

2M803 1/4 Turn Bayonet Coupling

Introduction and Specifications

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Amphenol's 2M Micro38999 Connector Series... The New Aerospace Standard

Averaging less than half the size and weight of their 38999 ancestors, Amphenol's 2M Micro38999 series are an easy and inexpensive way to take weight out of your system. 2M meet or exceed most environmental and performance requirements listed in MIL-DTL-38999, so modernizing your equipment doesn't mean sacrificing ruggedness. With almost 2,000,000 configurations in every termination style and a full complement of accessories available right out of the catalog, customization has never been easier. Smarter, faster and smaller: Amphenol's 2M... the only connector you'll ever need.

2M803 Features

- Bayonet Coupling
- Quickest turn-mating of the 2M series
- 1,000 mating cycles
- Lightest of the 2M series



Why 2M803?

2M803 connectors are very light; and their fast, sure-mate bayonet coupling make them the perfect choice for light duty applications that require frequent disconnect. Their small size and easy decoupling also make them the connector of choice for customers who have hard-to-reach panels. Unlike their other 2M counterparts, 2M803 connectors are not rated for immersion, and are recommended for general purpose connections that will not be exposed to the elements for very long.

2M803 VS 38999

SPECIFICATION	2M803	MIL-DTL-38999 SERIES II
Signal Count	1 to 55	1 to 187
Insulation Resistance	5,000 megaohms min	5,000 megaohms min
Operating Temperature	-65°C to +150°C	-65°C to +175°C
Shock	300 G ± 15	300 G ± 15
Vibration	"37.0 G Random 30.0 G Sine"	N/A
Shielding Effectiveness	"40 dB min. from 100 MHz to 1000 MHz"	"45 dB min. from 100 MHz to 1000 MHz"
Durability	2,000 mating cycles min.	500 mating cycles
Shell to Shell Conductivity	100 mV drop max	200 mV drop max
Contacts	Per AS39029	Per AS39029

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









2M803 1/4 Turn Bayonet Coupling

Ordering Guide for 2M803 Crimp Receptacles & Plugs



1.	2.	3.	4.	5.	6.
SERIES	SHELL STYLE	SERVICE CLASS	SHELL SIZE-INSERT AGGMT	CONTACTS	KEYING
2M803-00X	-06	NF	6-7	P	N

1. SERIES			2. SHELL STYLE		3. SERVICE CLASS			
Type	PartPCB	Description	Part #	Description	Material	Part #	Description	RoHS
CRIMP	PLUGS		PLUGS		ALUMINUM	C	Anodized (Non-conductive)	
	2M803-001	Plug with Integral Backshell	-06	Anti-Decoupling		M	Electroless Nickel	
	2M803-002	Plug with Accessory Threads				NF	Olive Drab Cadmium	
	RECEPTACLE		RECEPTACLES			MT	Durmalon (Ni PTFE)	
	2M803-003	Receptacle with Integral Backshell	-07	Jam Nut*		ZN	Olive Drab Zinc Nickel	
	2M803-004	Receptacle with Accessory Threads	-01	In-Line		ZNU	Black Zinc Nickel	
			-02	Flange Mount				
PCB/SOLDER RECEPTACLES			PCB/SOLDER RECEPTACLES			STAINLESS STEEL	Z1	Passivated
PCB/ SOLDER	2M803-005	Receptacle for Solder Cup or PCB Termination, with Standard Epoxy Potting	-02	Flange Mount	ZM		Electroless Nickel	
	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 1x10 ⁻⁴ cc/sec. pressure differential from -65°C to 150°C.	-07	Jam Nut*				
*add "-501" as a suffix to the Jam Nut Part number to include a Hex Nut instead of a Spanner Nut.								

2M803

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4. SHELL SIZE-INSERT ARRANGEMENT

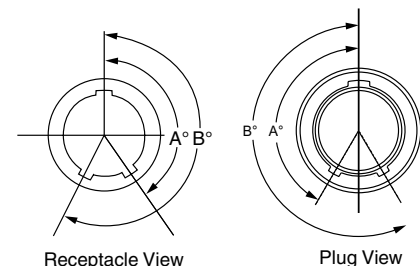
See Table on pages 7-20

5. CONTACTS

Style	Part #	Description
CRIMP	P	Pin
	S	Socket
	A	Pin-Less Contacts
	B	Socket-Less Contacts
PCB/SOLDER RECEPTACLES		
PCB/ SOLDER	P	Pin-PCB
	S	Socket-PCB
	E	Pin-Solder Cup
	F	Socket-Solder Cup

6. KEYING

Part #	A°	B°
N	150°	210°
X	75°	210°
Y	95°	230°
Z	140°	275°



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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