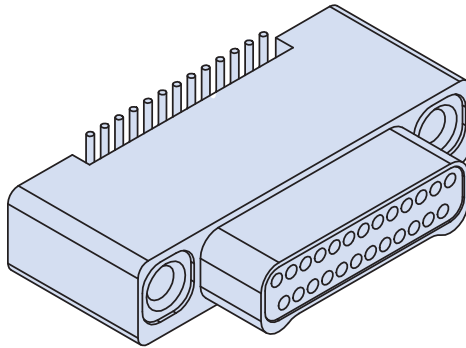


# 891-010 and -011 Series 89 Nanominiature Connectors Double Row Vertical Surface Mount



**Vertical Surface Mount PCB Nano Connectors** feature gold alloy TwistPin contacts. Contacts are precision-crimped #30 AWG gold-plated wire. These nanominiature connectors offer premium performance and reliability for demanding applications.

**Choose Aluminum, Titanium or Stainless Steel Shells** in eight layouts from 9 to 51 contacts. Complies to the requirements of MIL-DTL-32139.

## HOW TO ORDER VERTICAL MOUNT SMT CONNECTORS

Series	Insert Arrangement/ Contact Type	Shell Material and Finish	Termination Type	Hardware			
<b>891-010</b> Plug, Pin Contacts, Double Row, Vertical SMT Nanominiature	Plugs (891-010) <b>9P</b> <b>15P</b> <b>21P</b> <b>25P</b> <b>31P</b> <b>37P</b> <b>51P</b>	<b>A1</b> Aluminum Shell, Cadmium Plating	<b>BSS</b> "Board Surface Mount Straight"	<b>T</b> #0-80 Female Thread			
					<b>A2</b> Aluminum Shell, Electroless Nickel Plating		
						<b>T</b> Titanium Shell, Unplated	
		<b>S</b> Stainless Steel Shell, Passivated					
					Receptacles (891-011) <b>9S</b> <b>15S</b> <b>21S</b> <b>25S</b> <b>31S</b> <b>37S</b> <b>51S</b>		<b>891-011</b> Receptacle, Socket Contacts, Double Row, Vertical SMT Nanominiature
						<b>T</b> Titanium Shell, Unplated	
<b>S</b> Stainless Steel Shell, Passivated							
	<b>Sample Part Number</b>						
	<b>891-011</b>	<b>— 51S</b>	<b>A2</b>	<b>—BSS</b>		<b>T</b>	

### MATERIALS AND FINISHES

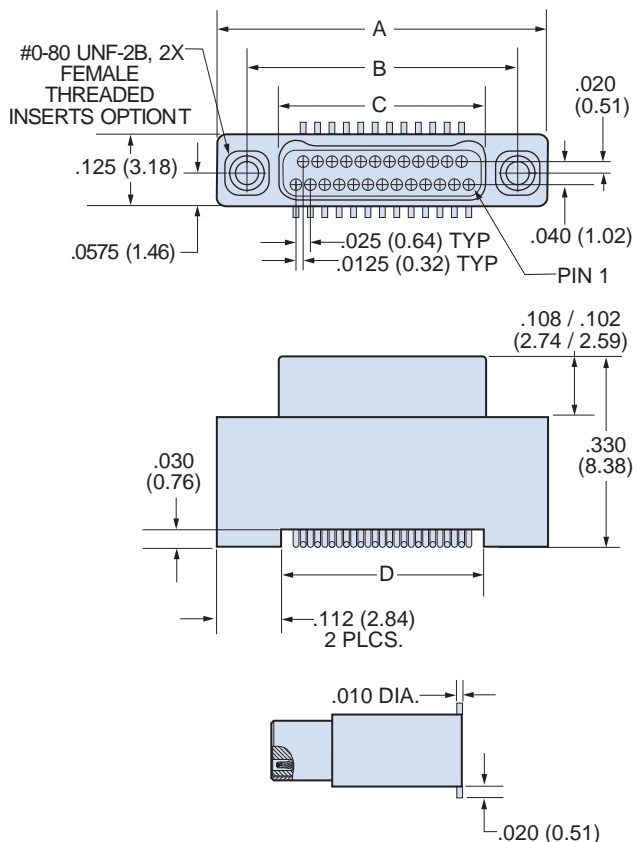
Connector Shell	See Ordering Information
Insulator	Liquid Crystal Polymer (LCP), 30% Glass-Filled
Contacts	Gold Alloy, Unplated
Hardware	300 Series Stainless Steel
PC Tails	#30 (.010 Dia.) Copper Wire, Solder Dipped
PCB Trays	Liquid Crystal Polymer (LCP) or Epoxy
Encapsulant	Epoxy

### SPECIFICATIONS

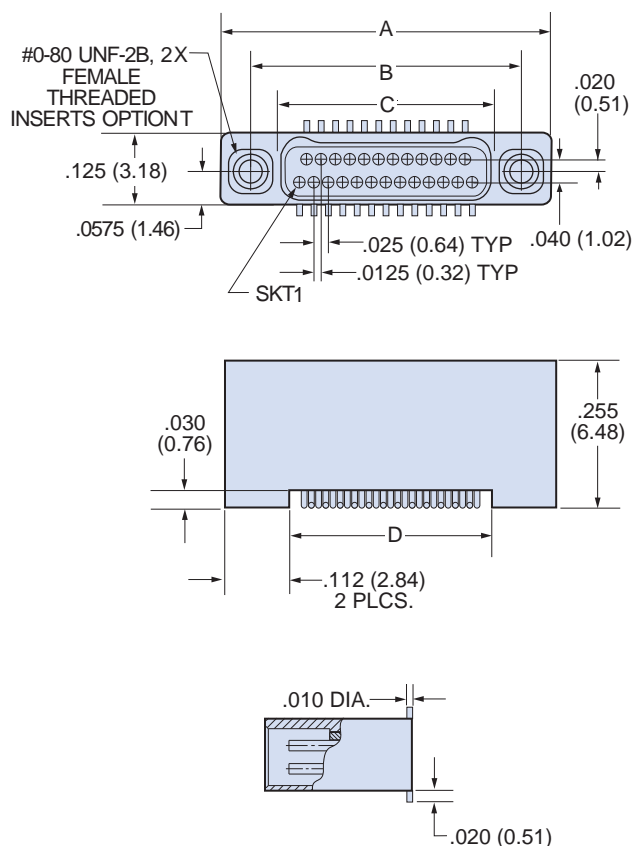
Durability	200 Cycles Minimum
Current Rating	1 AMP Maximum
Voltage Rating (DWV)	300 VAC RMS Sea Level
Insulation Resistance	5000 Megohms Minimum
Operating Temperature	-55° C. to +125° C.
Contact Resistance	71 mV. @1 AMP #30 AWG Wire
Thermal Vacuum Outgassing	1.0% Max TML, 0.1% Max. VCM

DOUBLE ROW VERTICAL SURFACE MOUNT NANO DIMENSIONS

Plug (Pin) Connectors



Receptacle (Socket) Connectors



Layout	A		B BSC.		C BSC.		D	
	In. ± .005	mm. ± 0.13	In.	mm.	In.	mm.	In. ± .005	mm. ± 0.13
9P	.375	9.52	.270	6.86	.160	4.06	.152	3.86
9S	.375	9.52	.270	6.86	.163	4.14	.152	3.86
15P	.450	11.43	.345	8.76	.235	5.97	.227	5.77
15S	.450	11.43	.345	8.76	.238	6.04	.227	5.77
21P	.525	13.33	.420	10.67	.310	7.87	.302	7.67
21S	.525	13.33	.420	10.67	.313	7.95	.302	7.67
25P	.575	14.60	.470	11.94	.360	9.14	.352	8.94
25S	.575	14.60	.470	11.94	.363	9.22	.352	8.94
31P	.650	16.51	.545	13.84	.435	11.05	.427	10.85
31S	.650	16.51	.545	13.84	.438	11.12	.427	10.85
37P	.725	18.41	.620	15.75	.510	12.95	.502	12.75
37S	.725	18.41	.620	15.75	.513	13.03	.502	12.75
51P	.900	22.86	.795	20.19	.685	17.40	.677	17.20
51S	.900	22.86	.795	20.19	.688	17.47	.677	17.20

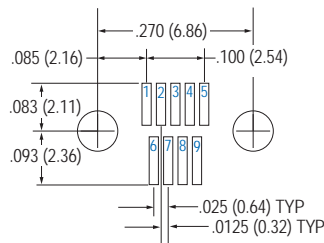
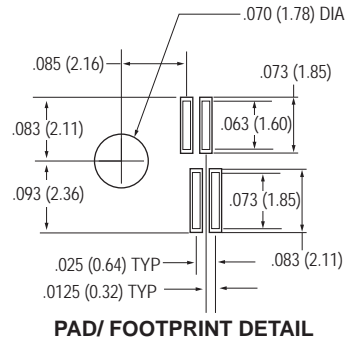
# 891-010 and -011 Series 89 Nanominiature Connectors Double Row Vertical Surface Mount



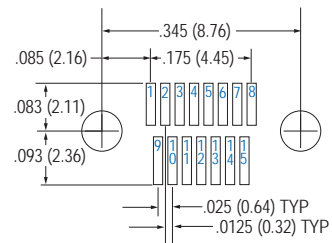
Double Row Connectors

Patterns shown are for connector mounting side of PC Board.

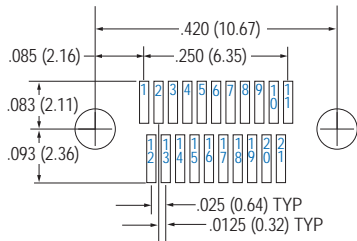
## DOUBLE ROW VERTICAL SURFACE MOUNT BOARD LAYOUT—891-010 PLUGS (PIN CONTACTS)



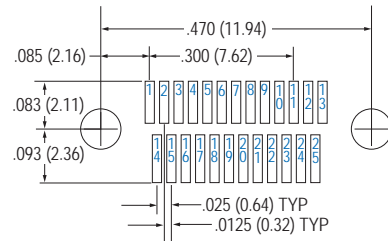
**9 Contacts**



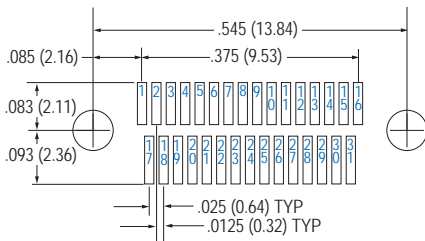
**15 Contacts**



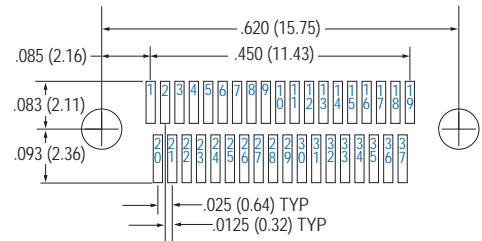
**21 Contacts**



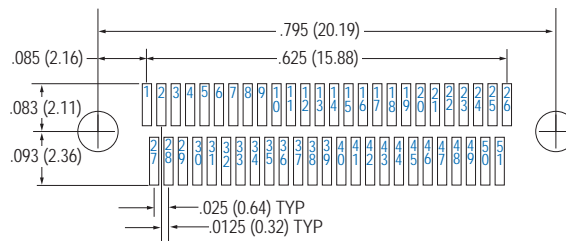
**25 Contacts**



**31 Contacts**



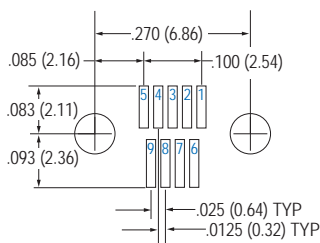
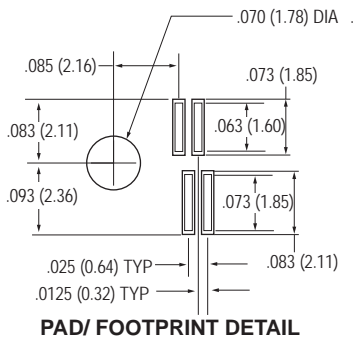
**37 Contacts**



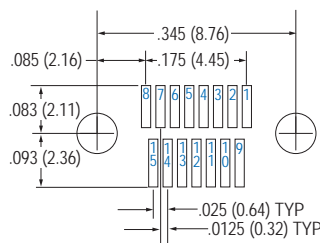
**51 Contacts**

Patterns shown are for connector mounting side of PC Board.

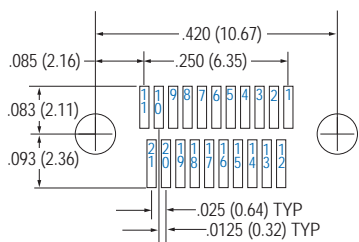
### DOUBLE ROW VERTICAL SURFACE MOUNT BOARD LAYOUT—891-011 RECEPTACLES



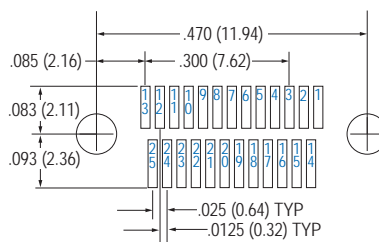
**9 Contacts**



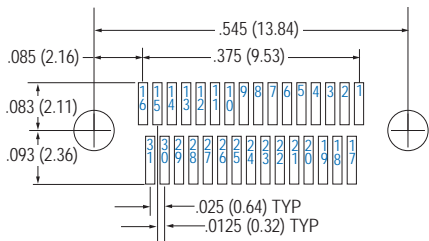
**15 Contacts**



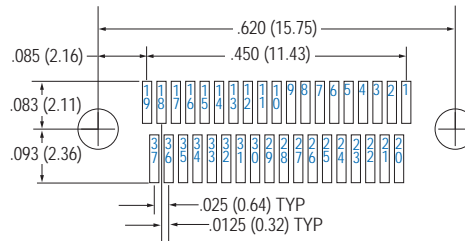
**21 Contacts**



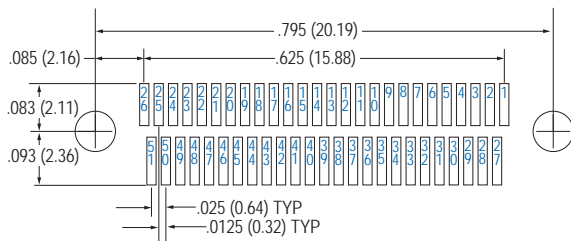
**25 Contacts**



**31 Contacts**



**37 Contacts**



**51 Contacts**