M Series

High Voltage Miniature / #20 Contacts / .040" Dia. / 7.5 Amps

M4PLSH10
Plug with lock spring and hood

M4SLRGN
Receptacle with lock ring, ground lug and nut

M10SLRN
Receptacle with lock ring and nut

M10PLSH19
Plug with lock spring and hood

N
Nylon Nut

M12SLS12
Receptacle with lock spring

M12P
Plug

M12H
Hood with lock shell

The extreme compactness and lightweight of M connectors make them ideal for such applications as strain gauges, telemetry and pressure pick-up installations in aircraft, portable equipment and instrumentation.

Specifications

Current Rating: 7.5 amps

No. of Contacts: 4, 5, 7, 9, 10, 12

Pin Contacts: .040 dia. brass, gold plated

Socket Contacts: Spring temper phosphor bronze, gold plated

Terminations: .048 dia. solder cup accepts up to #20 AWG stranded wire. M12 - .043 dia. solder cup accepts up to #20 AWG stranded wire.

Electrical Data: The dielectric withstanding voltage is one minute electrification at 1500 VAC. (2250 VAC for M12).

Dielectric: Brown mineral filled diallyl phthalate. Also available in gray glass filled diallyl phthalate, per MIL-M-14, SDG-F.

Polarization: Body design permits engagement in proper position only.

Mounting: For 1/16" panel mounting of either plug or receptacle use cadmium plated brass nut for M4-10, nylon nut for M12. Add "**N**" to code number.

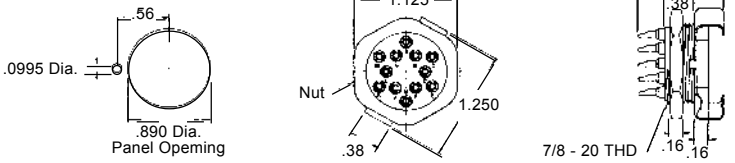
Lock Ring (and lock spring): May be applied to plug or receptacle to stop connector rotation on panel. When engaged with lock spring, prevents accidental disconnection due to vibration, etc.

Ground Lug: Can be used to ground any of the 4 contacts on M4 connector. Add "**G**" to code number.

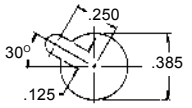
Hood: Anodized aluminum or brown mineral filled diallyl phthalate hoods may be applied to plug or receptacle of M4-M10. With or without cable clamps to provide additional strain relief for the cable.

Outline

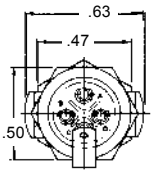
Dimensions are for reference only and are subject to change. Outline drawings on request.

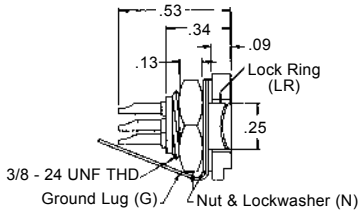


M21S

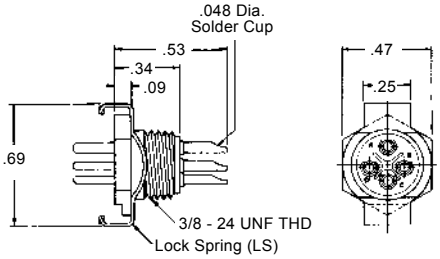


Panel Drilling

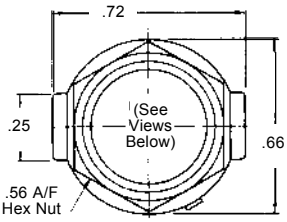


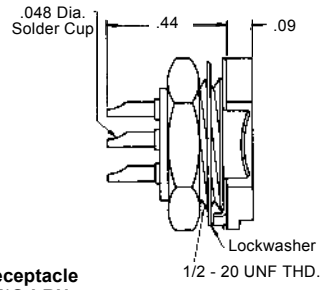


Receptacle
M4S-LRGN

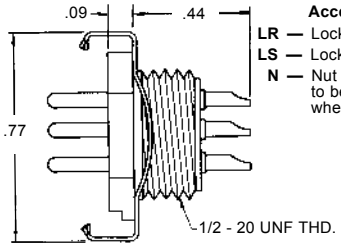


Plug
M4P-LS



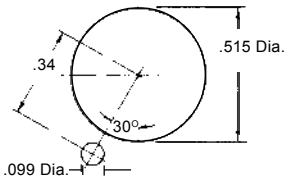


Receptacle
M*S-LRN

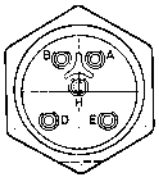


Plug
M*P-LS

Accessory Code
LR — Lock Ring
LS — Lock Spring
N — Nut & Lockwasher to be used as suffixes when required.

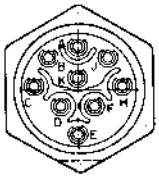


Panel Drilling
(Viewed from Front of Panel)

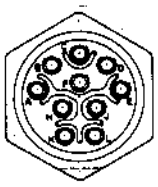


Contact Arrangement M5S

Contact Arrangement M7S



Contact Arrangement M9S



Contact Arrangement M10S

Contact locations are shown from terminal sides

NOTE: Contact arrangement of M*P are reversed
* Insert number, indicating number of contacts (5, 7, 9, 10)

Physical & Electrical Data

Catalog Number	Number of Contacts	Weight In Ounces						Solder Cup Hole Dia./in.	Current Rating
		Plug	Rec.	Nut	Lock Spring	Lock Ring	Lock Washer		
M4P M4S	4	.08	.06	.08	.02	.02	.01	.048	7.5 amps
M5P M5S	5	.10	.08	.06	.02	.03	.01	.048	7.5 amps
M7P M7S	7	.12	.10	.06	.02	.03	.01	.048	7.5 amps
M9P M9S	9	.13	.10	.06	.02	.03	.01	.048	7.5 amps
M10P M10S	10	.13	.10	.06	.02	.03	.01	.048	7.5 amps
M12P M12S	12	.3	.4	.05	.02	.03	.01	.043	7.5 amps

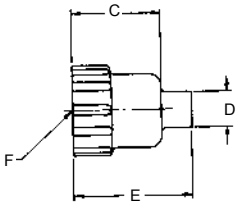
Molded Diallyl Phthalate and Aluminum Hoods

Molded diallyl phthalate cable hoods protect soldered wires and facilitate disengagement of connectors. Cable clamps provide additional strain relief and support. They are supplied on hoods with "**C**" in the code number. Clamps are cadmium plated with olive drab iridite finish. Anodized aluminum hoods are precision machined from bar stock to give greater strength than die cast units. Cable clamps are machined as an integral part of the connector. The set screw prevents accidental disassembly from vibration, etc. A polyethylene sleeve liner provides added insulation in the terminal area.

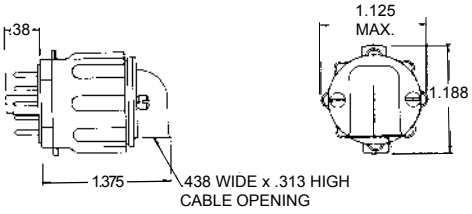
Outline

Dimensions are for reference only and are subject to change. Outline drawings on request.

standard hoods

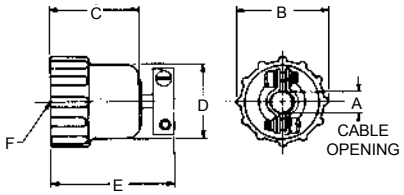


H9, H10, H19



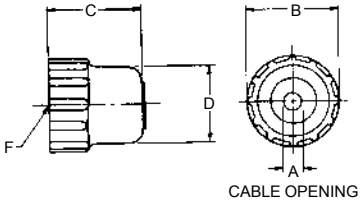
M12H

hood with cable clamps



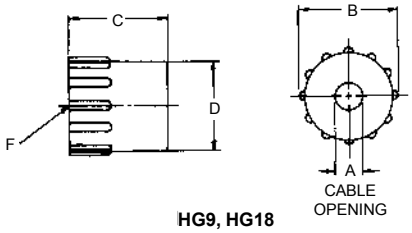
H9C, H10C, H19C, H19CS

modified hoods



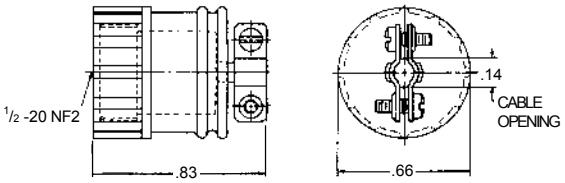
H9S, H19S

special hoods



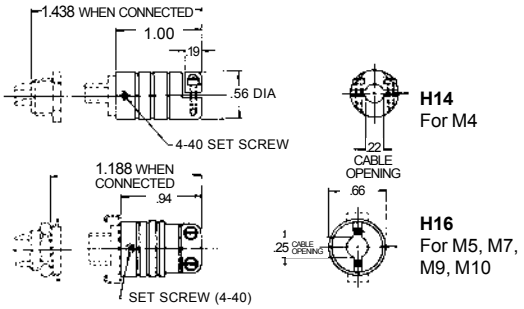
HG9, HG18

special hood with cable clamps
Used on Connectors M5, M7, M9, M10



HG9C

aluminum hoods



H14
For M4

H16
For M5, M7, M9, M10

Physical Data

Hood Code Number	Used on of Connectors	DIMENSIONS						Weight In Ounces
		A	B	C	D	E	F-Thds	
H9	M5, 7, 9, 10	.14	.66	.66	.27	.88	1/2 - 20	.10
H10	M4	.16	.56	.69	.25	.75	3/8 - 24	.05
H19	M5, 7, 9, 10	.30	.66	.66	.42	.88	1/2 - 20	.08
H9C	M5, 7, 9, 10	.16	.66	.78	.55	.97	1/2 - 20	.11
H10C	M4	.19	.56	.69	.44	.88	3/8 - 24	.09
H19C	M5, 7, 9, 10	.30	.66	.78	.55	.97	1/2 - 20	.12
H19CS	M5, 7, 9, 10	.30	.66	.66	.55	.86	1/2 - 20	.11
H9S	M5, 7, 9, 10	.14	.66	.66	.55		1/2 - 20	.07
H19S	M5, 7, 9, 10	.30	.66	.66	.55		1/2 - 20	.06
HG9	M5, 7, 9, 10	.22	.66	.66	.59		1/2 - 20	.10
HG18	M5, 7, 9, 10	.28	.66	.66	.59		1/2 - 20	.11
HG9C	M5, 7, 9, 10	See Drawing						.14
H14	M4	See Drawing						.25
H16	M5, 7, 9, 10	See Drawing						.25
H12H	M12	See Drawing						1.10

Ordering Information

Omit steps not required

M		P / S				

■ Step 1
Series Code:
M series

■ Step 2
No. of Contacts:
4, 5, 7, 9, 10, 12

■ Step 3
Contact Type:
P = Pin
S = Socket

■ Step 4
LS = lock spring
LR = lock ring
LS6 = M12 lock spring
LR6 = M12 lock ring
LS12 = lock spring for M12H hood

■ Step 5
N = Nut

■ Step 6
G = Ground lug (M4 only)

■ Step 7
Hoods:
See hood code number above.