

## SM2 SERIES



The new Amphenol SMT D-Sub is offered in right angle, receptacle with brackets, as an industry standard for I / O connections.

New boardlock features:  
-LIF (Low Insertion Force) boardlock especially designed to be fully compatible with pick and place equipment.  
-ZeFo (Zero Insertion Force) boardlock has been designed so that once placed and expanded, secures the connector in place.

### Applications

- Industrial
- Telecom
- Any industry standard I / O connections

## Stamped And Formed Contacts Surface Mount Connectors

### SPECIFICATIONS:

#### MATERIALS AND PLATINGS

Shells	Steel with tin plating
Insulator	High temperature (peak at 500°F [260°C]) glass-filled thermoplastic, UL 94V-0
Socket Contact	Stamped and formed brass, selected gold in mating area; 100µ" (2.54µm) min. tin-lead on termination area, with entire contact under-plated 50µ" (1.27µm) min. nickel
Rear Insert	Brass, 118µ" up to 197µ" (3µm up to 5µm) tinned over nickel 78µ" to 118µ" (2µm up to 3µm)
Boardlock	Tin-lead plating 157µ" up to 236µ" (4µm up to 6µm) over nickel 78µ" up to 118µ" (2µm up to 3µm) Insertion force: Low Insertion Force = LIF (bronze) Zero Insertion Force = ZeFo (brass)
Screwlock	Brass, 236µ" up to 394µ" (6µm up to 10µm) tinned over nickel 78µ" up to 118µ" (2µm up to 3µm)
Grounding	Grounding strap: brass, (4µ" up to 6µ") (0.10µm up to 0.15µm) tin-lead plating over nickel 78µ" up to 118µ" (2µm up to 3µm)

#### ELECTRICAL DATA

Current Rating	3A
Voltage Rating	300V AC/ rms 50Hz
Withstanding Voltage	1000V AC/ rms 50Hz for one minute
Insulation Resistance	5000MΩ
Contact Resistance	10 mΩ max.

#### CLIMATIC DATA

Operating Temperature	185°F (85°C), peak at 221°F (105°C)
Damp Heat	56 days 221°F (105°C) - 95% RH

#### MECHANICAL DATA

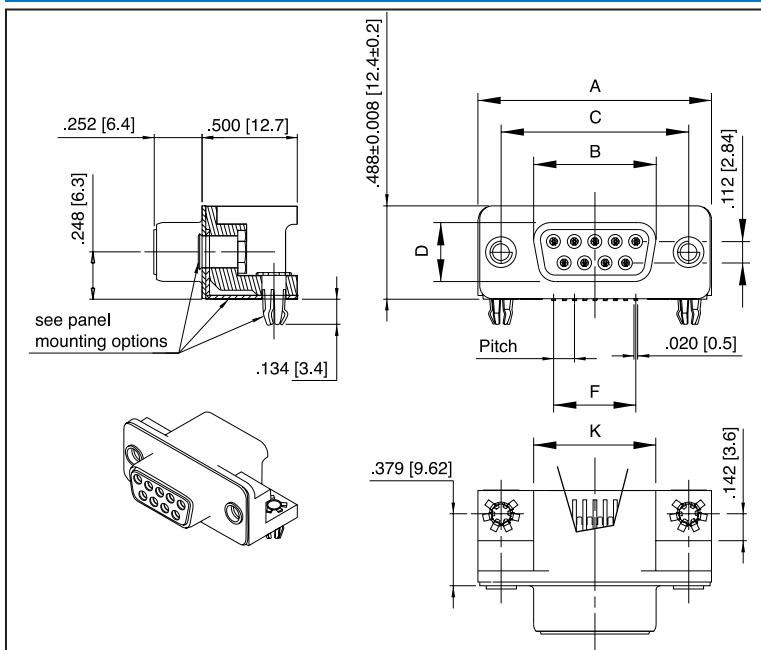
Single Contact Insertion Force	1.2N < F < 2.5N
Single Contact Withdrawal Force	0.4N min.
LIF Boardlock	8N max. per connector
Coplanarity of Contacts	.008" (0.2) max.

Mating and Unmating Force  
Unit: N

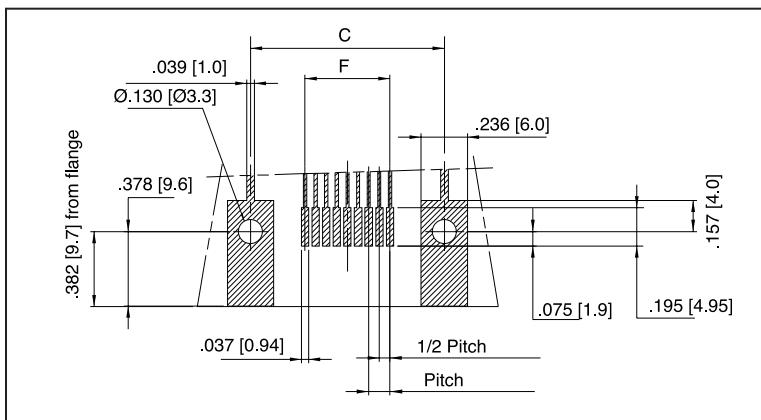
No. of Contacts	Mate (max.)	Unmate (min.)
9 (size E)	30	3.5
15 (size A)	50	4.5
25 (size B)	83	8.0

AMPHENOL-D-SUB MINIATURE

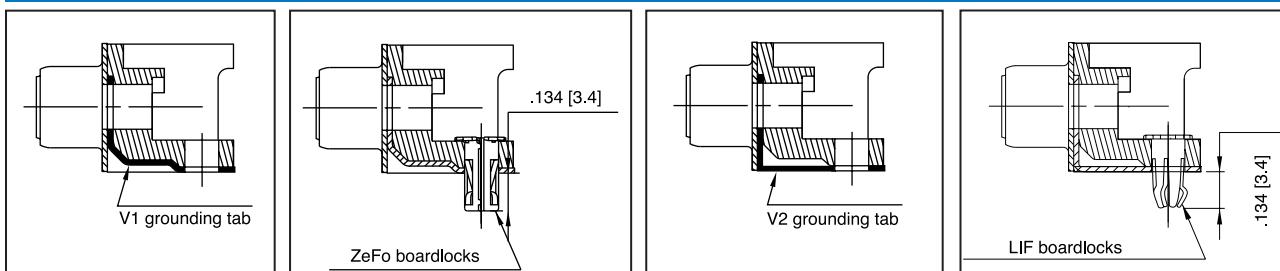
## SHELL DIMENSIONS



## PCB LAYOUT

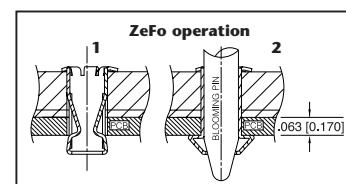


## GROUNDING TABS

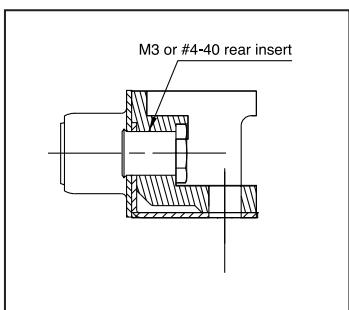
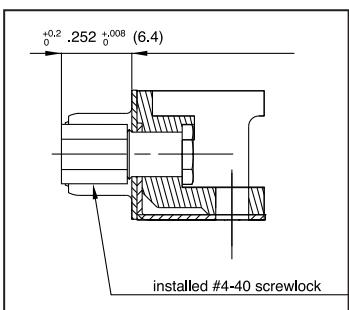
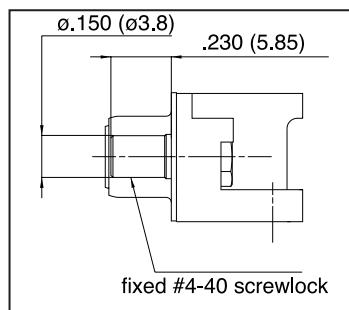


SHELL SIZE	A	B	C	D	PITCH	F	K
	+.002 (0.05)	0	±.004 (0.1)	0			
	-.004 (0.1)	-.008 (0.2)		-.01 (0.25)			
E	1.226 (31.15)	.645 (16.4)	.984 (25)	.316 (8.03)	.1078 (2.74)	.432 (10.97)	.642 (16.3)
A	1.551 (39.4)	.976 (24.8)	1.311 (33.3)	.316 (8.03)	.1078 (2.74)	.756 (19.2)	.968 (24.6)
B	2.098 (53.3)	1.515 (38.5)	1.850 (47)	.316 (8.03)	.1086 (2.76)	1.304 (33.12)	1.508 (38.3)

INCHES (MM)



## FLANGE ACCESSORIES

Threaded Rear  
1/2Installed Front Female  
5Fixed Front Female  
6

## ORDERING INFORMATION

17SM2 - XX - S - X - X - X - X

## Configuration :

09

15

25

**SOCKET ONLY**

## Board locks / grounding tab:

1 V1 grounding tab +ZeFo

boardlocks (PCB = .062 [1.6])

4 ZeFo boardlocks only

(PCB = .062 [1.6])

7 V1 grounding tab only

8 no grounding tab and no boardlocks

B V2 grounding tab + LIF boardlocks  
(PCB = .062 [1.6])

## Packaging:

R reel (9 Pos only, 100/reel)

T tube

## Contact plating:

1 7.9µ" (0.2µm Au)

2 15.7µ" (0.4µm Au)

3 19.7µ" (0.5µm Au)

4 31.5µ" (0.8µm Au)

6 50µ" (1.27µm Au)

## Mounting options:

1 rear insert 4-40

2 rear insert M3

5 installed front screwlock 4-40

6 fixed front screwlock 4-40

■ : Standard options