

SERIES 89 NANOMINIATURE Single and Dual Row Nano Strip Connectors



890-046 Single Row, Plastic Shell, Nano Strip, Back-to-Back Cable Assembly

SINGLE AND DUAL ROW NANO STRIP CONNECTORS



Nano Strip Jumper with Insulated Wire feature gold alloy TwistPin contacts. Contacts are precision-crimped to Insulated wire. These nanominiature strip connectors offer premium performance and reliability for demanding applications. 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 UAVs, satellites, missile systems and geophysical instruments.

HOW TO ORDER									
Sample Part Number	890-046	-9	CS	-0	B	7	-6	-P1	MH
Series	890-046 = Single Row, Plastic Shell, Nano Strip, Back-to-Back Cable Assembly								
Number of Cavities	1 thru 40 = Total number of cavities including cavities used for guide pins and disabled cavities used for mounting holes, if any. See Table I								
Contact Type	GP = Pin (plug) connector for both ends GS = Socket (receptacle) connector for both ends CS = Pin (plug) connector to socket (receptacle) connector								
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	1 = White 2 = Yellow 7 = 10 color repeating (wire Type A is striped, Types B, C, E and F are solid colors)								
Wire Length	Wire length in inches, as required (I.E. 12 = 12 inches; 2" minimum)								
Optional Guide Pin	Omit for no guide pin (Guide pin in receptacle, accepts guide pin in plug) P1 = Guide pin or accepts guide pin in position 1 (add 1 cavity to number of active contacts) PB = Guide pin or accepts guide pin in 1 and last position (add 2 cavities to number of active contacts) PX = Guide pin or accepts guide pin in position specified by "X" (add 1 cavity to number of active contacts)								
Optional Mounting Holes	Omit for no mounting holes MH = Mounting holes (add 6 cavities to number of active contacts)								

NUMBER OF CAVITIES EXAMPLE
2 ACTIVE CONTACTS
+1 P1 GUIDE PIN
+6 MOUNTING HOLES
9 TOTAL

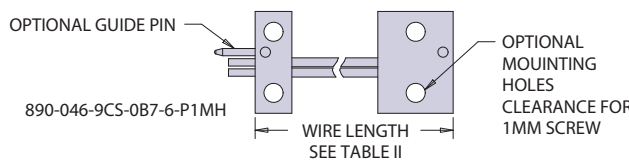


TABLE II WIRE LENGTH TOLERANCE	
LENGTH RANGE	TOLERANCE
2 (50.80) -48 (1219.20)	+0.50 (12.70) /-0.00 (0.00)
>48 (1219.20) -72 (1828.80)	+1.00 (25.40) /-0.00 (0.00)
>72 (1828.80) -120 (3048.00)	+2.00 (50.80) /-0.00 (0.00)
>120 (3048.00)	+4.00 (101.60) /-0.00 (0.00)

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

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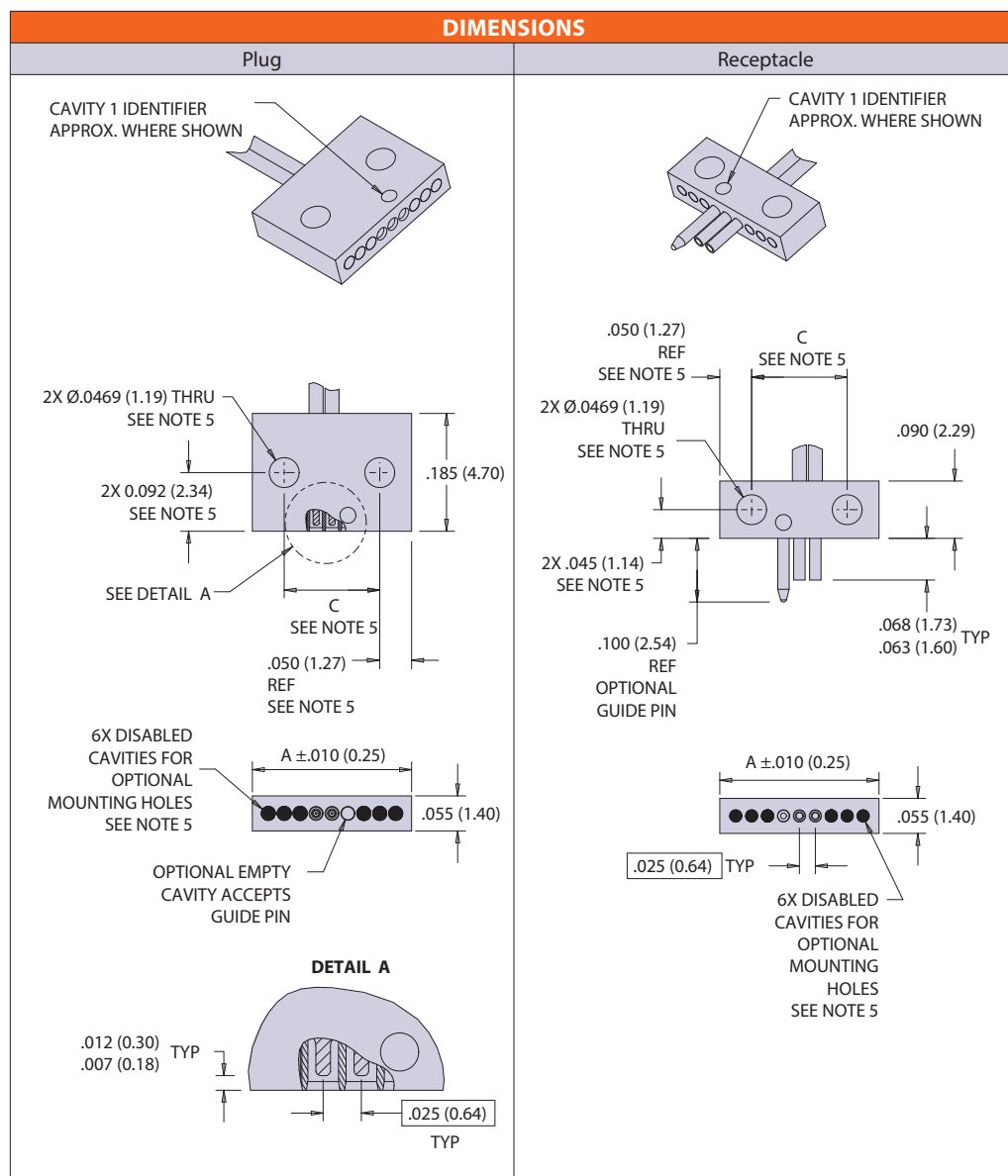


TABLE I : DIMENSIONS

Number Cavities	A	C See Note 5
1	0.050 (1.27)	N/A
2	0.075 (1.91)	N/A
3	0.100 (2.54)	N/A
4	0.125 (3.18)	N/A
5	0.150 (3.81)	N/A
6	0.175 (4.45)	N/A
7	0.200 (5.08)	0.100 (2.54)
8	0.225 (5.72)	0.125 (3.18)
9	0.250 (6.35)	0.150 (3.81)
10	0.275 (6.99)	0.175 (4.45)
11	0.300 (7.62)	0.200 (5.08)
12	0.325 (8.26)	0.225 (5.72)
13	0.350 (8.89)	0.250 (6.35)
14	0.375 (9.53)	0.275 (6.99)
15	0.400 (10.16)	0.300 (7.62)
16	0.425 (10.80)	0.325 (8.26)
17	0.450 (11.43)	0.350 (8.89)
18	0.475 (12.07)	0.375 (9.53)
19	0.500 (12.70)	0.400 (10.16)
20	0.525 (13.34)	0.425 (10.80)
21	0.550 (13.97)	0.450 (11.43)
22	0.575 (14.61)	0.475 (12.07)
23	0.600 (15.24)	0.500 (12.70)
24	0.625 (15.88)	0.525 (13.34)
25	0.650 (16.51)	0.550 (13.97)
26	0.675 (17.15)	0.575 (14.61)
27	0.700 (17.78)	0.600 (15.24)
28	0.725 (18.42)	0.625 (15.88)
29	0.750 (19.05)	0.650 (16.51)
30	0.775 (19.69)	0.675 (17.15)
31	0.800 (20.32)	0.700 (17.78)
32	0.825 (20.96)	0.725 (18.42)
33	0.850 (21.59)	0.750 (19.05)
34	0.875 (22.23)	0.775 (19.69)
35	0.900 (22.86)	0.800 (20.32)
36	0.925 (23.50)	0.825 (20.96)
37	0.950 (24.13)	0.850 (21.59)
38	0.975 (24.77)	0.875 (22.23)
39	1.000 (25.40)	0.900 (22.86)
40	1.025 (26.04)	0.925 (23.50)

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NOTES

- Material and Finishes:
 - Shell: polyphenylene sulfide (PPS)
 - Contacts: gold alloy / unplated
 - Wire: see part number break down
 - Optional guide pin: stainless steel, passivated
- Inspect and test IAW MIL-DTL-32139 where applicable
- Strip shell may have a half cavity on either end or each end
- For 10 repeating colors, wire color skipped for guide pin designated cavity(ies)
- Only applies if ordered with optional mounting holes