

# SERIES 89 NANOMINIATURE Threaded and Breakaway Nano Circulares



## 893-009 Rear Panel Mount, Threaded Receptacle with PC Tails

THREADED AND BREAKAWAY NANO CIRCULARS



**Glenair Rear Panel Mount Threaded Coupling Receptacle Connectors** feature gold alloy contacts, offering premium performance and reliability for demanding applications. Choose Aluminum or Stainless Steel Shells in 6 layouts from 4 to 55 contacts. These connectors are intermateable with Nano Miniature 892-006 plug connectors. Pre-Tinned PC Tails are coated with Sn63Pb37 or Sn60Pb40 tin-lead for excellent solderability.

HOW TO ORDER	
<b>Sample Part Number</b>	893 -009 -1-7 N A2 -0 D3 -S1
<b>Series</b>	893 = Nano Circular with PC Tails
<b>Shell Style</b>	009 = Rear Panel Mount Threaded Coupling Receptacle
<b>Shell Size/Contact Arrangement</b>	1-4 = Shell Size 1 with 4 contacts      3-37 = Shell Size 3 with 37 contacts 1-7 = Shell Size 1 with 7 contacts      4-44 = Shell Size 4 with 44 contacts 2-19 = Shell Size 2 with 19 contacts    4-55 = Shell Size 4 with 55 contacts See Receptacle Mating Face View and Contact Layout Table
<b>Polarization</b>	N = Normal      A = Alternate
<b>Shell Material/Finish</b>	A2 = Aluminum/Electroless Nickel      S1 = Stainless Steel/Zinc Cobalt (Black) A5 = Aluminum/Gold Over Nickel      S2 = Stainless Steel/Passivated
<b>Wire Gauge</b>	0 = 30 AWG
<b>Wire Type</b>	D3 = Single Strand Copper Alloy Wire Uninsulated, Pre-tinned
<b>PC Tail Length (inches)</b>	S1 = .080" Straight Lead    S2 = .110" Straight Lead    S3 = .140" Straight Lead    S4 = .170" Straight Lead

RECEPTACLE MATING FACE VIEW AND CONTACT LAYOUT (POSITION IDENTIFICATIONS NOT MARKED ON PART)					
Size 1-4 4 Contacts	Size 1-7 7 Contacts	Size 2-19 19 Contacts	Size 3-37 37 Contacts	Size 4-44 44 Contacts	Size 4-55 55 Contacts

PERFORMANCE SPECIFICATIONS		
<p><b>Contact Spacing:</b> .025" (0.64) contact centers</p> <p><b>Current Rating:</b> 1 AMP maximum tested per EIA-364-70</p> <p><b>DWV:</b> 250 VAC RMS sea level, 100 VAC RMS 70,000 feet per EIA-364 Procedure 20</p> <p><b>Insulation Resistance:</b> 5000 Megohms minimum test voltage 100 VDC, per EIA-364 Procedure 21</p> <p><b>Operating Temperature:</b> -55° C. to +125° C.</p>	<p><b>Contact Resistance:</b> 71 millivolt drop maximum, 1 AMP current, any catalog supported wire type</p> <p><b>Vibration:</b> 20 g's, IAW EIA-364-28, Condition IV</p> <p><b>Shock:</b> 100 g's, IAW EIA-364-27, Condition G</p> <p><b>Durability:</b> 200 mating cycles per test procedure EIA-364-09</p> <p><b>Corrosion Resistance:</b> 48 hours salt spray IAW EIA-364-26, Condition B</p>	<p><b>Humidity:</b> 240 hours, IAW EIA-364-31, Test Condition B</p> <p><b>Contact Engaging/Separation Force:</b> 5 ounce maximum, 0.4 ounce minimum</p> <p><b>Thermal Vacuum Outgassing:</b> Total mass loss (TML) 1.0% max., volatile condensable material (VCM) 0.1% max. IAW ASTM E595</p> <p><b>Inspect and Test:</b> IAW MIL-DTL-32139</p>

### NOTES

- Material and finish shell and spanner nut:
  - A2: aluminum alloy, electroless nickel plated per SAE-AMS-2404, Class 3 or 4, Grade B
  - A5: aluminum alloy, gold plate per ASTM B488, Type I, Code C, over electroless nickel per ASTM B733 SC 2, Type IV, Class 4
  - S1: 300 Series stainless steel per ASTM

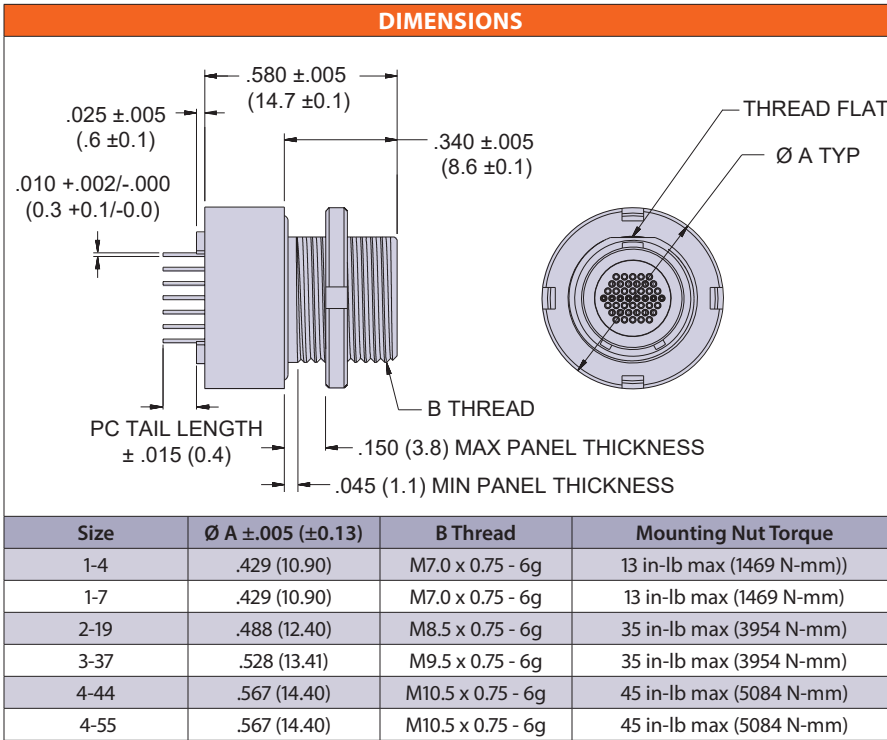
- A276, zinc cobalt (black) plating per ASTM B840 Gr 6, Type D, over nickel strike (not recommended for bonding resistance requirements)
- S2: 300 Series stainless steel per ASTM A276, passivated IAW SAE AMS 2700
- Insulator: liquid crystal polymer (LCP), per MIL-M-24519 GLCP-30F, 30% glass-filled
- Contacts: gold alloy/unplated
- O-rings: fluorosilicone/NA

- EMI Spring: stainless steel/gold plate
- Inspect and test per MIL-DTL-32139
  - Replacement parts and tools:
    - Internal O-ring: 899-021
    - EMI spring: 899-022
    - Mounting nut: 899-019
    - Panel o-ring: 899-020
    - Rear panel mount spanner nut wrenches: 600-189

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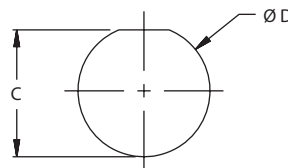


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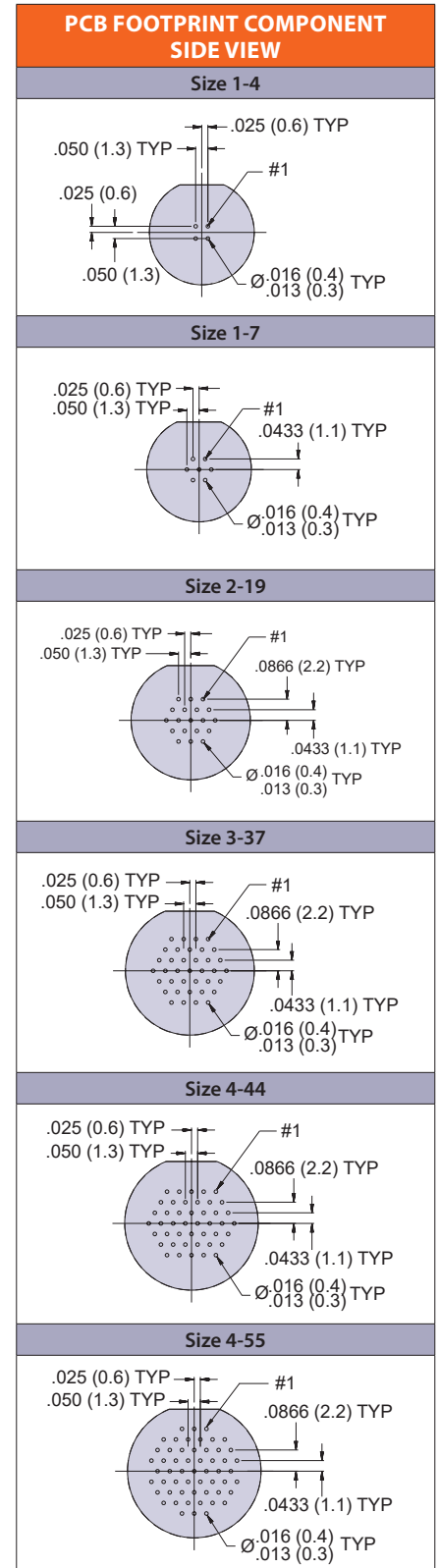
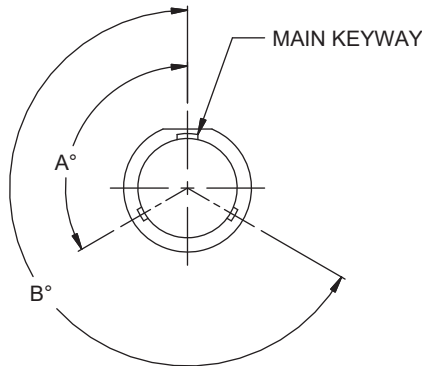
**REAR PANEL MOUNT PANEL CUT-OUT**

Size	C +.002 / -.001 (+0.05/-0.00)	ØD +.002 / -.001 (+0.05/-0.00)
1-4	.260 (6.60)	.280 (7.11)
1-7	.260 (6.60)	.280 (7.11)
2-19	.318 (8.08)	.340 (8.64)
3-37	.361 (9.17)	.378 (9.60)
4-44	.401 (10.19)	.420 (10.67)
4-55	.401 (10.19)	.420 (10.67)



**KEYWAY POSITIONS**

Size	Polarization	A°	B°
1-4	N	150	210
	A	75	210
1-7	N	95	230
	A	140	275
2-19	N	150	210
	A	75	210
3-37	N	150	210
	A	75	210
4-44	N	150	210
	A	75	210
4-55	N	95	230
	A	140	275



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