# Solder Cup Metal Shell



**FEATURES** 

■ Terminates Discrete Wire (loose or jacketed cable) with ultra-low-resistance solder connections.

- Metal shell provides grounding and shielding capability.
- Available in plug and socket styles in 14, 24, 36, and 50 position sizes.
- Designed for panel mount, 180° (Top-Entry), or 90° (Standard) / 270° (Reverse) End-Entry cable applications.
- All plugs lock with InstaLatch passive latch feature for automatic latching.
- Industry-standard bail latch feature available for locking/unlocking without tools in applications such as SCSI-1 and Centronics.
- UL Recognized Files E170218 (UL1977), E130965 (UL1863).
- CSA Approved File LR31996-7.

**MATERIALS** 

Insulator: Blue UL94V-0 rated diallyl phthalate type MDG, per MIL-M14F

Contact: Copper alloy

Contact Plating: Select gold over 50µin. select nickel standard;

30µin. select gold over 50µin. select nickel available where indicated

Shell: Steel

Shell Plating: Zinc with clear chromate coating

ENVIRONMENTAL

Operating Temperature: -40°C to +105°C

Shock: 50G Peak, per EIA Std. RS364, TP27, Condition A

Vibration: 3 cycles @ 10-55Hz in each of 3 axes per EIA Std. 364, TP28, Condition A

Moisture Resistance: Per EIA Std. RS364, TP31, Condition B, with Step 7B excluded

ELECTRICAL

Voltage Rating: 500 VAC @ sea level; 125 VAC @ 70,000 ft.

Withstanding Voltage: 1200 VAC RMS @ sea level, per EIA Std. RS364, TP20

Contact Rating: 5 Amps (4 Amps per CSA)

Contact Resistance: 6 Milliohms maximum, per EIA Std. RS364, TP6

Insulation Resistance: 5000 Megohms minimum initial;

1000 Megohms minimum after moisture



Durability: 200 mating/unmating cycles

Mating / Unmating Forces:

	Mating	g Force (max.)	Unmating Force (min.)			
Size	Lb.	Kg	Lb.	Kg		
14	5	2.27	2	0.91		
24	8	3.63	4	1.81		
36	12	5.44	6	2.72		
50	15	6.80	7	3.18		

**Termination:** Each contact accepts maximum 22 AWG solid wire or maximum 24 AWG stranded wire









# .085 in. (2.16mm) Density Miniature Ribbon

# Solder Cup Metal Shell



#### **Panel Mount**

"Panel mount" products are connectors without hoods. They are typically used to provide signal I/O from a system panel or cabinet, where strain relief to a cable jacket is not required.

- Available with high barrier insulators that extend beyond the end of the solder cup, physically isolating adjacent contacts.
- Standard versions have .103" mounting holes (sockets have .103" with float bushings) for use with #3 hardware, or .185" mounting holes for use with #8 hardware.
- Select sizes are available with .120" mounting holes for use with #4 hardware, or with integral panel clips, which allow snap-in front mounting for more cost-effective assembly.
- Bail latching sockets are available, as are bail latching plugs. While the plugs would not be panel-mounted, they are available for premold/solder overmolding applications.

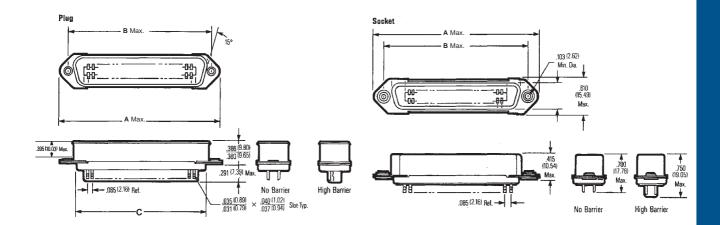
See page 6-4 for recommended standard panel cutout dimensions.

See page 6-51 for accessories such as mounting screws and dust covers, which make the use of Cinch Miniature Ribbon connectors even more cost-effective in panel-mount applications.

See the appropriate cable connector section that follows for products that include hoods for exposed-cable applications.

#### **Dimensions**

		Α	E	3	С	С		
Size	in	mm	in	mm	in	mm		
14	1.750	44.45	1.417	35.99	0.910	23.11		
24	2.175	55.25	1.842	46.79	1.335	33.91		
36	2.685	68.20	2.352	59.74	1.845	46.86		
50	3.260	82.80	2.947	74.85	2.440	61.98		

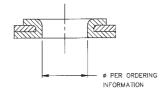


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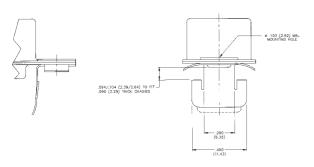
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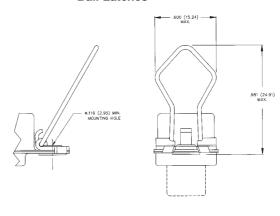
# **Through Hole**



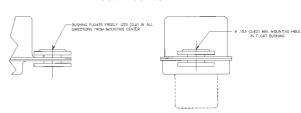
# **Integral Panel Clips**



#### **Bail Latches**



#### **Float Mounts**



# **Ordering Information, Panel Mount**

# Plug, InstaLatching

		No B	arrier	High I	Barrier	
Mount	Size	Commercial	30Au/Ni	Commercial	30Au/Ni	
	14	57-10140	57-10140A	57-10140-6	57-10140-6A	
.103 Hole	24	57-10240	57-10240A	57-10240-6	57-10240-6A	
	36	57-10360	57-10360A	57-10360-14	57-10360-14A	
	50	57-10500	57-10500A	57-10500-6	57-10500-6A	
	14	57-10140-185	57-10140-185A	-	=	
.185 Hole	24	57-10240-4	57-10240-4A	-	-	
	36	57-10360-22	57-10360-22A	-	-	
	50	57-10500-48	57-10500-48A	-	-	
.120 Hole	50	=	-	57-10500-120	57-10500-120A	
Integral Panel Clips*, .103 Hole	50	=	-	57-10500-41	57-10500-41A	
Bail Latching	36	-	-	57-10360-28†	57-10360-28A†	
Tin-Plated Shells	50	-	-	57-10500-79	57-10500-79A	

<sup>†</sup> IEEE 1284-B (for foil wrap & overmold applications)

# Socket

			No E	arrier	High I	Barrier
Latch	Mount	Size	Commercial	30Au/Ni	Commercial	30Au/Ni
		14	57-20140	57-20140A	57-20140-6	57-20140-6A
	Float Mounts with	24	57-20240	57-20240A	57-20240-6	57-20240-6A
	.103 Hole	36	57-20360	57-20360A	57-20360-10	57-20360-10A
S		50	57-20500	57-20500A	57-20500-6	57-20500-6A
latches		14	57-20140-4	57-20140-4A	-	-
atc	.185 Hole	24	57-20240-2	57-20240-2A	-	-
2		36	57-20360-3	57-20360-3A	-	-
_		50	57-20500-15	57-20500-15A	-	-
	.120 Hole	50	-	-	57-20500-120	57-20500-120
	Integral Panel Clips*, .103 Hole	50	-	-	57-20500-41	57-20500-41A
		14	57-40140	57-40140A	57-40140-HB	57-40140-HBA
S	.116 Hole	24	57-40240	57-40240A	57-40240-HB	57-40240-HBA
latches		36	57-40360†	57-40360A†	57-40360-9†	57-40360-9A†
		50	57-40500	57-40500A	57-40500-4	57-40500-4A
Ra D	.116 Hole with					
Δ	Tin-Plated Shell	50	57-40500-5	57-40500-5A	57-40500-28†	57-40500-28A1

<sup>\*</sup> Integral Panel Clips, for front-mount only, require modified panel cutout. See page 6-52 for details.

<sup>†</sup> IEEE 1284-B



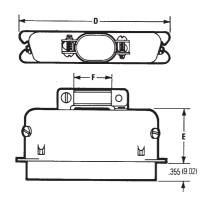
# 180° (Top-Entry) Cable

Top-Entry products include a connector, hood, and associated hardware. They are typically used at the end of a cable, where it is subject to physical strain and protection of the termination area is required.

- Includes all hardware required to attach hood to connector.
- Bail latching sockets have latch hardware integral to connector body, making cable assembly less costly.
- Bail latching plugs include notches that lock with industry-standard bail-lock sockets.

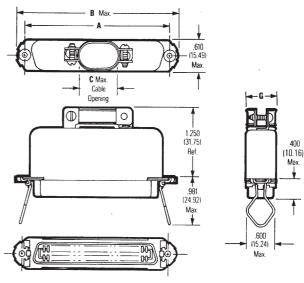
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Socket



#### **Dimensions**

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Size	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
14	1.417	35.99	1.750	44.45	.306	7.77	1.495	37.97	.843	21.41	.306	7.77	.422	10.72
24	1.842	46.79	2.175	55.25	.473	11.10	1.920	48.77	.825	20.96	.473	12.01	.473	12.01
36	2.352	59.74	2.685	68.20	.639	16.23	2.431	61.75	.905	22.99	.640	16.26	.473	12.01
50	2.947	74.85	3.270	83.06	.766	19.46	3.025	76.84	.995	25.27	.766	19.46	.473	12.01

# Ordering Information, 180° (Top-Entry) Cable

Plug, InstaLatching

		No	Barrier	High Barrier		
Mount	Size	Commercial	30Au/Ni	Commercial	30Au/Ni	
	14	57-30140	57-30140A	-	-	
Bail Latching	24	57-30240	57-30240A	-	-	
	36	57-30360	57-30360A	-	-	
	50	57-30500	57-30500A	57-30500-3	57-30500-3A	
#4-40 Holes for captive screw	50	57-30500-4	57-30500-4A	-	-	

## **Socket**

	Size	No	Barrier	High Barrier		
Mount		Commercial	30Au/Ni	Commercial	30Au/Ni	
	14	57-60140	57-60140A	-	-	
With Bail Latches	24	57-60240	57-60240A	-	-	
	36	57-60360	57-60360A	-	-	
	50	57-60500	57-60500A	-	-	

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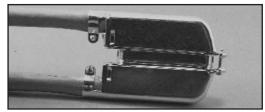
## 90° (Standard) / 270° (Reverse) End-Entry Cable

End-Entry connectors, available in 50 position size only, include a hood and integral cable clamp for cable exit from the end of the connector

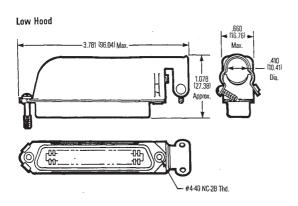
- The standard-orientation plug has the cable clamp on the position 1/26 end, and the standard-orientation socket has the clamp on the position 25/50 end.
- Cables may be extended end-to-end (i.e., "running cable") by mating standard-orientation plugs and sockets, or "doubled back" by mating a standard-orientation connector with a reverse-orientation mate.
- Cables may exit either direction on a cable-to-panel application by choosing standard- or reverse-orientation, depending on the desired direction of cable exit.
- Include screw that is 5/8" long, suitable for locking directly to the body
  of another connector. For locking to connectors panel-mounted
  with screw-lock hardware, shorter screws are required. See page 6-51
  for these and other accessories, such as dust covers.

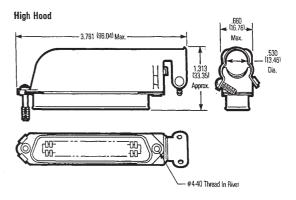


Running Cable Application



Double-Back Cable Application





#### **Ordering Information, End-Entry**

#### Plug, InstaLatching (High Barrier, with Dust Cover)

		Standard (90	Standard (90°) Orientation		Orientation
Mount	Size	Commercial	30Au/Ni	Commercial	30Au/Ni
High (Standard) Hood	50	57-10500-14	57-10500-14A	57-10500-270	57-10500-270A
Low-Profile Hood	50	57-10500-7	57-10500-7A	57-10500-271	57-10500-271A

## Socket (High Barrier, with Dust Cover)

		Standard (9	Standard (90°) Orientation		Orientation
Mount	Size	Commercial	30Au/Ni	Commercial	30Au/Ni
High (Standard) Hood	50	57-20500-7	57-20500-7A	57-20500-270	57-20500-270A
Low-Profile Hood	50	57-20500-19	57-20500-19A	57-20500-271	57-20500-271A

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