D-subminiature Metal Shell
MIL-C-24308
M24308 Series

Cinch

Features

- ***Meets all MIL-C-24308 Class G specifications.***
- ***Offered in Crimp and Poke and Solder Cup and PCB vertical and right-angle.***
- ***Offered in 9, 15, 25, 37, and 50 position plugs and sockets except right-angle (9 to 37 positions).***
- ***Monoblock green diallyl phthalate insulator for improved electrical performance.***
- ***See pages 4-5 thru 4-10 for standard dimensions, contact arrangements, and panel mounting specifications.***

Materials

Insulator Material: Glass-filled diallyl phthalate (green) per MIL-M-14, Type SDG-F
Connector Shell: Steel with cadmium plating and yellow chromate finish
Contact Material: Plug - Brass (machined), Socket - Phosphor bronze (machined)
Contact Plating: 50µin. gold over copper or nickel
Dual Float Bushing: Stainless steel, passivated or non-magnetic brass

Environmental

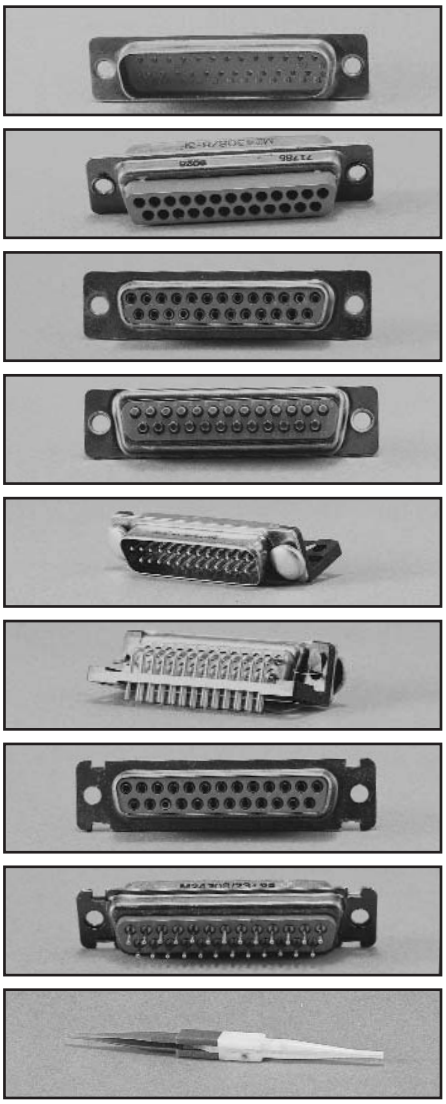
Operating Temperature: -65°C to + 125°C
Shock: 50G peak per MIL-STD-202, Method 213, Condition G
Vibration: 12 cycles in three perpendicular directions @ 10-2000Hz, per MIL-STD-202 Method 204, Condition D
Moisture Resistance: 90-95% relative humidity @ 40°C for 96 hours per MIL-STD-202, Method 103

Electrical

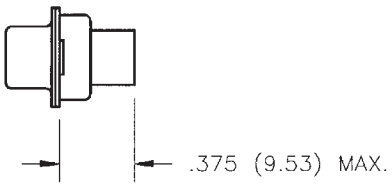
Withstanding Voltage:	Minimum 1250V RMS @ sea level
Current Rating:	5 Amps
Contact Resistance:	2.7 milliohms maximum
Insulation Resistance:	5000 megohms maximum (initial); 1000 megohms (minimum) after environmental testing

Mechanical

Individual Contact Insertion and Separation Force (minimum/maximum): 0.7 oz./12 oz.
Durability: 500 mating cycles



- Available with .120 mounting holes, float bushings, or dual float bushings.
- Order with contacts included or separately.
- Order with contact Insertion/Extraction Tool included or order tool #CIET-20-HD separately. See page 4-103.



Ordering Information

Crimp and Poke Plugs

Steel Shell

Contacts Included. Insertion/Extraction Tool Not Included.

Positions	Mounting Holes	Float Bushings	Dual Float Bushings
9	M24308/4-1F	M24308/4-302F	M24308/4-435F
15	M24308/4-2F	M24308/4-303F	M24308/4-436F
25	M24308/4-3F	M24308/4-304F	M24308/4-437F
37	M24308/4-4F	M24308/4-305F	M24308/4-438F
50	M24308/4-5F	M24308/4-306F	M24308/4-439F

Contacts Included. Insertion/Extraction Tool Included.

Positions	Mounting Holes	Float Bushings	Dual Float Bushings
9	M24308/4-6F	M24308/4-313F	M24308/4-446F
15	M24308/4-7F	M24308/4-314F	M24308/4-447F
25	M24308/4-8F	M24308/4-315F	M24308/4-448F
37	M24308/4-9F	M24308/4-316F	M24308/4-449F
50	M24308/4-10F	M24308/4-317F	M24308/4-450F

Contacts Not Included. Insertion/Extraction Tool Not Included.

Positions	Mounting Holes	Float Bushings	Dual Float Bushings
9	M24308/4-259F	M24308/4-324F	M24308/4-457F
15	M24308/4-260F	M24308/4-325F	M24308/4-458F
25	M24308/4-261F	M24308/4-326F	M24308/4-459F
37	M24308/4-262F	M24308/4-327F	M24308/4-460F
50	M24308/4-263F	M24308/4-328F	M24308/4-461F

Ordering Information

Crimp and Poke Sockets

Steel Shell

Contacts Included. Insertion/Extraction Tool Not Included.

Positions	Mounting Holes	Float Bushings	Dual Float Bushings
9	M24308/2-1F	M24308/2-23F	M24308/2-342F
15	M24308/2-2F	M24308/2-24F	M24308/2-343F
25	M24308/2-3F	M24308/2-25F	M24308/2-344F
37	M24308/2-4F	M24308/2-26F	M24308/2-345F
50	M24308/2-5F	M24308/2-27F	M24308/2-346F

Contacts Included. Insertion/Extraction Tool Included.

Positions	Mounting Holes	Float Bushings	Dual Float Bushings
9	M24308/2-6F	M24308/2-34F	M24308/2-353F
15	M24308/2-7F	M24308/2-35F	M24308/2-354F
25	M24308/2-8F	M24308/2-36F	M24308/2-355F
37	M24308/2-9F	M24308/2-37F	M24308/2-356F
50	M24308/2-10F	M24308/2-38F	M24308/2-357F

Contacts Not Included. Insertion/Extraction Tool Not Included.

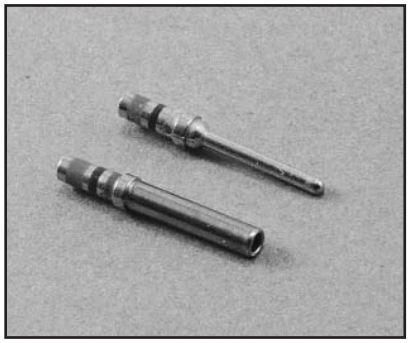
Positions	Mounting Holes	Float Bushings	Dual Float Bushings
9	M24308/2-281F	M24308/2-292F	M24308/2-482F
15	M24308/2-282F	M24308/2-293F	M24308/2-483F
25	M24308/2-283F	M24308/2-294F	M24308/2-484F
37	M24308/2-284F	M24308/2-295F	M24308/2-485F
50	M24308/2-285F	M24308/2-296F	M24308/2-486F

Ordering Information

Tooling

- Contact Insertion/Extraction Tool: #CIET-20-HD (Military #M81969/39-01). See page 4-103.
- Wire termination hand tool: #M22520/2-01. See page 4-103.
- Positioner for machine contacts for hand tool #M22520/2-08 (locates contact in the correct position). See page 4-103.

Crimp and Poke Contacts

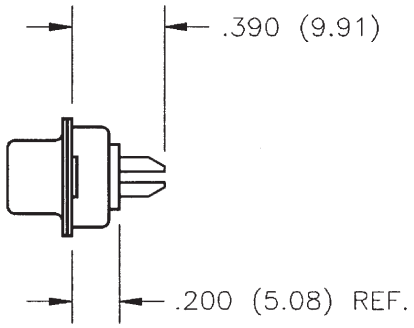


Ordering Information

- Will accommodate 20, 22, and 24 AWG wire.

Description	
Pin	M39029/64-369
Socket	M39029/63-368

- Available with .120" mounting holes, float bushings, or dual float bushings.
- Will accommodate up to 20 AWG wire.



Ordering Information

Solder Cup Plugs

Steel Shell

Positions	Mounting Holes	Float Bushings	Dual Float Bushings
9	M24308/3-1F	M24308/3-12F	M24308/3-17F
15	M24308/3-2F	M24308/3-13F	M24308/3-18F
25	M24308/3-3F	M24308/3-14F	M24308/3-19F
37	M24308/3-4F	M24308/3-15F	M24308/3-20F
50	M24308/3-5F	M24308/3-16F	M24308/3-21F

Brass Non-Magnetic Shell

Positions	Mounting Holes	Float Bushings	Dual Float Bushings
9	M24308/7-1F	M24308/7-12F	M24308/7-17F
15	M24308/7-2F	M24308/7-13F	M24308/7-18F
25	M24308/7-3F	M24308/7-14F	M24308/7-19F
37	M24308/7-4F	M24308/7-15F	M24308/7-20F
50	M24308/7-5F	M24308/7-16F	M24308/7-21F

Solder Cup Sockets

Steel Shell

Positions	Mounting Holes	Float Bushings	Dual Float Bushings
9	M24308/1-1F	M24308/1-12F	M24308/1-23F
15	M24308/1-2F	M24308/1-13F	M24308/1-24F
25	M24308/1-3F	M24308/1-14F	M24308/1-25F
37	M24308/1-4F	M24308/1-15F	M24308/1-26F
50	M24308/1-5F	M24308/1-16F	M24308/1-27F

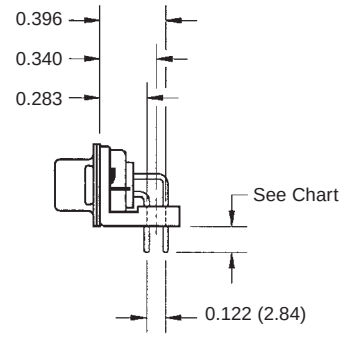
Brass Non-Magnetic Shell

Positions	Mounting Holes	Float Bushings	Dual Float Bushings
9	M24308/5-1F	M24308/5-12F	M24308/5-23F
15	M24308/5-2F	M24308/5-13F	M24308/5-24F
25	M24308/5-3F	M24308/5-14F	M24308/5-25F
37	M24308/5-4F	M24308/5-15F	M24308/5-26F
50	M24308/5-5F	M24308/5-16F	M24308/5-27F

Right-Angle Connector

- .283" footprint requires minimal PCB space.
- Available with three contact tail lengths (.127", .158", and .183") with .030" contact diameter.
- Available with two contact tail lengths (.127" and .183") with .040" contact diameter.
- Offered with .120" mounting holes.
- Mounting bracket: Black nylon. Can be removed if necessary.

Right-Angle



Ordering Information

Right-Angle PCB Plugs (Sockets not available)

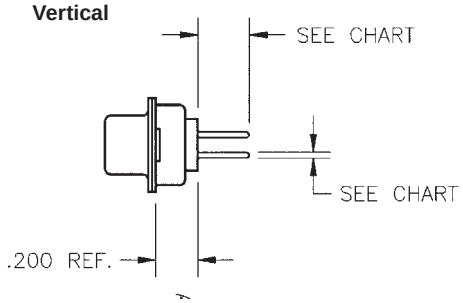
Steel Shell

Positions	.127 Tail Length .030 Contact Diameter	.158 Tail Length .030 Contact Diameter	.183 Tail Length .030 Contact Diameter	.127 Tail Length .040 Contact Diameter	.183 Tail Length .040 Contact Diameter
9	M24308/24-25F	M24308/24-31F	M24308/24-49F	M24308/24-37F	M24308/24-55F
15	M24308/24-26F	M24308/24-32F	M24308/24-50F	M24308/24-38F	M24308/24-56F
25	M24308/24-27F	M24308/24-33F	M24308/24-51F	M24308/24-39F	M24308/24-57F
37	M24308/24-28F	M24308/24-34F	M24308/24-52F	M24308/24-40F	M24308/24-58F

Vertical Connector

- Available with two contact tail lengths (.158" and .183") and two contact diameters (.030" and .040").
- Offered with .120" mounting holes.

Vertical



Ordering Information

Vertical PCB Plugs

Steel Shell

Positions	.158 Tail Length .030 Contact Diameter	.183 Tail Length .030 Contact Diameter	.158 Tail Length .040 Contact Diameter	.183 Tail Length .040 Contact Diameter
9	M24308/24-1F	M24308/24-7F	M24308/24-13F	M24308/24-19F
15	M24308/24-2F	M24308/24-8F	M24308/24-14F	M24308/24-20F
25	M24308/24-3F	M24308/24-9F	M24308/24-15F	M24308/24-21F
37	M24308/24-4F	M24308/24-10F	M24308/24-16F	M24308/24-22F
50	M24308/24-5F	M24308/24-11F	M24308/24-17F	M24308/24-23F

Vertical PCB Sockets

Steel Shell

Positions	.158 Tail Length .030 Contact Diameter	.183 Tail Length .030 Contact Diameter	.158 Tail Length .040 Contact Diameter	.183 Tail Length .040 Contact Diameter
9	M24308/23-1F	M24308/23-7F	M24308/23-13F	M24308/23-19F
15	M24308/23-2F	M24308/23-8F	M24308/23-14F	M24308/23-20F
25	M24308/23-3F	M24308/23-9F	M24308/23-15F	M24308/23-21F
37	M24308/23-4F	M24308/23-10F	M24308/23-16F	M24308/23-22F
50	M24308/23-5F	M24308/23-11F	M24308/23-17F	M24308/23-23F