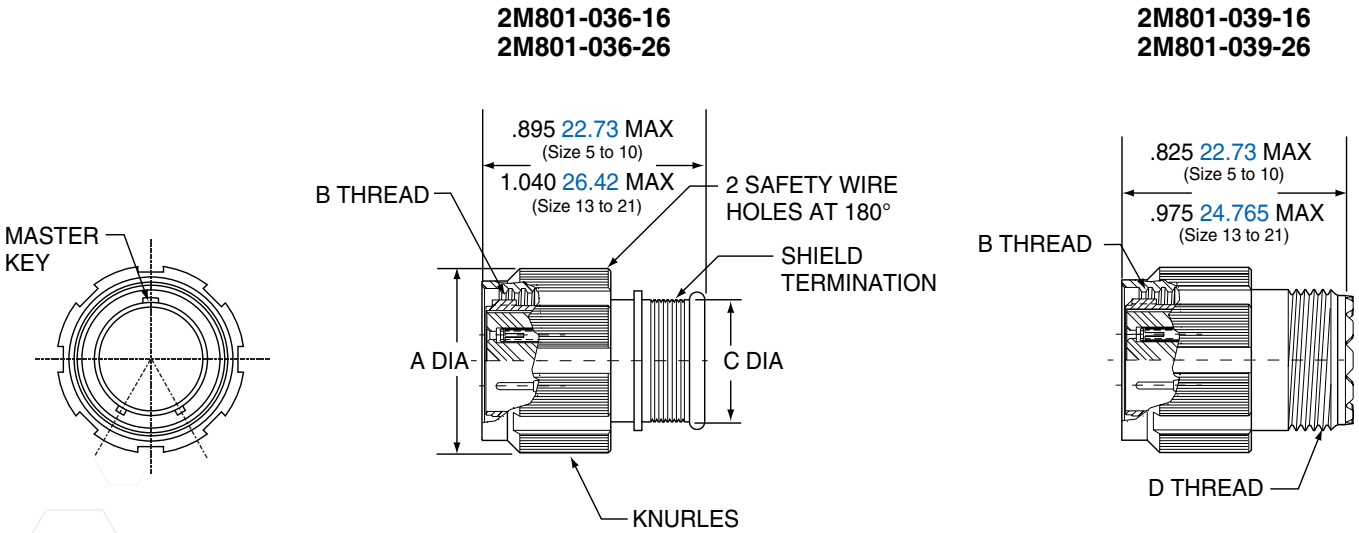
INSERT ARRANGEMENTS



2M801 High Speed Dual-Start ACME Threads Plug

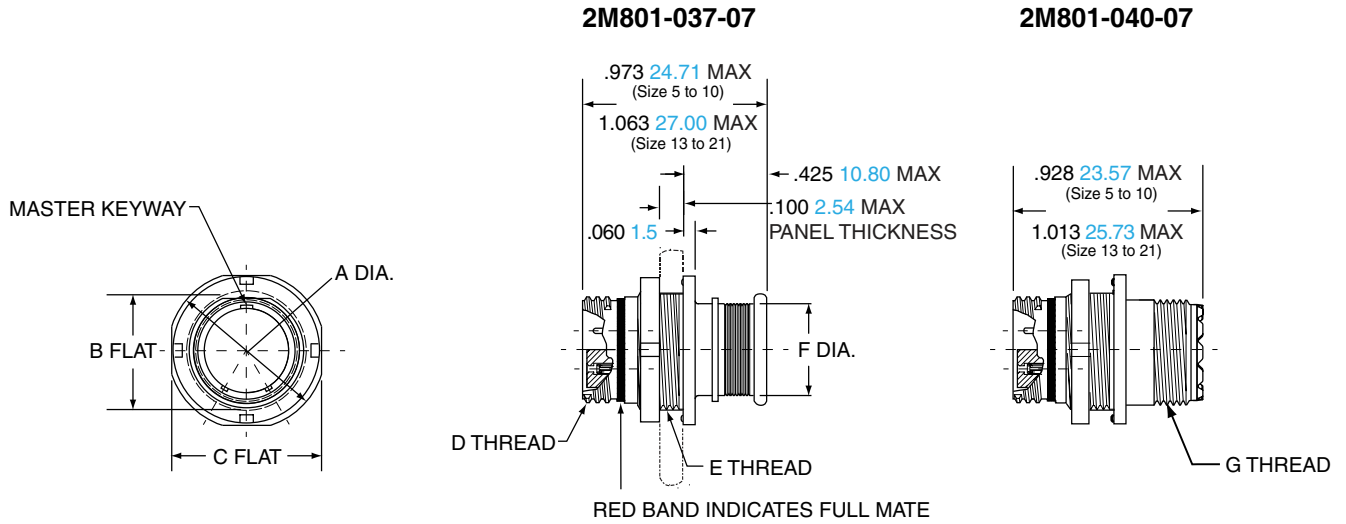


2M801-036 and 2M801-039



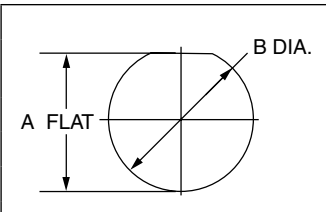
Shell Size	Style 16		Style 26		B Thread	C Dia.		D Thread UNEF-2A
	A Dia.		A Dia.			in.	mm.	
	in.	mm.	in.	mm.				
6	.610	15.49	.710	18.03	.3750-.05P-.1L-2B	.290	7.37	.3125-32
7	.695	17.65	.790	20.07	.4375-.05P-.1L-2B	.390	9.91	.4375-28
9	.810	20.57	.920	23.37	.5625-.05P-.1L-2B	.500	12.70	.5625-24
10	.890	22.61	.985	25.02	.6250-.05P-.1L-2B	.560	14.22	.6250-24

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus



Shell Size	A Dia.		B Flat		C Flat		D Thread	E Thread	F Dia.		G Thread UNEF-2A
	in.	mm.	in.	mm.	in.	mm.			in.	mm.	
6	.635	16.13	.410	10.41	.595	15.11	.3750-.05P-.1L-2A	.4375-28 UNEF-2A	.290	7.37	.3125-32
7	.755	19.18	.536	13.61	.723	18.36	.4375-.05P-.1L-2A	.5625-32 UN-2A	.390	9.91	.4375-28
9	.830	21.08	.596	15.14	.790	20.07	.5625-.05P-.1L-2A	.6250-28 UN-2A	.500	12.70	.5625-24
10	.890	22.61	.658	16.71	.855	21.72	.6250-.05P-.1L-2A	.6875-28 UN-2A	.560	14.22	.6250-24

JAM NUT PANEL CUTOUT

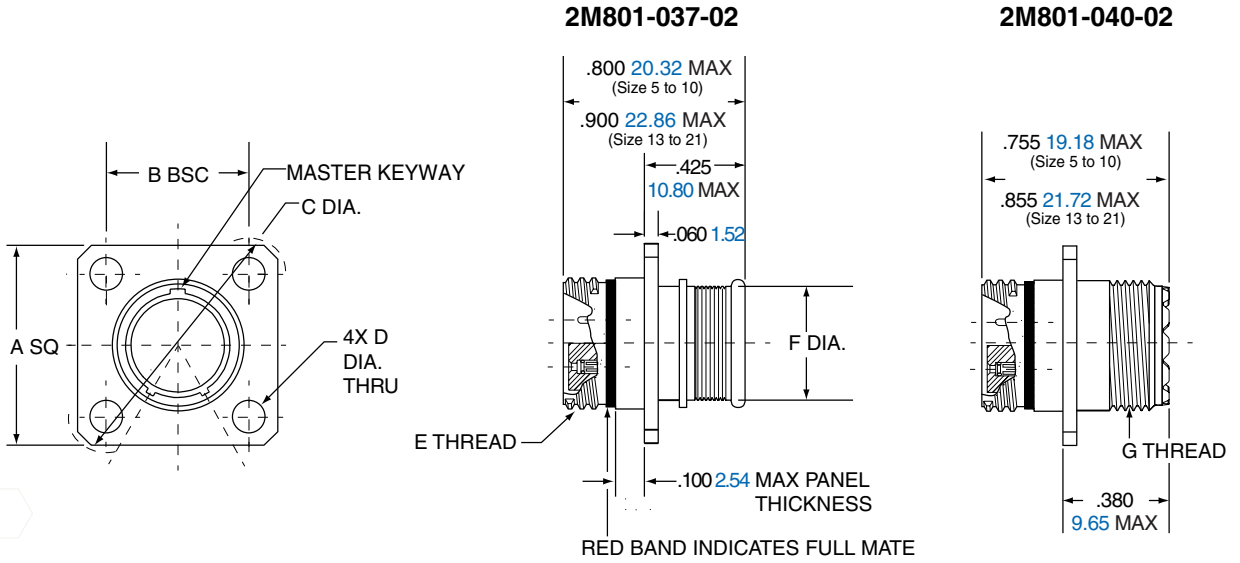


Shell Size	A Flat		B Dia.	
	in. ± .002	mm. ± 0.05	in. ± .002	mm. ± 0.05
6	.416	10.57	.447	11.35
7	.542	13.77	.572	14.53
9	.602	15.29	.635	16.13
10	.666	16.62	.697	17.70

2M801 High Speed Dual-Start ACME Threads Square Flange



Receptacle 2M801-037-02 & 2M801-040-02

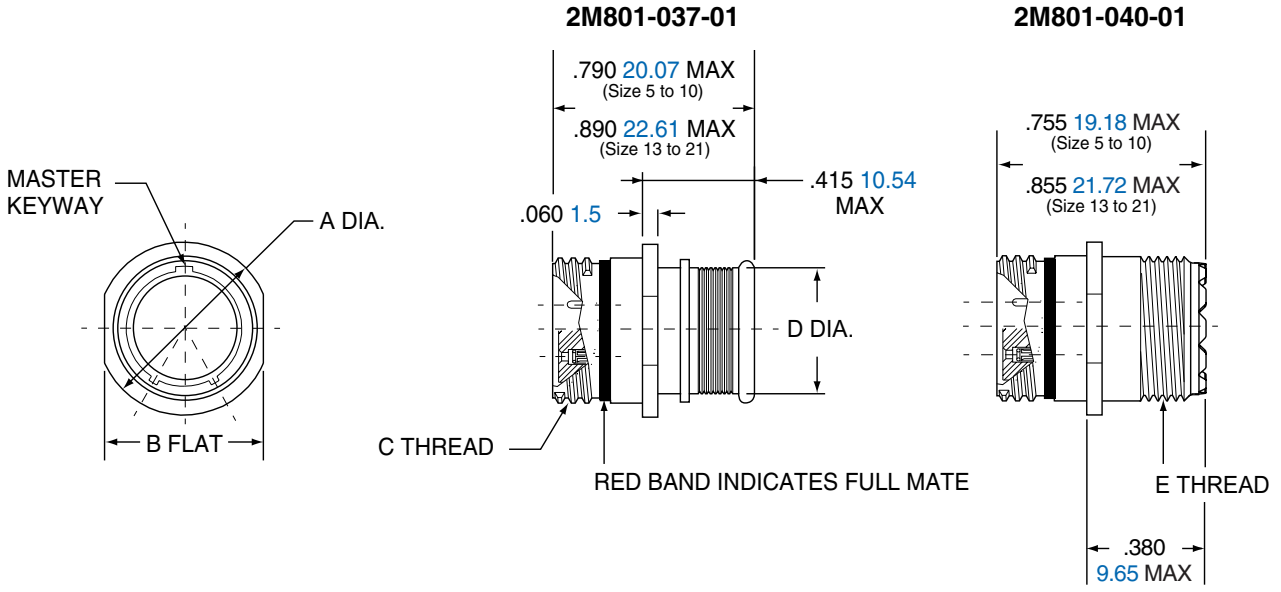


Shell Size	A		B BSC		C Dia.		D Dia.		E Thread	F Dia.		G Thread UNEF-2A
	in.	mm.	in.	mm.	in.	mm.	in. ± .003	mm. ± .08		in.	mm.	
6	.590	14.99	.423	10.74	.750	19.05	.093	2.36	.3750-.05P-.1L-2A	.290	7.37	.3125-32
7	.650	16.51	.483	12.27	.850	21.59	.093	2.36	.4375-.05P-.1L-2A	.390	9.91	.4375-28
9	.850	21.59	.607	15.42	1.125	28.58	.128	3.25	.5625-.05P-.1L-2A	.500	12.70	.5625-24
10	.890	22.61	.670	17.02	1.190	30.23	.128	3.25	.6250-.05P-.1L-2A	.560	14.22	.6250-24

PANEL CUTOUT

Shell Size	A Dia.		B Dia.		C Dia.	
	in.	mm.	in.	mm.	in.	mm.
6	.390	9.91	.423	10.74	.093	2.36
7	.450	11.43	.483	12.27	.093	2.36
9	.575	14.61	.607	15.42	.128	3.25
10	.640	16.26	.670	17.02	.128	3.25

- Contacts & Tools
- 2M Specs
- 2M801**
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus



Shell Size	A Dia.		B Flat		C Thread	D Dia.		E Thread UNEF-2A
	in.	mm.	in.	mm.		in.	mm.	
6	.415	10.54	.385	9.78	.3750-.05P-.1L-2A	.290	7.37	.3125-32
7	.480	12.19	.445	11.30	.4375-.05P-.1L-2A	.390	9.91	.4375-28
9	.605	15.37	.575	14.61	.5625-.05P-.1L-2A	.500	12.70	.5625-24
10	.665	16.89	.635	16.13	.6250-.05P-.1L-2A	.560	14.22	.6250-24

2M801 Series of PC Board Receptacles:

2M801 Series of PC Board Receptacles are intended for use of terminating the connector directly to a Circuit Board or Flex assembly. These connectors can also be supplied with Solder cup termination for direct wire attachment.

2M801 FEATURES INCLUDE:

- Low Profile Shells for minimum box protrusion
- Shell Standoffs for PC Board washout
- Non-removable PC and/or Solder cup contacts
- Environmental Sealing



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M801-0XX	-02	NF	6-7	P	A

*add "-501" to the suffix of Jam Nut version to include a Hex Nut instead of a Spanner Nut.

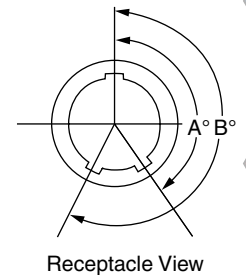
SERIES	
2M801-011	Receptacle for Solder Cup or PCB Termination with Epoxy Potting
2M801-033	Receptacle with Solder Cup or PCB Termination with Special Sealing for Open Face (unmated) Water Immersion Requirements. 100% Leak Tested. To maintain a helium leak rate of 1-10 ⁻⁴ cc/sec. pressure differential from -55°C to 150° C.

SHELL STYLE	
-02	Square Flange
-07	Jam Nut*

SHELL SIZE - INSERT ARRANGEMENTS
See Insert Arrangements on Pages 13-15

SERVICE CLASS	
	Finish
C	Aluminum/Black Anodize (Non-Conductive)
M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium with Olive Drab Chromate
MT	Aluminum/Nickel-PTFE (Durmalon)
Z1	Stainless Steel/Passivated
ZM	Stainless Steel/Electroless Nickel
ZN	Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU	Aluminum/Zinc-Nickel with Black Chromate

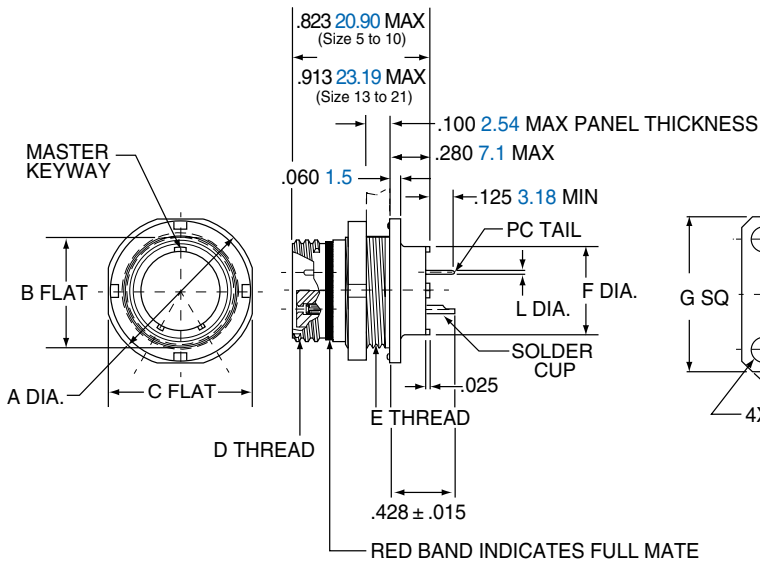
KEYING		
	A°	B°
(Normal) A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°



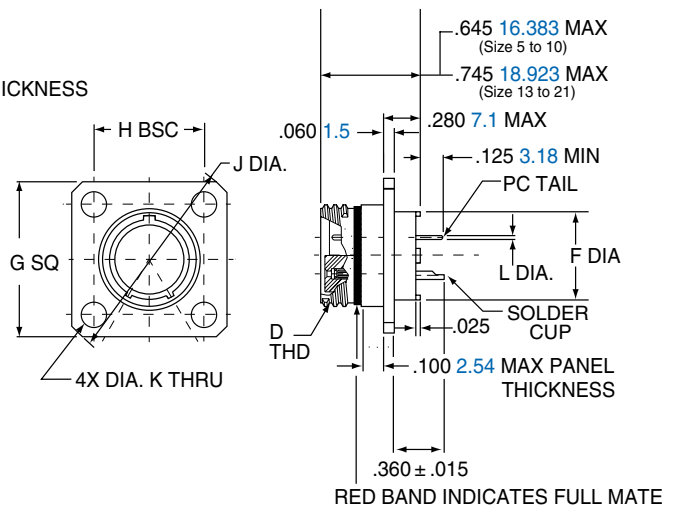
CONTACTS	
P	Pin - PCB
S	Socket - PCB
E	Pin - Solder Cup
F	Socket - Solder Cup



2M801-011-07
2M801-033-07



2M801-011-02
2M801-033-02



Shell Size	A Dia.		B Flat		C Flat		D Thread	E Thread	F Dia.		G Sq.		H BSC		J Dia.		K Dia.		L Dia. Tail Dia.
	in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	
5	.575	14.61	.350	8.89	.545	13.84	.3125-.05P-.1L-2A	.3750-28	.244	6.20	.530	13.46	.363	9.22	.680	17.27	.093	2.36	#23
6	.635	16.13	.410	10.41	.595	15.11	.3750-.05P-.1L-2A	.4375-28	.330	8.38	.590	14.99	.423	10.74	.750	19.05	.093	2.36	.018/.022
7	.755	19.18	.536	13.61	.723	18.36	.4375-.05P-.1L-2A	.5625-32	.432	10.97	.650	16.51	.483	12.27	.850	21.59	.093	2.36	0.46/0.56
8	.755	19.18	.536	13.61	.723	18.36	.5000-.05P-.1L-2A	.5625-32	.493	12.52	.712	18.08	.545	13.84	.938	23.88	.093	2.36	#20/20HD
9	.830	21.08	.596	15.14	.790	20.07	.5625-.05P-.1L-2A	.6250-28	.551	14.00	.850	21.56	.607	15.42	1.125	28.58	.128	3.25	.025/.027
10	.890	22.61	.658	16.71	.855	21.72	.6250-.05P-.1L-2A	.6875-28	.620	15.75	.890	22.61	.670	17.02	1.188	30.23	.128	3.25	0.64/0.69
13	1.078	27.38	.845	21.46	1.044	26.52	.8125-.1P-.2L-2A	.8750-28	.703	17.86	1.030	26.16	.812	20.62	1.375	34.93	.128	3.25	#16
16	1.264	32.11	1.022	25.96	1.230	31.24	1.0000-.1P-.2L-2A	1.0625-20	.863	21.92	1.219	30.96	.981	24.92	1.625	41.28	.128	3.25	.060/.064
17	1.325	33.66	1.096	27.84	1.290	32.77	1.0625-.1P-.2L-2A	1.1250-28	.912	23.16	1.280	32.51	1.060	26.92	1.700	43.18	.128	3.25	1.52/1.63
21	1.625	41.28	1.345	34.16	1.577	40.06	1.3125-.1P-.2L-2A	1.3750-28	1.170	29.72	1.565	36.32	1.322	33.58	2.100	49.28	.128	3.25	#12
																			.092/.096
																			2.34/2.44

PANEL CUTOUT

Shell Size	A Dia.		B Dia.		C Dia.		D Flat		E Dia.	
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
	±.002		± 0.05		±.002		± 0.05		±.002	
5	.330	8.38	.363	9.22	.093	2.36	.356	9.04	.385	9.78
6	.390	9.91	.423	10.74	.093	2.36	.416	10.57	.447	11.35
7	.450	11.43	.483	12.27	.093	2.36	.542	13.77	.572	14.53
8	.510	12.95	.545	13.84	.093	2.36	.542	13.77	.572	14.53
9	.575	14.61	.607	15.42	.128	3.25	.602	15.29	.635	16.13
10	.640	16.26	.670	17.02	.128	3.25	.666	16.92	.697	17.70
13	.825	20.96	.812	20.65	.128	3.25	.851	21.62	.885	22.48
16	1.015	25.78	.981	24.92	.128	3.25	1.028	26.11	1.075	27.31
17	1.075	27.31	1.060	26.92	.128	3.25	1.102	27.99	1.135	28.83
21	1.330	33.78	1.322	33.58	.128	3.25	1.354	34.39	1.385	35.18

2M801 High Speed Dual-Start ACME Threads



Ordering Guide for High Speed PCB Receptacles 2M801-038 and 2M801-041

2M801 High Speed Series of PC Board Receptacles:

2M801 High Speed Series of PC Board Receptacles are intended for use of terminating the connector directly to a Circuit Board or Flex assembly. These connectors can also be supplied with Solder cup termination for direct wire attachment.

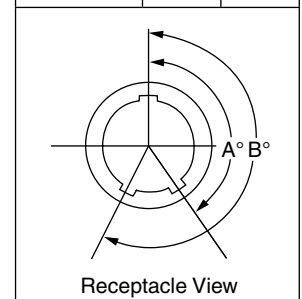
2M801 HIGH SPEED SERIES FEATURES INCLUDE:

- Low Profile Shells for minimum box protrusion
- Shell Standoffs for PC Board washout
- Non-removable PC and/or Solder cup contacts
- Teflon Inserts
- Environmental Sealing



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position	
2M801-0XX	-02	NF	6-7	P	A	*add "-501" to the suffix of Jam Nut version to include a Hex Nut instead of a Spanner Nut.

KEYING		
	A°	B°
(Normal) A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°



SERIES	
2M801-038	Receptacle for Solder Cup or PCB Termination with Epoxy Potting
2M801-041	Receptacle with Solder Cup or PCB Termination with Special Sealing for Open Face (unmated) Water Immersion Requirements. 100% Leak Tested. To maintain a helium leak rate of 1-10 ⁻⁴ cc/sec. pressure differential from -55°C to 150° C.

SHELL STYLE	
-02	Square Flange
-07	Jam Nut*

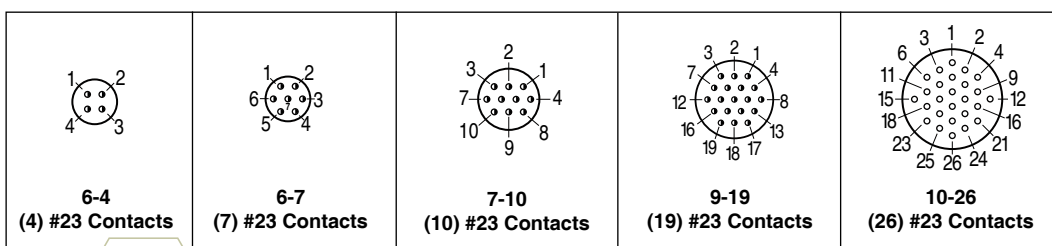
SHELL SIZE - INSERT ARRANGEMENTS

See Insert Arrangements Below

SERVICE CLASS		
		Finish
C		Aluminum/Black Anodize (Non-Conductive)
M		Aluminum/Electroless Nickel
NF		Aluminum/Cadmium with Olive Drab Chromate
MT		Aluminum/Nickel-PTFE (Durmalon)
Z1		Stainless Steel/Passivated
ZM		Stainless Steel/Electroless Nickel
ZN		Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU		Aluminum/Zinc-Nickel with Black Chromate

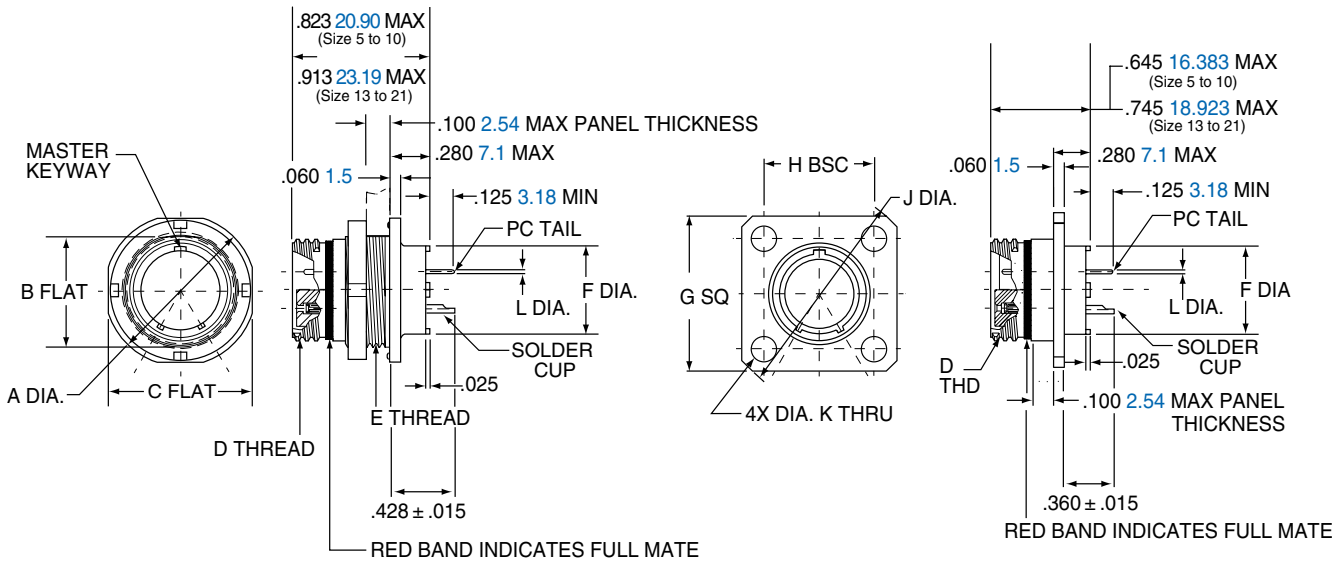
CONTACTS	
P	Pin - PCB
S	Socket - PCB
E	Pin - Solder Cup
F	Socket - Solder Cup

INSERT ARRANGEMENTS



2M801-038-07
2M801-041-07

2M801-038-02
2M801-041-02



Shell Size	A Dia.		B Flat		C Flat		D Thread	E Thread	F Dia.		G Sq.		H BSC		J Dia.		K Dia.		L Dia. Tail Dia.
	in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	
6	.635	16.13	.410	10.41	.595	15.11	.3750-.05P-.1L-2A	.4375-28	.330	8.38	.590	14.99	.423	10.74	.750	19.05	.093	2.36	#23
7	.755	19.18	.536	13.61	.723	18.36	.4375-.05P-.1L-2A	.5625-32	.432	10.97	.650	16.51	.483	12.27	.850	21.59	.093	2.36	.018/.022
9	.830	21.08	.596	15.14	.790	20.07	.5625-.05P-.1L-2A	.6250-28	.551	14.00	.850	21.56	.607	15.42	1.125	28.58	.128	3.25	0.46/0.56
10	.890	22.61	.658	16.71	.855	21.72	.6250-.05P-.1L-2A	.6875-28	.620	15.75	.890	22.61	.670	17.02	1.188	30.23	.128	3.25	

Square Flange 02

Jam Nut 07

PANEL CUTOUT

Shell Size	A Dia.		B Dia.		C Dia.		D Flat		E Dia.	
	in.	mm.	in.	mm.	in.	mm.	in. ±.002	mm. ± 0.05	in. ±.002	mm. ± 0.05
6	.390	9.91	.423	10.74	.093	2.36	.416	10.57	.447	11.35
7	.450	11.43	.483	12.27	.093	2.36	.542	13.77	.572	14.53
9	.575	14.61	.607	15.42	.128	3.25	.602	15.29	.635	16.13
10	.640	16.26	.670	17.02	.128	3.25	.666	16.92	.697	17.70

2M801 Series of Hermetic Receptacles:

2M801 Series of Hermetic Receptacles provide superior sealing of 1×10^{-8} cc/second helium leak rate and are 100% tested prior to shipping. This superior sealing is accomplished through the use of glass insulator fused to stainless steel shells and iron alloy contacts.

2M801 FEATURES INCLUDE:

- Low profile shells for minimum box protrusion
- Shell Standoffs for PC Board washout
- Non-removable PC and/or Solder cup contacts
- Hermetic Sealing



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M801-012	-02	Z1	6-7	P	A

SERIES	
2M801-012	Hermetic Receptacles with Printed Circuit Board Contacts or Solder cup contacts

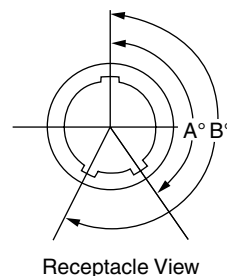
SHELL STYLE	
-02	Square Flange
-03	Weld Mount (only available is Z1 finish)
-07	Jam Nut

SHELL SIZE - INSERT ARRANGEMENTS
See Insert Arrangements Below

CONTACTS	
P	Pin - Solder Cup
C	Pin - PC Tail
H	Pin, Solder Cup - Without Interfacial Seal
Y	Pin, PC Tail - Without Interfacial Seal

SERVICE CLASS	
	Finish
Z1	Stainless Steel/Passivated
ZB	Stainless Steel with Olive Drab Cadmium Finish
ZL	Stainless Steel/Nickel Plated

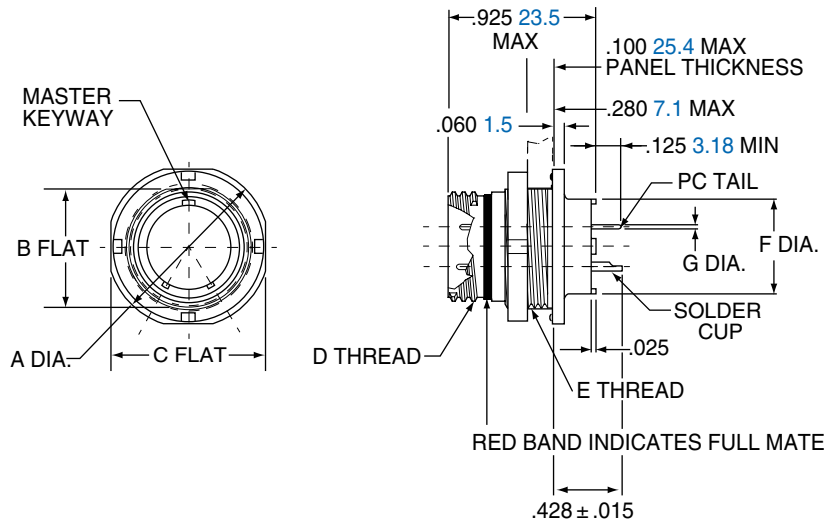
KEYING		
	A°	B°
(Normal) A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°



Note: Please contact the factory directly for a listing of tooled interfacial seals for the hermetically sealed connectors.



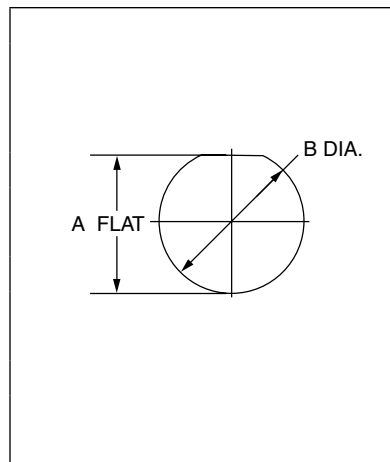
2M801-012-07



Shell Size	A Dia.		B Flat		C Flat		D Thread	E Thread	F Dia.		G Dia. Tail Dia.
	in.	mm.	in.	mm.	in.	mm.			in.	mm.	
5	.575	14.61	.350	8.89	.545	13.84	.3125-.05P-.1L-2A	.3750-28	.244	6.20	#23
6	.635	16.13	.410	10.41	.595	15.11	.3750-.05P-.1L-2A	.4375-28 UNEF-2A	.330	8.38	.018/.022 0.46/0.56
7	.755	19.18	.536	13.61	.723	18.36	.4375-.05P-.1L-2A	.5625-32	.432	10.97	#20/20HD .025/.027 0.64/0.69
8	.755	19.18	.536	13.61	.723	18.36	.5000-.05P-.1L-2A	.5625-32	.493	12.52	#16
9	.830	21.08	.596	15.14	.790	20.07	.5625-.05P-.1L-2A	.6250-28	.551	14.00	.060/.064 1.52/1.63
10	.890	22.61	.658	16.71	.855	21.72	.6250-.05P-.1L-2A	.6875-28	.620	15.75	#12
13	1.078	27.38	.845	21.46	1.044	26.52	.8125-.1P-.2L-2A	.8750-28	.703	17.86	.092/.096 2.34/2.44
16	1.264	32.11	1.022	25.96	1.230	31.24	1.0000-.1P-.2L-2A	1.0625-20	.863	21.92	
17	1.325	33.66	1.096	27.84	1.290	32.77	1.0625-.1P-.2L-2A	1.125-28	.912	23.16	
21	1.625	41.28	1.345	34.16	1.577	40.06	1.3125-.1P-.2L-2A	1.375-28	1.170	29.72	

PANEL CUTOUT

Shell Size	A Flat		B Dia.	
	in. ±.002	mm. ± 0.05	in. ±.002	mm. ± 0.05
5	.356	9.04	.385	9.78
6	.416	10.57	.447	11.35
7	.542	13.77	.572	14.53
8	.542	13.77	.572	14.53
9	.602	15.29	.635	16.13
10	.666	16.92	.697	17.70
13	.851	21.62	.885	22.48
16	1.028	26.11	1.075	27.31
17	1.102	27.99	1.135	28.83
21	1.354	34.39	1.385	35.18

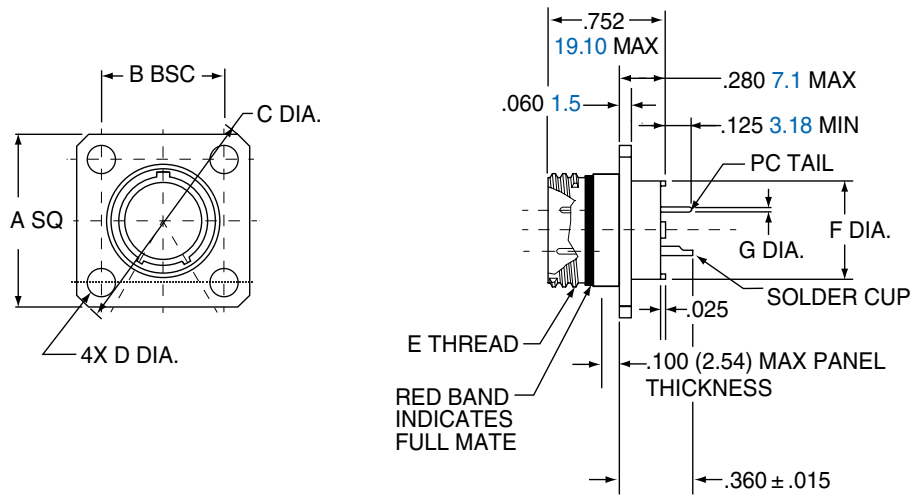


2M801 Dual-Start ACME Threads



Hermetic Square Flange Connector 2M801-012-02

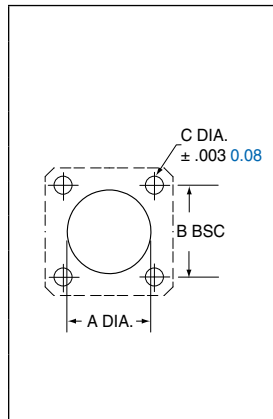
2M801-012-02



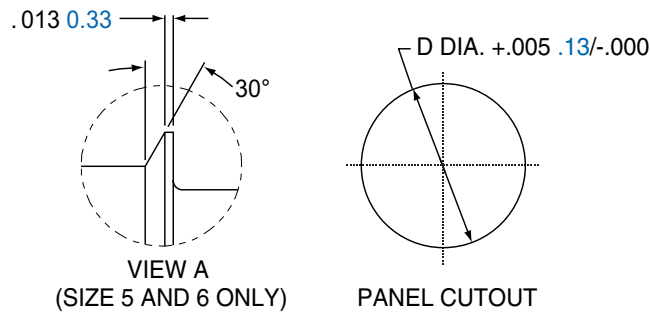
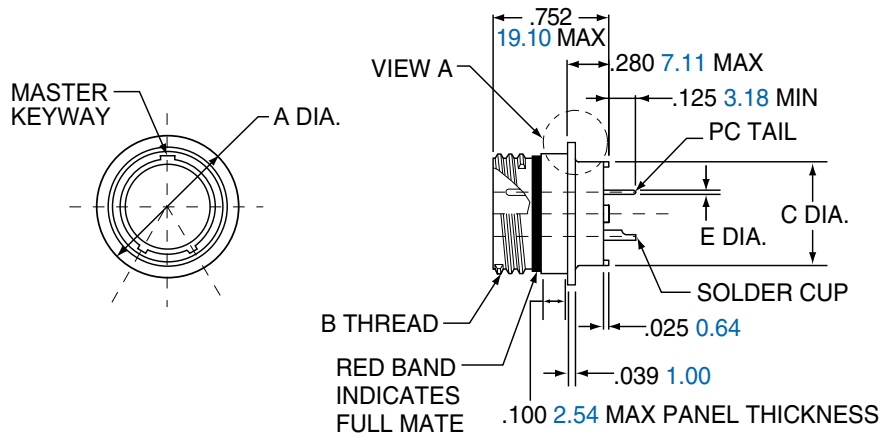
Shell Size	A SQ.		B BSC		C Dia.		D Dia.		E Thread	F Dia.		G Dia. Tail Dia.
	in.	mm.	in.	mm.	in.	mm.	in.	mm. ± .003		in.	mm.	
5	.530	13.46	.363	9.22	.680	17.27	.093	2.36	.3125-.05P-.1L-2A	.244	6.20	#23
6	.590	14.99	.423	10.74	.750	19.05	.093	2.36	.3750-.05P-.1L-2A	.330	8.38	.018/.022 0.46/0.56
7	.650	16.51	.483	12.27	.850	21.59	.093	2.36	.4375-.05P-.1L-2A	.432	10.97	#20/20HD .025/.027
8	.712	18.08	.545	13.84	.938	23.83	.093	2.36	.5000-.05P-.1L-2A	.493	12.52	0.64/0.69
9	.850	21.56	.607	15.42	1.125	28.58	.128	3.25	.5625-.05P-.1L-2A	.551	14.00	#16
10	.890	22.61	.670	17.02	1.188	30.18	.128	3.25	.6250-.05P-.1L-2A	.620	15.75	.060/.064
13	1.030	26.16	.812	20.62	1.375	34.93	.128	3.25	.8125-.1P-.2L-2A	.703	17.86	1.52/1.63
16	1.219	31.96	.981	24.92	1.625	41.28	.128	3.25	1.0000-.1P-.2L-2A	.863	21.92	#12
17	1.280	32.51	1.060	26.92	1.700	43.18	.128	3.25	1.0625-.1P-.2L-2A	.912	23.16	.092/.096 2.34/2.44
21	1.430	36.32	1.205	30.61	1.940	49.28	.128	3.25	1.3125-.1P-.2L-2A	1.170	29.72	

PANEL CUTOUT

Shell Size	A Dia.		B BSC		C Dia.	
	in.	mm.	in.	mm.	in.	mm.
5	.330	8.38	.363	9.22	.093	2.36
6	.390	9.91	.423	10.74	.093	2.36
7	.450	11.43	.483	12.27	.093	2.36
8	.510	12.95	.545	13.84	.093	2.36
9	.575	14.61	.607	15.42	.128	3.25
10	.640	16.26	.670	17.02	.128	3.25
13	.825	20.96	.812	20.65	.128	3.25
16	1.015	25.78	.981	24.92	.128	3.25
17	1.075	27.31	1.060	26.92	.128	3.25
21	1.325	33.66	1.205	30.61	.128	3.25



2M801-012-03



Shell Size	A Dia		B Thread	C Dia.		D Dia. Panel Cutout		G. PC Tail Dia.
	in.	mm.		in.	mm.	in.	mm.	
5	.395	10.03	.3125-.05P-.1L-2A	.244	6.20	.319	8.10	#23
6	.455	11.56	.3750-.05P-.1L-2A	.330	8.38	.379	9.55	.018/.022 0.46/0.56
7	.520	13.21	.4375-.05P-.1L-2A	.432	11.97	.438	11.13	#20/20HD .025/.027
8	.580	14.73	.5000-.05P-.1L-2A	.493	12.52	.502	11.13	0.64/0.69
9	.645	16.38	.5625-.05P-.1L-2A	.551	14.00	.563	14.30	#16
10	.705	18.01	.6250-.05P-.1L-2A	.620	15.75	.627	11.13	.060/.064
13	.895	22.73	.8125-.1P-.2L-2A	.703	17.86	.814	20.68	1.52/1.63
16	1.080	27.43	1.0000-.1P-.2L-2A	.863	21.92	1.007	25.58	#12
17	1.145	29.08	1.0625-.1P-.2L-2A	.912	23.16	1.067	27.10	.092/.096 2.34/2.44
21	1.395	35.43	1.3125-.1P-.2L-2A	1.170	29.72	1.320	33.53	

2M801 Series Right Angle PCB Receptacle:

2M801 Right Angle PCB Receptacles are ideal for applications where space and weight are at a premium. This receptacle design can withstand high temperature environments while maintaining an environmental seal.

2M801 FEATURES INCLUDE:

- Dual-Start ACME Thread
- Right Angle Contacts
- High Temperature Housing
- Threaded Inserts
- Environmentally Sealed



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M801-023	-07	Z1	6-7	P	A

SERIES	
2M801-023	PCB Receptacle for Right Angle PC Board

SHELL STYLE	
-07	Jam Nut

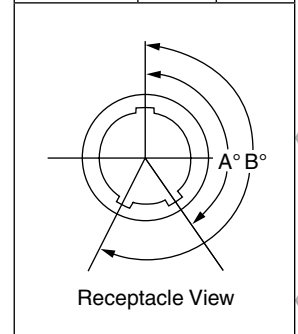
SHELL SIZE - INSERT ARRANGEMENTS	
Arrangement	No. of Contacts
5-3	3
6-4	4
6-7	7
7-10	10
8-2	2
8-13	13
9-19	19

CONTACTS	
P	Pin
S	Socket

KEYING		
	A°	B°
(Normal) A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

SERVICE CLASS		
		Finish
C		Aluminum/Black Anodize (Non-Conductive)
M		Aluminum/Electroless Nickel
NF		Aluminum/Cadmium with Olive Drab Chromate
MT		Aluminum/Nickel-PTFE (Durmalon)
Z1		Stainless Steel/Passivated
ZM		Stainless Steel/Electroless Nickel
ZN		Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU		Aluminum/Zinc-Nickel with Black Chromate

Note: Consult factory for available arrangements.



Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

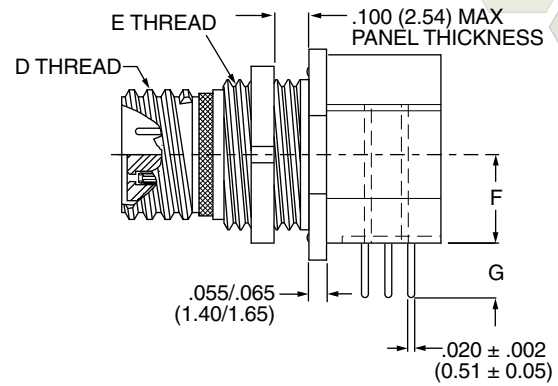
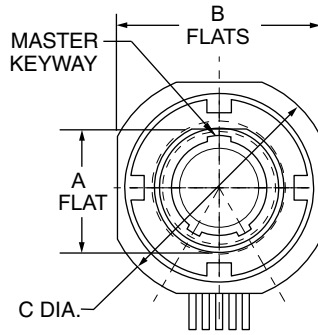
2M Filter & Accessories

HD38999

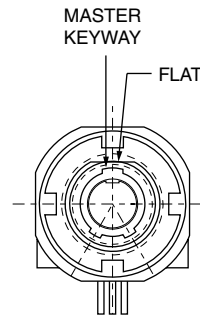
Micro-D

Terrapin

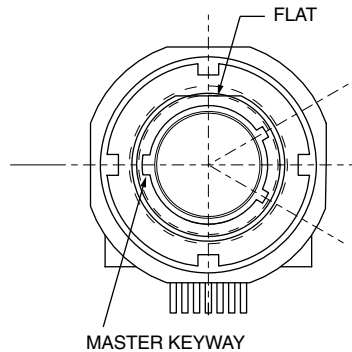
Nexus



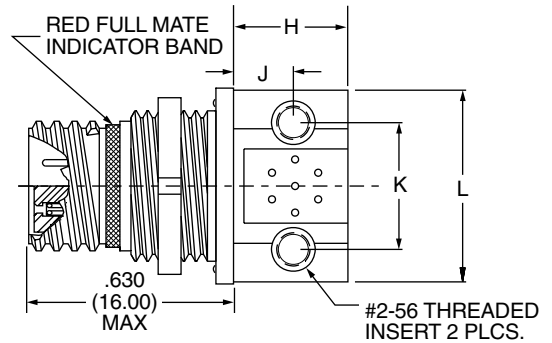
MASTER KEYWAY IS LOCATED AT TOP DEAD CENTER FOR ALL ARRANGEMENTS EXCEPT FOR THE 8-13.



5-3, 6-4, 6-7, 7-10, AND 9-19
MASTER KEYWAY LOCATION

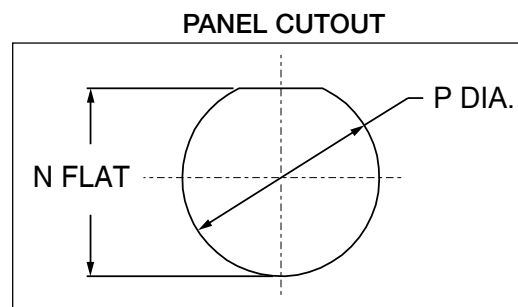


8-13
MASTER KEYWAY LOCATION



Shell Size	A		B		C Dia.		D Thread	E Thread	F		G		H		J		K	
	in. ±.005	mm. ±0.13	in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
5-3	.350	8.89	.548	13.92	.575	14.61	.3125-.05P-.1L-2A	.3750-28 UN-2A	.225	5.72	.275	6.99	.260	6.60	.165	4.19	.310	7.87
6-4	.410	10.41	.598	15.19	.635	16.13	.3750-.05P-.1L-2A	.4375-28 UNEF-2A	.225	5.72	.265	6.73	.345	8.76	.187	4.75	.408	10.36
6-7	.410	10.41	.598	15.19	.635	16.13	.3750-.05P-.1L-2A	.4375-28 UNEF-2A	.225	5.72	.265	6.73	.345	8.76	.187	4.75	.408	10.36
7-10	.536	13.61	.726	18.44	.755	19.18	.4375-.05P-.1L-2A	.5625-32 UN-2A	.296	7.52	.273	6.93	.345	8.76	.170	4.32	.452	11.48
8-2	.538	13.67	.728	18.49	.758	19.25	.5000-.05P-.1L-2A	.5625-32 UN-2A	.319	8.10	.316	.803	.490	12.45	.230	5.84	.490	4.31
8-13	.538	13.67	.728	18.49	.758	19.25	.5000-.05P-.1L-2A	.5625-32 UN-2A	.319	8.10	.316	8.03	.490	12.45	.230	5.84	.490	12.45
9-19	.596	15.14	.793	20.14	.833	21.16	.5625-.05P-.1L-2A	.6250-28 UN-2A	.360	9.14	.275	6.99	.490	12.45	.342	8.69	.600	15.24

Shell Size	L		N		P	
	in.	mm.	in. ±.002	mm. ±0.05	in. ±.005	mm. ±0.13
5-3	.490	14.45	.357	9.07	.385	9.78
6-4	.589	15.19	.418	10.62	.448	11.37
6-7	.589	15.19	.418	10.62	.448	11.37
7-10	.710	18.03	.544	13.82	.573	14.55
8-2	.710	18.03	.544	13.82	.573	14.55
8-13	.710	18.03	.544	13.82	.573	14.55
9-19	.800	20.32	.603	15.32	.635	16.13



Protection Caps:

2M801 Double Start Protective Caps are available in plug and receptacle versions. Protective caps keep the connector interface dry and clean while not in use. Caps come in a variety of materials, lanyard styles and lengths to accommodate specific design requirements.

2M801 FEATURES INCLUDE:

- Aluminum or Stainless Steel Bodies
- Rubber Gaskets for Environmental Sealing
- Stainless Steel Fittings
- Variety of attachments



Series	Service Class	Attachment Type	Shell Size	Attachment Code	Attachment Length in Inches
2M667-21X	-NF	-S	5	04	-5

Omit for attachment Type N (No Attachment)
Example "-5" equals 5 inch length

SERIES	
2M667-217	Protection Cap for 2M801 Plugs
2M667-218	Protection Cap for 2M801 Receptacles

ATTACHMENT TYPE	
-G	Nylon Rope
-H	Stainless Steel Wire Rope, Teflon® Jacket
-N	No Attachment
-S	Stainless Steel Sash Chain
-SK	Nylon Rope With Slip Knot
-T	Stainless Steel Wire Rope, No Jacket
-U	Stainless Steel Wire Rope, Polyurethane Jacket

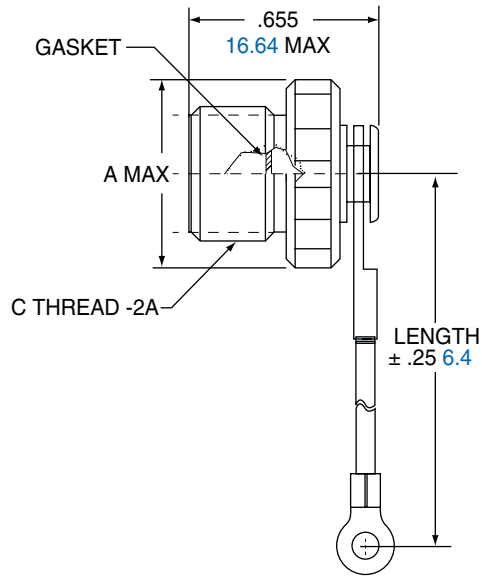
SHELL SIZE
5
6
7
8
9
10
13
16
17
21

ATTACHMENT CODE	
Omit for attachment Type N (No Attachment) and Slip Knot	
Small Ring	01 -.126 (3.20) I.D.
	02 -.145 (3.68) I.D.
	04 -.188 (4.78) I.D.
	06 -.197 (5.00) I.D.
	14 -.385 (9.78) I.D.
	15 -.445 (11.30) I.D.
Large Ring	16 -.570 (14.48) I.D.
	17 -.635 (16.13) I.D.
	18 -.695 (17.65) I.D.
	19 -.885 (22.48) I.D.
	20 -1.070 (27.17) I.D.
	21 -1.135 (28.83) I.D.
	22 -1.210 (30.73) I.D.
	23 -1.275 (32.39) I.D.
	24 -1.375 (34.94) I.D.
	Split Ring
52 -.480 (12.19) I.D.	
54 -.635 (16.13) I.D.	
56 -.745 (18.92) I.D.	
58 -.885 (22.48) I.D.	
60 -1.010 (25.65) I.D.	
64 -1.125 (28.58) I.D.	
68 -1.345 (34.16) I.D.	

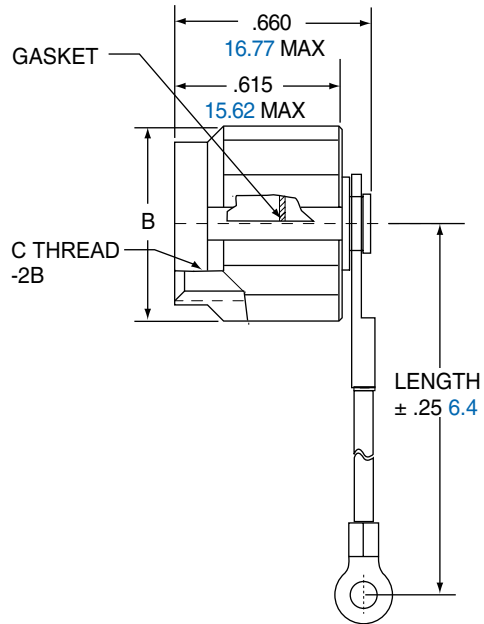
SERVICE CLASS		
Finish		
-C		Aluminum/Black Anodize (Non-Conductive)
-M		Aluminum/Electroless Nickel
-NF		Aluminum/Cadmium with Olive Drab Chromate
-MT		Aluminum/Nickel-PTFE (Durmalon)
-Z1		Stainless Steel/Passivated
-ZM		Stainless Steel/Electroless Nickel
-ZN		Aluminum/Zinc-Nickel w/Olive Drab Chromate
-ZNU		Aluminum/Zinc-Nickel with Black Chromate



2M667-217 (Plug)



2M667-218 (Receptacle)



Shell Size	A Max.		B Max.		C
	in.	mm.	in.	mm.	
5	.463	11.76	.550	13.97	.3125-.05P-1L
6	.523	13.28	.613	15.57	.3750-.05P-1L
7	.588	14.94	.700	17.78	.4375-.05P-1L
8	.648	16.46	.758	19.25	.5000-.05-.1L
9	.713	18.11	.813	20.65	.5625-.05P-.1L
10	.773	19.63	.893	22.68	.6250-.05P-1L
13	.963	24.46	1.063	27.00	.8125-.1P-.2L
16	1.148	29.16	1.257	31.93	1.0000-.1P-.2L
17	1.213	30.81	1.313	33.35	1.0625-.1P-.2L
21	1.473	37.41	1.563	39.70	1.3125-.1P-.2L

MATERIALS

Cover	Aluminum alloy or stainless steel
Gasket	Silicone rubber
Wire, Hardware	Stainless steel, passivated

LANYARD OPTIONS

	Nylon Rope	-55° to +100°C., black, flexible, good abrasion resistance, good resistance to fuels, .120" 3mm diameter
	Sash Chain	Stainless steel, #8 Chain
	Slip Knot (SK) for attaching Covers to Cables	55° to +100°C., black, flexible, good abrasion resistance, good resistance to fuels, .120" 3mm diameter. Length includes .5" 13mm diameter loop.

2M803 Series Micro-Miniature Connectors:

Amphenol's 2M803 Series of connectors are ideal for applications where space is limited or a high density interconnect is needed. The series features bayonet connectors with 1/4 turn full mate coupling. Plugs and Receptacles are provided in two different styles to accommodate the attachment of backshell with rear accessory threads or with integral backshell. The integral backshell allows for use of EMI shielding attachments and/or overmolding. Contact termination styles include Crimp, PC Tail, and Solder Cup with others available upon request. Custom and Filter configurations are available, please consult factory for ordering information.

2M803 FEATURES INCLUDES:

- Bayonet Coupling for 1/4 Full mating
- Sealed Receptacles:
 - Hermetic (1×10^{-8} cc/second)
 - Epoxy Backfilled (1×10^{-4} cc/second)
- ROHS Compliant Platings available
- Insert Arrangements up to 85 contacts



2M803 SPECIFICATIONS

Current Rating	See Insert Arrangements (pg. 13-15)
DWV	See Insert Arrangements (pg. 13-15)
Insulation Resistance	5000 megohms min.
Operating Temperature	-65°C to +150°C
Shock	300 g's
Vibration	Random: 37 g Sine: 30 g
Shielding Effectiveness	40 dB min. from 100MHz to 1000MHz
Durability	Aluminum: 1000 mating cycles Stainless Steel: 2000 mating cycles

2M803 MATERIALS AND FINISHES

Shells	Aluminum Alloy or Stainless Steel
Contacts	Copper Alloy, gold plated
Insulators	Polyphenylene Sulfide (PPS)
Contact Retention	Beryllium Copper Alloy
Grommet, Interfacial Seal, O'Ring	Fluorosilicone Rubber

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-D

Terrapin

Nexus



2M803 1/4 Turn Bayonet Coupling

Weights

SERIES 2M803 MAXIMUM CONNECTOR WEIGHT IN GRAMS

Insert Arrangements	Cable Plug	Jam Nut Receptacle Crimp	Jam Nut Receptacle PCB	Flange Receptacle Crimp	Flange Receptacle PCB
5-3P	3.6	3.6	3.9	2.9	3.3
5-3S	3.7	3.7	4.0	3.1	3.4
6-1P	4.4	4.4	4.6	3.1	3.5
6-1S	4.5	4.5	4.7	3.2	3.6
6-4P	4.7	3.7	4.1	3.1	3.6
6-4S	4.7	4.0	4.2	3.2	3.7
6-7P	5.1	4.8	5.3	3.3	4.4
6-7S	5.1	5.1	5.5	3.6	4.4
7-1P	5.7	5.9	5.8	4.4	4.7
7-1S	5.9	6.2	5.9	4.7	5.1
7-10P	6.9	7.4	8.1	5.0	6.5
7-10S	7.4	7.8	8.4	5.4	6.6
8-2P	8.6	8.9	9.9	6.6	8.6
8-2S	9.4	9.7	10.7	7.4	9.4
8-13P	7.9	8.3	9.2	5.9	7.9
8-13S	8.7	8.9	9.7	6.6	8.1
8-200P	8.9	9.2	10.2	6.9	8.9
8-200S	9.6	9.9	10.9	6.9	9.6
9-4P	9.2	9.6	10.6	6.6	9.2
9-4S	9.6	9.9	10.9	6.9	9.6
9-19P	9.2	9.1	10.6	7.0	9.9
9-19S	10.2	10.1	11.2	8.1	10.2
9-200P	9.1	9.5	10.5	7.2	9.1
9-200S	10.2	10.6	11.6	8.3	10.2
9-201P	9.2	9.6	10.6	7.3	10.3
9-201S	9.8	10.1	11.7	8.4	10.3
10-5P	13.4	14.1	15.0	10.6	13.9
10-5S	14.9	15.5	17.5	12.0	15.3
10-26P	11.7	12.3	14.3	8.8	12.8
10-26S	13.4	13.6	15.1	10.1	13.1
10-200P	12.5	13.2	15.2	9.7	13.0
10-200S	14.0	14.6	16.6	11.1	14.4
10-201P	12.9	13.5	15.5	10.0	13.3
10-201S	14.4	15.1	17.1	11.6	14.9
10-202P	12.4	13.1	15.1	9.6	11.8
10-202S	14.0	14.6	16.6	11.1	14.4
12-2P	15.5	16.4	19.1	11.4	16.9
12-2S	17.2	18.0	20.8	13.1	18.6
12-3P	16.5	17.4	20.1	12.4	17.9
12-3S	18.3	19.1	21.9	14.2	19.7
12-7P	16.7	17.6	20.4	12.7	18.2
12-7S	19.4	20.2	23.0	15.3	20.8
12-37P	15.0	15.8	18.6	10.9	16.4
12-37S	16.6	17.5	19.6	12.4	16.7
12-200P	15.6	16.5	19.3	11.6	17.1
12-200S	17.9	18.8	21.6	13.9	19.4
12-201P	15.7	16.6	19.4	11.7	17.2
12-201S	18.2	19.0	21.8	14.1	19.6
14-5P	22.2	23.5	27.7	17.3	25.5
14-5S	24.8	26.1	29.3	19.8	25.1
14-55P	19.6	20.9	25.1	14.6	22.9
14-55S	22.6	23.9	27.1	14.6	23.9

2M803 1/4 Turn Bayonet Coupling



Ordering Guide for 2M803 Crimp Receptacles & Plugs



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M803-00X	-06	NF	6-7	P	N

*add "-501" to the suffix of Jam Nut version to include a Hex Nut instead of a Spanner Nut.

SERIES	
2M803-001	Plug, Integral Backshell
2M803-002	Plug with Rear Accessory Thread
2M803-003	Receptacle with Integral Backshell
2M803-004	Receptacle with Rear Accessory Thread

SHELL SIZE - INSERT ARRANGEMENTS

See Insert Arrangements on Pages 13-15

CONTACTS	
P	Pin
S	Socket
A	Pin, less contacts
B	Socket, less contacts



SHELL STYLE	
2M803-001, 2M803-002	
-06	Plug
SHELL STYLE	
2M803-003, 2M803-004	
-07	Jam Nut*
-02	Flange Mount
-01	In-Line

SERVICE CLASS		
		Finish
C		Aluminum/Black Anodize (Non-Conductive)
M		Aluminum/Electroless Nickel
NF		Aluminum/Cadmium with Olive Drab Chromate
MT		Aluminum/Nickel-PTFE (Durmalon)
Z1		Stainless Steel/Passivated
ZM		Stainless Steel/Electroless Nickel
ZN		Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU		Aluminum/Zinc-Nickel with Black Chromate

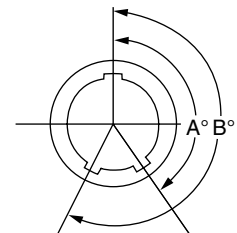
KEYING		
Key Position	Key Rotation	
	A	B
N	150°	210°
X	75°	210°
Y	95°	230°
Z	140°	275°

INSERT ARRANGEMENTS

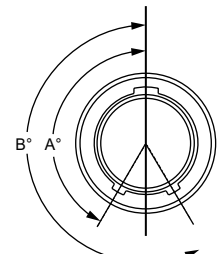
Insert Arrg.	No. of Contacts				
	#23	#20	#20HD	#16	#12
5-3	3				
6-1				1	
6-4	4				
6-6	6				
6-7	7				
6-23			3		
7-1					1
7-10	10				
7-25			5		
8-2				2	
8-28			8		
8-13	13				
8-200	4	2			
9-4				4	
9-19	19				
9-200	4			2	
9-201	8	2			
9-210			10		
10-2					2
10-5				5	
10-26	26				
10-200	12				1

INSERT ARRANGEMENTS

Insert Arrg.	No. of Contacts				
	#23	#20	#20HD	#16	#12
10-201	4				2
10-202	8			2	
12-2					2
12-3					3
12-7				7	
12-37	37				
12-200	6				2
12-201	10				2
12-220			20		
14-5					5
14-12				12	
14-55	55				
14-235			35		
15-7					7
15-14				14	
15-85	85				



Receptacle View

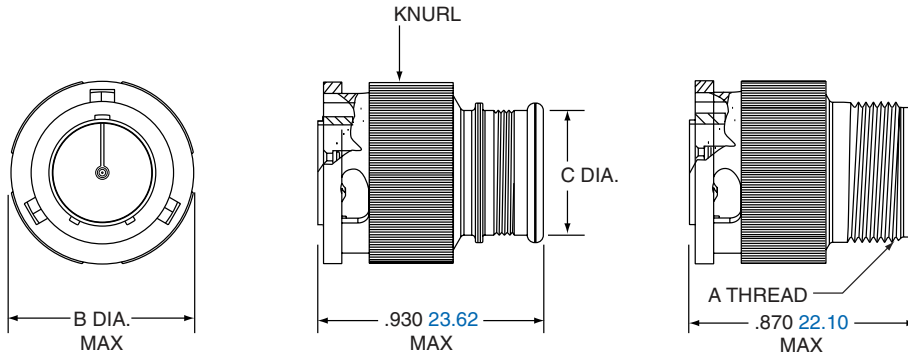


Plug View

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

2M803-001-06

2M803-002-06

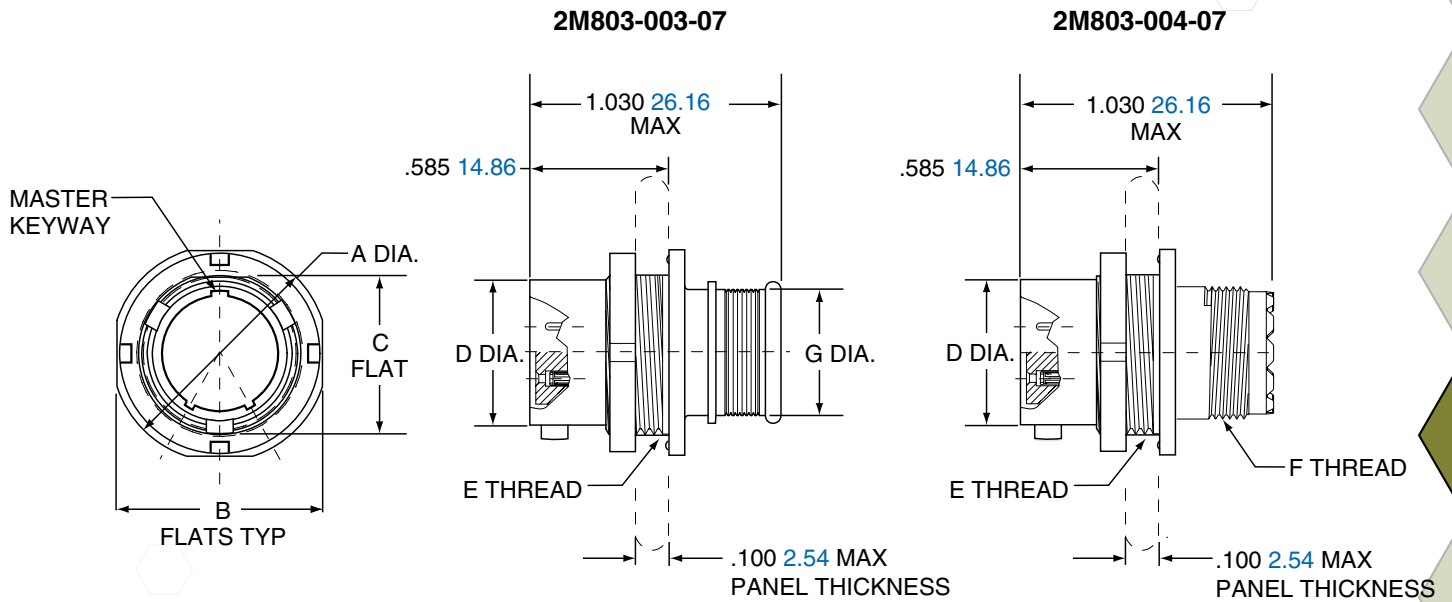


Shell Size	A Thread UNEF-2A	B Dia. Max		C Dia.	
		in.	mm.	in.	mm.
5	.2500-32	.475	12.07	.245	6.22
6	.3125-32	.540	13.72	.290	7.37
7	.4375-28	.620	15.75	.390	9.91
8	.5000-28	.675	17.15	.450	11.43
9	.5625-24	.745	18.92	.500	12.70
10	.6250-24	.812	20.63	.562	14.28
12	.6875-24	.894	22.71	.650	16.51
14	.9375-20	1.060	26.92	.800	20.32
15	.9375-20	1.120	28.45	1.035	26.29

2M803 1/4 Turn Bayonet Coupling Jam Nut



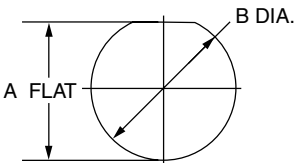
2M803-003-07 and 2M803-004-07

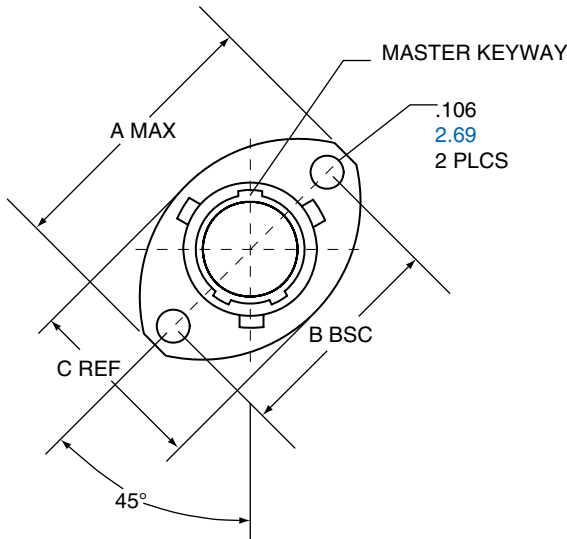


Shell Size	A Dia.		B Flat		C Flat		D Dia.		E Thread	F Thread	G Dia.	
	in.	mm.	in.	mm.	in.	mm.	in.	mm.			in.	mm.
5	.575	14.61	.545	13.84	.350	8.89	.300	7.62	.3750-32 UNEF-2A	.2500-32 UNEF-2A	.245	6.30
6	.635	16.13	.595	15.11	.410	10.41	.362	9.19	.4375-28 UNEF-2A	.3125-32 UNEF-2A	.290	7.44
7	.755	19.18	.723	18.36	.536	13.61	.436	11.07	.5625-32 UN-2A	.4375-28 UNEF-2A	.390	9.86
8	.830	21.08	.790	20.11	.593	15.10	.498	12.65	.6250-28 UN-2A	.5000-28 UNEF-2A	.450	11.38
9	.830	21.08	.790	20.07	.596	15.14	.561	14.25	.6250-28 UN-2A	.5625-24 UNEF-2A	.500	12.78
10	.955	24.26	.925	23.51	.721	18.31	.635	16.13	.7500-28 UN-2A	.6250-24 UNEF-2A	.562	14.30
12	1.078	27.38	1.044	26.52	.845	21.46	.714	18.14	.8750-28 UN-2A	.6875-24 UNEF-2A	.650	16.71
14	1.264	32.11	1.230	31.24	1.022	25.96	.865	21.97	1.0625-20 UN-2A	.9375-20 UNEF-2A	.805	20.40
15	1.322	33.58	1.287	32.69	1.093	27.76	.924	23.47	1.1250-28 UN-2A	.9375-20 UNEF-2A	.850	21.67

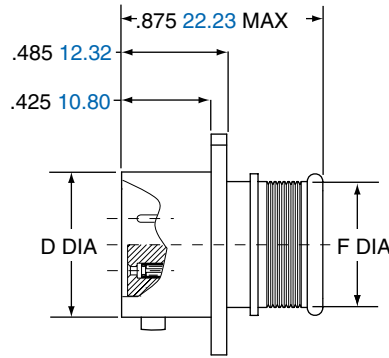
PANEL CUTOUT FOR JAM NUT RECEPTACLE

Shell Size	A Flat		B Dia.	
	in. ±.002	mm. ± 0.05	in.	mm.
5	.355	9.02	.382	9.70
6	.415	10.54	.445	11.30
7	.541	13.74	.572	14.53
8	.601	15.27	.635	16.13
9	.601	15.27	.643	16.33
10	.729	18.52	.760	18.29
12	.850	21.59	.885	22.48
14	1.031	23.19	1.072	27.23

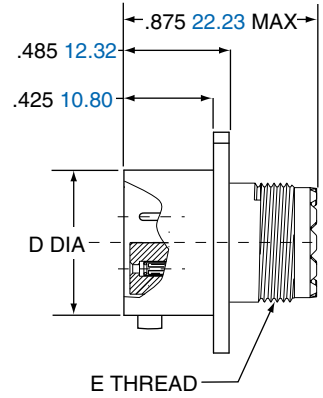




2M803-003-02



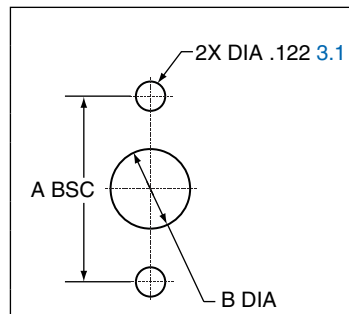
2M803-004-02



Shell Size	A Max.		B BSC.		C Ref.		D Dia.		E Thread UNEF-2A	F Dia.	
	in.	mm.	in.	mm.	in.	mm.	in.	mm.		in.	mm.
5	.710	18.03	.513	13.03	.460	11.68	.300	7.62	.2500-32	.245	6.30
6	.788	20.02	.598	15.19	.522	13.26	.362	9.19	.3125-32	.290	7.44
7	.895	22.73	.708	17.98	.590	14.99	.436	11.07	.4375-28	.390	9.86
8	1.154	29.31	.964	24.49	.668	16.97	.500	12.70	.5000-28	.450	11.38
9	1.210	30.73	1.017	25.83	.721	18.31	.561	14.25	.5625-24	.500	12.78
10	1.291	32.79	1.101	27.97	.795	20.19	.635	16.13	.6250-24	.562	14.30
12	1.395	35.43	1.204	30.58	.874	22.20	.714	18.14	.6875-24	.650	16.71
14	1.550	39.37	1.280	32.51	1.050	26.67	.865	21.97	.9375-20	.805	20.40

FLANGE MOUNT PANEL CUTOUTS

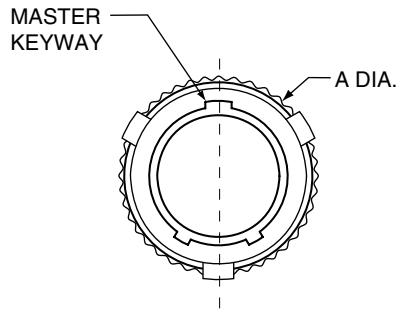
Shell Size	A BSC		B Dia	
	in.	mm.	in.	mm.
5	.513	13.03	.365	9.25
6	.598	15.19	.430	10.92
7	.708	17.98	.520	13.21
8	.964	17.98	.592	15.04
9	1.017	25.83	.645	16.38
10	1.101	27.97	.726	18.44
12	1.204	30.58	.832	21.13
14	1.280	32.51	.945	24.00



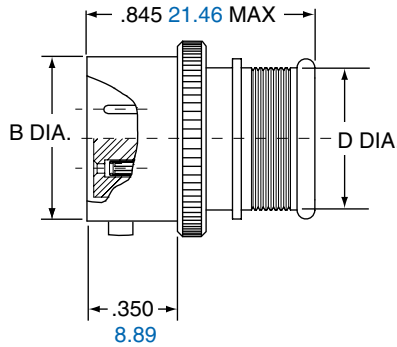
2M803 1/4 Turn Bayonet Coupling In-Line



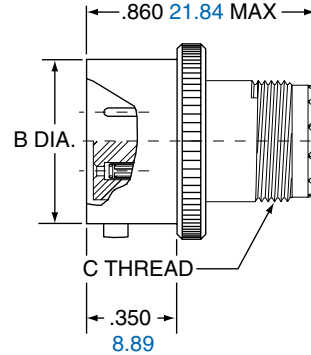
2M803-003-01 and 2M803-004-01



2M803-003-01



2M803-004-01



Shell Size	A Max.		B Dia.		C Thread UNEF-2A	D Dia.	
	in.	mm.	in.	mm.		in.	mm.
5	.385	9.78	.300	7.62	.2500-32	.245	6.30
6	.465	11.81	.362	9.19	.3125-32	.290	7.44
7	.485	12.32	.438	11.13	.4375-28	.390	9.86
8	.566	14.38	.498	12.65	.5000-28	.450	11.38
9	.658	16.71	.564	14.33	.5625-24	.500	12.78
10	.720	18.29	.636	16.15	.6250-24	.562	14.30
12	.810	20.57	.713	18.11	.6875-24	.650	16.71
14	1.027	26.09	.865	21.97	.9375-20	.805	20.40
15	1.027	26.09	.924	23.47	.9375-20	.850	21.67

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-D

Terrapin

Nexus

2M803 Series of PC Board Receptacles

2M803 Series of PC Board Receptacles are intended for use of terminating the connector directly to a Circuit Board or Flex assembly. These connectors can also be supplied with solder cup termination for direct wire attachment.

2M803 FEATURES INCLUDE:

- Low profile shells for minimum box protrusion
- Shell Standoffs for PC Board washout
- Non-removable PC and/or Solder cup contacts
- Environmental Sealing



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M803-0XX	-07	ZNU	9-19	P	N

*add "-501" to the suffix of Jam Nut version to include a Hex Nut instead of a Spanner Nut.

SERIES	
2M803-005	Receptacle for Solder Cup or PCB Termination, with Standard Epoxy Potting
2M803-015	Receptacle with Solder Cup or PCB Termination with Special Sealing for Open Face (unmated) Water Immersion Requirements. 100% Leak Tested. To maintain a helium leak rate of 1×10^{-4} cc/sec. pressure differential from -65°C to 150°C.

SHELL STYLE	
-02	Flange Mount
-07	Jam Nut*

SHELL SIZE - INSERT ARRANGEMENTS

See Insert Arrangements on Pages 13-15

CONTACTS	
P	Pin - PC Tail
S	Socket - PC Tail
E	Pin - Solder Cup
F	Socket - Solder Cup

SERVICE CLASS	
	Finish
C	Aluminum/Black Anodize (Non-Conductive)
M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium with Olive Drab Chromate
MT	Aluminum/Nickel-PTFE (Durmalon)
Z1	Stainless Steel/Passivated
ZM	Stainless Steel/Electroless Nickel
ZN	Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU	Aluminum/Zinc-Nickel with Black Chromate

KEYING		
Key Position	Key Rotation	
	A	B
N (Normal)	150°	210°
X	75°	210°
Y	95°	230°
Z	140°	275°

Receptacle View

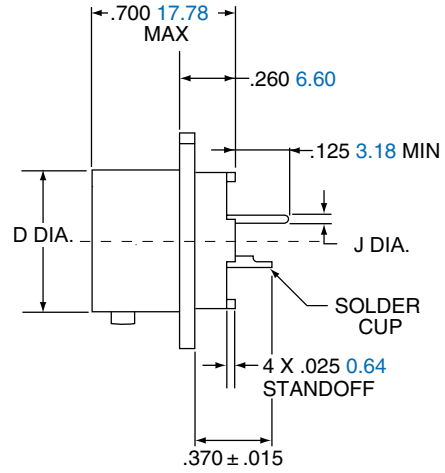
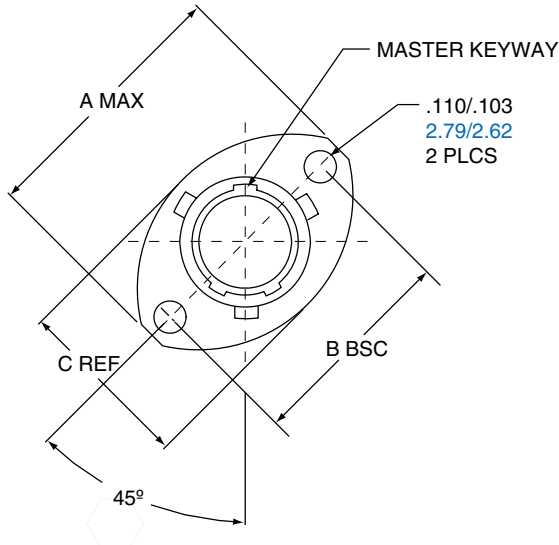


2M803 1/4 Turn Bayonet Coupling

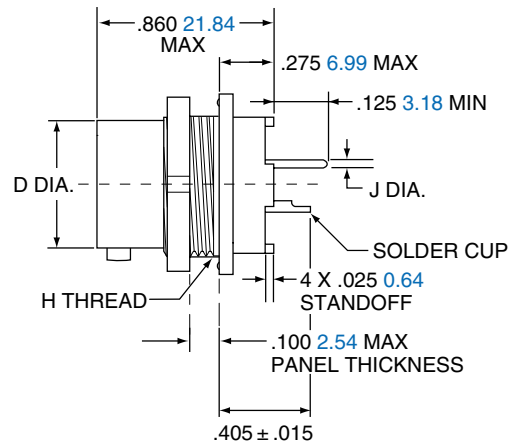
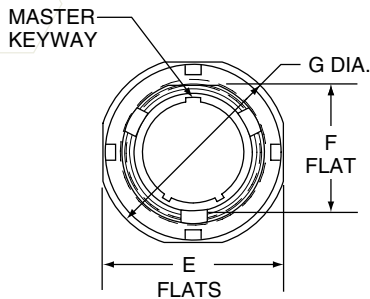


Flange Mount & Jam Nut Receptacle 2M803-005-02 & 07

2M803-005-02



2M803-005-07



Shell Size	A Max.		B BSC.		C Ref.		D Dia.		E Flats		F Flats		G Dia.		H Thread	J Dia. Tail Dia.
	in.	mm	in.	mm.	in.	mm	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
5	.710	18.03	.513	13.03	.460	11.68	.300	7.62	.545	13.84	.350	8.89	.575	14.61	.3750-32 UNEF-2A	#23
6	.788	20.02	.598	15.19	.522	13.26	.362	9.19	.595	15.11	.410	10.42	.635	16.13	.4375-28 UNEF-2A	.018/.022 0.46/0.56
7	.895	22.73	.708	17.98	.590	14.99	.436	11.07	.723	18.36	.536	13.61	.755	19.18	.5625-32 UN-2A	#20/20HD .025/.027 0.64/0.69
8	1.154	29.31	.964	24.49	.665	16.97	.500	12.70	.790	20.07	.593	15.10	.830	21.08	.6250-28 UN-2A	#16 .060/.064
9	1.210	30.73	1.017	25.83	.721	18.31	.561	14.25	.790	20.07	.596	15.14	.830	21.08	.6250-28 UN-2A	1.52/1.63
10	1.291	32.79	1.101	27.97	.795	20.19	.635	16.13	.925	23.51	.721	23.49	.955	24.26	.7500-28 UN-2A	#12 .092/.096 2.34/2.44
12	1.395	35.43	1.204	30.58	.874	22.20	.714	18.14	1.044	26.52	.845	21.46	1.078	27.38	.8750-28 UN-2A	
14	1.550	39.37	1.280	32.51	1.050	26.67	.865	21.97	1.230	31.24	1.022	25.96	1.264	32.11	1.0625-20 UN-2A	
15	N/A	N/A	N/A	N/A	N/A	N/A	.924	23.47	1.287	32.69	1.093	27.76	1.322	33.58	1.1250-28 UN-2A	

2M803 Series of Hermetic Receptacles:

2M803 Series of Hermetic Receptacles provide superior sealing of 1×10^{-8} cc/second helium leak rate and are 100% tested prior to shipping. This superior sealing is accomplished through the use of glass insulator fused to stainless steel shells and iron alloy contacts.

2M803 FEATURES INCLUDE:

- Low profile shells for minimum box protrusion
- Shell Standoffs for PC Board washout
- Non-removable PC and/or Solder cup contacts
- Hermetic Sealing

Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M803-006	-07	Z1	6-7	P	N

SERIES	
2M803-006	Hermetic Receptacles with PCB Contacts or Solder Cup Contacts

SHELL STYLE	
-02	Flange Mount
-07	Jam Nut

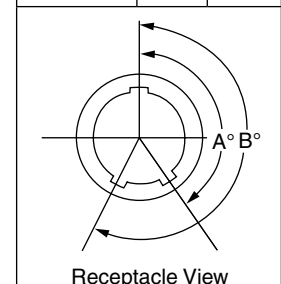
SHELL SIZE - INSERT ARRANGEMENTS
See Insert Arrangements on Pages 13-15

CONTACTS	
P	Pin - Solder Cup
C	Pin - PC Tail
H	Pin, Solder Cup - Without Interfacial Seal
Y	Pin, PC Tail - Without Interfacial Seal

SERVICE CLASS		
		Finish
Z1		Stainless Steel/Passivated
ZL		Stainless Steel/Nickel Plated



KEYING		
Key Position	Key Rotation	
	A	B
N (Normal)	150°	210°
X	75°	210°
Y	95°	230°
Z	140°	275°



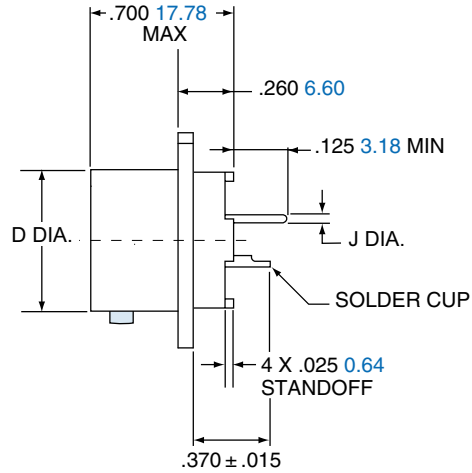
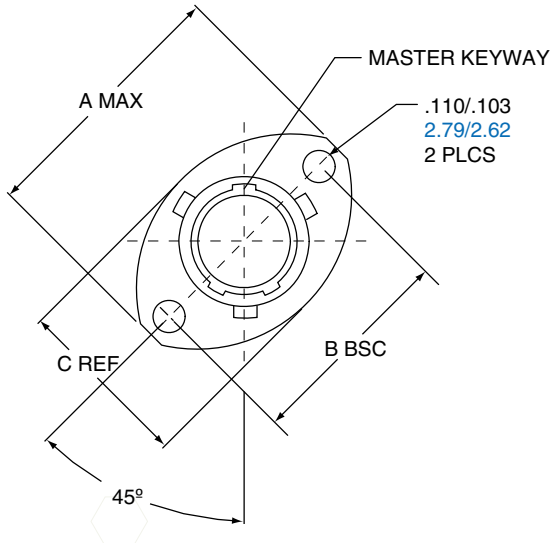
Note: Please contact the factory directly for a listing of tooled interfacial seals for the hermetically sealed connectors.

2M803 1/4 Turn Bayonet Coupling

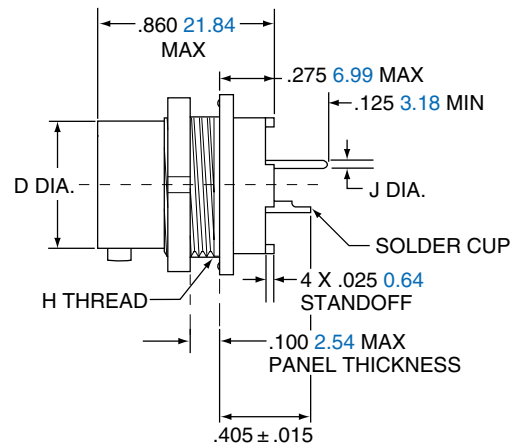
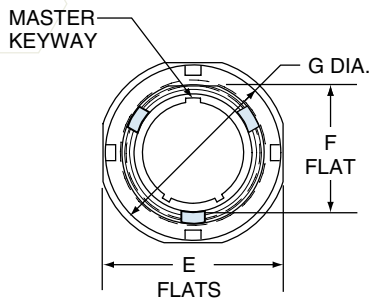


Flange Mount and Jam Nut 2M803-006-02 & -07

2M803-006-02



2M803-006-07



Shell Size	A Max.		B BSC.		C Ref.		D Dia.		E Flats		F Flat		G Dia.		H Thread	J PC Tail Dia.
	in.	mm	in.	mm.	in.	mm	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
5	.710	18.03	.513	13.03	.460	11.68	.300	7.62	.545	13.84	.350	8.89	.575	14.61	.3750-32 UNEF-2A	#23
6	.788	20.02	.598	15.19	.522	13.26	.362	9.19	.595	15.11	.410	10.42	.635	16.13	.4375-28 UNEF-2A	#20/20HD 0.46/0.56
7	.895	22.73	.708	17.98	.590	14.99	.436	11.07	.723	18.36	.536	13.61	.755	19.18	.5625-32 UN-2A	#20/20HD 0.64/0.69
8	1.154	29.31	.964	24.49	.665	16.98	.500	12.70	.790	20.07	.593	15.10	.830	21.08	.6250-28 UN-2A	#16 0.64/0.69
9	1.210	30.73	1.017	25.83	.721	18.31	.561	14.25	.790	20.07	.596	15.14	.830	21.08	.6250-28 UN-2A	#16 0.64/0.69
10	1.291	32.79	1.101	27.97	.795	20.19	.635	16.13	.925	23.51	.721	.721	.955	24.26	.7500-28 UN-2A	#12 1.52/1.63
12	1.395	35.43	1.204	30.58	.874	22.20	.714	18.14	1.044	26.52	.845	21.46	1.078	27.38	.8750-28 UN-2A	#12 1.52/1.63
14	1.550	39.37	1.280	32.51	1.050	26.67	.865	21.97	1.230	31.24	1.022	25.96	1.264	32.11	1.0625-20 UN-2A	#12 2.34/2.44
15	N/A	N/A	N/A	N/A	N/A	N/A	.924	23.47	1.287	32.69	1.093	27.76	1.322	33.58	1.1250-28 UN-2A	

Protection Caps:

2M803 1/4 Turn Bayonet Protective Caps are available in plug and receptacle versions. Protective caps keep the connector interface dry and clean while not in use. Caps come in a variety of materials, lanyard styles and lengths to accommodate specific design requirements.

2M803 FEATURES INCLUDE:

- Aluminum or Stainless Steel Bodies
- Rubber Gaskets for Environmental Sealing
- Stainless Steel Fittings
- Variety of attachments



Series	Service Class	Attachment Type	Shell Size	Attachment Code	Attachment Length in Inches
2M660-08X	-M	-G	6	04	-5

SERIES	
2M660-082	Protection Cap for Bayonet Plug Connectors
2M660-083	Protection Cap for Bayonet Receptacle Connectors

ATTACHMENT TYPE		SHELL SIZE
-G	Nylon Rope	5
-H	Stainless Steel Wire Rope, Teflon® Jacket	6
-N	No Attachment	7
-S	Stainless Steel Sash Chain	8
-SK	Nylon Rope With Slip Knot	9
-T	Stainless Steel Wire Rope, No Jacket	10
-U	Stainless Steel Wire Rope, Polyurethane Jacket	12
		14
		15

Omit for attachment Type N (No Attachment)
Example "-5" equals five inch length

ATTACHMENT CODE	
Omit for attachment Types N (No Attachment) and SK (Slip Knot)	
Small Ring	01 -.126 (3.20) I.D.
	02 -.145 (3.68) I.D.
	04 -.188 (4.78) I.D.
	06 -.197 (5.00) I.D.
	14 -.385 (9.78) I.D.
Large Ring	15 -.445 (11.30) I.D.
	16 -.570 (14.48) I.D.
	17 -.635 (16.13) I.D.
	18 -.695 (17.65) I.D.
	19 -.885 (22.48) I.D.
Split Ring	20 -1.070 (27.17) I.D.
	50 -.420 (10.67) I.D.
	52 -.480 (12.19) I.D.
	54 -.635 (16.13) I.D.
	56 -.745 (18.92) I.D.
58 -.885 (22.48) I.D.	
60 -1.010 (25.65) I.D.	
64 -1.125 (28.58) I.D.	
68 -1.345 (34.16) I.D.	

SERVICE CLASS		
		Finish
-C		Aluminum/Black Anodize (Non-Conductive)
-M		Aluminum/Electroless Nickel
-NF		Aluminum/Cadmium with Olive Drab Chromate
-MT		Aluminum/Nickel-PTFE (Duralon)
-Z1		Stainless Steel/Passivated
-ZM		Stainless Steel/Electroless Nickel
-ZN		Aluminum/Zinc-Nickel w/Olive Drab Chromate
-ZNU		Aluminum/Zinc-Nickel with Black Chromate

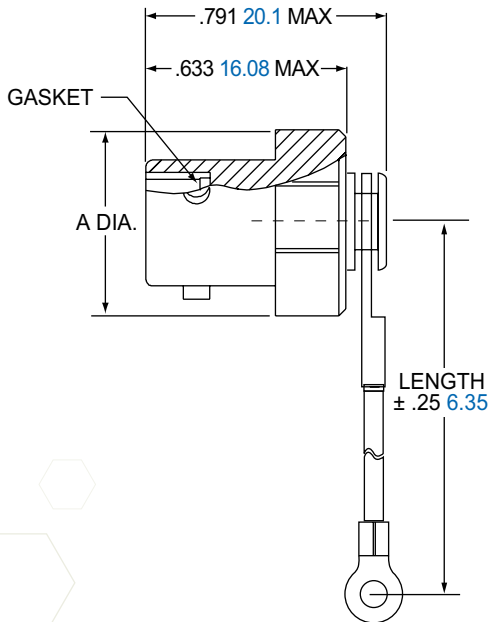


2M803 1/4 Turn Bayonet Coupling

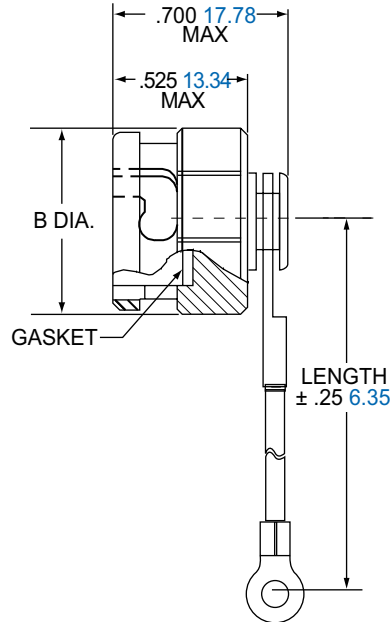


Protective Cap 2M660-082 & 2M660-083

2M660-082



2M660-083



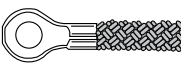

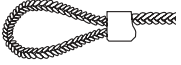
Shell Size	A Max.	
	in.	mm.
5	.620	15.75
6	.620	15.75
7	.620	15.75
8	.690	17.53
9	.760	19.30
10	.850	21.59
12	.940	23.88
14	1.170	29.72
15	1.230	31.24

Shell Size	B Max.	
	in.	mm.
6	.541	13.74
7	.618	15.70
9	.743	18.87
12	.892	22.66

MATERIALS

Cover	Aluminum alloy or stainless steel
Gasket	Fluorosilicone rubber
Wire, Hardware	Stainless steel, passivated

LANYARD OPTIONS

	Nylon Rope	-55° to +100°C, black, flexible, good abrasion resistance, good resistance to fuels, .120" 3mm diameter
	Sash Chain	Stainless steel
	Slip Knot (SK) for attaching Covers to Cables	55° to +100°C, black, flexible, good abrasion resistance, good resistance to fuels, .120" 3mm diameter. Length includes .5" 13mm diameter loop.

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-D

Terrapin

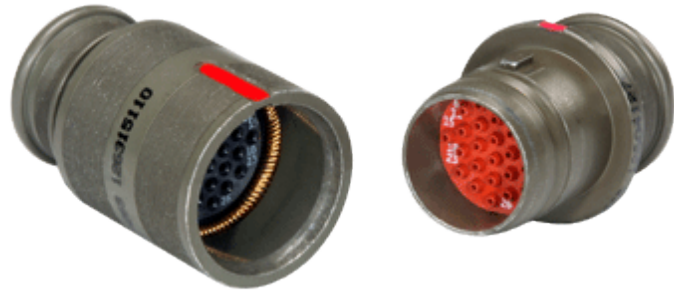
Nexus

2M804 Series Micro-Miniature Connectors:

Amphenol's 2M804 Series of connectors are ideal for applications where space is limited and a quick disconnect connector is needed. The series features a push to mate, pull to unmate connector with EMI spring installed in the receptacle for improved EMI performance. Plugs and receptacles are provided in two different styles to accommodate the attachment of backshell with rear accessory threads or with integral backshell. The integral backshell allows for use of EMI shielding attachments and/or overmolding. Contact termination styles include: Crimp, PC Tail, and Solder cup with others available upon request. Custom and Filter configurations are available, please consult factory for ordering information.

2M804 FEATURES INCLUDE:

- Push to mate, Pull to unmate coupling
- Flush mounting Receptacle on outside of panel
- Sealed Receptacles:
 - Hermetic (1×10^{-8} cc/second)
 - Epoxy Backfilled (1×10^{-4} cc/second)
- ROHS Compliant Platings available
- Insert Arrangements up to 85 contacts



2M804 SPECIFICATIONS

Current Rating	See Insert Arrangements (pg. 13-15)
DWV	See Insert Arrangements (pg. 13-15)
Insulation Resistance	5000 megohms min.
Operating Temperature	-65° C to +150° C
Shock	300 g's
Vibration	Random: 37 g Sine: 30 g
Shielding Effectiveness	85 dB min. from 100MHz to 1000MHz
Durability	2000 mating cycles

2M804 MATERIALS AND FINISHES

Shells	Aluminum Alloy or Stainless Steel
Contacts	Copper Alloy, gold plated
Insulators	Polyphenylene Sulfide (PPS)
Contact Retention	Beryllium Copper Alloy
Grommet, Interfacial Seal, O'Ring	Fluorosilicone Rubber
Canted Coil Spring	Stainless Steel, Gold plated

Contact & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-D

Terrapin

Nexus

Connector Weights

SERIES 2M804 WEIGHTS IN GRAMS

Insert Arrg.	Plug	Jam Nut Receptacle		In-Line Receptacle
		Rear Mount	Front Mount	
5-3P	2.2	8.0	9.7	4.0
5-3S	2.4	8.3	9.8	4.1
6-1P	3.1	7.2	11.8	5.2
6-1S	3.4	7.5	12.1	5.5
6-4P	2.8	8.8	11.4	4.8
6-4S	3.0	9.0	11.6	5.1
6-7P	3.0	9.1	11.7	5.3
6-7S	3.2	9.5	12.0	5.5
7-1P	3.7	11.1	16.4	10.1
7-1S	4.3	11.7	16.9	10.7
7-10P	3.7	10.9	16.2	10.0
7-10S	4.2	11.3	16.5	10.3
8-2P	5.0	10.9	13.5	8.0
8-2S	5.7	5.7	11.7	9.0
8-13P	4.3	10.6	12.4	7.4
8-13S	4.8	11.0	13.0	8.1
8-200P	5.3	11.2	13.9	8.4
8-200S	6.1	12.0	14.6	9.1
9-4P	5.7	15.2	21.1	11.0
9-4S	6.7	16.2	22.1	12.0
9-19P	4.6	14.1	20.0	9.9
9-19S	4.8	14.9	21.1	9.8
9-200P	5.2	14.6	20.6	10.5
9-200S	6.3	15.7	21.7	11.6
9-201P	5.8	15.3	21.2	11.1
9-201S	6.9	16.4	22.3	12.2
10-5P	7.3	15.5	23.3	11.9
10-5S	8.7	16.9	24.8	13.3
10-26P	5.4	13.6	20.5	10.1
10-26S	6.2	13.9	21.1	10.5
10-200P	6.2	14.4	22.2	10.8
10-200S	7.6	15.8	23.7	12.2
10-201P	6.3	14.5	22.3	10.9
10-201S	7.7	16.0	23.8	12.3
10-202P	6.3	14.5	22.3	10.9
10-202S	7.8	16.1	23.9	12.4
12-2P	10.7	21.5	26.1	20.8
12-2S	12.3	23.1	27.7	22.4
12-3P	11.7	22.4	27.1	21.8
12-3S	13.4	24.2	28.8	23.4
12-7P	11.9	22.7	27.3	22.0

SERIES 2M804 WEIGHTS IN GRAMS

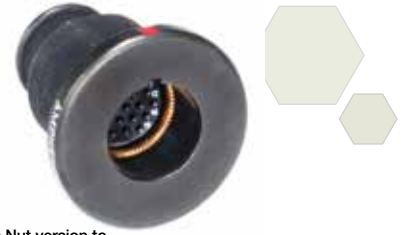
Insert Arrg.	Plug	Jam Nut Receptacle		In-Line Receptacle
		Rear Mount	Front Mount	
12-7S	14.5	25.3	29.9	24.6
12-37P	10.1	21.5	25.5	22.4
12-37S	11.8	23.1	27.2	22.1
12-200P	10.3	21.1	25.7	20.5
12-200S	12.5	23.3	27.9	22.7
12-201P	10.7	21.5	26.1	22.8
12-201S	13.0	23.8	28.4	23.1
14-5P	15.4	28.3	33.6	26.3
14-5S	18.4	31.2	36.5	29.3
14-12P	16.2	29.0	34.3	27.1
14-12S	19.8	32.7	38.0	30.7
14-55P	12.8	25.6	30.9	23.7
14-55S	15.6	28.3	33.8	26.5

SERIES 2M804 UNMATE FORCE

Layout	Average Force	
	Pounds	Newtons
5-3	10.6	47.1
6-4	10.8	48.0
6-7	11.4	50.7
7-10	12.0	53.4
8-13	12.6	56.0
9-19	13.8	61.4
10-26	15.2	67.6
12-37	17.4	77.4
14-55	21.0	93.4

Note: Contact Amphenol if modified force values are needed.

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus



1. Series	2. Shell Style	3. Service Class	4. Shell Size-Insert Arrg.	5. Contact Type	6. Alternate Position
2M804-00X	-06	ZNU	6-7	P	

*add "-501" to the suffix of Jam Nut version to include a Hex Nut instead of a Spanner Nut.

SERIES	
2M804-001	Plug with Integral Backshell
2M804-002	Plug with Accessory Thread
2M804-003	Receptacle with Integral Backshell
2M804-004	Receptacle with Accessory Thread

SHELL SIZE - INSERT ARRANGEMENTS

See Insert Arrangements on Pages 13-15

CONTACTS	
P	Pin
S	Socket
A	Pin, less contacts
B	Socket, less contacts



SHELL STYLE	
2M804-001	2M804-002
-06	Plug
SHELL STYLE	
2M804-003	2M804-004
-00	Jam Nut* for Front Panel Mounting
-01	In-Line for Free-Hanging Cable
-07	Jam Nut* for Rear Panel Mounting

SERVICE CLASS	
	Finish
C	Aluminum/Black Anodize (Non-Conductive)
M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium with Olive Drab Chromate
MT	Aluminum/Nickel-PTFE (Duralon)
Z1	Stainless Steel/Passivated
ZM	Stainless Steel/Electroless Nickel
ZN	Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU	Aluminum/Zinc-Nickel with Black Chromate

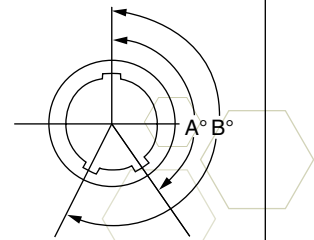
KEYING		
Key Position	Key Rotation	
	A	B
Omit	Single Master Key	
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°

INSERT ARRANGEMENTS

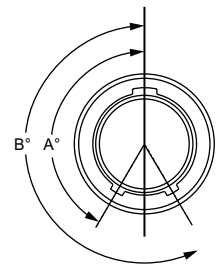
Insert Arrg.	No. of Contacts				
	#23	#20	#20HD	#16	#12
5-3	3				
6-1				1	
6-4	4				
6-6	6				
6-7	7				
6-23			3		
7-1					1
7-10	10				
7-25			5		
8-2				2	
8-28			8		
8-13	13				
8-200	4	2			
9-4				4	
9-19	19				
9-200	4			2	
9-201	8	2			
9-210			10		
10-2					2
10-5				5	
10-26	26				
10-200	12				1

INSERT ARRANGEMENTS

Insert Arrg.	No. of Contacts				
	#23	#20	#20HD	#16	#12
10-201	4				2
10-202	8			2	
12-2					2
12-3					3
12-7				7	
12-37	37				
12-200	6				2
12-201	10				2
12-220			20		
14-5					5
14-12				12	
14-55	55				
14-235			35		
15-7					7
15-14				14	
15-85	85				



Receptacle View



Plug View

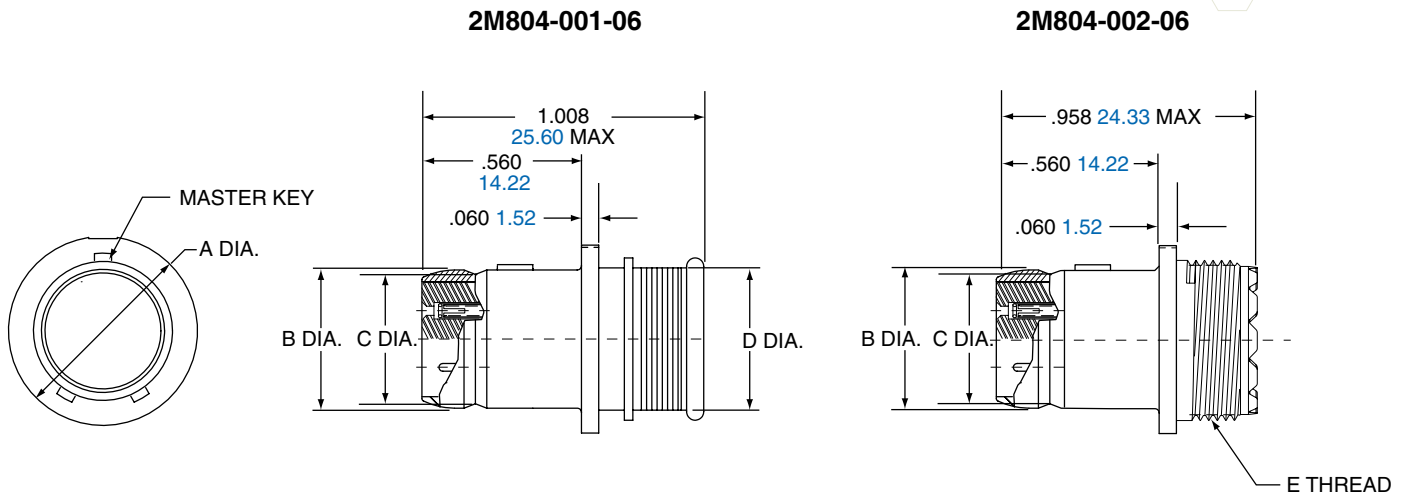
For single master key omit (leave blank)

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

2M804 Push-Pull Plug Connector

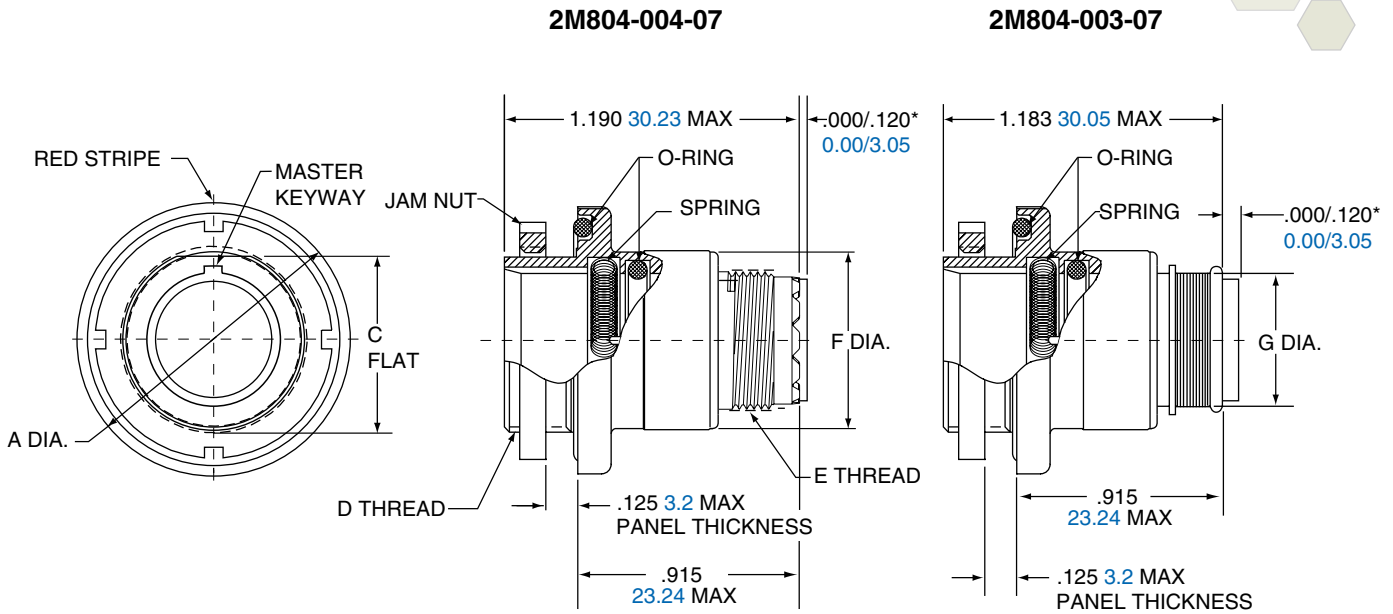


2M804-001-06 and 2M804-002-06



Shell Size	A Dia.		B Dia.		C Dia.		D Dia.		E Thread UNEF-2A
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	
5	.418	10.62	.245	6.22	.218	5.54	.248	6.30	.2500-32
6	.488	12.40	.310	7.87	.275	6.99	.293	7.44	.3125-32
7	.561	14.25	.378	9.60	.350	8.89	.388	9.86	.4375-28
8	.603	15.32	.426	10.82	.395	10.03	.448	11.38	.5000-28
9	.663	16.84	.482	12.24	.450	11.43	.503	12.78	.5625-24
10	.743	18.87	.555	14.10	.525	13.34	.563	14.30	.6250-24
12	.851	21.62	.672	17.07	.642	16.31	.653	16.59	.6875-24
14	.978	24.84	.795	20.19	.761	19.33	.803	20.40	.9375-20
15	1.038	26.37	.863	21.92	.837	21.26	.853	21.67	.9375-20

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804**
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus



*Grommet protrudes for power/combo arrangements

Shell Size	A Dia.		C Flat		D Thread UN-2A	E Thread UNEF-2A	F Dia.		G Dia.	
	in.	mm	in.	mm			in.	mm.	in.	mm.
5	.773	19.63	.414	10.52	.4375-32	.2500-32	.448	11.38	.248	6.30
6	.833	21.16	.468	11.89	.5000-32	.3125-32	.513	13.03	.293	7.44
7	.903	22.94	.593	15.06	.6250-28	.4375-28	.573	14.55	.388	9.86
8	.958	24.33	.593	15.06	.6250-28	.5000-28	.596	15.14	.448	11.38
9	.998	25.35	.653	16.59	.6875-28	.5625-24	.691	17.55	.503	12.78
10	1.083	27.51	.721	18.31	.7500-28	.6250-24	.728	18.49	.563	14.30
12	1.183	30.05	.843	21.41	.8750-28	.6875-24	.883	22.43	.653	16.59
14	1.323	33.60	.968	24.59	1.0000-28	.9375-20	1.003	25.48	.803	20.40
15	1.373	34.87	1.036	26.31	1.0625-20	.9375-20	1.063	27.00	.853	21.67

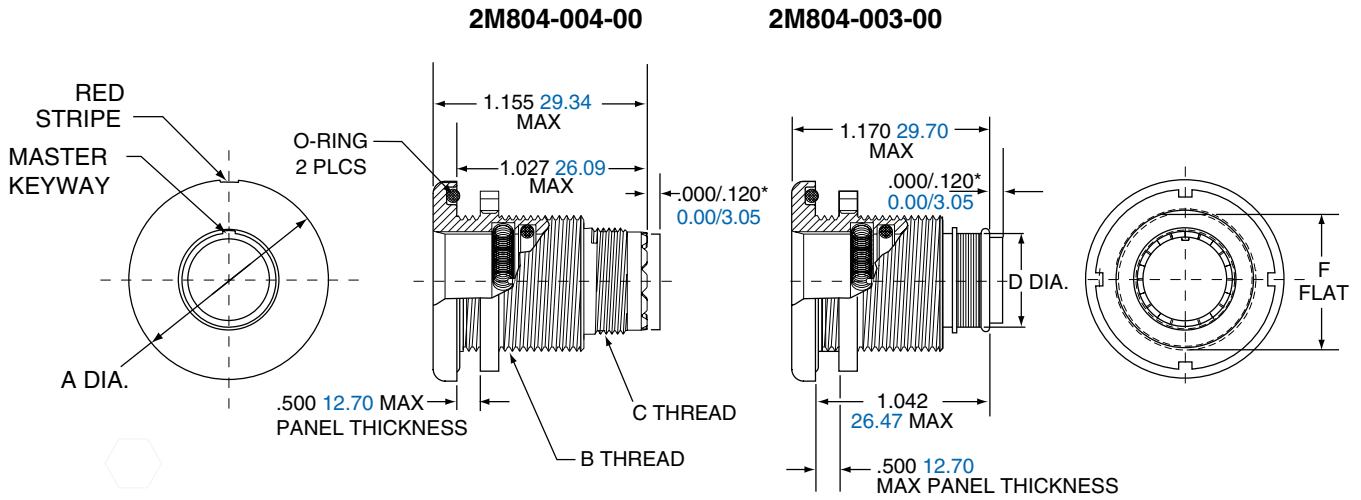
JAM NUT PANEL CUTOUT

Shell Size	A Flat		B Dia.	
	in. ±.002	mm. ± 0.05	in. ±.005	mm. ± 0.13
5	.423	10.74	.448	11.38
6	.475	12.07	.510	12.95
7	.602	15.29	.635	16.13
8	.602	15.29	.635	16.13
9	.663	16.84	.698	17.73
10	.729	18.82	.760	19.30
12	.851	21.62	.885	22.48
14	.976	24.79	1.010	25.65
15	1.043	26.49	1.073	27.25

2M804 Push-Pull Jam Nut Front Panel Receptacle



2M804-004-00 and 2M804-003-00

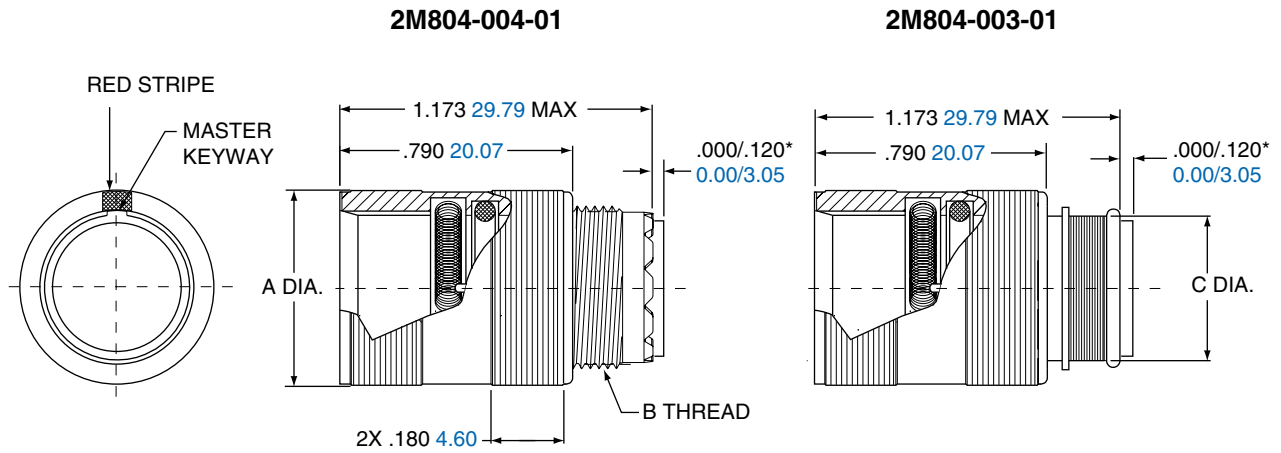


*Grommet protrudes for power/combo arrangements

Shell Size	A Dia.		B Thread UN-2A	C Thread UNEF-2A	D Dia.		F Flat.	
	in.	mm			in.	mm.	in.	mm.
5	.830	21.08	.5000-32	.2500-32	.248	6.30	.470	11.94
6	.884	22.45	.5625-32	.3125-32	.293	7.44	.529	13.44
7	.994	25.25	.6875-28	.4375-28	.388	9.86	.663	16.84
8	.994	25.25	.6875-28	.5000-28	.448	11.38	.663	16.84
9	1.073	27.25	.7500-28	.5625-24	.503	12.78	.719	18.26
10	1.138	28.91	.8125-28	.6250-24	.563	14.30	.778	19.76
12	1.338	33.96	1.0000-28	.6875-24	.653	16.59	.969	24.61
14	1.388	35.26	1.0625-20	.9375-20	.803	20.40	1.019	25.88
15	1.453	36.91	1.1250-28	.9375-20	.853	21.67	1.113	28.27

PANEL CUTOUT

Shell Size	A Flat		B Dia.	
	in. ±.002	mm. ± 0.05	in. ±.005	mm. ± 0.13
5	.477	12.12	.510	12.95
6	.537	13.64	.573	14.55
7	.670	17.02	.698	17.73
8	.670	17.02	.698	17.73
9	.727	18.47	.760	19.30
10	.787	20.19	.823	20.90
12	.977	24.82	1.010	25.65
14	1.027	26.09	1.073	27.25
15	1.121	28.47	1.135	28.83



*Grommet protrudes for power/combo arrangements

Shell Size	A Dia.		B Thread UNEF-2A	C Dia.	
	in.	mm		in.	mm.
5	.453	11.51	.2500-32	.248	6.30
6	.523	13.28	.3125-32	.293	7.44
7	.583	14.81	.4375-28	.388	9.86
8	.606	15.39	.5000-28	.448	11.38
9	.698	17.73	.5625-24	.503	12.78
10	.738	18.75	.6250-24	.563	14.30
12	.883	22.43	.6875-24	.653	16.59
14	1.013	25.73	.9375-20	.803	20.40
15	1.061	26.95	.9375-20	.853	21.67

2M804 Series of PC Board Receptacles:

2M804 Series of PC Board Receptacles are intended for use of terminating the connector directly to a Circuit Board or Flex assembly. These connectors can also be supplied with Solder cup termination for direct wire attachment.

2M804 FEATURES INCLUDE:

- Flush mounting Receptacle on outside of panel
- Shell Standoffs for PC Board washout
- Non-removable PC and/or Solder cup contacts
- Environmental Sealing



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M804-0XX	-07	ZNU	9-19	P	

*add "-501" to the suffix of Jam Nut version to include a Hex Nut instead of a Spanner Nut.

SERIES	
2M804-005	Receptacle with Solder cup or PCB Termination with Standard Epoxy Potting
2M804-020	Receptacle with Solder Cup or PCB Termination with Special Sealing for Open Face (unmated) Water Immersion Requirements. 100% Leak Tested. To maintain a helium leak rate of 1×10^{-4} cc/sec. pressure differential from -65°C to 150°C.

SHELL STYLE	
-00	Jam Nut* for Front Panel Mounting
-07	Jam Nut* for Rear Panel Mounting

SHELL SIZE - INSERT ARRANGEMENTS

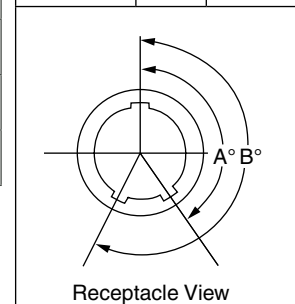
See Insert Arrangements on Pages 13-15

CONTACTS

P	Pin - PC Tail
S	Socket - PC Tail
E	Pin - Solder Cup
F	Socket - Solder Cup

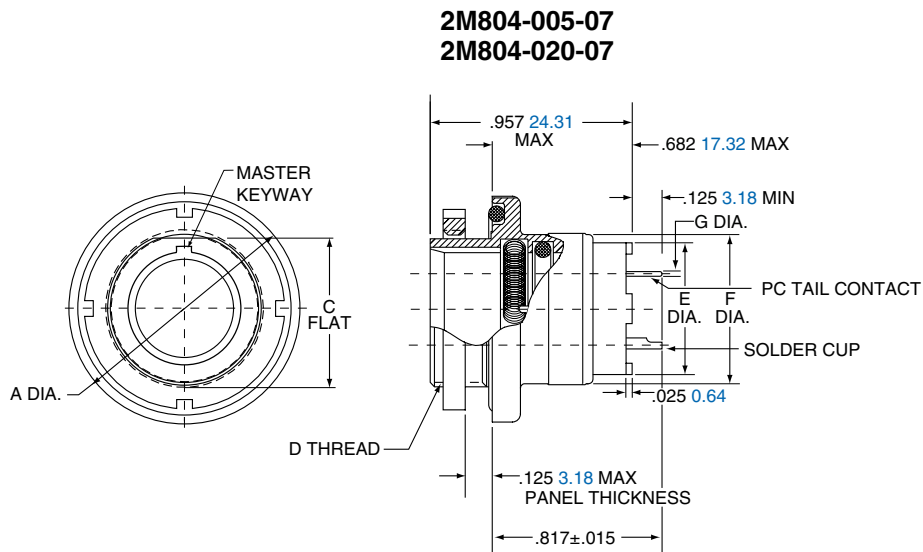
SERVICE CLASS		
		Finish
C		Aluminum/Black Anodize (Non-Conductive)
M		Aluminum/Electroless Nickel
NF		Aluminum/Cadmium with Olive Drab Chromate
MT		Aluminum/Nickel-PTFE (Durmalon)
Z1		Stainless Steel/Passivated
ZM		Stainless Steel/Electroless Nickel
ZN		Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU		Aluminum/Zinc-Nickel with Black Chromate

KEYING		
Key Position	Key Rotation	
	A	B
Omit	Single Master Key-way	
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°



Receptacle View
For single master key omit (leave blank)





Shell Size	A Dia.		C Flat		D Thread UN-2A	E Dia.		F Dia.		G PC Tail Dia.
	in.	mm.	in.	mm.		in.	mm.	in.	mm.	
5	.773	19.63	.414	10.52	.4375-32	.274	6.96	.448	11.38	#23 .018/.022 0.46/0.56
6	.833	21.16	.468	11.89	.5000-32	.329	8.36	.513	13.03	#20/20HD .025/.027 0.64/0.69
7	.903	22.94	.593	15.06	.6250-28	.431	10.95	.573	14.55	
8	.958	24.33	.593	15.06	.6250-28	.493	12.52	.596	15.14	#16 .060/.064 1.52/1.63
9	.998	25.35	.653	16.59	.6875-28	.551	14.00	.691	17.55	
10	1.083	27.51	.721	18.31	.7500-28	.619	15.72	.728	18.49	#12 .092/.096 2.34/2.44
12	1.183	30.05	.843	21.41	.8750-28	.703	17.86	.883	22.43	
14	1.323	33.60	.968	24.59	1.0000-28	.863	21.92	1.003	25.48	
15	1.373	34.87	1.036	26.31	1.0625-20	.913	23.19	1.063	27.00	

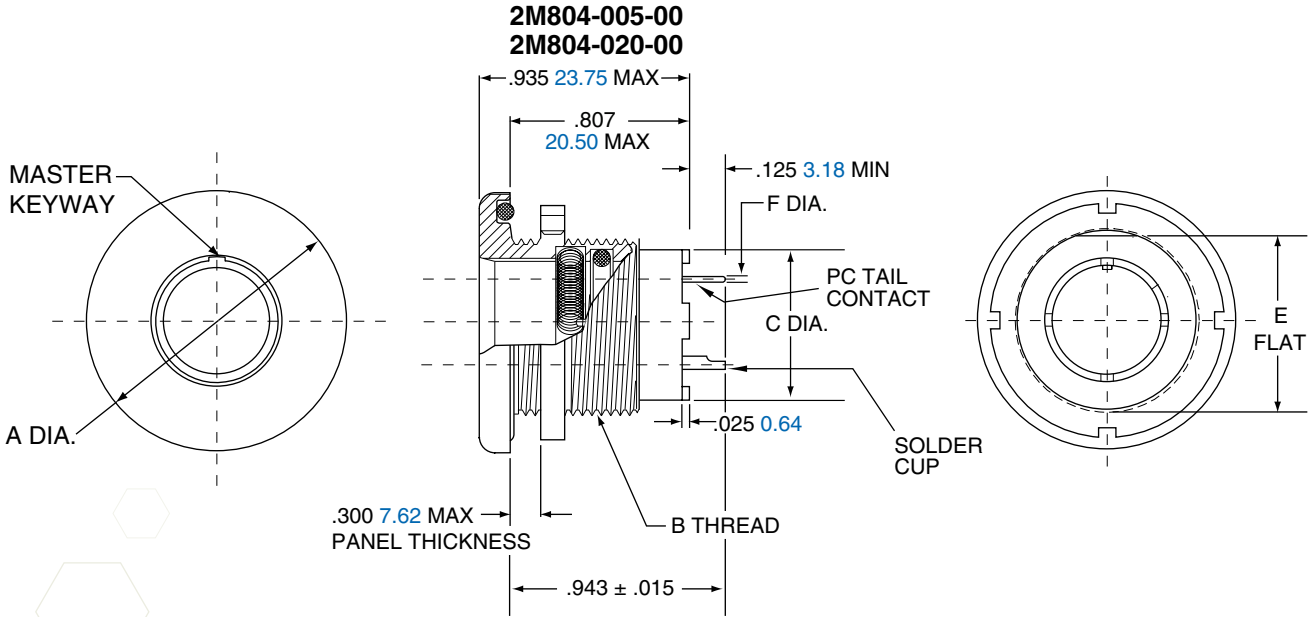
JAM NUT PANEL CUTOUT

Shell Size	A Flat		B Dia.	
	in. ±.002	mm. ± 0.05	in. ±.005	mm. ± 0.13
5	.423	10.74	.448	11.38
6	.475	12.07	.510	12.95
7	.602	15.29	.635	16.13
8	.602	15.29	.635	16.13
9	.663	16.84	.698	17.73
10	.729	18.82	.760	19.30
12	.851	21.62	.885	22.48
14	.976	24.79	1.010	25.65
15	1.043	26.49	1.073	27.25

2M804 Push-Pull PCB or Solder Cup Receptacles



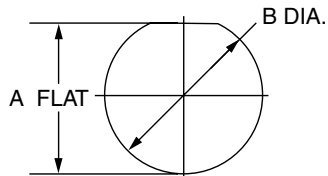
2M804-005-00 and 2M804-020-00



Shell Size	A Dia.		B Thread UN-2A	C Dia.		E Flat.		F Dia. Tail Dia.
	in.	mm.		in.	mm.	in.	mm.	
5	.830	21.08	.5000-32	.274	6.96	.470	11.94	#23 .018/.022 0.46/0.56
6	.884	22.45	.5625-28	.329	8.36	.529	13.44	
7	.994	25.25	.6875-28	.431	10.95	.663	16.84	#20/20HD .025/.027 0.64/0.69
8	.994	25.25	.6875-28	.493	12.52	.663	16.84	
9	1.073	27.25	.7500-28	.551	14.00	.719	18.26	#16 .060/.064 1.52/1.63
10	1.138	28.91	.8125-28	.619	15.72	.778	19.76	
12	1.338	33.99	1.0000-28	.703	17.86	.969	24.61	#12 .092/.096 2.34/2.44
14	1.388	35.26	1.0625-20	.863	21.92	1.019	25.88	
15	1.453	36.91	1.1250-28	.913	23.19	1.113	28.27	

JAM NUT PANEL CUTOUT

Shell Size	A Flat		B Dia.	
	in. ±.002	mm. ± 0.05	in. ±.005	mm. ± 0.13
5	.477	12.12	.510	12.95
6	.537	13.64	.573	14.55
7	.670	17.02	.698	17.73
8	.670	17.02	.698	17.73
9	.727	18.47	.760	19.30
10	.787	20.00	.823	20.90
12	.977	24.82	1.010	25.65
14	1.027	26.10	1.073	27.75
15	1.121	28.47	1.135	28.83



2M804 Panel Mount Plugs:

2M804 Series of Panel Mount Plugs are intended for use of terminating the connector directly to a Circuit Board or Flex assembly. These connectors can also be supplied with solder cup termination for direct wire attachment.

2M804 FEATURES INCLUDE:

- Low profile shells for minimum box protrusion
- Shell Standoffs for PC Board washout
- Non-removable PC and/or Solder cup contacts
- Environmental Sealing



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M804-0XX	-06	ZNU	9-19	P	

For single master key omit (leave blank)

SERIES	
2M804-009	Plugs with Solder Cup or PCB Termination with Standard Epoxy Potting
2M804-021	Plugs with Solder Cup or PCB Termination with Special Sealing for Open Face (unmated) Water Immersion Requirements. 100% Leak Tested. To maintain a helium leak rate of 1×10^{-4} cc/sec. pressure differential from -65°C to 150°C.

SHELL SIZE - INSERT ARRANGEMENTS

See Insert Arrangements on Pages 13-15

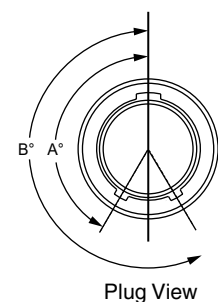
CONTACTS

P	Pin - PC Tail
S	Socket - PC Tail
E	Pin - Solder Cup
F	Socket - Solder Cup

SHELL STYLE	
-00	Jam Nut for Front Panel Mounting
-07	Jam Nut for Rear Panel Mounting
-02	Flange Mount, Rear Panel

SERVICE CLASS	
	Finish
C	Aluminum/Black Anodize (Non-Conductive)
M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium with Olive Drab Chromate
MT	Aluminum/Nickel-PTFE (Duralon)
Z1	Stainless Steel/Passivated
ZM	Stainless Steel/Electroless Nickel
ZN	Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU	Aluminum/Zinc-Nickel with Black Chromate

KEYING		
Key Position	Key Rotation	
	A	B
Omit	Single Master Key	
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°

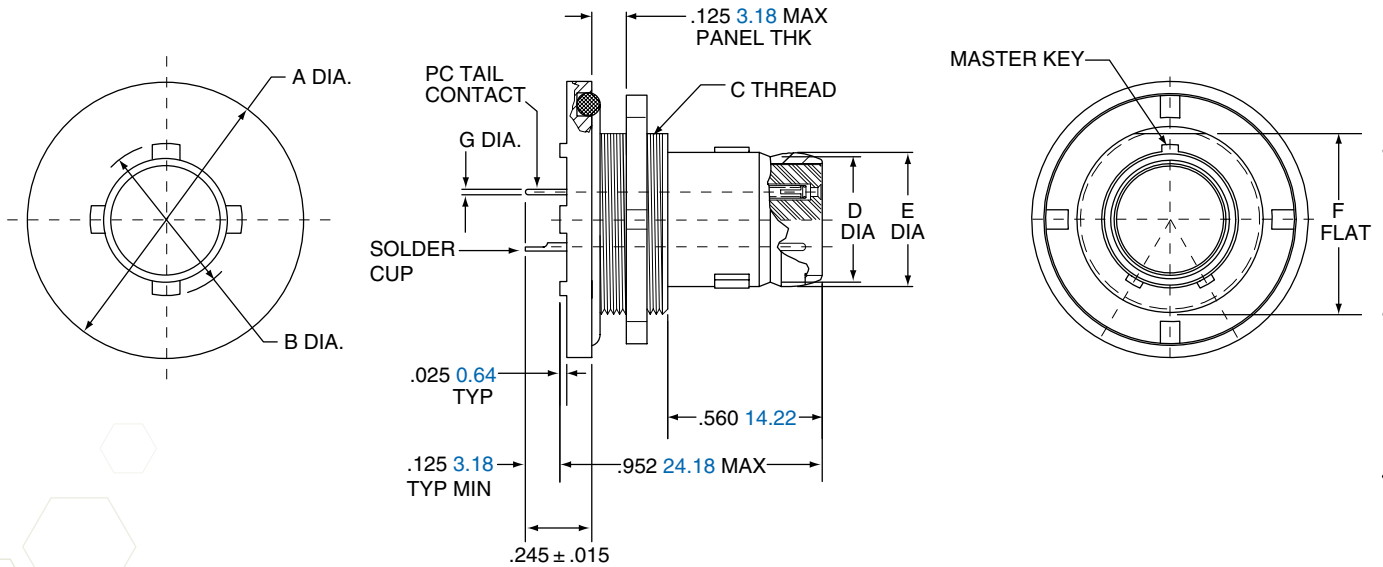


2M804 Push-Pull Jam Nut Panel Mount Plug



2M804-009-07 and 2M804-021-07

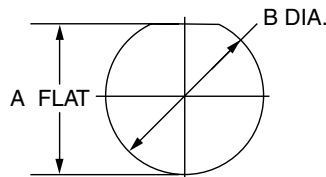
2M804-009-07
2M804-021-07



Shell Size	A Dia.		B Dia.		C Thread UN-2A	D Dia.		E Dia.		F Flat.		G PC Tail Dia.
	in.	mm.	in.	mm.		in.	mm.	in.	mm.	in.	mm.	
5	.773	19.63	.244	6.20	.4375-32	.218	5.54	.245	6.22	.414	10.52	#23 .018/.022 0.46/0.56
6	.833	21.16	.330	8.38	.5000-32	.275	6.99	.310	7.87	.468	11.89	#20/20HD .025/.027 0.64/0.69
7	.903	22.94	.432	10.97	.6250-28	.350	8.89	.378	9.60	.593	15.06	#16 .060/.064 1.52/1.63
8	.958	24.33	.493	12.52	.6250-28	.395	10.03	.426	10.82	.593	15.06	#12 .092/.096 2.34/2.44
9	.998	25.35	.551	14.00	.6875-28	.450	11.43	.482	12.24	.653	16.59	
10	1.083	27.51	.620	15.75	.7500-28	.525	13.34	.555	14.10	.721	18.31	
12	1.183	30.05	.703	17.86	.8750-28	.642	16.31	.672	17.07	.843	21.41	
14	1.323	33.60	.863	21.92	1.0000-28	.761	19.33	.795	20.19	.968	24.59	

JAM NUT PANEL CUTOUT

Shell Size	A Flat		B Dia.	
	in. ±.002	mm. ± 0.05	in. ±.005	mm. ± 0.13
5	.423	10.74	.448	11.38
6	.475	12.07	.510	12.95
7	.602	15.29	.635	16.13
8	.602	15.29	.635	16.13
9	.663	16.84	.698	17.73
10	.729	18.82	.760	19.30
12	.851	21.62	.885	22.48
14	.976	24.79	1.010	25.65

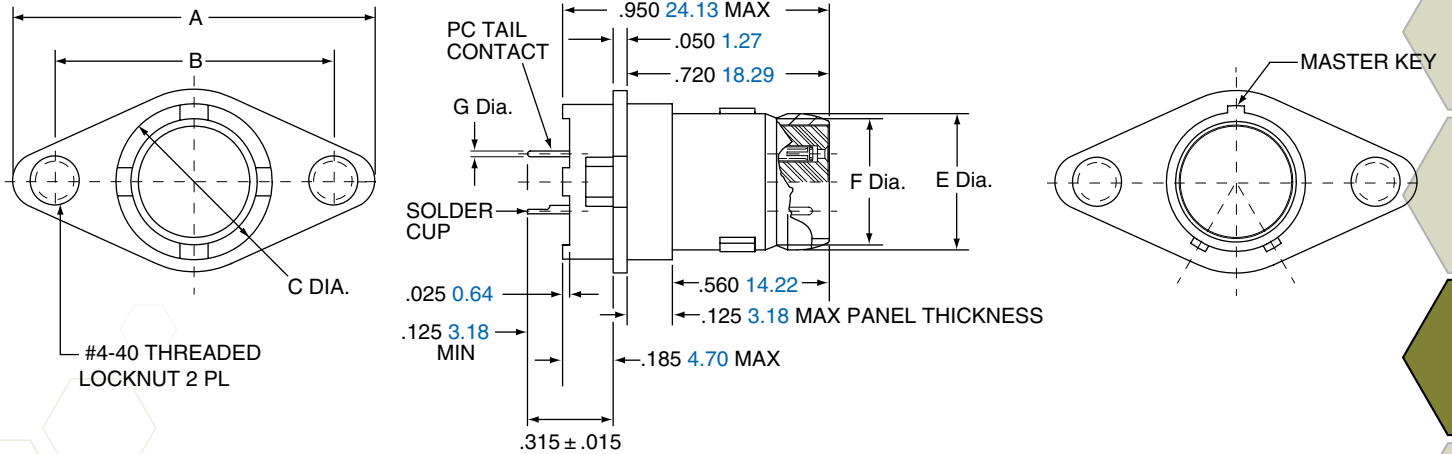


2M804 Push-Pull Plug Flange Panel Mount



2M804-009-02 and 2M804-021-02

2M804-009-02
2M804-021-02



Shell Size	A		B		C Dia.		E Dia.		F Dia.		G PC Tail Dia.
	in.	mm.	in. ± .005	mm. ± 0.13	in.	mm.	in.	mm.	in.	mm.	
5	1.055	26.80	.755	19.18	.323	8.20	.245	6.22	.218	5.54	#23 .018/.022 0.46/0.56
6	1.120	28.45	.820	20.83	.388	9.86	.310	7.87	.275	6.99	#20/20HD .025/.027 0.64/0.69
7	1.185	30.10	.885	22.48	.453	11.51	.378	9.60	.350	8.89	#16 .060/.064 1.52/1.63
8	1.230	31.24	.930	23.62	.498	12.65	.425	10.80	.395	10.03	#12 .092/.096 2.34/2.44
9	1.290	32.77	.990	25.15	.558	14.17	.482	12.24	.450	11.43	
10	1.360	34.54	1.060	26.92	.628	15.95	.555	14.10	.525	13.34	
12	1.485	37.72	1.185	30.10	.753	19.13	.672	17.07	.642	16.31	
14	1.600	40.64	1.300	33.02	.868	22.05	.795	20.19	.761	19.33	

2M804 Series of Hermetic Receptacles:

2M804 Series of Hermetic Receptacles provide superior sealing of 1×10^{-8} cc/second helium leak rate and are 100% tested prior to shipping. This superior sealing is accomplished through the use of glass insulator fused to stainless steel shells and iron alloy contacts.

2M804 FEATURES INCLUDE:

- Low profile shells for minimum box protrusion
- Shell Standoffs for PC Board washout
- Non-removable PC and/or Solder cup contacts
- Hermetic Sealing

Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position	For single master key omit (leave blank)
2M804-006	-07	Z1	9-19	P	A	

SERIES	
2M804-006	Hermetic Receptacle with Printed Circuit Board Contacts or Solder Cup Contacts.

SHELL STYLE	
-00	Jam Nut for Front Panel Mounting
-07	Jam Nut for Rear Panel Mounting

SHELL SIZE - INSERT ARRANGEMENTS	
See Insert Arrangements on Pages 13-15	

CONTACTS	
P	Pin - Solder Cup
C	Pin - PC Tail
H	Pin, Solder Cup - Without Interfacial Seal
Y	Pin, PC Tail - Without Interfacial Seal

SERVICE CLASS	
	Finish
ZL	Stainless Steel/Nickel Plated
Z1	Stainless Steel/Passivated

KEYING		
Key Position	Key Rotation	
	A	B
Omit	Single Master Key-way	
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°

Receptacle View

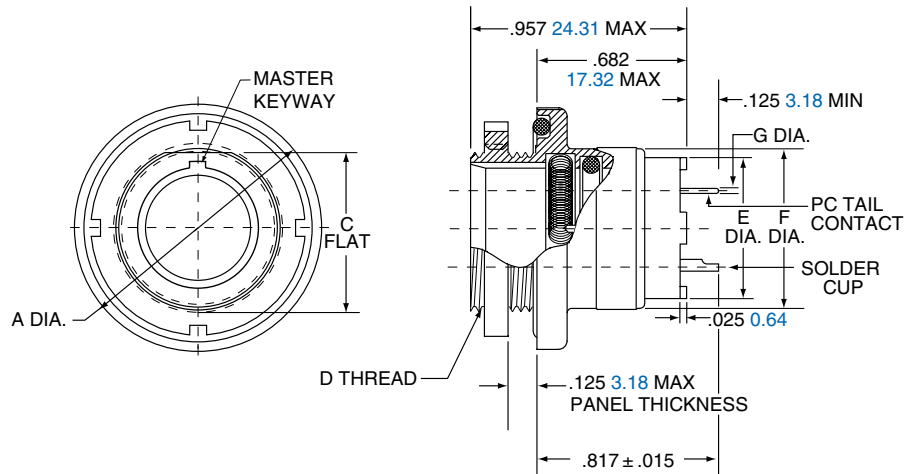
Note: Please contact the factory directly for a listing of tooled interfacial seals for the hermetically sealed connectors.

2M804 Push-Pull Rear Panel Jam Nut Hermetic



2M804-006-07

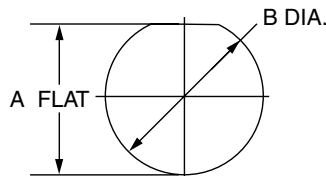
2M804-006-07



Shell Size	A Dia.		C Flat		D Thread UN-2A	E Dia.		F Dia.		G PC Tail Dia.
	in.	mm.	in.	mm.		in.	mm.	in.	mm.	
5	.773	19.63	.414	10.52	.4375-32	.274	6.96	.448	11.38	#23 .018/.022 0.46/0.56
6	.833	21.16	.468	11.89	.5000-32	.329	8.36	.513	13.03	
7	.903	22.94	.593	15.06	.6250-28	.431	10.95	.573	14.55	#20/20HD .025/.027 0.64/0.69
8	.958	24.33	.593	15.06	.6250-28	.493	12.52	.596	15.14	
9	.998	25.35	.653	16.59	.6875-28	.551	14.00	.691	17.55	#16 .060/.064 1.52/1.63
10	1.083	27.51	.721	18.31	.7500-28	.619	15.72	.728	18.49	
12	1.183	30.05	.843	21.41	.8750-28	.703	17.86	.883	22.43	#12 .092/.096 2.34/2.44
14	1.323	33.60	.968	24.59	1.0000-28	.863	21.92	1.003	25.48	
15	1.373	34.87	1.036	26.31	1.0625-20	.913	23.19	1.063	27.00	

JAM NUT PANEL CUTOUT

Shell Size	A Flat		B Dia.	
	in. ±.002	mm. ± 0.05	in. ±.005	mm. ± 0.13
5	.423	10.74	.448	11.38
6	.475	12.07	.510	12.95
7	.602	15.29	.635	16.13
8	.602	15.29	.635	16.13
9	.663	16.84	.698	17.73
10	.729	18.82	.760	19.30
12	.851	21.62	.885	22.48
14	.976	24.79	1.010	25.65



Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

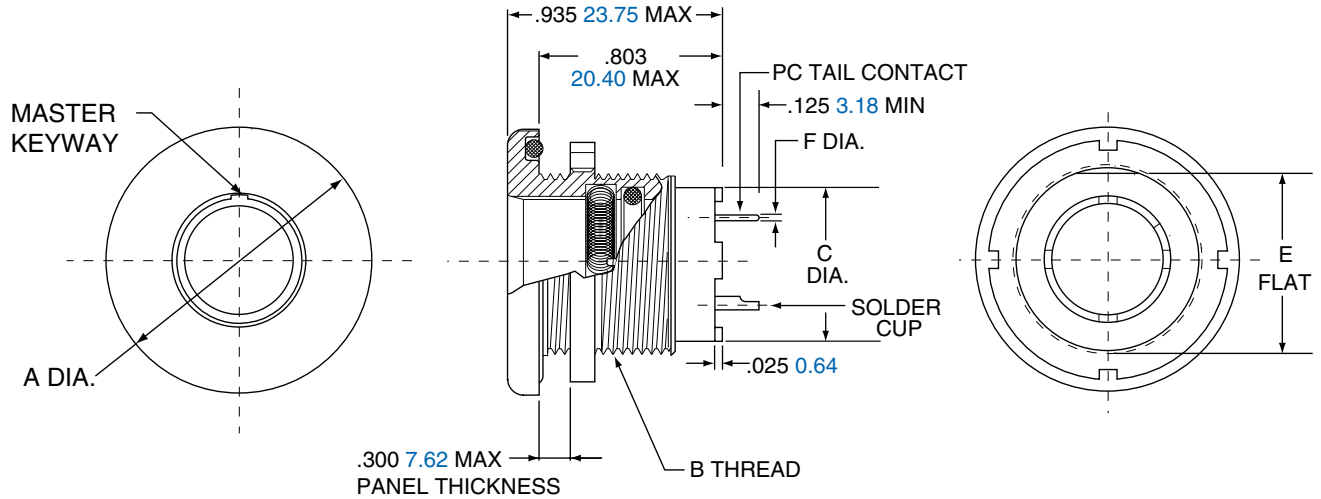
HD38999

Micro-D

Terrapin

Nexus

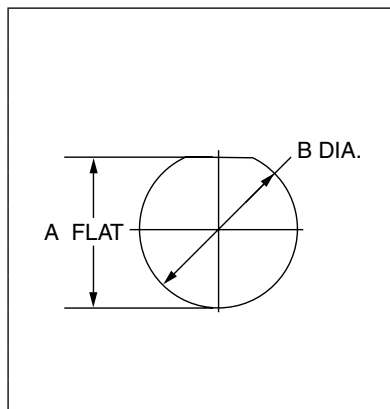
2M804-006-00



Shell Size	A Dia.		B Thread UN-2A	C Dia.		E Flat.		F PC Tail Dia.
	in.	mm.		in.	mm.	in.	mm.	
5	.830	21.08	.5000-32	.274	6.96	.470	11.94	#23 .018/.022 0.46/0.56
6	.884	22.45	.5625-32	.329	8.36	.529	13.44	
7	.994	25.25	.6875-28	.431	10.95	.663	16.84	#20/20HD .025/.027 0.64/0.69
8	.994	25.25	.6875-28	.493	12.52	.663	16.84	
9	1.073	27.25	.7500-28	.551	14.00	.719	18.26	#16 .060/.064 1.52/1.63
10	1.138	28.91	.8125-28	.619	15.72	.778	19.76	
12	1.338	33.99	1.0000-28	.703	17.86	.969	24.61	#12 .092/.096 2.34/2.44
14	1.388	35.26	1.0625-20	.863	21.92	1.019	25.88	
15	1.453	36.91	1.1250-28	.913	23.19	1.113	28.27	

JAM NUT PANEL CUTOUT

Shell Size	A Flat		B Dia.	
	in. ±.002	mm. ± 0.05	in. ±.005	mm. ± 0.13
5	.477	12.12	.510	12.95
6	.537	13.64	.635	16.13
7	.670	17.02	.635	16.13
8	.670	17.02	.698	17.73
9	.727	18.47	.760	19.30
10	.787	19.81	.885	22.48
12	.977	24.82	1.010	25.65
14	1.027	26.09	1.073	27.25
15	1.120	28.45	1.135	28.83



Protection Caps:

2M804 Push-Pull Protective Caps are available in plug and receptacle versions. Protective caps keep the connector interface dry and clean while not in use. Caps come in a variety of materials, lanyard styles and lengths to accommodate specific design requirements.



Series	Service Class	Shell Size	Attachment Type	Attachment Code	Attachment Length in Inches	Pull Ring Option
2M667-202	-M	9	-G	04	-5	R

SERIES	
2M667-202	Protection Caps 2M804 Receptacles

SHELL SIZE	ATTACHMENT TYPE
5	-G Nylon Rope
6	Stainless Steel
7	-H Wire Rope, Teflon@ Jacket
8	-N No Attachment
9	-S Stainless Steel Sash Chain
10	-SK Nylon Rope With Slip Knot
12	-T Stainless Steel Wire Rope, No Jacket
14	-U Stainless Steel Wire Rope, Polyurethane Jacket

Omit for attachment Type N (No Attachment)
Example "-5" equals five inch length

PULL RING OPTIONS	
R	Supplied with Pull Ring
	Omit for None

ATTACHMENT CODE	
Omit for attachment Types N (No Attachment) and SK (Slip Knot)	
Small Ring	01 -.126 (3.20) I.D. 02 -.145 (3.68) I.D. 04 -.188 (4.78) I.D. 06 -.197 (5.00) I.D.
Large Ring	14 -.385 (9.78) I.D. 15 -.445 (11.30) I.D. 16 -.570 (14.48) I.D. 17 -.635 (16.13) I.D. 18 -.695 (17.65) I.D. 19 -.885 (22.48) I.D. 20 -1.070 (27.17) I.D. 21 -1.135 (28.83) I.D. 25 -0.820 (20.8) I.D.
Split Ring	50 -.420 (10.67) I.D. 52 -.480 (12.19) I.D. 54 -.635 (16.13) I.D. 56 -.745 (18.92) I.D. 58 -.885 (22.48) I.D. 60 -1.010 (25.65) I.D. 64 -1.125 (28.58) I.D. 68 -1.345 (34.16) I.D.

SERVICE CLASS		
		Finish
-C		Aluminum/Black Anodize (Non-Conductive)
-M		Aluminum/Electroless Nickel
-NF		Aluminum/Cadmium with Olive Drab Chromate
-MT		Aluminum/Nickel-PTFE (Duralon)
-Z1		Stainless Steel/Passivated
-ZM		Stainless Steel/Electroless Nickel
-ZN		Aluminum/Zinc-Nickel w/Olive Drab Chromate
-ZNU		Aluminum/Zinc-Nickel with Black Chromate



Series	Service Class	Shell Size	Attachment Type	Attachment Code	Attachment Length in Inches
2M809-198	-M	6	-G	04	-5

SERIES	
2M809-198	Protection Cap for 2M804 Plug

SHELL SIZE	ATTACHMENT TYPE
5	-G Nylon Rope
6	Stainless Steel
7	-H Wire Rope, Teflon® Jacket
8	-N No Attachment
9	-S Stainless Steel Sash Chain
10	Nylon Rope With Slip Knot
12	-SK
14	-T Stainless Steel Wire Rope, No Jacket
	-U Stainless Steel Wire Rope, Polyurethane Jacket

Omit for attachment Type N (No Attachment)
Example "-5" equals five inch length

ATTACHMENT CODE	
Omit for attachment Types N (No Attachment) and SK (Slip Knot)	
Small Ring	01 -.126 (3.20) I.D. 02 -.145 (3.68) I.D. 04 -.188 (4.78) I.D. 06 -.197 (5.00) I.D.
Large Ring	14 -.385 (9.78) I.D. 15 -.445 (11.30) I.D. 16 -.570 (14.48) I.D. 17 -.635 (16.13) I.D. 18 -.695 (17.65) I.D. 19 -.885 (22.48) I.D. 20 -1.070 (27.17) I.D. 21 -1.135 (28.83) I.D. 22 -1.210 (30.73) I.D. 23 -1.275 (32.39) I.D. 24 -1.375 (34.94) I.D. 24 -0.820 (20.8) I.D.
Split Ring	50 -.420 (10.67) I.D. 52 -.480 (12.19) I.D. 54 -.635 (16.13) I.D. 56 -.745 (18.92) I.D. 58 -.885 (22.48) I.D. 60 -1.010 (25.65) I.D. 64 -1.125 (28.58) I.D. 68 -1.345 (34.16) I.D.

SERVICE CLASS		
		Finish
-C		Aluminum/Black Anodize (Non-Conductive)
-M		Aluminum/Electroless Nickel
-NF		Aluminum/Cadmium with Olive Drab Chromate
-MT		Aluminum/Nickel-PTFE (Durmalon)
-Z1		Stainless Steel/Passivated
-ZM		Stainless Steel/Electroless Nickel
-ZN		Aluminum/Zinc-Nickel w/Olive Drab Chromate
-ZNU		Aluminum/Zinc-Nickel with Black Chromate

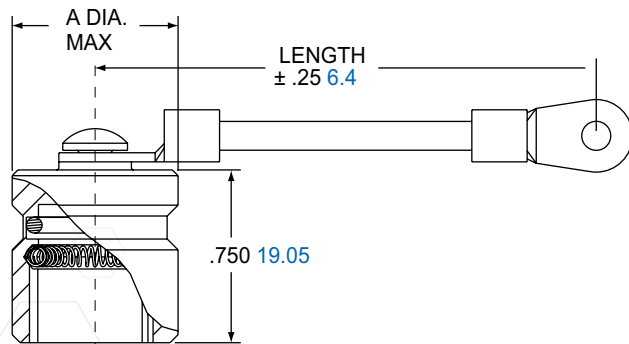


2M804 Push-Pull Protection Cap

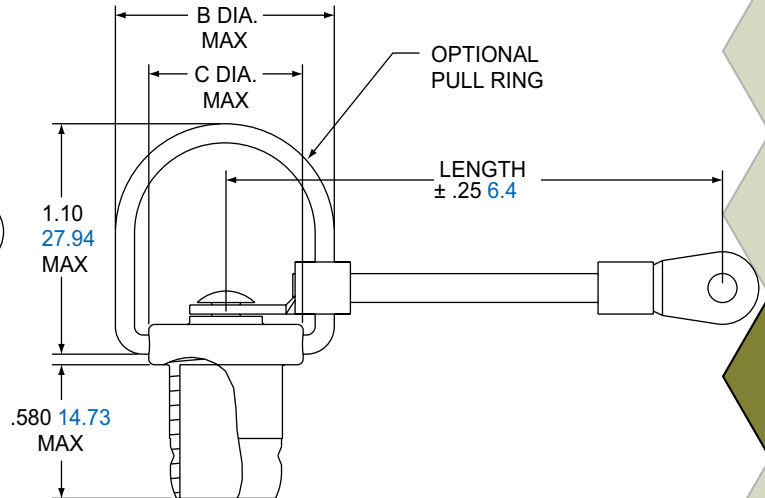


Metal Protection Cap 2M809-198 and 2M667-202

2M809-198



2M667-202



Shell Size	A Max.		B Max.		C Max.	
	in.	mm.	in.	mm.	in.	mm.
5	.483	12.27	.720	18.29	.498	12.65
6	.533	13.54	.720	18.29	.503	12.78
7	.633	16.08	.800	20.32	.578	14.68
8	.658	16.71	.850	21.59	.627	15.93
9	.708	17.98	.900	22.86	.678	17.22
10	.783	19.89	1.010	25.65	.791	20.09
12	.908	23.06	1.090	27.69	.868	22.05
14	1.033	26.24	1.210	30.73	.988	25.10
15	1.083	27.51	1.260	32.00	1.038	26.37

LANYARD OPTIONS

	Nylon Rope	-55° to +100°C., black, flexible, good abrasion resistance, good resistance to fuels, .120" 3mm diameter
	Sash Chain	Stainless steel
	Slip Knot (SK) for attaching Covers to Cables	55° to +100°C., black, flexible, good abrasion resistance, good resistance to fuels, .120" 3mm diameter. Length includes .5" 13mm diameter loop.

MATERIALS AND FINISHES

Cover	Aluminum alloy or stainless steel
O-Ring	Fluorosilicone rubber
Wire, Hardware	Stainless steel, passivated

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-ID

Terrapin

Nexus

Protection Caps:

Push-Pull Rubber Protective Caps can be used on the 2M804 push-pull plugs and receptacles. These molded rubber covers are ideal for a protective splash-proof option.



Series	Shell Size	Attachment Type	Lanyard Length	Attachment Code	Conductive Rubber
2M809-083	-6	G	5	-04	C

Example "-5" equals five inch length

SERIES	
2M809-083	Protection Cap for 2M804 Plugs
2M809-087	Protection Cap for 2M804 Receptacles

ATTACHMENT TYPE	
G	Nylon Rope
N	No Attachment

SHELL SIZE
-5
-6
-7
-8
-9
-10
-12
-14

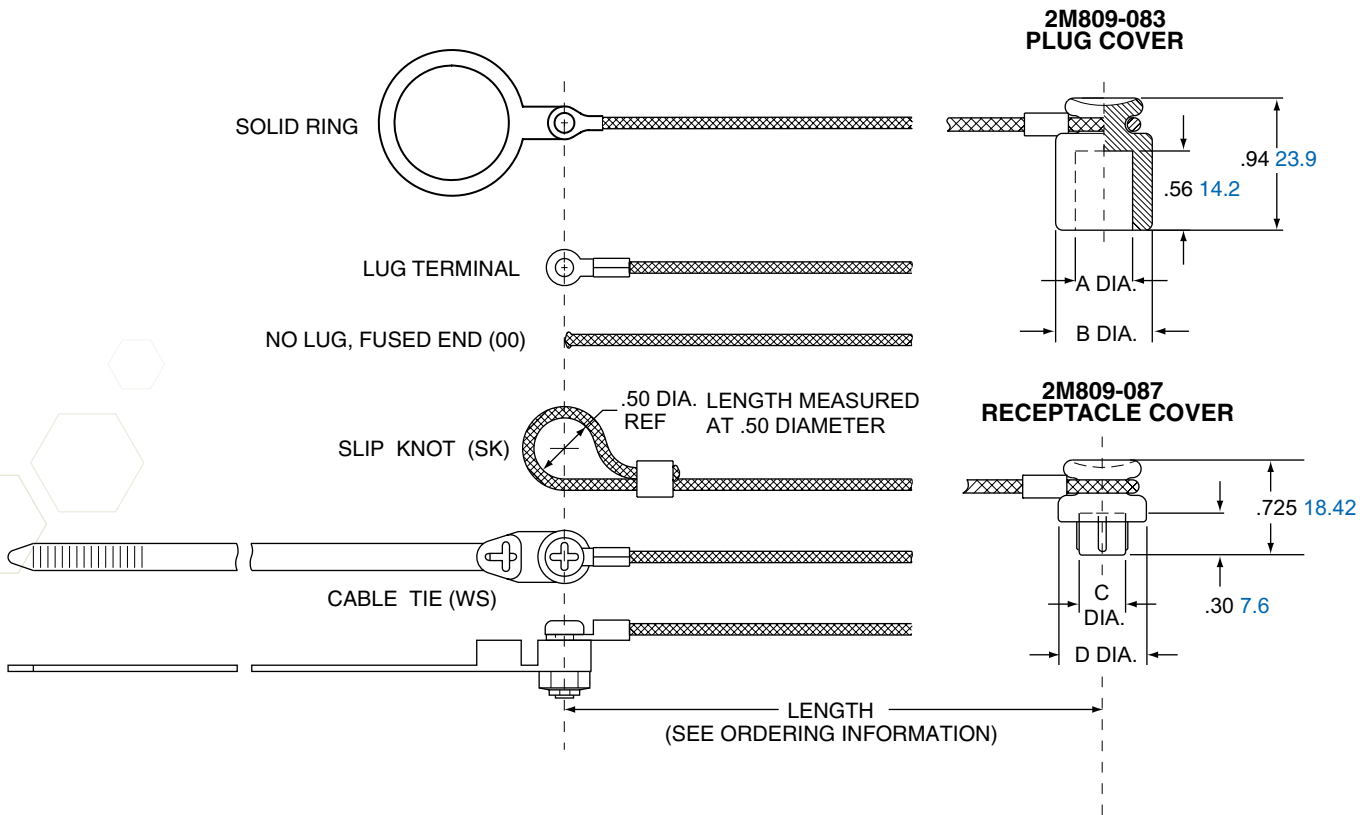
ATTACHMENT CODE		
-WS	Nylon Cable tie, 1.77 Inch (45mm) Maximum Wire Bundle Diameter	Small Ring
-SK	Slip Knot	
-00	Lanyard with no attachment (fused End)	
-01	-.147 (3.73) I.D.	Large Ring
-02	-.147 (3.73) I.D.	
-04	-.173 (3.94) I.D.	
-06	N/A	
-07	-.385 (9.78) I.D.	
-08	-.510 (13.11) I.D.	
-09	-.583 (14.81) I.D.	
-10	-.766 (19.4) I.D.	
-11	-.896 (25.76) I.D.	
-12	-1.015 (25.78) I.D.	
-15	-.445 (11.30) I.D.	
-16	-.570 (14.48) I.D.	
-17	-.635 (16.13) I.D.	
-18	-.695 (17.65) I.D.	
-19	-.885 (22.48) I.D.	
-20	-1.070 (27.18) I.D.	
-21	-1.135 (28.83) I.D.	
-25	-0.820 (20.8) I.D.	

CONDUCTIVE RUBBER	
Omit for Standard Neoprene	
C	Conductive Rubber

2M804 Push-Pull Plug Rubber Caps



Rubber Caps 2M809-083 and 2M809-087



Shell Size	A Dia.		B Dia.		C Dia.		D Dia.	
	in.	mm.	in. ± .005	mm. ± 0.13	in.	mm.	in.	mm.
5	.230	5.84	.560	14.22	.293	7.44	.638	16.21
6	.290	7.37	.560	14.22	.358	9.09	.700	17.78
7	.360	9.14	.560	14.22	.418	10.62	.825	20.96
8	.410	10.41	.680	17.27	.473	12.01	.825	20.96
9	.460	11.68	.680	17.27	.526	13.36	.888	22.56
10	.540	13.72	.790	20.07	.603	15.32	.950	24.13
12	.650	16.51	.790	20.07	.724	18.39	1.075	27.31
14	.780	19.81	1.110	28.19	.845	21.46	1.200	30.48
15	.845	21.46	1.110	28.19	.900	22.86	1.325	33.66

MATERIALS

Cover	Neoprene rubber blend, black
Lanyard	.062" (1.57) diameter nylon cord, black
Cable Tie	6/6 nylon, black SST locking tab
Ring	Stainless steel

Protection Covers:

Protection Covers are used on 2M804 Jam Nut Receptacles. The spring loaded cover stays closed when cable is disconnected. A silicone gasket is used to provide a seal when closed. Cover is available in Aluminum alloy or stainless steel.

Shell Size	Part Number				
	Aluminum				Stainless Steel
	Nickel	Olive Drab	Nickel-PTFE	Black Zinc-Nickel	Passivated
5	2M667-282M05	2M667-282NF05	2M667-282MT05	2M667-282ZNU05	2M667-282Z105
6	2M667-282M06	2M667-282NF06	2M667-282MT06	2M667-282ZNU06	2M667-282Z106
7	2M667-282M07	2M667-282NF07	2M667-282MT07	2M667-282ZNU07	2M667-282Z107
8	2M667-282M08	2M667-282NF08	2M667-282MT08	2M667-282ZNU08	2M667-282Z108
9	2M667-282M08	2M667-282NF09	2M667-282MT09	2M667-282ZNU09	2M667-282Z109
10	2M667-282M10	2M667-282NF10	2M667-282MT10	2M667-282ZNU10	2M667-282Z110
12	2M667-282M12	2M667-282NF12	2M667-282MT12	2M667-282ZNU12	2M667-282Z112
14	2M667-282M14	2M667-282NF14	2M667-282MT14	2M667-282ZNU14	2M667-282Z114

Shell Size	Dimensions			
	A		B	
	in.	mm.	in.	mm.
5	.63	16.0	.93	23.6
6	.69	17.5	.99	25.1
7	.82	20.8	1.11	28.2
8	.82	20.8	1.11	28.2
9	.88	22.4	1.18	30.0
10	.94	23.9	1.24	31.5
12	1.07	27.2	1.36	34.5
14	1.19	30.2	1.49	37.8

Materials	
Cover, Housing	Aluminum Alloy or Stainless Steel
Gasket	Silicone Rubber
Sleeve	Delrin
Spring, Shaft	Stainless Steel



2M805 Series Micro-Miniature Connectors:

Amphenol's 2M805 Series of connectors offers the best EMI and Vibration performance among all the 2M connector series. The series features a Tri-Start thread with 1 turn full mate coupling. An EMI ground strap and shell-to-shell bottoming provide superior EMI shielding. Plugs and Receptacles are provided in two different styles to accommodate the attachment of backshell with rear accessory threads or with integral backshell. The integral backshell allows for use of EMI shielding attachments and/or overmolding. Contact termination styles include Crimp, PC Tail, and Solder Cup with others available upon request. Custom and Filter configurations are available, please consult factory for ordering information.

2M805 FEATURES INCLUDE:

- Anti-Vibration Self locking Plugs
- Tri-Start thread for 1 turn full mating
- Superior EMI shielding
- Sealed Receptacles:
 - Hermetic (1×10^{-6} cc/second)
 - Epoxy Backfilled (1×10^{-4} cc/second)
- ROHS Compliant Plating
- Insert Arrangements up to 130 contacts



2M805 SPECIFICATIONS

Current Rating	See Insert Arrangements (pg. 14-17)
DWV	See Insert Arrangements (pg. 14-17)
Insulation Resistance	5000 megohms min.
Operating Temperature	-65° C to +150° C
Shock	300 g's
Vibration	Random: 43.9 g Sine: 60 g
Shielding Effectiveness	85 dB min. from 100MHz to 1000MHz
Durability	500 mating cycles

2M805 MATERIALS AND FINISHES

Shells	Aluminum Alloy or Stainless Steel
Contacts	Copper Alloy, gold plated
Insulators	Polyphenylene Sulfide (PPS)
Contact Retention	Beryllium Copper Alloy
Grommet, Interfacial Seal, O'Ring	Fluorosilicone Rubber

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805**
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus



2M805 Tri-Start Threaded Coupling

Connector Weight in Grams

SERIES 2M805 CONNECTOR WEIGHT IN GRAMS

Insert Arrange	Cable Plug	J/N Recept. Crimp	J/N Recept. PCB	Sq. Flange Recept. Crimp	Sq. Flange Recept. PCB
8-1P	7.5	5.8	5.7	5.8	4.6
8-1S	7.9	6.3	6.2	6.3	5.1
8-4P	8.3	6.6	6.5	6.6	5.4
8-4S	8.8	7.2	7.0	7.2	5.9
8-7P	7.3	5.6	5.5	5.6	4.4
8-7S	7.7	6.1	5.9	6.1	4.8
9-1P	10.9	9.0	9.0	6.8	7.7
9-1S	11.4	9.6	9.6	7.4	8.3
9-10P	10.7	8.8	8.8	6.6	7.5
9-10S	11.6	9.7	9.7	7.5	8.4
10-2P	13.3	10.2	10.3	8.9	9.4
10-2S	14.1	11.0	11.1	9.7	10.1
10-13P	12.7	9.6	9.7	8.3	8.7
10-13S	13.4	10.3	10.5	9.0	9.5
10-200P	13.9	10.8	10.9	9.5	9.9
10-200S	14.7	11.7	11.8	10.3	10.8
11-4P	15.4	12.1	13.1	10.3	11.3
11-4S	16.4	13.1	14.1	11.3	12.3
11-19P	14.3	11.0	12.0	9.2	10.2
11-19S	15.4	12.1	13.1	10.3	11.3
11-200P	14.9	11.6	12.5	9.8	10.8
11-200S	16.0	12.7	13.6	10.9	11.9
11-201P	15.4	12.1	13.1	10.3	11.3
11-201S	16.6	13.3	14.3	11.6	12.5
12-5P	17.6	13.9	16.3	12.2	13.1
12-5S	19.0	15.3	17.7	13.6	14.5
12-26P	15.8	12.1	14.5	10.5	11.3
12-26S	17.4	13.6	16.1	12.0	12.9
12-200P	16.5	12.8	15.2	11.1	12.0
12-200S	17.9	14.2	16.6	12.5	13.4
12-201P	16.6	12.9	15.3	11.2	12.1
12-201S	18.0	14.3	16.7	12.7	13.5

SERIES 2M805 CONNECTOR WEIGHT IN GRAMS

Insert Arrange	Cable Plug	J/N Recept. Crimp	J/N Recept. PCB	Sq. Flange Recept. Crimp	Sq. Flange Recept. PCB
12-202P	16.6	12.9	15.3	11.2	12.1
12-202S	18.2	14.4	16.8	12.8	13.6
15-2P	20.7	20.2	21.8	17.1	19.5
15-2S	22.3	21.9	23.4	18.7	21.1
15-3P	21.7	21.2	22.8	18.0	20.5
15-3S	23.4	23.0	24.5	19.8	22.2
15-7P	21.9	21.5	23.0	18.3	20.7
15-7S	24.5	24.1	25.6	20.9	23.3
15-37P	20.1	19.7	21.2	16.5	18.9
15-37S	23.0	22.6	24.1	19.4	21.8
15-200P	20.4	19.9	21.5	16.7	19.1
15-200S	22.6	22.1	23.7	18.9	21.3
15-201P	20.7	20.2	21.8	17.1	19.5
15-201S	23.0	22.6	24.1	19.4	21.8
18-5P	29.9	31.6	30.1	26.1	29.0
18-5S	32.9	34.5	33.1	29.0	32.0
18-12P	30.7	32.3	30.9	26.8	29.8
18-12S	34.3	36.0	34.5	30.5	33.4
18-55P	27.3	28.9	27.5	23.4	26.4
18-55S	30.7	32.3	30.9	26.8	29.8
19-7P	27.9	30.0	33.1	25.1	33.0
19-7S	31.0	33.1	36.2	28.2	36.1
19-14P	32.9	35.0	38.1	30.0	38.0
19-14S	32.6	34.7	37.7	29.7	37.6
19-85P	26.6	28.7	31.8	23.8	31.7
19-85S	31.1	33.2	36.3	28.3	36.2
23-17P	40.2	42.9	44.4	36.7	43.9
23-12S	45.2	48.0	49.5	41.8	49.0
23-22P	42.7	45.4	47.0	39.3	46.4
23-22S	49.6	52.4	53.9	46.2	53.4
23-130P	37.8	40.6	42.1	34.4	41.6
23-130S	44.9	47.7	49.3	41.6	48.7

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

2M805 Tri-Start Threaded Coupling



Ordering Guide for 2M805 Plug & Receptacle

2M805 Series Connector



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M805-00X	-16	C	15-37	S	A

*add "-501" to the suffix of Jam Nut version to include a Hex Nut instead of a Spanner Nut.

SERIES	
2M805-001	Plug with Integral Backshell
2M805-002	Plug with Accessory Thread
2M805-003	Receptacle with Integral Backshell
2M805-004	Receptacle with Accessory Thread

SHELL STYLE	
2M805-001, 2M805-002	
-16	Plug Connector with Ratcheting Anti-Decoupling Mechanism
SHELL STYLE	
2M805-003, 2M805-004	
-01	In-Line Receptacle
-02	Square Flange Receptacle
-07	Jam Nut* for Rear Panel Mounting Receptacle

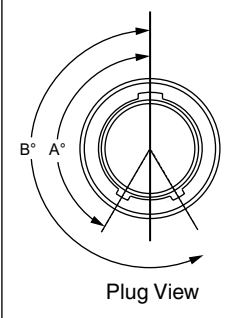
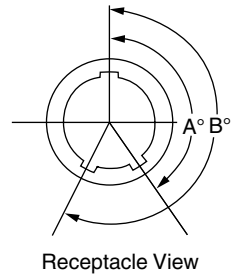
SHELL SIZE - INSERT ARRANGEMENTS
See Insert Arrangements on Pages 13-15



CONTACTS	
P	Pin
S	Socket
A	Pin, less contacts
B	Socket, less contacts

SERVICE CLASS	
Finish	
C	Aluminum/Black Anodize (Non-Conductive)
M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium with Olive Drab Chromate
MT	Aluminum/Nickel-PTFE (Durmalon)
Z1	Stainless Steel/Passivated
ZM	Stainless Steel/Electroless Nickel
ZN	Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU	Aluminum/Zinc-Nickel with Black Chromate

KEYING		
Key Position	Key Rotation	
	A	B
Normal A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°



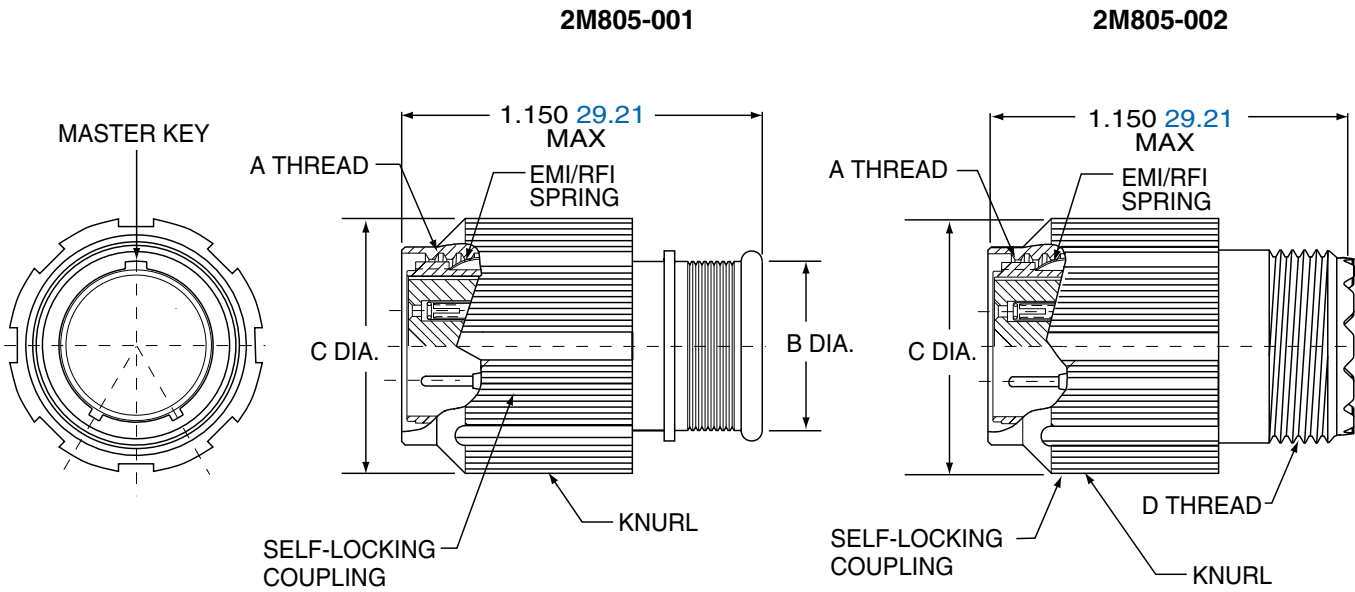
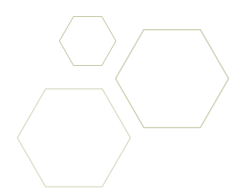
INSERT ARRANGEMENTS

Insert Arrg.	No. of Contacts				
	#23	#20	#20HD	#16	#12
8-1				1	
8-4	4				
8-6	6				
8-7	7				
8-23			3		
9-1					1
9-10	10				
9-25			5		
10-2				2	
10-13	13				
10-28			8		
10-200	4	2			
11-4				4	
11-19	19			2	
11-200	4			2	
11-201	8	2			
11-210			10		
12-2					2
12-5				5	
12-26	26				
12-200	12				1

INSERT ARRANGEMENTS

Insert Arrg.	No. of Contacts				
	#23	#20	#20HD	#16	#12
12-201	4				2
12-202	8			2	
15-2					2
15-3					3
15-7				7	
15-37	37				
15-200	6				2
15-201	10				2
15-220			20		
18-5					5
18-12				12	
18-55	55				
18-235			35		
19-7					7
19-14				14	
19-85	85				
19-241			41		
23-12					12
23-22				22	
23-130	130				
23-269			69		

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

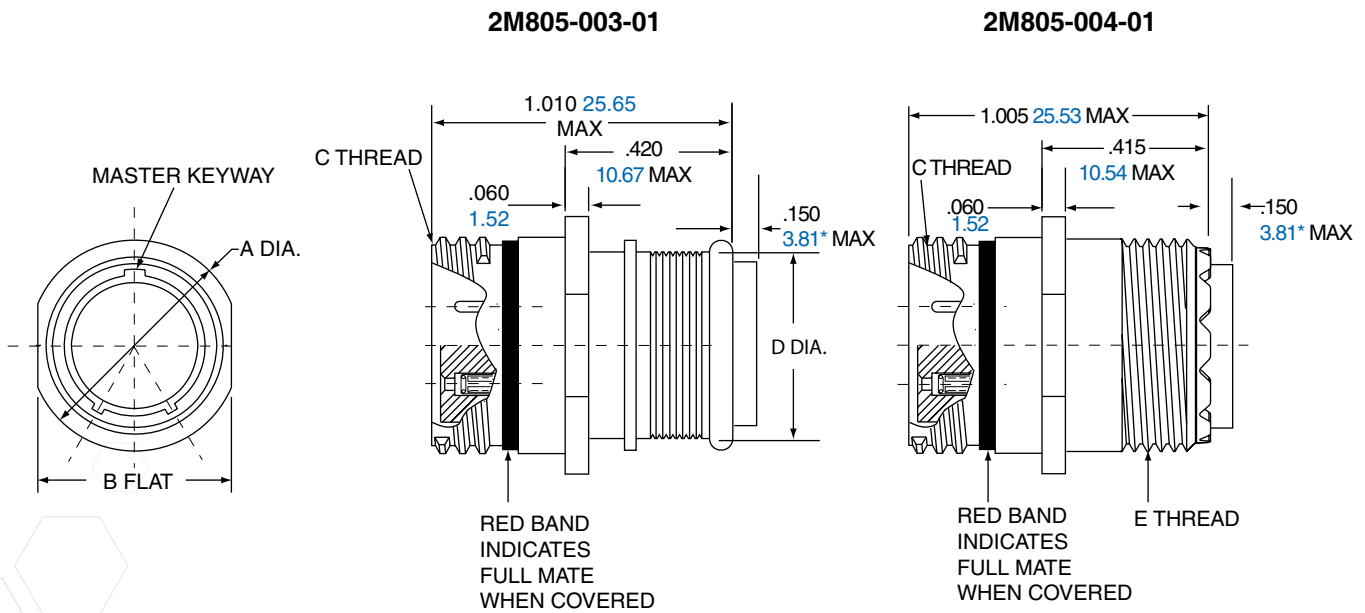


Shell Size	A Threads	B Dia.		C Dia.		D Threads Accessory
		in.	mm.	in.	mm.	
8	.5000-.1P-.3L-TS-2B	.317	8.05	.691	17.55	.3750-32 UNEF-2A
9	.5625-.1P-.3L-TS-2B	.397	10.08	.787	19.99	.4375-28 UNEF-2A
10	.6250-.1P-.3L-TS-2B	.473	12.01	.826	20.98	.5000-28 UNEF-2A
11	.6875-.1P-.3L-TS-2B	.519	13.18	.925	23.50	.5625-24 UNEF-2A
12	.7500-.1P-.3L-TS-2B	.585	14.86	.982	24.94	.6250-24 UNEF-2A
15	.9375-.1P-.3L-TS-2B	.687	17.45	1.105	28.07	.7500-20 UNEF-2A
18	1.1250-.1P-.3L-TS-2B	.884	22.45	1.275	32.39	.9375-20 UNEF-2A
19	1.1875-.1P-.3L-TS-2B	.884	22.45	1.310	33.27	.9375-20 UNEF-2A
23	1.4375-.1P-.3L-TS-2B	1.135	28.83	1.562	39.67	1.1875-18 UNEF-2A

2M805 Tri-Start In-Line Receptacle

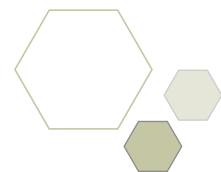


2M805-003-01 and 2M805-004-01

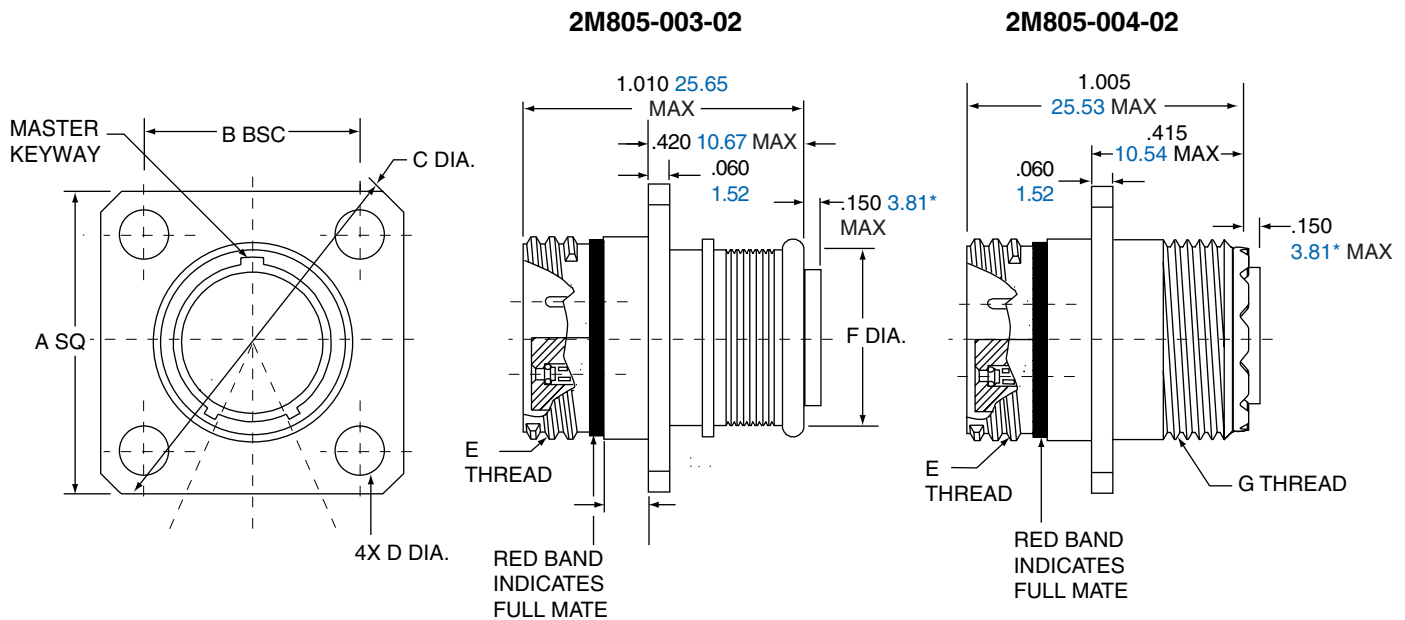


* Grommet protrudes for power/combo arrangement

Shell Size	A Dia.		B Flat		C Threads	D Dia.		E Threads Accessory
	in.	mm.	in.	mm.		in.	mm.	
8	.543	13.79	.513	13.03	.5000-.1P-.3L-TS-2A	.317	8.05	.3750-32 UNEF-2A
9	.608	15.44	.578	14.68	.5625-.1P-.3L-TS-2A	.397	10.08	.4375-28 UNEF-2A
10	.671	17.04	.641	16.28	.6250-.1P-.3L-TS-2A	.473	12.01	.5000-28 UNEF-2A
11	.733	18.62	.703	17.86	.6875-.1P-.3L-TS-2A	.519	13.18	.5625-24 UNEF-2A
12	.796	20.22	.766	19.46	.7500-.1P-.3L-TS-2A	.585	14.86	.6250-24 UNEF-2A
15	.983	24.97	.953	24.21	.9375-.1P-.3L-TS-2A	.687	17.45	.7500-20 UNEF-2A
18	1.168	29.67	1.138	28.91	1.1250-.1P-.3L-TS-2A	.884	22.45	.9375-20 UNEF-2A
19	1.238	31.45	1.208	30.68	1.1875-.1P-.3L-TS-2A	.884	22.45	.9375-20 UNEF-2A
23	1.485	37.72	1.455	39.96	1.4375-.1P-.3L-TS-2A	1.135	28.83	1.1875-18 UNEF-2A



Contacts & Tools
2M Specs
2M801
2M803
2M804
2M805
2M Filter & Accessories
HD38999
Micro-D
Terrapin
Nexus



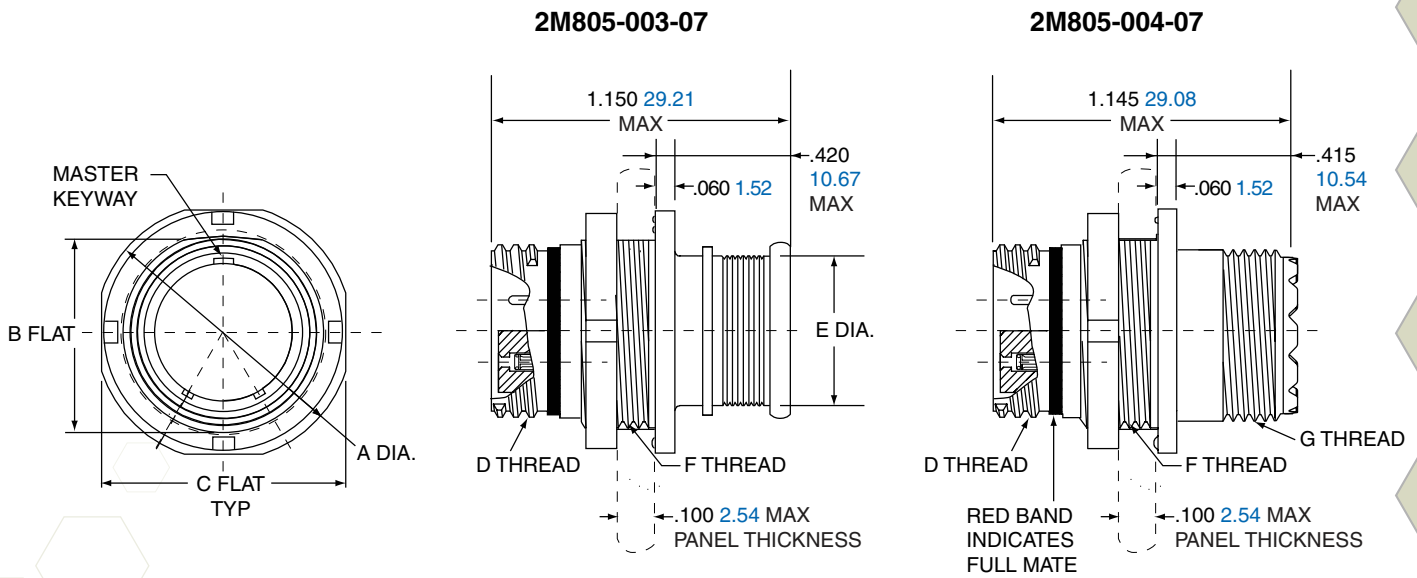
* Grommet protrudes for power/combo arrangement

Shell Size	A Sq.		B BSC.		C Dia.		D Dia.		E Threads	F Dia.		G Threads Accessory
	in.	mm.	in.	mm.	in.	mm.	in. ±.003	mm. ±.08		in.	mm.	
8	.853	21.67	.660	16.76	1.153	29.29	.091	2.31	.5000-.1P-.3L-TS-2A	.317	8.05	.3750-32 UNEF-2A
9	.916	23.27	.723	18.36	1.233	31.32	.091	2.31	.5625-.1P-.3L-TS-2A	.397	10.08	.4375-28 UNEF-2A
10	.978	24.84	.785	19.94	1.333	33.86	.091	2.31	.6250-.1P-.3L-TS-2A	.473	12.01	.5000-28 UNEF-2A
11	1.042	26.47	.848	21.54	1.413	35.89	.091	2.31	.6875-.1P-.3L-TS-2A	.519	13.18	.5625-24 UNEF-2A
12	1.102	27.99	.909	23.09	1.503	38.18	.091	2.31	.7500-.1P-.3L-TS-2A	.585	14.86	.6250-24 UNEF-2A
15	1.291	32.79	1.058	26.87	1.753	44.53	.125	3.18	.9375-.1P-.3L-TS-2A	.687	17.45	.7500-20 UNEF-2A
18	1.478	37.54	1.255	31.88	2.003	50.88	.125	3.18	1.1250-.1P-.3L-TS-2A	.884	22.45	.9375-20 UNEF-2A
19	1.540	39.12	1.327	33.71	2.097	53.26	.125	3.18	1.1875-.1P-.3L-TS-2A	.884	22.45	.9375-20 UNEF-2A
23	1.790	45.47	1.570	39.88	2.443	62.05	.125	3.18	1.4375-.1P-.3L-TS-2A	1.135	28.83	1.1875-18 UNEF-2A

2M805 Tri-Start Jam Nut Receptacle



2M805-003-07 and 2M805-004-07



Shell Size	A Dia.		B Flat		C Flat		D Threads	E Dia.		F Threads	G Threads Accessory
	in.	mm.	in.	mm.	in.	mm.		in.	mm.		
8	.760	19.30	.535	13.59	.730	18.54	.5000-.1P-.3L-TS-2A	.317	8.05	.5625-28 UN-2A	.3750-32 UNEF-2A
9	.880	22.35	.661	16.79	.850	21.59	.5625-.1P-.3L-TS-2A	.397	10.08	.6875-28 UN-2A	.4375-28 UNEF-2A
10	.880	22.35	.661	16.79	.850	21.59	.6250-.1P-.3L-TS-2A	.473	12.01	.6875-28 UN-2A	.5000-28 UNEF-2A
11	.955	24.26	.721	18.31	.925	23.50	.6875-.1P-.3L-TS-2A	.519	13.18	.7500-28 UN-2A	.5625-24 UNEF-2A
12	1.065	27.05	.784	19.91	1.039	26.39	.7500-.1P-.3L-TS-2A	.585	14.86	.8125-28 UN-2A	.6250-24 UNEF-2A
15	1.203	30.56	.970	24.64	1.173	29.79	.9375-.1P-.3L-TS-2A	.687	17.45	1.0000-28 UN-2A	.7500-20 UNEF-2A
18	1.395	35.43	1.150	29.21	1.359	34.52	1.1250-.1P-.3L-TS-2A	.884	22.45	1.1875-28 UN-2A	.9375-20 UNEF-2A
19	1.450	36.83	1.221	31.01	1.420	36.07	1.1875-.1P-.3L-TS-2A	.884	22.45	1.2500-28 UN-2A	.9375-20 UNEF-2A
23	1.705	43.31	1.470	37.34	1.678	42.62	1.4375-.1P-.3L-TS-2A	1.135	28.83	1.5000-28 UN-2A	1.1875-18 UNEF-2A

PANEL CUTOUT FOR JAM NUT

Shell Size	A Flat		B Dia	
	in. ±.002	mm. ± 0.05	in. ±.005	mm. ± 0.13
8	.543	13.79	.572	14.53
9	.669	16.99	.698	17.73
10	.669	16.99	.698	17.73
11	.729	18.51	.760	19.30
12	.792	20.17	.822	20.88
15	.978	24.84	1.010	25.65
18	1.155	29.34	1.198	30.43
19	1.231	31.27	1.260	32.00
23	1.480	37.59	1.510	38.35

2M805 High Speed Series Connector



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M805-00X	-16	C	7-10	S	A

*add "-501" to the suffix of Jam Nut version to include a Hex Nut instead of a Spanner Nut.

SERIES	
2M805-020	Plug with Integral Backshell
2M805-021	Plug with Accessory Thread
2M805-022	Receptacle with Integral Backshell
2M805-023	Receptacle with Accessory Thread

SHELL SIZE - INSERT ARRANGEMENTS

See Insert Arrangements Below

CONTACTS	
P	Pin
S	Socket
A	Pin, less contacts
B	Socket, less contacts

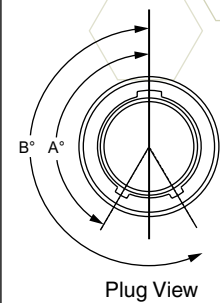
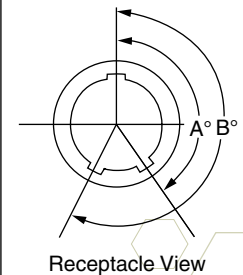


SHELL STYLE 2M805-001, 2M805-002	
-16	Plug Connector with Ratcheting Anti-Decoupling Mechanism

SHELL STYLE 2M805-003, 2M805-004	
-01	In-Line Receptacle
-02	Square Flange Receptacle
-07	Jam Nut* for Rear Panel Mounting Receptacle

SERVICE CLASS	
	Finish
C	Aluminum/Black Anodize (Non-Conductive)
M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium with Olive Drab Chromate
MT	Aluminum/Nickel-PTFE (Durmalon)
Z1	Stainless Steel/Passivated
ZM	Stainless Steel/Electroless Nickel
ZN	Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU	Aluminum/Zinc-Nickel with Black Chromate

KEYING		
Key Position	Key Rotation	
	A	B
Normal A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°



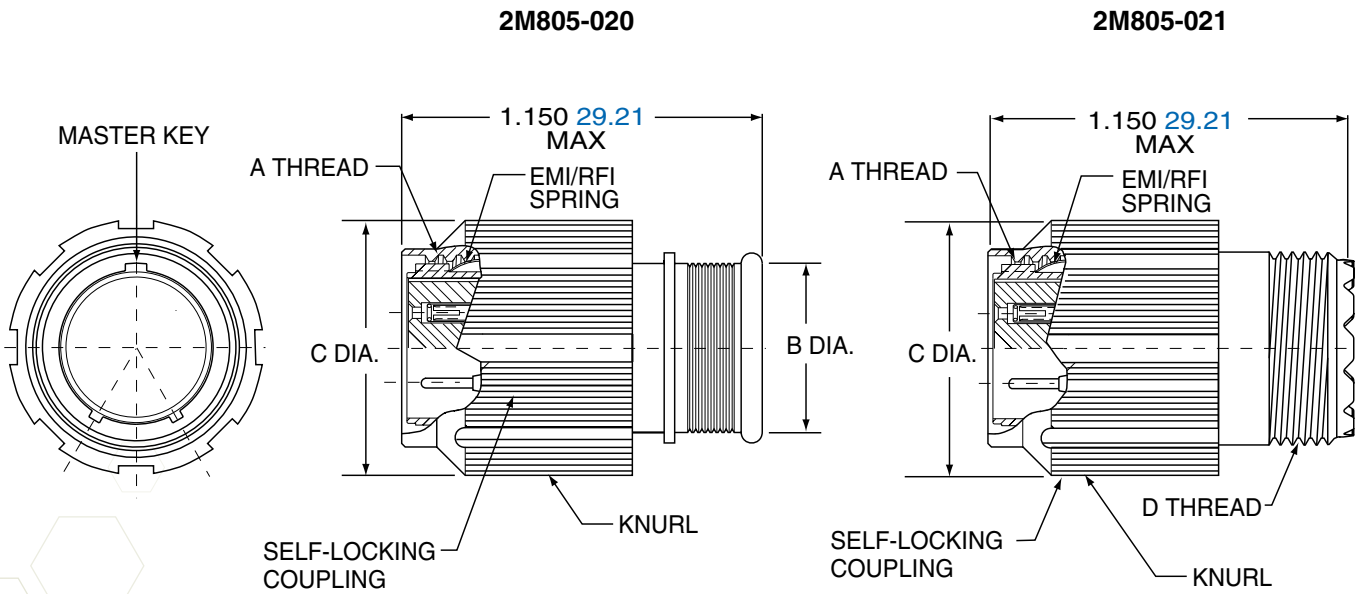
INSERT ARRANGEMENTS

8-4 (4) #23 Contacts	8-7 (7) #23 Contacts	9-10 (10) #23 Contacts	11-19 (19) #23 Contacts	12-26 (26) #23 Contacts

2M805 High Speed Tri-Start Plug

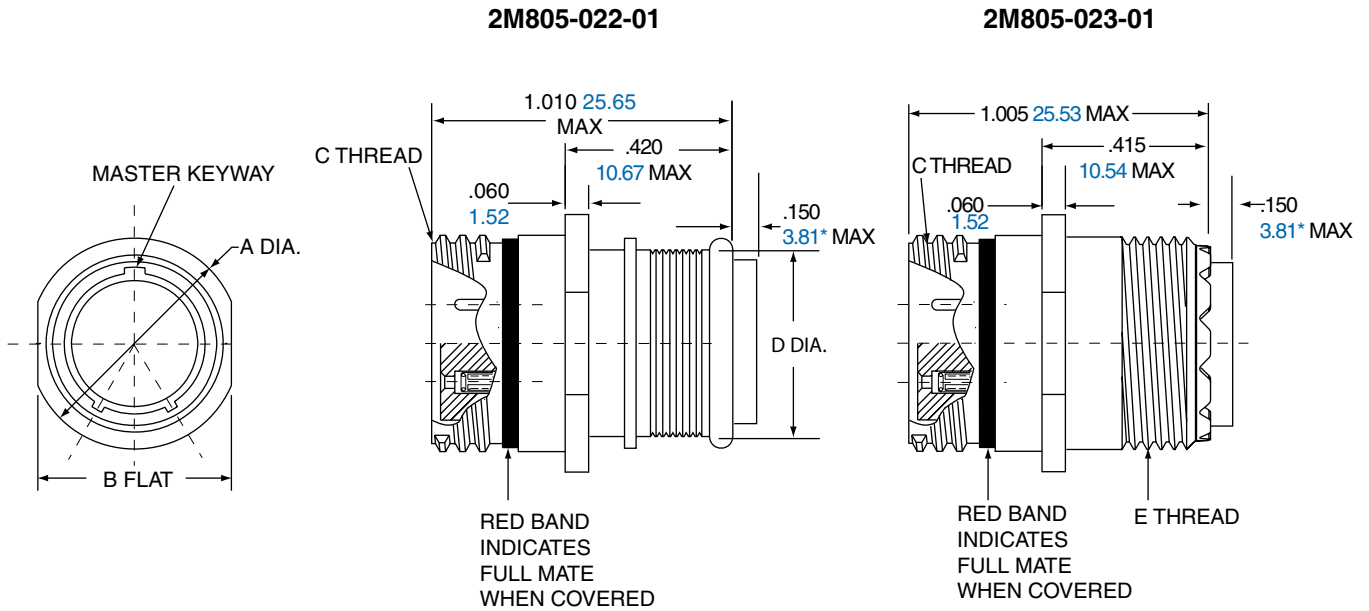


2M805-020 and 2M805-021



Shell Size	A Threads	B Dia.		C Dia.		D Threads Accessory
		in.	mm.	in.	mm.	
8	.5000-.1P-.3L-TS-2B	.317	8.05	.691	17.55	.3750-32 UNEF-2A
9	.5625-.1P-.3L-TS-2B	.397	10.08	.787	19.99	.4375-28 UNEF-2A
11	.6875-.1P-.3L-TS-2B	.519	13.18	.925	23.50	.5625-24 UNEF-2A
12	.7500-.1P-.3L-TS-2B	.585	14.86	.982	24.94	.6250-24 UNEF-2A

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus



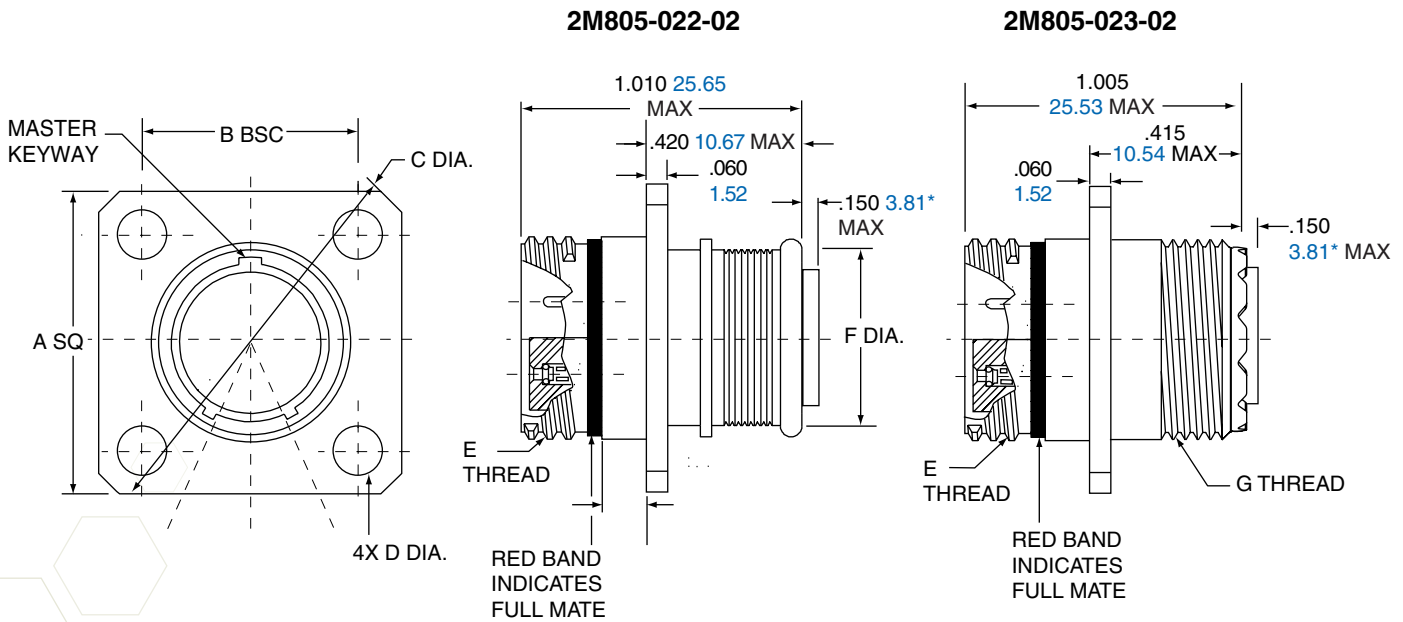
* Grommet protrudes for power/combo arrangement

Shell Size	A Dia.		B Flat		C Threads	D Dia.		E Threads Accessory
	in.	mm.	in.	mm.		in.	mm.	
8	.543	13.79	.513	13.03	.5000-.1P-.3L-TS-2A	.317	8.05	.3750-32 UNEF-2A
9	.608	15.44	.578	14.68	.5625-.1P-.3L-TS-2A	.397	10.08	.4375-28 UNEF-2A
11	.733	18.62	.703	17.86	.6875-.1P-.3L-TS-2A	.519	13.18	.5625-24 UNEF-2A
12	.796	20.22	.766	19.46	.7500-.1P-.3L-TS-2A	.585	14.86	.6250-24 UNEF-2A

2M805 High Speed Tri-Start Square Flange Receptacle



2M805-022-02 and 2M805-023-02



* Grommet protrudes for power/combo arrangement

Shell Size	A Sq.		B BSC.		C Dia.		D Dia.		E Threads	F Dia.		G Threads Accessory
	in.	mm.	in.	mm.	in.	mm.	in. ±.003	mm. ±.08		in.	mm.	
8	.853	21.67	.660	16.76	1.153	29.29	.091	2.31	.5000-.1P-.3L-TS-2A	.317	8.05	.3750-32 UNEF-2A
9	.916	23.27	.723	18.36	1.233	31.32	.091	2.31	.5625-.1P-.3L-TS-2A	.397	10.08	.4375-28 UNEF-2A
11	1.042	26.47	.848	21.54	1.413	35.89	.091	2.31	.6875-.1P-.3L-TS-2A	.519	13.18	.5625-24 UNEF-2A
12	1.102	27.99	.909	23.09	1.503	38.18	.091	2.31	.7500-.1P-.3L-TS-2A	.585	14.86	.6250-24 UNEF-2A

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

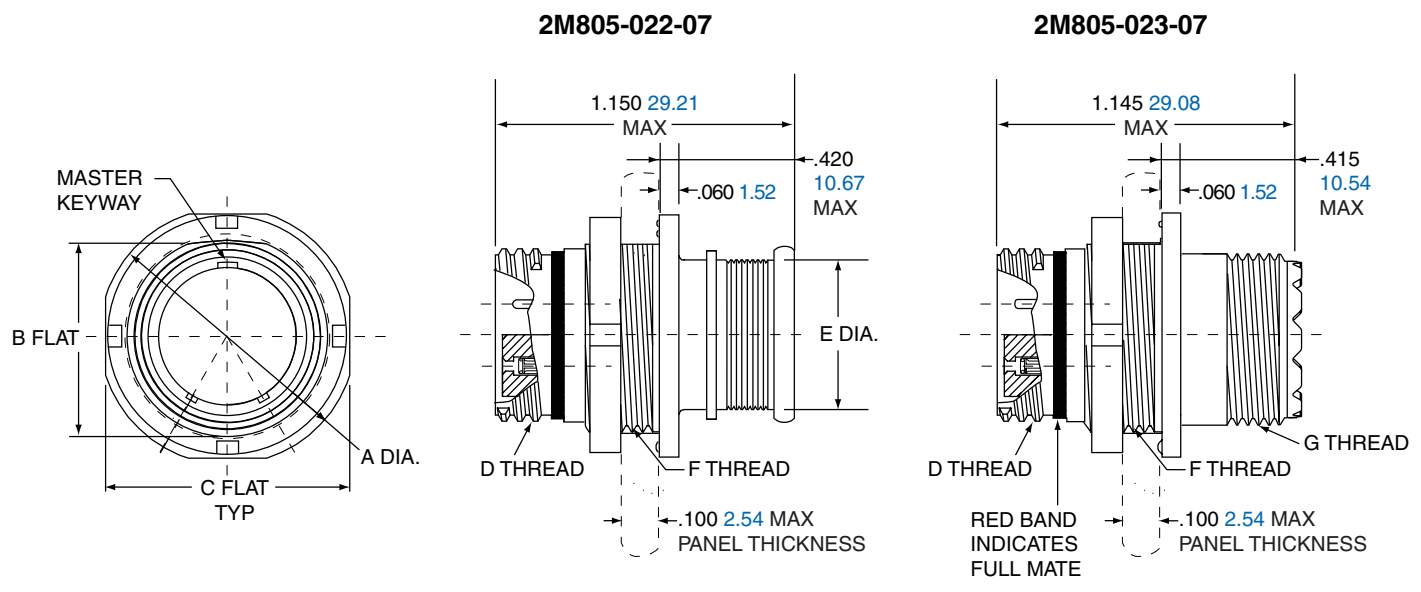
2M Filter & Accessories

HD38999

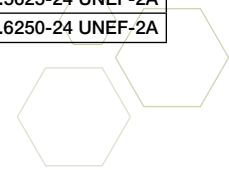
Micro-D

Terrapin

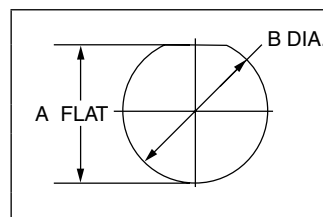
Nexus



Shell Size	A Dia.		B Flat		C Flat		D Threads	E Dia.		F Threads	G Threads Accessory
	in.	mm.	in.	mm.	in.	mm.		in.	mm.		
8	.760	19.30	.535	13.59	.730	18.54	.5000-.1P-.3L-TS-2A	.317	8.05	.5625-28 UN-2A	.3750-32 UNEF-2A
9	.880	22.35	.661	16.79	.850	21.59	.5625-.1P-.3L-TS-2A	.397	10.08	.6875-28 UN-2A	.4375-28 UNEF-2A
11	.955	24.26	.721	18.31	.925	23.50	.6875-.1P-.3L-TS-2A	.519	13.18	.7500-28 UN-2A	.5625-24 UNEF-2A
12	1.065	27.05	.784	19.91	1.039	26.39	.7500-.1P-.3L-TS-2A	.585	14.86	.8125-28 UN-2A	.6250-24 UNEF-2A



PANEL CUTOUT FOR JAM NUT



Shell Size	A Flat		B Dia	
	in. ±.002	mm. ± 0.05	in. ±.005	mm. ± 0.13
8	.543	13.79	.572	14.53
9	.669	16.99	.698	17.73
11	.729	18.51	.760	19.30
12	.792	20.17	.822	20.88

PC Board Receptacles:

2M805 Series of PC Board Receptacles are intended for use of terminating the connector directly to a Circuit Board or Flex assembly. These connectors can also be supplied with solder cup termination for direct wire attachment.

2M805 FEATURES INCLUDE:

- Low profile shells for minimum box protrusion
- Shell Standoffs for PC Board washout
- Non-removable PC and/or Solder cup contacts
- Environmental Sealing



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M805-0XX	-02	C	15-37	S	A

*add "-501" to the suffix of Jam Nut version to include a Hex Nut instead of a Spanner Nut.

SERIES	
2M805-005	Receptacle for Solder Cup or PCB Termination, with Standard Epoxy Potting
2M805-017	Receptacle for Solder Cup or PCB Termination with Special Sealing for open face (unmated) Water Immersion Requirements. 100% leak tested to maintain a helium leak rate of 1×10^{-4} cc/sec. at 1 atmosphere pressure differential from -65°C to 150°C

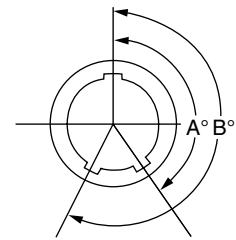
SHELL STYLE	
-02	Square Flange Receptacle
-07	Jam Nut* for Rear Panel Mounting Receptacle

SHELL SIZE - INSERT ARRANGEMENTS
See Insert Arrangements on Pages 13-15

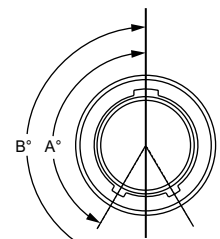
CONTACTS	
P	Pin - PC Tail
S	Socket - PC Tail
E	Pin - Solder Cup
F	Socket - Solder Cup

SERVICE CLASS		
		Finish
C		Aluminum/Black Anodize (Non-Conductive)
M		Aluminum/Electroless Nickel
NF		Aluminum/Cadmium with Olive Drab Chromate
MT		Aluminum/Nickel-PTFE (Durmalon)
Z1		Stainless Steel/Passivated
ZM		Stainless Steel/Electroless Nickel
ZN		Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU		Aluminum/Zinc-Nickel with Black Chromate

KEYING		
Key Position	Key Rotation	
	A	B
(Normal) A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°



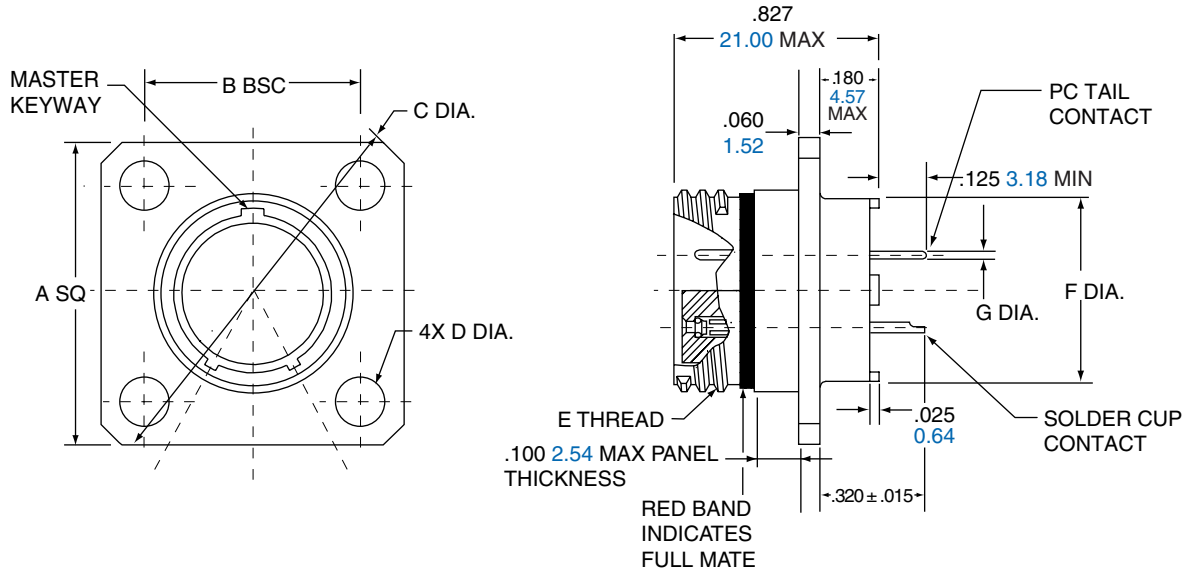
Receptacle View



Plug View



**2M805-005-02
2M805-017-02**



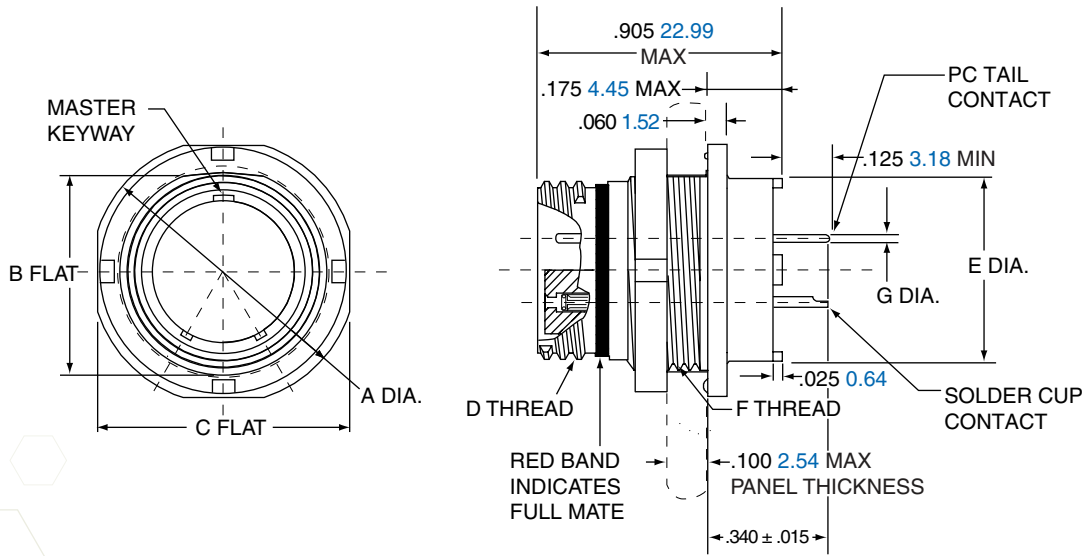
Shell Size	A Sq.		B BSC.		C Dia.		D Dia.		E Threads	F Dia.		G PC Tail Dia.
	in.	mm.	in.	mm.	in.	mm.	in. ±.003	mm. ±.08		in.	mm.	
8	.853	21.67	.660	16.76	1.153	29.29	.091	2.31	.5000-.1P-.3L-TS-2A	.330	8.38	#23 .018/.022 0.46/0.56
9	.916	23.27	.723	18.36	1.233	31.32	.091	2.31	.5625-.1P-.3L-TS-2A	.432	10.97	#20/20HD .025/.027 0.64/0.69
10	.978	24.84	.785	19.94	1.333	33.86	.091	2.31	.6250-.1P-.3L-TS-2A	.493	12.52	#16 .060/.064 1.521/1.63
11	1.042	26.47	.848	21.54	1.413	35.89	.091	2.31	.6875-.1P-.3L-TS-2A	.551	14.00	#12 .092/.096 2.34/2.44
12	1.102	27.99	.909	23.09	1.503	38.18	.091	2.31	.7500-.1P-.3L-TS-2A	.620	15.78	
15	1.291	32.79	1.058	26.87	1.753	44.53	.125	3.18	.9375-.1P-.3L-TS-2A	.703	17.86	
18	1.478	37.54	1.255	31.88	2.003	50.88	.125	3.18	1.1250-.1P-.3L-TS-2A	.863	21.92	
19	1.540	39.12	1.327	33.71	2.097	53.26	.125	3.18	1.1875-.1P-.3L-TS-2A	.912	23.16	
23	1.790	45.47	1.570	39.88	2.443	62.05	.125	3.18	1.4375-.1P-.3L-TS-2A	1.162	29.51	

2M805 Tri-Start PC Tail/Solder Cup Jam Nut



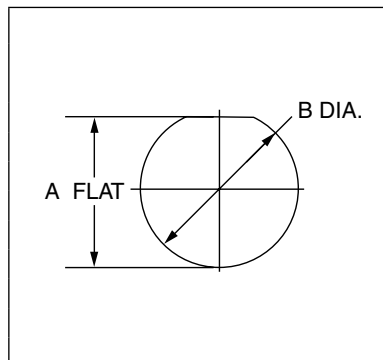
2M805-005-07 and 2M805-017-07

2M805-005-07
2M805-017-07



Shell Size	A Dia.		B Flat		C Flat		D Threads	E Dia.		F Threads	G PC Tail Dia.
	in.	mm.	in.	mm.	in.	mm.		in.	mm.		
8	.760	19.30	.535	13.59	.730	18.54	.5000-.1P-.3L-TS-2A	.330	8.38	.5625-28 UN-2A	#23
9	.880	22.35	.661	16.79	.850	21.59	.5625-.1P-.3L-TS-2A	.432	10.97	.6875-28 UN-2A	.018/.022 0.46/0.56
10	.880	22.35	.661	16.79	.850	21.59	.6250-.1P-.3L-TS-2A	.493	12.52	.6875-28 UN-2A	#20/20HD
11	.955	24.26	.721	18.31	.925	23.50	.6875-.1P-.3L-TS-2A	.551	14.00	.7500-28 UN-2A	.025/.027 0.64/0.69
12	1.060	26.92	.784	19.91	1.035	26.29	.7500-.1P-.3L-TS-2A	.620	15.78	.8125-28 UN-2A	#16
15	1.203	30.56	.970	24.64	1.173	29.79	.9375-.1P-.3L-TS-2A	.703	17.86	1.0000-28 UN-2A	.060/.064 1.521/1.63
18	1.395	35.43	1.150	29.21	1.359	34.52	1.1250-.1P-.3L-TS-2A	.863	21.92	1.1875-28 UN-2A	#12
19	1.450	36.83	1.221	31.01	1.420	36.07	1.1875-.1P-.3L-TS-2A	.912	23.16	1.2500-28 UN-2A	.092/.096 2.34/2.44
23	1.705	43.31	1.470	37.34	1.675	42.55	1.4375-.1P-.3L-TS-2A	1.162	29.51	1.5000-28 UN-2A	

PANEL CUTOUT FOR JAM NUT



Shell Size	A Flat		B Dia	
	in. ±.002	mm. ± 0.05	in. ±.005	mm. ± 0.13
8	.543	13.79	.572	14.53
9	.669	16.99	.698	17.73
10	.669	16.99	.698	17.73
11	.729	18.51	.760	19.30
12	.792	20.17	.822	20.88
15	.978	24.84	1.010	25.65
18	1.155	29.34	1.198	30.43
19	1.231	31.27	1.260	32.00
23	1.480	37.59	1.510	38.35

High Speed PC Board Receptacles:

2M805 High Speed Series of PC Board Receptacles are intended for use of terminating the connector directly to a Circuit Board or Flex assembly. These connectors can also be supplied with solder cup termination for direct wire attachment.

2M805 HIGH SPEED FEATURES INCLUDE:

- Low profile shells for minimum box protrusion
- Shell Standoffs for PC Board washout
- Non-removable PC and/or Solder cup contacts
- Teflon Inserts
- Environmental Sealing



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M805-0XX	-02	C	7-10	S	A

*add "-501" to the suffix of Jam Nut version to include a Hex Nut instead of a Spanner Nut.

SERIES	
2M805-024	Receptacle for Solder Cup or PCB Termination, with Standard Epoxy Potting

SHELL SIZE - INSERT ARRANGEMENTS

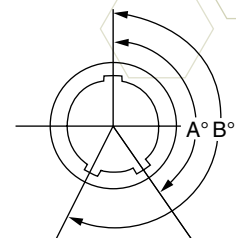
See Insert Arrangements Below

CONTACTS	
P	Pin - PC Tail
S	Socket - PC Tail
E	Pin - Solder Cup
F	Socket - Solder Cup

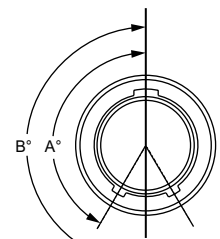
SHELL STYLE	
-02	Square Flange Receptacle
-07	Jam Nut* for Rear Panel Mounting Receptacle

SERVICE CLASS		
		Finish
C		Aluminum/Black Anodize (Non-Conductive)
M		Aluminum/Electroless Nickel
NF		Aluminum/Cadmium with Olive Drab Chromate
MT		Aluminum/Nickel-PTFE (Durmalon)
Z1		Stainless Steel/Passivated
ZM		Stainless Steel/Electroless Nickel
ZN		Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU		Aluminum/Zinc-Nickel with Black Chromate

KEYING		
Key Position	Key Rotation	
	A	B
(Normal) A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°



Receptacle View



Plug View

INSERT ARRANGEMENTS

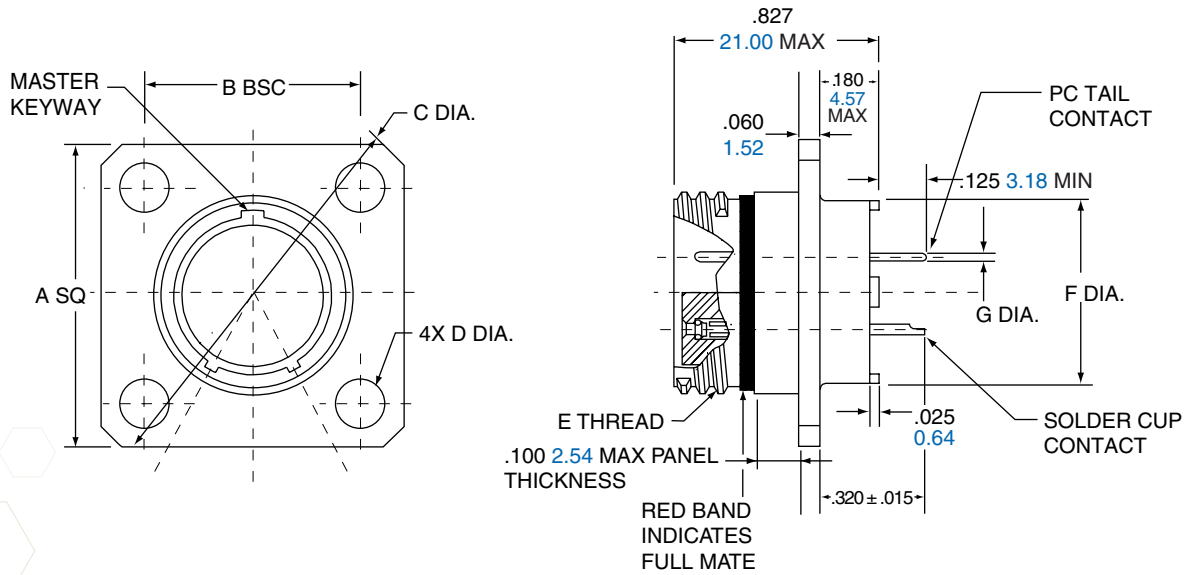
8-4 (4) #23 Contacts	8-7 (7) #23 Contacts	9-10 (10) #23 Contacts	11-19 (19) #23 Contacts	12-26 (26) #23 Contacts

2M805 High Speed Tri-Start PC Solder Cup Sq. Flange



2M805-024-02

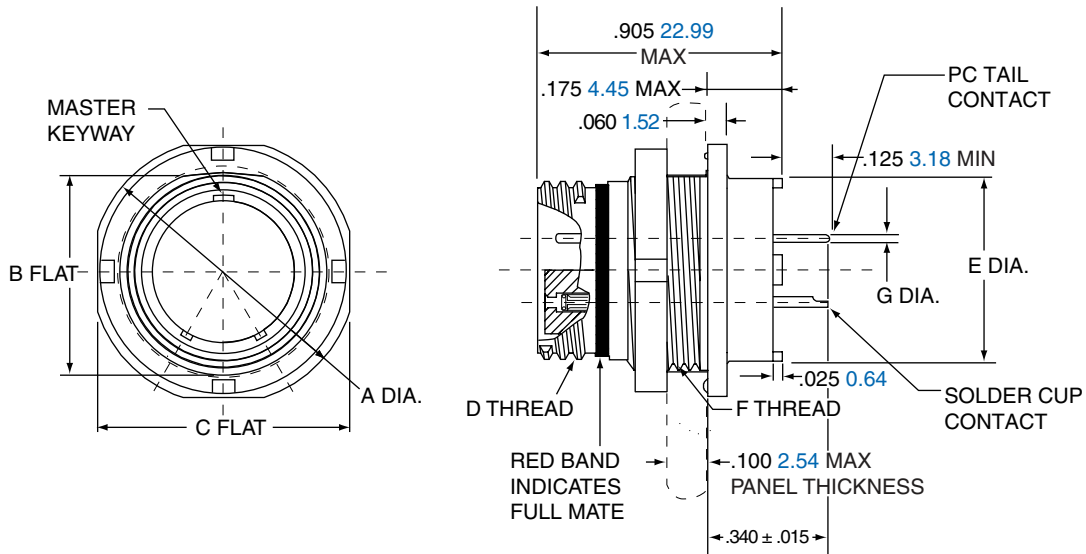
2M805-024-02



Shell Size	A Sq.		B BSC.		C Dia.		D Dia.		E Threads	F Dia.		G PC Tail Dia. #23 .018/.022 0.46/0.56
	in.	mm.	in.	mm.	in.	mm.	in. ±.003	mm. ±.08		in.	mm.	
8	.853	21.67	.660	16.76	1.153	29.29	.091	2.31	.5000-1P-.3L-TS-2A	.330	8.38	
9	.916	23.27	.723	18.36	1.233	31.32	.091	2.31	.5625-1P-.3L-TS-2A	.432	10.97	
11	1.042	26.47	.848	21.54	1.413	35.89	.091	2.31	.6875-1P-.3L-TS-2A	.551	14.00	
12	1.102	27.99	.909	23.09	1.503	38.18	.091	2.31	.7500-1P-.3L-TS-2A	.620	15.78	

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

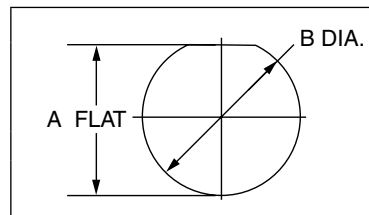
2M805-024-07



Shell Size	A Dia.		B Flat		C Flat		D Threads	E Dia.		F Threads	G PC Tail Dia. #23 .018/.022 0.46/0.56
	in.	mm.	in.	mm.	in.	mm.		in.	mm.		
8	.760	19.30	.535	13.59	.730	18.54	.5000-.1P-.3L-TS-2A	.330	8.38	.5625-28 UN-2A	
9	.880	22.35	.661	16.79	.850	21.59	.5625-.1P-.3L-TS-2A	.432	10.97	.6875-28 UN-2A	
11	.955	24.26	.721	18.31	.925	23.50	.6875-.1P-.3L-TS-2A	.551	14.00	.7500-28 UN-2A	
12	1.060	26.92	.784	19.91	1.035	26.29	.7500-.1P-.3L-TS-2A	.620	15.78	.8125-28 UN-2A	

PANEL CUTOUT FOR JAM NUT

Shell Size	A Flat		B Dia	
	in. ±.002	mm. ± 0.05	in. ±.005	mm. ± 0.13
8	.543	13.79	.572	14.53
9	.669	16.99	.698	17.73
11	.729	18.51	.760	19.30
12	.792	20.17	.822	20.88



2M805 Series of Hermetic Receptacles:

2M805 Series of Hermetic Receptacles provide superior sealing of 1×10^{-8} cc/second helium leak rate and are 100% tested prior to shipping. This superior sealing is accomplished through the use of glass insulator fused to stainless steel shells and iron alloy contacts.

2M805 FEATURES INCLUDE:

- Low profile shells for minimum box protrusion
- Shell Standoffs for PC Board washout
- Non-removable PC and/or Solder cup contacts
- Hermetic Sealing



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M805-006	-07	Z1	12-26	C	A

SERIES	
2M805-006	Hermetic Receptacle

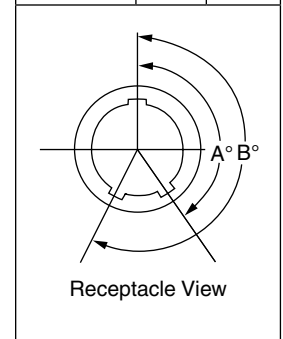
SHELL STYLE	
-02	Square Flange Receptacle
-03	Weld Mount (only available in Z1 Finish)
-07	Jam Nut for Rear Panel Mounting Receptacle

SHELL SIZE - INSERT ARRANGEMENTS
See Insert Arrangements on Pages 13-15

CONTACTS	
P	Pin - Solder Cup
C	Pin - PC Tail
H	Pin, Solder Cup - Without Interfacial Seal
Y	Pin, PC Tail - Without Interfacial Seal

SERVICE CLASS		
		Finish
ZL		Stainless Steel/Nickel Plated
Z1		Stainless Steel/Passivated

KEYING		
Key Position	Key Rotation	
	A	B
(Normal) A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°

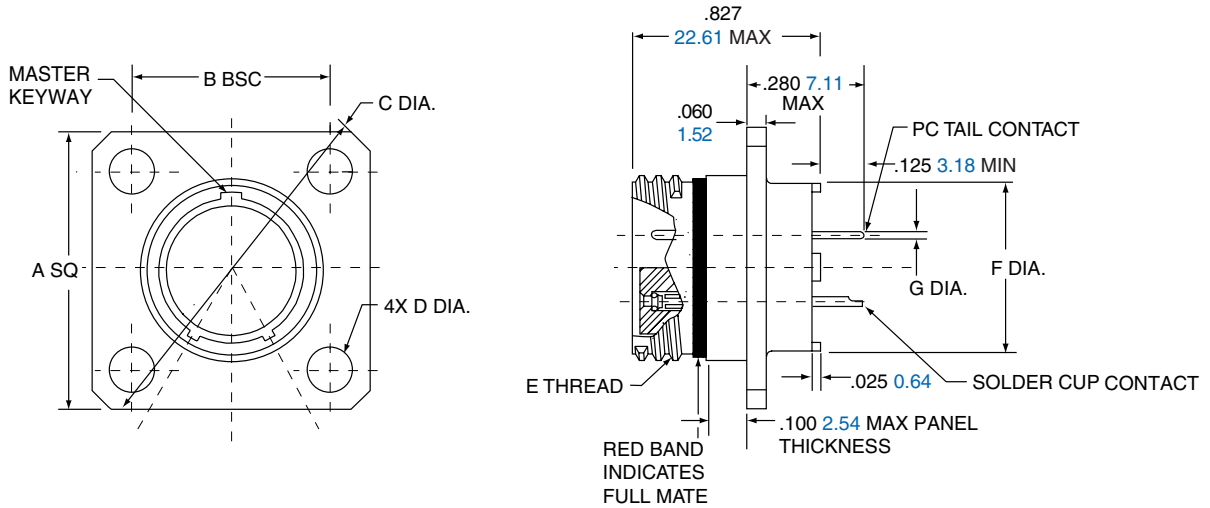


Note: Please contact the factory directly for a listing of tooled interfacial seals for the hermetically sealed connectors.

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus



2M805-006-02



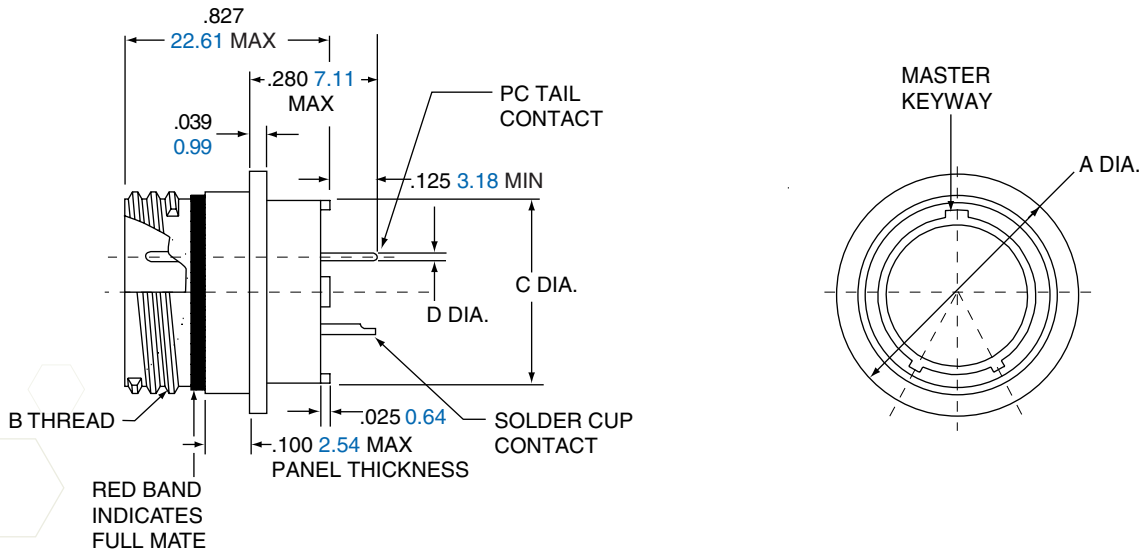
Shell Size	A Sq.		B BSC.		C Dia.		D Dia.		E Threads	F Dia.		G PC Tail Dia.
	in.	mm.	in.	mm.	in.	mm.	in. ±.003	mm. ±.08		in.	mm.	
8	.853	21.67	.660	16.76	1.153	29.29	.091	2.31	.5000-.1P-.3L-TS-2A	.330	8.38	#23 .018/.022 0.46/0.56
9	.916	23.27	.723	18.36	1.233	31.32	.091	2.31	.5625-.1P-.3L-TS-2A	.432	10.97	#20/20HD .025/.027 0.64/0.69
10	.978	24.84	.785	19.94	1.333	33.86	.091	2.31	.6250-.1P-.3L-TS-2A	.493	12.52	#16 .060/.064 1.521/1.63
11	1.042	26.47	.848	21.54	1.413	35.89	.091	2.31	.6875-.1P-.3L-TS-2A	.551	14.00	#12 .092/.096 2.34/2.44
12	1.102	27.99	.909	23.09	1.503	38.18	.091	2.31	.7500-.1P-.3L-TS-2A	.622	15.80	
15	1.291	32.79	1.058	26.87	1.753	44.53	.125	3.18	.9375-.1P-.3L-TS-2A	.703	17.86	
18	1.478	37.54	1.255	31.88	2.003	50.88	.125	3.18	1.1250-.1P-.3L-TS-2A	.863	21.92	
19	1.540	39.12	1.327	33.71	2.097	53.26	.125	3.18	1.1875-.1P-.3L-TS-2A	.912	23.16	
23	1.790	45.47	1.570	39.88	2.443	62.05	.125	3.18	1.4375-.1P-.3L-TS-2A	1.163	29.54	

2M805 Tri-Start Solder Mount Hermetic



2M805-006-03

2M805-006-03



Shell Size	A Dia.		B Threads	C Dia.		D PC Tail Dia.
	in.	mm.		in.	mm.	
8	.625	15.88	.5000-.1P-.3L-TS-2A	.330	8.38	#23 .018/.022 0.46/0.56
9	.688	17.48	.5625-.1P-.3L-TS-2A	.432	10.97	#20/20HD .025/.027 0.64/0.69
10	.750	19.75	.6250-.1P-.3L-TS-2A	.493	12.52	#16 .060/.064 1.521/1.63
11	.812	20.62	.6875-.1P-.3L-TS-2A	.551	14.00	#12 .092/.096 2.34/2.44
12	.875	22.23	.7500-.1P-.3L-TS-2A	.620	15.78	
15	1.062	26.97	.9375-.1P-.3L-TS-2A	.703	17.86	
18	1.250	31.75	1.1250-.1P-.3L-TS-2A	.863	21.92	
19	1.312	33.32	1.1875-.1P-.3L-TS-2A	.912	23.16	
23	1.563	39.70	1.4375-.1P-.3L-TS-2A	1.162	29.51	

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

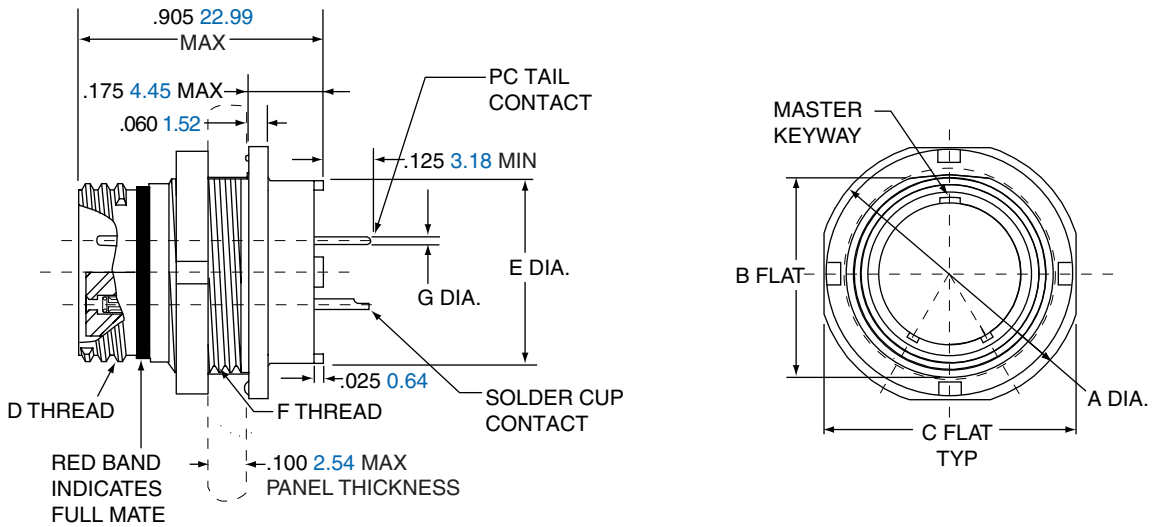
Micro-D

Terrapin

Nexus

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

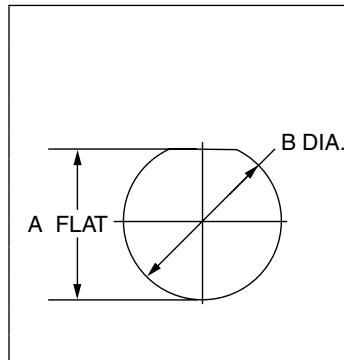
2M805-006-07



Shell Size	A Dia.		B Flat		C Flat		D Threads	E Dia.		F Threads	G PC Tail Dia.
	in.	mm.	in.	mm.	in.	mm.		in.	mm.		
8	.760	19.30	.535	13.59	.730	18.54	.5000-.1P-.3L-TS-2A	.330	8.38	.5625-28 UN-2A	#23
9	.880	22.35	.661	16.79	.850	21.59	.5625-.1P-.3L-TS-2A	.432	10.97	.6875-28 UN-2A	.018/.022 0.46/0.56
10	.880	22.35	.661	16.79	.850	21.59	.6250-.1P-.3L-TS-2A	.493	12.52	.6875-28 UN-2A	#20/20HD
11	.955	24.26	.721	18.31	.925	23.50	.6875-.1P-.3L-TS-2A	.551	14.00	.7500-28 UN-2A	.025/.027 0.64/0.69
12	1.060	26.92	.784	19.91	1.035	26.29	.7500-.1P-.3L-TS-2A	.620	15.78	.8125-28 UN-2A	#16
15	1.203	30.56	.970	24.64	1.173	29.79	.9375-.1P-.3L-TS-2A	.703	17.86	1.0000-28 UN-2A	.060/.064 1.521/1.63
18	1.389	35.28	1.147	29.13	1.359	34.52	1.1250-.1P-.3L-TS-2A	.863	21.92	1.1875-28 UN-2A	#12
19	1.450	36.83	1.221	31.01	1.420	36.07	1.1875-.1P-.3L-TS-2A	.912	23.16	1.2500-28 UN-2A	.092/.096 2.34/2.44
23	1.705	43.31	1.470	37.34	1.675	42.55	1.4375-.1P-.3L-TS-2A	1.162	29.51	1.5000-28 UN-2A	

PANEL CUTOUT FOR JAM NUT

Shell Size	A Flat		B Dia	
	in. ±.002	mm. ± 0.05	in. ±.005	mm. ± 0.13
8	.543	13.79	.572	14.53
9	.669	16.99	.698	17.73
10	.669	16.99	.698	17.73
11	.729	18.51	.760	19.30
12	.792	20.17	.822	20.88
15	.978	24.84	1.010	25.65
18	1.155	29.34	1.198	30.43
19	1.231	31.27	1.260	32.00
23	1.480	37.59	1.510	38.35



2M805 Tri-Start Right Angle PCB Receptacle



Ordering Guide for Right Angle PCB Receptacle 2M805-011

2M805 Series Right Angle PCB Receptacle:

2M805 Right Angle PCB Receptacles are ideal for applications where space and weight are at a premium. This receptacle design can withstand high temperature environments while maintaining an environmental seal.

2M805 FEATURES INCLUDE:

- Tri-Start thread for 1 turn full mating
- Right Angle Contacts
- High Temperature Housing
- Threaded Inserts
- Environmentally Sealed



Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Alternate Position
2M805-011	-07	Z1	8-7	P	A

SERIES	
2M805-011	PCB Receptacle for Right Angle PC Board

SHELL STYLE	
-07	Jam Nut

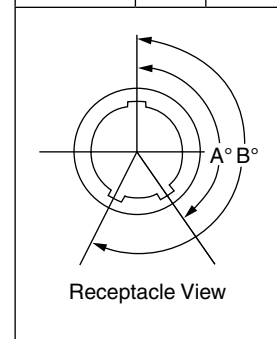
SERVICE CLASS		
		Finish
C		Aluminum/Black Anodize (Non-Conductive)
M		Aluminum/Electroless Nickel
NF		Aluminum/Cadmium with Olive Drab Chromate
MT		Aluminum/Nickel-PTFE (Durmalon)
Z1		Stainless Steel/Passivated
ZM		Stainless Steel/Electroless Nickel
ZN		Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU		Aluminum/Zinc-Nickel with Black Chromate

SHELL SIZE - INSERT ARRANGEMENTS	
Arrangement	No. of Contacts
8-4	4
8-7	7
9-10	10
10-2	2
10-13	13
11-19	19

Note: Consult factory for all available arrangements.

CONTACTS	
P	Pin
S	Socket

Key Position	Key Rotation	
	A	B
(Normal) A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°



Protection Caps:

2M805 Tri-Start Protection Caps are available in plug and receptacle versions. Protective caps keep the connector interface dry and clean while not in use. Caps come in a variety of materials, lanyard styles and lengths to accommodate specific design requirements.



Series	Service Class	Attachment Type	Shell Size	Attachment Code	Attachment Length in Inches
2M667-26X	-NF	-H	9	04	-5

SERIES	
2M667-261	Protection Caps for 2M805 Plugs
2M667-262	Protection Caps for 2M805 Receptacles

ATTACHMENT TYPE		SHELL SIZE
-G	Nylon Rope	8
-H	Stainless Steel Wire Rope, Teflon® Jacket	9
-N	No Attachment	10
-S	Stainless Steel Sash Chain	11
-SK	Nylon Rope With Slip Knot	12
-T	Stainless Steel Wire Rope, No Jacket	15
-U	Stainless Steel Wire Rope, Polyurethane Jacket	18
		19
		23

Omit for attachment Type N (No Attachment)
Example "-5" equals five inch length

ATTACHMENT CODE		
Omit for attachment Types N (No Attachment) and Slip Knot		
Small Ring	01 -.126 (3.20) I.D.	
	02 -.145 (3.68) I.D.	
	04 -.188 (4.78) I.D.	
	06 -.197 (5.00) I.D.	
	14 -.385 (9.78) I.D.	
	16 -.570 (14.48) I.D.	
Large Ring	17 -.635 (16.13) I.D.	
	18 -.695 (17.65) I.D.	
	19 -.885 (22.48) I.D.	
	20 -1.070 (27.17) I.D.	
	22 -1.210 (30.73) I.D.	
	23 -1.275 (32.39) I.D.	
	25 -1.530 (38.86) I.D.	
	Split Ring	50 -.420 (10.67) I.D.
		52 -.480 (12.19) I.D.
		54 -.635 (16.13) I.D.
56 -.745 (18.92) I.D.		
58 -.885 (22.48) I.D.		
60 -1.010 (25.65) I.D.		
64 -1.125 (28.58) I.D.		
68 -1.345 (34.16) I.D.		

SERVICE CLASS	
Finish	
-C	Aluminum/Black Anodize (Non-Conductive)
-M	Aluminum/Electroless Nickel
-NF	Aluminum/Cadmium with Olive Drab Chromate
-MT	Aluminum/Nickel-PTFE (Duralon)
-Z1	Stainless Steel/Passivated
-ZM	Stainless Steel/Electroless Nickel
-ZN	Aluminum/Zinc-Nickel w/Olive Drab Chromate
-ZNU	Aluminum/Zinc-Nickel with Black Chromate

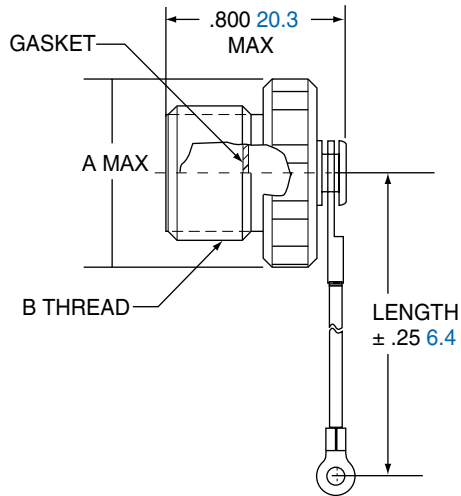


2M805 Tri-Start Protection Cap

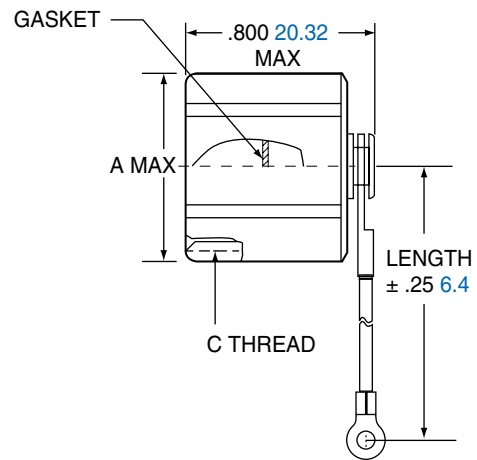


Metal Protective Caps 2M667-261 and 2M667-262

2M667-261



2M667-262

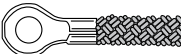

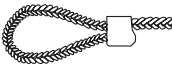


Shell Size	A Max.		B Thread	C Thread
	in.	mm.		
8	.656	16.66	.5000-.1P-.3L-TS-2A	.5000-.1P-.3L-TS-2B
9	.718	18.24	.5625-.1P-.3L-TS-2A	.5625-.1P-.3L-TS-2B
10	.781	19.84	.6250-.1P-.3L-TS-2A	.6250-.1P-.3L-TS-2B
11	.844	21.44	.6875-.1P-.3L-TS-2A	.6875-.1P-.3L-TS-2B
12	.906	23.01	.7500-.1P-.3L-TS-2A	.7500-.1P-.3L-TS-2B
15	1.094	27.79	.9375-.1P-.3L-TS-2A	.9375-.1P-.3L-TS-2B
18	1.281	32.54	1.1250-.1P-.3L-TS-2A	1.1250-.1P-.3L-TS-2B
19	1.343	34.11	1.1875-.1P-.3L-TS-2A	1.1875-.1P-.3L-TS-2B
23	1.603	40.72	1.4375-.1P-.3L-TS-2A	1.4375-.1P-.3L-TS-2B

MATERIALS AND FINISHES

Cover	Aluminum alloy or stainless steel
Gasket	Fluorosilicone rubber
Wire, Hardware	Stainless steel, passivated

LANYARD OPTIONS

	Nylon Rope	-55° to +100°C., black, flexible, good abrasion resistance, good resistance to fuels, .120" 3mm diameter
	Sash Chain	Stainless steel
	Slip Knot (SK) for attaching Covers to Cables	55° to +100°C., black, flexible, good abrasion resistance, good resistance to fuels, .120" 3mm diameter. Length includes .5" 13mm diameter loop.

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-ID

Terrapin

Nexus



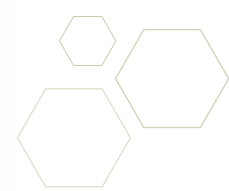
2M Micro-Miniature Double Flange Standoff

Double Flange: Amphenol offers customized 2M receptacles with double flange standoffs. This enhancement allows the user to mount to PC board applications. Shells are available in aluminum and stainless steel. Consult Amphenol Aerospace for ordering information.



2M Micro-Miniature PCB Header Assemblies

2M PCB Header Assemblies: Header assemblies can be utilized in all 2M series. They can be attached to connectors with standard flange placement or directly to the circuit board. Utilizing a header assembly in your application allows for easy separation of the connector from the board. Pin or Socket arrangements are available. Consult Amphenol Aerospace for ordering information.



2M Micro-Miniature High Speed

Amphenol's 2M line is available in high speed variations when your application requires superior electrical performance and shielding. A variety of contacts can provide high speed transmission and operate in high frequency conditions. For a complete list of size 12 and 16 coax/twinax contacts refer to the high speed section of catalog 12-C Combined Circular Catalog.



Advantages

For 2M Filtered High Density Connectors, Look to the leader...

Amphenol® EMI Protection Connectors have been designed and manufactured for over 45 years. Our EMI protection connectors offer the versatility of our standard 2M connectors with EMI protection to suit the demands of your application.

ADVANTAGES OF FILTER CONNECTORS

- Reduction in overall weight and space with the elimination of external filtering
- Reduction in solder joints
- Fewer components equals a cost effective solution with increased reliability
- Eliminates radiated and conducted EMI from entering the box
- Perfect for retrofits or late design-in
- Can utilize standard connector packaging

QUALITY

All filter connectors undergo extensive mechanical and electrical testing to ensure consistent, quality hardware.

STANDARD ELECTRICAL TESTS

- 100% Insulation Resistance testing
- 100% Dielectric Withstanding Voltage testing
- 100% Capacitance testing at 1KHz

SPECIAL TESTS/PROCESSES AVAILABLE

- Attenuation testing (through 100 MHz)
- Leakage inspection
- Thermal cycling/shock
- Burn-in
- De-gassing

Amphenol will work to provide the best solution in standard 2M packaging for the most cost effective solutions available

RESOURCES

Amphenol Aerospace Factory Direct: 607.563.5011
Filter Technical Support: FilterApps@Amphenol-aa0.com

Contacts
& Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter &
Accessories

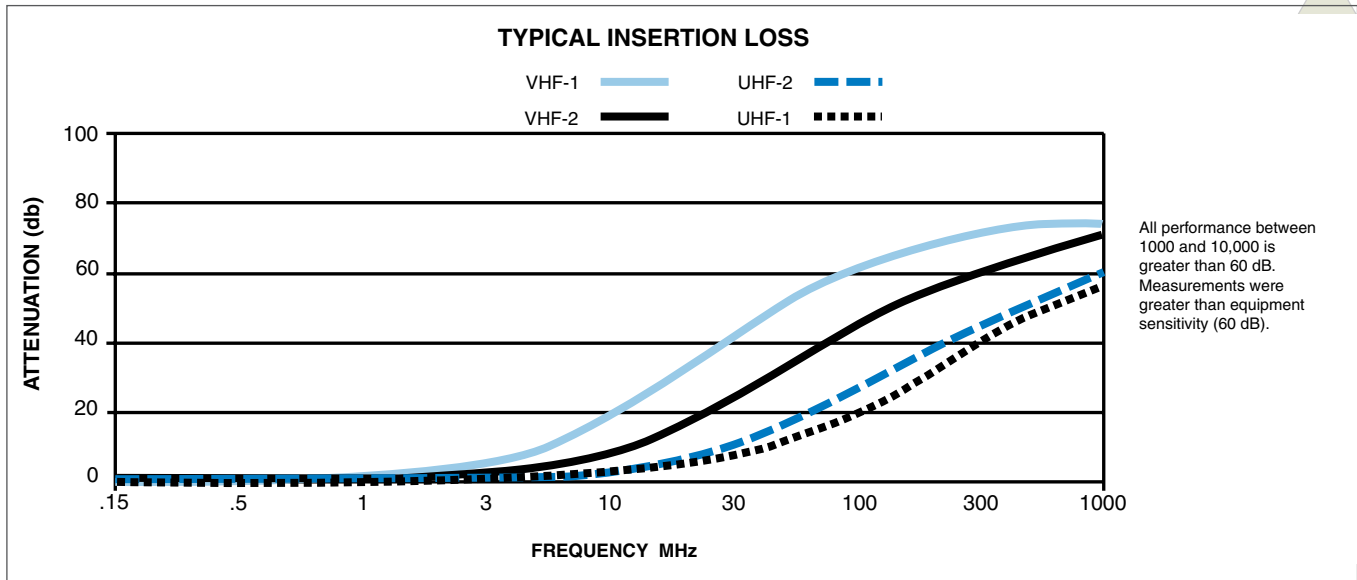
HD38999

Micro-D

Terrapin

Nexus

Note: Below are typical capacitance values. Other capacitance values are available. Please consult Amphenol Aerospace for availability.



**TYPICAL INSERTION LOSS (dB)
PER MIL-STD-220, 5 ADC, 25°C**

Capacitance	1MHz	3MHz	10MHz	30MHz	100MHz	300MHz	1000MHz
375 pf UHF ₁	0	0	1	8	16	-	-
750 pf UHF ₂	0	0	3	10	19	-	-
2500 pf VHF ₂	0	2	8	20	28	-	-
7000 pf VHF ₁	5	9	17	23	40	-	-

Most filter attenuation curves and capacitance values are expressed at 25°C. However, temperature can affect the capacitance of a barium titanate filter element, affecting the insertion loss that the element will cause. In order to assist the user in anticipating the effect of various temperatures, the following charts applicable to Amphenol filter connectors utilizing VHF-1, VHF-2, UHF-1 and UHF-2 filters are provided. Please note that all insertion loss (attenuation) values given were measured with no load applied. The band designations refer to MIL-STD-2120.

VHF-1

Typical Capacitance = 7,000 pf Min. 4,900 pf Max. 12,000 pf
Band G, Type Pi

Temp.	F _{co}	1MHz	3MHz	10MHz	30MHz	100MHz	300MHz	1000MHz
-55°C	-	1	2	8	21	44	61	65
Room	1.27M	1	6	18	42	62	72	75
+125°C	-	0	2	9	24	45	62	64

Note: F_{co} = Cut-off Frequency

VHF-2

Typical Capacitance = 2,500 pf Min. 1,900 pf Max. 4,000 pf
Band E, Type Pi

Temp.	F _{co}	1MHz	3MHz	10MHz	30MHz	100MHz	300MHz	1000MHz
-55°C	-	0	2	7	17	40	58	71
Room	3.3M	0	2	8	24	46	61	71
+125°C	-	0	3	10	26	46	63	69

UHF-1

Typical Capacitance = 375 pf Min. 290 pf Max. 450 pf
Band B, Type Pi

Temp.	F _{co}	1MHz	3MHz	10MHz	30MHz	100MHz	300MHz	1000MHz
-55°C	-	0	0	1	6	21	43	58
Room	21.9M	0	0	1	8	18	42	56
+125°C	-	0	0	1	8	17	38	50

UHF-2

Typical Capacitance = 750 pf Min. 500 pf Max. 1,100 pf
Band C, Type Pi

Temp.	F _{co}	1MHz	3MHz	10MHz	30MHz	100MHz	300MHz	1000MHz
-55°C	-	0	0	3	9	25	46	61
Room	12.7M	0	0	3	10	28	46	61
+125°C	-	0	0	3	10	24	42	60

Please consult the Amphenol Circular Interconnects catalog 12-C Edition 4 for full Amphenol EMI/EMP Filter Protection information.

Inserts Arrangements

SERIES 2M INSERT ARRANGEMENTS

Contact Size	Contact Quantity					Insert Arrangement			
	#23	#20	#20HD	#16	#12	2M801	2M803	2M804	2M805
Size #23 Contacts 5 Amp Max. Current #23-#28 AWG	3					5-3	5-3	5-3	NA
	4					6-4	6-4	6-4	8-4
	6					6-6	6-6	6-6	8-6
	7					6-7	6-7	6-7	8-7
	10					7-10	7-10	7-10	9-10
	13					8-13	8-13	8-13	10-13
	19					9-19	9-19	9-19	11-19
	26					10-26	10-26	10-26	12-26
	37					13-37	12-37	12-37	15-37
	55					16-55	14-55	14-55	18-55
	85					17-85	NA	15-85	19-85
130					21-130	NA	NA	23-130	
Size #20HD Contacts 7.5 Amp Max. Current #20-#24 AWG.			3			6-23	6-23	6-23	8-23
			5			7-25	7-25	7-25	9-25
			8			8-28	8-28	8-28	10-28
			10			9-210	9-210	9-210	11-210
			20			13-220	12-220	12-220	15-220
			35			16-235	14-235	14-235	18-235
			41			17-241	NA	NA	19-241
			69			21-269	NA	NA	23-269
Size #16 Contacts 13 Amp Max. Current #16-#20 AWG				1		6-1	6-1	6-1	8-1
				2		8-2	8-2	8-2	10-2
				4		9-4	9-4	9-4	11-4
				5		10-5	10-5	10-5	12-5
				7		13-7	12-7	12-7	15-7
				12		16-12	14-12	14-12	18-12
				14		17-14	NA	NA	19-14
				22		21-22	NA	NA	23-22
Size #12 Contacts 23 Amp Max. Current #12-14 AWG					1	7-1	7-1	7-1	9-1
					2	10-2	10-2	10-2	12-2
					2	13-2	12-2	12-2	15-2
					3	13-3	12-3	12-3	15-3
					5	16-5	14-5	14-5	18-5
					7	17-7	NA	NA	19-7
					12	21-12	NA	NA	23-12
Insert Arrangements with Mixed Size (Combo) Layouts	4	2				8-200	8-200	8-200	10-200
	8	2				9-201	9-201	9-201	11-201
	4		2			9-200	9-200	9-200	11-200
	8		2			10-202	10-202	10-202	12-202
	4			2		10-201	10-201	10-201	12-201
	6			2		13-200	12-200	12-200	15-200
	10			2		13-201	12-201	12-201	15-201
	12			1		10-200	10-200	10-200	12-200

Contacts
& Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter &
Accessories

HD38999

Micro-D

Terrapin

Nexus

2M801 Series EMI/EMP Filtered Connectors

2M801 Filtered Connectors feature double-start ACME coupling threads. Available in Jam Nut and Square Flange versions, these environmentally sealed connectors offer aerospace filter performance in a small package. These connectors mate to standard 2M801 Series plugs. Please consult Amphenol Aerospace for additional Filter Types, TVS Diodes, and other Custom Filter Connector Configurations.

2M801 FEATURES INCLUDE:

- Environmentally Sealed
- Jam Nut and Square Flange versions
- Non-removable PC and/or Solder cup contacts

Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Filter Type	Capacitance Code (See table below)	Alternate Position
2MF-801	-02	NF	6-7	P	C	A	A

SERIES	
2MF-801	Filter Receptacle with Printed Circuit Board Contacts or Solder Cup Contacts

CONTACTS	
P	Pin - Solder Cup
C	Pin - PC Tail

FILTER TYPE	
P	Pi
C	C

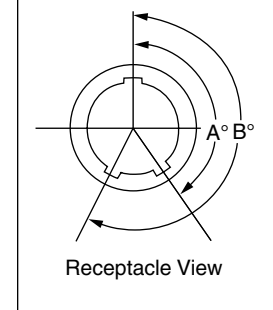
SHELL SIZE - INSERT ARRANGEMENTS
See Insert Arrangements on Pages 13-15

SHELL STYLE	
-01	Square Flange Receptacle with Solder Cup Contacts & Band Platform
-02	Square Flange Receptacle with Printed Circuit Board Contacts
-07	Jam Nut Receptacle with Solder Cup Contacts & Band Platform
-08	Jam Nut Receptacle with Printed Circuit Board Contacts

SERVICE CLASS		
		Finish
M		Aluminum/Electroless Nickel
NF		Aluminum/Cadmium with Olive Drab Chromate
MT		Aluminum/Nickel-PTFE (Durmalon)
ZM		Stainless Steel/Electroless Nickel
ZN		Aluminum/Zinc-Nickel w/ Olive Drab Chromate

KEYING		
Key Position	Key Rotation	
	A	B
(Normal) A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°
E	75°	275°
F	95°	210°

CAPACITANCE CODE		
Code	PI - SECTION (pF)	C - SECTION (pF)
A	38,000 - 56,000	19,000 - 28,000
B	32,000 - 45,000	16,000 - 22,500
C	18,000 - 33,000	9,000 - 16,500
D	8,000 - 12,000	4,000 - 6,000
E	3,300 - 5,000	1,650 - 2,500
F	800 - 1,300	400 - 650
G	400 - 600	200 - 300



Filtered Square Flange Receptacle 2MF-801-01 & 2MF-801-02

2MF-801-01

2MF-801-02

Shell Size	A Sq.		B BSC		C Dia.		D Dia.		E Threads	F Dia.		G Dia.
	in.	mm.	in.	mm.	in.	mm.	in. ±.003	mm. ±.08		in.	mm.	
5	.530	13.46	.363	9.22	.680	17.27	.093	2.36	.3125-.05P-.1L-2A	.245	6.22	#23 .018/.022 0.46/0.56
6	.590	14.99	.423	10.74	.750	19.05	.093	2.36	.375-.05P-.1L-2A	.290	7.37	
7	.650	16.51	.483	12.27	.850	21.59	.093	2.36	.4375-.05P-.1L-2A	.390	9.91	
8	.712	18.08	.545	13.84	.938	23.83	.093	2.36	.5000-.05P-.1L-2A	.445	11.30	#20/20HD .025/.027 0.64/0.69
9	.850	21.59	.607	15.42	1.125	28.58	.128	3.25	.5625-.05P-.1L-2A	.500	12.70	
10	.890	22.61	.670	17.02	1.188	30.18	.128	3.25	.6250-.05P-.1L-2A	.560	14.22	
13	1.030	26.16	.812	20.62	1.375	34.93	.128	3.25	.8125-.1P.2L-2A	.650	16.51	#16 .060/.064 1.52/1.63
16	1.219	30.96	.981	24.92	1.625	41.28	.128	3.25	1.000-.1P-.2L-2A	.805	20.45	
17	1.280	32.51	1.060	26.92	1.700	43.18	.128	3.25	1.062-.1P-.2L-2A	.850	21.59	#12 .092/.096 2.34/2.44
21	1.430	36.32	1.205	30.61	1.938	49.23	.128	3.25	1.3125-.1P-.2L-2A	1.110	28.19	

PANEL CUTOUT

Shell Size	A Flat		B Dia		C Dia.	
	in.	mm.	in.	mm.	in.	mm.
5	.330	8.38	.363	9.22	.093	2.36
6	.390	9.91	.423	10.74	.093	2.36
7	.450	11.43	.483	12.27	.093	2.36
8	.510	12.95	.545	13.84	.093	2.36
9	.575	14.61	.607	15.42	.128	3.25
10	.640	16.26	.670	17.02	.128	3.25
13	.825	20.96	.812	20.65	.128	3.25
16	1.015	25.78	.981	24.92	.128	3.25
17	1.075	27.31	1.060	26.92	.128	3.25
21	1.325	33.66	1.205	30.61	.128	3.25

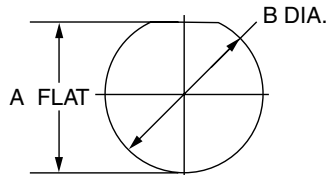
2MF-801-07

2MF-801-08

Shell Size	A Dia.		B Flat		C Flat		D Thread	E Thread UN-2A	F Dia.		G Dia.
	in.	mm.	in.	mm.	in.	mm.			in.	mm.	
5	.575	14.61	.350	8.89	.545	13.84	.3125-.05P-.1L-2A	.375-28	.245	6.22	#23 .018/.022 0.46/0.56
6	.635	16.13	.410	10.41	.595	15.11	.375-.05P-.1L-2A	.4375-28	.290	7.37	#20/20HD .025/.027 0.64/0.69
7	.755	19.18	.536	13.61	.723	18.36	.4375-.05P-.1L-2A	.5625-32	.390	9.91	#16 .060/.064 1.52/1.63
8	.755	19.77	.536	13.61	.723	18.36	.5000-.05P-.1L-2A	.5625-32	.445	11.30	#12 .092/.096 2.34/2.44
9	.830	21.08	.596	15.14	.790	20.07	.5625-.05P-.1L-2A	.625-28	.500	12.70	
10	.890	22.61	.658	16.71	.855	21.72	.6250-.05P-.1L-2A	.6875-28	.560	14.22	
13	1.078	27.38	.845	21.46	1.044	26.52	.8125-.1P-.2L-2A	.875-28	.650	16.51	
16	1.264	32.11	1.022	25.96	1.230	31.24	1.000-.1P-.2L-2A	1.0625-20	.805	20.45	
17	1.325	33.66	1.096	27.84	1.290	32.77	1.062-.1P-.2L-2A	1.125-28	.850	21.59	
21	1.625	41.28	1.345	34.16	1.577	40.06	1.3125-.1P-.2L-2A	1.375-28	1.110	28.19	

PANEL CUTOUT

Shell Size	A Flat		B Dia	
	in. ±.002	mm. ±0.05	in. ±.002	mm. ± 0.05
5	.356	9.04	.385	9.78
6	.416	10.57	.447	11.35
7	.542	13.77	.572	14.53
8	.542	13.77	.572	14.53
9	.602	15.29	.635	16.13
10	.666	16.92	.697	17.70
13	.851	21.62	.885	22.48
16	1.028	26.11	1.075	27.31
17	1.102	27.99	1.135	28.83
21	1.354	34.39	1.385	35.18



2M804 Series EMI/EMP Filtered Connectors

2M801 Filtered Connectors feature push-pull coupling. These environmentally sealed connectors offer aerospace filter performance in a small package. A gold-plated spring provides excellent shell-to-shell conductivity. Please consult Amphenol Aerospace for additional Filter Types, TVS Diodes, and other Custom Filter Connector Configurations.

2M804 FEATURES INCLUDE:

- Environmentally Sealed
- Push-pull coupling
- RoHS Compliant Platings Available

Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Filter Type	Capacitance Code (See table below)	Alternate Position	Omit for Single Keyway
2MF-804	-07	NF	6-7	P	C	A	A	

SERIES	
2MF-804	Filter Receptacle with Printed Circuit Board Contacts or Solder Cup Contacts

SHELL STYLE	
-07	Jam Nut Receptacle, Rear Mount
-08	Jam Nut Receptacle, Front Mount

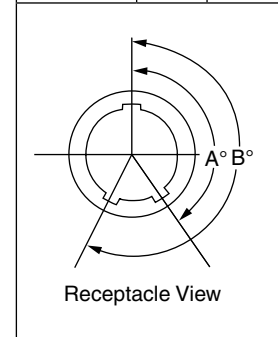
CONTACTS	
P	Pin - Solder Cup
C	Pin - PC Tail

FILTER TYPE	
P	Pi
C	C

SHELL SIZE - INSERT ARRANGEMENTS
See Insert Arrangements on Pages 13-15

SERVICE CLASS		
		Finish
M		Aluminum/Electroless Nickel
NF		Aluminum/Cadmium with Olive Drab Chromate
MT		Aluminum/Nickel-PTFE (Durmalon)
ZM		Stainless Steel/Electroless Nickel
ZN		Aluminum/Zinc-Nickel w/ Olive Drab Chromate

KEYING		
Key Position	Key Rotation	
	A	B
(Normal) A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°



CAPACITANCE CODE		
Code	PI - SECTION (pF)	C - SECTION (pF)
A	38,000 - 56,000	19,000 - 28,000
B	32,000 - 45,000	16,000 - 22,500
C	18,000 - 33,000	9,000 - 16,500
D	8,000 - 12,000	4,000 - 6,000
E	3,300 - 5,000	1,650 - 2,500
F	800 - 1,300	400 - 650
G	400 - 600	200 - 300

2MF-804-07

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus

Shell Size	A Dia.		B Dia.		C Flat		D Threads	E Dia.		F Dia.		G Dia.
	in.	mm.	in.	mm.	in.	mm.		in.	mm.	in.	mm.	
5	.730	18.54	.562	14.27	.415	10.54	.4375-32 UN-2A	.244	6.20	.435	11.05	#23 .018/.022 0.46/0.56
6	.730	18.54	.625	15.87	.467	14.40	.5000-32 UN-2A	.330	8.38	.483	12.27	#20/20HD .025/.027 0.64/0.69
7	.910	23.11	.750	19.05	.594	15.09	.6250-28 UN-2A	.432	10.97	.570	14.48	#16 .060/.064 1.52/1.63
8	.955	24.26	.750	19.05	.594	15.09	.6250-28 UN-2A	.493	12.52	.593	15.06	#12 .092/.096 2.34/2.44
9	1.000	25.40	.812	20.62	.655	16.64	.6875-28 UN-2A	.551	14.00	.685	17.40	
10	1.085	27.48	.875	22.22	.721	18.31	.7500-28 UN-2A	.620	15.75	.725	18.42	
12	1.190	30.23	1.000	25.40	.843	21.41	.8750-28 UN-2A	.703	17.86	.850	21.59	
14	1.325	33.66	1.125	28.57	.968	24.59	1.0000-28 UN-2A	.863	21.92	.973	24.71	
15	1.375	34.93	1.188	30.17	1.029	26.14	1.0625-20 UN-2A	.912	23.16	1.028	26.11	

PANEL CUTOUT

The diagram shows a circular panel cutout with a horizontal diameter labeled 'A FLAT' and a diagonal diameter labeled 'B DIA.'.

Shell Size	A Flat		B Dia	
	in. ±.002	mm. ±0.05	in. ±.005	mm. ± 0.13
5	.423	10.74	.448	11.38
6	.475	12.07	.510	12.95
7	.588	14.94	.635	16.13
8	.602	15.29	.635	16.13
9	.663	16.84	.698	17.73
10	.729	18.82	.760	19.30
12	.851	21.62	.885	22.48
14	.976	24.79	1.010	25.65
15	1.039	26.39	1.070	27.18

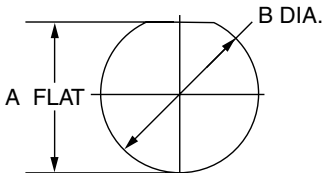
Filtered Front Mount Jam Nut Receptacle 2MF-804-08

2MF-804-08

Shell Size	A Dia.		B Threads	C Dia.		D Dia.		E Flat		F Dia.
	in.	mm.		in.	mm.	in.	mm.	in.	mm.	
5	.830	21.08	.5000-32 UN-2A	.244	6.20	.625	15.87	.470	11.94	#23 .018/.022 0.46/0.56
6	.885	22.48	.5625-28 UN-2A	.330	8.38	.688	17.47	.530	13.46	#20/20HD .025/.027 0.64/0.69
7	.995	25.27	.6875-28 UN-2A	.432	10.97	.812	20.62	.663	16.84	#16 .060/.064 1.52/1.63
8	.995	25.27	.6875-28 UN-2A	.493	12.52	.812	20.62	.663	16.84	#12 .092/.096 2.34/2.44
9	1.075	27.31	.7500-28 UN-2A	.551	14.00	.875	22.22	.720	18.29	
10	1.140	28.95	.8125-28 UN-2A	.620	15.75	.938	23.82	.788	20.02	
12	1.340	34.04	1.0000-28 UN-2A	.703	17.86	1.125	28.57	.970	24.64	
14	1.390	35.31	1.0625-20 UN-2A	.863	21.92	1.188	30.18	1.020	25.91	
15	1.450	36.83	1.1250-28 UN-2A	.912	23.16	1.250	31.75	1.093	27.76	

PANEL CUTOUT

Shell Size	A Flat		B Dia	
	in. ±.002	mm. ±0.05	in. ±.005	mm. ± 0.13
5	.480	12.19	.510	12.95
6	.540	13.72	.575	14.61
7	.674	17.12	.698	17.73
8	.674	17.12	.698	17.73
9	.730	18.54	.760	19.30
10	.799	20.29	.822	20.88
12	.980	24.89	1.010	25.65
14	1.030	26.16	1.075	27.31
15	1.103	28.02	1.135	28.83



2M805 Series EMI/EMP Filtered Connectors

2M805 Filtered Connectors feature triple-start ACME coupling threads. Available in Jam Nut and Square Flange versions, these environmentally sealed connectors offer aerospace filter performance in a small package. These connectors mate to standard 2M805 Series plugs. Please consult Amphenol Aerospace for additional Filter Types, TVS Diodes, and other Custom Filter Connector Configurations.

2M805 FEATURES INCLUDE:

- Environmentally Sealed
- Jam Nut and Square Flange versions
- Non-removable PC and/or Solder cup contacts

Series	Shell Style	Service Class	Shell Size-Insert Arrg.	Contact Type	Filter Type	Capacitance Code (See table below)	Alternate Position
2MF-805	-02	NF	8-7	P	C	A	A

SERIES	
2MF-805	Filter Receptacle with Printed Circuit Board Contacts or Solder Cup Contacts

SHELL STYLE	
-01	Square Flange Receptacle with Solder Cup Contacts & Band Platform
-02	Square Flange Receptacle with Printed Circuit Board Contacts
-07	Jam Nut Receptacle with Solder Cup Contacts & Band Platform
-08	Jam Nut Receptacle with Printed Circuit Board Contacts

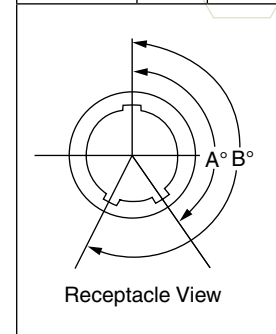
CONTACTS	
P	Pin - Solder Cup
C	Pin - PC Tail

FILTER TYPE	
P	Pi
C	C

SHELL SIZE - INSERT ARRANGEMENTS
See Insert Arrangements on Pages 13-15

SERVICE CLASS		
		Finish
M		Aluminum/Electroless Nickel
NF		Aluminum/Cadmium with Olive Drab Chromate
MT		Aluminum/Nickel-PTFE (Durmalon)
ZM		Stainless Steel/Electroless Nickel
ZN		Aluminum/Zinc-Nickel w/ Olive Drab Chromate

KEYING		
Key Position	Key Rotation	
	A	B
(Normal) A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°



CAPACITANCE CODE		
Code	PI - SECTION (pF)	C - SECTION (pF)
A	38,000 - 56,000	19,000 - 28,000
B	32,000 - 45,000	16,000 - 22,500
C	18,000 - 33,000	9,000 - 16,500
D	8,000 - 12,000	4,000 - 6,000
E	3,300 - 5,000	1,650 - 2,500
F	800 - 1,300	400 - 650
G	400 - 600	200 - 300

2MF-805-01

2MF-805-02

Shell Size	A		B		C Dia.		D Dia.		E Threads	F Dia.		G Dia.
	in.	mm.	in.	mm.	in.	mm.	in. ±.003	mm. ±.08		in.	mm.	
8	.850	21.59	.660	16.76	1.150	29.21	.094	2.39	.5000-.1P-.3L-TS-2A	.316	8.05	#23 .018/.022 0.46/0.56
9	.913	23.19	.723	18.36	1.230	31.24	.094	2.39	.5625-.1P-.3L-TS-2A	.397	10.08	#20/20HD .025/.027 0.64/0.69
10	.975	24.77	.785	19.94	1.330	33.78	.094	2.39	.6250-.1P-.3L-TS-2A	.472	12.01	#16 .060/.064 1.52/1.63
11	1.039	26.39	.848	21.54	1.410	35.81	.094	2.39	.6875-.1P-.3L-TS-2A	.519	13.18	#12 .092/.096 2.34/2.44
12	1.099	27.91	.909	23.09	1.500	38.10	.094	2.39	.7500-.1P-.3L-TS-2A	.585	14.86	
15	1.288	32.74	1.058	26.87	1.750	44.45	.128	3.25	.9375-.1P-.3L-TS-2A	.687	17.45	
18	1.475	37.47	1.255	31.88	2.000	50.80	.128	3.25	1.1250-.1P-.3L-TS-2A	.884	22.45	
19	1.537	71.06	1.327	33.71	2.094	53.19	.128	3.25	1.1875-.1P-.3L-TS-2A	.884	22.45	
23	1.787	45.39	1.570	39.88	2.440	61.98	.128	3.25	1.4375-.1P-.3L-TS-2A	1.134	28.80	

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-D

Terrapin

Nexus

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-D

Terrapin

Nexus

2MF-805-07

2MF-805-08

Shell Size	A Dia.		B		C		D Threads	E Dia.		F Threads	G Dia.
	in.	mm.	in.	mm.	in.	mm.		in.	mm.		
8	.760	19.30	.535	13.59	.730	18.54	.5000-1P.3L-TS-2A	.317	8.05	.5625-28 UNEF-2A	#23
9	.880	22.35	.661	16.79	.850	21.59	.5625-1P.3L-TS-2A	.397	10.08	.6875-28 UN-2A	.018/.022 0.46/0.56
10	.880	22.35	.661	16.79	.850	21.59	.6250-1P.3L-TS-2A	.473	12.01	.6875-28 UN-2A	#20/20HD
11	.955	24.26	.721	18.31	.925	23.50	.6875-1P.3L-TS-2A	.519	13.18	.7500-28 UN-2A	.025/.027 0.64/0.69
12	1.060	26.92	.784	19.91	1.035	26.29	.7500-1P.3L-TS-2A	.585	14.86	.8125-28 UN-2A	#16
15	1.203	30.56	.970	24.64	1.173	29.79	.9375-1P.3L-TS-2A	.687	17.45	1.0000-28 UN-2A	.060/.064 1.52/1.63
18	1.389	35.28	1.147	29.13	1.359	34.52	1.1250-1P.3L-TS-2A	.884	22.45	1.1875-28 UN-2A	#12
19	1.450	36.83	1.221	31.01	1.420	36.07	1.1875-1P.3L-TS-2A	.884	22.45	1.2500-28 UN-2A	.092/.096 2.34/2.44
23	1.705	43.31	1.470	37.34	1.675	42.55	1.4375-1P.3L-TS-2A	1.134	28.80	1.500-25 UN-2A	

PANEL CUTOUT

Shell Size	A Flat		B Dia	
	in. ±.002	mm. ±0.05	in. ±.002	mm. ± 0.05
8	.543	13.79	.572	14.53
9	.669	16.99	.698	17.73
10	.669	16.99	.698	17.73
11	.729	18.51	.760	19.30
12	.792	20.17	.822	20.88
15	.978	24.84	1.010	25.65
18	1.155	29.34	1.198	30.43
19	1.229	31.22	1.260	32.00
23	1.480	37.59	1.510	38.35

2M809S060, 2M809A060, Shrink Boots

The 2M Series of Shrink Boots is intended for use with the 2M series of connectors supplied with Integral Backshells. All shrink boots are supplied pre-coated with Hi-Temperature, Hot-Melt adhesive that will seal the boot to both the cable and connector. The boots also contains a lip that will lock on to a groove on the connector for improved strain relief.

High Performance Elastomer - Lipped Shrink Boot

- Pre-coated with Adhesive
- Operating Temperature: -70°C to +150°C
- Rated for 3000 hrs. continuous operation at +150°C
- Excellent resistance to fuels, oils, and solvents

Material	Spec
Fluid Resistant Polymer	VG 95343 Part 6

Boot Size	Shell Size		Straight Shrink Boots Part Number	Right Angle Boots Part Number
	Series 2M801, 2M803, 2M804	Series 2M805	Pre-Coated with Hi-Temp Hot-Melt Adhesive	Pre-Coated with Hi-Temp Hot-Melt Adhesive
1	5	N/A	2M809S060-1	2M809A060-1
2	6, 7	8,9	2M809S060-2	2M809A060-2
3	8, 9	10,11	2M809S060-3	2M809A060-3
4	10, 12, 13	12, 15	2M809S060-4	2M809A060-4
5	14, 15, 16, 17	18, 19	2M809S060-5	2M809A060-5
6	21	23	2M809S060-6	2M809A060-6

Zero Halogen - Lipped Shrink Boots

- Low Smoke, Zero Halogen
- Toxicity Requirements: Meets U.S. and EU standards
- Pre-coated with Adhesive
- Operating Temperature: -30°C to +125°C
- Good resistance to fuels, oils, and solvents

Material	Spec
Low Smoke Halogen Free	NAVSEA 5617649

Boot Size	Shell Size		Straight Shrink Boot Part Number	Right Angle Shrink Boots Part Number
	Series 2M801, 2M803, 2M804	Series 2M805	Pre-Coated with Hi-Temp Hot-Melt Adhesive	Pre-Coated with Hi-Temp Hot-Melt Adhesive
1	5	N/A	2M809S060-1H	2M809A060-1H
2	6, 7	8,9	2M809S060-2H	2M809A060-2H
3	8, 9	10,11	2M809S060-3H	2M809A060-3H
4	10, 12, 13	12, 15	2M809S060-4H	2M809A060-4H
5	14, 15, 16, 17	18, 19	2M809S060-5H	2M809A060-5H
6	21	23	2M809S060-6H	2M809A060-6H

Size 1 right angle supplied less lip see page 108

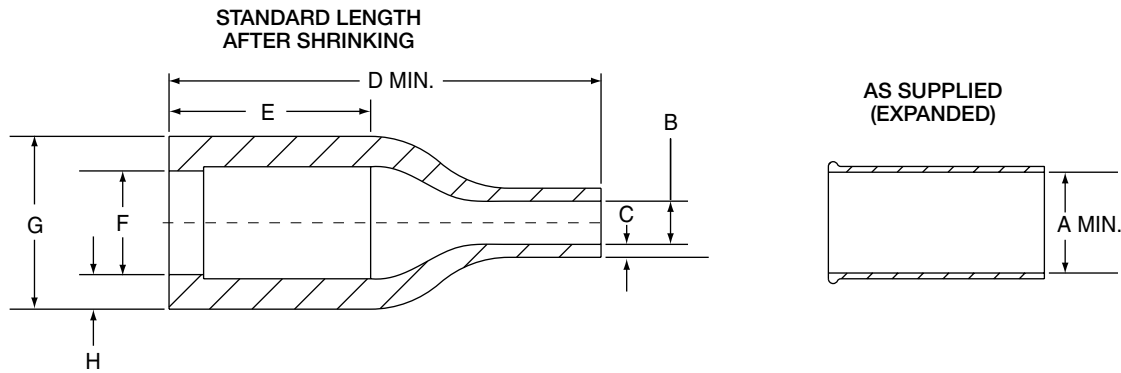
Series 2M Torque Values

SERIES 2M801, 2M803, 2M804, 2M805
RECOMMENDED TORQUE VALUES

Shell Size Series 2M801, 2M803, 2M804	Shell Size Series 2M805	Backshell Tightening			
		In-LBs.		N-m	
		Min.	Max.	Min.	Max.
5	-	13	17	1.5	1.9
6	8	18	22	2.0	2.5
7	9	30	40	3.4	4.5
8	10	30	40	3.4	4.5
9	11	35	45	4.0	5.1
10	12	35	45	4.0	5.1
12, 13	15	35	45	4.0	5.1
14, 16	18	35	45	4.0	5.1
15, 17	19	35	45	4.0	5.1
21	23	35	45	4.0	5.1

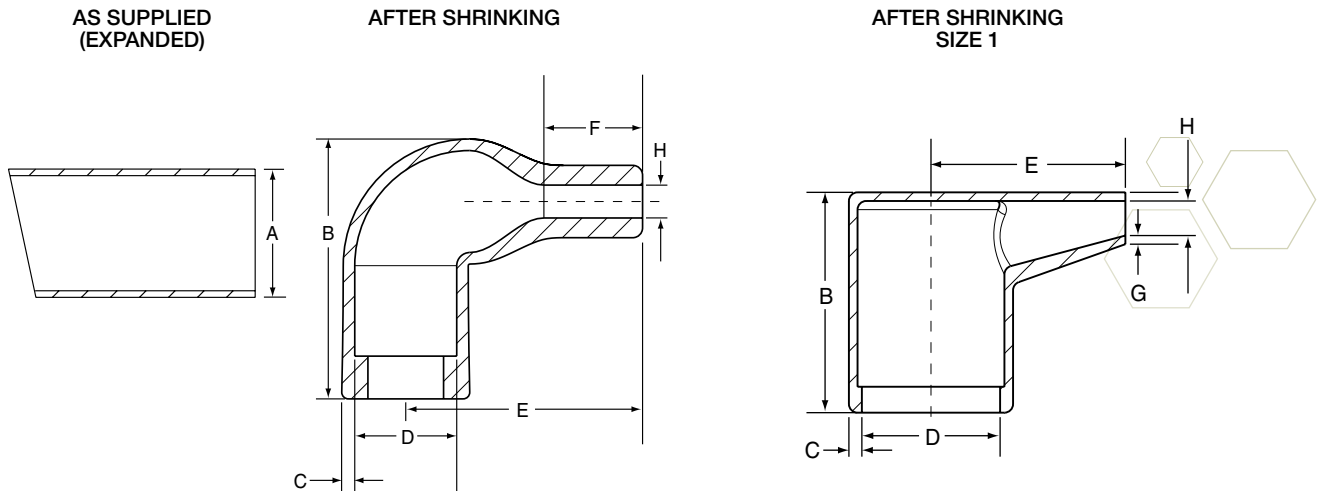


Lipped Straight Shrink Boots



Boot Size	A Min.		B Max.		C±20%		D±10%		E Ref.		F Max.		G Ref.		H±30%	
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
1	.350	9.0	.075	1.91	.023	.584	.750	19.0	.350	9.0	.182	4.62	.300	7.6	.060	1.52
2	.650	16.5	.150	3.8	.050	1.27	1.000	25.4	.560	14.2	.238	6.05	.410	10.5	.090	2.29
3	.920	23.4	.220	5.6	.060	1.52	1.500	38.1	0.830	21.1	.338	8.59	.530	13.46	.100	2.54
4	1.120	28.4	.260	6.6	.070	1.78	2.160	54.9	1.090	27.7	.488	12.40	.700	17.8	.110	2.79
5	1.220	31.0	.280	7.1	.080	2.03	2.640	67.0	1.380	35.0	.628	15.95	.860	21.8	.120	3.05
6	1.680	42.7	.390	9.9	.080	2.03	4.080	103.6	2.220	56.4	.984	25.00	1.270	32.2	.143	3.63

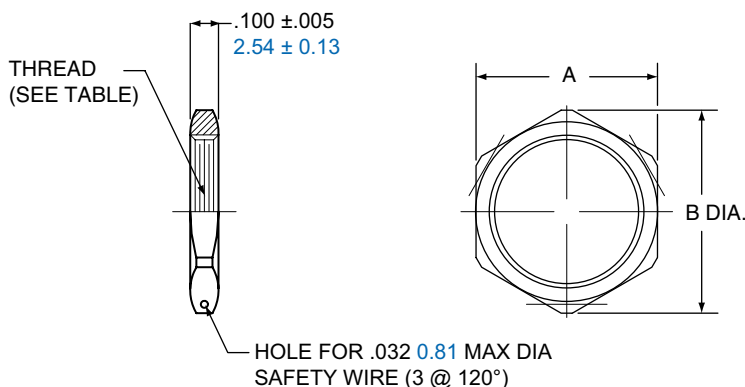
Lipped Right Angle Shrink Boots



Boot Size	A Min.		B Ref.		C±30%		D Max.		E±20%		F Ref.		G±20%		H Max	
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
1	.240	6.0	.510	13.0	.040	1.0	.322	8.18	.410	10.5	N/A	N/A	.020	0.5	.080	2.0
2	.650	16.5	.790	20.1	.040	1.0	.310	7.9	.720	18.3	.300	7.62	.060	1.6	.100	2.5
3	.920	23.3	.900	22.9	.050	1.3	.410	10.4	.800	20.3	.230	5.8	.050	1.3	.220	5.6
4	1.120	28.5	1.120	28.5	.060	1.5	.560	14.2	1.170	29.8	.280	7.1	.060	1.5	.250	6.3
5	1.220	30.9	1.200	30.5	.070	1.8	.700	17.8	1.400	35.6	.340	8.6	.070	1.8	.280	7.1
6	1.680	42.6	1.700	43.2	.080	2.0	1.100	27.9	2.100	53.3	.620	15.7	.080	2.0	.380	9.7

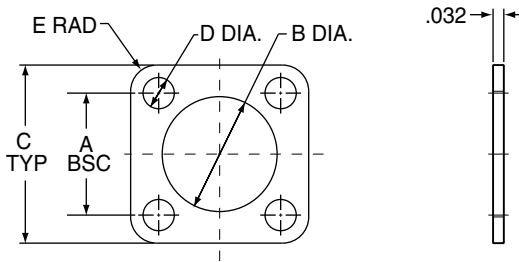
Hex Nuts 2M809-035

Hex Jam Nuts for 2M Receptacles



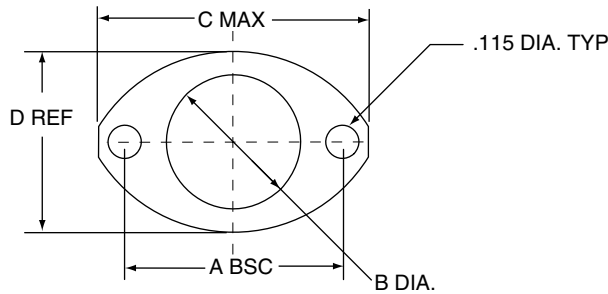
Thread Size Class 2B	Part Number						Dimensions			
	Aluminum				Stainless Steel		A Hex.		B Dia.	
	Electroless Nickel	Olive Drab Cadmium	Black Zinc Nickel	Nickel-PTFE	Passivated	Black Zinc- Cobalt	In.	mm.	In.	mm.
.2500-32 UNEF	2M809-035M01W	2M809-035NF01W	2M809-035ZNU01W	2M809-035MT01W	2M809-035Z101W	2M809-035ZC01W	.375	9.53	.403	10.24
.3125-28 UN	2M809-035M02W	2M809-035NF02W	2M809-035ZNU02W	2M809-035MT02W	2M809-035Z102W	2M809-035ZC02W	.4375	11.11	.475	12.07
.3125-32 UNEF	2M809-035M03W	2M809-035NF03W	2M809-035ZNU03W	2M809-035MT03W	2M809-035Z103W	2M809-035ZC03W	.4375	11.11	.475	12.07
.3750-28 UN	2M809-035M04W	2M809-035NF04W	2M809-035ZNU04W	2M809-035MT04W	2M809-035Z104W	2M809-035ZC04W	.500	12.70	.547	13.89
.4375-28 UNEF	2M809-035M05W	2M809-035NF05W	2M809-035ZNU05W	2M809-035MT05W	2M809-035Z105W	2M809-035ZC05W	.5625	14.29	.620	15.75
.5625-24 UNEF	2M809-035M06W	2M809-035NF06W	2M809-035ZNU06W	2M809-035MT06W	2M809-035Z106W	2M809-035ZC06W	.6875	17.46	.755	19.18
.5625-28 UN	2M809-035M16W	2M809-035NF16W	2M809-035ZNU16W	2M809-035MT16W	2M809-035Z116W	2M809-035ZC16W	.6875	17.46	.755	19.18
.5625-32 UN	2M809-035M07W	2M809-035NF07W	2M809-035ZNU07W	2M809-035MT07W	2M809-035Z107W	2M809-035ZC07W	.6875	17.46	.755	19.18
.6250-28 UN	2M809-035M08W	2M809-035NF08W	2M809-035ZNU08W	2M809-035MT08W	2M809-035Z108W	2M809-035ZC08W	.750	19.05	.830	21.08
.6875-28 UN	2M809-035M09W	2M809-035NF09W	2M809-035ZNU09W	2M809-035MT09W	2M809-035Z109W	2M809-035ZC09W	.8125	20.64	.898	22.81
.7500-28 UN	2M809-035M10W	2M809-035NF10W	2M809-035ZNU10W	2M809-035MT10W	2M809-035Z110W	2M809-035ZC10W	.875	22.23	.970	24.64
.8125-28 UN	2M809-035M17W	2M809-035NF17W	2M809-035ZNU17W	2M809-035MT17W	2M809-035Z117W	2M809-035ZC17W	.9375	23.81	1.030	26.16
.8750-28 UN	2M809-035M11W	2M809-035NF11W	2M809-035ZNU11W	2M809-035MT11W	2M809-035Z111W	2M809-035ZC11W	1.000	25.40	1.078	27.38
.9375-20 UNEF	2M809-035M12W	2M809-035NF12W	2M809-035ZNU12W	2M809-035MT12W	2M809-035Z112W	2M809-035ZC12W	1.0625	26.99	1.187	30.15
.9375-28 UN	2M809-035M13W	2M809-035NF13W	2M809-035ZNU13W	2M809-035MT13W	2M809-035Z113W	2M809-035ZC13W	1.0625	26.99	1.187	30.15
1.0000-28 UN	2M809-035M18W	2M809-035NF18W	2M809-035ZNU18W	2M809-035MT18W	2M809-035Z118W	2M809-035ZC18W	1.125	28.58	1.200	30.48
1.0625-20 UN	2M809-035M14W	2M809-035NF14W	2M809-035ZNU14W	2M809-035MT14W	2M809-035Z114W	2M809-035ZC14W	1.1875	30.16	1.264	32.11
1.1250-28 UN	2M809-035M15W	2M809-035NF15W	2M809-035ZNU15W	2M809-035MT15W	2M809-035Z115W	2M809-035ZC15W	1.250	31.75	1.325	33.66
1.1875-28 UN	2M809-035M19W	2M809-035NF19W	2M809-035ZNU19W	2M809-035MT19W	2M809-035Z119W	2M809-035ZC19W	1.3125	33.34	1.415	35.94
1.2500-28 UN	2M809-035M20W	2M809-035NF20W	2M809-035ZNU20W	2M809-035MT20W	2M809-035Z120W	2M809-035ZC20W	1.375	34.93	1.490	37.85
1.5000-28 UN	2M809-035M21W	2M809-035NF21W	2M809-035ZNU21W	2M809-035MT21W	2M809-035Z121W	2M809-035ZC21W	1.625	41.28	1.750	44.45

Flange Gaskets for Series 2M801 Receptacles



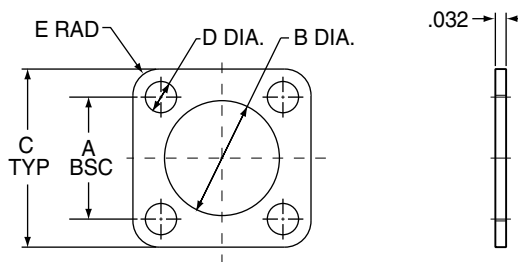
Shell Size	Part Number			A Bsc.		B Dia.		C Typ.		D Dia.		E Rad.	
	Fluorosilicone	Viton®	Conductive Fluorosilicone	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
5	2M809-108F11	2M809-108V11	2M809-108X11	.363	9.22	.342	8.69	.530	13.46	.093	2.36	.078	1.98
6	2M809-108F12	2M809-108V12	2M809-108X12	.423	10.74	.405	10.29	.590	14.99	.093	2.36	.078	1.98
7	2M809-108F13	2M809-108V13	2M809-108X13	.483	12.27	.467	11.86	.650	16.51	.093	2.36	.078	1.98
8	2M809-108F14	2M809-108V14	2M809-108X14	.545	13.84	.530	13.46	.712	18.08	.093	2.36	.078	1.98
9	2M809-108F16	2M809-108V16	2M809-108X16	.607	15.42	.560	14.22	.850	21.59	.125	3.18	.105	2.67
10	2M809-108F15	2M809-108V15	2M809-108X15	.670	17.02	.655	16.64	.890	22.61	.125	3.18	.105	2.67
13	2M809-108F17	2M809-108V17	2M809-108X17	.812	20.62	.842	21.39	1.030	26.16	.125	3.18	.105	2.67
16	2M809-108F18	2M809-108V18	2M809-108X18	.981	24.92	1.030	26.16	1.219	30.96	.125	3.18	.105	2.67
17	2M809-108F19	2M809-108V19	2M809-108X19	1.060	26.92	1.092	27.74	1.280	32.51	.125	3.18	.105	2.67
21	2M809-108F43	2M809-108V43	2M809-108X43	1.205	30.61	1.332	33.83	1.427	36.25	.125	3.18	.105	2.67

Flange Gaskets for Series 2M803 Receptacles



Shell Size	Part Number			A Bsc.		B Dia.		C Max.		D Ref.	
	Fluorosilicone	Viton®	Conductive Fluorosilicone	in.	mm.	in.	mm.	in.	mm.	in.	mm.
5	2M809-108F31	2M809-108V31	2M809-108X31	.513	13.03	.345	8.00	.710	18.03	.460	11.68
6	2M809-108F32	2M809-108V32	2M809-108X32	.598	15.19	.405	10.29	.795	20.19	.522	13.26
7	2M809-108F33	2M809-108V33	2M809-108X33	.708	17.98	.475	12.07	.900	22.86	.590	14.99
8	2M809-108F34	2M809-108V34	2M809-108X34	.964	24.51	.545	13.84	1.160	29.46	.670	17.02
9	2M809-108F35	2M809-108V35	2M809-108X35	1.017	25.83	.605	15.37	1.215	30.86	.721	18.31
10	2M809-108F36	2M809-108V36	2M809-108X36	1.101	37.97	.682	17.32	1.295	32.89	.795	20.19
12	2M809-108F37	2M809-108V37	2M809-108X37	1.204	30.58	.757	19.23	1.400	35.56	.874	22.20
14	2M809-108F38	2M809-108V38	2M809-108X38	1.280	32.51	.910	23.11	1.555	39.50	1.050	26.67
15	2M809-108F39	2M809-108V39	2M809-108X39	1.370	34.80	.970	24.64	1.640	41.66	1.150	29.21

Flange Gaskets for Series 2M805 Receptacles



Shell Size	Part Number			A Bsc.		B Dia.		C Typ.		D Dia.		E Rad.	
	Fluorosilicone	Viton®	Conductive Fluorosilicone	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
8	2M809-108F20	2M809-108V20	2M809-108X20	.660	16.76	.530	13.46	.850	21.46	.093	2.36	.078	1.98
9	2M809-108F21	2M809-108V21	2M809-108X21	.723	18.36	.590	14.99	.913	23.19	.093	2.36	.078	1.98
10	2M809-108F22	2M809-108V22	2M809-108X22	.785	19.94	.660	16.76	.975	24.77	.093	2.36	.078	1.98
11	2M809-108F23	2M809-108V23	2M809-108X23	.848	21.54	.720	18.29	1.039	26.39	.093	2.36	.078	1.98
12	2M809-108F24	2M809-108V24	2M809-108X24	.909	23.09	.780	19.81	1.099	27.91	.093	2.36	.078	1.98
15	2M809-108F25	2M809-108V25	2M809-108X25	1.058	26.87	.970	24.64	1.288	32.72	.125	3.18	.105	2.67
18	2M809-108F26	2M809-108V26	2M809-108X26	1.255	31.88	1.160	29.46	1.475	37.47	.125	3.18	.105	2.67
19	2M809-108F27	2M809-108V27	2M809-108X27	1.327	33.71	1.220	30.99	1.537	39.04	.125	3.18	.105	2.67
23	2M809-108F28	2M809-108V28	2M809-108X28	1.570	39.88	1.458	37.03	1.797	45.64	.125	3.18	.105	2.67

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

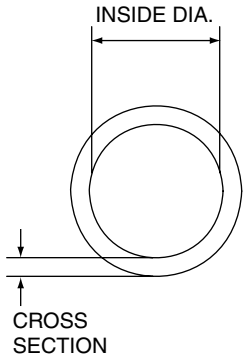
2M Filter & Accessories

HD38999

Micro-D

Terrapin

Nexus



O-Rings for Series 2M801 Jam Nut Receptacles

Shell Size	Part Number				Inside Dia.		Cross-Section	
	Fluorosilicone	EPDM	Conductive Silicone Cho-Seal 1285	Conductive Fluoro-Silicone Cho-Seal 1298	in.	mm.	in.	mm.
5	2M809-054-05F	2M809-054-05E	249-003-2M801-05B	249-003-2M801-05C	.395	10.03	.048	1.22
6	2M809-054-06F	2M809-054-06E	249-003-2M801-06B	249-003-2M801-06C	.458	11.63	.048	1.22
7	2M809-054-07F	2M809-054-07E	249-003-2M801-07B	249-003-2M801-07C	.595	15.11	.048	1.22
8	2M809-054-08F	2M809-054-08E	249-003-2M801-08B	249-003-2M801-08C	.595	15.11	.048	1.22
9	2M809-054-09F	2M809-054-09E	249-003-2M801-09B	249-003-2M801-09C	.660	16.76	.048	1.22
10	2M809-054-10F	2M809-054-10E	249-003-2M801-10B	249-003-2M801-10C	.710	18.03	.048	1.22
13	2M809-054-13F	2M809-054-13E	249-003-2M801-13B	249-003-2M801-13C	.900	22.86	.048	1.22
16	2M809-054-16F	2M809-054-16E	249-003-2M801-16B	249-003-2M801-16C	1.090	27.69	.048	1.22
17	2M809-054-17F	2M809-054-17E	249-003-2M801-17B	249-003-2M801-17C	1.135	28.83	.048	1.22
21	2M809-054-21F	2M809-054-21E	249-003-2M801-21B	249-003-2M801-21C	1.535	38.99	.048	1.22

O-Rings for Series 2M804 Rear Mount Jam Nut Receptacles

Shell Size	Part Number				Inside Diameter		Cross Section	
	Fluorosilicone	EPDM	Conductive Silicone Cho-Seal 1285	Conductive Fluorosilicone Cho-Seal 1298	in.	mm.	in.	mm.
5	2M809-055-05F	2M809-055-05E	249-003-2M804-05B	249-003-2M804-05C	.489	12.42	.070	1.78
6	2M809-055-06F	2M809-055-06E	249-003-2M804-06B	249-003-2M804-06C	.525	13.34	.070	1.78
7	2M809-055-07F	2M809-055-07E	249-003-2M804-07B	249-003-2M804-07C	.630	16.00	.070	1.78
8	2M809-055-08F	2M809-055-08E	249-003-2M804-08B	249-003-2M804-08C	.676	17.17	.070	1.78
9	2M809-055-09F	2M809-055-09E	249-003-2M804-09B	249-003-2M804-09C	.739	18.77	.070	1.78
10	2M809-055-10F	2M809-055-10E	249-003-2M804-10B	249-003-2M804-10C	.801	20.35	.070	1.78
12	2M809-055-12F	2M809-055-12E	249-003-2M804-12B	249-003-2M804-12C	.926	23.52	.070	1.78
14	2M809-055-14F	2M809-055-14E	249-003-2M804-14B	249-003-2M804-14C	1.051	26.70	.070	1.78
15	2M809-055-15F	2M809-055-15E	249-003-2M804-15B	249-003-2M804-15C	1.114	28.30	.070	1.78

O-Rings for Series 2M805 Jam Nut Receptacles

Shell Size	Part Number				Inside Diameter		Cross Section	
	Fluorosilicone	EPDM	Conductive Silicone Cho-Seal 1285	Conductive Fluorosilicone Cho-Seal 1298	in.	mm.	in.	mm.
8	2M809-150-08F	2M809-150-08E	249-003-2M805-08B	249-003-2M805-08C	.595	15.11	.048	1.22
9	2M809-150-09F	2M809-150-09E	249-003-2M805-09B	249-003-2M805-09C	.710	18.03	.048	1.22
10	2M809-150-10F	2M809-150-10E	249-003-2M805-10B	249-003-2M805-10C	.710	18.03	.048	1.22
11	2M809-150-11F	2M809-150-11E	249-003-2M805-11B	249-003-2M805-11C	.785	19.94	.048	1.22
12	2M809-150-12F	2M809-150-12E	249-003-2M805-12B	249-003-2M805-12C	.900	22.86	.048	1.22
15	2M809-150-15F	2M809-150-15E	249-003-2M805-15B	249-003-2M805-15C	1.030	26.16	.048	1.22
18	2M809-150-18F	2M809-150-18E	249-003-2M805-18B	249-003-2M805-18C	1.200	30.48	.048	1.22
19	2M809-150-19F	2M809-150-19E	249-003-2M805-19B	249-003-2M805-19C	1.250	31.75	.048	1.22
23	2M809-150-23F	2M809-150-23E	249-003-2M805-23B	249-003-2M805-23C	1.535	38.99	.048	1.22

2M Strain Relief Clamp Ordering Information



2M620MS064 and 2M620MS065



Part Number	Service Class	Size Code
2M620MS064	-M	07

PART NUMBER	
2M620MS065	Rotatable Coupling
2M620MS064	Direct Coupling

SIZE CODE				
Size Code	UNEF-2B Thread Size	Cable Entry Diameter	Shell Size	
			Series 2M801, 2M803, 2M804	Series 2M805
05	.2500-32 UNEF	.11	5	
06	.3125-32 UNEF	.17	6	
11	.3750-32 UNEF	.17		8
07	.4375-28 UNEF	.23	7	9
08	.5000-28 UNEF	.30	8	10
09	.5625-24 UNEF	.30	9	11
10	.6250-24 UNEF	.36	10	12
12	.6875-24 UNEF	.42	12, 13	
13	.7500-20 UNEF	.42		15
14	.9375-20 UNEF	.48	14, 15, 16, 17	18, 19
15	.9375-20 UNEF	.61	14, 15, 16, 17	18, 19
17	1.1875-18 UNEF	.86	21	23



SERVICE CLASS	
	Finish
-C	Aluminum/Black Anodize (Non-Conductive)
-M	Aluminum/Electroless Nickel
-NF	Aluminum/Cadmium with Olive Drab Chromate
-MT	Aluminum/Nickel-PTFE (Durmalon)
-Z1	Stainless Steel/Passivated
-ZM	Stainless Steel/Electroless Nickel
-ZN	Aluminum/Zinc-Nickel w/Olive Drab Chromate
-ZNU	Aluminum/Zinc-Nickel with Black Chromate

MATERIALS

Nut, Clamp, and Saddles	Aluminum Alloy 6061-T6 or 300 Series SST
Hardware	300 Series Stainless Steel

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

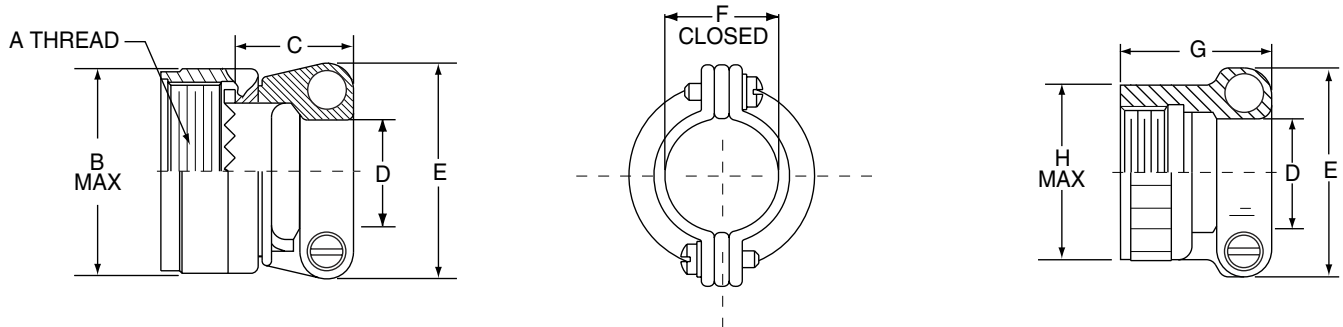
2M Filter & Accessories

HD38999

Micro-D

Terrapin

Nexus



Size Code	A Threads UNEF-2B	B Max.		C Max.		D DIA.		E		F		G Max		H Max.	
		in.	mm.	in.	mm.	in. ± .015	mm. ± 0.38	in. ± .015	mm. ± 0.38	in. ± .030	mm. ± 0.76	in.	mm.	in.	mm.
05	.2500-32	.470	11.94	.688	17.48	.119	3.02	.496	12.60	.110	2.79	.625	15.88	.350	8.89
06	.3125-32	.530	13.46	.688	17.48	.182	4.62	.582	14.78	.170	4.32	.625	15.88	.415	10.54
11	.3750-32	.570	14.48	.688	17.48	.182	4.62	.582	14.78	.170	4.32	.625	15.88	.465	11.81
07	.4375-28	.637	16.18	.688	17.48	.244	6.20	.656	16.66	.230	5.08	.688	17.48	.530	13.46
08	.5000-28	.700	17.78	.688	17.48	.307	7.80	.726	18.44	.300	7.62	.688	17.48	.595	15.11
09	.5625-24	.758	19.25	.750	19.05	.307	7.80	.726	18.44	.300	7.62	.750	19.05	.650	16.51
10	.6250-24	.819	20.80	.750	19.05	.369	9.37	.885	22.48	.360	9.14	.875	22.23	.715	18.16
12	.6875-24	.896	22.76	.750	19.05	.432	10.97	.952	24.18	.420	10.67	.875	22.23	.785	19.94
13	.7500-20	.930	23.62	.750	19.05	.432	10.97	.952	24.18	.420	10.67	.875	22.23	.830	21.08
14	.9375-20	1.137	28.88	.750	19.05	.494	12.55	1.018	25.86	.480	12.19	1.000	25.40	1.020	25.91
15	.9375-20	1.137	28.88	.750	19.05	.619	15.72	1.148	29.16	.610	15.49	1.000	25.40	1.020	25.91
17	1.1875-18	1.397	35.48	.750	19.05	.869	22.07	1.400	35.56	.860	21.84	1.125	28.58	1.280	32.51

2M Thread-On Micro Band Adapter



Ordering Information 2M440MS135, /MK135 and /ML135

Part Number	Service Class	Size Code	Cable Entry Size	Length	Band Option
2M440M 135	M	07	05	-6	K

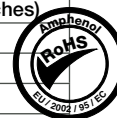
Omit for no band supplied
K adapter is supplied with
Micro Band shield
termination band, pre-coiled

PART NUMBER	
2M440MS135	Straight Entry
2M440MK135	45° Entry
2M440ML135	90° Entry

SIZE CODE	
05	.2500-32
06	.3125-32
11	.3750-32
07	.4375-28
08	.5000-28
09	.5625-24
10	.6250-24
12	.6875-24
13	.7500-20
14	.9375-20
17	1.1875-18

CABLE ENTRY SIZE		
02	.125	05-17
03	.188	05-17
04	.250	06-17
05	.312	07-17
06	.375	07-17
07	.438	08-17
08	.500	09-17
09	.562	10-17
10	.625	12-17
11	.688	14-17
12	.750	14-17
13	.812	14-17
14	.875	14-17

LENGTH	
Straight Entry 2M440MS135 Only	
Length Code	Length (inches)
-6	.750
-7	.875
-8	1.000
-9	1.125
-10	1.250
-11	1.375
-12	1.500
-13	1.625
-14	1.750
-15	1.875
-16	2.000
-17	2.125
-18	2.250
-19	2.375
-20	2.500
Specify Length in increments of .125 inches (3.18 mm.)	



SERVICE CLASS	
	Finish
C	Aluminum/Black Anodize (Non-Conductive)
M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium with Olive Drab Chromate
MT	Aluminum/Nickel-PTFE (Duralon)
Z1	Stainless Steel/Passivated
ZM	Stainless Steel/Electroless Nickel
ZN	Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU	Aluminum/Zinc-Nickel with Black Chromate

MATERIALS

Nut, Adapter	Aluminum Alloy or 300 Series SST
Band	300 Series SST
O-Ring	Silicone Elastomer

Shell Size

Accessory Thread	Size Code	Series 2M801	Series 2M803	Series 2M804	Series 2M805
.2500-32 UNEF-2B	05	5	5	5	
.3125-32 UNEF-2B	06	6	6	6	
.3750-32 UNEF-2B	11				8
.4375-28 UNEF-2B	07	7	7	7	9
.5000-28 UNEF-2B	08	8	8	8	10
.5625-24 UNEF-2B	09	9	9	9	11
.6250-24 UNEF-2B	10	10	10	10	12
.6875-24 UNEF-2B	12	13	12	12	
.7500-20 UNEF-2B	13				15
.9375-20 UNEF-2B	14	16,17	14, 15	14, 15	18, 19
1.1875-18 UNEF-2B	17	21			23

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

Micro-D

Terrapin

Nexus

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

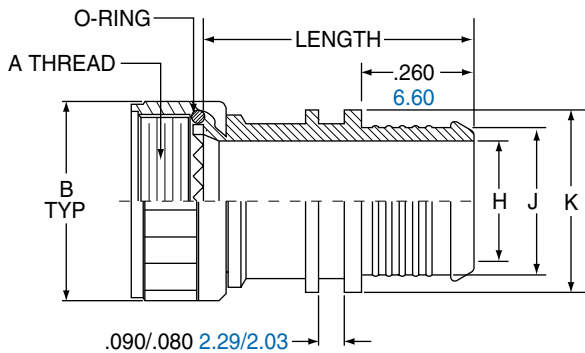
HD38999

Micro-D

Terrapin

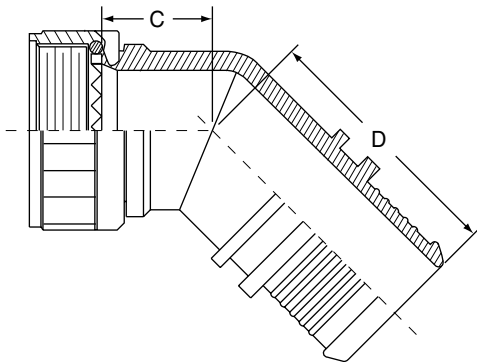
Nexus

STRAIGHT ENTRY ROTATABLE COUPLING 2M440MS135

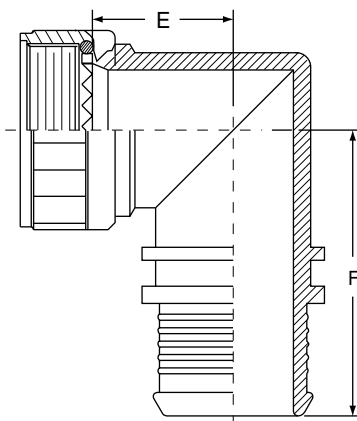


Size Code	A Threads UNEF-2B	B Max		C Max.		D Max.		E Max.		F Max.	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
05	.2500-32	.470	11.94	.530	13.46	.660	16.76	.630	16.00	.780	19.81
06	.3125-32	.530	13.46	.550	13.97	.670	17.02	.660	16.76	.790	20.27
11	.3750-32	.570	14.48	.560	14.22	.680	17.27	.680	17.27	.810	20.57
07	.4375-28	.637	16.18	.570	14.48	.690	17.53	.700	17.48	.830	21.08
08	.5000-28	.700	17.78	.580	14.73	.700	17.78	.740	18.80	.860	21.84
09	.5625-24	.758	19.25	.590	14.99	.710	18.03	.770	19.56	.890	22.61
10	.6250-24	.819	20.80	.610	15.49	.730	18.54	.800	20.32	.920	23.37
12	.6875-24	.896	22.76	.640	16.26	.750	19.05	.840	21.34	.970	24.64
13	.7500-20	.930	23.62	.660	16.76	.750	19.56	.880	22.35	1.020	25.91
14	.9375-20	1.137	28.88	.690	17.53	.800	20.32	.950	24.13	1.090	27.69
17	1.1875-18	1.387	35.23	.720	18.29	.830	21.08	1.010	25.65	1.160	29.46

45° ENTRY ROTATABLE COUPLING 2M440MK135



90° ENTRY ROTATABLE COUPLING 2M440ML135



Cable Entry Code	CABLE ENTRY						Use With Size Codes
	H Dia.		J Dia.		K Dia.		
	in. ± .015	mm. ± 0.38	in. ± .015	mm. ± 0.38	in. ± .015	mm. ± 0.38	
02	.125	3.18	.164	4.17	.266	6.76	05-14
03	.188	4.78	.227	5.77	.329	8.36	05-14
04	.250	6.35	.289	7.34	.391	9.93	06-14
05	.312	7.92	.351	8.92	.453	11.51	07-14
06	.375	9.53	.414	10.52	.516	13.11	07-14
07	.438	11.13	.477	12.12	.579	14.71	08-14
08	.500	12.70	.539	13.69	.641	16.28	09-14
09	.562	14.27	.601	15.27	.703	17.86	10-14
10	.625	15.88	.664	16.87	.766	19.46	12-14
11	.688	17.48	.727	18.47	.829	21.06	14
12	.750	19.05	.789	20.04	.891	22.63	14
13	.812	20.62	.851	21.62	.953	24.21	14
14	.875	22.23	.914	23.22	1.016	25.81	14

Size Code	A Threads	CONNECTOR SHELL SIZE	
		Shell Size	
		Series 2M801, 2M803, 2M804	Series 2M805
05	.2500-32 UNEF-2B	5	
06	.3125-32 UNEF-2B	6	
11	.3750-32 UNEF-2B		8
07	.4375-28 UNEF-2B	7	9
08	.5000-28 UNEF-2B	8	10
09	.5625-24 UNEF-2B	9	11
10	.6250-24 UNEF-2B	10	12
12	.6875-24 UNEF-2B	12, 13	
13	.7500-20 UNEF-2B		15
14	.9375-20 UNEF-2B	14, 15, 16, 17	18, 19
17	1.1875-18 UNEF-2B	21	23

2M Low-Profile Micro Band Adapter Order Info



2M440MS134

Part Number	Service Class	Size Code	Cable Entry Size	Length	Band Option
2M440MS135	M	07	05	-6	K

Omit for no band supplied
K adapter is supplied with
Micro Band shield
termination band, pre-coiled

PART NUMBER	
2M440MS134	Straight Entry

SIZE CODE	
05	.2500-32
06	.3125-32
11	.3750-32
07	.4375-28
08	.5000-28
09	.5625-24
10	.6250-24
12	.6875-24
13	.7500-20
14	.9375-20
17	1.1875-18

CABLE ENTRY SIZE		
01	.094	05-06, 11
02	.125	05-07, 11
03	.175	05-08, 11
04	.234	06-08
05	.272	07-09
06	.312	07-10
07	.375	08-13
08	.438	09-13
09	.500	10-13
10	.562	12-14, 17
11	.625	14, 17
12	.688	14, 17
13	.750	14, 17
14	.812	14, 17

LENGTH	
Straight Entry 2M440MS135 Only	
Length Code	Length (inches)
-6	.750
-7	.875
-8	1.000
-9	1.125
-10	1.250
-11	1.375
-12	1.500
-13	1.625
-14	1.750
-15	1.875
-16	2.000
-18	2.250
-19	2.375
-20	2.500
Specify Length in increments of .125 inches (3.18 mm.)	



SERVICE CLASS		
		Finish
C		Aluminum/Black Anodize (Non-Conductive)
M		Aluminum/Electroless Nickel
NF		Aluminum/Cadmium with Olive Drab Chromate
MT		Aluminum/Nickel-PTFE (Duralon)
Z1		Stainless Steel/Passivated
ZM		Stainless Steel/Electroless Nickel
ZN		Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU		Aluminum/Zinc-Nickel with Black Chromate

MATERIALS

Nut, Adapter	Aluminum Alloy or 300 Series SST
Band	300 Series SST
O-Ring	Silicone Elastomer

Shell Size

Accessory Thread	Size Code	Series 2M801	Series 2M803	Series 2M804	Series 2M805
.2500-32 UNEF-2B	05	5	5	5	
.3125-32 UNEF-2B	06	6	6	6	
.3750-32 UNEF-2B	11				8
.4375-28 UNEF-2B	07	7	7	7	9
.5000-28 UNEF-2B	08	8	8	8	10
.5625-24 UNEF-2B	09	9	9	9	11
.6250-24 UNEF-2B	10	10	10	10	12
.6875-24 UNEF-2B	12	13	12	12	
.7500-20 UNEF-2B	13				15
.9375-20 UNEF-2B	14	16,17	14, 15	14, 15	18, 19
1.1875-18 UNEF-2B	17	21			23

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

HD38999

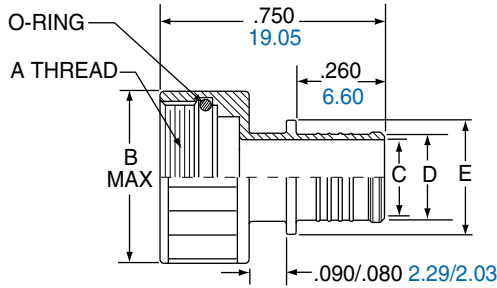
Micro-D

Terrapin

Nexus

2M440MS134

- Contacts & Tools
- 2M Specs
- 2M801
- 2M803
- 2M804
- 2M805
- 2M Filter & Accessories
- HD38999
- Micro-D
- Terrapin
- Nexus



CONNECTOR SHELL SIZE			
Size Code	A Threads	B Max.	
		in.	mm.
05	.2500-32 UNEF-2B	.350	8.89
06	.3125-32 UNEF-2B	.415	10.54
11	.3750-32 UNEF-2B	.465	11.81
07	.4375-28 UNEF-2B	.530	13.46
08	.5000-28 UNEF-2B	.595	15.11
09	.5625-24 UNEF-2B	.650	16.51
10	.6250-24 UNEF-2B	.715	18.16
12	.6875-24 UNEF-2B	.785	19.94
13	.7500-20 UNEF-2B	.830	21.08
14	.9375-20 UNEF-2B	1.020	25.91
17	1.1875-18 UNEF-2B	1.280	32.51

Cable Entry Code	CABLE ENTRY						Use With Size Codes
	C Dia.		D Dia.		E Dia.		
	in. ± .015	mm. ± 0.38	in. ± .015	mm. ± 0.38	in. ± .015	mm. ± 0.38	
01	.094	2.39	.133	3.38	.235	5.97	05-06
02	.125	3.18	.164	4.17	.266	6.76	05-07
03	.172	4.37	.211	5.36	.313	7.95	05-08
04	.234	5.94	.273	6.93	.375	9.53	06-08
05	.272	6.91	.311	7.90	.413	10.49	07-09
06	.312	7.92	.351	8.92	.453	11.51	07-10
07	.375	9.53	.414	10.52	.516	13.11	08-12
08	.438	11.13	.477	12.12	.579	14.71	09-12
09	.500	12.70	.539	13.69	.641	16.28	10-12
10	.562	14.27	.601	15.27	.703	17.88	12-14
11	.625	15.88	.664	16.87	.766	19.46	14
12	.688	17.48	.727	18.47	.829	21.06	14
13	.750	19.05	.789	20.04	.891	22.63	14
14	.812	20.62	.851	21.62	.953	24.21	14

Size Code	A Threads	CONNECTOR SHELL SIZE	
		Shell Size	
		Series 2M801, 2M803, 2M804	Series 2M805
05	.2500-32 UNEF-2B	5	
06	.3125-32 UNEF-2B	6	
11	.3750-32 UNEF-2B		8
07	.4375-28 UNEF-2B	7	9
08	.5000-28 UNEF-2B	8	10
09	.5625-24 UNEF-2B	9	11
10	.6250-24 UNEF-2B	10	12
12	.6875-24 UNEF-2B	12, 13	
13	.7500-20 UNEF-2B		15
14	.9375-20 UNEF-2B	14, 15, 16, 17	18, 19
17	1.1875-18 UNEF-2B	21	23

2M Environmental Backshell Ordering Info



2M370MS37, MS038, 2M370MB038, 2M370MA038



Part Number	Service Class	Size Code	Cable Entry Size	Length	Options
2M370M 03X	M	07	05	-6	N

Omit for screw clamp with saddle bars
N Optional Compression Nut, Low Profile

PART NUMBER	
2M370MS038	Straight Entry Rotatable Coupling
2M370MS037	Straight Entry, Direct Coupling
2M370MB038	45° Entry
2M370MA038	90° Entry

SIZE CODE	
05	.2500-32
06	.3125-32
11	.3750-32
07	.4375-28
08	.5000-28
09	.5625-24
10	.6250-24
12	.6875-24
13	.7500-20
14	.9375-20
17	1.1875-18

CABLE ENTRY SIZE		
Code	Max.	Min.
01	.109	.031
02	.172	.078
03	.234	.140
04	.297	.203
05	.359	.265
06	.422	.328
07	.484	.390
08	.547	.463
09	.609	.515

LENGTH		
Straight Entry 2M440MS. Only		
Length Code	Length (inches)	
-5	.625	
-6	.750	
-7	.875	
-8	1.000	
-9	1.125	
-10	1.250	
-11	1.375	
-12	1.500	
-13	1.625	
-14	1.750	
-15	1.875	
-16	2.000	
-17	2.125	
-18	2.250	
-19	2.375	
-20	2.500	

Specify Length in increments of .125 inches (3.18 mm.)

SERVICE CLASS	
	Finish
C	Aluminum/Black Anodize (Non-Conductive)
M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium with Olive Drab Chromate
MT	Aluminum/Nickel-PTFE (Durmalon)
Z1	Stainless Steel/Passivated
ZM	Stainless Steel/Electroless Nickel
ZN	Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU	Aluminum/Zinc-Nickel with Black Chromate



Shell Size

Accessory Thread	Size Code	Series 2M801	Series 2M803	Series 2M804	Series 2M805
.2500-32 UNEF-2B	05	5	5	5	
.3125-32 UNEF-2B	06	6	6	6	
.3750-32 UNEF-2B	11				8
.4375-28 UNEF-2B	07	7	7	7	9
.5000-28 UNEF-2B	08	8	8	8	10
.5625-24 UNEF-2B	09	9	9	9	11
.6250-24 UNEF-2B	10	10	10	10	12
.6875-24 UNEF-2B	12	13	12	12	
.7500-20 UNEF-2B	13				15
.9375-20 UNEF-2B	14	16,17	14, 15	14, 15	18, 19
1.1875-18 UNEF-2B	17	21			23

MATERIALS

Adapter, Clamp, Nut and Saddles	Aluminum Alloy 6061-T6 or 300 Series Stainless Steel
O-Rings	Silicone Rubber
Hardware	300 Series Stainless Steel

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

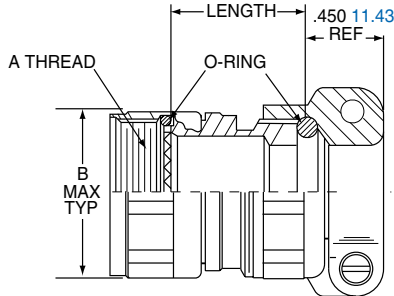
HD38999

Micro-D

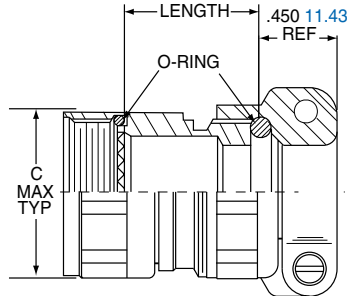
Terrapin

Nexus

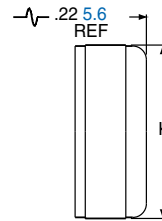
STRAIGHT ENTRY
ROTATABLE COUPLING
2M370MS038



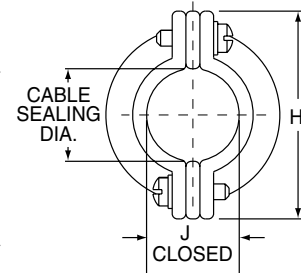
STRAIGHT ENTRY
DIRECT COUPLING
2M370MS037



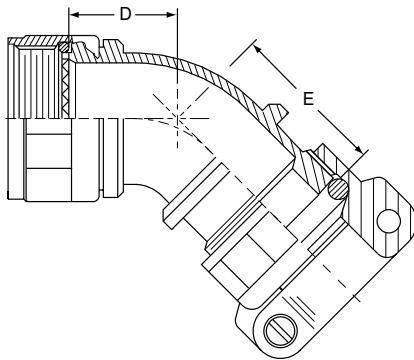
CLAMP STYLE N
COMPRESSION NUT



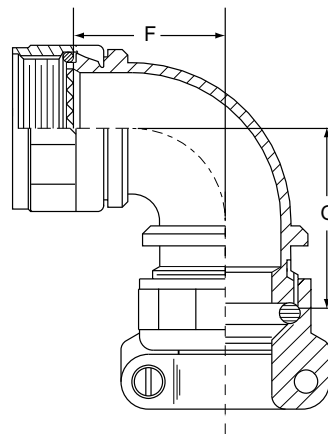
SADDLE CLAMP



45° ENTRY
ROTATABLE COUPLING
2M370MB038



90° ENTRY
ROTATABLE COUPLING
2M370MA038



Size Code	A Threads UNEF-2B	B Max.		C Max.	
		in.	mm.	in.	mm.
05	.2500-32	.470	11.94	.350	8.89
06	.3125-32	.530	13.46	.415	10.54
11	.3750-32	.570	14.48	.465	11.68
07	.4375-28	.637	16.18	.530	13.46
08	.5000-28	.700	17.78	.595	15.11
09	.5625-24	.758	19.25	.650	16.51
10	.6250-24	.819	20.80	.715	18.16
12	.6875-24	.896	22.76	.785	19.94
13	.7500-20	.930	23.62	.830	21.08
14	.9375-20	1.137	28.88	1.020	25.91
17	1.1875-18	1.280	32.51	1.280	32.51

CABLE ENTRY																
Cable Entry Code	Cable Sealing Dia.		D Max.		E Max.		F Max.		G Max.		H Dia.		J Dia.		K Dia.	
	Max.	Min.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
			± .015	± 0.38	± .030	± 0.76	± .015	± 0.38								
01	.109	.031	.603	15.32	.581	14.67	.724	18.39	.702	17.83	.496	12.60	.110	2.79	.398	10.11
02	.172	.078	.603	15.32	.581	14.67	.724	18.39	.702	17.83	.582	14.78	.170	4.32	.460	11.68
03	.234	.140	.603	15.32	.581	14.67	.724	18.39	.702	17.83	.656	16.66	.230	5.84	.523	13.28
04	.297	.203	.629	15.98	.607	15.42	.786	19.96	.764	19.41	.726	18.44	.300	7.62	.585	14.86
05	.359	.265	.629	15.98	.607	15.42	.786	19.96	.764	19.41	.885	22.48	.360	9.14	.647	16.43
06	.422	.328	.655	16.64	.633	16.00	.848	21.54	.826	20.98	.952	24.18	.420	10.67	.710	18.03
07	.484	.390	.655	16.64	.633	16.00	.848	21.54	.826	20.98	1.018	25.86	.480	12.19	.773	19.63
08	.547	.453	.707	17.96	.685	17.40	.911	23.14	.889	22.68	1.084	27.53	.550	13.97	.835	21.21
09	.609	.515	.707	17.96	.685	17.40	.911	23.14	.889	22.58	1.148	29.16	.610	15.49	.897	22.76

2M EMI Backshell Ordering Information



2M380MS137, MS135, 2M380MB137, 2M380MA137



Part Number	Service Class	Size Code	Cable Entry Size	Length	Options
2M380M 03X	M	07	05	-6	N

Omit for screw clamp with saddle bars
N Optional Compression Nut, Low Profile

PART NUMBER	
2M380MS137	Straight Entry Rotatable Coupling
2M380MS135	Straight Entry, Direct Coupling
2M380MB137	45° Entry
2M380MA137	90° Entry

SIZE CODE	
05	.2500-32
06	.3125-32
11	.3750-32
07	.4375-28
08	.5000-28
09	.5625-24
10	.6250-24
12	.6875-24
13	.7500-20
14	.9375-20
17	1.1875-18

CABLE ENTRY SIZE	
Code	Saddle Clamp Dia. Fully Closed
01	.109
02	.172
03	.234
04	.297
05	.359
06	.422
07	.484
08	.547
09	.609

LENGTH	
Straight Entry 2M380MS Only	
Length Code	Length (inches)
-5	.625
-6	.750
-7	.875
-8	1.000
-9	1.125
-10	1.250
-11	1.375
-12	1.500
-13	1.625
-14	1.750
-15	1.875
-16	2.000
-17	2.125
-18	2.250
-19	2.375
-20	2.500

Specify Length in increments of .125 inches (3.18 mm.)

SERVICE CLASS	
	Finish
C	Aluminum/Black Anodize (Non-Conductive)
M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium with Olive Drab Chromate
MT	Aluminum/Nickel-PTFE (Durmalon)
Z1	Stainless Steel/Passivated
ZM	Stainless Steel/Electroless Nickel
ZN	Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU	Aluminum/Zinc-Nickel with Black Chromate



Shell Size

Accessory Thread	Size Code	Series 2M801	Series 2M803	Series 2M804	Series 2M805
.2500-32 UNEF-2B	05	5	5	5	
.3125-32 UNEF-2B	06	6	6	6	
.3750-32 UNEF-2B	11				8
.4375-28 UNEF-2B	07	7	7	7	9
.5000-28 UNEF-2B	08	8	8	8	10
.5625-24 UNEF-2B	09	9	9	9	11
.6250-24 UNEF-2B	10	10	10	10	12
.6875-24 UNEF-2B	12	13	12	12	
.7500-20 UNEF-2B	13				15
.9375-20 UNEF-2B	14	16,17	14, 15	14, 15	18, 19
1.1875-18 UNEF-2B	17	21			23

MATERIALS

Adapter, Clamp, Nut and Saddles	Aluminum Alloy 6061-T6 or 300 Series Stainless Steel
O-Rings	Silicone Rubber
Hardware	300 Series Stainless Steel

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

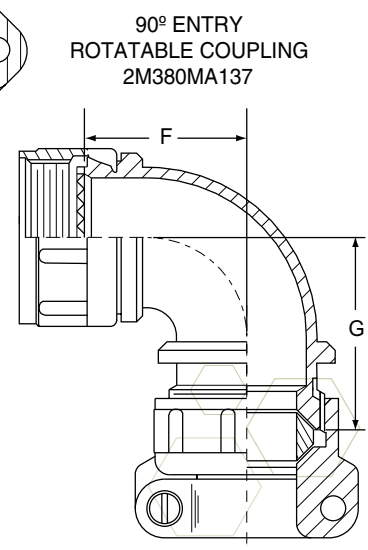
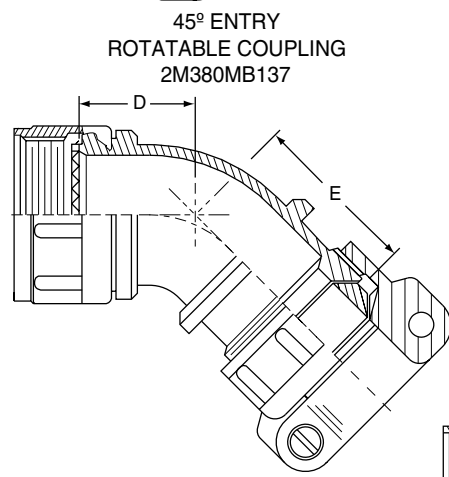
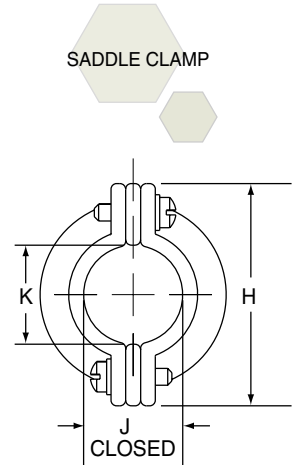
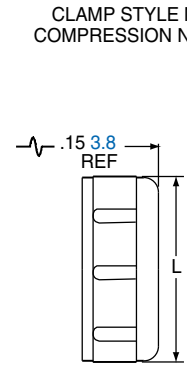
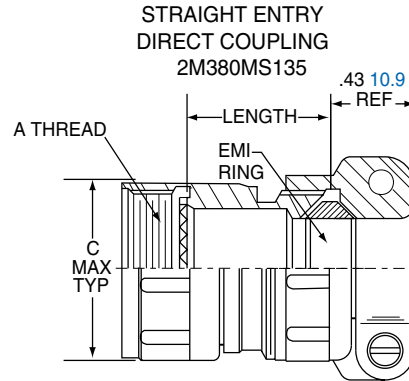
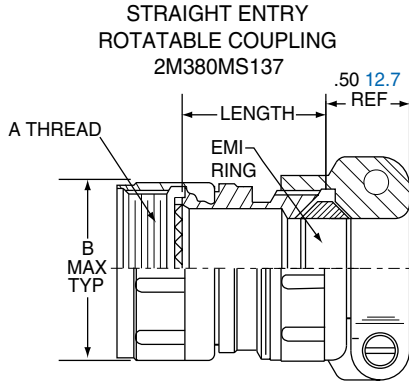
2M Filter & Accessories

HD38999

Micro-D

Terrapin

Nexus



Size Code	A Threads	B Max.		C Max.	
		in.	mm.	in.	mm.
05	.2500-32 UNEF-2B	.470	11.94	.350	8.89
06	.3125-32 UNEF-2B	.530	13.46	.415	10.54
11	.3750-32 UNEF-2B	.570	14.48	.465	11.68
07	.4375-28 UNEF-2B	.637	16.18	.530	13.46
08	.5000-28 UNEF-2B	.700	17.78	.595	15.11
09	.5625-24 UNEF-2B	.758	19.25	.650	16.51
10	.6250-24 UNEF-2B	.819	20.80	.715	18.16
12	.6875-24 UNEF-2B	.896	22.76	.785	19.94
13	.7500-20 UNEF-2B	.930	23.62	.830	21.08
14	.9375-20 UNEF-2B	1.137	28.88	1.020	25.91
17	1.1875-18 UNEF-2B	1.387	35.23	1.280	32.51

Cable Entry Code	CABLE ENTRY															
	D Max.		E Max.		F Max.		G Max.		H		J Dia. Closed		K Dia.		L Dia.	
	in.	mm.	in.	mm.	in.	mm.	in.	mm.	± .015	± 0.38	in.	mm.	± .015	± 0.38	in.	mm.
01	.603	15.32	.581	14.67	.724	18.39	.702	17.83	.496	12.60	.110	2.79	.119	3.02	.398	10.11
02	.603	15.32	.581	14.67	.724	18.39	.702	17.83	.582	14.78	.170	4.32	.182	4.62	.460	11.68
03	.603	15.32	.581	14.67	.724	18.39	.702	17.83	.656	16.66	.230	5.84	.244	6.20	.523	13.28
04	.629	15.98	.607	15.42	.786	19.96	.764	19.41	.726	18.44	.300	7.62	.307	7.80	.585	14.86
05	.629	15.98	.607	15.42	.786	19.96	.764	19.41	.885	22.48	.360	9.14	.369	9.37	.647	16.43
06	.655	16.64	.633	16.00	.848	21.54	.826	20.98	.952	24.18	.420	10.67	.432	10.97	.710	18.03
07	.655	16.64	.633	16.00	.848	21.54	.826	20.98	1.018	25.86	.480	12.19	.494	12.55	.773	19.63
08	.707	17.96	.685	17.40	.911	23.14	.889	22.68	1.084	27.53	.550	13.97	.557	14.15	.835	21.21
09	.707	17.96	.685	17.40	.911	23.14	.889	22.58	1.148	29.16	.610	15.49	.619	15.72	.897	22.76

2M Environmental EMI Backshell Ordering Info



2M390MS077, MS076, 2M390MB077, 2M390MA077



Part Number	Service Class	Size Code	Cable Entry Size	Length	Options
2M390M 07X	M	07	05	-6	N

Omit for screw clamp with saddle bars
N Optional Compression Nut, Low Profile

PART NUMBER	
2M390MS077	Straight Entry Rotatable Coupling
2M390MS076	Straight Entry, Direct Coupling
2M390MB077	45° Entry Rotatable Coupling
2M390MA077	90° Entry Rotatable Coupling

SIZE CODE	
05	.2500-32
06	.3125-32
11	.3750-32
07	.4375-28
08	.5000-28
09	.5625-24
10	.6250-24
12	.6875-24
13	.7500-20
14	.9375-20
17	1.1875-18

CABLE ENTRY SIZE		
Code	Max.	Min.
01	.109	.031
02	.172	.078
03	.234	.140
04	.297	.203
05	.359	.265
06	.422	.328
07	.484	.390
08	.547	.463
09	.609	.515
10	.672	.578
11	.734	.640

LENGTH	
Straight Entry 2M390MS Only	
Length Code	Length (inches)
-5	.625
-6	.750
-7	.875
-8	1.000
-9	1.125
-10	1.250
-11	1.375
-12	1.500
-13	1.625
-14	1.750
-15	1.875
-16	2.000
-17	2.125
-18	2.250
-19	2.375
-20	2.500
Specify Length in increments of .125 inches (3.18 mm.)	

SERVICE CLASS	
	Finish
C	Aluminum/Black Anodize (Non-Conductive)
M	Aluminum/Electroless Nickel
NF	Aluminum/Cadmium with Olive Drab Chromate
MT	Aluminum/Nickel-PTFE (Duralon)
Z1	Stainless Steel/Passivated
ZM	Stainless Steel/Electroless Nickel
ZN	Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU	Aluminum/Zinc-Nickel with Black Chromate



Shell Size

Accessory Thread	Size Code	Series 2M801	Series 2M803	Series 2M804	Series 2M805
.2500-32 UNEF-2B	05	5	5	5	
.3125-32 UNEF-2B	06	6	6	6	
.3750-32 UNEF-2B	11				8
.4375-28 UNEF-2B	07	7	7	7	9
.5000-28 UNEF-2B	08	8	8	8	10
.5625-24 UNEF-2B	09	9	9	9	11
.6250-24 UNEF-2B	10	10	10	10	12
.6875-24 UNEF-2B	12	13	12	12	
.7500-20 UNEF-2B	13				15
.9375-20 UNEF-2B	14	16,17	14, 15	14, 15	18, 19
1.1875-18 UNEF-2B	17	21			23

SERIES

Adapter, Clamp, Nut and Saddles	Aluminum Alloy 6061-T6 or 300 Series Stainless Steel
O-Rings	Silicone Rubber
Hardware	300 Series Stainless Steel

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

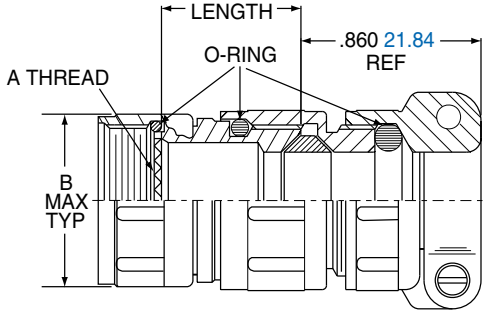
HD38999

Micro-D

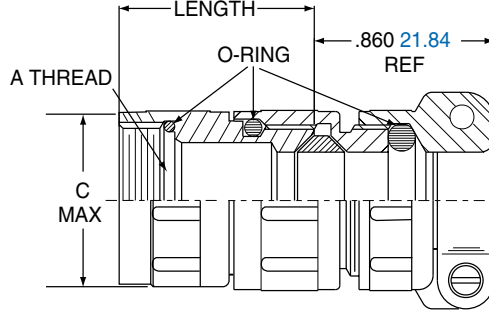
Terrapin

Nexus

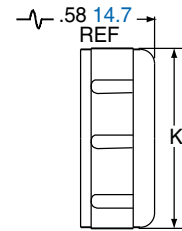
STRAIGHT ENTRY
ROTATABLE COUPLING
2M390MS077



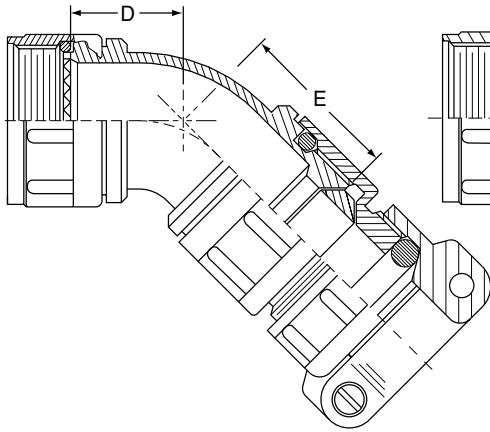
STRAIGHT ENTRY
DIRECT COUPLING
2M390MS076



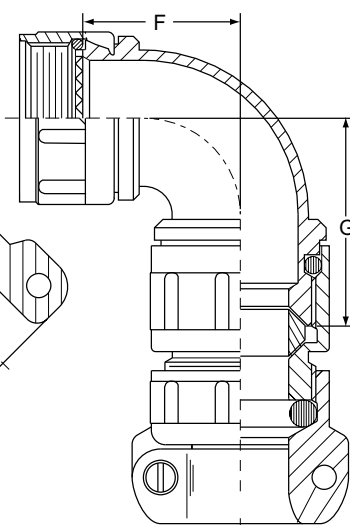
CLAMP STYLE N
COMPRESSION NUT



45° ENTRY
ROTATABLE COUPLING
2M390MB077

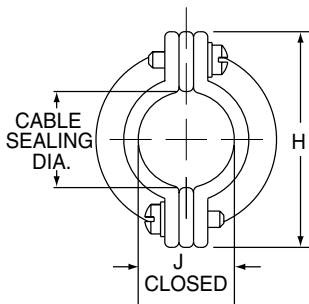


90° ENTRY
ROTATABLE COUPLING
2M390MA077



Size Code	A Threads UNEF-2B	B Max.		C Max.	
		in.	mm.	in.	mm.
05	.2500-32	.470	11.94	.350	8.89
06	.3125-32	.530	13.46	.415	10.54
11	.3750-32	.570	14.48	.570	14.48
07	.4375-28	.637	16.18	.530	13.46
08	.5000-28	.700	17.78	.595	15.11
09	.5625-24	.758	19.25	.650	16.51
10	.6250-24	.819	20.80	.715	18.16
12	.6875-24	.896	22.76	.785	19.94
13	.7500-20	.930	23.62	.830	21.08
14	.9375-20	1.137	28.88	1.020	25.91
17	1.1875-18	1.387	35.23	1.280	32.51

SADDLE CLAMP



Cable Entry Code	Cable Sealing Dia.		D Max.		E Max.		F Max.		G Max.		H		J Dia. Closed		K Dia.	
	Max.	Min.	In.	mm.	in.	mm.	in.	mm.	in.	mm.	± .010	± 0.25	in.	mm.	± .010	± 0.25
	01	.109	.031	.603	15.32	.681	14.67	.724	18.39	.802	20.37	.496	12.60	.110	2.79	.398
02	.172	.078	.603	15.32	.681	14.67	.724	18.39	.802	20.37	.582	14.78	.170	4.32	.460	11.68
03	.234	.140	.603	15.32	.681	14.67	.724	18.39	.802	20.37	.656	16.66	.230	5.84	.523	13.28
04	.297	.203	.629	15.98	.707	15.42	.786	19.96	.864	21.95	.726	18.44	.300	7.62	.585	14.86
05	.359	.265	.629	15.98	.707	15.42	.786	19.96	.864	21.95	.885	22.48	.360	9.14	.647	16.43
06	.422	.328	.655	16.64	.733	16.00	.848	21.54	.926	23.52	.952	24.18	.420	10.67	.710	18.03
07	.484	.390	.655	16.64	.733	16.00	.848	21.54	.926	23.52	1.018	25.86	.480	12.19	.773	19.63
08	.547	.453	.707	17.96	.785	17.40	.911	23.14	.989	25.12	1.084	27.53	.550	13.97	.835	21.21
09	.609	.515	.707	17.96	.785	17.40	.911	23.14	.989	25.12	1.148	29.16	.610	15.49	.897	22.78

2M Shorting Cap Backshell Ordering Info



2M340MS026

Part Number	Service Class	Attachment Type	Size Code	Length	Attachment Code	Attachment Length
2M340M 02X	M	G	07	-4	02	-5

Omit for attachment Type N (No Attachment) Ex. "-5" equals five inch length

PART NUMBER	
2M340MS026	Shorting Cap Backshell

ATTACHMENT TYPE	
-G	Nylon Rope
-H	Stainless Steel Wire Rope, Teflon® Jacket
-N	No Attachment
-S	Stainless Steel Sash Chain
-SK	Nylon Rope With Slip Knot
-U	Stainless Steel Wire Rope, Polyurethane Jacket

LENGTH		
Overall Length in Inches		
Length Code	Length (inches)	
-4	.50	
-5	.75	
-6	1.00	
-7	1.25	
-8	1.50	
-9	1.75	
-10	2.00	
-11	2.25	
-12	2.50	
-13	2.75	
-14	3.00	

ATTACHMENT CODE	
Omit for attachment Types N (No Attachment) and SK (Slip Knot)	
Small Ring	01 -.126 (3.20) I.D.
	02 -.145 (3.68) I.D.
	04 -.188 (4.78) I.D.
	06 -.197 (5.00) I.D.
Large Ring	14 -.385 (9.78) I.D.
	15 -.445 (11.30) I.D.
	16 -.570 (14.48) I.D.
	17 -.635 (16.13) I.D.
	18 -.695 (17.65) I.D.
	19 -.885 (22.48) I.D.
Split Ring	20 -1.070 (27.17) I.D.
	50 -.420 (10.67) I.D.
	52 -.480 (12.19) I.D.
	54 -.635 (16.13) I.D.
	56 -.745 (18.92) I.D.
	58 -.885 (22.48) I.D.
	60 -1.010 (25.65) I.D.
	64 -1.125 (28.58) I.D.
	68 -1.345 (34.16) I.D.



SERVICE CLASS		
		Finish
C		Aluminum/Black Anodize (Non-Conductive)
M		Aluminum/Electroless Nickel
NF		Aluminum/Cadmium with Olive Drab Chromate
MT		Aluminum/Nickel-PTFE (Duralon)
Z1		Stainless Steel/Passivated
ZM		Stainless Steel/Electroless Nickel
ZN		Aluminum/Zinc-Nickel w/Olive Drab Chromate
ZNU		Aluminum/Zinc-Nickel with Black Chromate

SIZE CODE	
05	.2500-32
06	.3125-32
11	.3750-32
07	.4375-28
08	.5000-28
09	.5625-24
10	.6250-24
12	.6875-24
13	.7500-20
14	.9375-20
17	1.1875-18

MATERIALS

Adapter, Clamp, Nut and Saddles	Aluminum Alloy 6061-T6 or 300 Series Stainless Steel
O-Rings	Silicone Rubber
Hardware	300 Series Stainless Steel

Contacts & Tools

2M Specs

2M801

2M803

2M804

2M805

2M Filter & Accessories

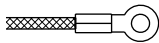
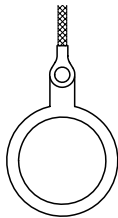
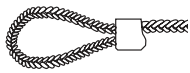
HD38999

Micro-D

Terrapin

Nexus

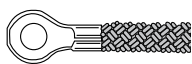
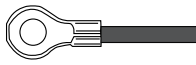
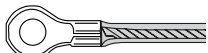

ATTACHMENT OPTIONS

 Small Ring for Attaching to a Panel with a Screw	Dia. Code	Ring I.D.		Ring O. D.	
		in.	mm.	in.	mm.
		± .005	± .13	Max	Max
	01	.126	8.89	.31	7.9
	02	.145	10.54	.31	7.9
	04	.188	11.81	.31	7.9
	06	.197	13.46	.31	7.9
 Large Solid Ring for Attaching to a Jam Nut Receptacle	Dia. Code	Ring I.D.		Ring O. D.	
		in.	mm.	in.	mm.
		± .010	± .25	± .015	± .38
	14	.385	9.78	.510	12.95
	15	.445	11.30	.565	14.35
	16	.570	14.48	.685	17.40
	17	.635	16.13	.760	19.30
	18	.695	17.65	.820	20.82
	19	.885	22.48	1.010	25.65
	20	1.070	27.17	1.195	30.35
21	1.135	28.83	1.250	31.75	
22	1.210	30.73	1.312	33.32	
 Nylon Rope Slip Knot (SK) for attaching Covers to Cables	55° to +100°C., black, flexible, good abrasion resistance, good resistance to fuels, .120" 3mm diameter. Length includes .5" 13mm diameter loop.				

DIMENSIONS

Size Code	A Max Dia.		B Threads
	in.	mm.	
05	.350	8.89	.2500-32 UNEF-2B
06	.415	10.54	.3125-32 UNEF-2B
11	.465	11.81	.3750-32 UNEF-2B
07	.530	13.46	.4375-28 UNEF-2B
08	.595	14.35	.5000-28 UNEF-2B
09	.650	16.51	.5625-24 UNEF-2B
10	.715	18.16	.6250-24 UNEF-2B
12	.785	19.94	.6875-24 UNEF-2B
13	.830	21.08	.7500-20 UNEF-2B
14	1.020	25.91	.9375-20 UNEF-2B
17	1.270	32.26	1.1875-18 UNEF-2B

LANYARD OPTIONS

 Nylon Rope	-55° to +100°C., black, very flexible, good abrasion resistance, good resistance to fuels, .120" 3mm diameter
 Polyurethane Coated Wire Rope	Black polyurethane over stainless steel rope, very flexible, excellent abrasion resistance, excellent resistance to fuels, .080" 2mm diameter
 Teflon® Jacketed Wire Rope	Translucent FEP jacket over stainless steel, -55° to +200°C., fair flexibility, good abrasion resistance, .100" diameter
 Sash Chain	Stainless steel, #8 chain, .240" 6mm diameter