Dual-Row Rectangular Connectors

891-005 Back-to-Back Cable Assembly

Glenair Back-To-Back Cable Assemblies are offered in three configurations and feature gold alloy TwistPin contacts. Contacts are precision-crimped to insulated, stranded wire. These nanominiature connectors offer premium performance and reliability for demanding applications. Contact spacing is .025 inches. 1 amp current rating, DWV rating 250 volts AC. Wire gages #30 and #32 AWG. Connectors are wired 1 to 1, 2 to 2, 3 to 3 etc.

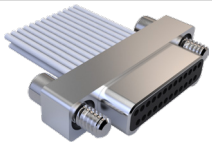
TwistPin Contact System assures premium performance in demanding environments. The gold alloy contacts will stand up to years of exposure without corrosion.

HOW TO ORDER

Sample Part Number	891-005	-9	GP	A1	-0	A	1	-12	JJ

Series	**891-005** Back-To-Back Cables, Dual-Row, Nanominiature
Contact Layout	**9**, **15**, **21**, **25**, **31**, **37**, **41**, **51**, **65**, **69**, **85**, **91**
Connector Type	**TYPE** / **SIDE 1** / **SIDE 2** **GP** Plug Plug **GS** Receptacle Receptacle **CS** Plug Receptacle
Shell Material and Finish	**A1** = Aluminum Shell, Cadmium Plating **A2** = Aluminum Shell, Electroless Nickel Plating **A31** = Aluminum Shell, Zinc Nickel Plating, Black **A33** = Aluminum Shell, Nickel PTFE Plating **T** = Titanium Shell, Unplated **S** = Stainless Steel Shell, Passivated
Wire Gage	**0** = #30 AWG (Wire types A, B, C, E, and F) **2** = #32 AWG (Wire Type B only)
Wire Type	**A** = Ultra Lightweight XLETFE Insulation, Silver Coated Ultra High Strength Copper. **B** = Extruded PTFE Insulation, Silver Coated Copper NEMA HP3-ETX (MIL-W-16878/6) **C** = Cross Linked Modified ETFE Insulation, Silver Coated High Strength Copper. SAE AS22759/33-30 **E** = Cross Linked Modified ETFE Insulation, Low Fluoride, Lightweight, Silver Coated High Strength Copper Alloy. SAE AS22759/51-30 **F** = Cross Linked Modified ETFE Insulation, Low Fluoride, Lightweight, Silver- Coated Copper, SAE AS22759/52-30
Wire Color Code	**1**= White **2** = Yellow **7** = 10 Color Repeating (wire type **A** is striped, types **B**, **C**, **E**, and **F** are solid colors)
Overall Length	In Inches Including Connectors; Example: "**12**" specifies 12 inches OAL; 2" minimum
Hardware	**JJ** = Jackscrews on both ends (GP, GS, CS) **JR** = Jackscrews on receptacle, threaded holes on receptacle (GS) **JT** = Jackscrews on plug, threaded holes on receptacle (CS) **TJ** = Jackscrews on receptacle, threaded holes on plug (CS) **JP** = Jackscrews on plug, threaded holes on plug (GP) **TT** = Threaded holes both ends (GP, CS) (Stainless steel threaded inserts installed in aluminum shells, tapped directly into stainless steel and titanium)

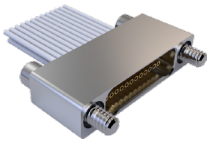
PLUG HARDWARE



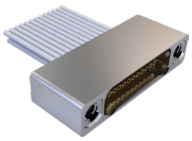
J - Jackscrew

T - Female Thread

RECEPTACLE HARDWARE



J - Jackscrew



T - Female Thread

PERFORMANCE SPECIFICATIONS

Contact Spacing: .025" (0.64) contact centers

Wire Accommodation: #30-#32 AWG

Current Rating: 1 AMP maximum tested per EIA-364-70

DWV: 250 VAC RMS sea level, 100 VAC RMS 70,000 feet per EIA-364 Procedure 20

Insulation Resistance: 5000 Megohms minimum test voltage 100 VDC, per EIA-364 Procedure 21

Operating Temperature: -55° C. to +125° C.

Contact Resistance: 71 millivolt drop maximum, 1 AMP current, any catalog supported wire type

Vibration: 20 g's, IAW EIA-364-28, Condition IV

Shock: 100 g's, IAW EIA-364-27, Condition G

Durability: 200 mating cycles per test procedure EIA-364-09

Corrosion Resistance: 48 hours salt spray IAW EIA-364-26, Condition B

Humidity: 240 hours, IAW EIA-364-31, Test Condition B

Contact Engaging/Separation Force: 5 ounce maximum, 0.4 ounce minimum

Thermal Vacuum Outgassing: Total mass loss (TML) 1.0% max., volatile condensable material (VCM) 0.1% max. IAW ASTM E595

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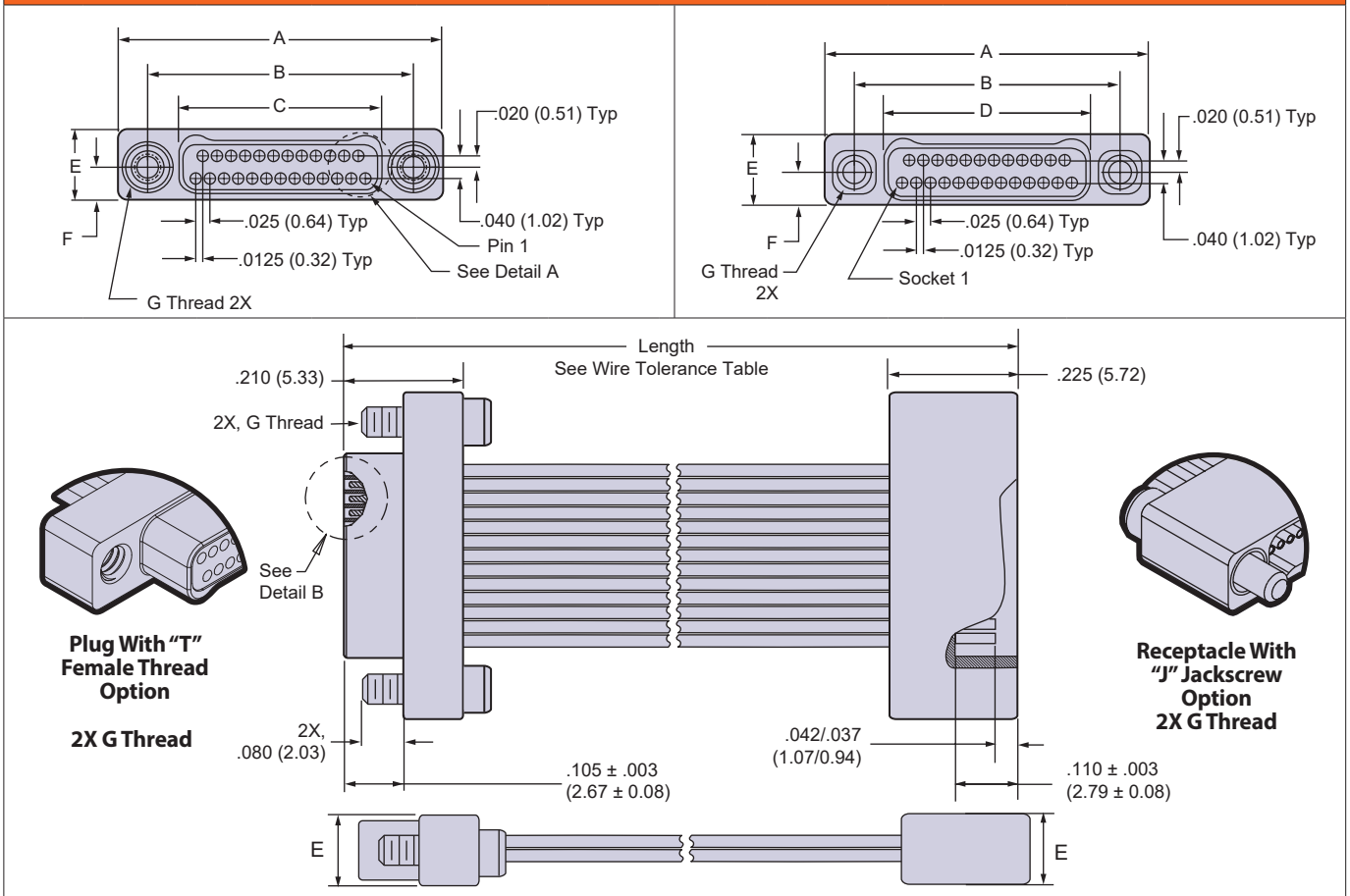
BACK-TO-BACK PLUG AND RECEPTACLE CONNECTOR DIMENSIONS



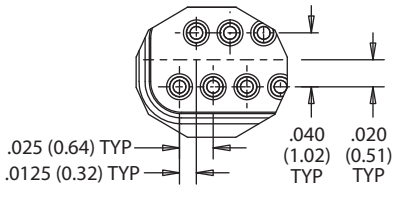
Layout	A ± .005(0.13)	B BSC.	C BSC. (Plug)	D BSC (Receptacle)	E ± .005(0.13)	F	G Thread
9	.375 (9.52)	.270 (6.86)	.160 (4.06)	.163 (4.14)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
15	.450 (11.43)	.345 (8.76)	.235 (5.97)	.238 (6.05)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
21	.525 (13.34)	.420 (10.67)	.310 (7.87)	.313 (7.95)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
25	.575 (14.60)	.470 (11.94)	.360 (9.14)	.363 (9.22)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
31	.650 (16.51)	.545 (13.84)	.435 (11.05)	.438 (11.13)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
37	.725 (18.42)	.620 (15.75)	.510 (12.95)	.513 (13.03)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
41	.775 (19.68)	.670 (17.02)	.560 (14.22)	.563 (14.30)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
51	.900 (22.86)	.795 (20.19)	.685 (17.40)	.688 (17.48)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
65	1.075 (27.30)	.970 (24.64)	.860 (21.84)	.863 (21.92)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
69	1.125 (28.58)	1.020 (25.91)	.910 (23.11)	.913 (23.19)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
85	1.377 (34.98)	1.246 (31.65)	1.110 (28.19)	1.113 (28.27)	.150 (3.81)	.0700 (1.78)	#2-56 UNC
91	1.452 (36.88)	1.321 (33.55)	1.185 (30.10)	1.188 (30.18)	.150 (3.81)	.0700 (1.78)	#2-56 UNC

WIRE LENGTH TOLERANCE	
Length Range	**Tolerance**
3″ - 48″ (76.20 - 1219.20)	+0.50/-0.00 (+ 12.70/-0.00)
>48″ - 72″ (>1219.20 - 1828.80)	+1.00/-0.00 (+25.4/-0.00)
>72″ - 120″ (>1828.80 - 3048.00)	+2.00/-0.00 (+50.80/-0.00)

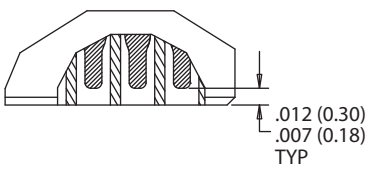
NOTES

1. Material and finish:
   - Shell: see part number breakdown
   - Insulator: LCP N/A
   - Contacts: gold alloy / unplated
   - Wire: see part number breakdown
   - Hardware: stainless steel, passivated
2. Inspect and Test IAW MIL-DTL-32139
3. Interface dimensions per MIL-DTL-32139/3 and MIL-DTL-32139/4
4. Connectors Wired 1 to 1, 2 to 2, 3 to 3, etc.

DETAIL A (PLUG)



DETAIL B (PLUG)



Dimensions in Inches (millimeters) are subject to change without notice.