

1.1 - Series

M Series

1.2 - Shell Finish

A = Alodine
B = Black Anodize
C = Cadmium
G = Gold
N = Electroless Nickel

1.3 - Insulator Material

E = Polyester
R = Polyphenylene Sulfide

1.4 - Contact Arrangements

9, 15, 21, 25, 31, 37, 51, 60, 100

1.5 - Contact Type/Gender

P = Pin (plug)
S = Socket (receptacle)

1.6 - Wire Size

4 = 24 AWG
5 = 25 AWG (solid wire only)
6 = 26 AWG
8 = 28 AWG
0 = 30 AWG
S = Solder cup (*)

④

* S = Solder cup (26 AWG max) (socket only)

1.7 - Wire Type

C = Solid Copper
E = 7 Strand type 'E' NEMA HP3 (was MIL-W-16878/4 Type 'E')
F = 7 Strand type 'ET' NEMA HP3 (was MIL-W-16878/4 Type 'ET')
G = 19 Strand type 'E' NEMA HP3 (was MIL-W-16878/4 Type 'E')
H = 19 Strand type 'ET' NEMA HP3 (was MIL-W-16878/4 Type 'ET')
K = 19 Strand M22759/33 (26 AWG only)
M= 19 Strand M22759/11 (24 & 26 AWG only)
N= 19 Strand M22759/19 (26 AWG only)

1.8 - Wire Color/Finish

1 = All white
2 = All yellow
3 = Tin plated
4 = Gold plated
5 = Color coded per MIL-STD-681 System 1 (all except 60 & 100 layouts)
6 = 15-color repeating color code
7 = 10-color repeating color code

1.9 - Lead Length (min)

Stranded wire: from 6.0" to 144.0" in 6.0" increments
Solid wire: from 0.5" to 3.0" in 0.5" increments

DWG NO: 00-016-0000				
REVISIONS				
ECO	REV	DESCRIPTION	DATE	APPROVED
	1	RELEASE	8/6/10	WC
	2	ADDED /07 FACTORY CODE	3/10/14	WC
	3	SECTION 1.7 - WIRE TYPE ADDED 24 AWG AS OPTION FOR 'M' WIRE	4/3/18	WC
	4	ADDED SOLDER CUP OPTION TO PART NUMBER BUILDER	7/17/19	WC
	5	SECTION 1.10 - HARDWARE ADDED M06 HARDWARE	2/26/20	WC
	6	SECTION 1.11 - FACTORY MOD CODES ADDED MCR TO CODES /01 & /06	7/14/21	WC

1.10 - Hardware (blank) = no hardware

Commercial (#2-56 for sizes 9-60; #4-40 for size 100):

F = Float mount
H = Hex drive (low profile)
J = Slotted drive (tall profile)
L = Slotted drive (low profile)
P = Jackpost (unassembled)

Military:

M02 = Hex drive, low profile (size 9-60 only)
M03 = Hex drive, tall profile (size 9-60 only)
M05 = Slotted drive, low profile (size 9-60 only)
M06 = Slotted drive, tall profile (size 9-60 only)
M07 = Jackpost, unassembled (size 9-60 only)
M12 = Hex drive, low profile (size 100 only)
M13 = Hex drive, tall profile (size 100 only)
M15 = Slotted drive, low profile (size 100 only)
M16 = Sloted drive, tall profile (size 100 only)
M17 = Jackpost, unassembled (size 100 only)

1.11 - Factory Modification Codes

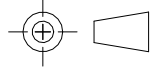
/01 = High temperature (200° C) (MNR, MCR & MBR connectors only)
/02 = Termination leads coated with Sn60 (solid wire 0.5" max. length)
/04 = Testing to M83513 Groups A & B
/05 = Testing to M83513 Group A only
/06 = High temperature (200° C) with enhanced sealing properties
for high humidity applications (MNR, MCR & MBR connectors only)
/07 = s/a /06 except no nickel underplating for non-magnetic
applications (MBE & MBR connectors only)

PART NUMBER		CUSTOMER APPROVAL							
SEE ABOVE		SIGNED:		DATE:					
INTENDED USE CUSTOMER		<div><div><div>MIN-E-CON</div><div>17312 EASTMAN IRVINE, CA 92614</div></div></div>							
REFERENCE									
SIGNATURES		DWG TITLE 'M' SERIES METAL SHELL PART NUMBER BUILDUP							
DATE									
DRAWN CHARETTE		8/6/10							
CHECKED		SIZE B		FSCM NO. 54455		DWG NO. 00-016-0000		REV 6	
APPROVED		SCALE NONE				SHEET 1 of 2			

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UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES DRAWING STANDARDS ARE PER ASME Y14.5M-2009

THIRD ANGLE PROJECTION

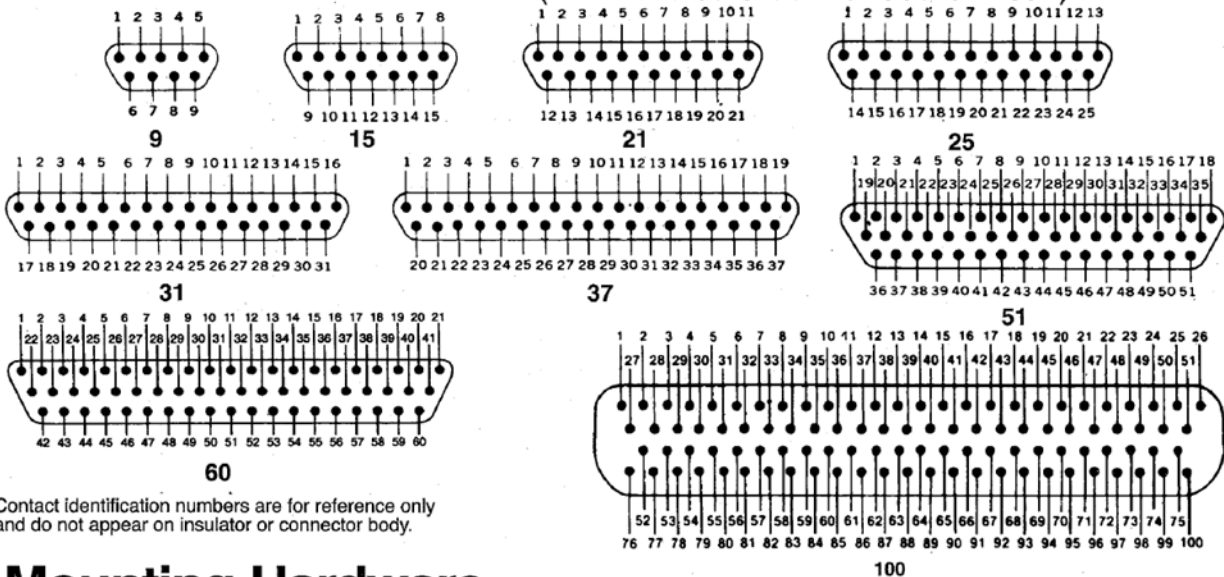


REVISIONS

ECO	REV	DESCRIPTION	DATE	APPROVED
	6	SEE SHEET 1		

Contact Arrangements/Series “D” & “M”

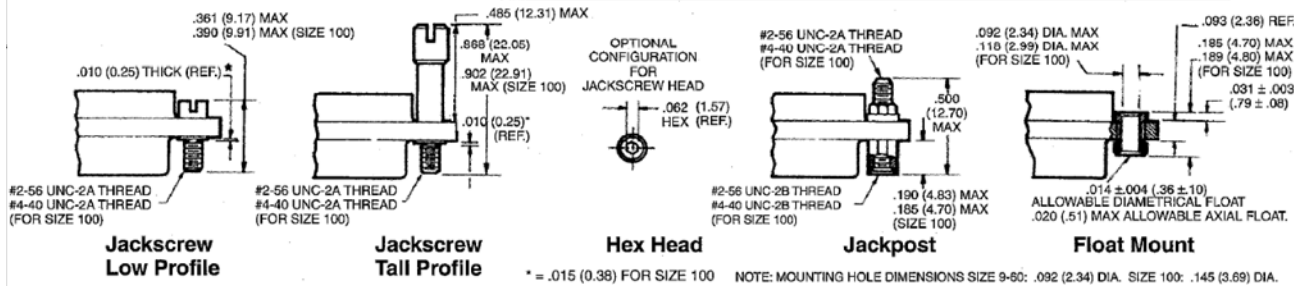
Face View of Pin Insert (Use Reverse Order For Socket Insert)



Contact identification numbers are for reference only and do not appear on insulator or connector body.

Note: 60 size available in metal shell only. A'D' series is not available in the 60 or 100.

Mounting Hardware



* = .015 (0.38) FOR SIZE 100 NOTE: MOUNTING HOLE DIMENSIONS SIZE 9-50: .092 (2.34) DIA. SIZE 100: .145 (3.69) DIA.

Commercial Style Jackscrew, Low Profile

Size 9-51	Size 100
Suffix code for ordering with connectors	H L
Kit number when ordering separately	10,000 - 0006 10-000-0002
Size 100	-

M83513/05 Style

Size 9-51	Size 100
Suffix code for ordering with connectors	M02 M05
Kit number when ordering separately	M83513/05-02 M83513/05-05
Size 100	-
Suffix code for ordering with connectors	M12 M15
Kit number when ordering separately	M83513/05-12 M83513/05-15

Jackscrew, Tall Profile

Size 9-51	Size 100
Suffix code for ordering with connectors	- J
Kit number when ordering separately	- 10-000-0001
Size 100	-

Jackpost

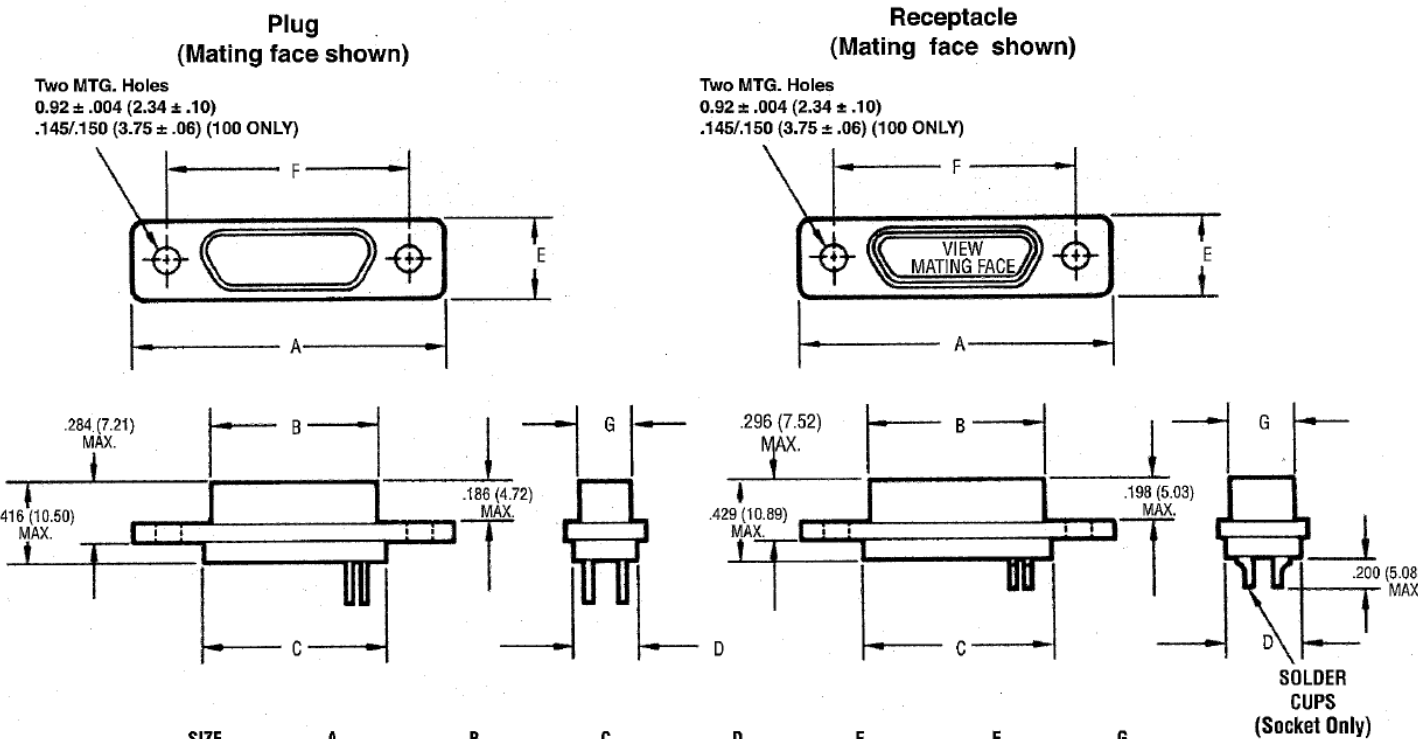
Size 9-51	Size 100
Suffix code for ordering with connectors	- P
Kit number when ordering separately	- 10-000-0003
Size 100	-

Float Mount

Size 9-51	Size 100
Suffix code for ordering with connectors	- F
Kit number when ordering separately	-
Size 100	-

- Notes:
- (1) When ordering hardware separately, each kit number is sufficient for one connector.
 - (2) Jackscrews and jackposts fit both plugs and receptacles.
 - (3) Size 100 commercial hardware not available (except for Float Mount), therefore use military hardware.
 - (4) Float Mount hardware is factory installed and available in commercial style only.
 - (5) Min-E-Con's commercial style Jackpost features an exclusive .087 counter bore.

Dimensions/Inches (mm)



SIZE	A ±.010 (.25)	B MAX	C ±.010 (.25) -.018 (.46)	D MAX	E ±.010 (.25)	F ±.005 (.13)	G MAX
9P	.775 (19.68)	.334 (8.48)	.390 (9.91)	.270 (6.86)	.298 (7.57)	.565 (14.35)	.184 (4.65)
9S	.775 (19.68)	.402 (10.21)	.390 (9.91)	.270 (6.86)	.298 (7.57)	.565 (14.35)	.252 (6.38)
15P	.925 (23.50)	.484 (12.29)	.540 (13.72)	.270 (6.86)	.298 (7.57)	.715 (18.16)	.184 (4.65)
15S	.925 (23.50)	.552 (14.02)	.540 (13.72)	.270 (6.86)	.298 (7.57)	.715 (18.16)	.252 (6.38)
21P	1.075 (27.30)	.634 (16.10)	.690 (17.53)	.270 (6.86)	.298 (7.57)	.865 (21.97)	.184 (4.65)
21S	1.075 (27.30)	.702 (17.83)	.690 (17.53)	.270 (6.86)	.298 (7.57)	.865 (21.97)	.252 (6.38)
25P	1.175 (29.84)	.734 (18.64)	.790 (20.07)	.270 (6.86)	.298 (7.57)	.965 (24.51)	.184 (4.65)
25S	1.175 (29.84)	.802 (20.37)	.790 (20.07)	.270 (6.86)	.298 (7.57)	.965 (24.51)	.252 (6.38)
31P	1.325 (33.66)	.884 (22.45)	.940 (23.88)	.270 (6.86)	.298 (7.57)	1.115 (28.32)	.184 (4.65)
31S	1.325 (33.66)	.952 (24.18)	.940 (23.88)	.270 (6.86)	.298 (7.57)	1.115 (28.32)	.252 (6.38)
37P	1.475 (37.46)	1.034 (26.26)	1.090 (27.69)	.270 (6.86)	.298 (7.57)	1.265 (32.13)	.184 (4.65)
37S	1.475 (37.46)	1.102 (27.99)	1.090 (27.69)	.270 (6.86)	.298 (7.57)	1.265 (32.13)	.252 (6.38)
51P	1.425 (36.20)	.984 (24.99)	1.040 (26.42)	.310 (7.87)	.341 (8.66)	1.215 (30.86)	.227 (5.74)
51S	1.425 (36.20)	1.052 (26.72)	1.040 (26.42)	.310 (7.87)	.341 (8.66)	1.215 (30.86)	.295 (7.47)
100P	2.160 (54.86)	1.384 (35.15)	1.432 (36.37)	.360 (9.14)	.384 (9.75)	1.800 (45.72)	.270 (6.86)
100S	2.160 (54.86)	1.498 (38.05)	1.432 (36.37)	.360 (9.14)	.384 (9.75)	1.800 (45.72)	.394 (10.01)

PART NUMBER		CUSTOMER APPROVAL	
		SIGNATURE	DATE
INTENDED USE			
CUSTOMER			
REFERENCE			
SIGNATURES		DATE	
DRAWN			
CHARETTE		8/6/10	
CHECKED			
APPROVED			
SIZE	FSCM NO.	DWG NO.	REV
B	54455	00-016-0000	6
SCALE	NONE	SHEET	2 of 2