

SERIES 89 NANOMINIATURE Dual-Row Rectangular Connectors



891-062 and 891-063 Rear Panel Mount, Gasket-Sealed, Vertical Thru-Hole PCB Mount Connectors

DUAL-ROW RECTANGULAR CONNECTORS



Rear Panel Mount PCB Connectors feature gold alloy TwistPin contacts, titanium or stainless steel shells offering premium performance and reliability for demanding applications. Gasket seals available in fluorosilicone, Cho-Seal 1298 or Cho-Seal 6503. For replacement gaskets see 899-015.

Twelve Layouts From 9 To 91 Contacts. MIL-DTL-32139 type connectors are intermateable with any M32139 compliant connector or Glenair Series 891 Dual-Row metal shell nanominiature connector. Pre-Tinned PC Tails are coated with Sn63Pb37 or Sn60Pb40 tin-lead for excellent solderability.

HOW TO ORDER	
Sample Part Number	891-062 -25S S -BST 1 T -01 M
Series	891-062 = Rear Panel Mount Plug, Vertical Thru-Hole PCB Mount 891-063 = Rear Panel Mount Receptacle, Vertical Thru-Hole PCB Mount
Insert Arrangement/ Contact Type	Pins (891-062 Plugs): 9P, 15P, 21P, 25P, 31P, 37P, 41P, 51P, 65P, 69P, 85P, 91P Sockets (891-063 Receptacles): 9S, 15S, 21S, 25S, 31S, 37S, 41S, 51S, 65S, 69S, 85P, 91S
Shell Material and Finish	T = Titanium Shell, Unplated S = Stainless Steel Shell, Passivated
Termination Type	BST = Board Straight Thru-Hole
PC Tail Length	1 = .110 (2.79) 2 = .172 (4.37) 3 = .140 (3.56)
Hardware Option	T = Female Threads (#0-80 for size 9-69, #2-56 for size 85, #2-56 for size 85 & 91)
Gasket Material	Omit for No Gasket 01 = Fluorosilicone IAW MIL-DTL25988 Type II, Class I, Grade 60 02 = Passivated Silver Plated Aluminum Filled Fluorosilicone IAW MIL-DTL-83528, Type D (Cho-Seal 1298 or Equivalent) 03 = Nickel Plated Aluminum Filled Fluorosilicone, (Cho-Seal 6503 or Equivalent)
Mounting Thread Option	Omit for #2-56 UNC-2B/ PCB Mounting #0-80 UNF-2B Sizes 9-69, #2-56 UNC-2B Size 85 & 91 M = Panel Mounting M2 X 0.4 6H / PCB Mounting M1.6 x 0.35 6H Sizes 9-69, M2 x 0.4 6H Size 85 & 91

PLUG HARDWARE

T - Female Thread

RECEPTACLE HARDWARE

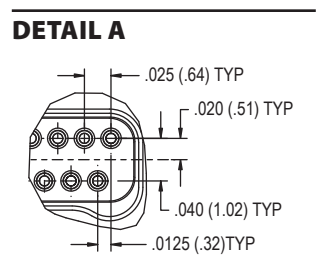
T - Female Thread

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

PANEL CUT-OUT DIMENSIONS

Shell Size	C	M	N
9	.566 (14.38)	.395 (10.03)	.155 (3.94)
15	.641 (16.28)	.470 (11.94)	.155 (3.94)
21	.716 (18.19)	.545 (13.84)	.155 (3.94)
25	.766 (19.46)	.595 (15.11)	.155 (3.94)
31	.841 (21.36)	.670 (17.02)	.155 (3.94)
37	.916 (23.27)	.745 (18.92)	.155 (3.94)
41	.966 (24.54)	.795 (20.19)	.155 (3.94)
51	1.091 (27.71)	.920 (23.37)	.155 (3.94)
65	1.266 (32.16)	1.095 (27.81)	.155 (3.94)
69	1.316 (33.43)	1.145 (29.08)	.155 (3.94)
85	1.568 (39.83)	1.397 (35.48)	.180 (4.57)
91	1.643 (41.73)	1.472 (37.39)	.180 (4.57)



- NOTES**
- Inspect and test IAW MIL-DTL-32139
 - Interface dimensions per MIL-DTL-32139, plug (1/3) Receptacle (1/4)

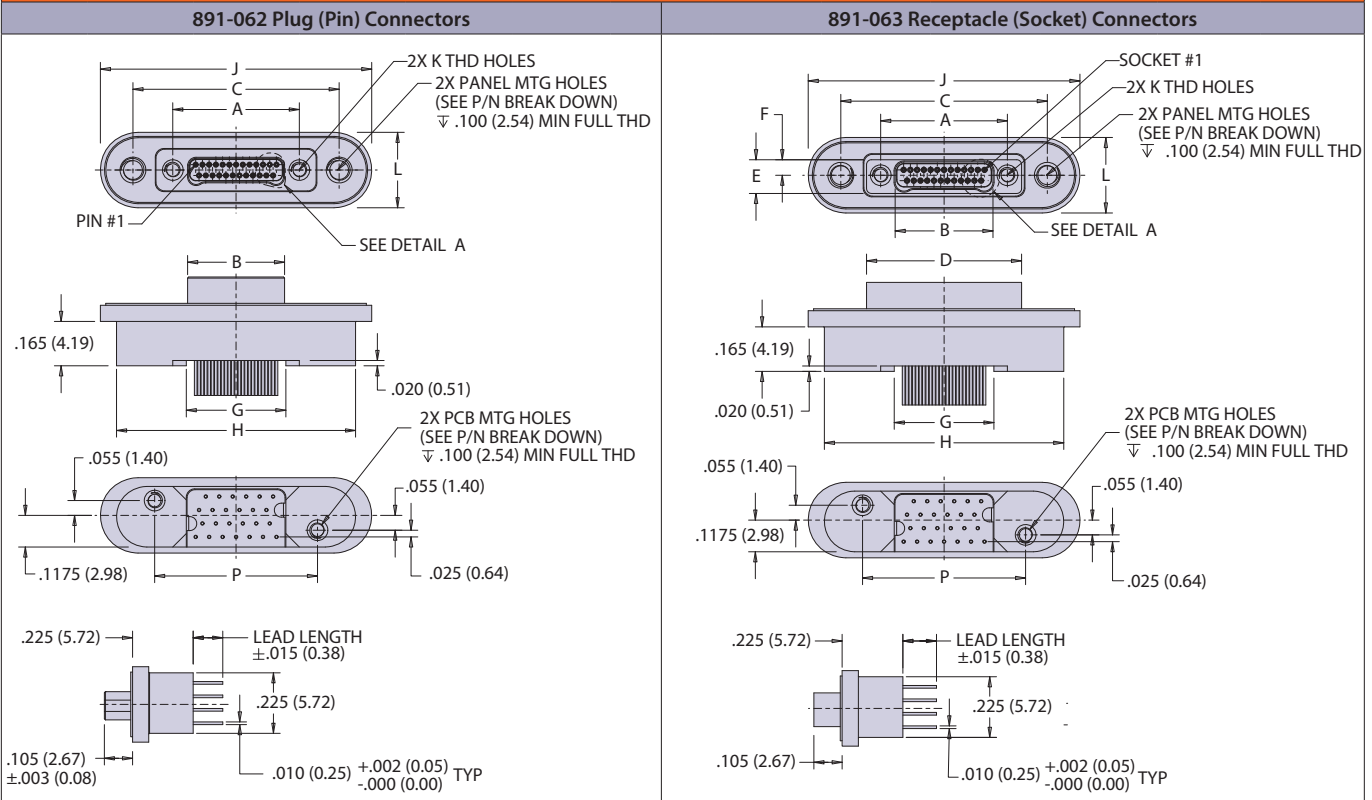
- Recommended Panel thickness .100 (2.54) max
- Panel cutout sized to allow lobe up or lobe down mounting orientation

SERIES 89 NANOMINIATURE Dual-Row Rectangular Connectors



891-062 and 891-063 Rear Panel Mount, Gasket-Sealed, Vertical Thru-Hole PCB Mount Connectors

DIMENSIONS



Layout	A BSC.	B BSC.	C BSC.	D	E	F	G	H	J	K THD HOLES	L	P
9P	.270 (6.86)	.160 (4.06)	.566 (14.38)	--	--	--	.170 (4.32)	.688 (17.48)	.808 (20.52)	#0-80 UNF-2B	.280 (7.11)	.405 (10.29)
9S	.270 (6.86)	.163 (4.14)	.566 (14.38)	.375 (9.53)	.125 (3.18)	.0575 (1.46)	.170 (4.32)	.688 (17.48)	.808 (20.52)	#0-80 UNF-2B	.280 (7.11)	.405 (10.29)
15P	.345 (8.76)	.235 (5.97)	.641 (16.28)	--	--	--	.245 (6.22)	.763 (19.38)	.883 (22.43)	#0-80 UNF-2B	.280 (7.11)	.480 (12.19)
15S	.345 (8.76)	.238 (6.05)	.641 (16.28)	.450 (11.43)	.125 (3.18)	.0575 (1.46)	.245 (6.22)	.763 (19.38)	.883 (22.43)	#0-80 UNF-2B	.280 (7.11)	.480 (12.19)
21P	.420 (10.67)	.310 (7.87)	.716 (18.19)	--	--	--	.320 (8.13)	.838 (21.29)	.958 (24.33)	#0-80 UNF-2B	.280 (7.11)	.555 (14.10)
21S	.420 (10.67)	.313 (7.95)	.716 (18.19)	.525 (13.34)	.125 (3.18)	.0575 (1.46)	.320 (8.13)	.838 (21.29)	.958 (24.33)	#0-80 UNF-2B	.280 (7.11)	.555 (14.10)
25P	.470 (11.94)	.360 (9.14)	.766 (19.46)	--	--	--	.370 (9.40)	.888 (22.56)	1.008 (25.60)	#0-80 UNF-2B	.280 (7.11)	.605 (15.37)
25S	.470 (11.94)	.363 (9.22)	.766 (19.46)	.575 (14.61)	.125 (3.18)	.0575 (1.46)	.370 (9.40)	.888 (22.56)	1.008 (25.60)	#0-80 UNF-2B	.280 (7.11)	.605 (15.37)
31P	.545 (13.84)	.435 (11.05)	.841 (21.36)	--	--	--	.445 (11.30)	.963 (24.46)	1.083 (27.51)	#0-80 UNF-2B	.280 (7.11)	.680 (17.27)
31S	.545 (13.84)	.438 (11.13)	.841 (21.36)	.650 (16.51)	.125 (3.18)	.0575 (1.46)	.445 (11.30)	.963 (24.46)	1.083 (27.51)	#0-80 UNF-2B	.280 (7.11)	.680 (17.27)
37P	.620 (15.75)	.510 (12.95)	.916 (23.27)	--	--	--	.520 (13.21)	1.038 (26.37)	1.158 (29.41)	#0-80 UNF-2B	.280 (7.11)	.755 (19.18)
37S	.620 (15.75)	.513 (13.03)	.916 (23.27)	.725 (18.42)	.125 (3.18)	.0575 (1.46)	.520 (13.21)	1.038 (26.37)	1.158 (29.41)	#0-80 UNF-2B	.280 (7.11)	.755 (19.18)
41P	.670 (17.02)	.560 (14.22)	.966 (24.54)	--	--	--	.570 (14.48)	1.088 (27.64)	1.208 (30.68)	#0-80 UNF-2B	.280 (7.11)	.805 (20.45)
41S	.670 (17.02)	.563 (14.30)	.966 (24.54)	.775 (19.69)	.125 (3.18)	.0575 (1.46)	.570 (14.48)	1.088 (27.64)	1.208 (30.68)	#0-80 UNF-2B	.280 (7.11)	.805 (20.45)
51P	.795 (20.19)	.685 (17.40)	1.091 (27.71)	--	--	--	.695 (17.65)	1.213 (30.81)	1.333 (33.86)	#0-80 UNF-2B	.280 (7.11)	.930 (23.62)
51S	.795 (20.19)	.688 (17.48)	1.091 (27.71)	.900 (22.86)	.125 (3.18)	.0575 (1.46)	.695 (17.65)	1.213 (30.81)	1.333 (33.86)	#0-80 UNF-2B	.280 (7.11)	.930 (23.62)
65P	.970 (24.64)	.860 (21.84)	1.266 (32.16)	--	--	--	.870 (22.10)	1.388 (35.26)	1.508 (38.30)	#0-80 UNF-2B	.280 (7.11)	1.105 (28.07)
65S	.970 (24.64)	.863 (21.92)	1.266 (32.16)	1.075 (27.31)	.125 (3.18)	.0575 (1.46)	.870 (22.10)	1.388 (35.26)	1.508 (38.30)	#0-80 UNF-2B	.280 (7.11)	1.105 (28.07)
69P	1.020 (25.91)	.910 (23.11)	1.316 (33.43)	--	--	--	.920 (23.37)	1.438 (36.53)	1.558 (39.57)	#0-80 UNF-2B	.280 (7.11)	1.155 (29.34)
69S	1.020 (25.91)	.913 (23.19)	1.316 (33.43)	1.125 (28.58)	.125 (3.18)	.0575 (1.46)	.920 (23.37)	1.438 (36.53)	1.558 (39.57)	#0-80 UNF-2B	.280 (7.11)	1.155 (29.34)
85P	1.246 (31.65)	1.110 (28.19)	1.568 (39.83)	--	--	--	1.120 (28.45)	1.690 (42.93)	1.810 (45.97)	#2-56 UNC-2B	.305 (7.75)	1.407 (35.74)
85S	1.246 (31.65)	1.113 (28.27)	1.568 (39.83)	1.377 (34.98)	.150 (3.81)	.0700 (1.78)	1.120 (28.45)	1.690 (42.93)	1.810 (45.97)	#2-56 UNC-2B	.305 (7.75)	1.407 (35.74)
91P	1.321 (33.55)	1.185 (30.10)	1.643 (41.73)	--	--	--	1.195 (30.35)	1.765 (44.83)	1.885 (47.88)	#2-56 UNC-2B	.305 (7.75)	1.482 (37.64)
91S	1.321 (33.55)	1.188 (30.18)	1.643 (41.73)	1.452 (36.88)	.150 (3.81)	.0700 (1.78)	1.195 (30.35)	1.765 (44.83)	1.885 (47.88)	#2-56 UNC-2B	.305 (7.75)	1.482 (37.64)

DUAL-ROW RECTANGULAR CONNECTORS

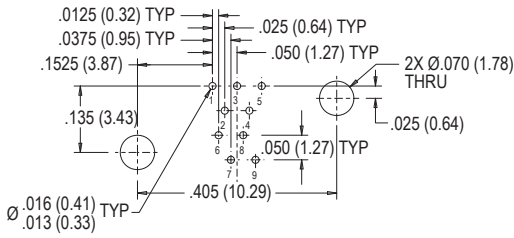
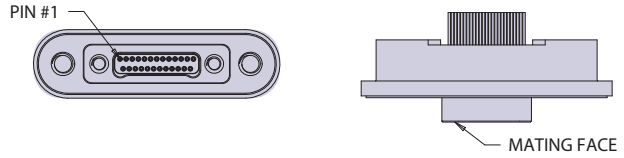
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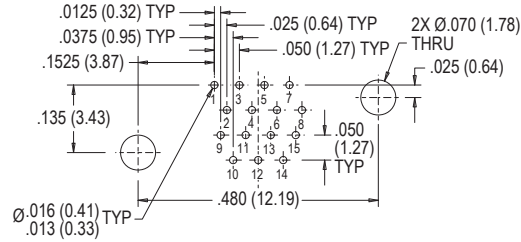
891-062 Rear Panel Mount, Gasket-Sealed, Vertical Thru-Hole PCB Mount - PCB Plug Footprint

DUAL-ROW RECTANGULAR CONNECTORS

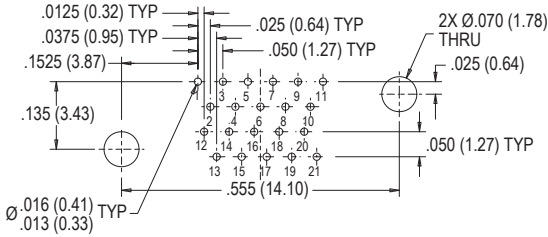
Straight thru-hole PCB plug (pin) connector layout patterns shown are for the connector mounting side of PC board



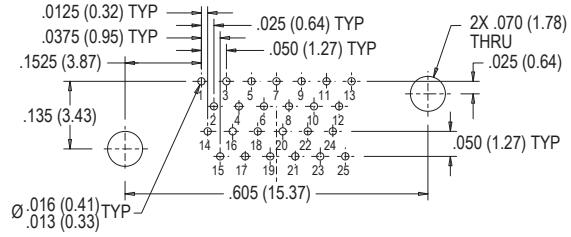
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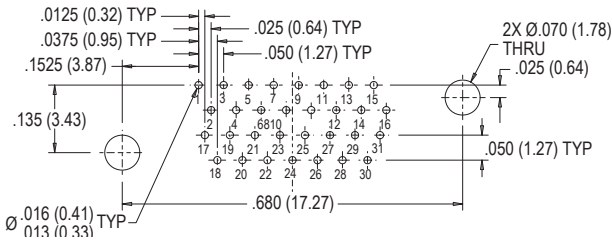
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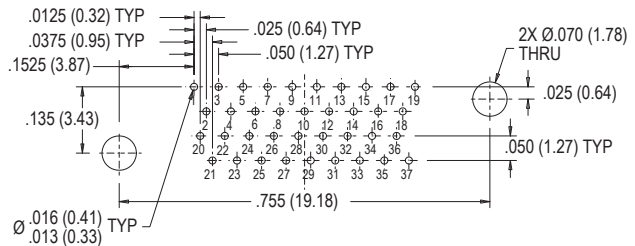
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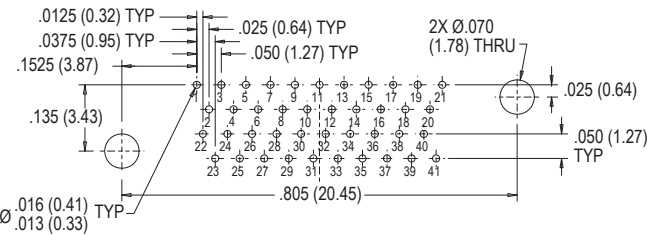
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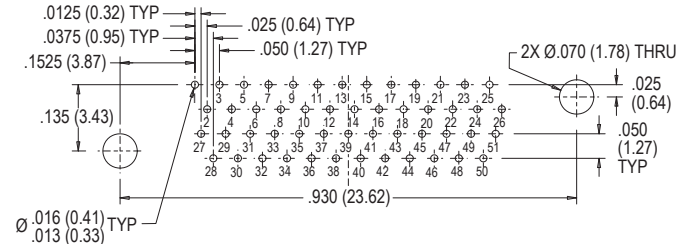
31 Contacts



37 Contacts



41 Contacts



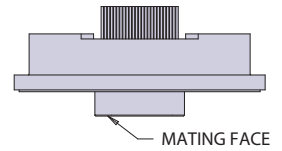
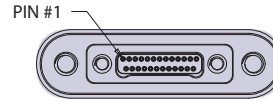
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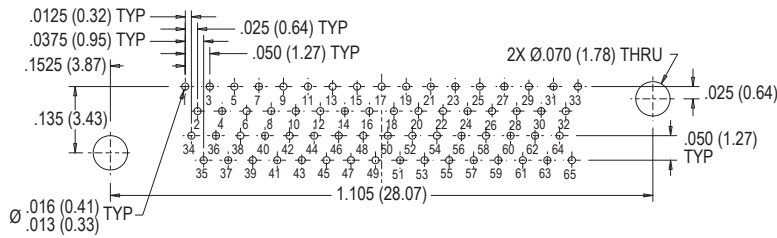


891-062 Rear Panel Mount, Gasket-Sealed, Vertical Thru-Hole PCB Mount - PCB Plug Footprint

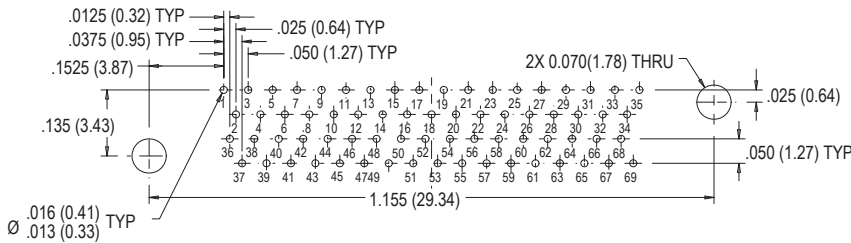
Straight thru-hole PCB plug (pin) connector layout patterns shown are for the connector mounting side of PC board



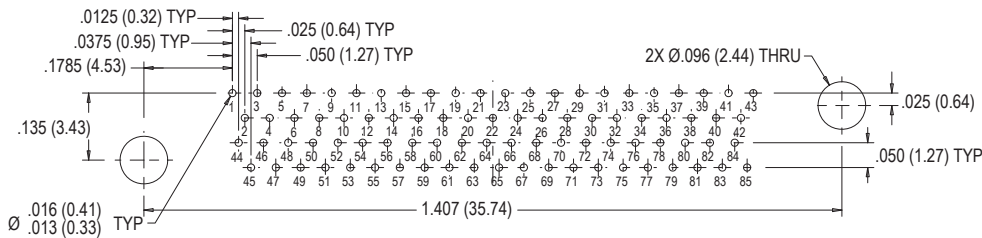
DUAL-ROW RECTANGULAR CONNECTORS



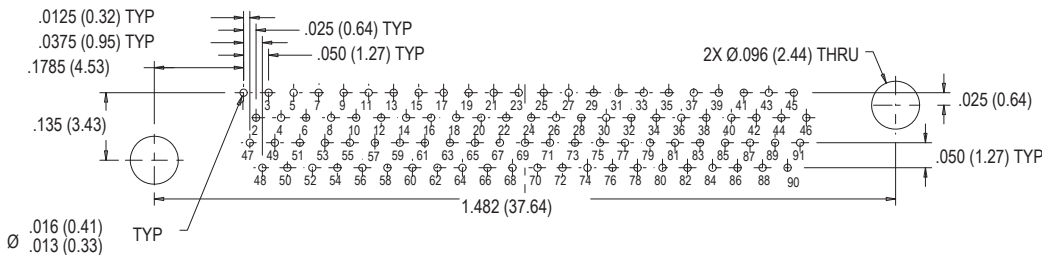
65 Contacts



69 Contacts



85 Contacts



91 Contacts

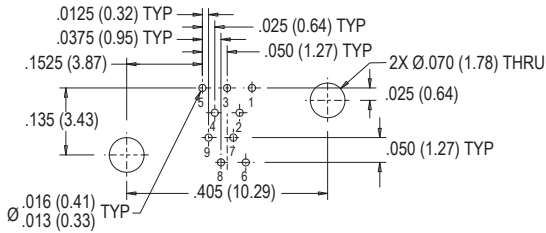
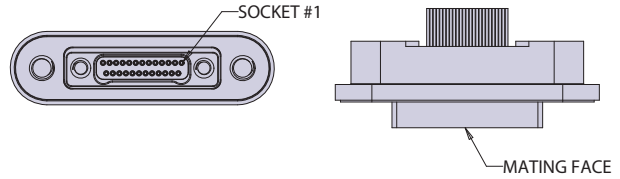
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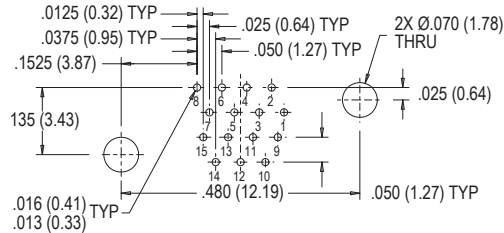
891-063 Rear Panel Mount, Gasket-Sealed, Vertical Thru-Hole PCB Mount - PCB Receptacle Footprint

DUAL-ROW RECTANGULAR CONNECTORS

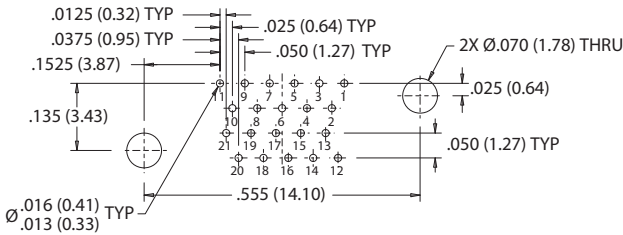
Straight thru-hole PCB receptacle (socket) connector layout patterns shown are for the connector mounting side of PC board



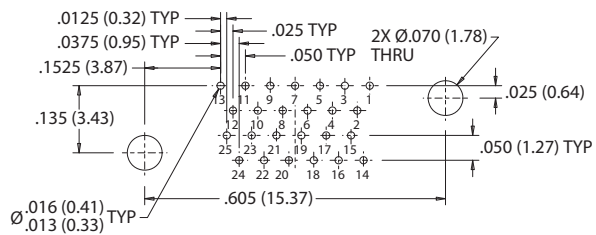
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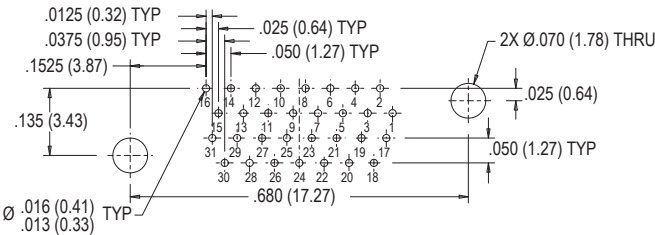
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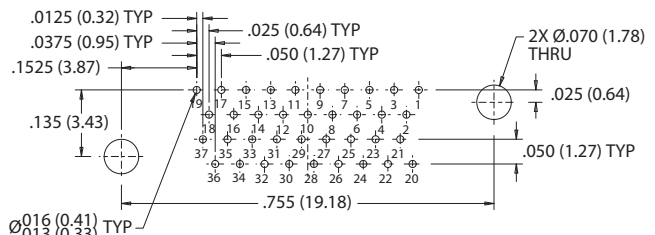
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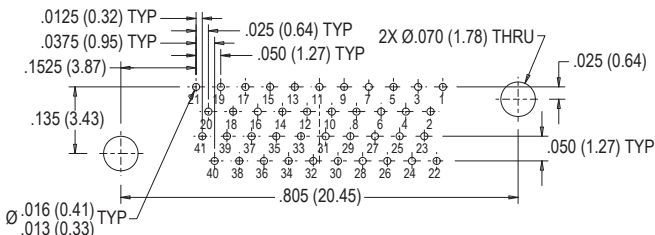
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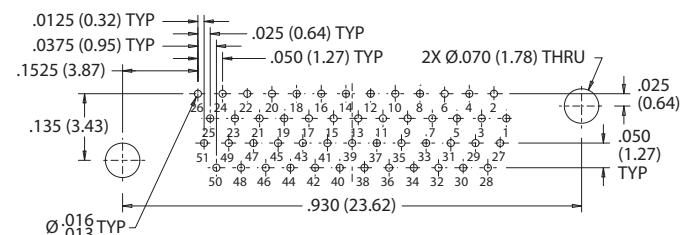
31 Contacts



37 Contacts



41 Contacts



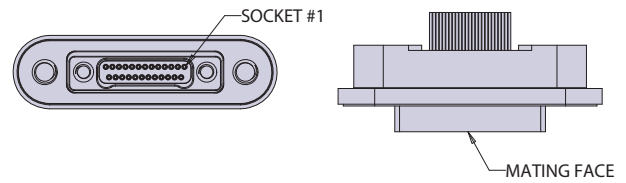
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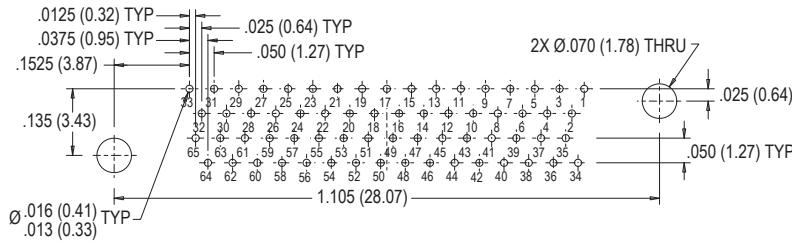


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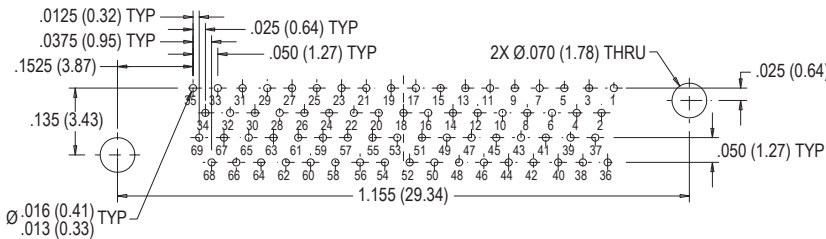
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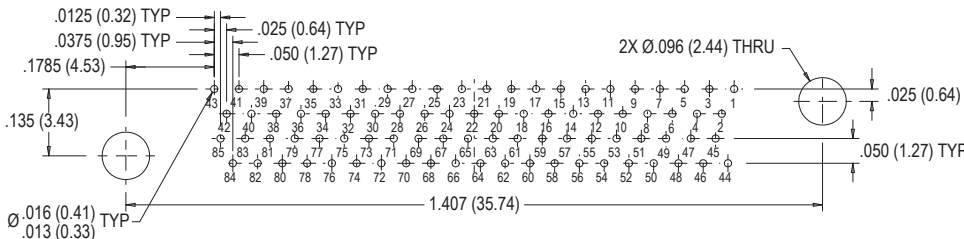
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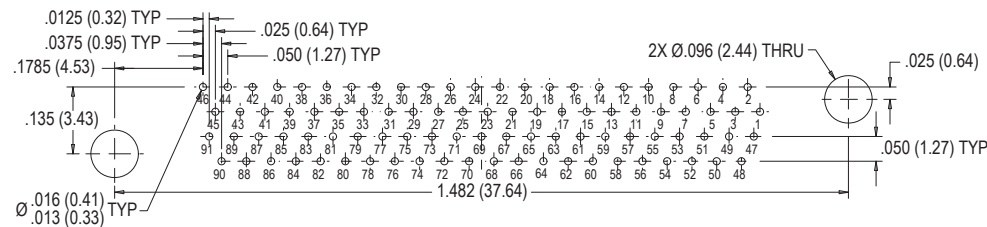
65 Contacts



69 Contacts



85 Contacts



91 Contacts