

HITECH INDIA PRIVATE LIMITED

Micro-D Series Connectors

MICRO-D CONNECTORS



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INTRODUCTION

Micro-D connectors are miniaturized connectors used in application where weight, space and long term performance are required.

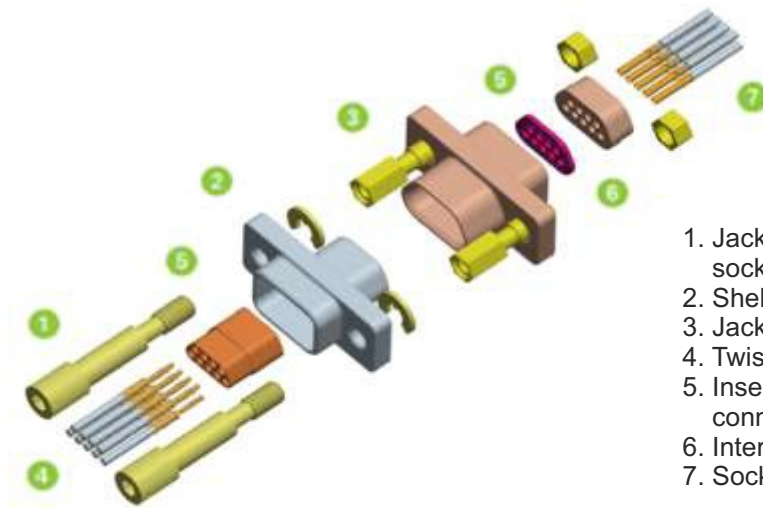
Hitech India Micro-D connectors use twist pin contact design for pin contacts which are flexible and highly reliable.

Micro-D connectors are available in pigtail type, solder type & PCB mount type with wide variety of mounting fasteners.

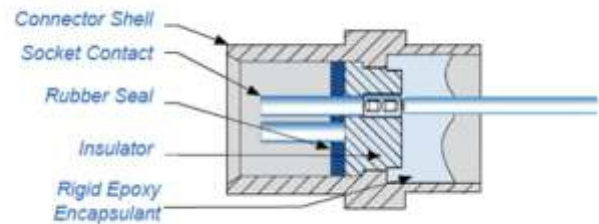
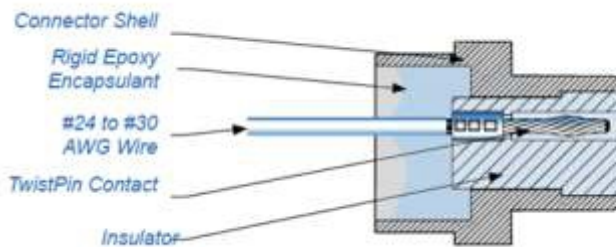
Hitech India India also has a full range of Micro-D Backshells to provide end-to-end solution.

Micro-D Connector Introduction

Connector Introduction



1. Jack Screw: High or low profile, hexagonal slotted or socket head
2. Shell: Connector metal body
3. Jackpost: Mates with jackscrew
4. Twist Pin: Male contact, fitted to plug connector
5. Insert: Moulded insulation housing, separating each connector
6. Interfacial Seal: Fitted on socket connector only
7. Socket: Female contact, fitted to socket connector



Twist Pin Contact:



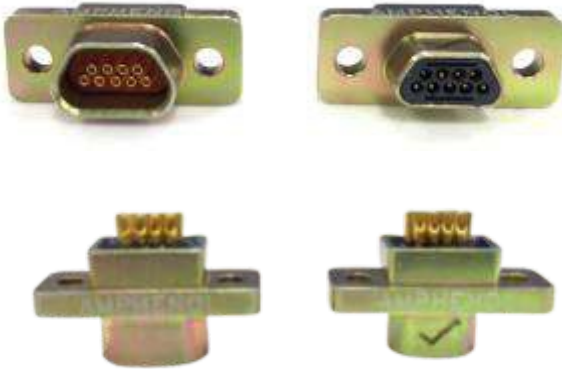
Socket Contact:



Connector Introduction

Connector Type

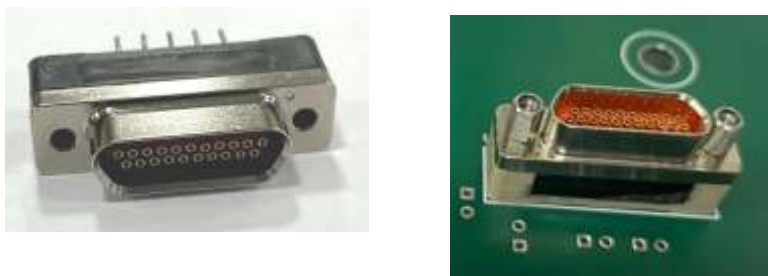
- 1)
(Similar to MIL-DTL-83513/01,02)



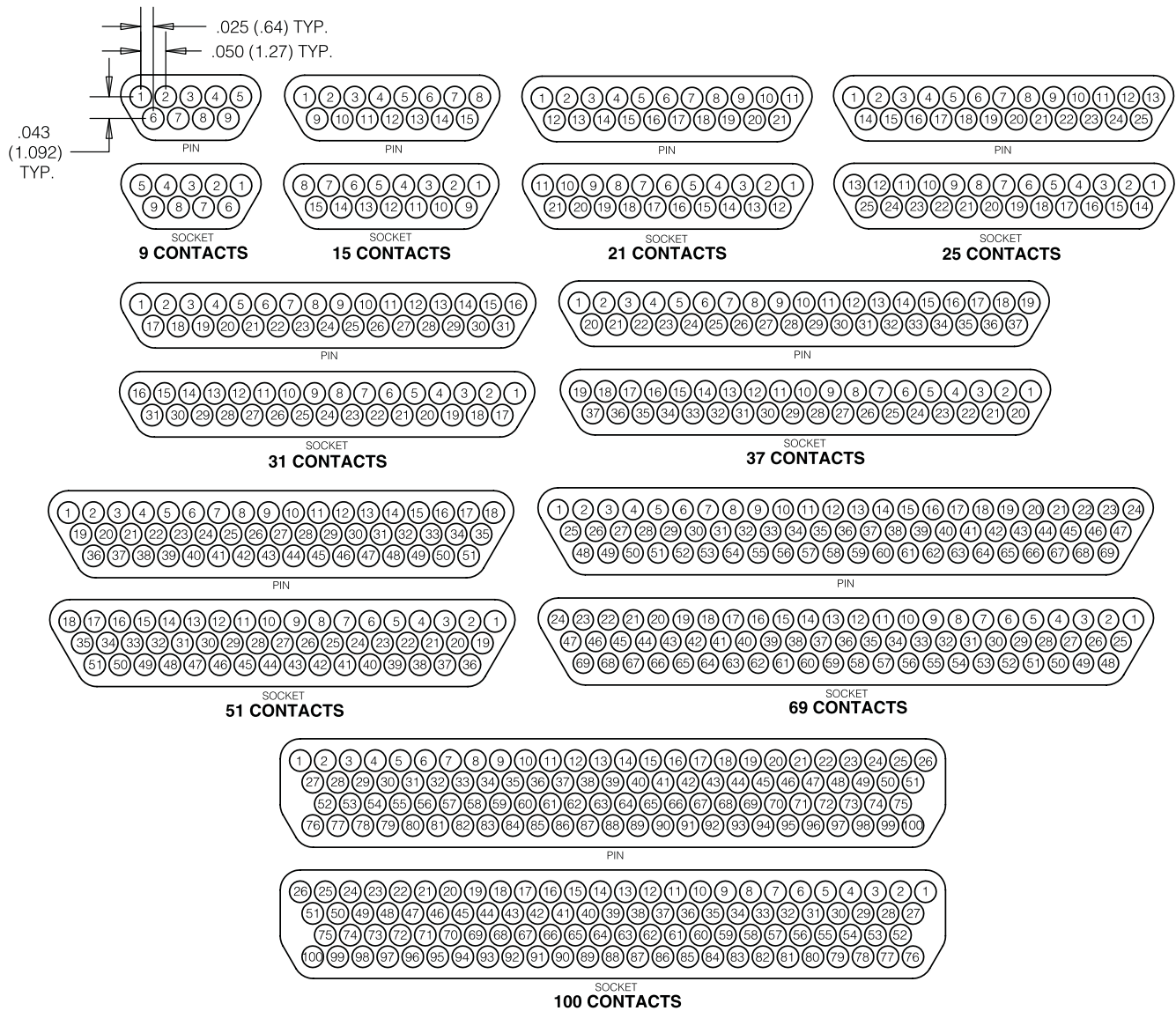
- 2)
(Similar to MIL-DTL-83513/03,04)



- 3)
(Similar to MIL-DTL-83513/10 thru 33)



Pin Configuration



Note: Only representative purpose. Not marked on connectors.

Connector Parameters

Connector Parameters

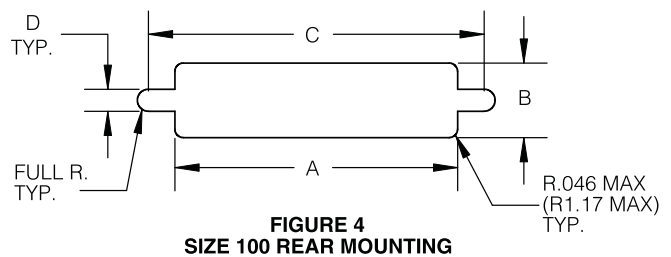
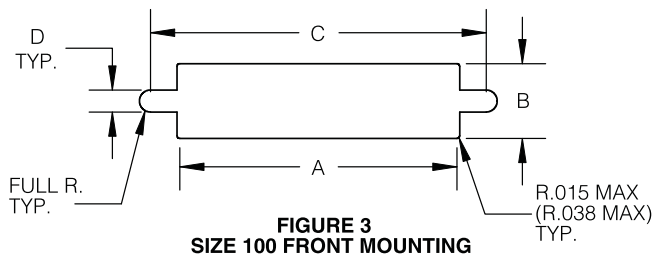
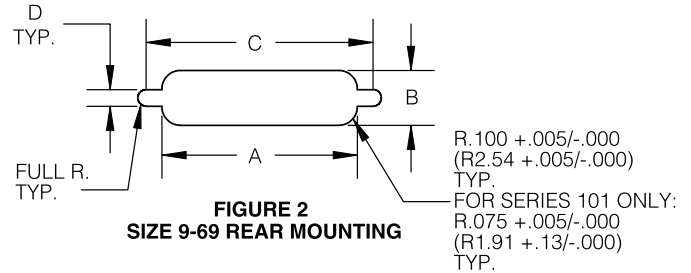
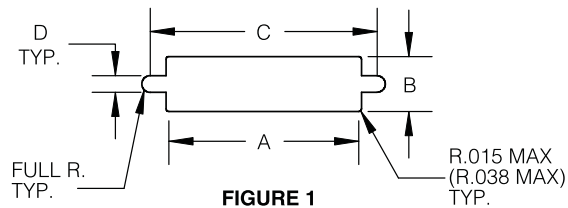
Test Description	Specification/Method	Limits
Contact Rating	--	3 amps max.
Magnetic Permeability	ASTM-A342/A342M	2.0 μ max.
D.W.V.	EIA-364-20	at sea level: 600 vac for solder pot and standard wire
(Test voltage rms 60 Hz ac volts)		at 70,000 ft altitude (reduced barometric pressure): 150 vac for solder pot and standard wire
Insulation Resistance	EIA-364-21	5000 megohms min.
Contact Resistance	EIA-364-23	65mV at 2.5 amps (Wire SAE AS22759/11) 75mV at 2.5 amps (Wire SAE AS22759/33)
Low Level Contact Resistance	EIA-364-23	28 mohm:- Wire SAE AS22759/11 32 mohm:- Wire SAE AS22759/33
Contact Engagement Force	MIL-DTL-83513	6.0 oz. max.
Contact Separation Force	MIL-DTL-83513	0.5 oz. min.
Connector Mating Force	MIL-DTL-83513	(10 oz. times no. of contacts) max.
Connector Unmating Force	MIL-DTL-83513	(0.5 oz. times no. of contacts) min.
Thermal Shock (Temperature Cycling)	EIA-364-32, condition I, 5 cycles	No physical damage -55°C to +125°C (-67°F to +257°F)
Mechanical Shock (Specified Pulse)	EIA-364-27, condition E	No physical damage and no loosening of parts No loss of continuity > 1 microsec.
Vibration	EIA-364-28, condition IV	No physical damage and no loosening of parts No loss of continuity > 1 microsec.
Durability	MIL-DTL-83513	500 mating cycles at a rate of 200 $\pm$ 100 CPH
Salt Spray (Corrosion)	EIA-364-26, condition B	Meets mateability and contact resistance requirements
Fluid Immersion	MIL-DTL-83513	Meets mateability requirements

Connector Parameters

Test Description	Specification/Method	Limits
Humidity	EIA-364-31	Meets D.W.V. and insulation resistance requirements 1 megohm min. after step 6, 1000 megohms min. after 24 hrs of conditioning
Insert Retention (class M)	MIL-DTL-83513	50 lbs psi (axial load)
Resistance to Soldering Heat		No Physical damage & should meet dimensional requirements
Solderability	MIL-STD-202, method 208	Withstand test condition
Contact Retention	EIA-364-29	5 lbs min. (axial load)
Crimp Tensile Strength (type I contacts only)		No Break or Pull out at less than 5 Pounds & 10 Pounds for wire

Mounting Arrangement

Mounting Arrangement (Panel Cutout)



Size	Figure	Dimensions							
		A		B		C		D	
		Inch	mm	Inch	mm	Inch	mm	Inch	mm
		+0.004 -0.000	+0.10 -0.00	+0.004 -0.000	+0.10 -0.00	+0.005 -0.000	+0.13 -0.00	+0.005 -0.000	+0.13 -0.00
9	1	0.406	10.31	0.257	6.53	0.570	14.48	0.089	2.26
	2	0.402	10.21	0.272	6.91	0.570	14.48	0.089	2.26
15	1	0.556	14.12	0.257	6.53	0.720	18.29	0.089	2.26
	2	0.552	14.02	0.272	6.91	0.720	18.29	0.089	2.26
21	1	0.706	17.93	0.257	6.53	0.870	22.10	0.089	2.26
	2	0.702	17.83	0.272	6.91	0.870	22.10	0.089	2.26
25	1	0.806	20.47	0.257	6.53	0.970	24.64	0.089	2.26
	2	0.802	20.37	0.272	6.91	0.970	24.64	0.089	2.26
31	1	0.956	24.28	0.257	6.53	1.120	28.45	0.089	2.26
	2	0.852	21.64	0.272	6.91	1.120	28.45	0.089	2.26
37	1	1.106	28.09	0.257	6.53	1.270	32.26	0.089	2.26
	2	1.102	27.99	0.272	6.91	1.270	32.26	0.089	2.26
51	1	1.056	26.82	0.300	7.62	1.220	30.99	0.089	2.26
	2	1.052	26.72	0.312	7.92	1.220	30.99	0.089	2.26
100	3	1.456	36.98	0.343	8.71	1.805	45.85	0.118	3.00
	4	1.444	36.68	0.362	9.19	1.805	45.85	0.118	3.00

Wiring Chart (As per MIL-STD-681)

WIRE (MIL-STD-681) COLOR CODE CHART										
Pin No.	MIL-STD-681 Identification no	Base Color	First Stripe	Second Stripe	Pin No.	MIL-STD-681 Identification no	Base Color	First Stripe	Second Stripe	Third Stripe
1	0	Black			51	957	White	Green	Violet	
2	1	Brown			52	958	White	Green	Gray	
3	2	Red			53	967	White	Blue	Violet	
4	3	Orange			54	968	White	Blue	Gray	
5	4	Yellow			55	978	White	Violet	Gray	
6	5	Green			56	9012	White	Black	Brown	Red
7	6	Blue			57	9013	White	Black	Brown	Orange
8	7	Violet			58	9014	White	Black	Brown	Yellow
9	8	Gray			59	9015	White	Black	Brown	Green
10	9	White			60	9016	White	Black	Brown	Blue
11	90	White	Black		61	9017	White	Black	Brown	Violet
12	91	White	Brown		62	9018	White	Black	Brown	Gray
13	92	White	Red		63	9023	White	Black	Red	Orange
14	93	White	Orange		64	9024	White	Black	Red	Yellow
15	94	White	Yellow		65	9025	White	Black	Red	Green
16	95	White	Green		66	9026	White	Black	Red	Blue
17	96	White	Blue		67	9027	White	Black	Red	Violet
18	97	White	Violet		68	9028	White	Black	Red	Gray
19	98	White	Gray		69	9034	White	Black	Orange	Yellow
20	901	White	Black	Brown	70	9035	White	Black	Orange	Green
21	902	White	Black	Red	71	9036	White	Black	Orange	Blue
22	903	White	Black	Orange	72	9037	White	Black	Orange	Violet
23	904	White	Black	Yellow	73	9038	White	Black	Orange	Gray
24	905	White	Black	Green	74	9045	White	Black	Yellow	Green
25	906	White	Black	Blue	75	9046	White	Black	Yellow	Blue
26	907	White	Black	Violet	76	9047	White	Black	Yellow	Violet
27	908	White	Black	Gray	77	9048	White	Black	Yellow	Gray
28	912	White	Brown	Red	78	9056	White	Black	Green	Blue
29	913	White	Brown	Orange	79	9057	White	Black	Green	Violet
30	914	White	Brown	Yellow	80	9058	White	Black	Green	Gray
31	915	White	Brown	Green	81	9067	White	Black	Blue	Violet
32	916	White	Brown	Blue	82	9068	White	Black	Blue	Gray
33	917	White	Brown	Violet	83	9078	White	Black	Violet	Gray
34	918	White	Brown	Gray	84	9123	White	Brown	Red	Orange
35	923	White	Red	Orange	85	9124	White	Brown	Red	Yellow
36	924	White	Red	Yellow	86	9125	White	Brown	Red	Green
37	925	White	Red	Green	87	9126	White	Brown	Red	Blue
38	926	White	Red	Blue	88	9127	White	Brown	Red	Violet
39	927	White	Red	Violet	89	9128	White	Brown	Red	Gray
40	928	White	Red	Gray	90	9134	White	Brown	Orange	Yellow
41	934	White	Orange	Yellow	91	9135	White	Brown	Orange	Green
42	935	White	Orange	Green	92	9136	White	Brown	Orange	Blue

Wiring Chart (As per MIL-STD-681)

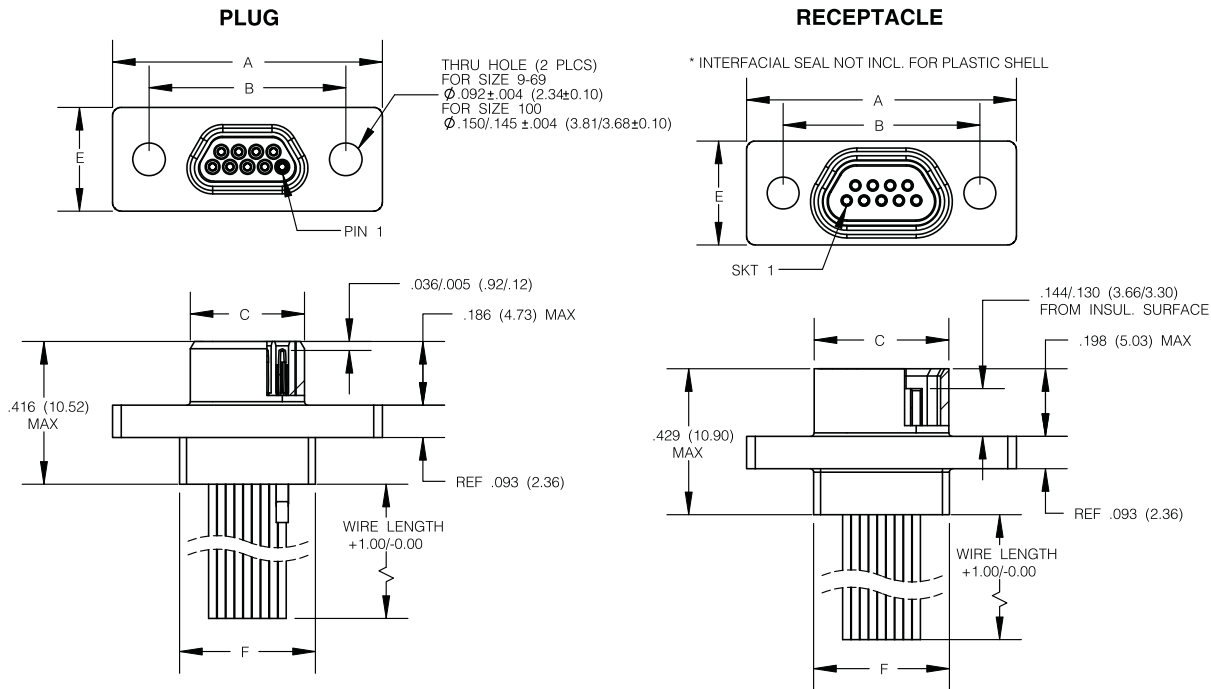
MIL-STD-681 COLOR CODE CHART CONTINUED										
Pin No.	MIL-STD-681 Identification no	Base Color	First Stripe	Second Stripe	Pin No.	MIL-STD-681 Identification no	Base Color	First Stripe	Second Stripe	Third Stripe
43	936	White	Orange	Blue	93	9137	White	Brown	Orange	Violet
44	937	White	Orange	Violet	94	9138	White	Brown	Orange	Gray
45	938	White	Orange	Gray	95	9145	White	Brown	Yellow	Green
46	945	White	Yellow	Green	96	9146	White	Brown	Yellow	Blue
47	946	White	Yellow	Blue	97	9147	White	Brown	Yellow	Violet
48	947	White	Yellow	Violet	98	9148	White	Brown	Yellow	Gray
49	948	White	Yellow	Gray	99	9156	White	Brown	Green	Blue
50	956	White	Green	Blue	100	9157	White	Brown	Green	Violet

Note:

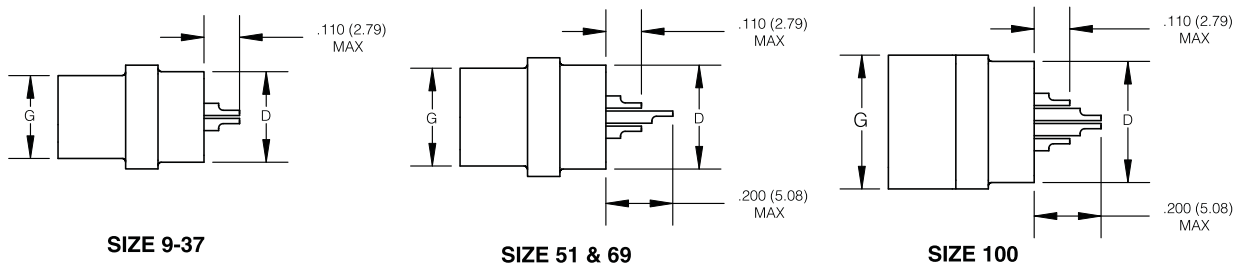
Black and White color wire terminations are available with lower lead time and mostly available in stock. Combination of black and white color is also available. First ten colours repeating combination available with lower lead time.

Solder & Wire Type

Wire Termination: (As per MIL-STD-83513/1&2)



Solder Termination: (As per MIL-STD-83513/3&4)



Size	A MAX.	B $\pm .005$ (0.13)	C MAX.		D MAX.	E MAX.	F MAX.	G MAX.	
			PLUG	RCPT				PLUG	RCPT
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.402 (10.21)	.270 (6.86)	.308 (7.82)	.400 (10.16)	.85 (4.70)	.253 (6.43)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.552 (13.97)	.270 (6.86)	.308 (7.82)	.550 (13.97)	.85 (4.70)	.253 (6.43)
21	1.085 (27.58)	.865 (21.97)	.634 (16.10)	.702 (17.83)	.270 (6.86)	.308 (7.82)	.700 (17.78)	.85 (4.70)	.253 (6.43)
25	1.85 (30.10)	.965 (24.51)	.734 (18.64)	.802 (20.37)	.270 (6.86)	.308 (7.82)	.800 (20.32)	.85 (4.70)	.253 (6.43)
31	1.335 (33.91)	1.115 (26.32)	.884 (22.45)	.952 (24.18)	.270 (6.86)	.308 (7.82)	.950 (24.13)	.85 (4.70)	.253 (6.43)
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.26)	1.102 (27.99)	.270 (6.86)	.308 (7.82)	1.100 (27.94)	.85 (4.70)	.253 (6.43)
51	1.435 (36.45)	1.215 (30.86)	.984 (24.99)	1.052 (26.72)	.310 (7.87)	.351 (8.92)	1.050 (26.67)	.229 (5.82)	.296 (7.52)
69	1.735 (44.07)	1.515 (38.48)	1.289 (32.74)	1.357 (34.47)	.310 (7.87)	.351 (8.92)	1.350 (34.29)	.229 (5.82)	.296 (7.52)
100	2.170 (55.12)	1.800 (15.72)	1.384 (35.13)	1.508 (38.10)	.360 (9.14)	.394 (10.1)	1.442 (36.63)	.271 (6.88)	.394 (10.01)

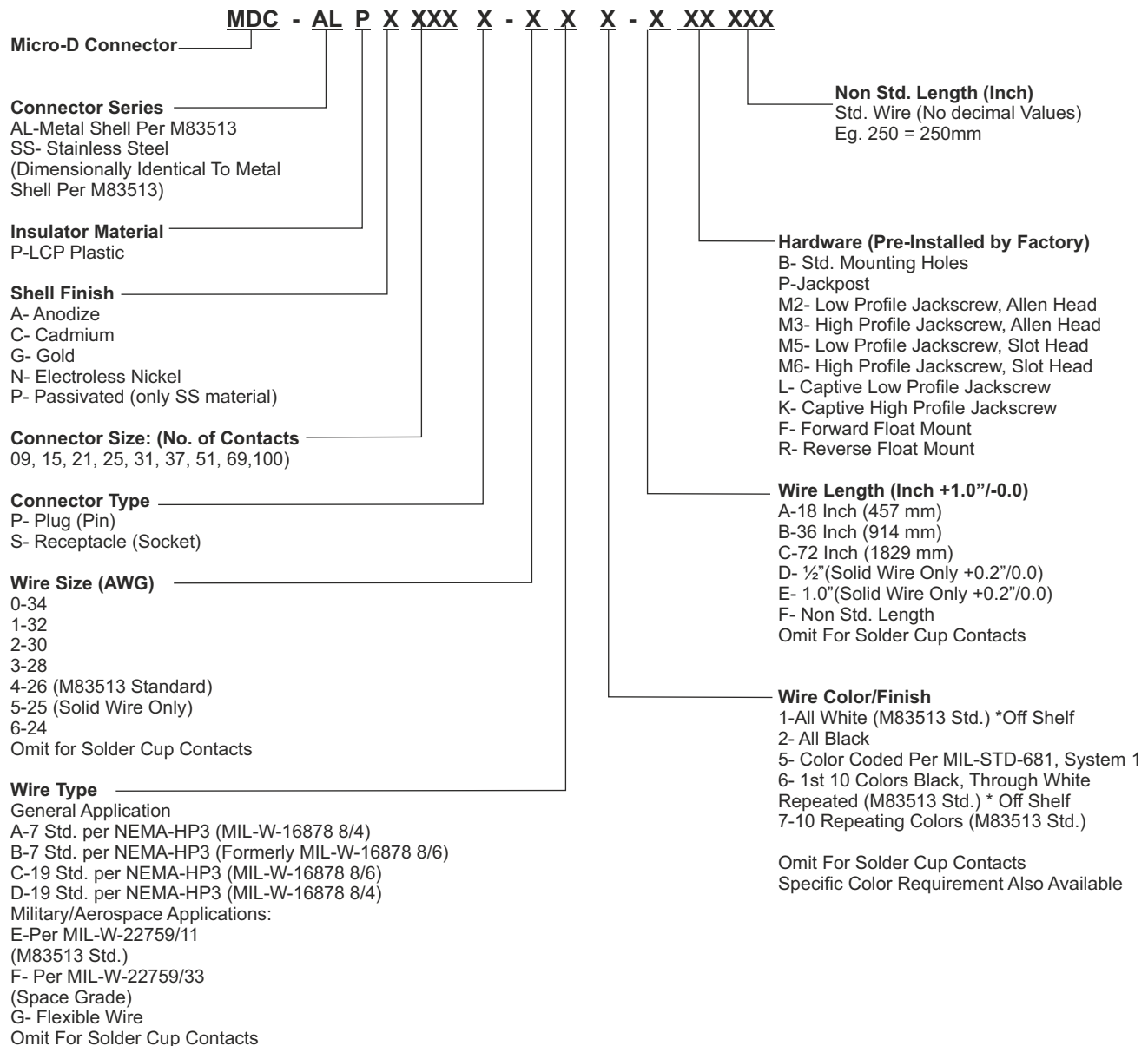
Ordering Information

Ordering Information: For Solder & Crimped Type

For Example:

Part No.:MDC-ALPN015P-4E1AM2

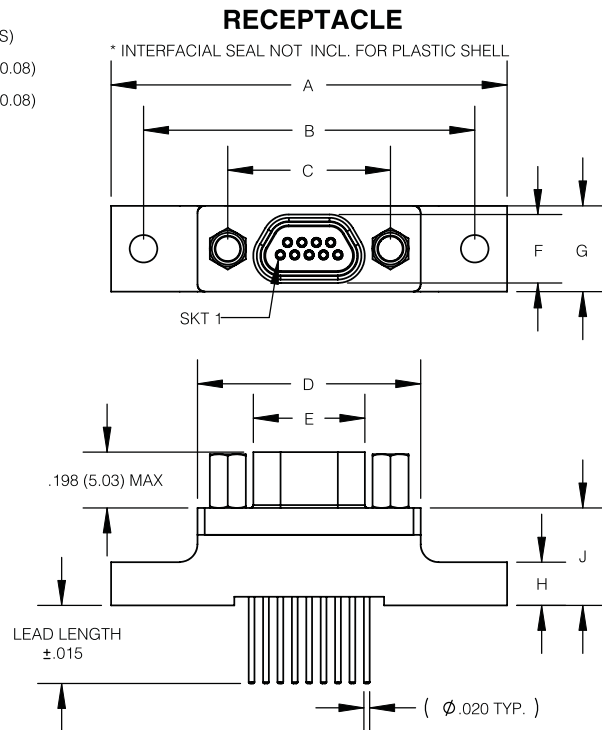
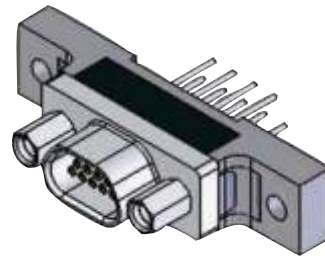
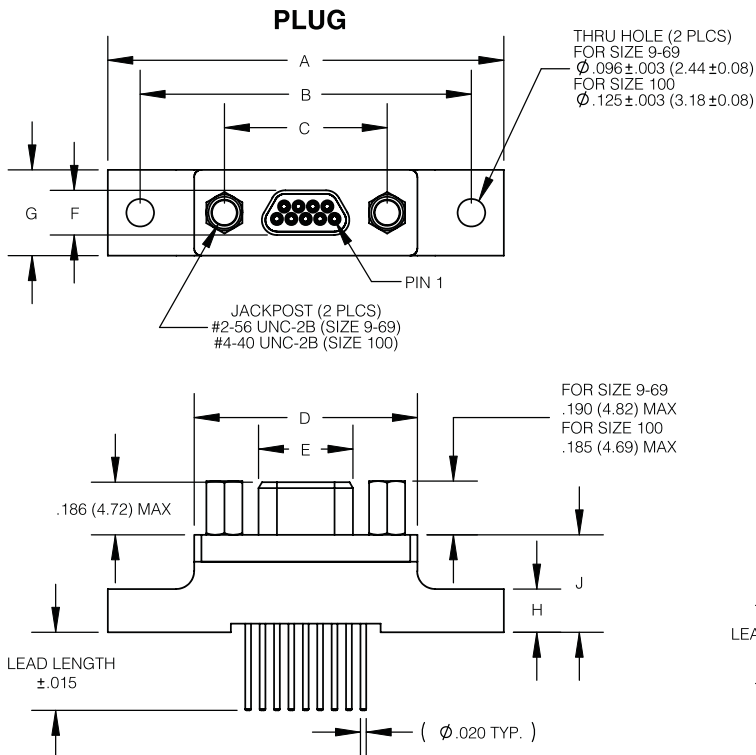
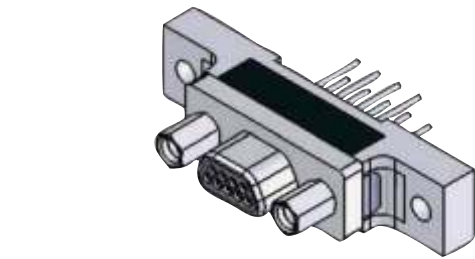
Description: Metal shell size 15 Plug, Nickel finish, 26 AWG wire type 'E', all white standard. Wire length 18" with M2 low profile Jack Screws.



Note:

Contact Factory for more options on termination type different color wise combinations and other type of Micro-D Connectors.

BS Termination Type (Similar to M83513/22 Thru /27)



SIZE	A MAX	B $\pm .005$ (0.13)	C $\pm .005$ (0.13)	D MAX	E MAX		F MAX		G MAX	H MAX	J MAX
					PLUG	RCPT	PLUG	RCPT			
09	1.390 (35.31)	1.150 (29.21)	.565 (14.35)	.785 (19.84)	.334 (8.48)	.402 (10.21)	.185 (4.70)	.253 (6.43)	.308 (7.82)	.165 (4.19)	.355 (9.02)
15	1.390 (35.31)	1.150 (29.21)	.715 (18.16)	.935 (23.75)	.484 (12.29)	.552 (13.97)	.185 (4.70)	.253 (6.43)	.308 (7.82)	.165 (4.19)	.355 (9.02)
21	1.690 (43.93)	1.450 (36.83)	.865 (21.97)	1.085 (27.56)	.634 (16.10)	.702 (17.83)	.185 (4.70)	.253 (6.43)	.308 (7.82)	.165 (4.19)	.355 (9.02)
25	1.740 (44.20)	1.500 (38.10)	.965 (24.51)	1.185 (30.10)	.734 (18.64)	.802 (20.37)	.185 (4.70)	.253 (6.43)	.308 (7.82)	.165 (4.19)	.355 (9.02)
31	2.040 (51.82)	1.800 (45.72)	1.115 (28.32)	1.335 (33.91)	.884 (22.45)	.952 (24.18)	.185 (4.70)	.253 (6.43)	.308 (7.82)	.165 (4.19)	.355 (9.02)
37	2.340 (59.44)	2.100 (53.34)	1.265 (32.13)	1.485 (37.72)	1.034 (26.26)	1.102 (27.99)	.185 (4.70)	.253 (6.43)	.308 (7.82)	.165 (4.19)	.355 (9.02)
51	2.270 (67.66)	2.000 (50.80)	1.215 (30.86)	1.435 (36.45)	.984 (24.99)	1.052 (26.72)	.228 (5.79)	.296 (7.52)	.351 (8.92)	.165 (4.19)	.355 (9.02)
69	2.870 (72.90)	2.600 (66.04)	1.515 (38.48)	1.735 (44.07)	1.289 (32.74)	1.357 (34.47)	.228 (5.79)	.296 (7.52)	.351 (8.92)	.165 (4.19)	.355 (9.02)
100	3.070 (77.98)	2.800 (71.12)	1.800 (45.72)	2.170 (55.12)	1.384 (35.13)	1.508 (38.10)	.271 (6.88)	.394 (10.01)	.460 (11.68)	.303 (7.70)	.550 (12.70)

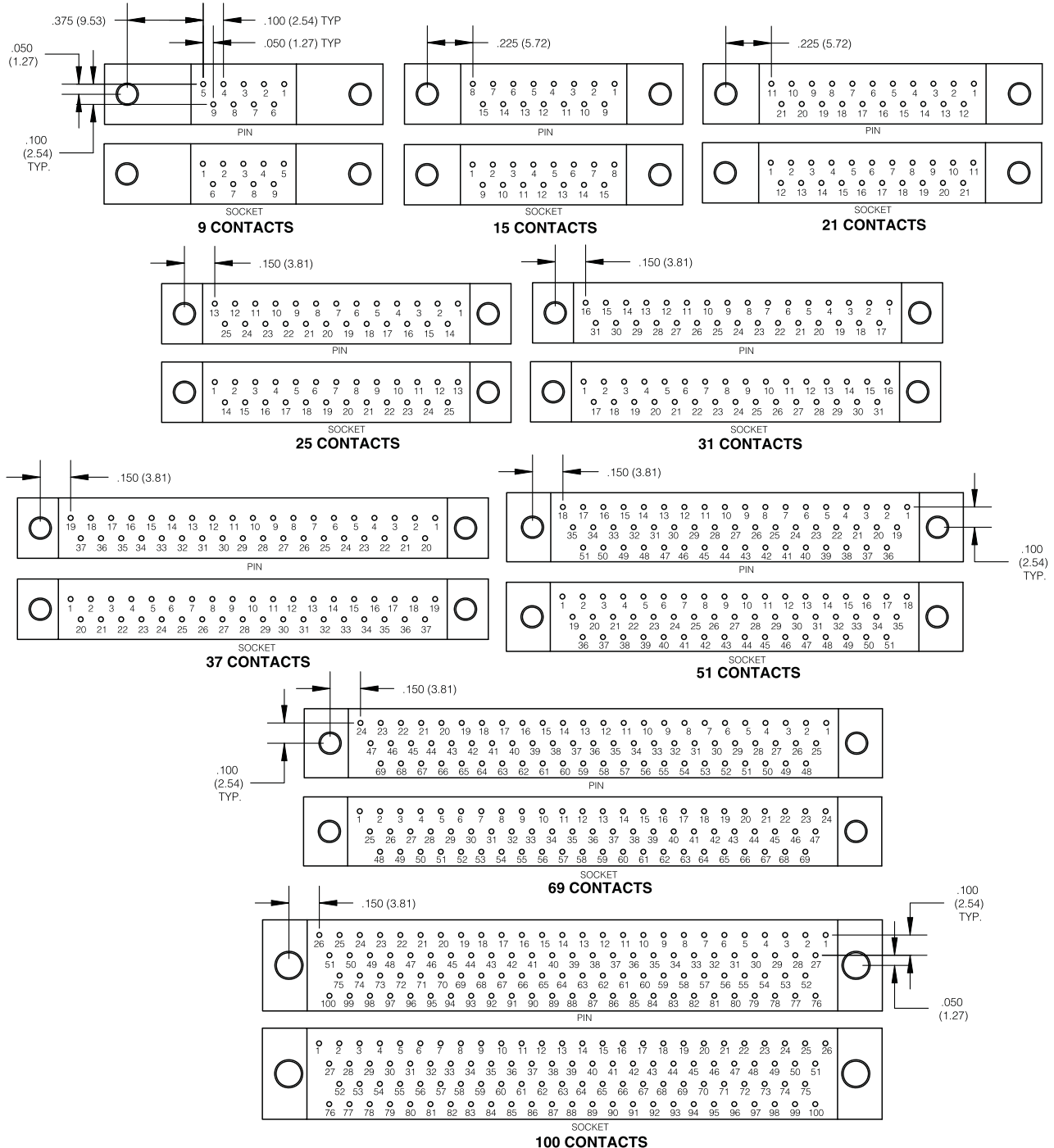
PCB Connectors

BS Termination Type (Similar to M83513/22 Thru /27)

STRAIGHT PC CONFIGURATIONS (REAR VIEW)

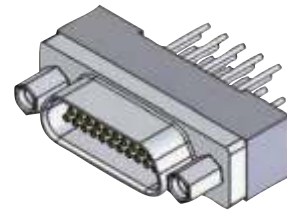
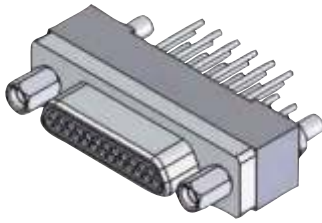
.100 (2.54) x .100 (2.54) grid pattern, offset .050 (1.27)

Cavity identification numbers are for reference only and does not appear on the connector.

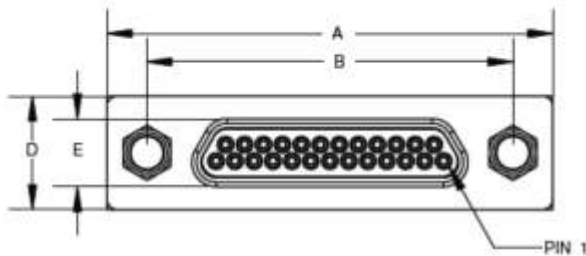


PCB Termination

C6 Termination Type (Similar to M83513/28 Thru /33)

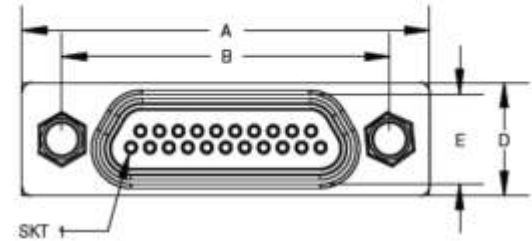


PLUG

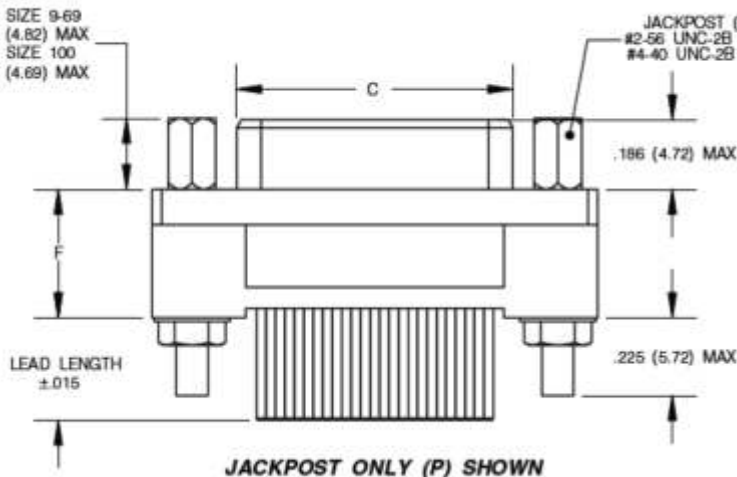


RECEPTACLE

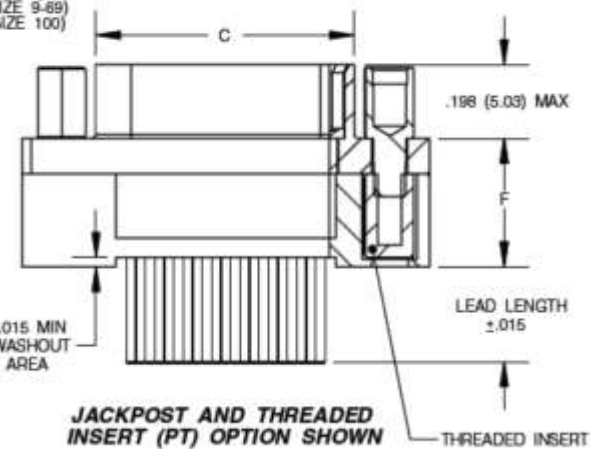
* INTERFACIAL SEAL NOT INCL. FOR PLASTIC SHELL



FOR SIZE 9-69
.190 (4.82) MAX
FOR SIZE 100
.185 (4.69) MAX



JACKPOST ONLY (P) SHOWN



JACKPOST AND THREADED INSERT (PT) OPTION SHOWN

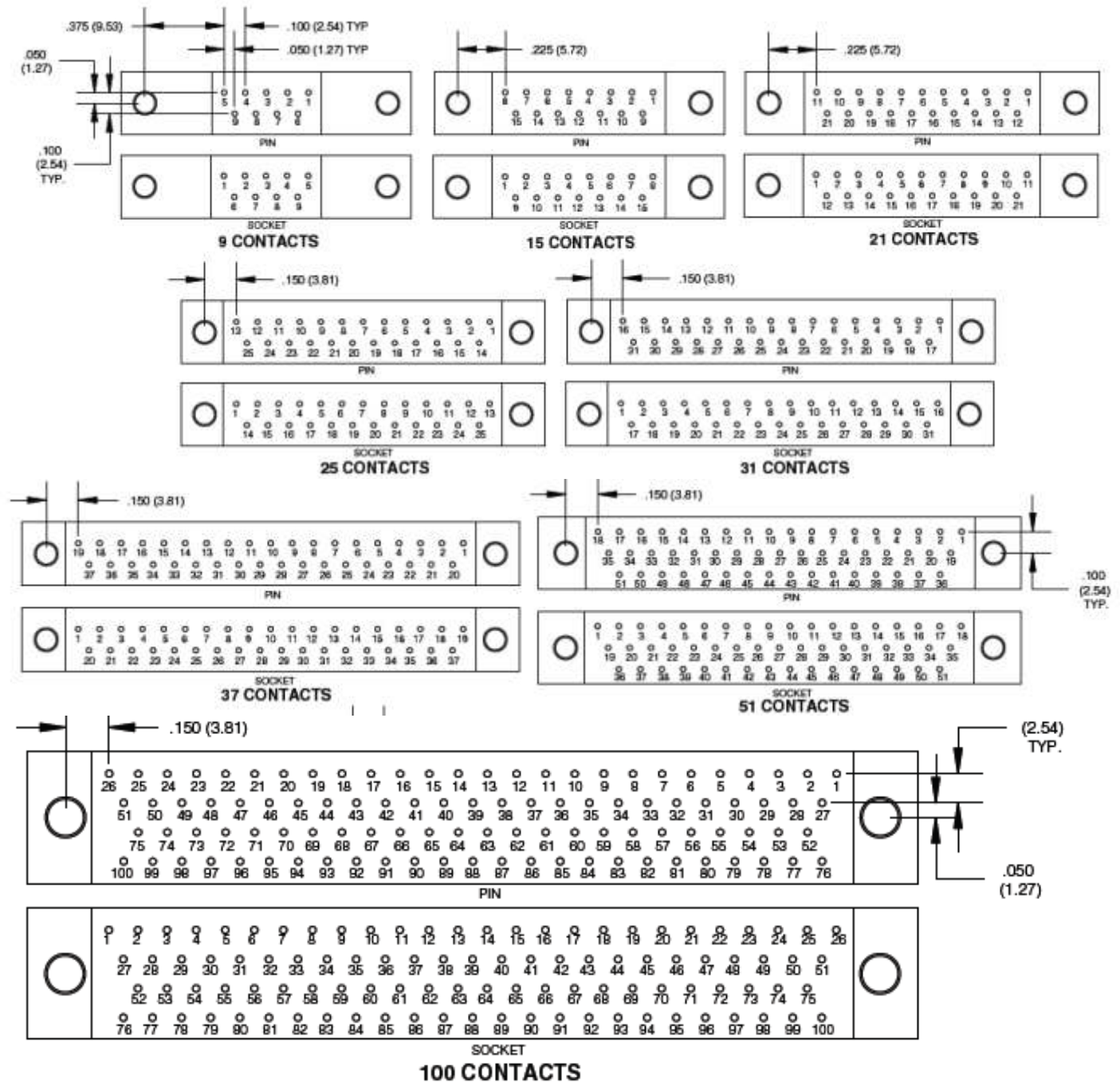
Size	A MAX.	B ±005 (0.13)	C MAX.		D MAX.	E MAX.		F MAX.
			PLUG	RCPT		PLUG	RCPT	
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.402 (10.21)	.310 (7.87)	.185 (4.70)	.253 (6.43)	.335 (8.51)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.552 (13.97)	.310 (7.87)	.185 (4.70)	.253 (6.43)	.335 (8.51)
21	1.085 (27.58)	.865 (21.97)	.634 (16.10)	.702 (17.83)	.310 (7.87)	.185 (4.70)	.253 (6.43)	.335 (8.51)
25	1.85 (30.10)	.965 (24.51)	.734 (18.64)	.802 (20.37)	.310 (7.87)	.185 (4.70)	.253 (6.43)	.335 (8.51)
31	1.335 (33.91)	1.115 (26.32)	.884 (22.45)	.952 (24.18)	.310 (7.87)	.185 (4.70)	.253 (6.43)	.335 (8.51)
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.26)	1.102 (27.99)	.310 (7.87)	.185 (4.70)	.253 (6.43)	.335 (8.51)
51	1.435 (36.45)	1.215 (30.86)	.984 (24.99)	1.052 (26.72)	.400 (10.16)	.228 (5.79)	.296 (7.52)	.335 (8.51)
69	1.735 (44.07)	1.515 (38.48)	1.289 (32.74)	1.357 (34.47)	.400 (10.16)	.228 (5.79)	.296 (7.52)	.335 (8.51)
100	2.170 (55.12)	1.800 (45.72)	1.384 (35.13)	1.508 (38.10)	.510 (12.95)	.271 (6.88)	.394 (10.01)	.430 (10.92)

Straight PC Configuration-Rear View

Straight PC Configuration - Rear View (C6 Termination Type)

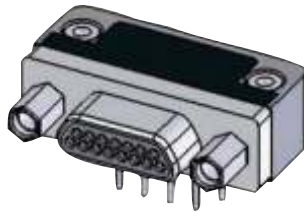
.100 (2.54) x .100 (2.54) grid pattern, offset .050 (1.27)

Cavity identification numbers are for reference only and does not appear on the connector.

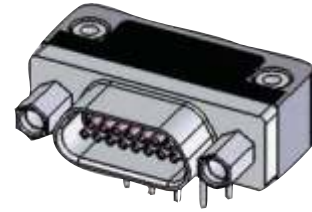


PCB Connectors

90° PCB Mount Narrow Profile CBR Termination Type (Similar to M83513/10 Thru /15)

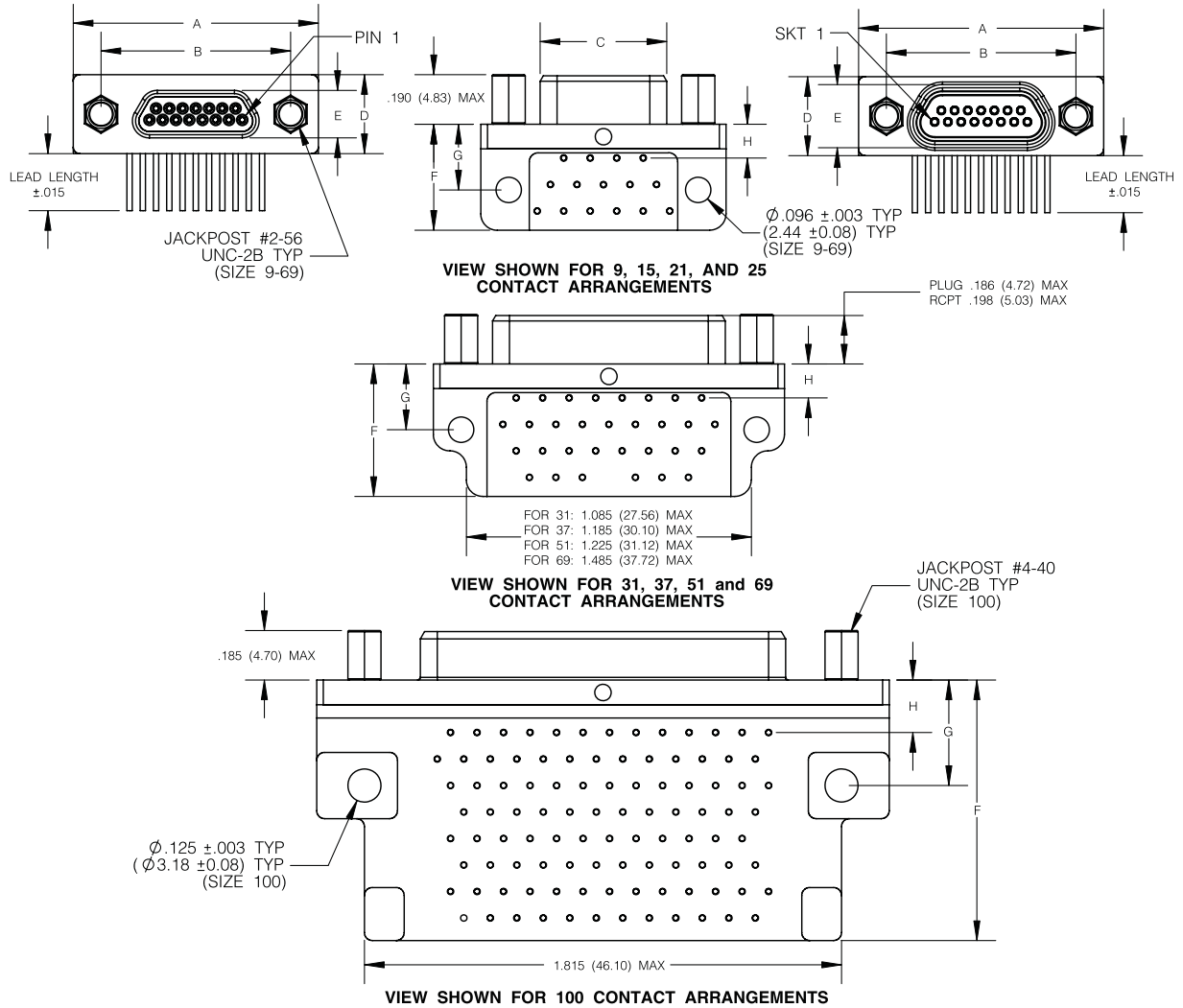


PLUG



RECEPTACLE

*INTERFACIAL SEAL NOT INCL. FOR PLASTIC SHELL



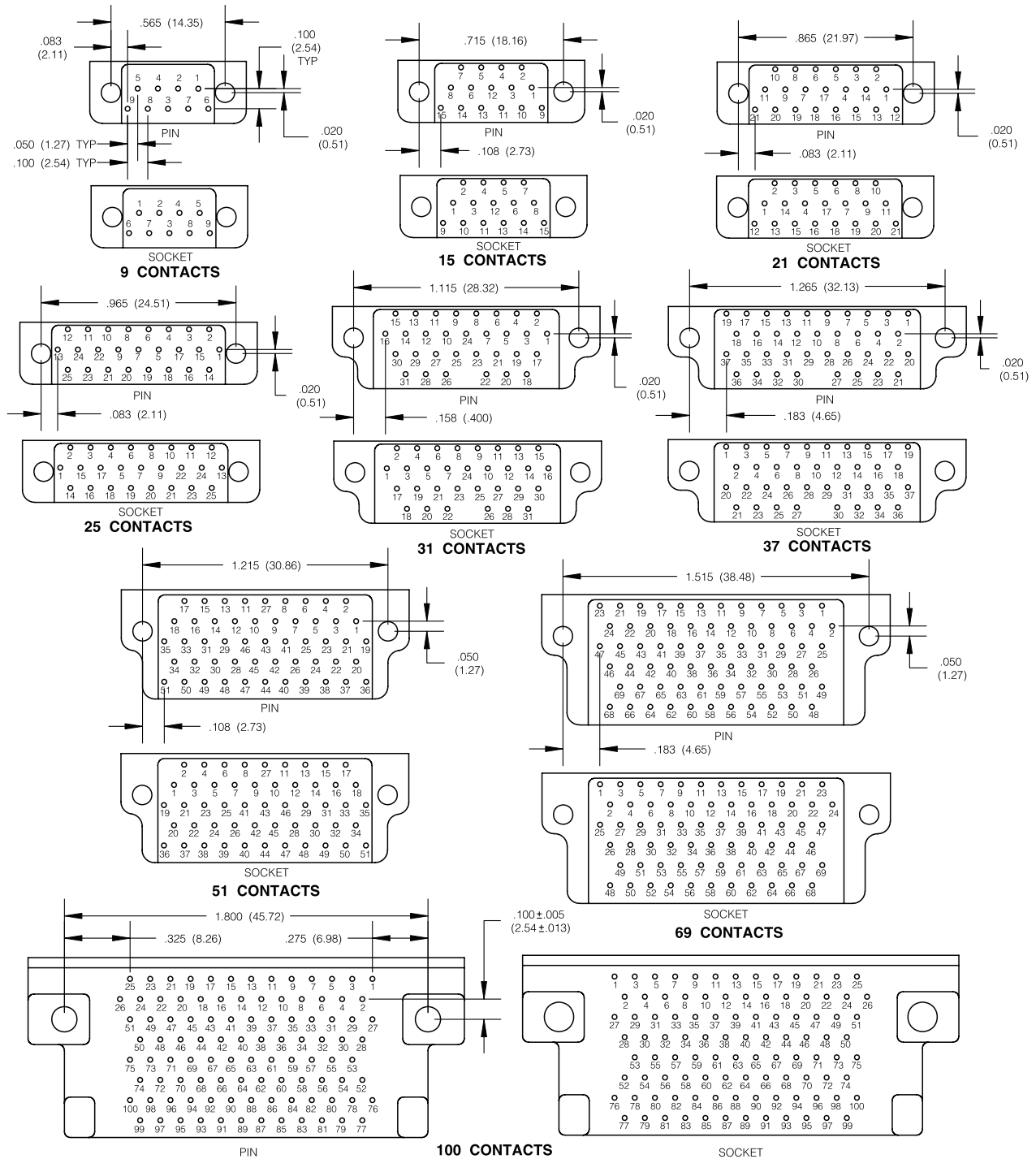
SIZE	A MAX	B ± 0.05 (0.13)	C MAX		D MAX	E MAX		F MAX	G ± 0.10 (0.25)	H ± 0.10 (0.25)
			PLUG	RCPT		PLUG	RCPT			
09	.785 (19.94)	.565 (14.35)	.334 (8.48)	.402 (10.21)	.308 (7.82)	.185 (4.70)	.253 (6.43)	.420 (10.67)	.250 (6.35)	.230 (5.81)
15	.935 (23.75)	.715 (18.16)	.484 (12.29)	.552 (13.97)	.308 (7.82)	.185 (4.70)	.253 (6.43)	.420 (10.67)	.250 (6.35)	.130 (3.30)
21	1.085 (27.56)	.865 (21.97)	.634 (16.10)	.702 (17.83)	.308 (7.82)	.185 (4.70)	.253 (6.43)	.420 (10.67)	.250 (6.35)	.130 (3.30)
25	1.185 (30.10)	.965 (24.51)	.734 (18.64)	.802 (20.37)	.308 (7.82)	.185 (4.70)	.253 (6.43)	.420 (10.67)	.250 (6.35)	.130 (3.30)
31	1.335 (33.91)	1.115 (28.32)	.884 (22.45)	.952 (24.18)	.308 (7.82)	.185 (4.70)	.253 (6.43)	.520 (13.21)	.250 (6.35)	.130 (3.30)
37	1.485 (37.72)	1.265 (32.13)	1.034 (26.26)	1.102 (27.99)	.308 (7.82)	.185 (4.70)	.253 (6.43)	.520 (13.21)	.250 (6.35)	.130 (3.30)
51	1.435 (36.45)	1.215 (30.86)	.984 (24.99)	1.052 (26.72)	.351 (8.92)	.228 (5.79)	.296 (7.52)	.650 (16.15)	.300 (7.62)	.150 (3.81)
69	1.735 (44.07)	1.515 (38.48)	1.289 (32.74)	1.357 (34.47)	.351 (8.92)	.228 (5.79)	.296 (7.52)	.755 (19.18)	.300 (7.62)	.150 (3.81)
100	2.170 (55.12)	1.800 (45.72)	1.386 (35.15)	1.508 (38.10)	.394 (10.01)	.271 (6.88)	.394 (10.01)	1.000 (25.40)	.400 (10.16)	.200 (5.08)

90° PCB Mount Narrow Profile CBR Termination Type (Similar to M83513/10 Thru /15)

RIGHT ANGLE (90 DEG) NARROW PROFILE PC CONFIGURATIONS

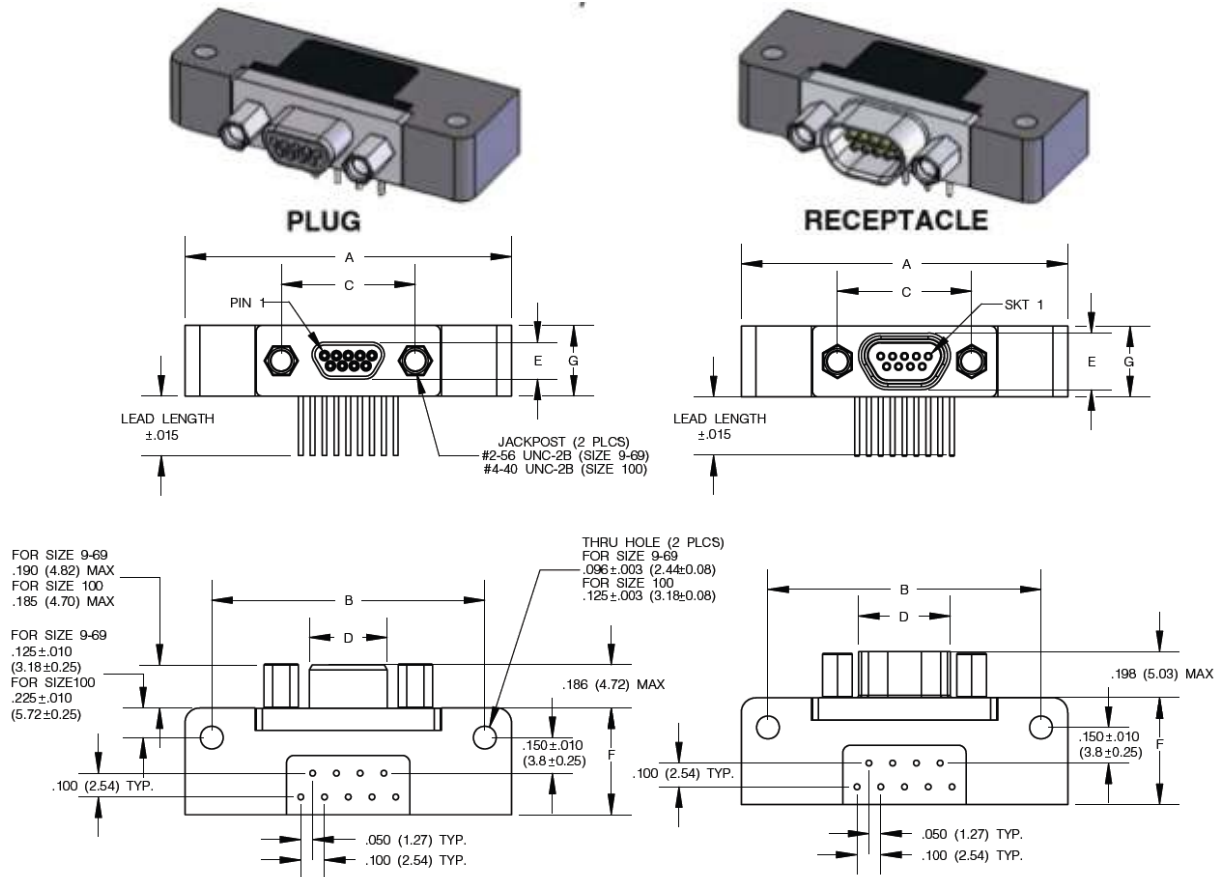
.100 (2.54) x .100 (2.54) grid pattern, offset .050 (1.27)

Cavity identification numbers are for reference only and does not appear on the connector.



Right Angle 90° PCB Mount

90° PCB Mount Narrow Profile BR Termination Type (Similar to M83513/16 Thru /21)



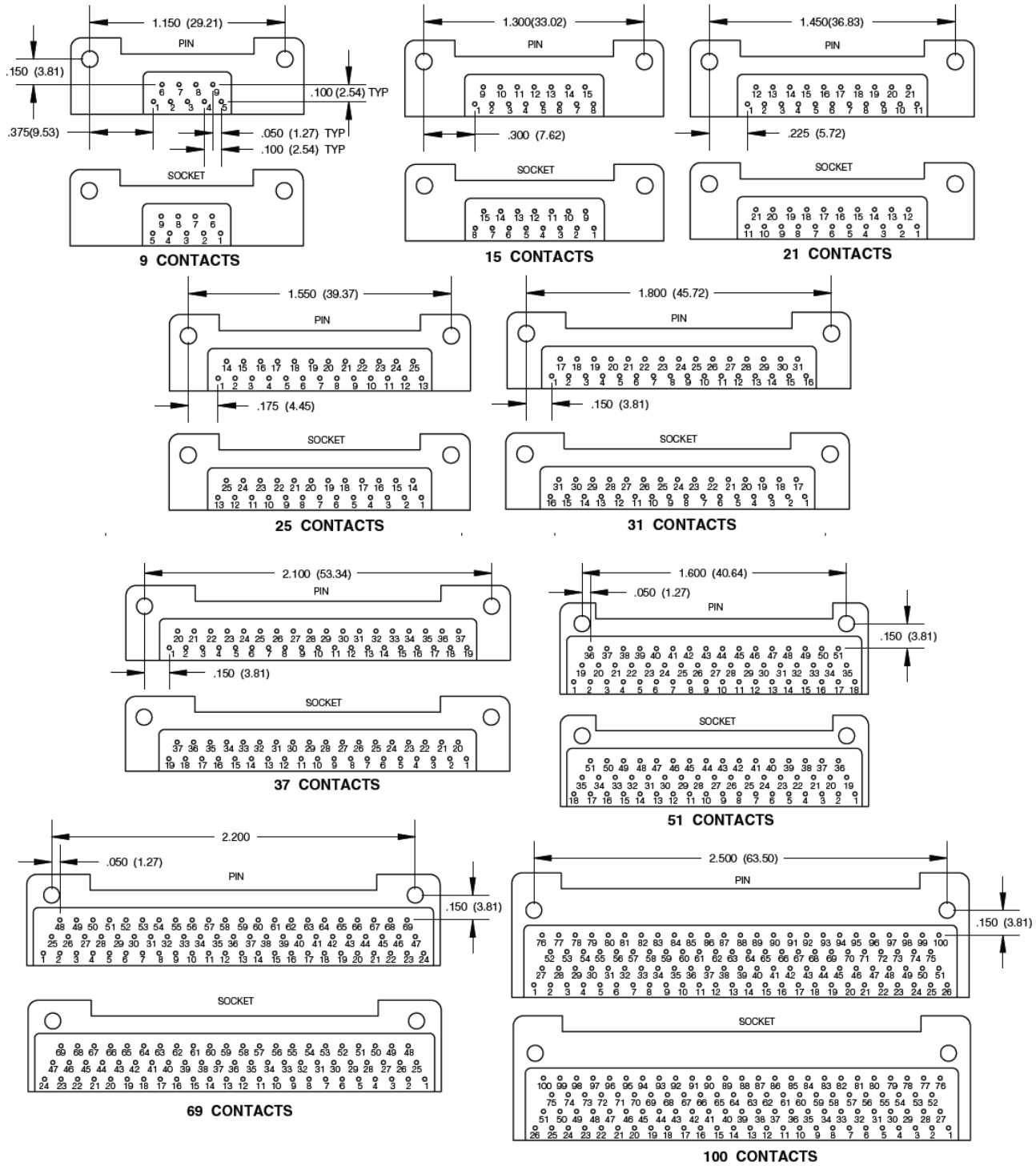
Size	A MAX.	B $\pm .007$ (0.18)	C $\pm .005$ (0.13)	D MAX.		E MAX.		F MAX.	G MAX.
				PLUG	RCPT	PLUG	RCPT		
09	1.390 (35.31)	1.150 (29.21)	.565 (14.35)	.334(8.48)	.402 (10.21)	.185 (4.70)	.253 (6.43)	.455 (11.56)	.308 (7.82)
16	1.540 (39.12)	1.300 (33.02)	.715 (18.16)	.484 (122.9)	.552 (13.97)	.185 (4.70)	.253 (6.43)	.455 (11.56)	.308 (7.82)
21	1.690 (42.93)	1.450 (36.83)	.865 (21.97)	.634 (16.10)	.702 (17.83)	.185 (4.70)	.253 (6.43)	.455 (11.56)	.308 (7.82)
25	1.790 (45.47)	1.550 (39.37)	.965 (24.51)	.734 (18.64)	.802 (20.37)	.185 (4.70)	.253 (6.43)	.455 (11.56)	.308 (7.82)
31	2.040 (51.82)	1.800 (45.72)	1.115 (28.32)	.884 (22.45)	.952 (24.18)	.185 (4.70)	.253 (6.43)	.455 (11.56)	.308 (7.82)
37	2.340 (59.44)	2.100 (53.34)	1.265 (32.13)	1.034(26.26)	1.102 (27.99)	.185 (4.70)	.253 (6.43)	.455 (11.56)	.308 (7.82)
51	1.875 (47.63)	1.600 (40.64)	1.215 (30.86)	.984 (24.99)	1.052 (26.72)	.228 (5.79)	.296 (7.52)	.565 (14.35)	.351 (8.92)
69	2.500 (63.50)	2.200 (55.88)	1.515 (38.48)	1.289(32.74)	1.357 (34.47)	.228 (5.79)	.296 (7.52)	.565 (14.35)	.351 (8.92)
100	2.780 (70.61)	2.500 (63.50)	1.800 (45.72)	1.386(38.10)	1.508 (38.10)	.271 (6.88)	.394 (10.01)	.765 (19.43)	.394 (10.1)

Right Angle 90° PCB Mount

Right Angle 90° PC Configuration

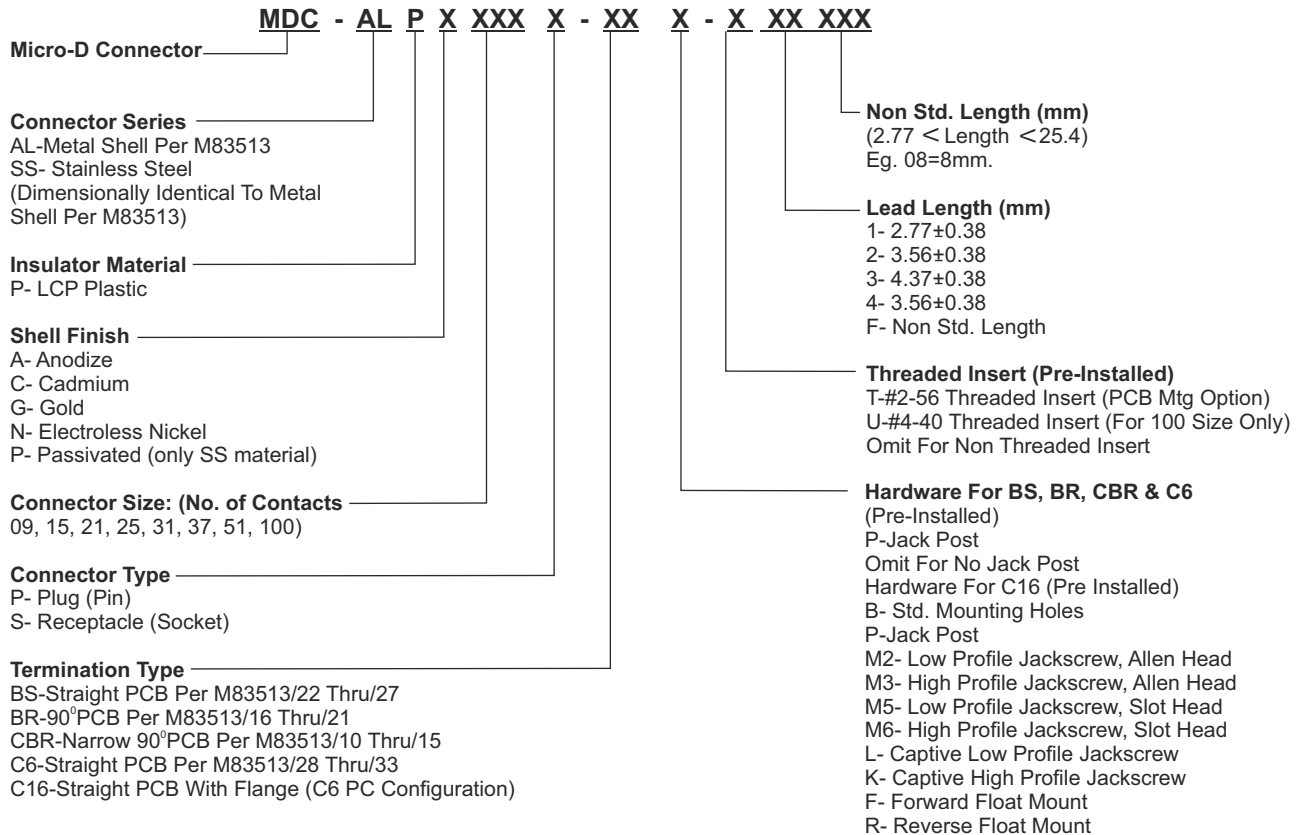
.100 (2.54) x .100 (2.54) grid pattern, offset .050 (1.27)

Cavity identification numbers are for reference only & does not appear on the connector



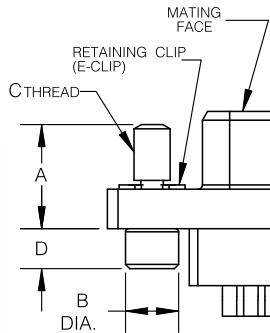
Ordering Information

Ordering Information: For PCB Mount Type



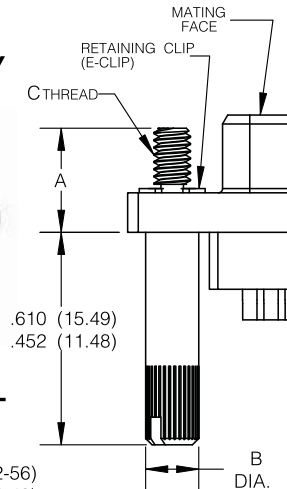
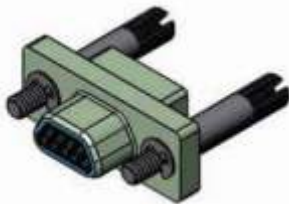
Hardware Details

LOW PROFILE JACKSCREW ASSEMBLY



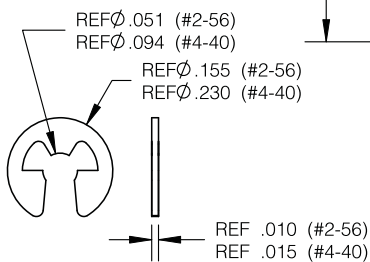
Shell Size	9-69		100	
Hitech India Pin	HM05-05	HM05-02	HM05-15	HM05-12
Pin Code	M5	M5	M5	M2
MIL-Spec Pin	M83513/05-05 (Slot)	M83513/05-02 (Allen)	M83513/05-15 (Slot)	M83513/05-12 (Allen)
Dim. A	.258/.235 (6.55/5.97)		.287±.005 (7.29±0.13)	
Dim. B	.125 (3.18)		.187 (4.75)	
Dim. C (Thd)	#2-56 UNC-2A		#4-40 UNC-2A	
Dim. D	.103/.070 (2.62/1.78)		.098 (2.49)	
Dim. E (Hex)	N/A			

HIGH PROFILE JACKSCREW ASSEMBLY

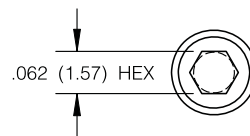


Shell Size	9-69		100	
Hitech India Pin	HM05-06	HM05-03	HM05-16	HM05-13
Pin Code	M6	M5	M5	M2
MIL-Spec Pin	M83513/05-06 (Slot)	M83513/05-03 (Allen)	M83513/05-16 (Slot)	M83513/05-13 (Allen)
Dim. A	.258/.235 (6.55/5.97)		.287±.005 (7.29±0.13)	
Dim. B	.125 (3.18)		.187 (4.75)	
Dim. C (Thd)	#2-56 UNC-2A		#4-40 UNC-2A	
Dim. D	N/A			
Dim. E (Hex)				

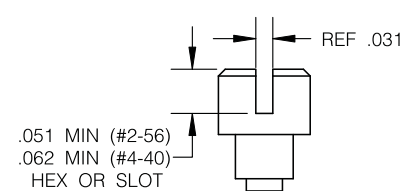
RETAINING CLIP DETAIL



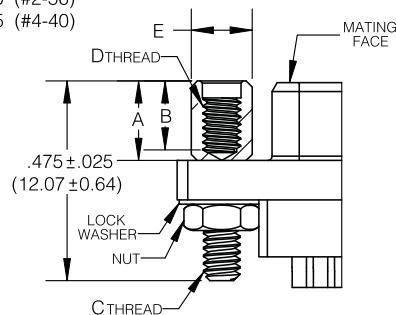
ALLEN HEAD DETAIL



SLOT HEAD DETAIL

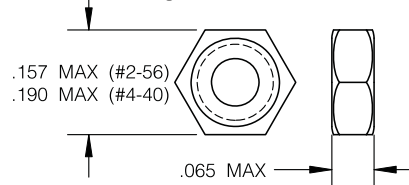


JACKPOST ASSEMBLY

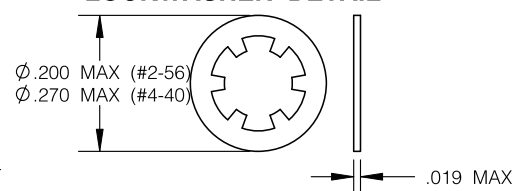


Shell Size	9-69	100
Hitech India Pin	HM05-07	HM05-17
Pin Code	P	
MIL-Spec Pin	M83513/05-07	M83513/05-17
Dim. A	.90/.185 (4.83/4.70)	.185/.190 (4.7C/4.58)
Dim. B	.155 (3.94)	.170 (4.58)
Dim. C (Thd)	#2-56 UNC-2A	#4-40 UNC-2A
Dim. D	#2-56 UNC-2B	#4-40 UNC-2B
Dim. E (Hex)	.125 (3.18)	.187 (4.75)

NUT DETAIL



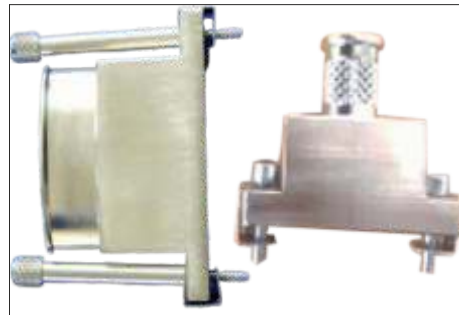
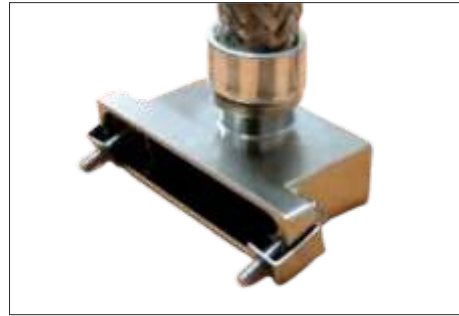
LOCKWASHER DETAIL



Micro-D Backshell



Introduction



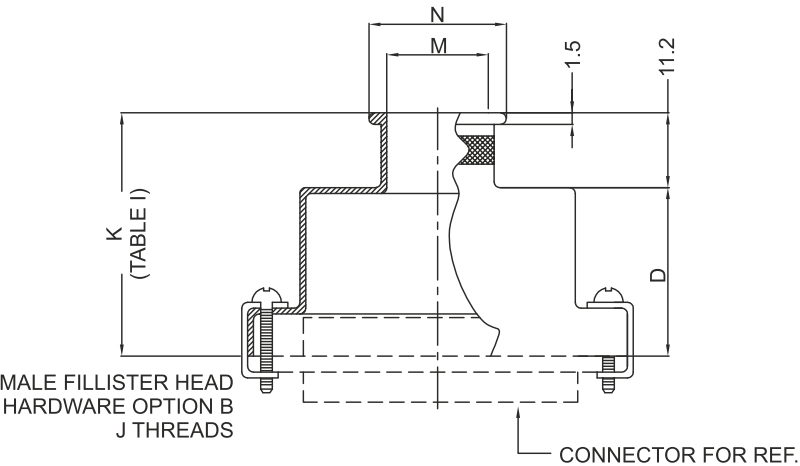
Introduction :-

Amphenol Micro-D backshell are used for shielding application of the Micro-D connectors. Additionally it also provides mechanical protection & strain relief for the connectors.

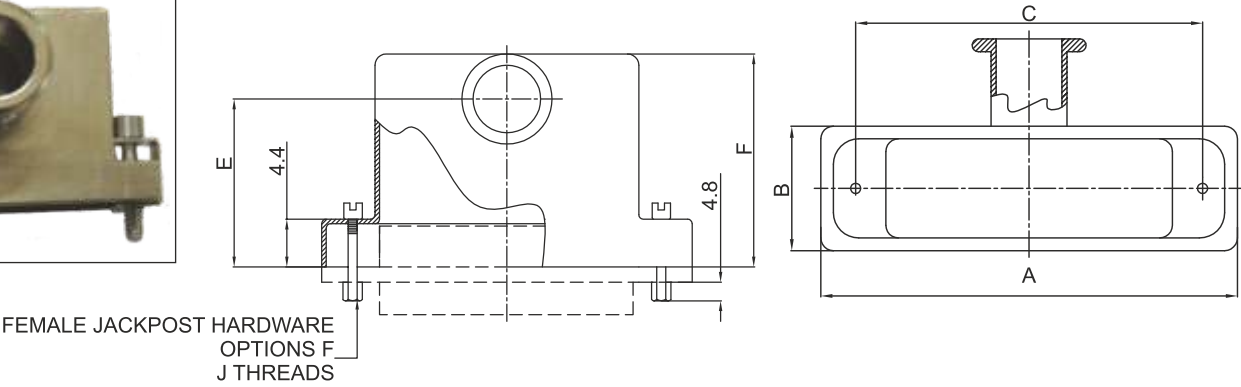
Features :-

- Machined aluminium alloy backshell are available in Standard EMI, Shield Shock, Strain relief, Elliptical Entry Backshells.
- Backshells are available for connector from 9 to 100 position & available in straight, 45 deg, dual 45 deg & 90 deg cable exit options with circular & Elliptical Entry options.
- Supplied with retaining clip & stainless steel hardware.
- Magnetic permeability less than 2 mμ
- Shielding efficiency to 1GHz, 6db to 100 db.
- Multiple finish offered like Cadmium, Electroless Nickel, Gold etc.

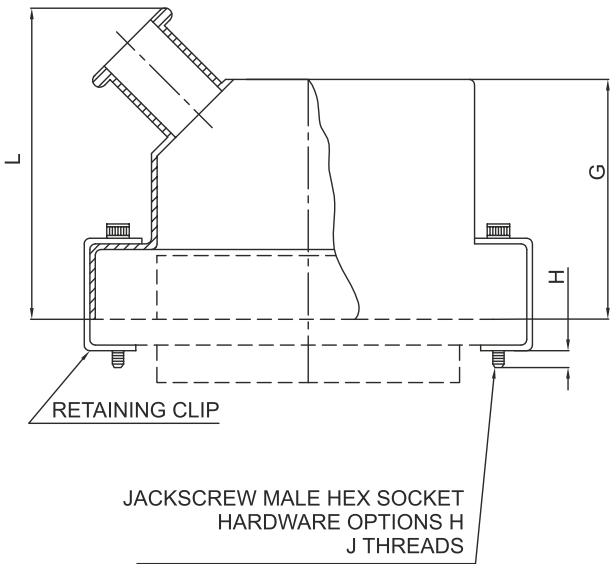
STYLE V - TOP ENTRY



STYLE W - SIDE ENTRY



STYLE X - 45° ENTRY



STYLE Y - DUAL 45° ENTRY

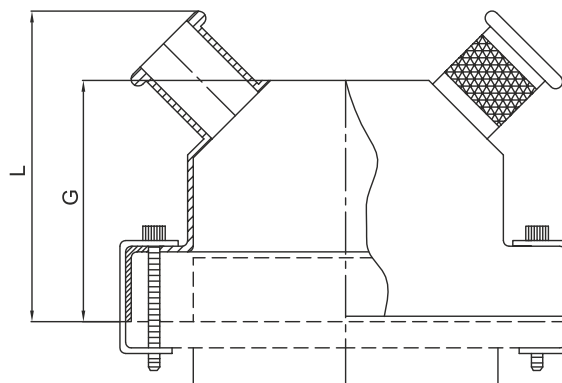


TABLE I

SHELL SIZE	A	B	C	D	E	F	G	H	J	K ±0.8	L MAX
9	19.70	9.10	14.40	8.10	11.00	15.40	16.50	3.90	2-56 UNC-2	19.10	25.40
15	23.50	9.10	18.20	11.20	11.20	16.30	17.80	3.90	2-56 UNC-2	22.40	26.20
21	27.30	9.10	22.00	14.20	11.60	17.20	18.70	3.90	2-56 UNC-2	25.40	26.70
25	29.80	9.10	24.50	15.70	12.30	18.20	20.30	3.90	2-56 UNC-2	26.90	27.70
31	33.70	9.10	28.30	17.30	12.10	18.40	21.80	3.90	2-56 UNC-2	28.40	28.70
37	37.50	9.10	32.10	18.30	12.20	18.90	23.50	3.90	2-56 UNC-2	29.50	31.30
51	36.20	10.20	30.90	19.10	13.90	21.10	24.80	3.90	2-56 UNC-2	30.20	31.80
100	54.90	11.40	45.70	20.60	17.40	25.00	26.70	4.90	4-40 UNC-2	31.80	33.50

TABLE II

CABLE ENTRY	SHELL SIZE	M ENTRY DIA.	N ENTRY DIA.
04	09 THRU 100	3.20	7.10
05	09 THRU 100	4.00	7.90
06	09 THRU 100	4.80	8.70
07	09 THRU 100	5.60	9.50
08	09 THRU 100	6.40	10.30
09	31 THRU 100	7.10	11.10
10	51 THRU 100	7.90	11.90
11	100 ONLY	8.70	12.7
12	100 ONLY	9.50	13.50

Strain Relief Backshell, Circular Entry

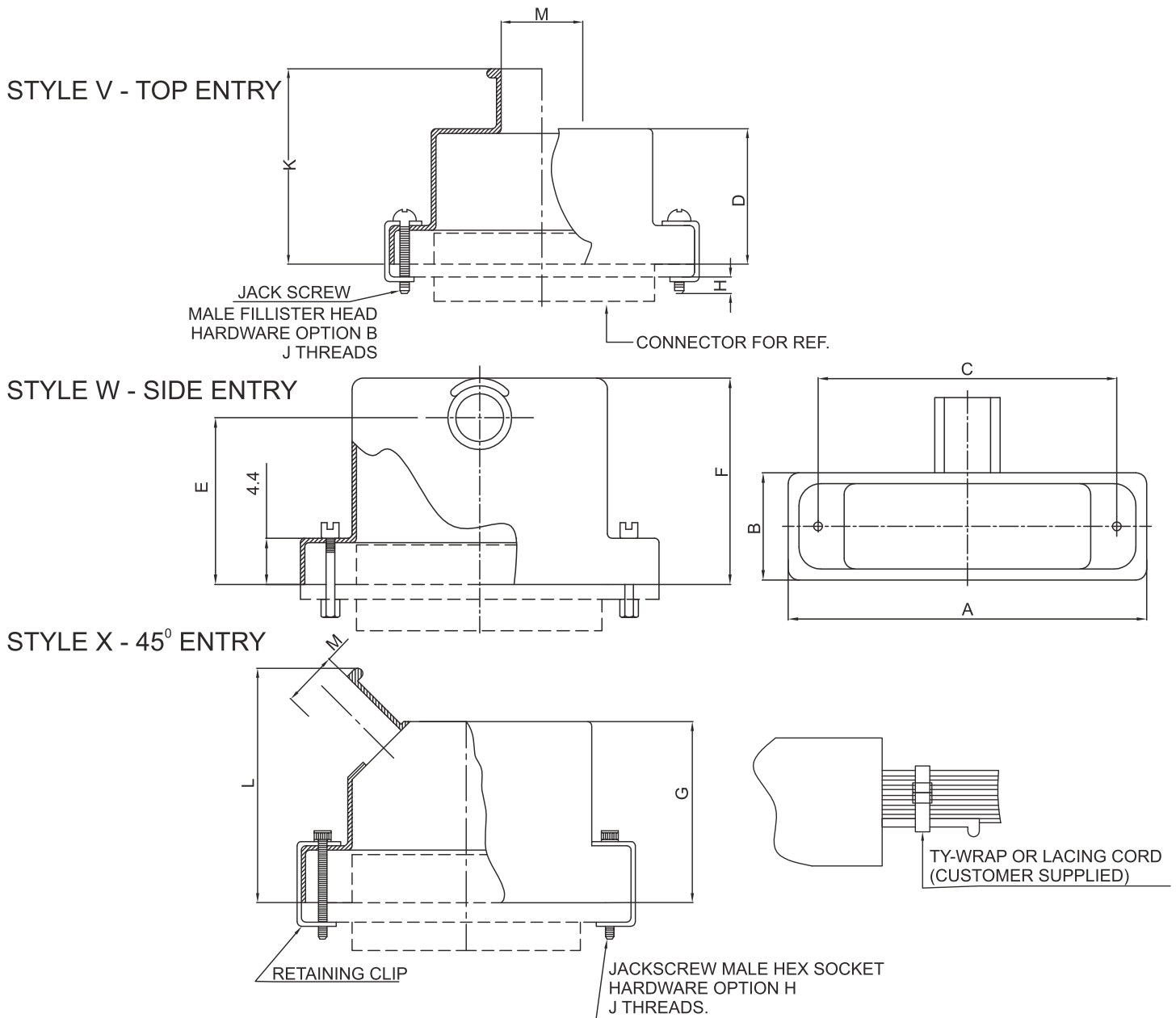
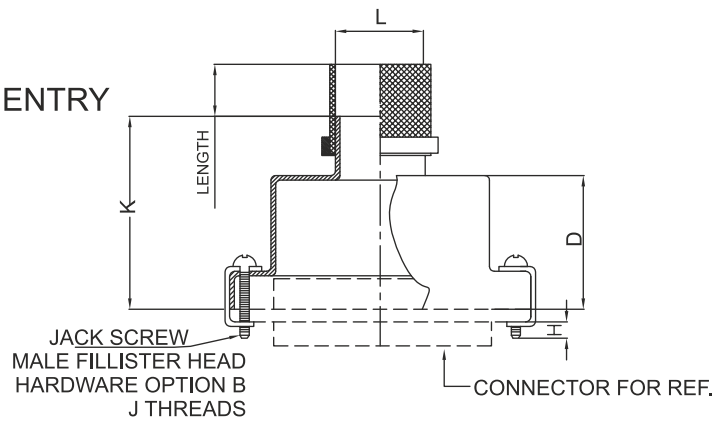


TABLE I

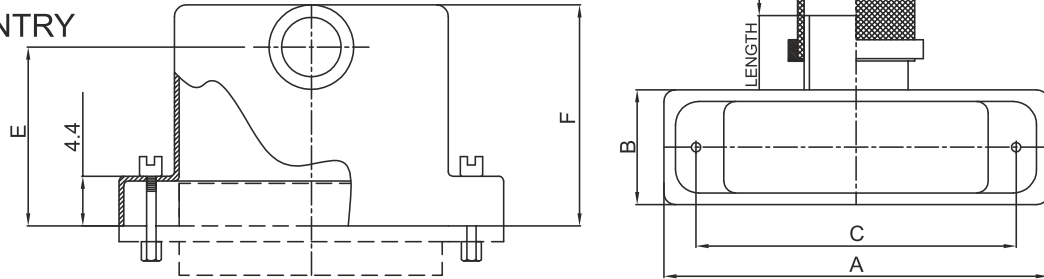
SHELL SIZE	A	B	C	D	E	F	G	H	J	K ±0.8	L MAX	M DIA. ±0.1
9	19.70	9.10	14.40	8.10	15.40	11.00	16.50	3.90	2-56 UNC-2	17.80	22.90	4.00
15	23.50	9.10	18.20	11.20	16.30	11.20	17.80	3.90	2-56 UNC-2	20.80	24.40	4.80
21	27.30	9.10	22.00	14.20	17.20	11.60	18.70	3.90	2-56 UNC-2	23.90	25.10	5.60
25	29.80	9.10	24.50	15.70	18.20	12.30	20.30	3.90	2-56 UNC-2	25.40	26.70	6.40
31	33.70	9.10	28.30	17.30	18.40	12.10	21.80	3.90	2-56 UNC-2	26.90	27.40	6.70
37	37.50	9.10	32.10	18.30	18.90	12.20	23.50	3.90	2-56 UNC-2	27.90	25.90	7.10
51	36.20	10.20	30.90	19.10	21.10	13.90	24.80	3.90	2-56 UNC-2	28.70	30.70	7.90
100	54.90	11.40	45.70	20.60	25.00	17.40	26.70	4.90	4-40 UNC-2	30.20	32.50	9.50

EMI Backshell With Shield Sock Circular Entry

STYLE V - TOP ENTRY



STYLE W - SIDE ENTRY



STYLE X - 45° ENTRY

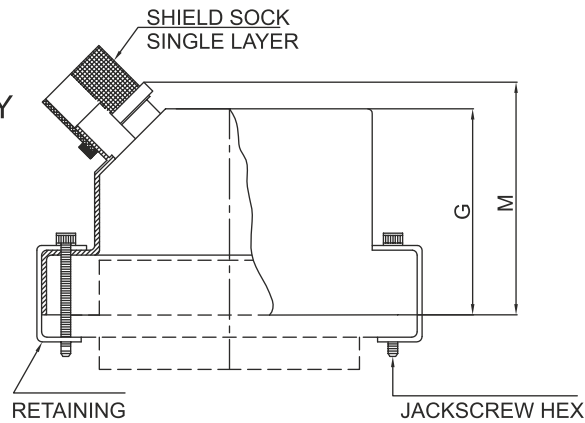
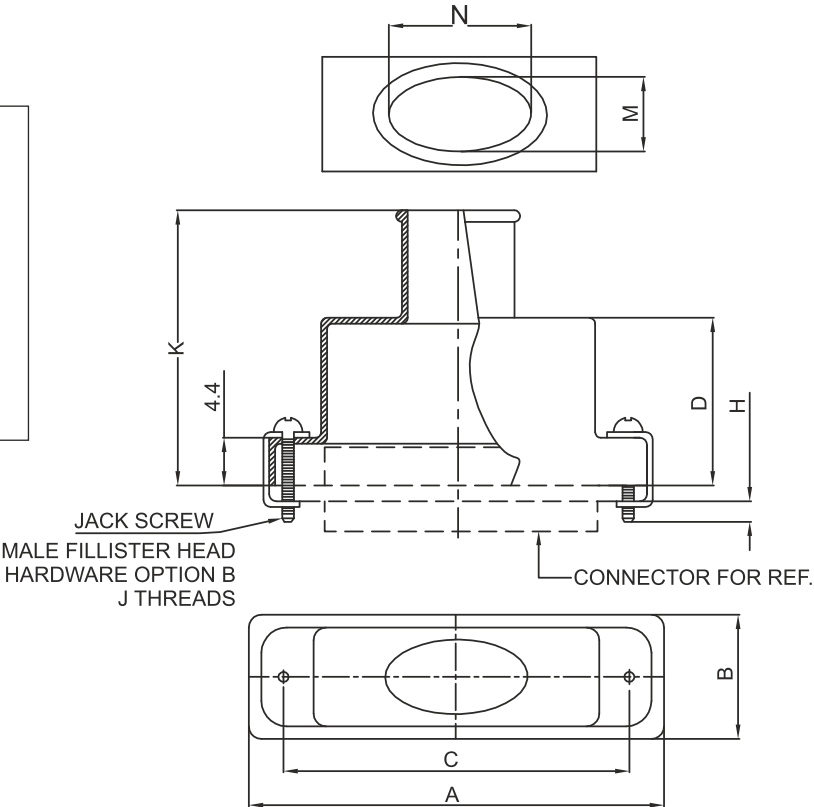
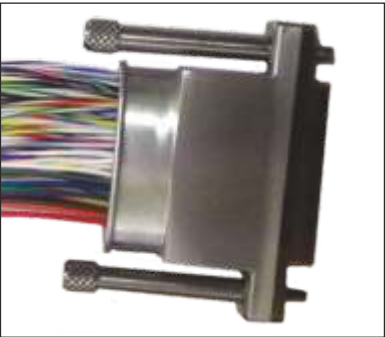


TABLE II - DIMENSION	
DASH NO.	L ENTRY
4	3.20
5	4.00
6	4.80
7	5.60
8	6.40
9	7.10
10	7.90
11	8.70
12	9.50

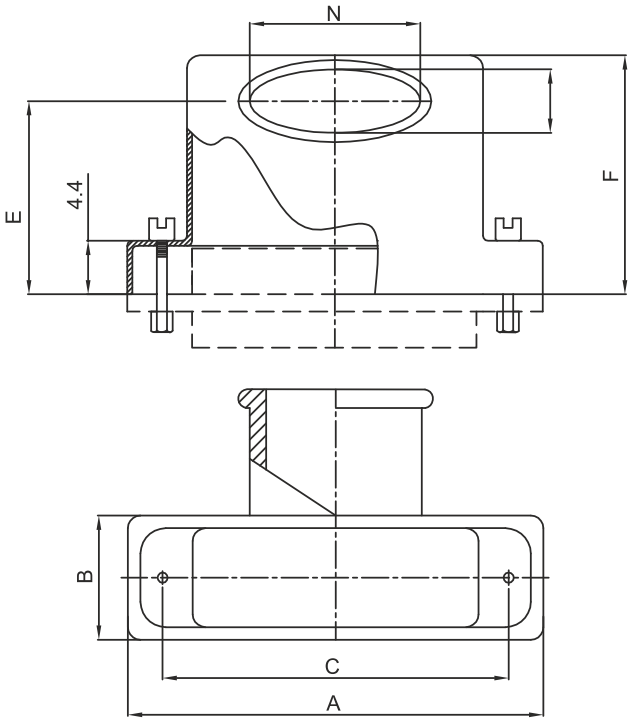
TABLE I

SHELL SIZE	A	B	C	D	E	F	G	H	J	K ±0.8	M MAX	MAX ENTRY TABLE II
9	19.70	9.10	14.40	8.10	11.00	15.40	16.50	3.90	2-56 UNC-2	19.10	25.40	8.00
15	23.50	9.10	18.20	11.20	11.20	16.30	17.80	3.90	2-56 UNC-2	22.40	26.20	8.00
21	27.30	9.10	22.00	14.20	11.60	17.20	18.70	3.90	2-56 UNC-2	25.40	26.70	8.00
25	29.80	9.10	24.50	15.70	12.30	18.20	20.30	3.90	2-56 UNC-2	26.90	27.70	8.00
31	33.70	9.10	28.30	17.30	12.10	18.40	21.80	3.90	2-56 UNC-2	28.40	28.70	9.00
37	37.50	9.10	32.10	18.30	12.20	18.90	23.50	3.90	2-56 UNC-2	29.50	29.50	9.00
51	36.20	10.20	30.90	19.10	13.90	21.10	24.80	3.90	2-56 UNC-2	30.20	30.20	10.00
100	54.90	11.40	45.70	20.60	17.40	25.00	26.70	4.90	4-40 UNC-2	31.80	31.80	12.00

STYLE V - TOP ENTRY



STYLE W - SIDE ENTRY



EMI/RFI Elliptical Banding Backshell

STYLE X - 45° ENTRY

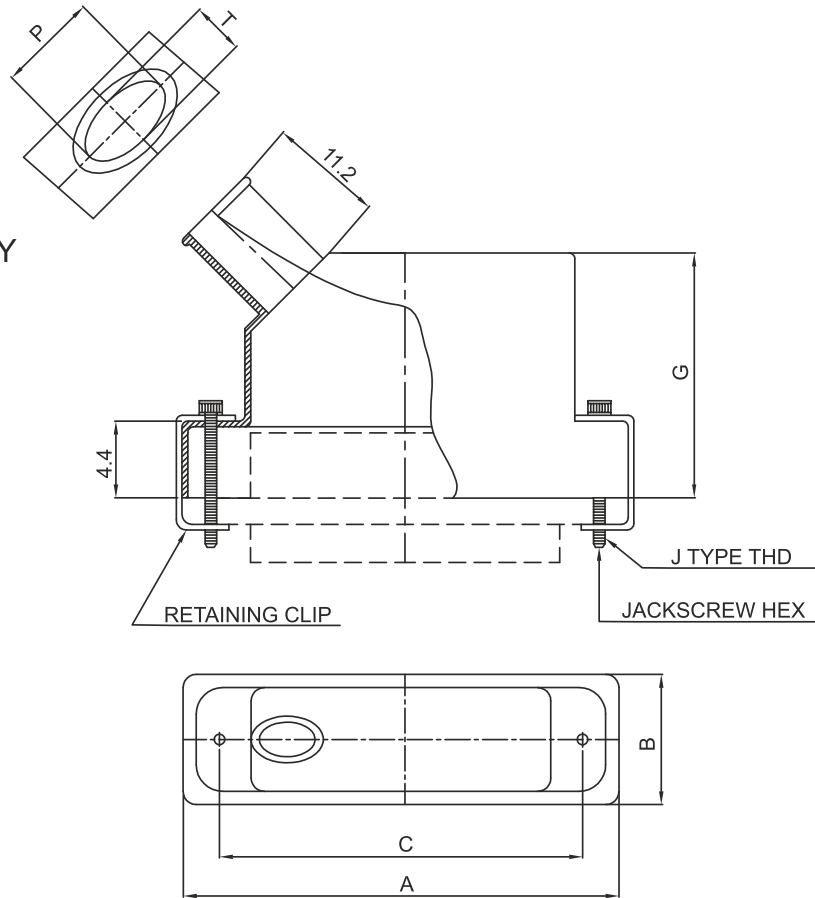
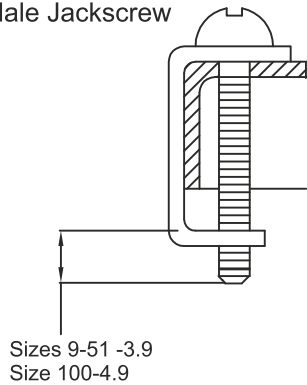


TABLE I

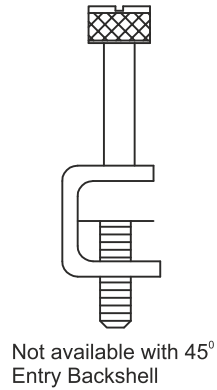
SHELL SIZE	A	B	C	D	E	F	G	P	T	H REF.	J	K ±0.8	M	N
9	19.70	8.60	14.40	8.10	11.00	15.40	21.30	8.10	4.00	3.90	2-56 UNC-2	19.10	7.10	7.90
15	23.50	8.60	18.20	11.20	11.20	16.30	22.60	9.80	4.80	3.90	2-56 UNC-2	22.40	7.10	10.70
21	27.30	8.60	22.00	14.20	11.40	17.20	23.60	11.40	5.60	3.90	2-56 UNC-2	25.40	7.10	15.00
25	29.80	8.60	24.50	15.70	12.30	18.20	24.90	12.90	6.40	3.90	2-56 UNC-2	26.90	7.10	17.50
31	33.70	8.60	28.30	17.30	12.10	18.40	25.40	13.80	6.70	3.90	2-56 UNC-2	28.40	7.10	20.80
37	37.50	8.60	32.10	18.30	12.10	18.90	25.90	14.20	7.10	3.90	2-56 UNC-2	29.50	7.10	24.60
51	36.20	9.70	30.90	19.10	13.70	21.10	27.20	16.20	7.90	3.90	2-56 UNC-2	30.20	7.90	23.40
100	54.90	10.90	45.70	20.60	17.40	25.00	29.50	19.50	9.50	4.90	4-40 UNC-2	31.80	9.10	32.80

Hardware Details

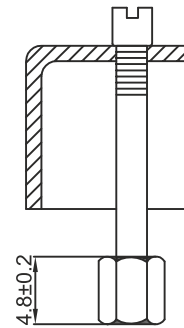
Style "B"
Fillister Head
Male Jackscrew



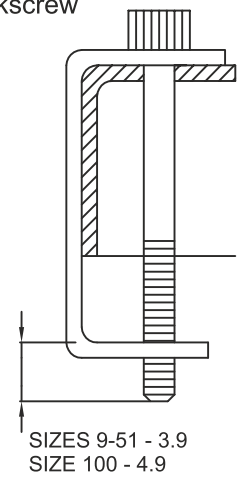
Style "E"
Extended Jackscrew



Style "F"
Female Jackpost



Style "H"
Hex (Allen) Head
Jackscrew



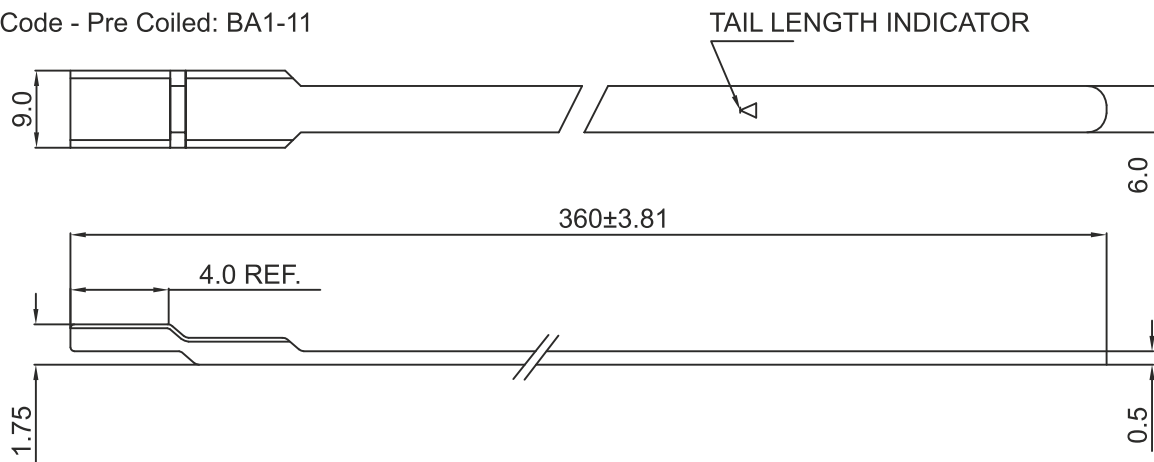
NOTES:-

FB:- (1) Female Jackpost & (1) Male Jackpost
FH:- (1) Female Jackpost & (1) Male Hex Socket

BAND OPTION: B

STANDARD BAND

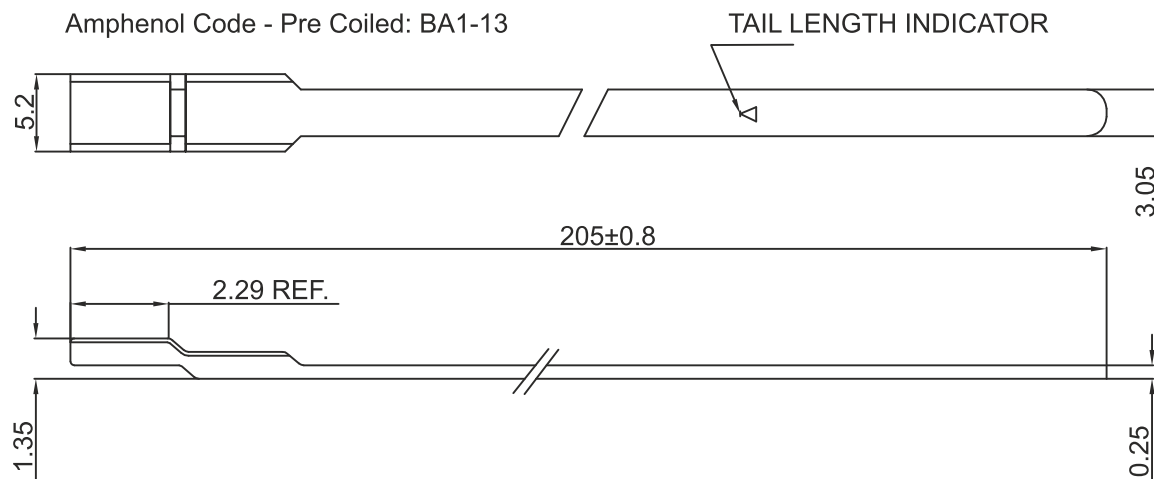
Amphenol Code - Pre Coiled: BA1-11



BAND OPTION: B1

MICRO-BAND

Amphenol Code - Pre Coiled: BA1-13



ordering Information For Micro D Backshells

SERIES DESIGNATION	XX	CABLE ENTRY STYLE	FINISH	XX	HARDWARE	CABLE ENTRY	6	B
BASIC PART NO.								
10:- STANDARD EMI BACKSHELL 11:- STRAIN RELIEF BACHSHELL 12:- EMI BACKSHELL WITH SHIELD SOCK 20:- ELLIPTICAL ENTRY EMI BACKSHELL								
CABLE ENTRY STYLE								
V:- TOP ENTRY W:- SIDE ENTRY X:- 45° ENTRY Y:- DUAL 45° ENTRY								
PLATING FINISH								
CB:- ELECTROLESS NICKEL VB:- CADMIUM PLATE WITH O/DRAB DARK GREEN SHADE OVER ELECTROLESS NICKEL FINISH. BD:- BLACK ANODIZE FINISH. MC:- 0.5 MICRON GOLD PLATED OVER NICKEL YB:- YELLOW CHROMATE TREATMENT (CHEM. FILM) (VD) VD:- CADMIMUM PLATING WITH YELLOW PASSIVATION (YB)								
SHELL SIZE								
09, 15, 21, 25, 31, 37, 51, 100								
HARDWARE OPTION								
B:- MALE FILLISTER HEAD E:- EXTENDED JACK SCREW H:- MALE HEX SOCKET F:- FEMALE JACKPOST (REF. PAGE NO. 11) FB:- 1 FEMALE JACKPOST & 1 MALE JACK POST FH:- 1 FEMALE JACKPOST & 1 MALE HEX SOCKET								
CABLE ENTRY SIZE								
04, 05, 06, 07, 08, 09, 10, 11, 12 (NOT APPLICABLE FOR ELLIPTICAL & STRAIN RELIEF BACKSHELL)								
SHIELD SOCK LENGTH								
LENGTH IN 1INCH INCREMENTS (E.G. 6=6) (ONLY FOR EMI BACKSHELL WITH SHIELD SOCK)								
BAND OPTION								
B- PRE-COILED STANDARD BAND B1- PRE-COILED MICRO BAND								