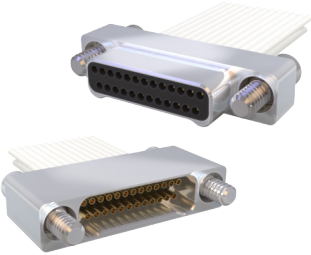


SERIES 89 NANOMINIATURE Dual-Row Rectangular Connectors



891-001 and 891-002 Plug and Receptacle Connectors with Insulated Wire



Nanominiature Connectors with insulated wire 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.

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

Typical applications include UAV's, satellites, missile systems and geophysical instruments.

HOW TO ORDER									
Sample Part Number		891-002	-25S	A2	-0	B	7	-12	J
Series	891-001 = Plug 891-002 = Receptacle								
Contact Layout	Plugs (891-001): 9P, 15P, 21P, 25P, 31P, 37P, 41P, 51P, 65P, 69P, 85P, 91P Receptacles (891-002): 9S, 15S, 21S, 25S, 31S, 37S, 41S, 51S, 65S, 69S, 85S, 91S								
Shell Material and Finish	A1 = Aluminum Shell, Cadmium A2 = Aluminum Shell, Electroless Nickel A31 = Aluminum Shell, Zinc Nickel, Black A33 = Aluminum Shell, Nickel PTFE 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)								
Wire Length	12 = 12.00 inches; as required in one inch increments.								
Hardware	J = Hex Head Jackscrew T = Female Threads* *Stainless Steel Inserts installed in Aluminum Shells, tapped directly into Stainless Steel and Titanium Shells								

PLUG HARDWARE		RECEPTACLE HARDWARE	
J - Jackscrew	T - Female Thread	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

NOTES

1. Material and Finishes:

• Shell: see part number break down

• Insulator: LCP/N/A
- Contacts: gold alloy / unplated

• Wire: see part number break down

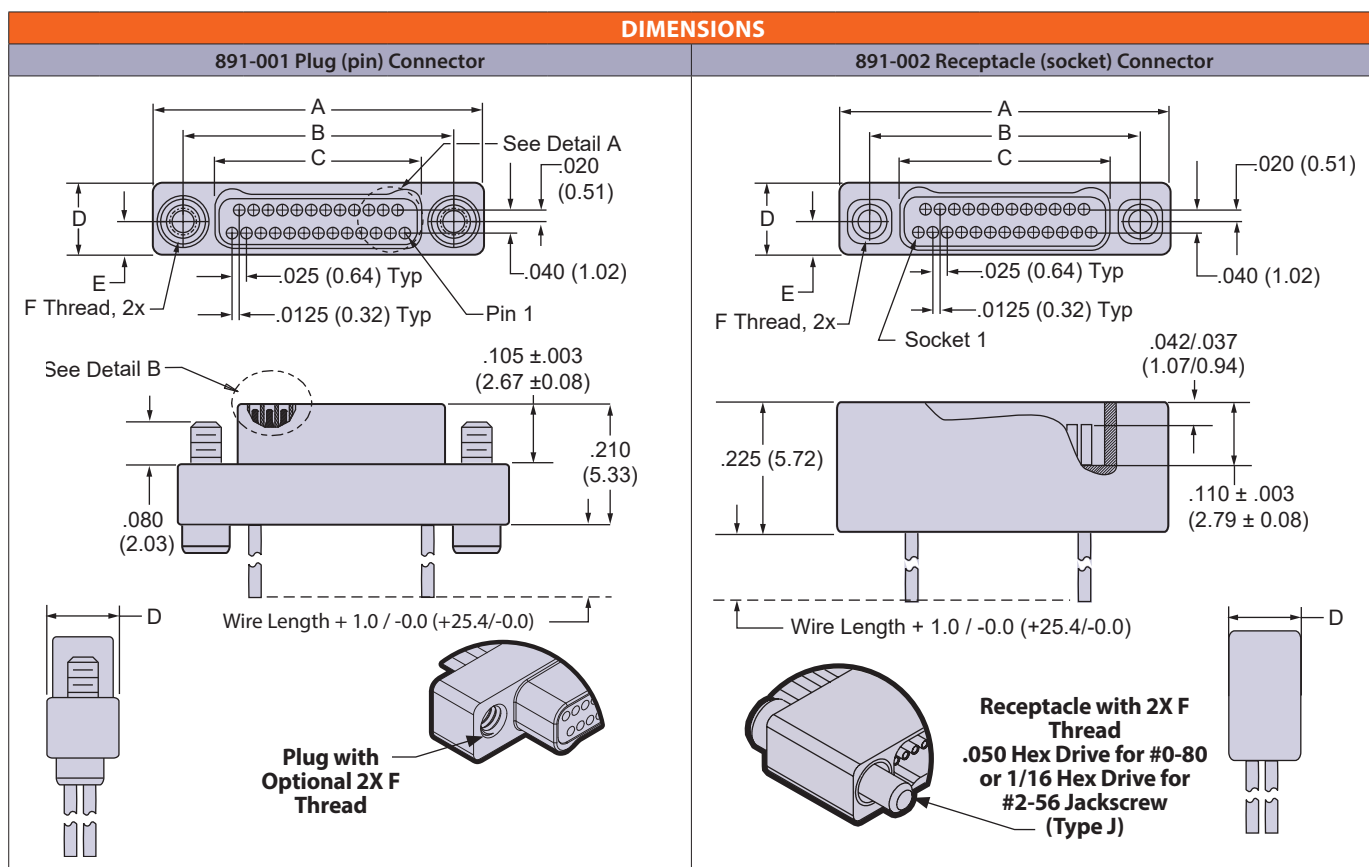
• Hardware: passivated stainless steel
2. Inspect and Test IAW MIL-DTL-32139

3. Interface dimensions per MIL-DTL-32139/3 and /4

SERIES 89 NANOMINIATURE Dual-Row Rectangular Connectors

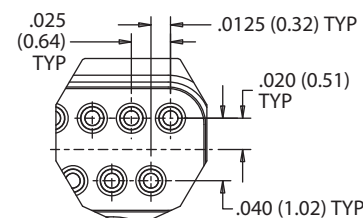


891-001 and 891-002 Plug and Receptacle Connectors with Insulated Wire



Layout	A ±.005(0.13)	B BSC.	C BSC.	D ±.005(0.13)	E BSC.	F Thread
9P	.375 (9.53)	.270 (6.86)	.160 (4.06)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
9S	.375 (9.53)	.270 (6.86)	.163 (4.14)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
15P	.450 (11.43)	.345 (8.76)	.235 (5.97)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
15S	.450 (11.43)	.345 (8.76)	.238 (6.05)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
21P	.525 (13.34)	.420 (10.67)	.310 (7.87)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
21S	.525 (13.34)	.420 (10.67)	.313 (7.95)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
25P	.575 (14.61)	.470 (11.94)	.360 (9.14)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
25S	.575 (14.61)	.470 (11.94)	.363 (9.22)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
31P	.650 (16.51)	.545 (13.84)	.435 (11.05)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
31S	.650 (16.51)	.545 (13.84)	.438 (11.13)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
37P	.725 (18.42)	.620 (15.75)	.510 (12.95)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
37S	.725 (18.42)	.620 (15.75)	.513 (13.03)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
41P	.775 (19.69)	.670 (17.02)	.560 (14.22)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
41S	.775 (19.69)	.670 (17.02)	.563 (14.30)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
51P	.900 (22.86)	.795 (20.19)	.685 (17.40)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
51S	.900 (22.86)	.795 (20.19)	.688 (17.48)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
65P	1.075 (27.31)	.970 (24.64)	.860 (21.84)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
65S	1.075 (27.31)	.970 (24.64)	.863 (21.92)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
69P	1.125 (28.58)	1.020 (25.91)	.910 (23.11)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
69S	1.125 (28.58)	1.020 (25.91)	.913 (23.19)	.125 (3.18)	.0575 (1.46)	#0-80 UNF
85P	1.377 (34.98)	1.246 (31.65)	1.110 (28.19)	.150 (3.81)	.0700 (1.78)	#2-56 UNC
85S	1.377 (34.98)	1.246 (31.65)	1.113 (28.27)	.150 (3.81)	.0700 (1.78)	#2-56 UNC
91P	1.452 (36.88)	1.321 (33.55)	1.185 (30.10)	.150 (3.81)	.0700 (1.78)	#2-56 UNC
91S	1.452 (36.88)	1.321 (33.55)	1.188 (30.18)	.150 (3.81)	.0700 (1.78)	#2-56 UNC

DETAIL A



DETAIL B

