

SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors



890-031 Flying Lead Plug and Receptacle Connectors with Insulated Wire and Backshell

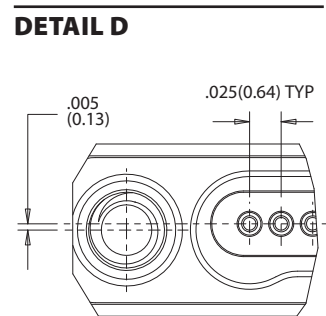
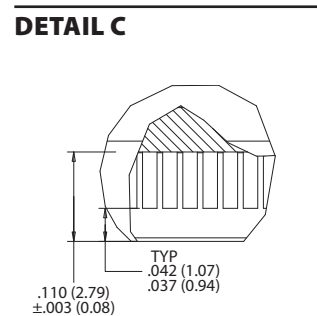
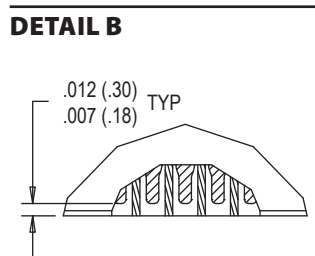
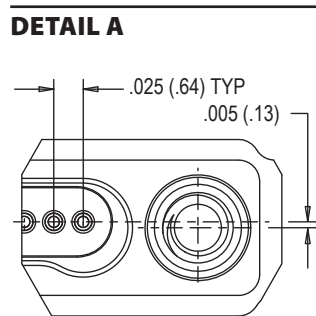
SINGLE-ROW RECTANGULAR CONNECTORS



Glenair Flying Lead Nano Connectors with Factory Installed Backshell feature gold alloy TwistPin contacts. Backshell wire exit configuration available in straight, 45°, and 90°. Contacts are precision-crimped to insulated, stranded wire. Nanominiature connectors offer premium performance and reliability for demanding applications, available in 8 arrangements. 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. Typical Applications include UAV's, satellites, missile systems and geophysical instruments.

HOW TO ORDER	
Sample Part Number	890-031 -25S A2 N -0 B 7 -12 T C
Series	890-031 = Single Row I/O Flying Lead with Factory Installed Backshell
Insert Arrangement/ Contact Type	Plugs: 5P, 9P, 15P, 21P, 25P, 31P, 37P, 51P Receptacles: 5S, 9S, 15S, 21S, 25S, 31S, 37S, 51S
Shell/Backshell Material and Finish	A1 = Al Shell, Cadmium Plating A2 = Al Shell, Electroless Nickel Plating A31 = Al Shell, Zinc Nickel Plating, Blk A33 = Al Shell, Nickel PTFE Plating S = Stainless Steel Shell, Passivated T = Titanium Shell, Unplated
Backshell Orientation	L = 90°, Lobe Side Exit H = 45°, Lobe Side Exit N = Straight, No Orientation M = 90°, Non-Lobe Side Exit K = 45°, Non-Lobe Side Exit
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 + 1.00 Inches; as required in one inch increments.
Hardware	J = Hex Head Jackscrew, #0-80 UNF-2A T = Female Thread, #0-80 UNF-2B* *Stainless Steel Inserts installed in Aluminum Shells, tapped directly into Stainless Steel and Titanium Shells
Shield/Jacket Opt	N, A, C, D, S, T, V, W, X, Z ; See Shield/Jacket Options Table for Details

PLUG (PIN) CONNECTOR HARDWARE		RECEPTACLE (SOCKET) CONNECTOR HARDWARE	
J - Jackscrew Option	T - Female Thread Option	J - Jackscrew Option	T - Female Thread Option



SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors



890-031 Flying Lead Plug and Receptacle Connectors with Insulated Wire and Backshell

DIMENSIONS									
890-031 Plug (Pin), Straight Backshell					890-031 Receptacle (Socket), Straight Backshell				
Layout	A	B BSC.	C BSC.	D	Layout	A	B BSC.	C BSC.	D
5	.295 (7.49)	.184 (4.67)	.420 (10.67)	.165 (4.19)	5	.295 (7.49)	.185 (4.70)	.420 (10.67)	.165 (4.19)
9	.395 (10.03)	.284 (7.21)	.520 (13.21)	.265 (6.73)	9	.395 (10.03)	.285 (7.24)	.520 (13.21)	.265 (6.73)
15	.545 (13.84)	.434 (11.02)	.670 (17.02)	.415 (10.54)	15	.545 (13.84)	.435 (11.05)	.670 (17.02)	.415 (10.54)
21	.695 (17.65)	.584 (14.83)	.820 (20.83)	.565 (14.35)	21	.695 (17.65)	.585 (14.86)	.820 (20.83)	.565 (14.35)
25	.795 (20.19)	.684 (17.37)	.920 (23.37)	.665 (16.89)	25	.795 (20.19)	.685 (17.40)	.920 (23.37)	.665 (16.89)
31	.945 (24.00)	.834 (21.18)	1.070 (27.18)	.815 (20.70)	31	.945 (24.00)	.835 (21.21)	1.070 (27.18)	.815 (20.70)
37	1.095 (27.81)	.984 (24.99)	1.220 (30.99)	.965 (24.51)	37	1.095 (27.81)	.985 (25.02)	1.220 (30.99)	.965 (24.51)
51	1.445 (36.70)	1.334 (33.88)	1.570 (39.88)	1.315 (33.40)	51	1.445 (36.70)	1.335 (33.91)	1.570 (39.88)	1.315 (33.40)

SINGLE-ROW RECTANGULAR CONNECTORS

PERFORMANCE SPECIFICATIONS	
Contact Spacing: .025" (0.64) contact centers	Vibration: 20 g's, IAW EIA-364-28, Condition IV
Wire Accommodation: #30-#32 AWG	Shock: 100 g's, IAW EIA-364-27, Condition G
Current Rating: 1 AMP maximum tested per EIA-364-70	Durability: 200 mating cycles per test procedure EIA-364-09
DWV: 250 VAC RMS sea level, 100 VAC RMS 70,000 feet per EIA-364 Procedure 20	Corrosion Resistance: 48 hours salt spray IAW EIA-364-26, Condition B
Insulation Resistance: 5000 Megohms minimum test voltage 100 VDC, per EIA-364 Procedure 21	Humidity: 240 hours, IAW EIA-364-31, Test Condition B
Operating Temperature: -55° C. to +125° C.	Contact Engaging/Separation Force: 5 ounce maximum, 0.4 ounce minimum
Contact Resistance: 71 millivolt drop maximum, 1 AMP current, any catalog supported wire type	Thermal Vacuum Outgassing: Total mass loss (TML) 1.0% max., volatile condensable material (VCM) 0.1% max. IAW ASTM E595

SHIELD/JACKET OPTIONS	
Code	Description
N	No Shield, No Jacket
A	Braided Shield Installed (Nickel Plated Copper)
C	Braided Shield Installed (Nickel Plated Copper), with E-CTFE Halar "Expando" Jacket (+150 C)
D	No Shield, With E-CTFE Halar "Expando" Jacket (+150 C)
S	100% Braided Amberstrand Shield Installed
T	100% Braided Amberstrand Shield Installed, with E-CTFE Halar "Expando" Jacket (+150 C)
V	75% Braided Amberstrand Shield Installed
W	Armorlite Braided Microfilament Stainless Steel Shield Installed
X	Armorlite Braided Microfilament Stainless Steel Shield Installed With E-CTFE Halar "Expando" Jacket (+150°C)
Z	75% Braided Amberstrand Shield Installed, With E-CTFE Halar "Expando" Jacket (+150 C)

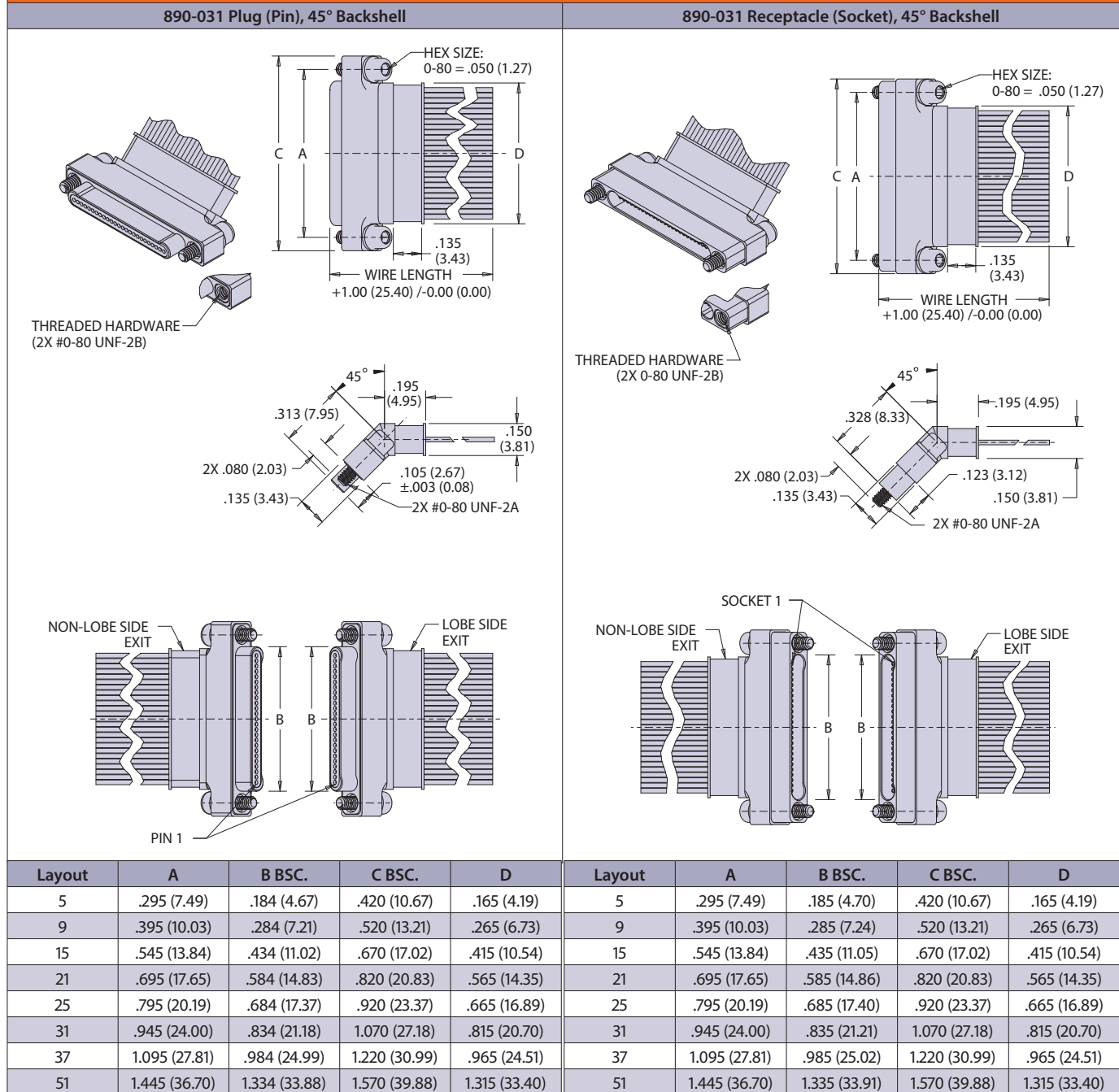
SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors



890-031 Flying Lead Plug and Receptacle Connectors with Insulated Wire and Backshell

SINGLE-ROW RECTANGULAR CONNECTORS

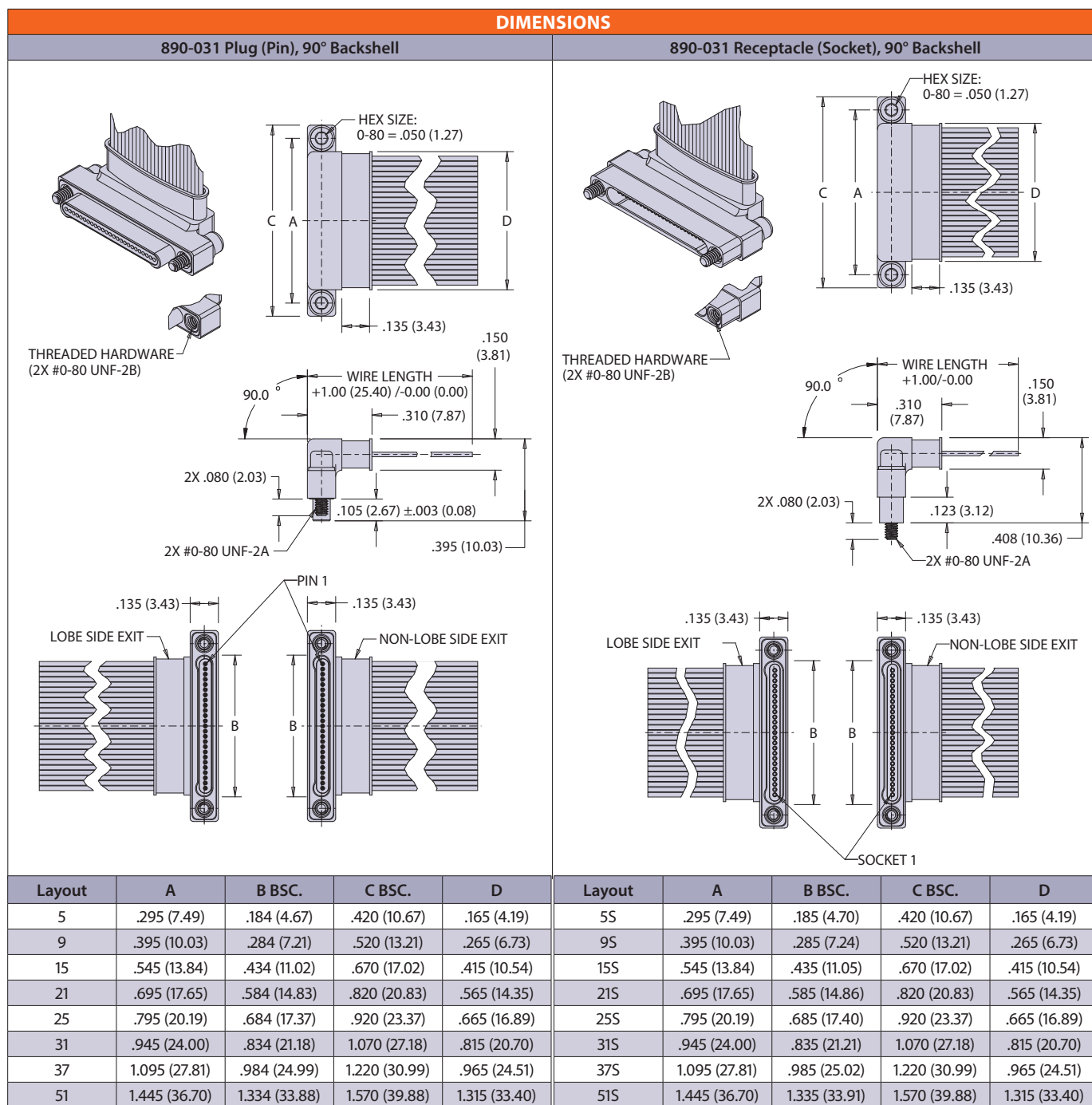
DIMENSIONS



SERIES 89 NANOMINIATURE Single-Row Rectangular Connectors



890-031 Flying Lead Plug and Receptacle Connectors with Insulated Wire and Backshell



SINGLE-ROW RECTANGULAR CONNECTORS