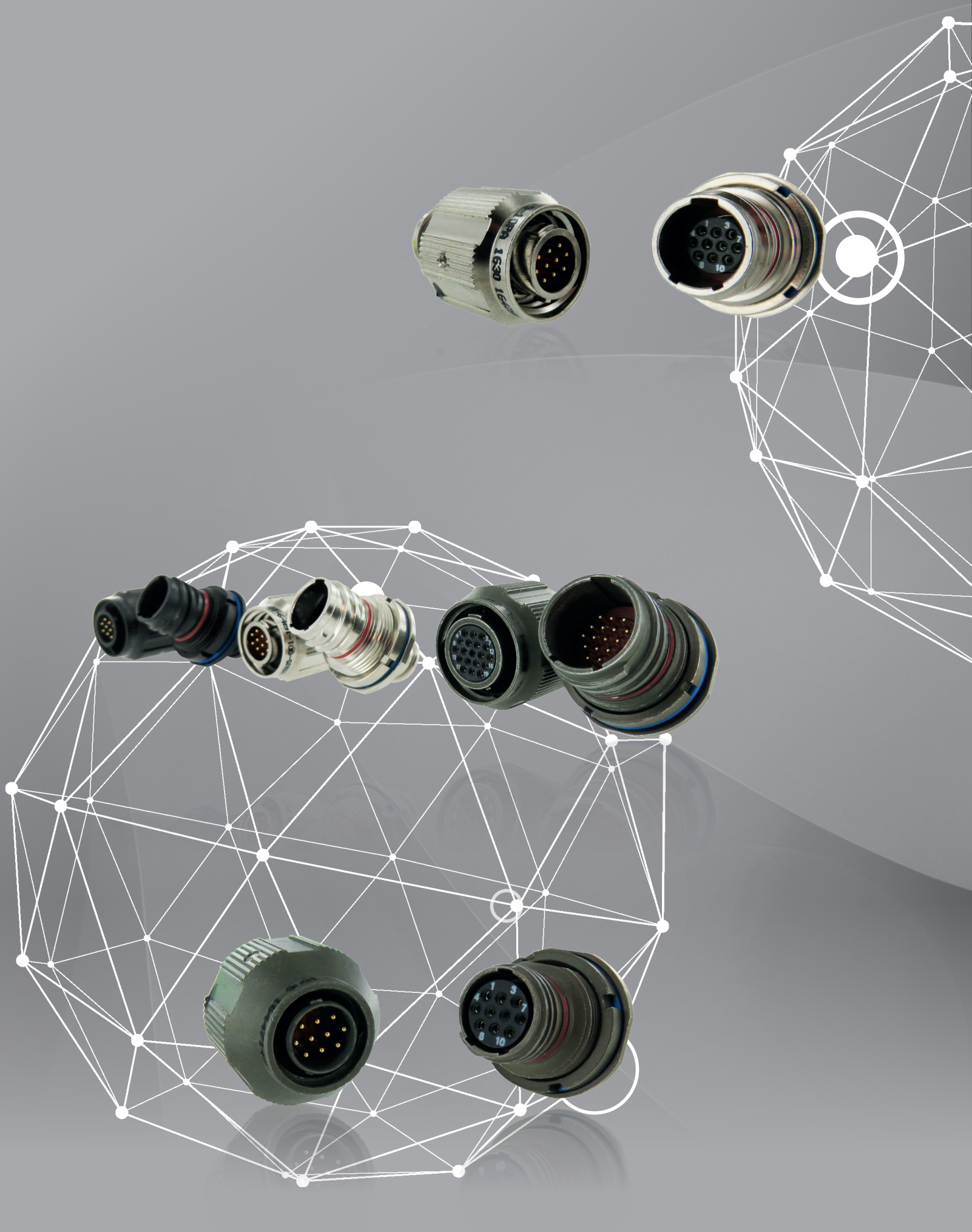


## 2M<sup>Micro</sup> Miniature

**Mil/Aero Connectors Series for Europe**  
*A selection of references with huge service*





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## ABOUT AMPHENOL SOCAPEX



### Proven excellence in interconnect solutions

Since 1947, Amphenol Socapex has prescribed, designed and manufactured reliable and innovative interconnection solutions for harsh environments, specializing in standard and customized electrical and fiber optic connectors, contacts, accessories and cabling solutions.

Located in the Mont Blanc region of France and Pune in India, Amphenol Socapex has a presence in over 100 countries around the world.

Amphenol Socapex is part of the international Amphenol Corporation.



**600+** employees



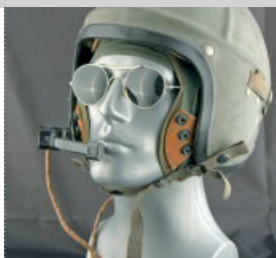
Net Sales 2017: **65.3 M€**  
64% Export - 36% France



Two facilities :  
**Thyez** (France), **Pune** (India)

### Our history

**1947**



- Socapex creation in Suresnes, France
- 1<sup>st</sup> radio connector

**1956-57**



- Manufacturing unit in Cluses (74), France
- Thomson-CSF becomes primary shareholder

**Early 1960's**



- 1st board level connectors: HE8
- 1st "licence Bendix" manufactured connectors
- SL Series launch

**1973**



- New factory 13 000 m<sup>2</sup> in Thyez (74) France with 250 people

**1975**



- Production of 38999 connectors

### Today and tomorrow ...



#### New technologies:

Advanced Materials (composite)

Miniaturization

Power

High-speed signals

Fiber optics

ROHS solutions

Rugged Ethernet



## INTERNATIONAL EXPERTISE



### Our expertise has no boundaries

#### Integrated Production in France & India

- 11 000 m<sup>2</sup> manufacturing capacity on 2 sites
- Design centers in France and India
- State-of-the-art manufacturing technology



### Our markets



#### Military

Communication Systems - Radios -  
C4ISR / Ground vehicles - Vetronics /  
Marine / Missiles



#### Aviation

Commercial & military / Avionics /  
Engines / Landing gear / Actuators



#### Industrial

Oil & Gas / Railways / Stage lighting

**1986**

**Amphenol**  
Socapex

- Amphenol becomes primary shareholder

**1995-96**



- Expanded Beam connector CTOS launch
- Headquarters transferred to Thyez

**2004**



- RJ Field launch, "Award Electronica"

**2005**



- Opening of manufacturing site in Pune, India

**2010's**



- LuxBeam™ and HDAS launch

### Today and tomorrow ...



#### Sustainable development:

Recycling  
Waste Management

Respect for nature and the environment

Optimization of natural resources

Goodwill

## PRODUCING FASTER, SMALLER, STRONGER CONNECTORS...



### Technologies & innovation

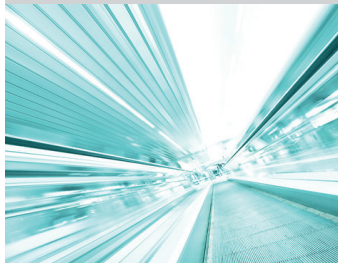
#### Technological Center



**Engineering Laboratory for product testing and qualification, product expertise and metrology**

- Mechanical and electrical skills
- RF and fiber optics expertise

#### High-Speed Expertise



**Strong expertise in high-speed signals**

- 3D EM simulation software & EM models
- Time Domain and frequency domain (VNA 20GHz, TDR and eye diagram)

#### Materials Expertise



**Focus on materials expertise and manufacturing techniques to produce faster, smaller and stronger products**

- 3D CAD mechanical software, simulation & analysis
- Disruptive metal alloys, additive manufacturing

#### Eco-responsibility



**Sustainable environment approach, with pro-active management of regulations (REACH / RoHS / Conflict minerals...)**

- New materials development, plating, and suitable processes
- Recycling and rational resources consumption

### Our workshops

Our workshops located in France & India provide consistent quality adapted to your volume requirements.

**Molding** : Solid expertise in thermoplastic elastomer and thermoset molding

**Machining** : Manufacturing of cylindrical shells from 10 to 90 mm in diameter and rectangular shells

**Screw Machining** : Cylindrical production parts up to 10 mm in diameter

**Plating** : Plating with cadmium, nickel, electroless nickel, silver, black zinc nickel, gold

**Assembly** : Sub-assembly, harnessing, cabling, bonding and marking for small & large volumes

### Our certifications



### Our memberships



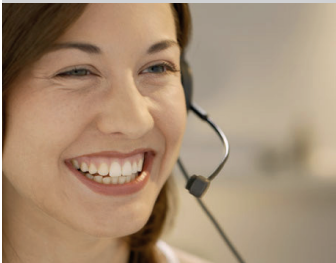


## DELIVERING GREAT CUSTOMER EXPERIENCE

► We have a strong reputation for helping customers solve their toughest challenges. This approach of serving your needs is ingrained in our company – from our sales team to our product development engineers.

### A partner you can trust

#### Customer Proximity



#### Design Expertise



#### Quality Commitment







#### On Time Delivery Performance



### Buy our solutions

You can access our solutions through our global network of sales offices or through our distributors.

#### Field Sales Team :

-  12 in France
-  15 in Europe
-  100+ in North America and rest of the world.
-  5 Business Development Managers supporting local sales force Europe, North America and the rest of the world

#### Technical Support & Multilingual Customer Service :

-  14 people

#### Worldwide Distribution Network :

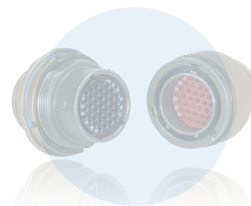
Including qualified distributors (QPL approved) for assembling : MIL-DTL-38999, PT/451/VG95328 & Fiber Optics connectors





# COMPLETE 2M SERIES BY AMPHENOL

## Selection table



SERIES	2M805	2M804	2M803	2M801
Type	Tri-Start ACME Thread	Push-Pull	Bayonet	Dual-Start ACME Thread
Description	"Anti-Decoupling" ratchet mechanism and ground spring for military airframes and avionics boxes. Fast mating	Breakaway connector for headsets and tactical equipment. Gold-plated spring for long mating life and superior EMI shielding.	Quick-mating, light duty, general purpose. Not rated for immersion, 50 milliohms shell-to-shell resistance.	More rugged keys and threads. Faster mating.
Contacts	1 to 130	1 to 85	1 to 55	1 to 130
Coupling	Tri-Start Thread	Push, Pull Quick-Disconnect	1/4 turn lock Bayonet	Threaded Coupling with 1 1/2 Turns to Full Mate
Water immersion, mated	MIL-STD-810 Method 512.1 Meter for 1 Hour	MIL-STD-810 Method 512.1 Meter for 1 Hour	Splashproof	MIL-STD-810 Method 512.1 Meter for 1 Hour
EMI Shielding	Excellent	Excellent	Fair	Very Good
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	500 Cycles	2000 Cycles	1000 Cycles Aluminum 2000 Cycles Stainless Steel	2000 Cycles (-16 Plugs) 500 Cycles (-26 Plugs)
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

## 2M TOP RUNNERS FOR EUROPE BY AMPHENOL SOCAPEX

### 2M Micro Miniature connectors Series for Europe

By Amphenol, the 2M connector series has been, since years, a flagship product with huge attends from our customers, especially for new design projects. First developed by our sister company, Amphenol Aerospace Operation, popularized all around the world, Amphenol Socapex is now taking over the charge of this product range for the European market.

The 2M connector series is very well adapted for new design which require smaller, and lighter connectors with less than half of size and weight than usual military connectors. Developed specially for the needs of the military and aviation markets, the 2M connector is ideally suited to applications such as armored vehicles, data acquisition equipment, aeroplanes, helicopters, avionic calculators, missiles and drones where electrical performance, miniaturization and weight reduction are essential.

Amphenol Socapex's main goal is the satisfaction of our clients providing the **same services than the standard MIL-DTL-38999 series** from Amphenol in terms of price and lead time. In this sense, we established the **selection of more than 600 "Top Runner"** for our customers in Europe, including **805 and 801 series** corresponding to the Tri-start and Dual-start series, with **9 different arrangements** and **3 platings**. These configurations are the most common on the market including plugs, jam nut and square flange receptacles, both with integrated backshell or also receptacles for soldering version on PCB. Obviously all corresponding accessories are also available as caps, shrink boots or tools.

New design project ?



Need of MINIATURIZATION and WEIGHT SAVING ?




Need of GOOD PRICE, PERFECT SERVICE and FAST DELIVERY ?

Amphenol SOCAPEX


# 2M

## Micro Miniature Connectors

A selection\* of references with high service










**2M801**  
Dual-start




**2M805**  
Tri-start

**6 SHELL SIZES WITH 9 ARRANGEMENTS**


						
<b>2M801</b>	6-1	6-7	6-23	7-10	8-13	
<b>2M805</b>	8-1	8-7	8-23	9-10	10-13	




**2M801**  
9-19






**2M805**  
11-19



**2M801**  
10-26



**2M805**  
13-37

CONTACT LEGEND:  16  20HD  23

**3 PLATING**

- Olive Drab Cadmium
- Black Zinc Nickel
- Electroless Nickel

**3 CONTACTS SIZES**

- #23
- #20HD
- #16

**SHELLS CONFIGURATIONS**

- Plugs with Integrated Backshells
- Jam Nut & Square Flange receptacles with Integrated Backshells
- Stand Off receptacles

**\*OVER 600 PART NUMBERS**

# GENERAL CHARACTERISTICS

## Markets and applications



### Military vehicles

Vetronics  
Video  
Battlefield  
Communication systems  
Threat detection systems



### Commercial Avionics & Airframe

IFE in Flight Entertainment  
Cockpit  
None compressed high resolution video



### Military Avionics & Airframe

Radars  
Display unit  
Flight control system  
Video



### C4ISR

Threat detection system  
Soldier wearable equipment  
Rugged computer & digital radio  
Satellite reception unit



### Missiles & UAVS

Air missiles and UAVS  
Ground control station & launchers  
Radars  
Video



### Navy

Threat detection systems  
Radars  
Network infrastructure



### Industrial

Rail mass transit  
Wifi connexion





# GENERAL CHARACTERISTICS

## Description



- Derived from MIL-DTL Series III
- 2M801 corresponding to Dual-start thread
- 2M805 corresponding to Tri-start thread - EN & QPL standards in progress
- Dedicated to harsh environment applications
- Perfectly suitable for new design project
- Integrated backshell
- 9 arrangements
- 6 sizes
- 3 platings: Olive drab cadmium, Nickel and Black zinc nickel

## Main features

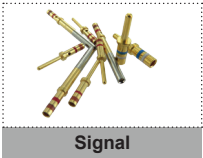
### Shell materials and platings:

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
Shell finish	<ul style="list-style-type: none"><li>- Electroless Nickel ✓</li><li>- Olive Drab Cadmium</li><li>- Black Zinc Nickel ✓</li></ul>

✓ : RoHS compliant

### Contacts:

- Standard contacts plated with a minimum of 1.27µm gold
- Size 16, 20 HD and 23



All dimensions are given for information only and are in mm

# CONNECTOR WEIGHT

## 2M805 Tri-start thread coupling

Insert Arrangement	Plug (g)	Jam nut Recept. Crimp (g)	Jam nut Recept. PCB (g)	Square Flange Recept. Crimp (g)	Square Flange Recept. PCB (g)
8-1P	7,5	5,8	5,7	5,8	4,6
8-1S	7,9	6,3	6,2	6,3	5,1
8-7P	7,3	5,6	5,5	5,6	4,4
8-7S	7,7	6,1	5,9	6,1	4,8
8-23P	/	/	/	/	/
8-23S	/	/	/	/	/
9-10P	10,7	8,8	8,8	6,6	7,5
9-10S	11,6	9,7	9,7	7,5	8,4
10-13P	12,7	9,6	9,7	8,3	8,7
10-13S	13,4	10,3	10,5	9	9,5
11-19P	14,3	11	12	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	12,7	13,6	10,9	11,9
12-26P	15,8	12,1	14,5	10,5	11,3
12-26S	17,4	13,6	16,1	12	12,9
15-37P	20,1	19,7	21,2	16,5	18,9
15-37S	23	22,6	24,1	19,4	21,8

## 2M801 Dual-start thread coupling

Insert Arrg.	Plug (g)	Jam Nut Recept. Crimp (g)	Jam Nut Recept. PCB (g)	Sq. Flange Recept. Crimp (g)	Sq. Flange Recept. PCB (g)
6-1P	5,6	4,3	4,6	2,7	2,9
6-1S	5,9	4,6	4,9	3	3,2
6-7P	5,4	4,1	4,6	2,9	3,4
6-7S	5,6	4,4	4,7	3,2	3,5
6-23P	/	/	/	/	/
6-23S	/	/	/	/	/
7-10P	7,6	6,3	7,7	4,3	5
7-10S	8	6,7	7	4,7	5,2
8-13P	8,3	7,1	9,4	5	6,2
8-13S	8,9	7,6	8,1	5,6	6,5
9-19P	10,1	7,9	9,2	5,8	7,1
9-19S	10,9	8,7	9,7	6,6	7,6
9-200P	10,4	9,2	10,2	7,1	8,1
9-200S	11,4	10,2	11,2	8,1	9,1
10-26P	14,2	11	11,9	12,5	8,7
10-26S	15,3	12,1	12,5	16,7	9,2
13-37P	18,4	16,7	16,7	16,7	14,6
13-37S	19,9	17,6	17,6	17,6	15,5

All dimensions are given for information only and are in mm

# TECHNICAL CHARACTERISTICS

## Mechanical characteristics

Durability	500 mating cycles
Shock	300 G ± 15
Vibration	43,9 G Random 60,0 G

## Working temperature

Shell material	Shell finish	Salt spray exposure per EIA364,26 (H)	Operating temperature (°C)	
			Min	Max
Aluminum	Electroless Nickel	48	- 65	+ 150
	O.D. cadmium	500		
	Black Zinc Nickel			

## Environmental

Characteristics	Requirement	Procedure
Humidity	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.
Altitude immersion	No evidence of moisture on connector interface or contacts. Connector shall meet dielectric withstanding voltage.	EIA-364-03
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
Water immersion, mated	No evidence of water penetration into mated connectors. ≥100W insulation resistance.	MIL-STD-810F Method 512.4 1 meter immersion 1 hour
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.
Sand and dust	Mated connectors shall withstand the effects of blowing sand and dust	MIL-STD-810F, Method 510.4

All dimensions are given for information only and are in mm



## ELECTRICAL CHARACTERISTICS

	Contact size	#23	#20HD	#16
Maximum Current Rating	Crimp contacts (A)	5	7,5	13
Contact resistance	Test current	73mV drop at 5A	55 mV drop at 7,5A	49 mV drop at 13A
Insultation resistance	5 000 megohms minimum			

## Salt spray exposure

		2M801 Series	2M805 Series
Shell-to-shell conductivity	Initial	2,5 mV	2 mV
	After 48 hours salt spray	2,5 mV	2 mV
Shielding effectiveness	Low frequency	100 MHz	90 dB Min
		200 MHz	88 dB Min
		300 MHz	88 dB Min
		400 MHz	87 dB Min
		800 MHz	85 dB Min
	High frequency	1 GHz	85 dB Min
		3 GHz	69 dB Min
		5 GHz	66 dB Min
		19 GHz	65 dB Min

## Service rating

Contact size	Dielectric withstanding voltage (Vrms)		
	At sea level		40 000 feet 12 000 meters
	Mated	Unmated	Mated
#23	500	500	100
#20HD	750	750	150
#16	1 800	1 800	1 000

All dimensions are given for information only and are in mm

## SELECTION OF INSERT ARRANGEMENTS

Front face of male insert (Only the major keyway is illustrated)

Contact Size	16	20HD	23
Caption			

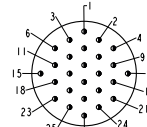
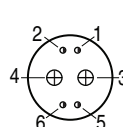
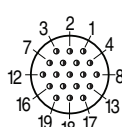
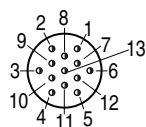
<b>2M801</b>
<b>2M805</b>
Nbr of contacts
Contacts sizes
DWV Voltage (VAC)
Current Rating (Amps)

<b>6-1</b>
<b>8-1</b>
1
#16
1800
13

<b>6-7</b>
<b>8-7</b>
7
#23
500
5

<b>6-23</b>
<b>8-23</b>
3
#20HD
750
7.5

<b>7-10</b>
<b>9-10</b>
10
#23
500
5



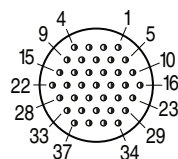
<b>2M801</b>
<b>2M805</b>
Nbr of contacts
Contacts sizes
DWV Voltage (VAC)
Current Rating (Amps)

<b>8-13</b>
<b>10-13</b>
13
#23
500
5

<b>9-19</b>
<b>11-19</b>
19
#23
500
5

<b>9-200</b>
<b>11-200</b>
2
#16
1800
5
4
#23
500
13

<b>10-26</b>
<b>12-26</b>
26
#23
500
5



<b>2M801</b>
<b>2M805</b>
Nbr of contacts
Contacts sizes
DWV Voltage (VAC)
Current Rating (Amps)

<b>13-37</b>
<b>15-37</b>
37
#23
500
5

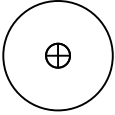
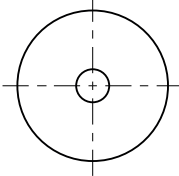
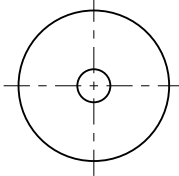
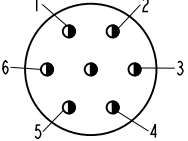
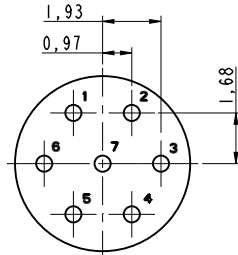
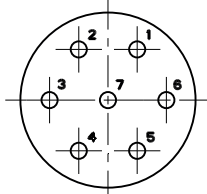
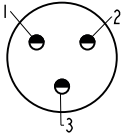
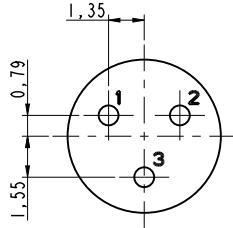
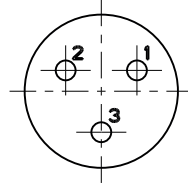
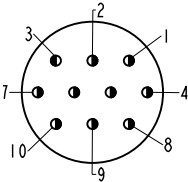
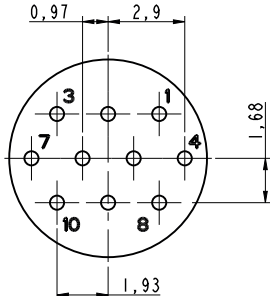
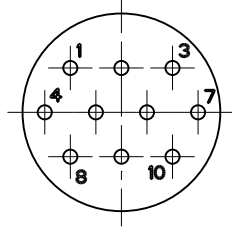
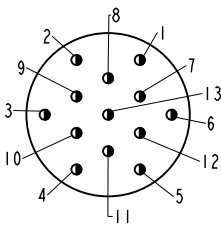
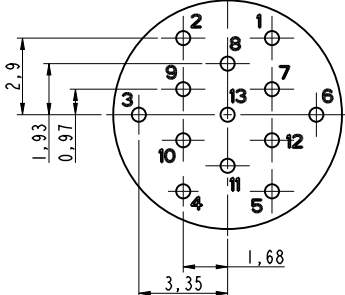
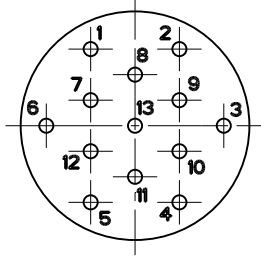
Inserts Arrangements		Contact Quantity			Current Rating (A)	Dielectric withstanding voltage (V)	Wire size AWG
2M801	2M805	#23	#20HD	#16			
<b>6-1</b>	<b>8-1</b>			1	13	1800	#16 - #20
<b>6-7</b>	<b>8-7</b>	7			5	500	#22 - #28
<b>6-23</b>	<b>8-23</b>		3		7,5	750	#20 - #24
<b>7-10</b>	<b>9-10</b>	10			5	500	#22 - #28
<b>8-13</b>	<b>10-13</b>	13			5	500	#22 - #28
<b>9-19</b>	<b>11-19</b>	19			5	500	#22 - #28
<b>9-200</b>	<b>11-200</b>	4		2	5 - 13	-	-
<b>10-26</b>	<b>12-26</b>	26			5	500	#22 - #28
<b>13-37</b>	<b>15-37</b>	37			5	500	#22 - #28

All dimensions are given for information only and are in mm

Part of the high service program

## SELECTION OF INSERT ARRANGEMENTS

## Straight PCB Footprints

INSERT ARRANGEMENT	PIN CONNECTOR	SOCKET CONNECTOR
 <p>6-1, 8-1 (1) #16 Contacts</p>		
 <p>6-7, 8-7 (7) #23 Contacts 0,56 Max. Dia. Tail</p>		
 <p>6-23, 8-23 (3) #20HD Contacts 0,58 Max. Dia. Tail</p>		
 <p>7-10, 9-10 10 #23 Contacts 0,56 Max. Dia. Tail</p>		
 <p>8-13, 10-13 (13) #23 Contacts 0,56 Max. Dia. Tail</p>		

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

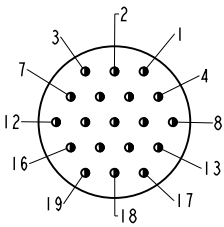
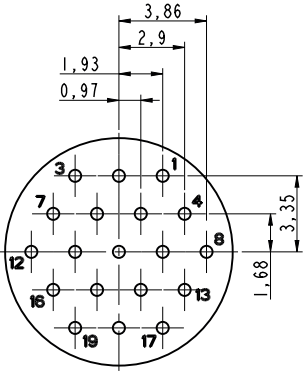
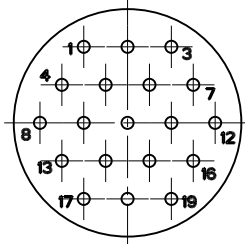
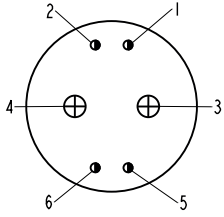
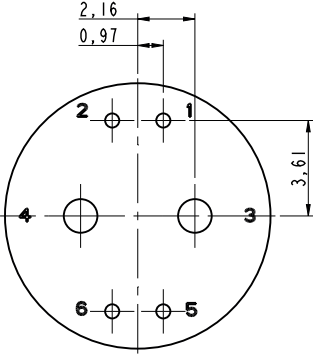
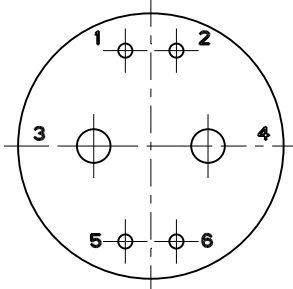
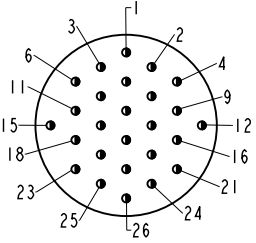
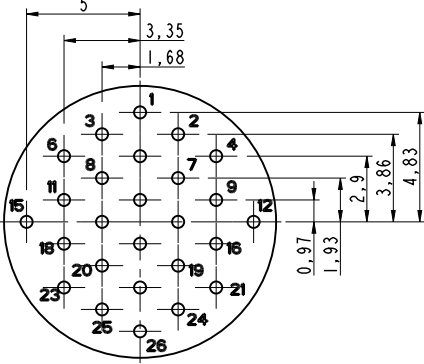
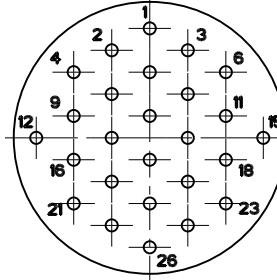
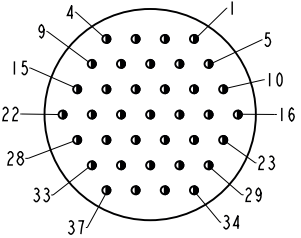
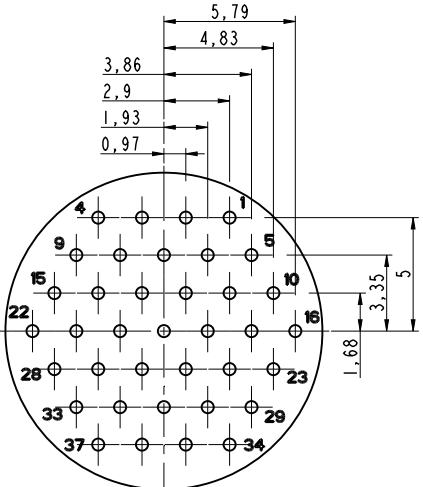
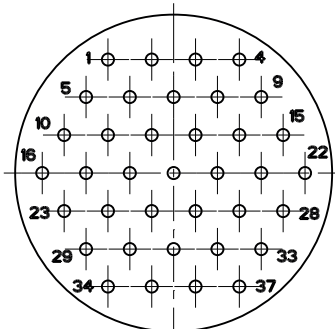
All dimensions are given for information only and are in mm

**Part of the high service program**



## SELECTION OF INSERT ARRANGEMENTS

## Straight PCB Footprints

INSERT ARRANGEMENT	PIN CONNECTOR	SOCKET CONNECTOR
 <p>9-19, 11-19 (19) #23 Contacts 0,56 Max. Dia. Tail</p>		
 <p>9-200, 11-200 (4) #23 Contacts (2) #16 Contacts</p>		
 <p>10-26, 12-26 (26) #23 Contacts 0,56 Max. Dia. Tail</p>		
 <p>13-37, 15-37 (37) #23 Contacts 0,56 Max. Dia. Tail</p>		

All dimensions are given for information only and are in mm

Part of the high service program



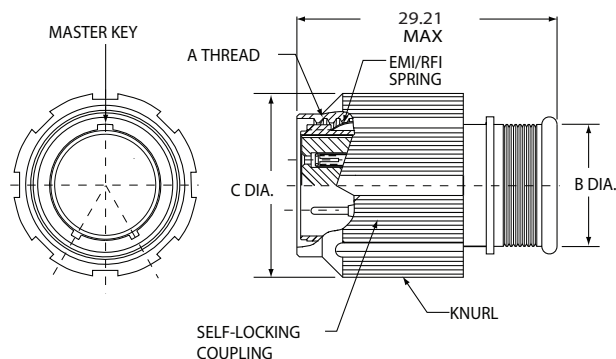
## SELECTION OF 2M805 TRI-START



## Overall dimensions

## Straight plug with integrated backshell:

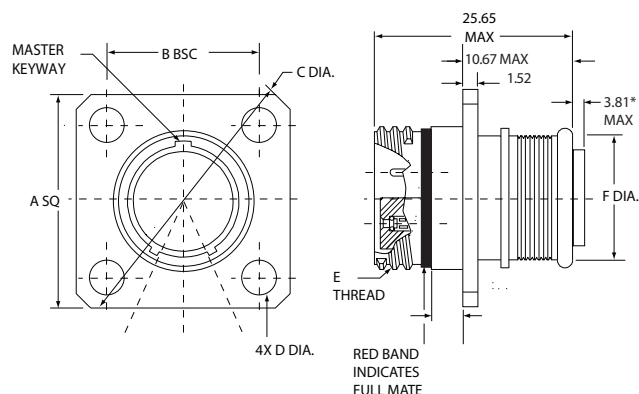
2M805-001-16



Shell Size	A Threads	B Dia. (mm)	C Dia. (mm)	D Threads Accessory
8	.5000-.1P-.3L-TS-2B	8,05	17,55	.3750-32 UNEF-2A
9	.5625-.1P-.3L-TS-2B	10,08	19,99	.4375-28 UNEF-2A
10	.6250-.1P-.3L-TS-2B	12,01	20,98	.5000-28 UNEF-2A
11	.6875-.1P-.3L-TS-2B	13,18	23,50	.5625-24 UNEF-2A
12	.7500-.1P-.3L-TS-2B	14,86	24,94	.6250-24 UNEF-2A
15	.9375-.1P-.3L-TS-2B	17,45	28,07	.7500-20 UNEF-2A

## Square Flange Receptacle with integrated backshell:

2M805-003-02



\* Grommet protrudes for power/combo arrangement

Shell Size	A Sq. (mm)	B BSC. (mm)	C Dia. (mm)	D Dia. ±.08 (mm)	E Threads	F Dia. (mm)	G Threads Accessory
8	21,67	16,76	29,29	2,31	.5000-.1P-.3L-TS-2A	8,05	.3750-32 UNEF-2A
9	23,27	18,36	31,32	2,31	.5625-.1P-.3L-TS-2A	10,08	.4375-28 UNEF-2A
10	24,84	19,94	33,86	2,31	.6250-.1P-.3L-TS-2A	12,01	.5000-28 UNEF-2A
11	26,47	21,54	35,89	2,31	.6875-.1P-.3L-TS-2A	13,18	.5625-24 UNEF-2A
12	27,99	23,09	38,18	2,31	.7500-.1P-.3L-TS-2A	14,86	.6250-24 UNEF-2A
15	32,79	26,87	44,53	3,18	.9375-.1P-.3L-TS-2A	17,45	.7500-20 UNEF-2A

All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch

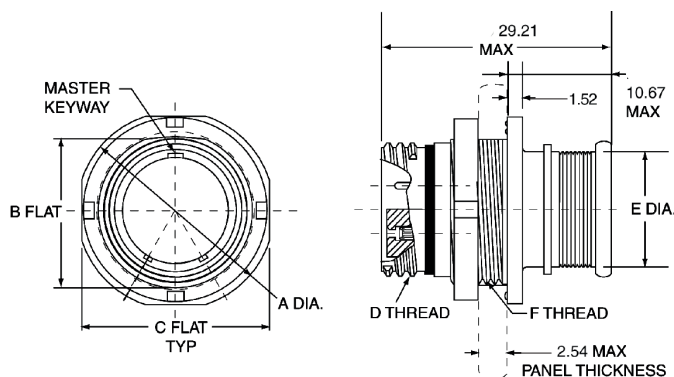
Part of the high service program

## SELECTION OF 2M805 TRI-START

## Overall dimensions

Jam Nut Receptacle with  
integrated backshell:

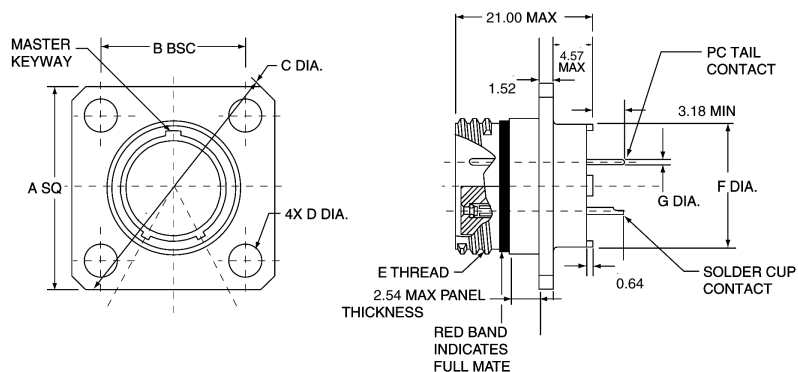
2M805-003-07



Shell Size	A Dia. (mm)	B Flat (mm)	C Flat (mm)	D Threads	E Dia. (mm)	F Threads	G Threads Accessory
8	19,30	13,59	18,54	.5000-.1P-.3L-TS-2A	8,05	.5625-28 UN-2A	.3750-32 UNEF-2A
9	22,35	16,79	21,59	.5625-.1P-.3L-TS-2A	10,08	.6875-28 UN-2A	.4375-28 UNEF-2A
10	22,35	16,79	21,59	.6250-.1P-.3L-TS-2A	12,01	.6875-28 UN-2A	.5000-28 UNEF-2A
11	24,26	18,31	23,50	.6875-.1P-.3L-TS-2A	13,18	.7500-28 UN-2A	.5625-24 UNEF-2A
12	27,05	19,91	26,39	.7500-.1P-.3L-TS-2A	14,86	.8125-28 UN-2A	.6250-24 UNEF-2A
15	30,56	24,64	29,79	.9375-.1P-.3L-TS-2A	17,45	1.0000-28 UN-2A	.7500-20 UNEF-2A

## Square Flange Receptacle PCB:

2M805-005-02



Shell Size	A Sq. (mm)	B BSC. (mm)	C Dia. (mm)	D Dia. (mm) ±.08	E Threads	F Dia. (mm)	G PC Tail Dia.
8	21,67	16,76	29,29	2,31	.5000-.1P-.3L-TS-2A	8,38	#23 .018/.022 0.46/0.56
9	23,27	18,36	31,32	2,31	.5625-.1P-.3L-TS-2A	10,97	#20/20HD .025/.027 0.64/0.69
10	24,84	19,94	33,86	2,31	.6250-.1P-.3L-TS-2A	12,52	#16 .060/.064 1.521/1.63
11	26,47	21,54	35,89	2,31	.6875-.1P-.3L-TS-2A	14,00	#12 .092/.096 2.34/2.44
12	27,99	23,09	38,18	2,31	.7500-.1P-.3L-TS-2A	15,78	
15	32,79	26,87	44,53	3,18	.9375-.1P-.3L-TS-2A	17,86	

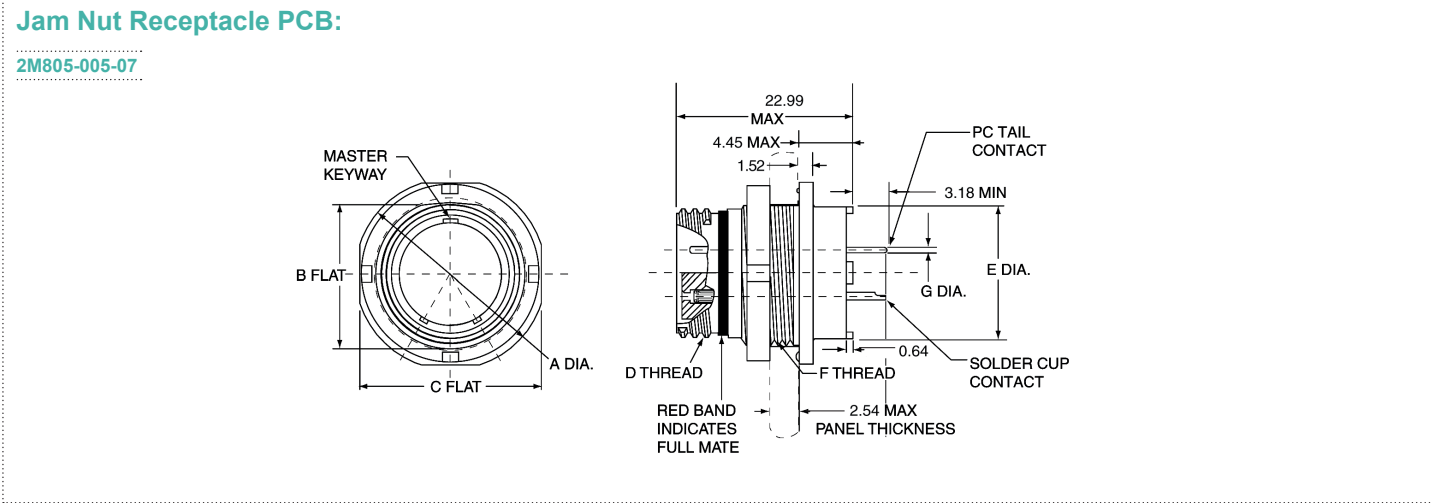
All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch

Part of the high service program



SELECTION OF 2M805 TRI-START

Overall dimensions



Shell Size	A Dia. (mm)	B Flat (mm)	C Flat (mm)	D Threads	E Dia. (mm)	F Threads	G PC Tail Dia.
8	19,30	13,59	18,54	.5000-.1P-.3L-TS-2A	8,38	.5625-28 UN-2A	
9	22,35	16,79	21,59	.5625-.1P-.3L-TS-2A	10,97	.6875-28 UN-2A	#23 .018/.022 0.46/0.56
10	22,35	16,79	21,59	.6250-.1P-.3L-TS-2A	12,52	.6875-28 UN-2A	#20/20HD .025/.027 0.64/0.69
11	24,26	18,31	23,50	.6875-.1P-.3L-TS-2A	14,00	.7500-28 UN-2A	#16 .060/.064 1.521/1.63
12	26,92	19,91	26,29	.7500-.1P-.3L-TS-2A	15,78	.8125-28 UN-2A	#12 .092/.096 2.34/2.44
15	30,56	24,64	29,79	.9375-.1P-.3L-TS-2A	17,86	1.0000-28 UN-2A	

All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch

Part of the high service program

SELECTION OF 2M805 TRI-START

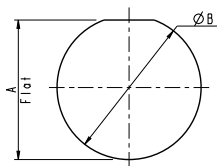
Panel drilling

Jam Nut Receptacle:

2M805-003-07

Jam Nut Receptacle PCB:

2M805-005-07



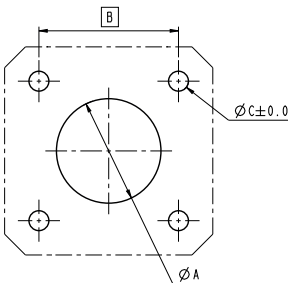
Shell Size	Panel Cutout	
	A Flat ± 0.05 (mm)	Ø B Dia ± 0.13 (mm)
8	13,79	14,53
9	16,99	17,73
10	16,99	17,73
11	18,51	19,30
12	20,17	20,88
15	24,84	25,65

Square Flange Receptacle:

2M805-003-02

Square Flange Receptacle PCB:

2M805-005-02



Shell Size	Panel Cutout		
	Ø A (mm)	B (mm)	Ø C (mm)
8	13,07	16,76	2,39
9	14,66	18,36	2,39
10	16,25	19,94	2,39
11	17,83	21,54	2,39
12	19,42	23,09	2,39
15	24,18	26,67	3,25

All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch  
Part of the high service program

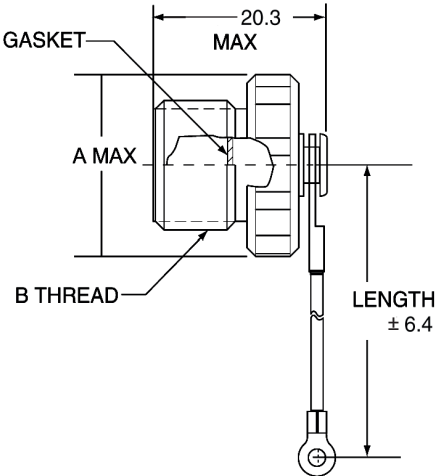
Due to technical modifications, all information provided is subject to change without prior notice  
Designed by Amphenol Socapex

SELECTION OF 2M805 TRI-START

Overall dimensions - Protective caps

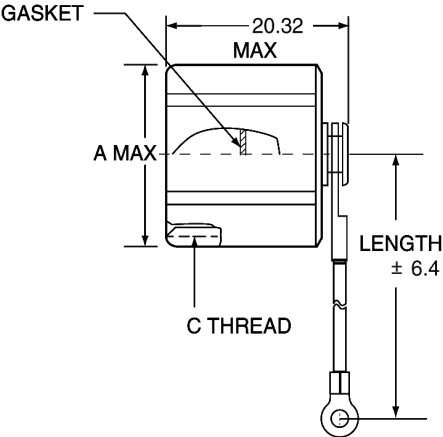
Protective caps for plug:

2M667-261



Protective caps for receptacle:

2M667-262



Shell Size	A Max. (mm)	B Thread	C Thread
8	16,66	.5000-.1P-.3L-TS-2A	.5000-.1P-.3L-TS-2B
9	18,24	.5625-.1P-.3L-TS-2A	.5625-.1P-.3L-TS-2B
10	19,84	.6250-.1P-.3L-TS-2A	.6250-.1P-.3L-TS-2B
11	21,44	.6875-.1P-.3L-TS-2A	.6875-.1P-.3L-TS-2B
12	23,01	.7500-.1P-.3L-TS-2A	.7500-.1P-.3L-TS-2B
15	27,79	.9375-.1P-.3L-TS-2A	.9375-.1P-.3L-TS-2B

Material & finishes	
Cover	Aluminum alloy or stainless steel
Gasket	Fluorosilicone rubber
Wire, hardware	Stainless steel, passivated

All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch  
Part of the high service program

Due to technical modifications, all information provided is subject to change without prior notice  
Designed by Amphenol Socapex





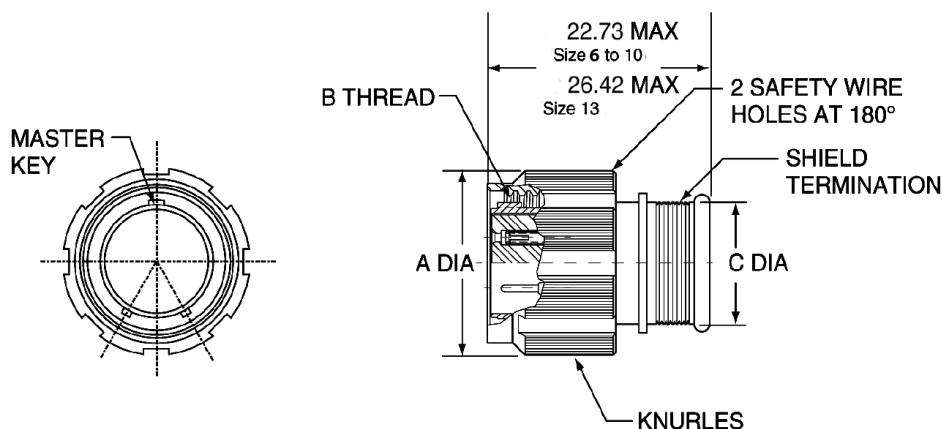
## SELECTION OF 2M801 DUAL-START



## Overall dimensions

## Straight Plug with integrated backshell:

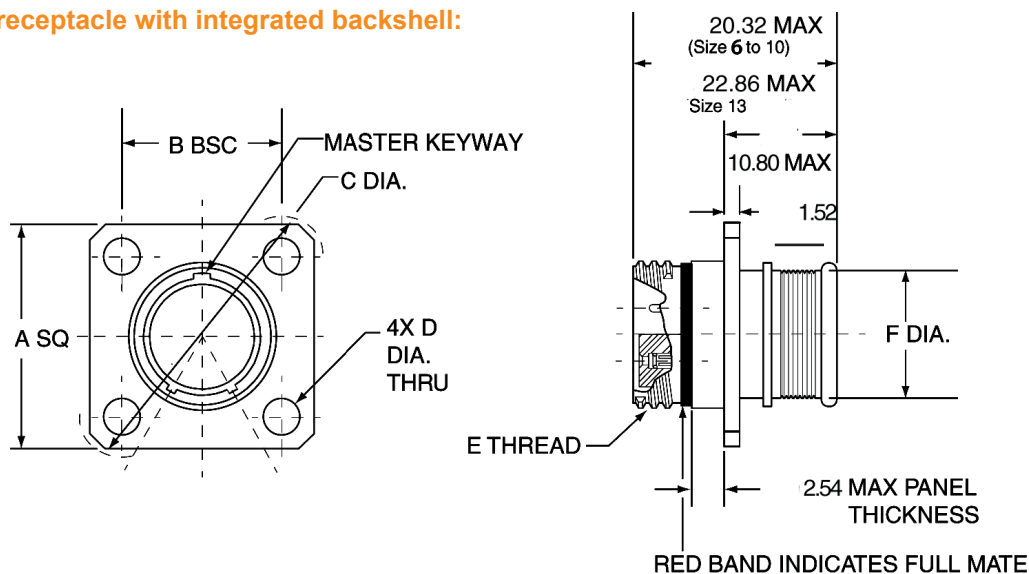
2M801-007-26



Shell Size	A Dia. (mm)	B Thread	C Dia. (mm)	D Thread UNEF-2A
6	18,03	.3750-.05P-.1L-2B	7,37	.3125-32
7	20,07	.4375-.05P-.1L-2B	9,91	.4375-28
8	21,84	.5000-.05P-.1L-2B	11,30	.5000-28
9	23,37	.5625-.05P-.1L-2B	12,70	.5625-24
10	25,02	.6250-.05P-.1L-2B	14,22	.6250-24
13	29,21	.8125-.1P-.2L-2B	16,51	.6875-24

## Square flange receptacle with integrated backshell:

2M801-009-02



Shell Size	A SQ (mm)	B BSC (mm)	C Dia. (mm)	D Dia. ± .08 (mm)	E Thread	F Dia. (mm)	G Thread UNEF-2A
6	14,99	10,74	19,05	2,36	.3750-.05P-.1L-2A	7,37	.3125-32
7	16,51	12,27	21,59	2,36	.4375-.05P-.1L-2A	9,91	.4375-28
8	18,08	13,84	23,88	2,36	.5000-.05P-.1L-2A	11,30	.5000-28
9	21,59	15,42	28,58	3,25	.5625-.05P-.1L-2A	12,70	.5625-24
10	22,61	17,02	30,23	3,25	.6250-.05P-.1L-2A	14,22	.6250-24
13	26,16	20,62	34,93	3,25	.8125-.1P-.2L-2A	16,51	.6875-24

All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch

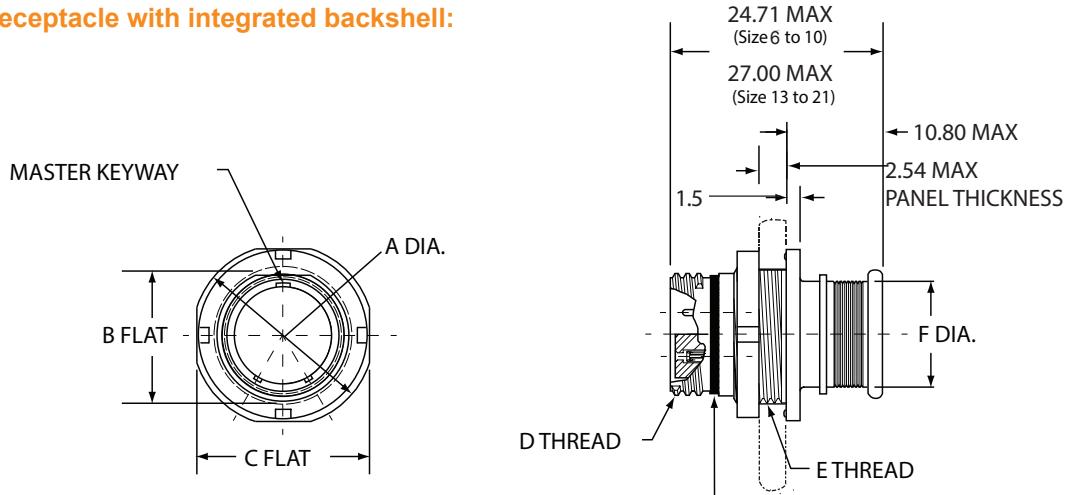
Part of the high service program

## SELECTION OF 2M801 DUAL-START

## Overall dimensions

## Jam Nut Receptacle with integrated backshell:

2M801-009-07

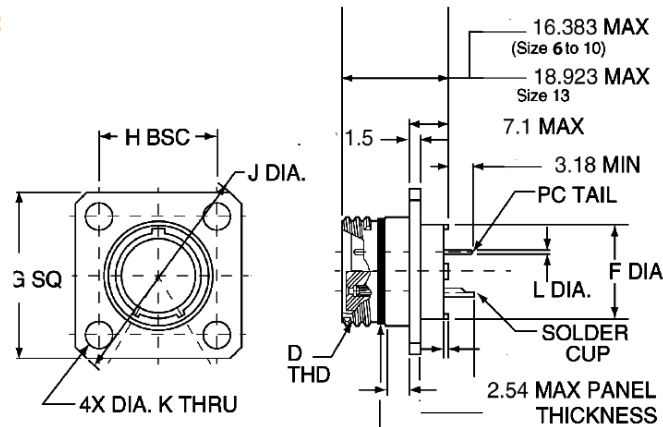


RED BAND INDICATES FULL MATE

Shell Size	A dia (mm)	B Flat (mm)	C Flat (mm)	D Thread	E Thread	F dia. (mm)	G Thread UNEF-2A
6	16,13	10,41	15,11	.3750-.05P-.1L-2A	.4375-28 UNEF-2A	7,37	.3125-32
7	19,18	13,61	18,36	.4375-.05P-.1L-2A	.5625-32 UN-2A	9,91	.4375-28
8	19,18	13,61	18,36	.5000-.05P-.1L-2A	.5625-32 UN-2A	11,30	.5000-28
9	21,08	15,14	20,07	.5625-.05P-.1L-2A	.6250-28 UN-2A	12,70	.5625-24
10	22,61	16,71	21,72	.6250-.05P-.1L-2A	.6875-28 UN-2A	14,22	.6250-24
13	27,38	21,46	26,52	.8125-.1P-.2L-2A	.8750-28 UN-2A	16,51	.6875-24

## Square Flange receptacle PCB:

2M801-011-02



RED BAND INDICATES FULL MATE

Shell Size	A Dia. (mm)	B Flat (mm)	C Flat (mm)	D Thread	E Thread	F Dia. (mm)	G Sq. (mm)	H BSC (mm)	J Dia. (mm)	K Dia. (mm)	L Dia. Tail Dia.
6	16,13	10,41	15,11	.3750-.05P-.1L-2A	.4375-28	8,38	14,99	10,74	19,05	2,36	#23
7	19,18	13,61	18,36	.4375-.05P-.1L-2A	.5625-32	10,97	16,51	12,27	21,59	2,36	0.46/0.56
8	19,18	13,61	18,36	.5000-.05P-.1L-2A	.5625-32	12,52	18,08	13,84	23,88	2,36	20HD
9	21,08	15,14	20,07	.5625-.05P-.1L-2A	.6250-28	14,00	21,56	15,42	28,58	3,25	0.64/0.69
10	22,61	16,71	21,72	.6250-.05P-.1L-2A	.6875-28	15,75	22,61	17,02	30,23	3,25	#16
13	27,38	21,46	26,52	.8125-.1P-.2L-2A	.8750-28	17,86	26,16	20,62	34,93	3,25	1.52/1.63

All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch

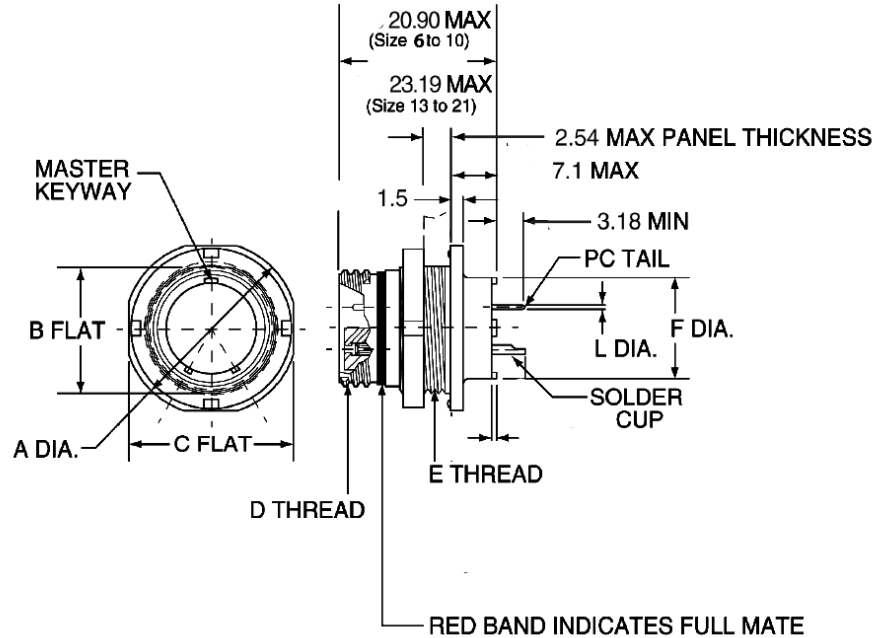
Part of the high service program

## SELECTION OF 2M801 DUAL-START

## Overall dimensions

## Jam Nut receptacle PCB:

2M801-011-07



Shell Size	A Dia. (mm)	B Flat (mm)	C Flat (mm)	D Thread	E Thread	F Dia. (mm)	G Sq. (mm)	H BSC (mm)	J Dia. (mm)	K Dia. (mm)	L Dia. Tail Dia.
6	16,13	10,41	15,11	.3750-.05P-.1L-2A	.4375-28	8,38	14,99	10,74	19,05	2,36	#23
7	19,18	13,61	18,36	.4375-.05P-.1L-2A	.5625-32	10,97	16,51	12,27	21,59	2,36	0.46/0.56
8	19,18	13,61	18,36	.5000-.05P-.1L-2A	.5625-32	12,52	18,08	13,84	23,88	2,36	20HD
9	21,08	15,14	20,07	.5625-.05P-.1L-2A	.6250-28	14,00	21,56	15,42	28,58	3,25	0.64/0.69
10	22,61	16,71	21,72	.6250-.05P-.1L-2A	.6875-28	15,75	22,61	17,02	30,23	3,25	#16
13	27,38	21,46	26,52	.8125-.1P-.2L-2A	.8750-28	17,86	26,16	20,62	34,93	3,25	1.52/1.63

All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch

Part of the high service program

# SELECTION OF 2M801 DUAL-START

Technical Characteristics

2M805

2M801

Accessories

How to order

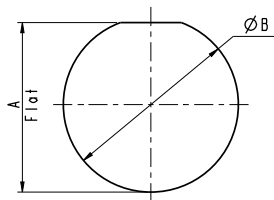
## Panel drilling

Jam Nut Receptacle:

2M801-009-07

Jam Nut Receptacle PCB:

2M801-011-07

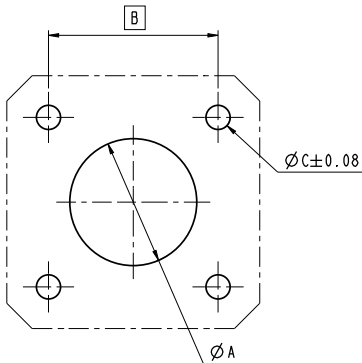


Square Flange Receptacle:

2M801-009-02

Square Flange Receptacle PCB:

2M801-011-02



Shell Size	Panel Cutout	
	A Flat ± 0.05 (mm)	Ø B Dia ± 0.05 (mm)
6	10,57	11,35
7	13,77	14,53
8	13,77	14,53
9	15,29	16,13
10	16,62	17,70
13	21,62	22,48

Shell Size	Panel Cutout		
	Ø A (mm)	B (mm)	Ø C (mm)
6	9,91	10,74	2,36
7	11,43	12,27	2,36
8	12,95	13,84	2,36
9	14,61	15,42	3,25
10	16,26	17,02	3,25
13	20,96	20,65	3,25

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Part of the high service program

Due to technical modifications, all information provided is subject to change without prior notice

Designed by Amphenol Socapex

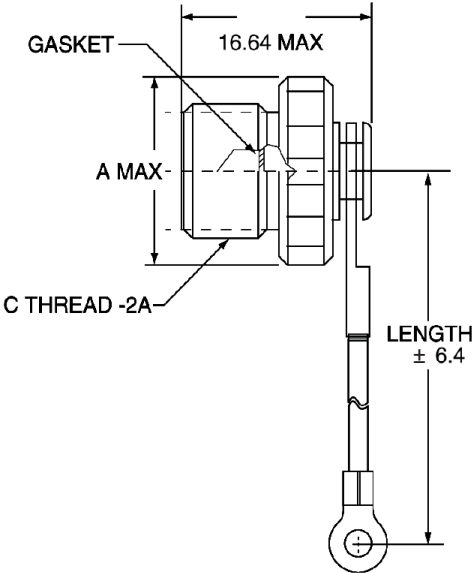


SELECTION OF 2M801 DUAL-START

Overall dimensions - Protective caps

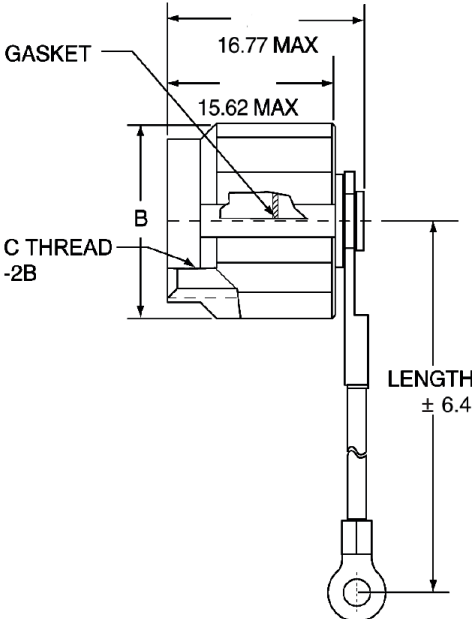
Protective caps for plug:

2M667-217



Protective caps for receptacle:

2M667-218



Shell Size	A Max. (mm)	B Max (mm)	C
6	13,28	15,57	.3750-.05P-1L
7	14,94	17,78	.4375-.05P-1L
8	16,46	19,25	.5000-.05-.1L
9	18,11	20,65	.5625-.05P-.1L
10	19,63	22,68	.6250-.05P-1L
13	24,46	27,00	.8125-.1P-.2L

Materials	
Cover	Aluminum alloy or stainless steel
Gasket for plug	Fluorosilicone rubber
Gasket for receptacle	Silicone rubber
Wire, hardware	Stainless steel, passivated

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Part of the high service program

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Designed by Amphenol Socapex

## 2M SERIES CONTACTS AND TOOLS

### 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
#16	Pin	13	#16-#20	M39029/58-364	Orange	Blue	Orange
	Socket		#16-#20	M39029/57-358	Orange	Green	Gray

\*Special order please consult Amphenol Socapex 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)
#16	M22520/1-01	M22520/1-04	M81969/14-03

\*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

Shell Size Series 2M801	Shell Size Series 2M805	Coupling Torque (N-m)		Jam Nut Tightening (N-m)		Backshell Tightening (N-m)	
		Min.	Max.	Min.	Max.	Min.	Max.
6	8	4,0	4,5	2,2	2,8	2,0	2,5
7	9	4,0	4,5	2,2	2,8	3,4	4,5
8	10	4,5	5,7	2,2	2,8	3,4	4,5
9	11	4,5	5,7	2,2	2,8	4,0	5,1
10	12	5,7	6,8	2,8	3,3	4,0	5,1
13	15	5,7	6,8	2,8	3,3	4,0	5,1

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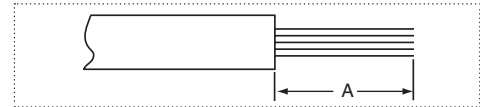
**Amphenol SOCAPEX**

## 2M SERIES ASSEMBLY INSTRUCTIONS

### Crimp Tensile Strength

1. 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.
2. See Table 1 for proper finished outside wire dimensions.
3. Twist strands together to form a firm bundle.
4. 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 (mm)
23	.292
20HD	4.77
16	4.77

Table 1

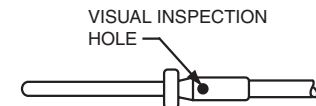
Contact Size	Wire Dimension (mm)**	
	Min.	Max.
16	1.651	2.769
20HD	1.016	1.956
23	0.635	1.219

\*\* 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.

1. Insert stripped wire into contact crimp pot. Wire must be visible through inspection hole.
2. 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.
3. Release crimped contact and wire from tool. Be certain the wire is visible through inspection hole in contact.



### Watch our videos

#### Twinax Contacts Termination Procedure



<http://opn.to/a/keXEG>

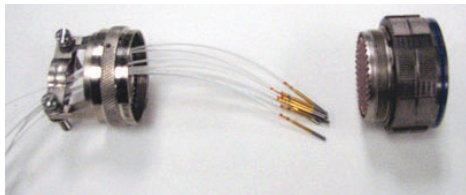
Scan  
& discover !



**Examples of M22520 Series Crimping Tools:**  
Shown top: tool used for small size 23 contacts.  
Shown bottom: tool used for size 20, 16 contacts and has a positioner that can be dialed for each contact size.

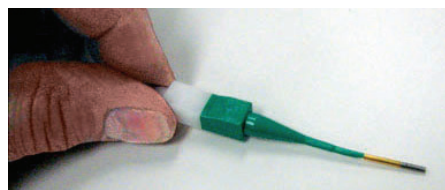
### Contact Insertion

1. First remove hardware from the plug and receptacle and slide the hardware over wires in proper sequence.



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

2. 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.



Plastic tool with contact in proper position.



Metal tool with contact.

3. 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.



Continued on next page.

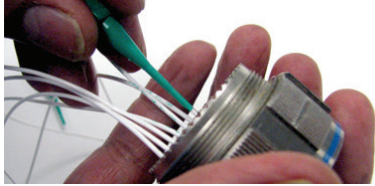
All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch

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## 2M SERIES ASSEMBLY INSTRUCTIONS

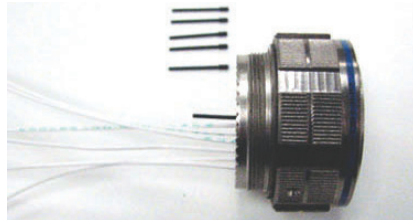
### Contact insertion, cont.

4. 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.



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

5. After all contacts are inserted, fill any empty cavities with wire sealing plugs.

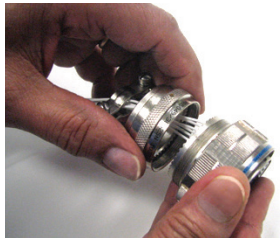


6. Reassemble plug or receptacle hardware slide forward and tighten using connector pliers. Connector holding tools are recommended while tightening back accessories. When using strain relief, center wires at bar clamp. Slide clamp grommet into position and tighten clamp bar screws. When tightening screws, 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.



### Contact removal

1. Remove hardware from plug or receptacle and slide hardware back along wire bundle.



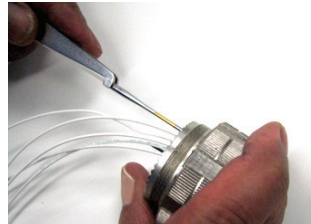
2. Use proper plastic or metal removal tool for corresponding contact. Slide correct size tool over wire insulation.



Use white end of plastic tool for removal of contacts.

3. 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.

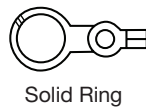
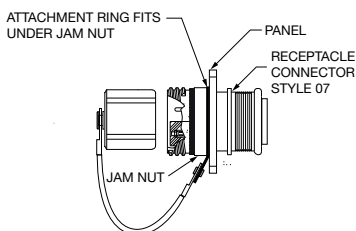
Grip wire and simultaneously remove tool and contact. (On occasion, it may be necessary to remove tool, rotate 90° and reinsert.)



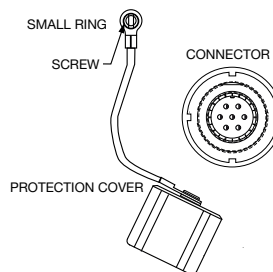
Removal of contacts with metal tool.

### Cap attachment

#### CAP ATTACHMENT TO JAM NUT RECEPTACLE

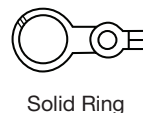
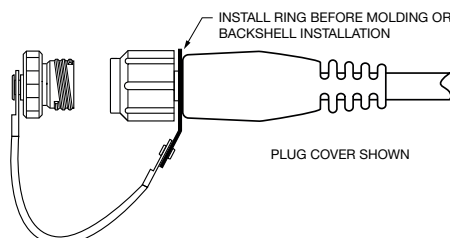


#### CAP ATTACHMENT TO PANEL



Small Ring for Attaching Receptacle Covers to a Panel with a Screw

#### CAP ATTACHMENT TO CABLE ASSEMBLY



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## 2M SERIES CONTACTS AND TOOLS

### 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.

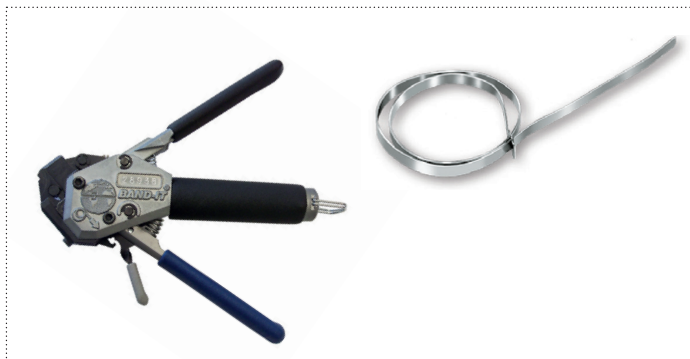
#### MATERIALS:

Micro Band Installation Tool. Use with 3.05 mm wide bands. 172 mm. length, 0.6 Kg

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

Micro Band Installation Tool: **2M600-061**

Length (mm)	Part Number (Flat)	Accommodates Diameters (mm)
206,38	<b>2M600-057</b>	22,35
361,95	<b>2M600-083</b>	47,75



### Micro Band Shield Termination Instruction:

1. Prepare cable braid for termination process (Figure 1).

2. Push braid forward over adapter retention lip to the adapter incline point (10.2mm minimum braid length). Milk braid as required to remove slack and ensure a snug fit around the shield termination area (Figure 2).

3. Prepare the band in the following manner:

IMPORTANT: Due to connector/adapter 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 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 grip per 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. To remove excess band from tool, squeeze gray gripper release handle, pull out and dispose. Inspect shield termination.

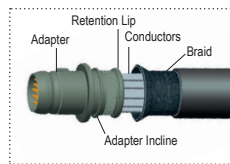


Fig. 1

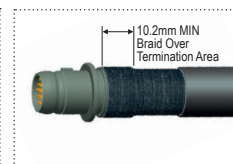


Fig. 2

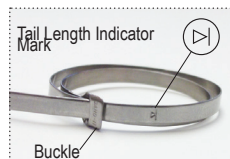


Fig. 3

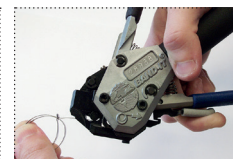


Fig. 4



Fig. 5

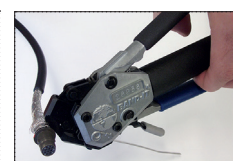


Fig. 6



Fig. 7

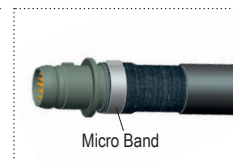


Fig. 8

All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch

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## 2M SERIES BACKSHELLS AND ACCESSORIES

### 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	Series 2M805	Pre-Coated with Hi-Temp Hot-Melt Adhesive	Pre-Coated with Hi-Temp Hot-Melt Adhesive
2	6, 7	8, 9	2M809S060-2G	2M809A060-2G
3	8, 9	10, 11	2M809S060-3G	2M809A060-3G
4	10, 13	12, 15	2M809S060-4G	2M809A060-4G

### 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	Series 2M805	Pre-Coated with Hi-Temp Hot-Melt Adhesive	Pre-Coated with Hi-Temp Hot-Melt Adhesive
2	6, 7	8, 9	2M809S060-2H	2M809A060-2H
3	8, 9	10, 11	2M809S060-3H	2M809A060-3H
4	10	12, 15	2M809S060-4H	2M809A060-4H

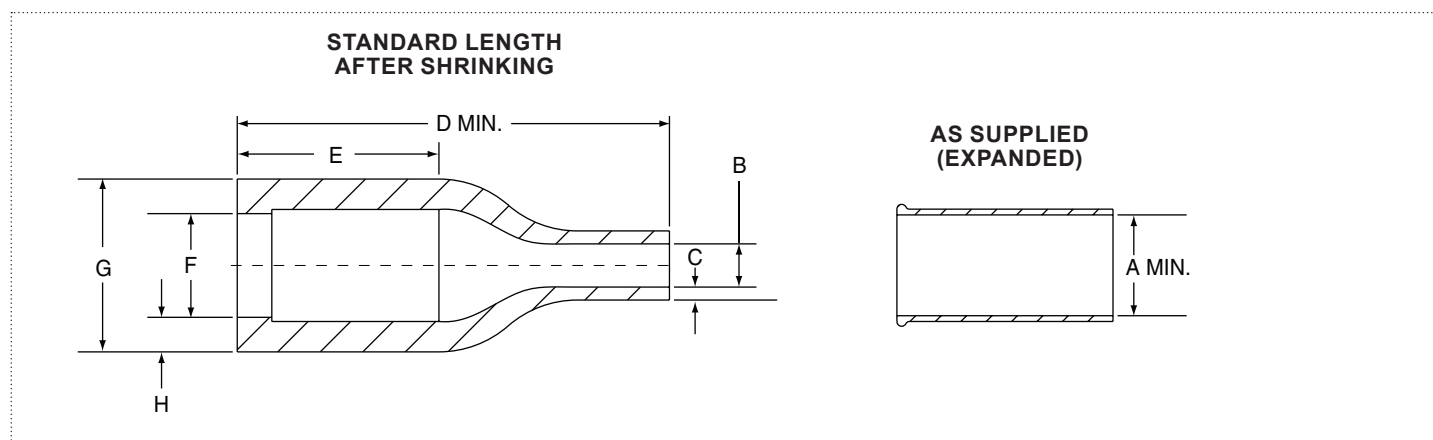
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## 2M SERIES BACKSHELLS AND ACCESSORIES

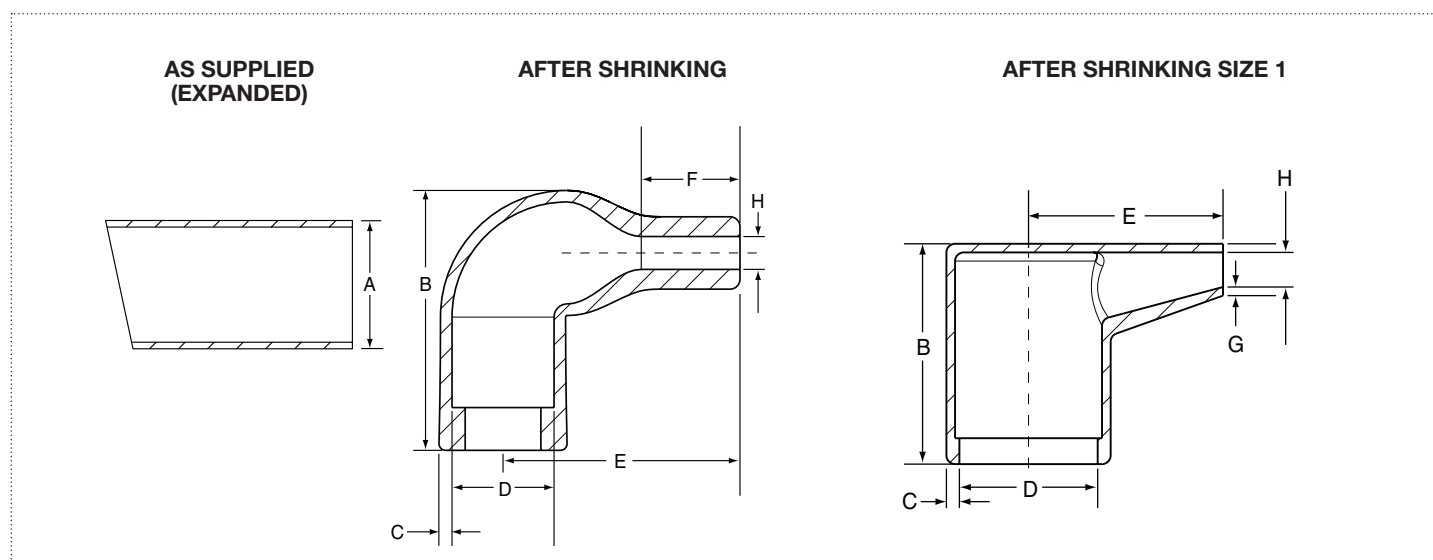
### 2M809S060, 2M809A060 SHRINK BOOTS

### Lipped Straight Shrink Boots



Boot Size	A Min. (mm)	B Max. (mm)	C $\pm$ 20% (mm)	D $\pm$ 10% (mm)	E Ref. (mm)	F Max. (mm)	G Ref. (mm)	H $\pm$ 30% (mm)
2	16,5	3,8	1,27	25,4	14,2	6,05	10,5	2,29
3	23,4	5,6	1,52	38,1	21,1	8,59	13,46	2,54
4	28,4	6,6	1,78	54,9	27,7	12,40	17,8	2,79

### Lipped Right Angle Shrink Boots



Boot Size	A Min. (mm)	B Ref. (mm)	C $\pm$ 30% (mm)	D Max. (mm)	E $\pm$ 20% (mm)	F Ref. (mm)	G $\pm$ 20% (mm)	H Max (mm)
2	16,5	20,1	1,0	7,9	18,3	7,62	1,6	2,5
3	23,3	22,9	1,3	10,4	20,3	5,8	1,3	5,6
4	28,5	28,5	1,5	14,2	29,8	7,1	1,5	6,3

All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch

Part of the high service program

## HOW TO ORDER - 2M805 TRI-START

1.

2.

3.

4.

5.

6.

7.

Series	Connector type	Shell type	Service Class	Shell size	Contacts	Keying
2M805	-001	-16	M	8-1	P	A

## 1. Series

2M805 2M805 Tri-start

## 2. Connector type

-001	Crimp	Plug	Integrated backshell
-003		Receptacle	
-005	Straight PCB	Receptacle	Epoxy potting

## 3. Shell type

-16	Self-Locking Ratchet for plug
-02	Square Flange for receptacle
-07	Jam Nut for receptacle

## 4. Service Class

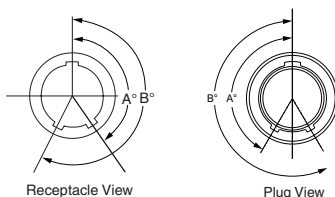
M	Electroless Nickel
NF	Olive Drab Cadmium
ZNU	Black Zinc Nickel

## 6. Contacts

P	Pin
S	Socket

## 7. Keying

A°	B°
150°	210°



## 5. Shell Size

8-1	1 contact #13	
8-7	7 contacts #23	
8-23	3 contacts #20HD	
9-10	10 contacts #23	
10-13	13 contacts #23	
11-19	19 contacts #23	
11-200	2 contacts #16 4 contacts #23	
12-26	26 contacts #23	
15-37	37 contacts #23	

All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch



# HOW TO ORDER - 2M805 PROTECTIVE CAPS

1.	2.	3.	4.	5.	6.
Series	Caps types	Service class	Attachement type	Shell size	Attachement code
<b>2M667-26</b>	<b>-261</b>	<b>M</b>	<b>G</b>	<b>8</b>	<b>01</b>

## 1. Series

**2M667-26** 2M805 Protective caps

## 2. Caps types

<b>-261</b>	Plugs
<b>-262</b>	Receptacles

## 3. Service class

<b>M</b>	Electroness Nickel
<b>NF</b>	Olive Drab Cadmium
<b>ZNU</b>	Black Zinc Nickel



## 4. Attachement type

<b>G</b>	Nylon Rope
<b>H</b>	Stainless Steel Wire Rop, Teflon Jacket

## 5. Shell Size

<b>8</b>	<b>9</b>	<b>10</b>
<b>11</b>	<b>12</b>	<b>15</b>

## 6. Attachement code

	Ring		I.D. (mm)	For shell size
<b>01</b>		Small	3,20	
<b>17</b>		Large	16,13	8
<b>18</b>			17,65	9,10
<b>19</b>			22,48	11,12
<b>20</b>			27,17	15

All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch

## HOW TO ORDER - 2M801 DUAL-START

1.

2.

3.

4.

5.

6.

7.

Series	Connector type	Shell type	Service Class	Shell size	Contacts	Keying
2M801	-007	-26	M	6-1	P	A

## 1. Series

2M801 2M801 Dual-start

## 2. Connector type

-007	Crimp	Plug	Integrated backshell
-009		Receptacle	
-011	Straight PCB	Receptacle	Epoxy potting

## 3. Shell type

-26	Self-Locking Ratchet for plug
-02	Square Flange for receptacle
-07	Jam Nut for receptacle

## 4. Service Class

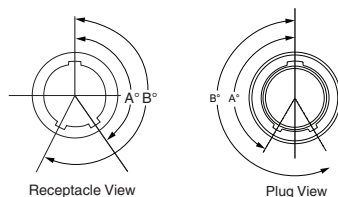
M	Electroless Nickel
NF	Olive Drab Cadmium
ZNU	Black Zinc Nickel

## 6. Contacts

P	Pin
S	Socket

## 7. Keying

A°	B°
150°	210°



## 5. Shell Size

6-1	1 contact #13	
6-7	7 contacts #23	
6-23	3 contacts #20HD	
7-10	10 contacts #23	
8-13	13 contacts #23	
9-19	19 contacts #23	
9-200	2 contacts #16 4 contacts #23	
10-26	26 contacts #23	
13-37	37 contacts #23	

All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch

# HOW TO ORDER - 2M801 PROTECTIVE CAPS

1.	2.	3.	4.	5.	6.
Series	Caps types	Service class	Attachement type	Shell size	Attachement code
2M667	-217	M	G	6	01

## 1. Series

2M667	2M801 Protective caps
-------	-----------------------

## 5. Shell Size

6	7	8
9	10	13

## 2. Caps types

-217	Plugs
-218	Receptacles



## 3. Service class

M	Electroness Nickel
NF	Olive Drab Cadmium
ZNU	Black Zinc Nickel

## 4. Attachement type

G	Nylon Rope
H	Stainless Steel Wire Rop, Teflon Jacket

## 6. Attachement code

	Ring		I.D. (mm)	For shell size
01		Small	3,20	
15		Large	11,30	6
16			14,48	7,8
17			16,13	9
18			17,35	10
19			22,48	13

All dimensions are given for information only and are in mm, except as otherwise specified | \*in mm: 1mm=0.03937 inch

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Notes section with horizontal dotted lines for writing.



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