



**VERSATILE**

- Variety of tail and standoff lengths
- Custom extended lengths available
- Choice of finishes

**FLEXIBLE**

- Contacts available alone or assembled in connectors

PC Tail Contacts and Connectors



TE 38999 connectors are available with PC tail contacts for mounting to pc boards or flex circuits. Alignment disks featured on the high density PCB connectors provide a fitting pattern on the tail side, making installation easier.

PC Contact Part Numbering System

**D3 J F A35 P N 1 B W G**

**BASIC IDENTIFIER**  
**D3** Extended Pin 38999-Style Receptacle Connector

**MOUNTING STYLE**  
**B** Box Mount  
**C** Square Flange with Clinch Nuts  
**D** Double Flange  
**H** Square Flange with Helicoils  
**J** Jam Nut  
**S** Square Flange (Standard)

**CLASS**  
**F** Aluminum, Nickel Plated  
**G** Aluminum, Nickel Plated, Space Grade  
**J** Composite, Olive Drab Cadmium Plated  
**M** Composite, Nickel Plated  
**T** Aluminum, PTFE Nickel Plated  
**W** Aluminum, Olive Drab Cadmium Plated  
**Z** Aluminum, Black Zinc Nickel Plated

**SHELL SIZE**  
**A (9), B (11), C (13), D (15), E (17), F (19), G (21), H (23), J (25)**

**INSERT ARRANGEMENT**  
 See Insert Arrangement Table

**CONTACT STYLE**  
**P** Pin  
**S** Socket

**KEYING**  
**N** Normal  
**A, B, C, D, E**

**EXTENDED TAIL FINISH**  
**G** Gold  
**T** Tin/Solder Dip

**SOLDER LEG DIAMETER (D ±0.001): NO STANDOFFS**

	Contact Size			
	Size 22	Size 20	Size 16	Size 12
<b>N</b>	<b>0.635</b> 0.025	<b>1.02</b> 0.040	<b>2.03</b> 0.080	<b>2.39</b> 0.094
<b>W</b>	<b>0.48</b> 0.019	<b>0.48</b> 0.019	<b>1.02</b> 0.044	<b>1.57</b> 0.062
<b>T</b>	<b>0.48</b> 0.019	<b>0.48</b> 0.019	<b>1.57</b> 0.062	<b>1.57</b> 0.062
<b>U</b>	<b>0.71</b> 0.028	<b>0.71</b> 0.028	<b>1.57</b> 0.062	<b>1.57</b> 0.062

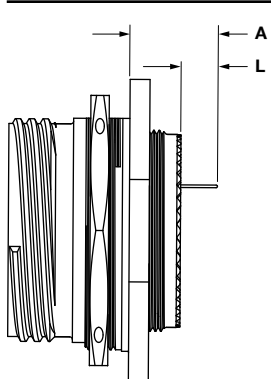
**CONTACT EXTENSION LENGTH (L)**  
 See Tables

**REAR CONFIGURATION**  
**1** Epoxy Seal  
**2** Grommet Seal



## PC Tail Contacts and Connectors

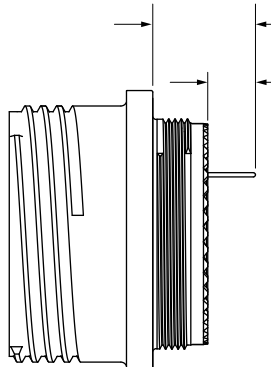
### Jam Nut Receptacles



Code	Dim L			Dim A	
	From Grommet	From Sawtooth		From Front of Jam Nut Flange	
	All	Aluminum	Composite	Aluminum	Composite
<b>A</b>	<b>4.14</b> 0.163	<b>4.14</b> 0.163	<b>2.92</b> 0.115	<b>13.54</b> 0.533	<b>13.74</b> 0.541
<b>B</b>	<b>5.33</b> 0.210	<b>5.33</b> 0.210	<b>4.11</b> 0.162	<b>14.73</b> 0.580	<b>14.94</b> 0.588
<b>C</b>	<b>5.84</b> 0.230	<b>5.84</b> 0.230	<b>4.62</b> 0.182	<b>15.24</b> 0.600	<b>15.44</b> 0.608
<b>D</b>	<b>6.76</b> 0.266	<b>6.76</b> 0.266	<b>5.54</b> 0.218	<b>16.05</b> 0.632	<b>16.36</b> 0.644
<b>E</b>	<b>7.98</b> 0.314	<b>7.98</b> 0.314	<b>6.50</b> 0.256	<b>17.37</b> 0.684	<b>17.32</b> 0.682

Millimeters Inches

### Square Flange Receptacles



Code	Dim L			Dim A			
	From Grommet	From Sawtooth		Distance from Square Flange			
	All	Aluminum	Composite	Shell Sizes 9-19		Shell Sizes 21-25	
				Aluminum	Composite	Aluminum	Composite
<b>A</b>	<b>4.14</b> 0.163	<b>4.42</b> 0.174	<b>3.94</b> 0.155	<b>13.97</b> 0.550	<b>13.11</b> 0.516	<b>13.39</b> 0.527	<b>13.11</b> 0.516
<b>B</b>	<b>5.33</b> 0.210	<b>5.61</b> 0.221	<b>5.13</b> 0.202	<b>15.16</b> 0.597	<b>14.30</b> 0.563	<b>14.58</b> 0.574	<b>14.30</b> 0.563
<b>C</b>	<b>5.84</b> 0.230	<b>6.12</b> 0.241	<b>5.64</b> 0.222	<b>15.67</b> 0.617	<b>14.81</b> 0.583	<b>15.09</b> 0.594	<b>14.81</b> 0.583
<b>D</b>	<b>6.76</b> 0.266	<b>7.04</b> 0.277	<b>6.55</b> 0.258	<b>16.59</b> 0.653	<b>15.72</b> 0.619	<b>16.00</b> 0.630	<b>15.72</b> 0.619
<b>E</b>	<b>7.98</b> 0.314	<b>8.26</b> 0.325	<b>7.77</b> 0.306	<b>17.81</b> 0.701	<b>16.94</b> 0.667	<b>17.22</b> 0.678	<b>16.94</b> 0.667

Millimeters Inches



PC Tail Contacts and Connectors

Box Mount Receptacles

Code	Dim L
A	9.78 0.385
D	12.40 0.488
J	7.67 0.302

Millimeters Inches  
Only epoxy seal (1) available for Box Mount Receptacles

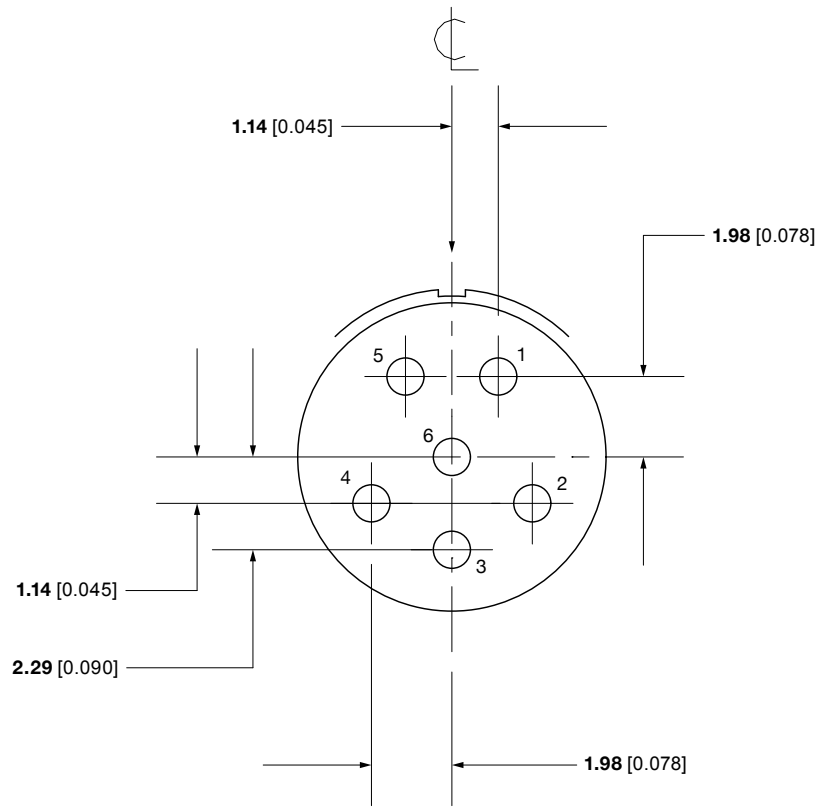
Double Flange Receptacles

Code	Dim L
E	1.68 0.066
F	2.97 0.117
G	4.62 0.182
H	5.64 0.222

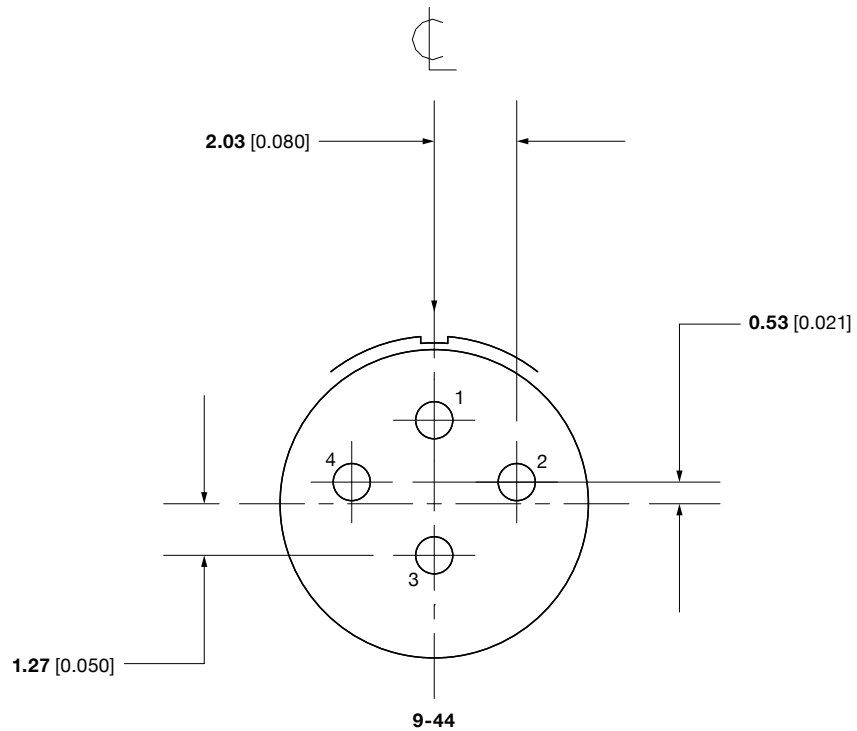
Millimeters Inches



9-06/9-35

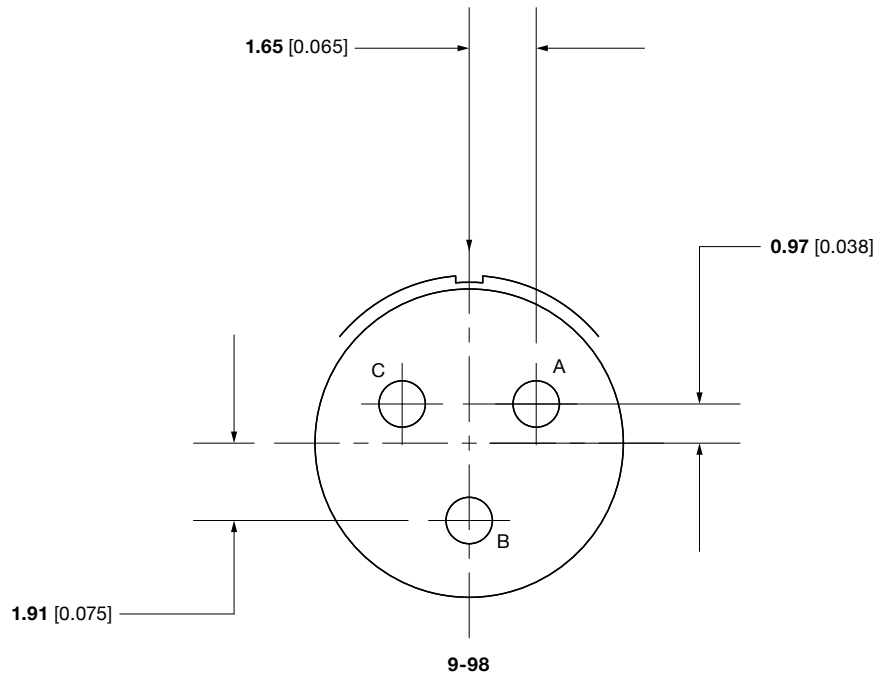


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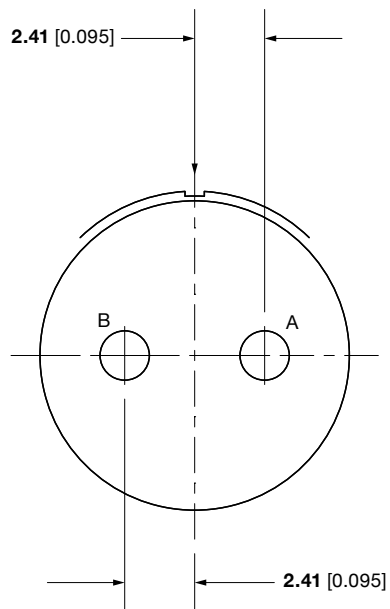




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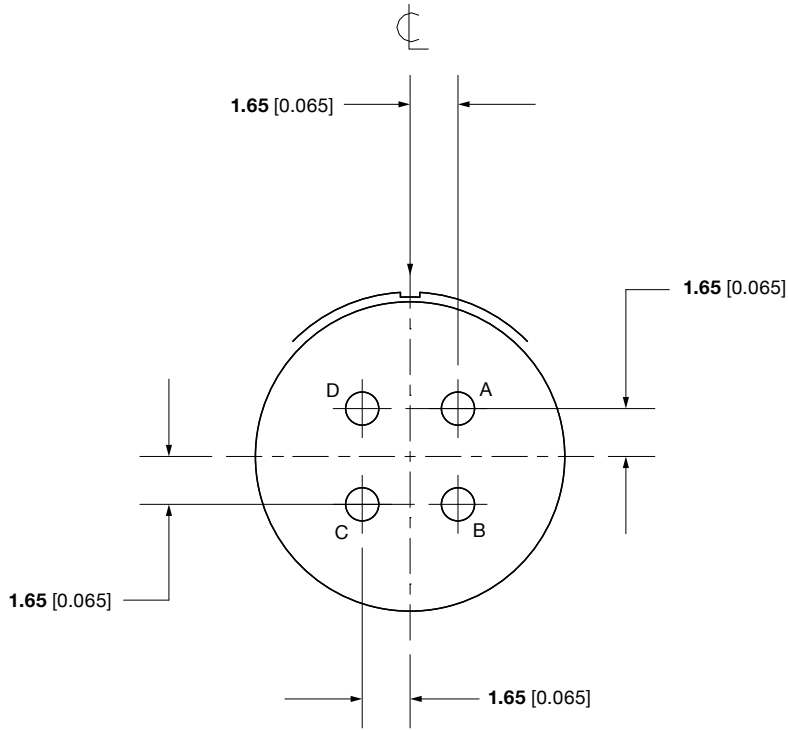


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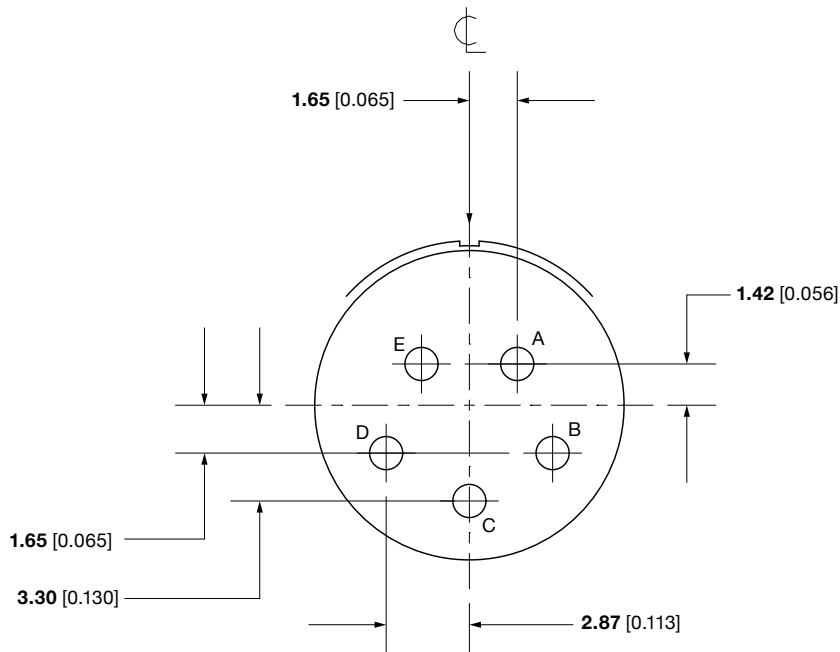




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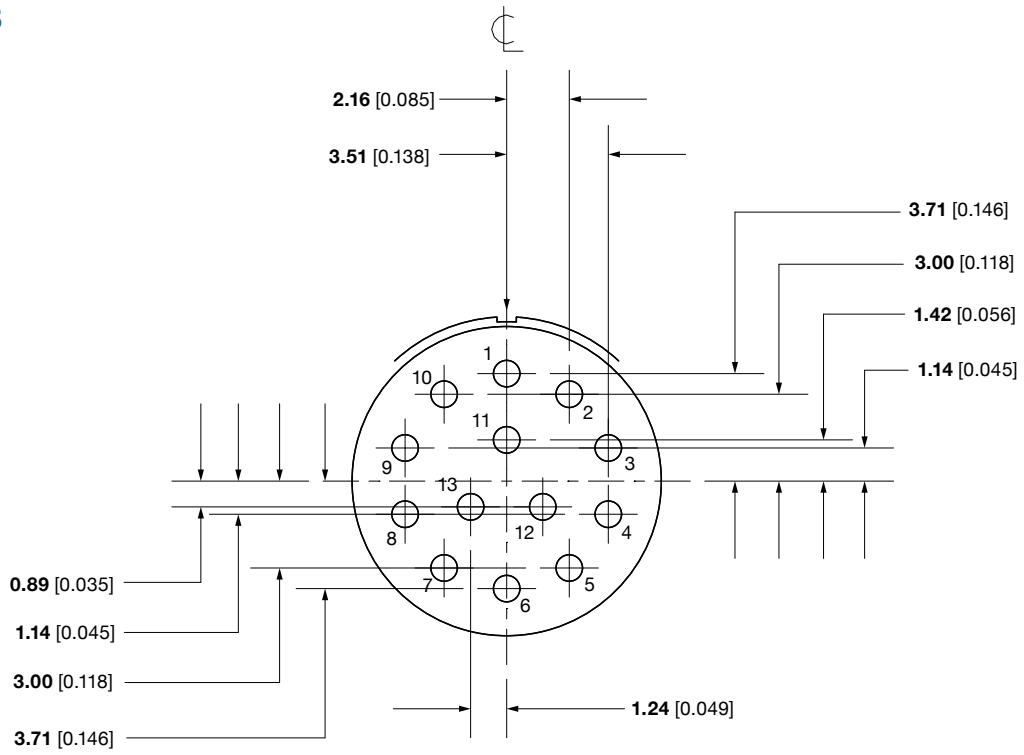


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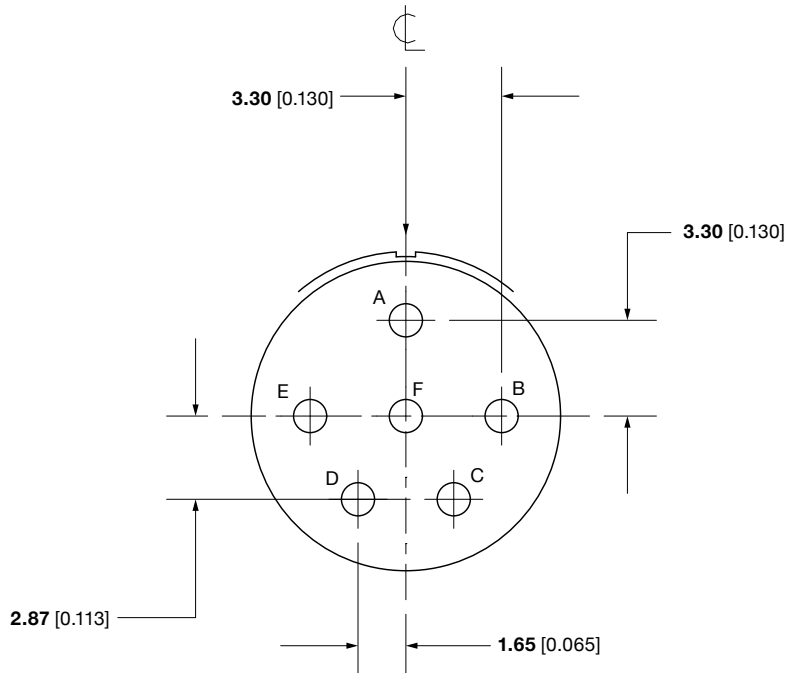




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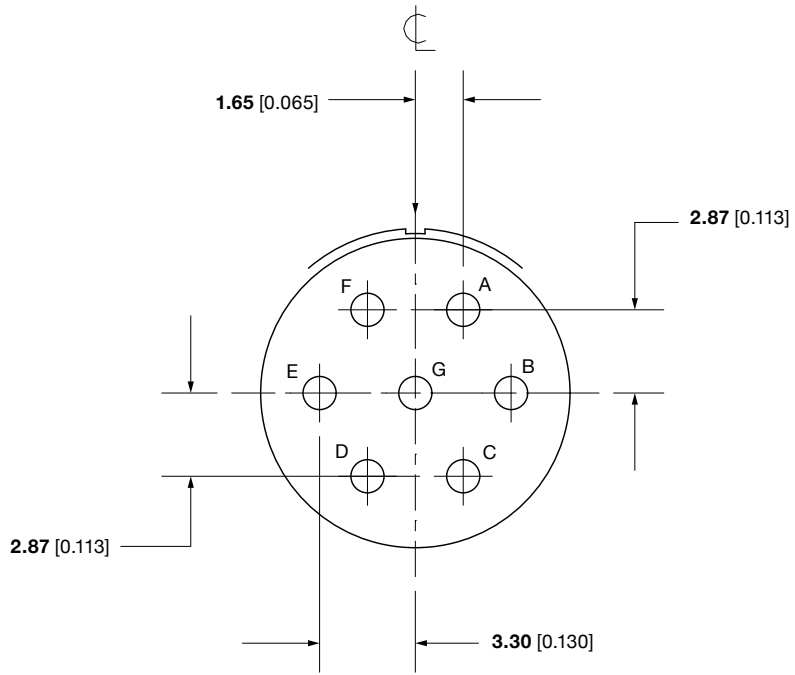


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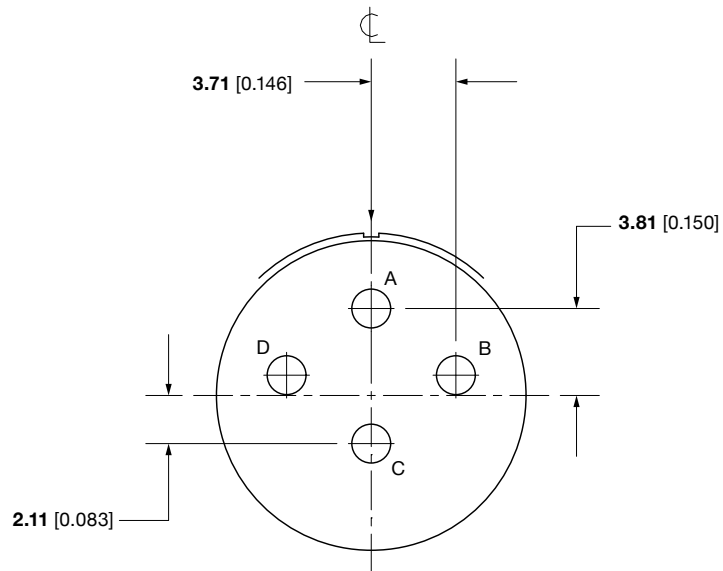




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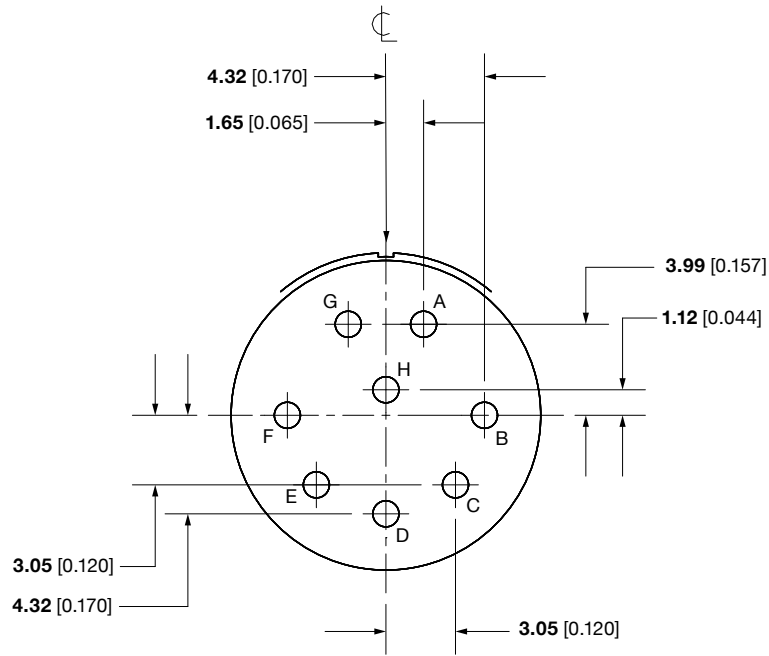
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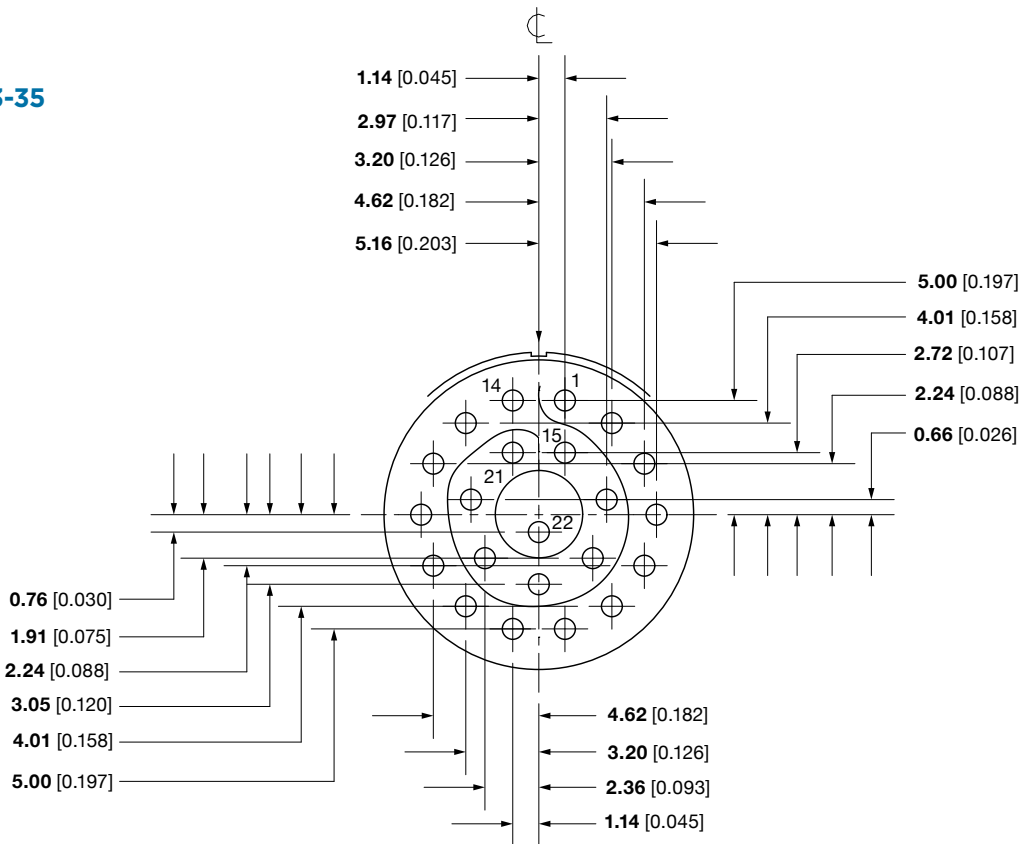




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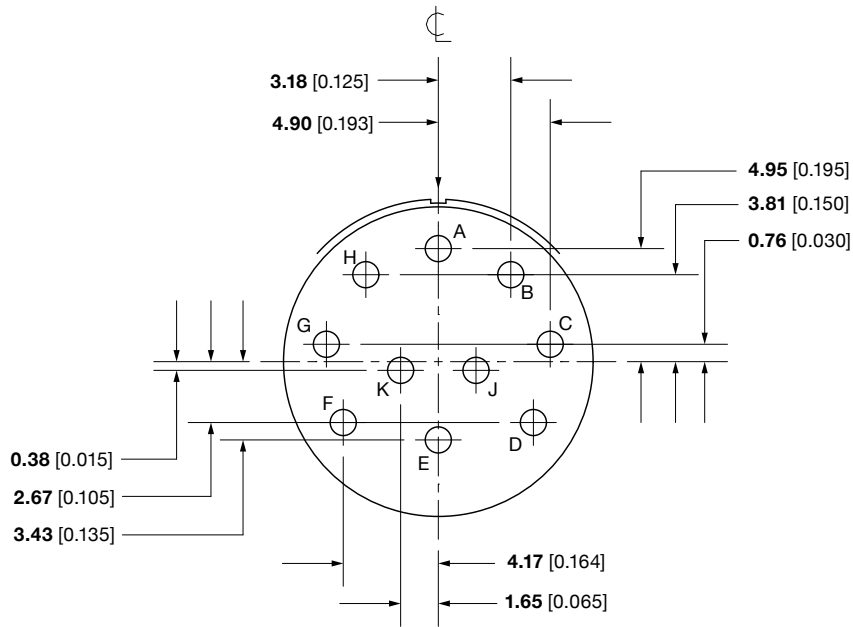


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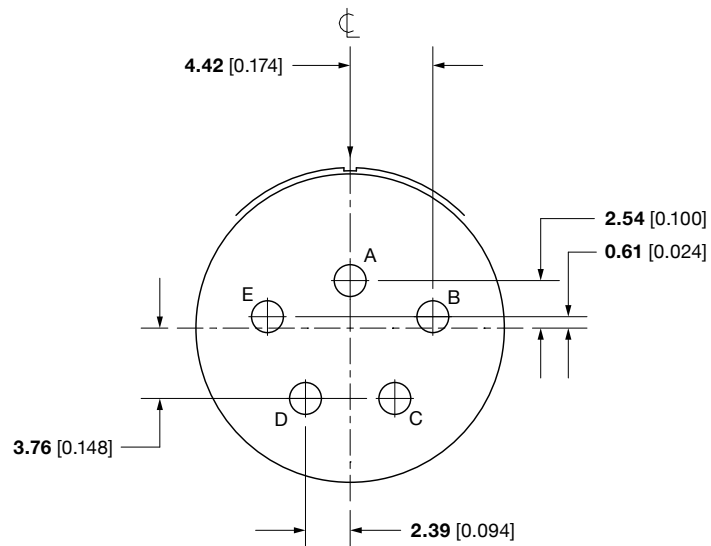




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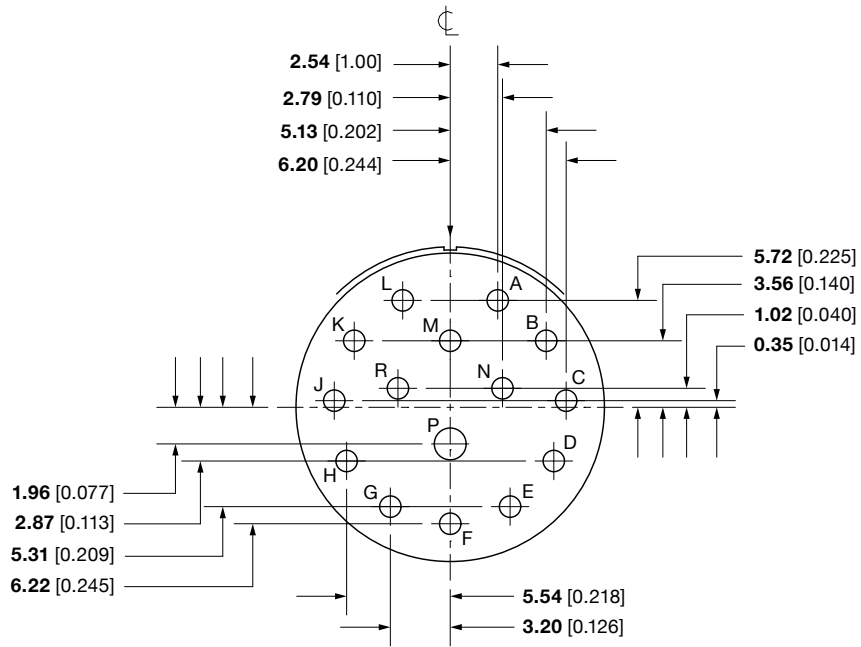


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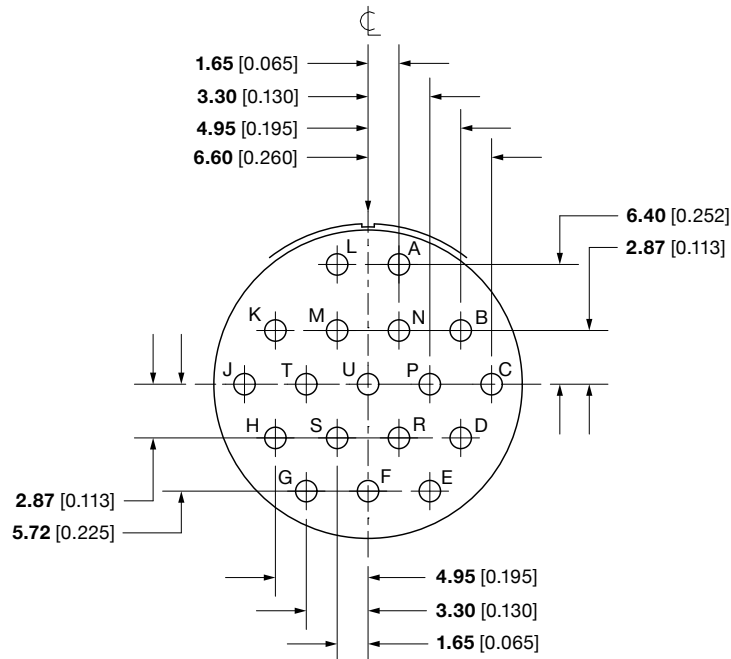




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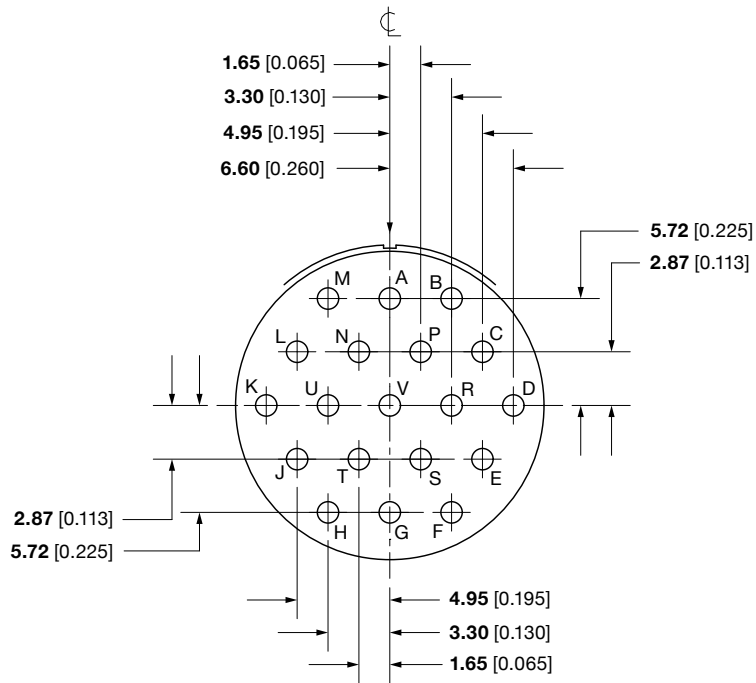


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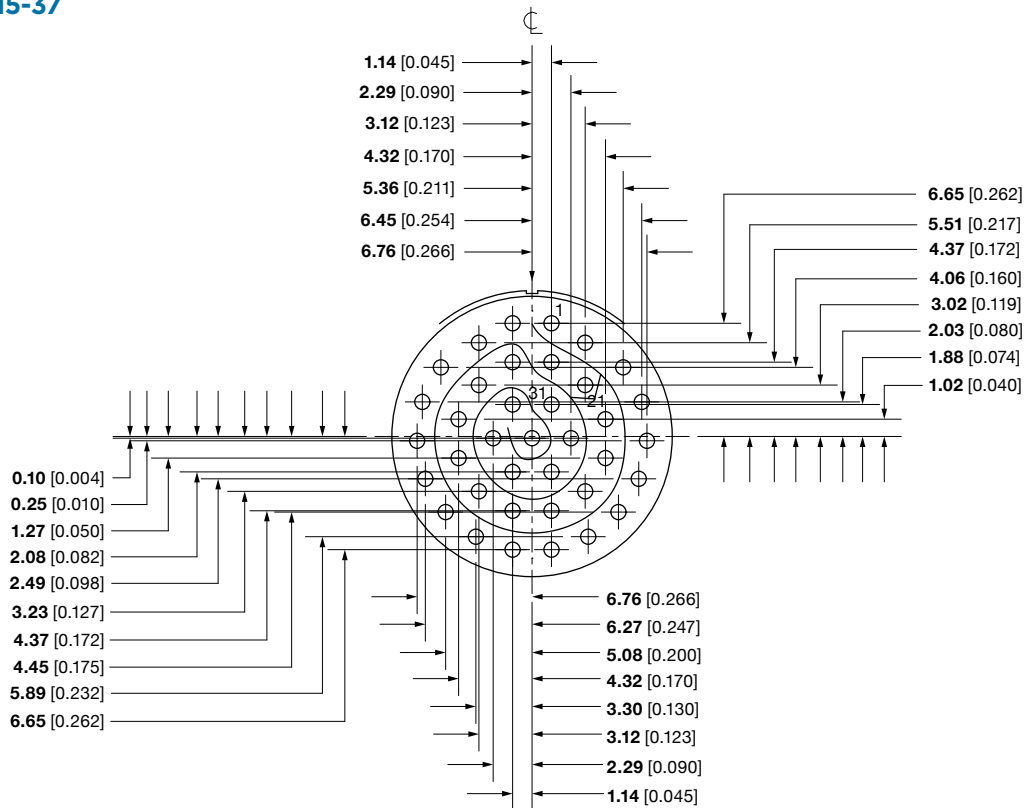




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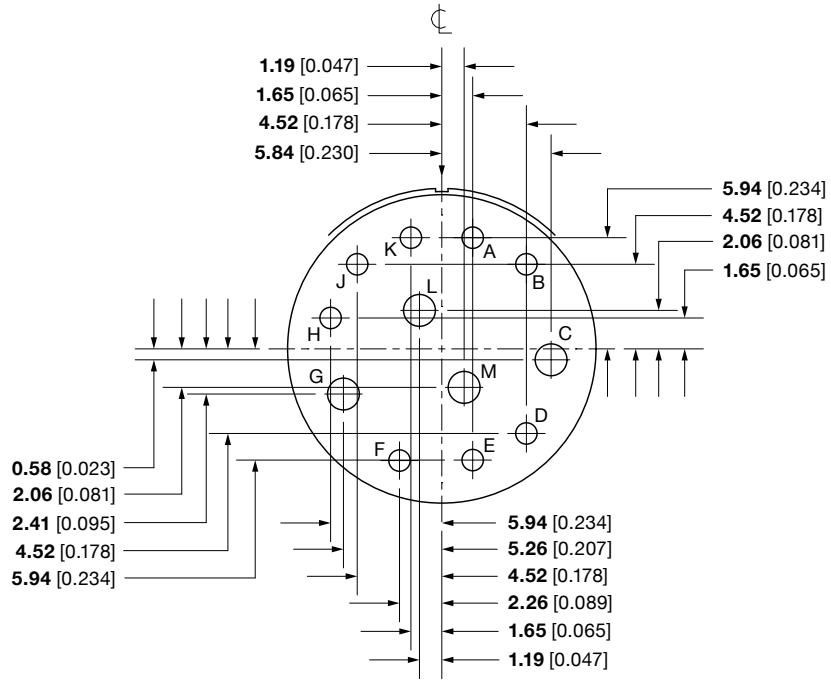
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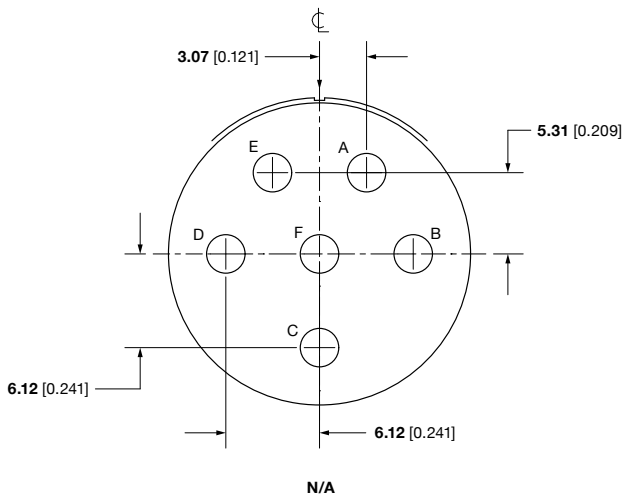
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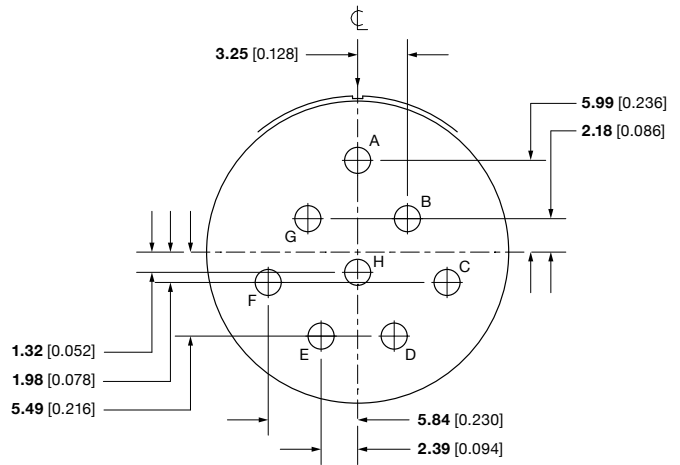
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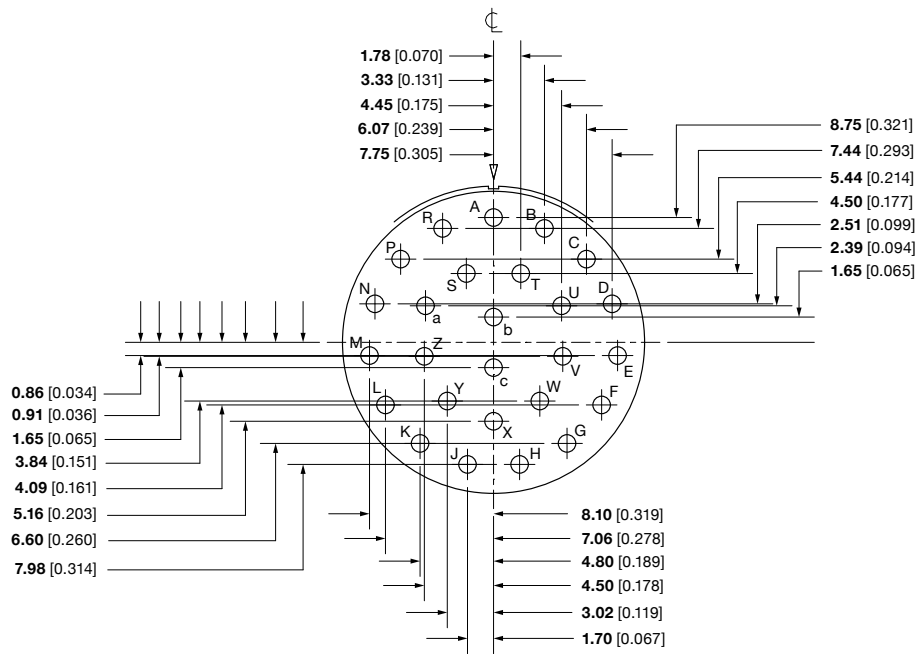


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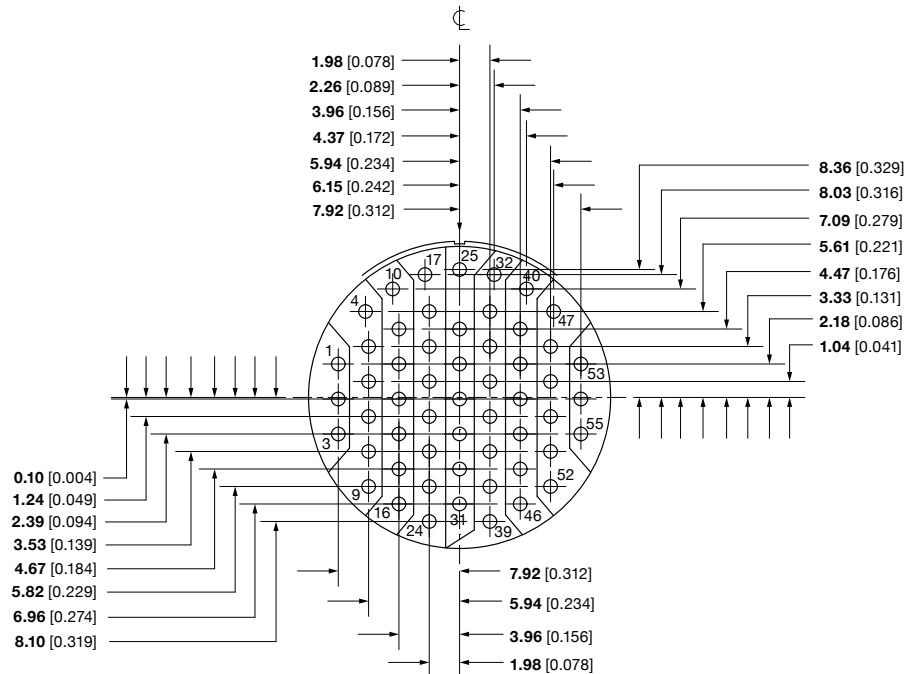




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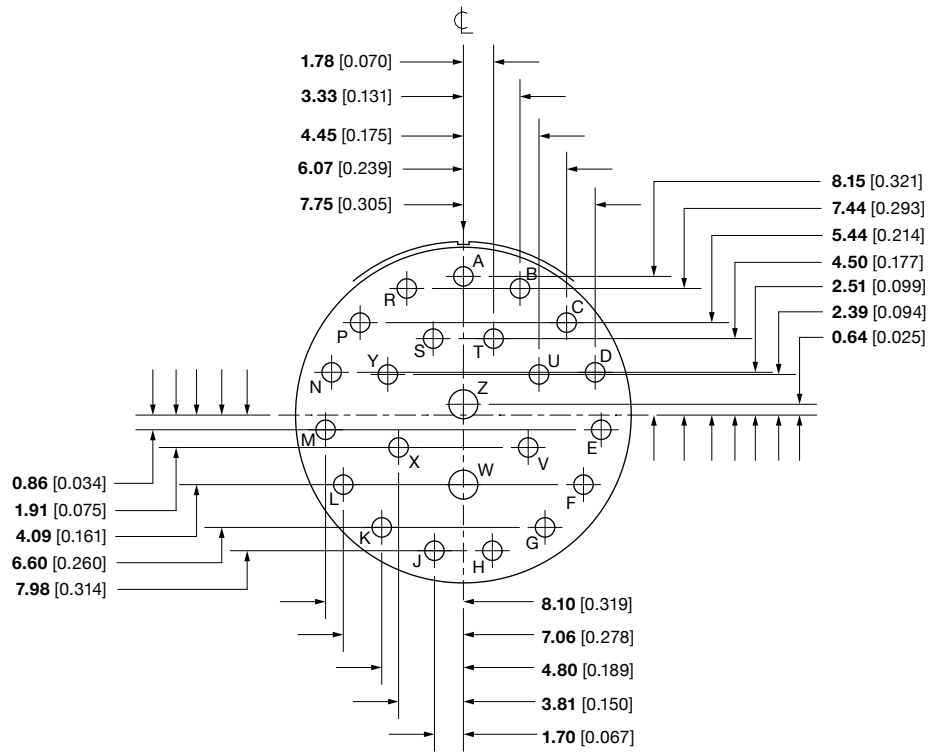


17-35/17-55

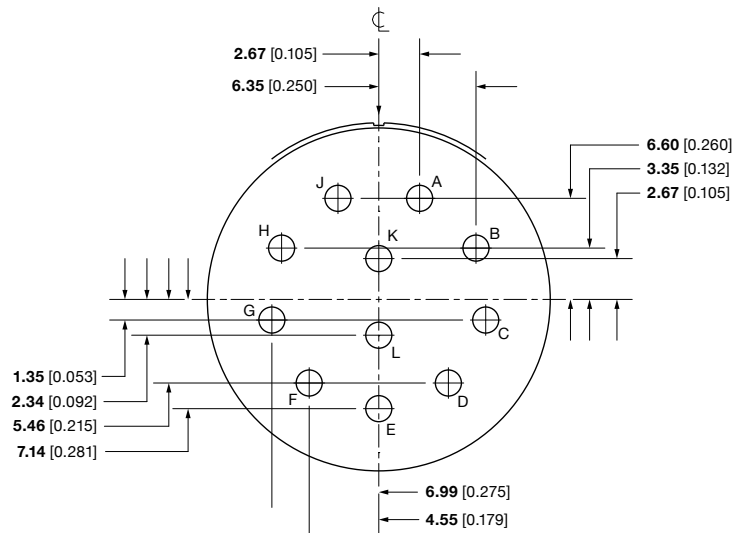




17-99

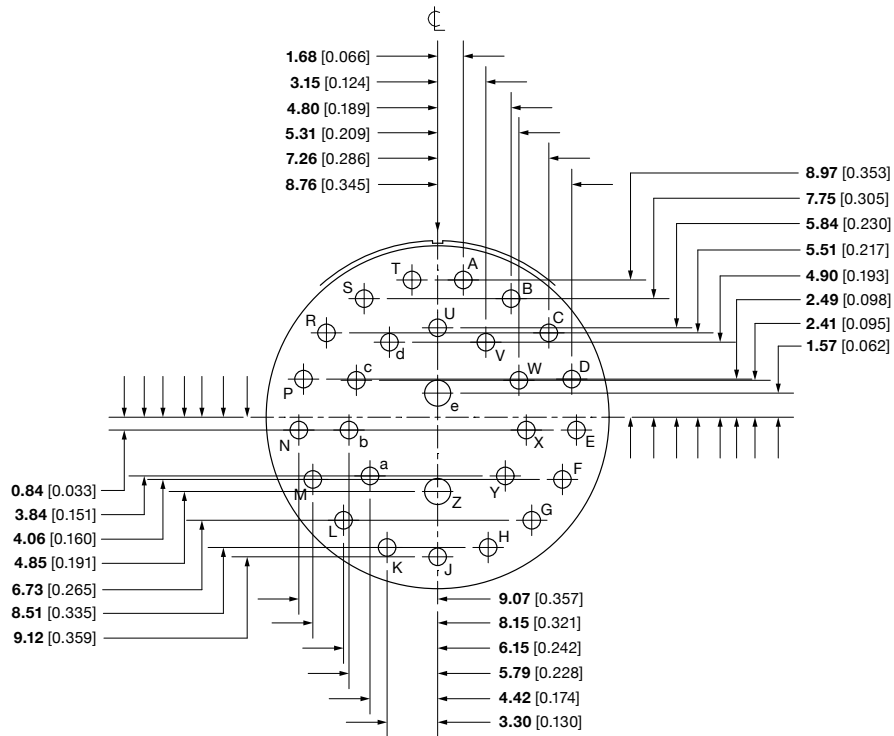


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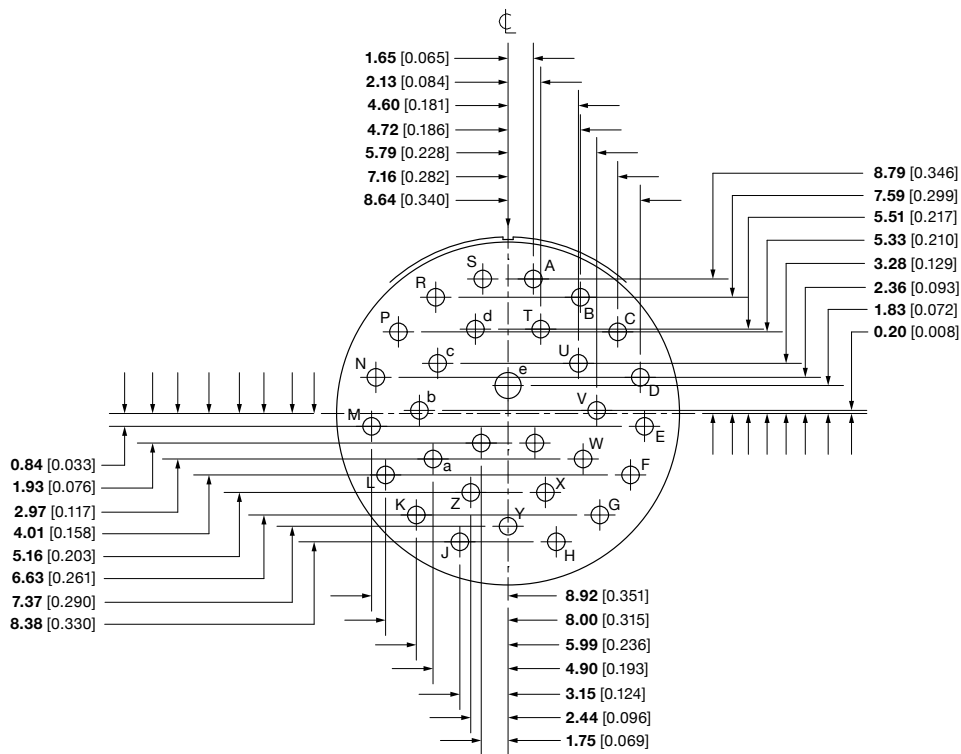




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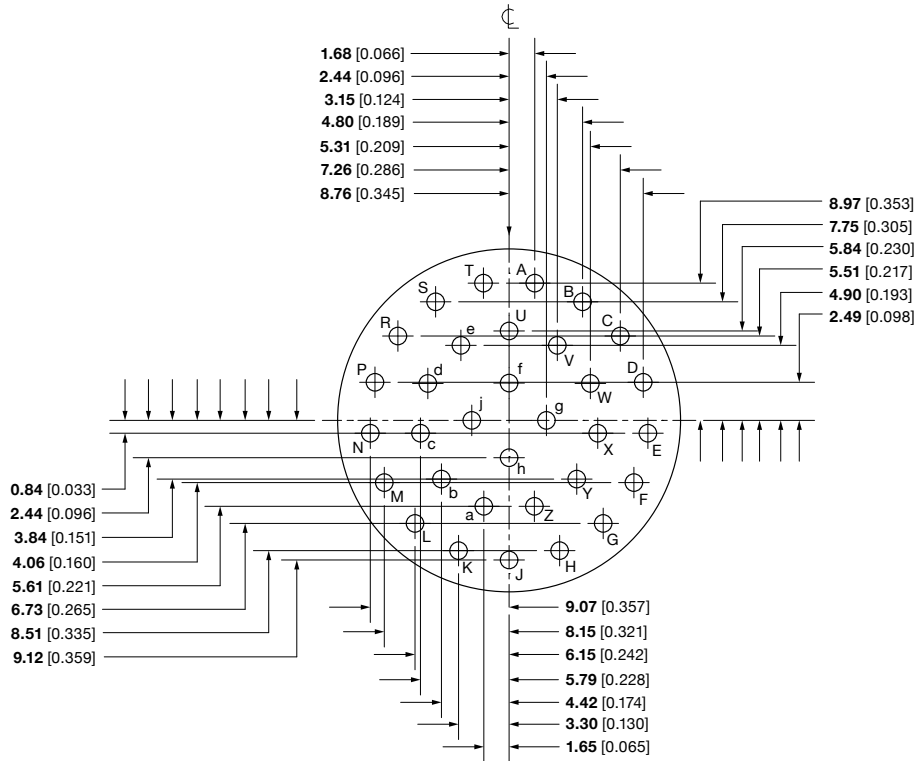
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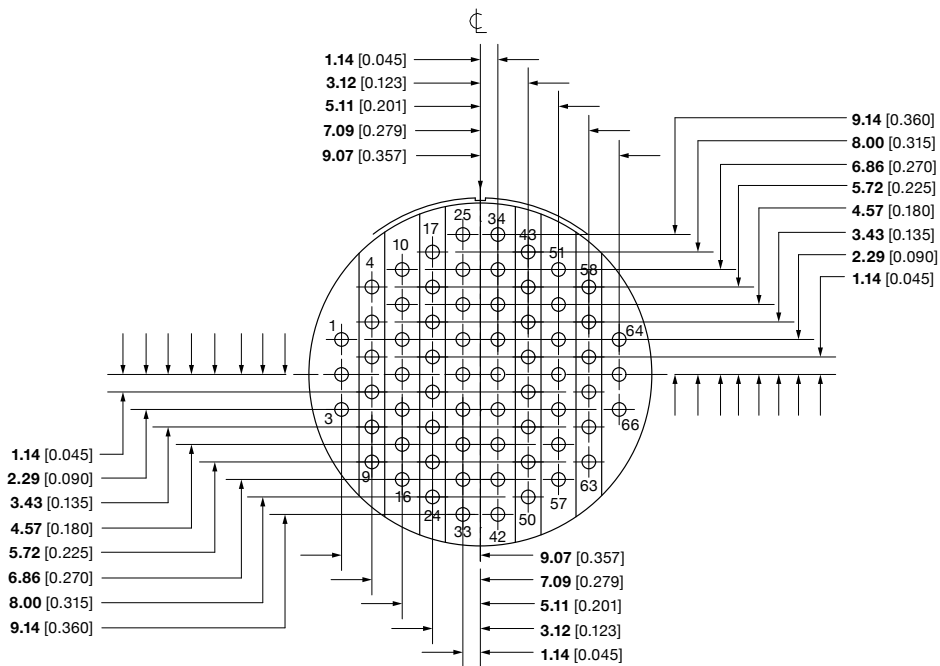




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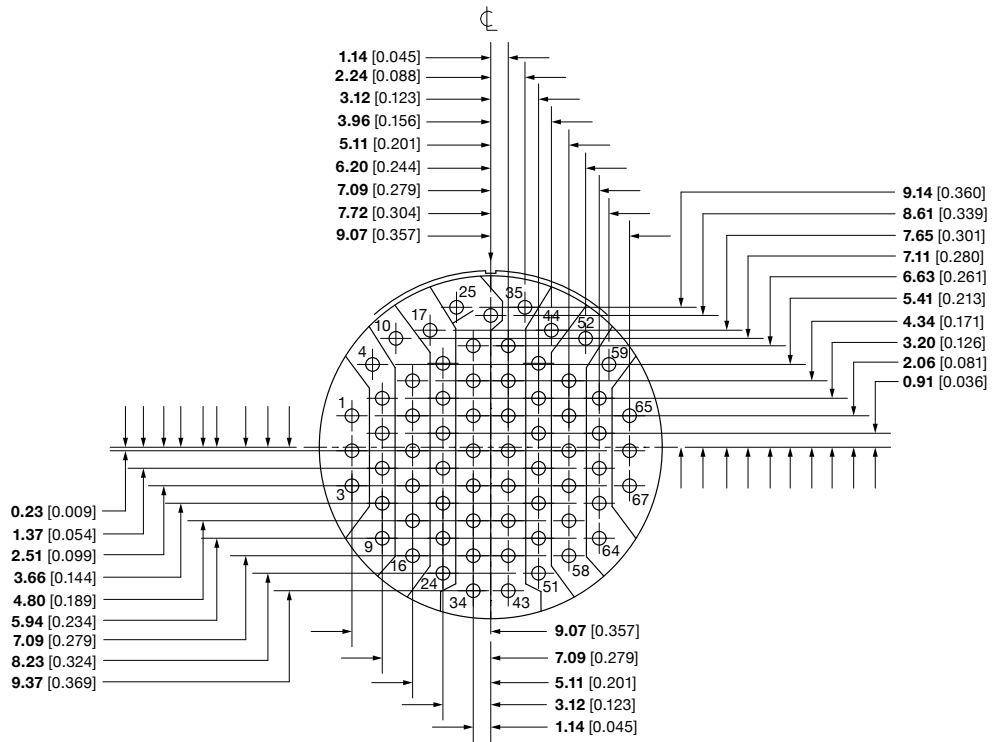


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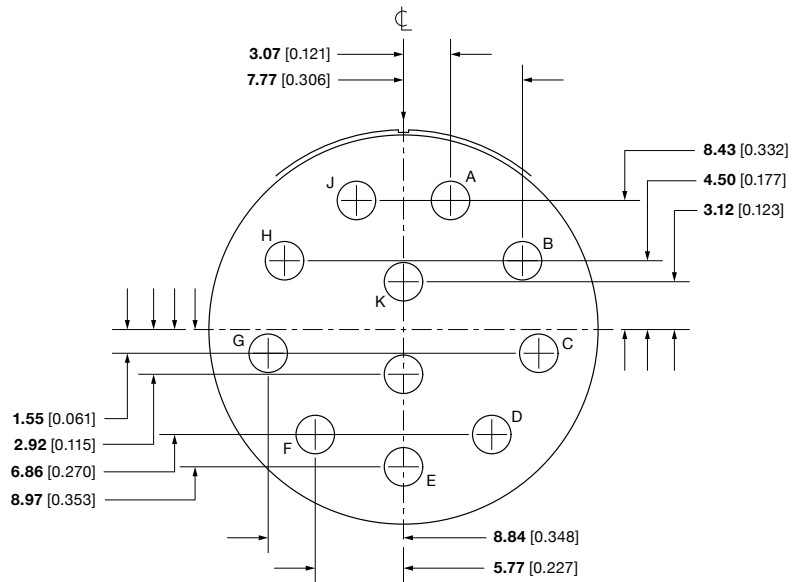




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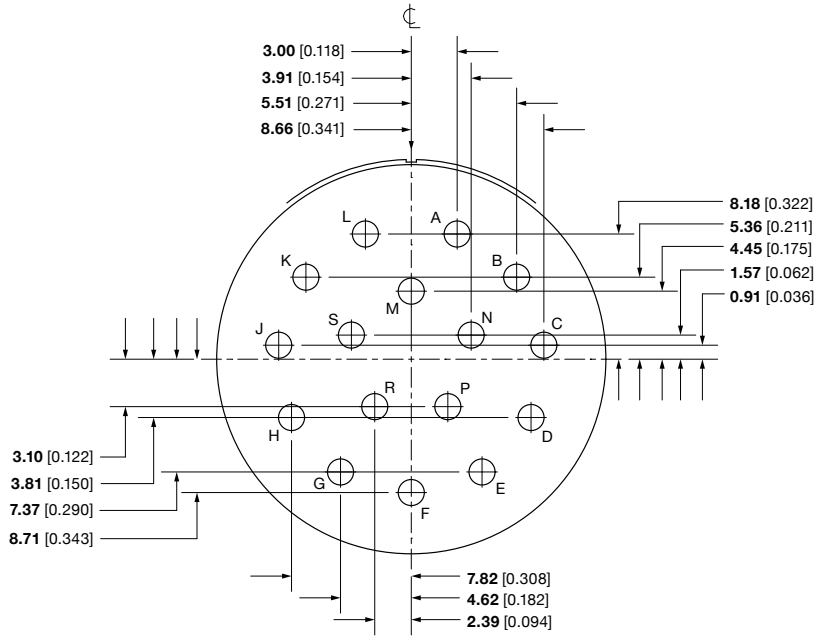


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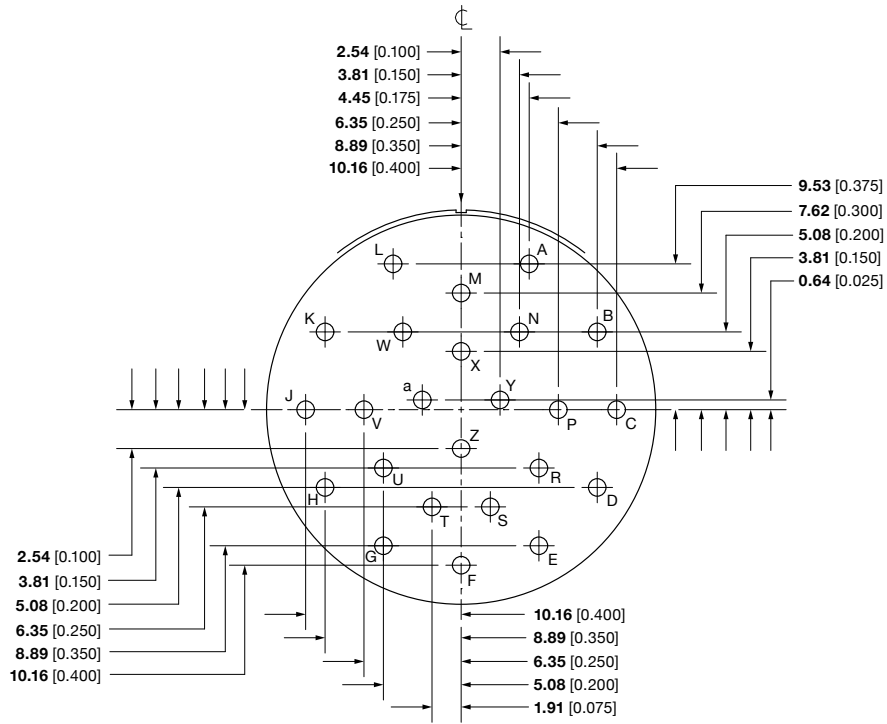




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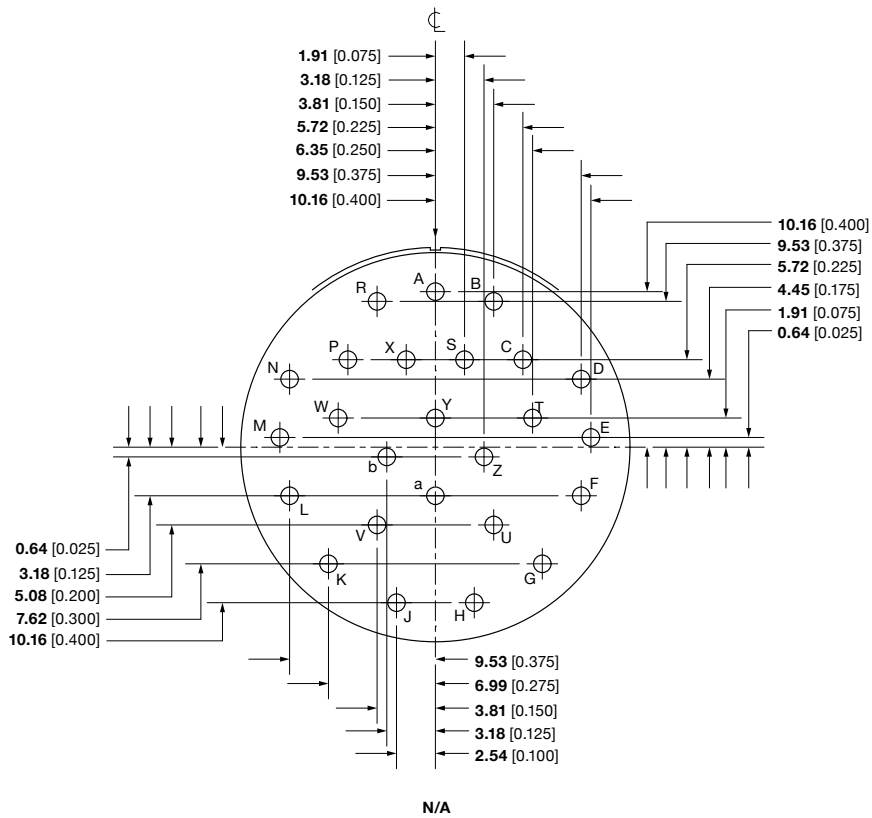
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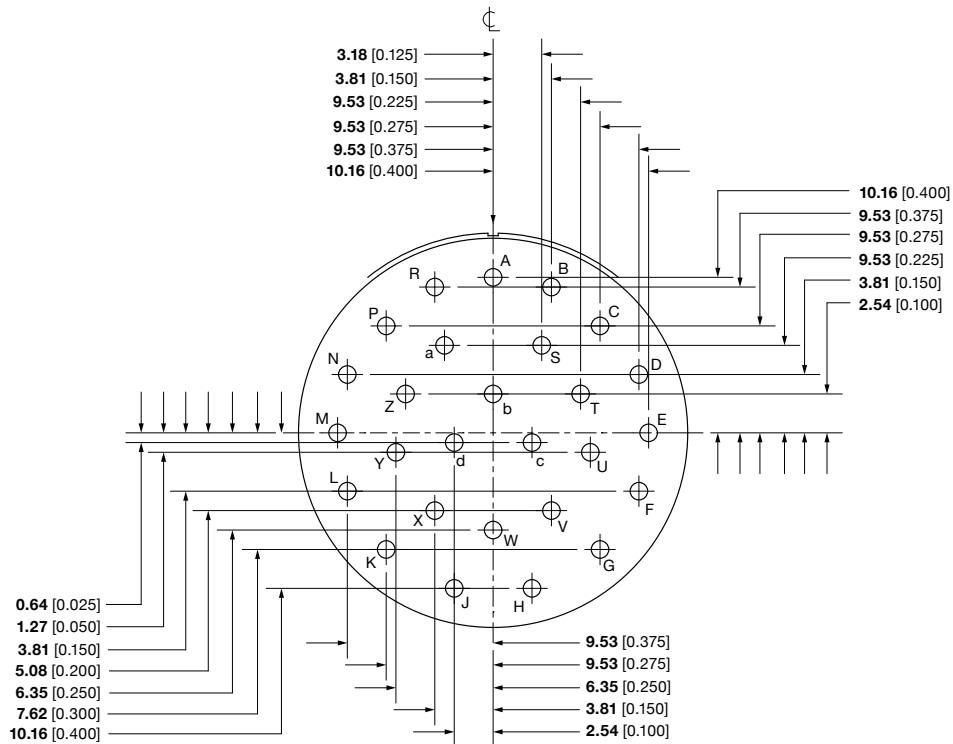
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21-25

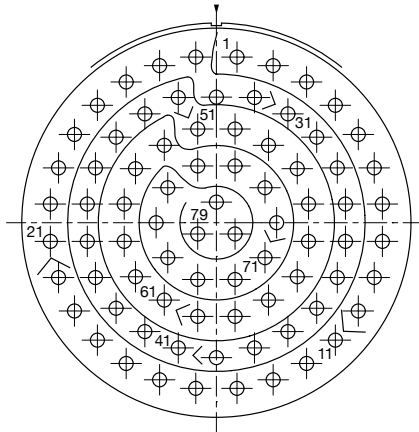


21-27





21-01/21-35



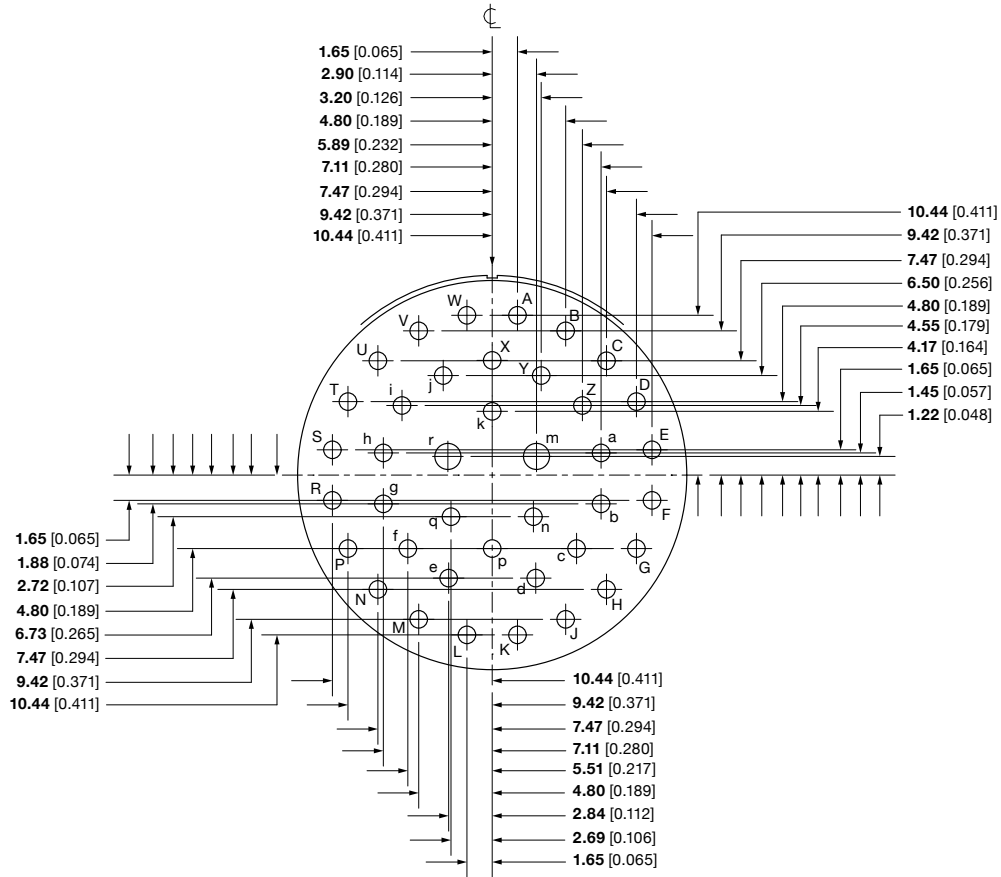
Contact Position	Location	
	X Axis	Y Axis
1	+0.053	+0.426
2	+0.146	+0.404
3	+0.232	+0.362
4	+0.306	+0.302
5	+0.365	+0.227
6	+0.406	+0.141
7	+0.427	+0.048
8	+0.427	-0.048
9	+0.406	-0.141
10	+0.365	-0.227
11	+0.306	-0.302
12	+0.232	-0.362
13	+0.146	-0.404
14	+0.053	-0.426
15	-0.053	-0.426
16	-0.146	-0.404
17	-0.232	-0.362
18	-0.306	-0.302
19	-0.365	-0.227
20	-0.406	-0.141
21	-0.427	-0.048
22	-0.427	+0.048
23	-0.406	+0.141
24	-0.365	+0.227
25	-0.306	+0.302
26	-0.232	+0.362
27	-0.146	+0.404

Contact Position	Location	
	X Axis	Y Axis
28	-0.053	+0.426
29	+0.000	+0.323
30	+0.098	+0.322
31	+0.184	+0.280
32	+0.258	+0.220
33	+0.311	+0.141
34	+0.332	+0.048
35	+0.332	-0.048
36	+0.311	-0.141
37	+0.258	-0.220
38	+0.184	-0.280
39	+0.098	-0.322
40	+0.000	-0.347
41	-0.098	-0.322
42	-0.184	-0.280
43	-0.258	-0.220
44	-0.311	-0.141
45	-0.332	-0.048
46	-0.332	+0.048
47	-0.311	+0.141
48	-0.258	+0.220
49	-0.184	+0.280
50	-0.098	+0.322
51	-0.048	+0.241
52	+0.048	+0.241
53	+0.134	+0.199
54	+0.208	+0.139

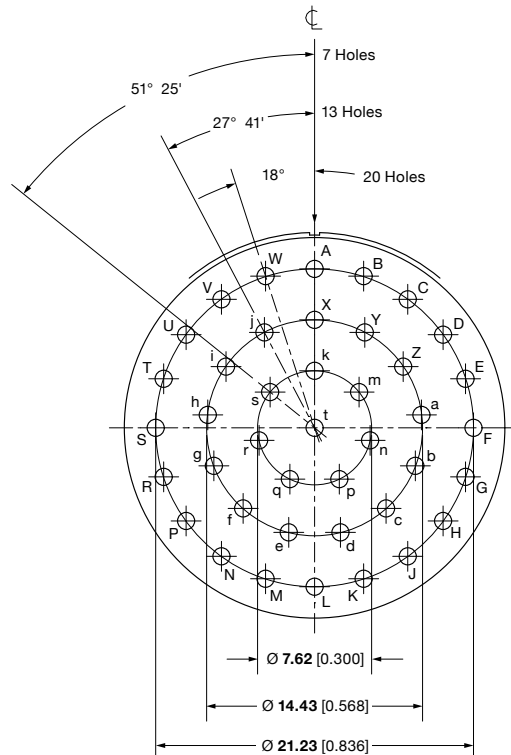
Contact Position	Location	
	X Axis	Y Axis
55	+0.237	+0.048
56	+0.237	-0.048
57	+0.208	-0.139
58	+0.134	-0.199
59	+0.048	-0.241
60	-0.048	-0.241
61	-0.134	-0.199
62	-0.208	-0.139
63	-0.237	-0.048
64	-0.237	+0.048
65	-0.208	+0.139
66	-0.134	+0.199
67	-0.048	+0.146
68	+0.048	+0.146
69	+0.125	+0.090
70	+0.155	+0.000
71	+0.125	-0.090
72	+0.048	-0.146
73	-0.048	-0.146
74	-0.125	-0.090
75	-0.155	-0.000
76	-0.125	+0.090
77	+0.000	+0.053
78	+0.048	-0.029
79	-0.048	-0.029
—	—	—



21-39

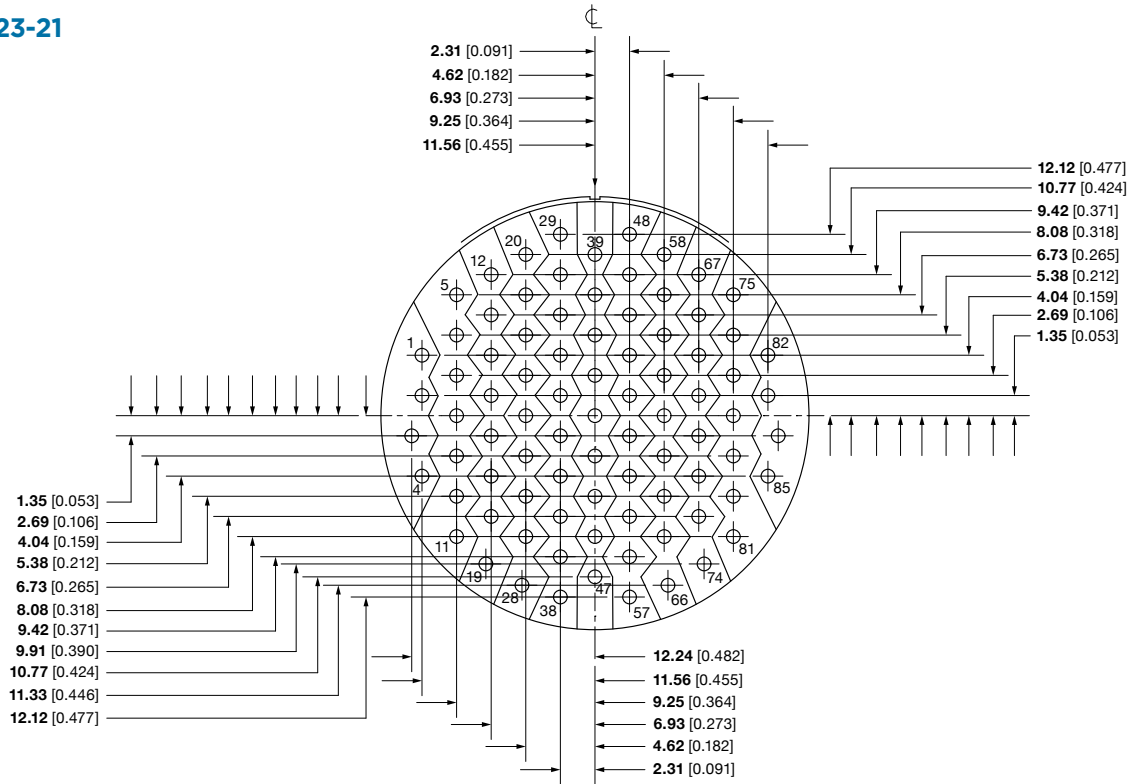


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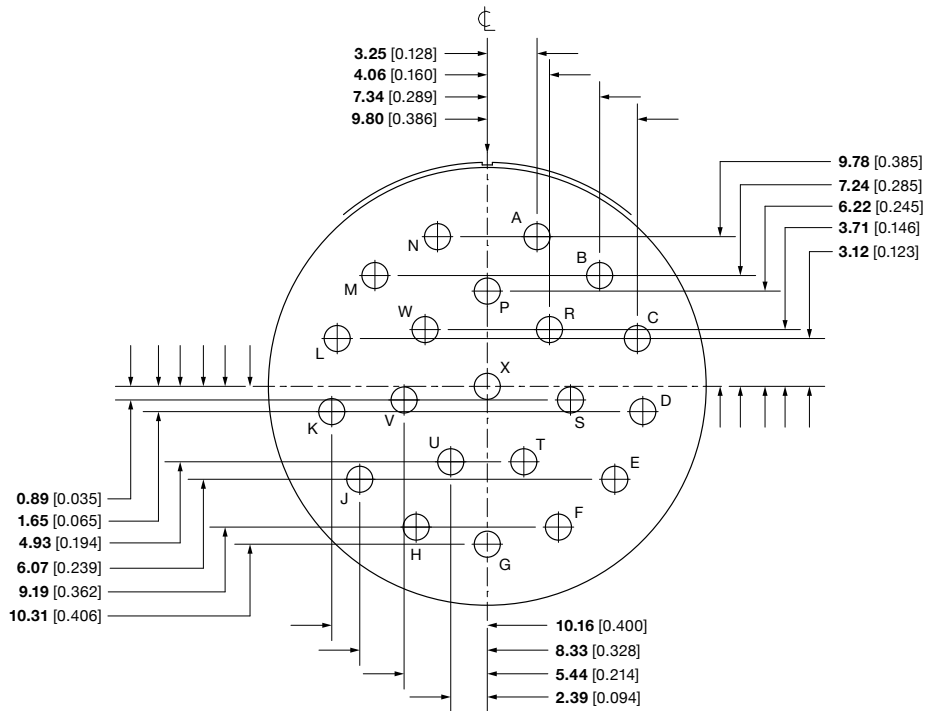




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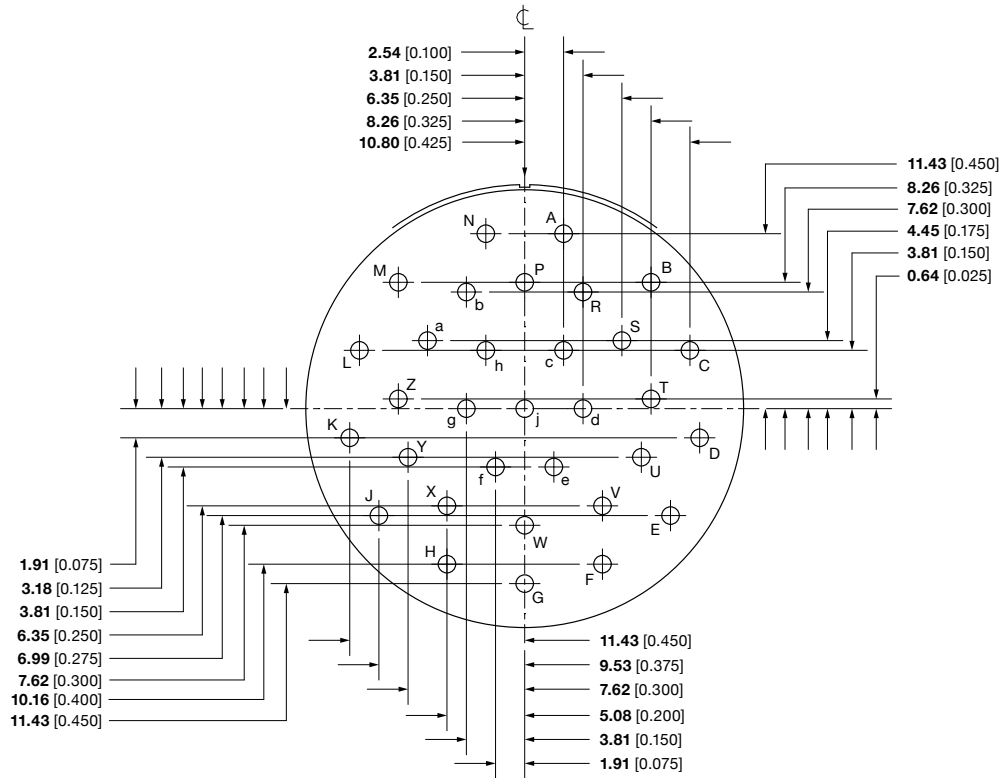


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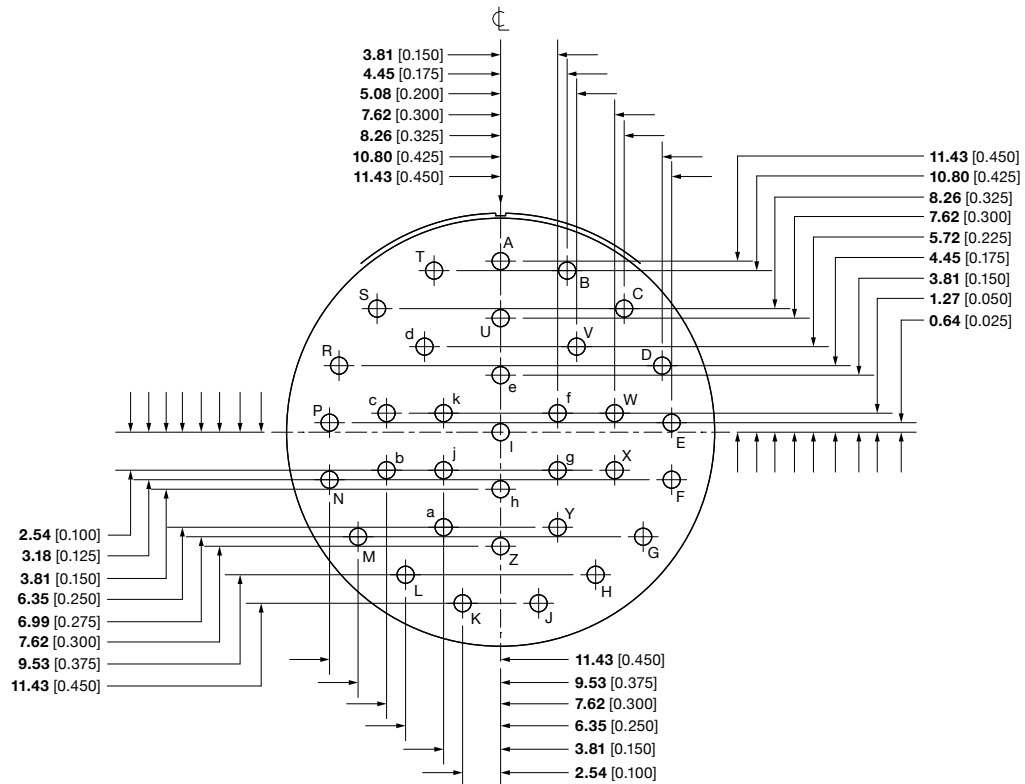




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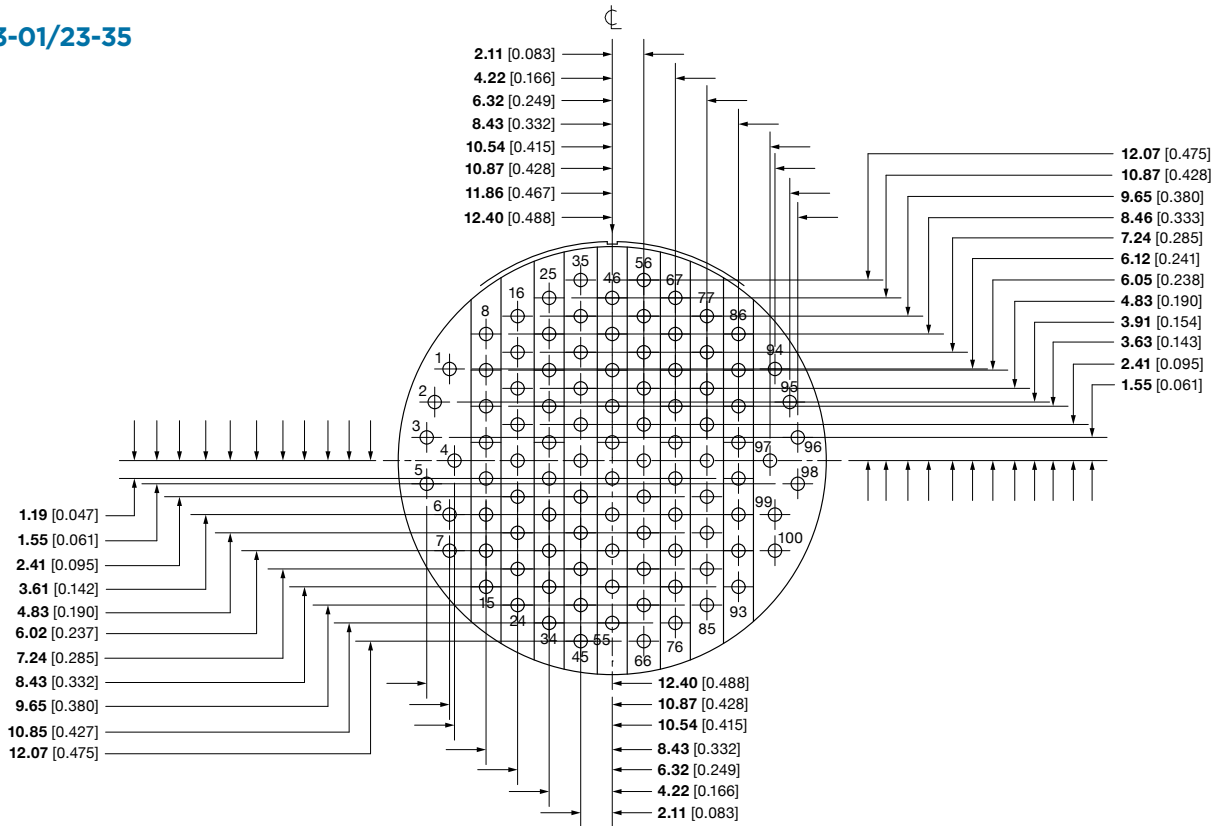
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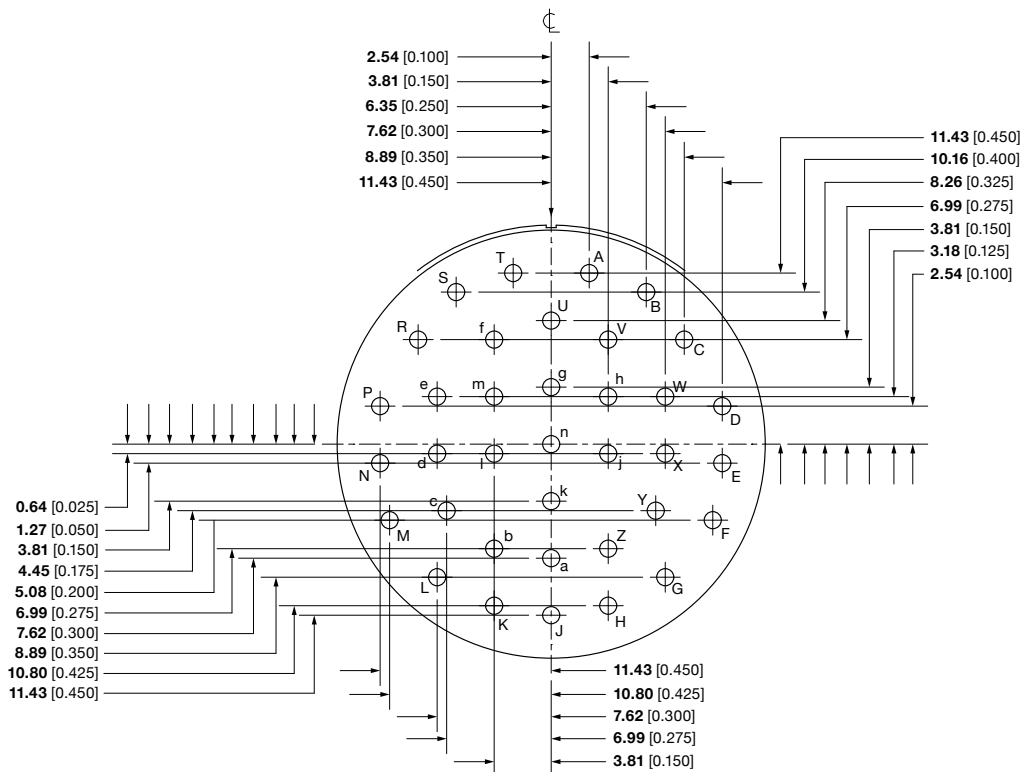




23-01/23-35

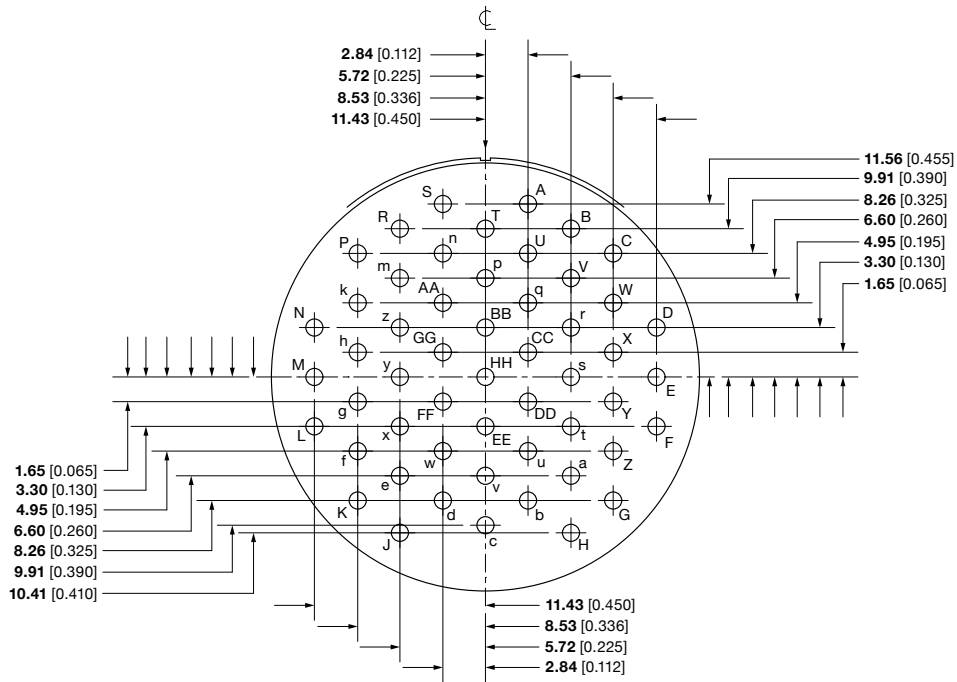


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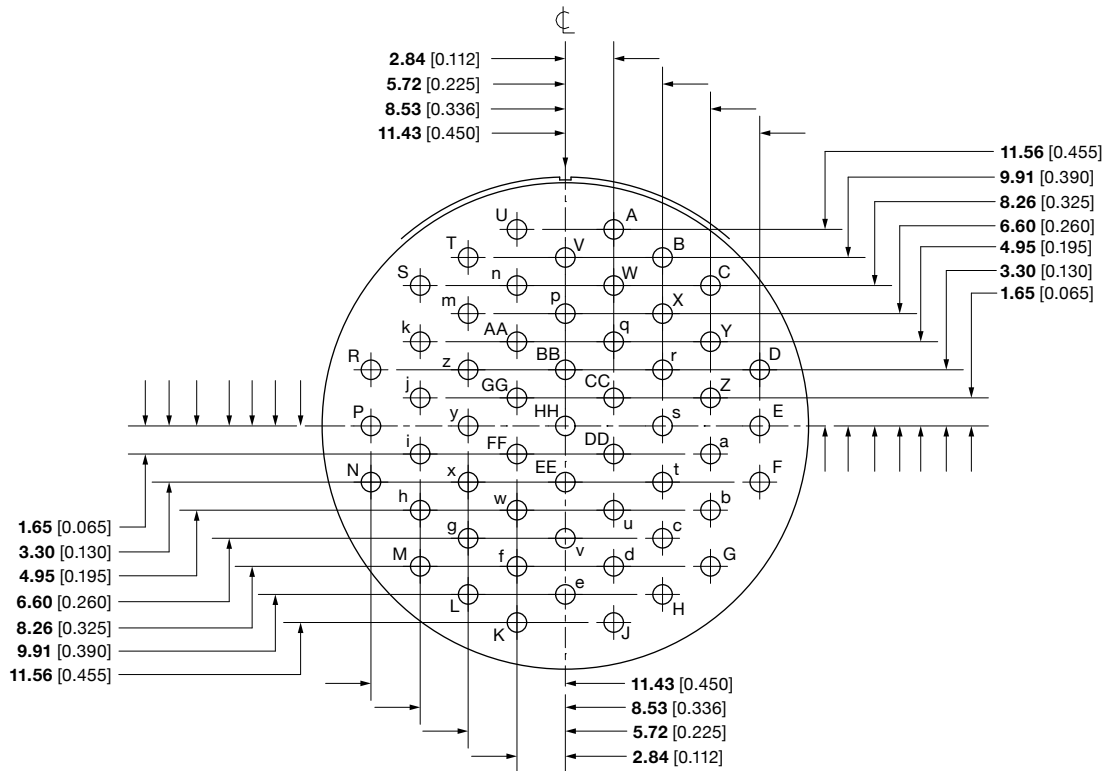




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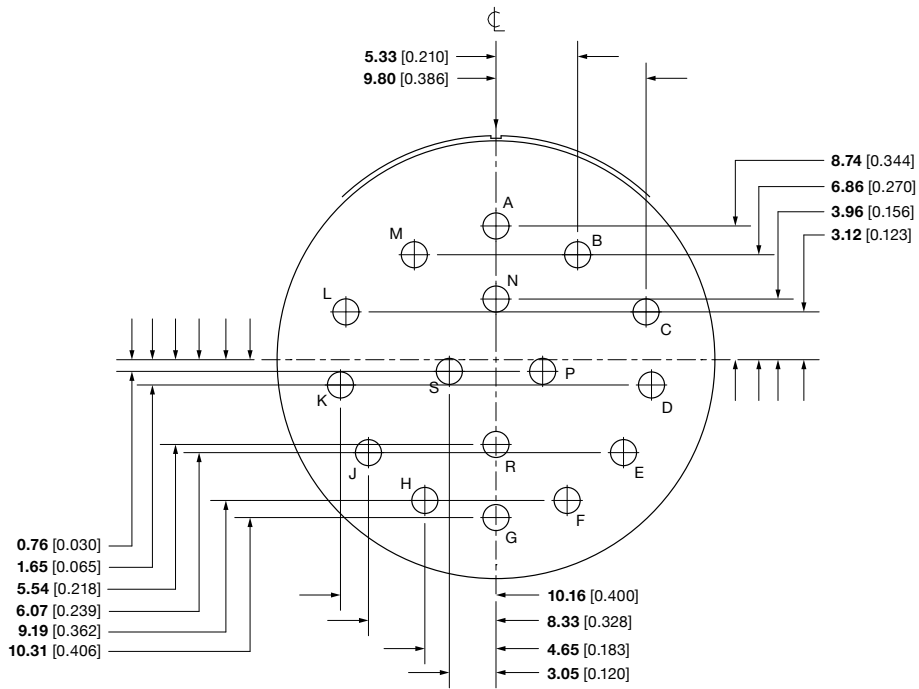


23-55

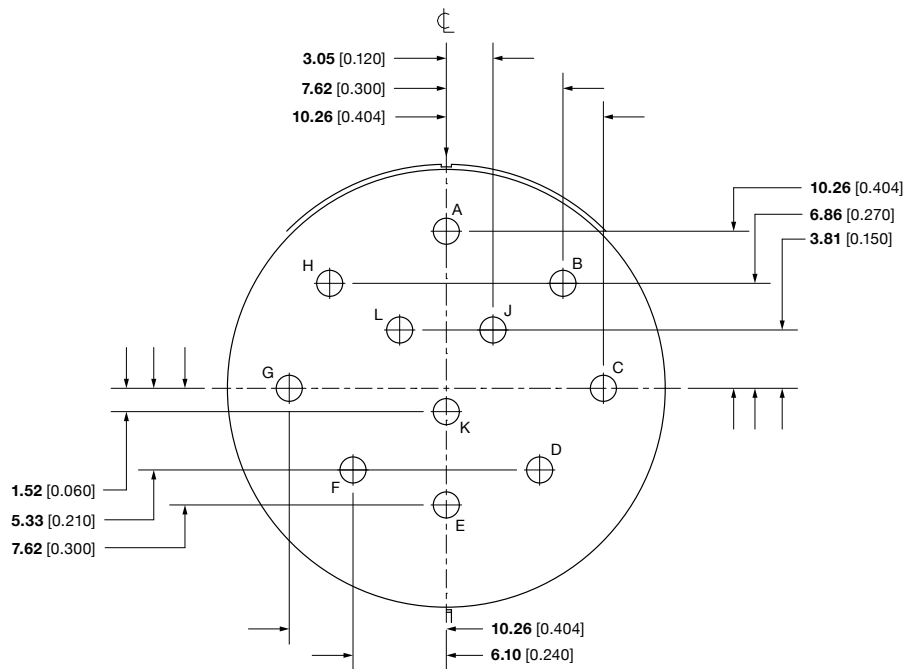




23-97

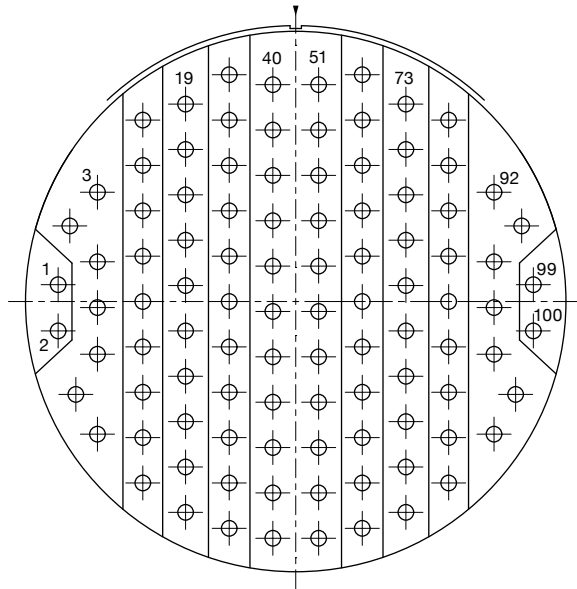


23-99





25-02





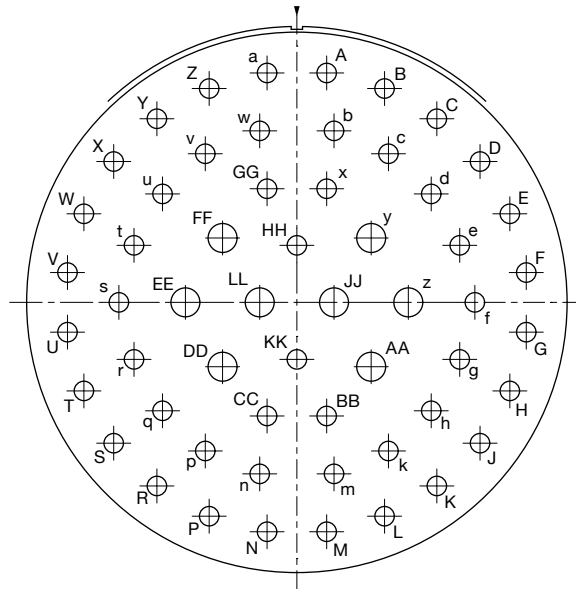
Contact Position	Location	
	X Axis	Y Axis
1	-0.550	+0.039
2	-0.550	-0.068
3	-0.459	+0.253
4	-0.523	+0.175
5	-0.459	+0.092
6	-0.459	-0.014
7	-0.459	-0.122
8	-0.509	-0.215
9	-0.459	-0.307
10	-0.354	+0.420
11	-0.354	+0.315
12	-0.354	+0.210
13	-0.354	+0.105
14	-0.354	+0.000
15	-0.354	-0.105
16	-0.354	-0.210
17	-0.354	-0.315
18	-0.354	-0.420
19	-0.255	+0.457
20	-0.255	+0.352
21	-0.255	+0.247
22	-0.255	+0.142
23	-0.255	+0.037
24	-0.255	-0.068
25	-0.255	-0.173
26	-0.255	-0.278
27	-0.255	-0.383
28	-0.255	-0.488
29	-0.154	+0.525
30	-0.154	+0.420
31	-0.154	+0.315
32	-0.154	+0.210
33	-0.154	+0.105
34	-0.154	+0.000

Contact Position	Location	
	X Axis	Y Axis
35	-0.154	-0.105
36	-0.154	-0.210
37	-0.154	-0.315
38	-0.154	-0.420
39	-0.154	-0.525
40	-0.053	+0.502
41	-0.053	+0.397
42	-0.053	+0.292
43	-0.053	+0.187
44	-0.053	+0.082
45	-0.053	-0.023
46	-0.053	-0.128
47	-0.053	-0.233
48	-0.053	-0.338
49	-0.053	-0.443
50	-0.053	-0.548
51	+0.053	+0.502
52	+0.053	+0.397
53	+0.053	+0.292
54	+0.053	+0.187
55	+0.053	+0.082
56	+0.053	-0.023
57	+0.053	-0.128
58	+0.053	-0.233
59	+0.053	-0.338
60	+0.053	-0.443
61	+0.053	-0.548
62	+0.154	+0.525
63	+0.154	+0.420
64	+0.154	+0.315
65	+0.154	+0.210
66	+0.154	+0.105
67	+0.154	+0.000
68	+0.154	-0.105

Contact Position	Location	
	X Axis	Y Axis
69	+0.154	-0.210
70	+0.154	-0.315
71	+0.154	-0.420
72	+0.154	-0.525
73	+0.255	+0.457
74	+0.255	+0.352
75	+0.255	+0.247
76	+0.255	+0.142
77	+0.255	+0.037
78	+0.255	-0.068
79	+0.255	-0.173
80	+0.255	-0.278
81	+0.255	-0.383
82	+0.255	-0.488
83	+0.354	+0.420
84	+0.354	+0.315
85	+0.354	+0.210
86	+0.354	+0.105
87	+0.354	+0.000
88	+0.354	-0.105
89	+0.354	-0.210
90	+0.354	-0.315
91	+0.354	-0.420
92	+0.459	+0.253
93	+0.523	+0.175
94	+0.459	+0.092
95	+0.459	-0.014
96	+0.459	-0.122
97	+0.509	-0.215
98	+0.459	-0.037
99	+0.550	+0.039
100	+0.550	-0.068



25-04



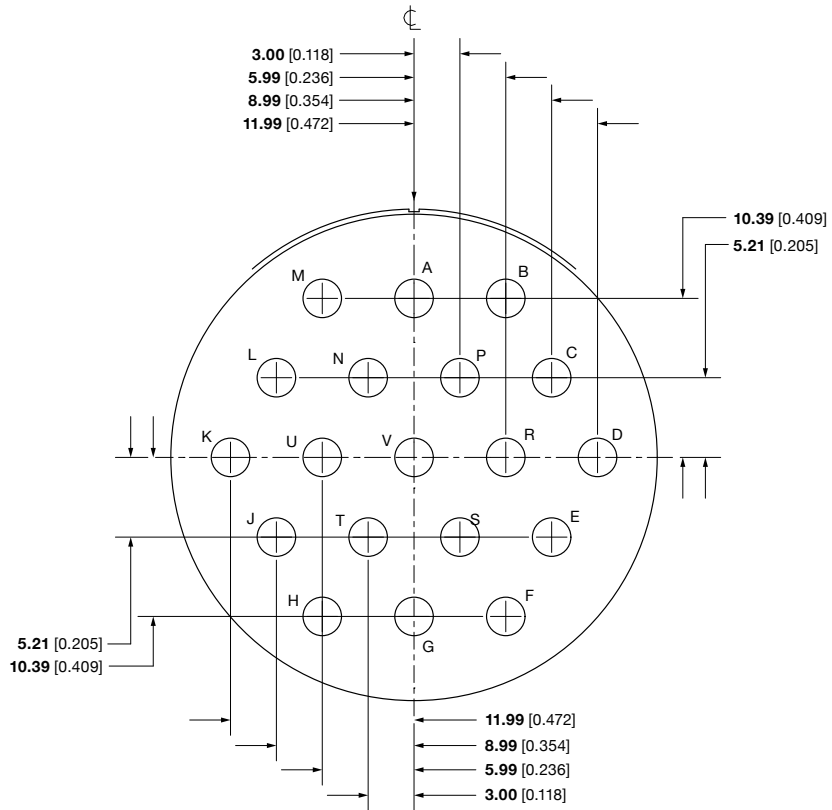
Contact Position	Location	
	X Axis	Y Axis
A	+0.069	+0.531
B	+0.203	+0.495
C	+0.324	+0.425
D	+0.424	+0.326
E	+0.493	+0.205
F	+0.531	+0.069
G	+0.531	-0.069
H	+0.493	-0.205
J	+0.424	-0.326
K	+0.324	-0.425
L	+0.203	-0.495
M	+0.069	-0.531
N	-0.069	-0.531
P	-0.203	-0.495
R	-0.324	-0.425
S	-0.424	-0.326
T	-0.493	-0.205
U	-0.531	-0.069
V	-0.531	+0.069

Contact Position	Location	
	X Axis	Y Axis
W	-0.493	+0.205
X	-0.424	+0.326
Y	-0.324	+0.425
Z	-0.203	+0.495
a	-0.069	+0.531
b	+0.806	+0.397
c	+0.212	+0.344
d	+0.311	+0.251
e	+0.377	+0.132
f	+0.412	+0.000
g	+0.377	-0.132
h	+0.311	-0.251
k	+0.212	-0.344
m	+0.086	-0.397
n	-0.086	-0.397
p	-0.212	-0.344
q	-0.311	-0.251
r	-0.377	-0.132
s	-0.412	+0.000

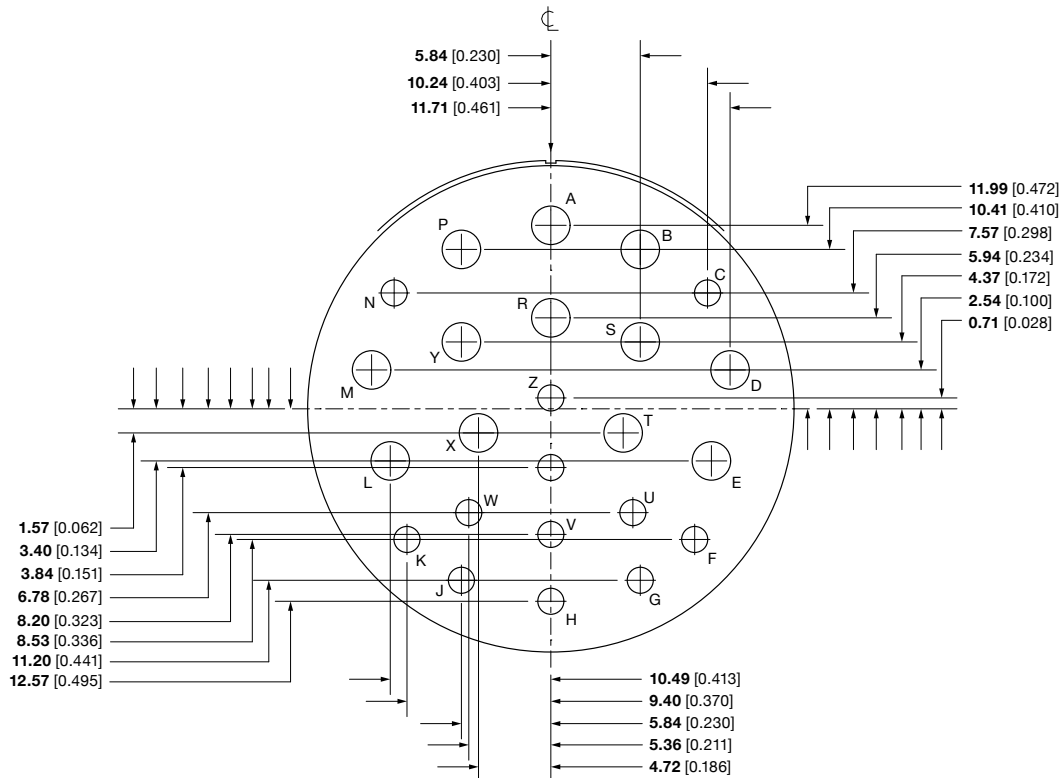
Contact Position	Location	
	X Axis	Y Axis
t	-0.377	+0.132
u	-0.311	+0.251
v	-0.212	+0.344
w	-0.086	+0.397
x	+0.069	+0.263
y	+0.172	+0.149
z	+0.258	+0.000
AA	+0.172	-0.149
BB	+0.069	-0.263
CC	-0.069	-0.263
DD	-0.172	-0.149
EE	-0.258	+0.000
FF	-0.172	+0.149
GG	-0.069	+0.263
HH	+0.000	+0.132
JJ	+0.086	+0.000
KK	+0.000	-0.132
LL	-0.086	+0.000



25-19

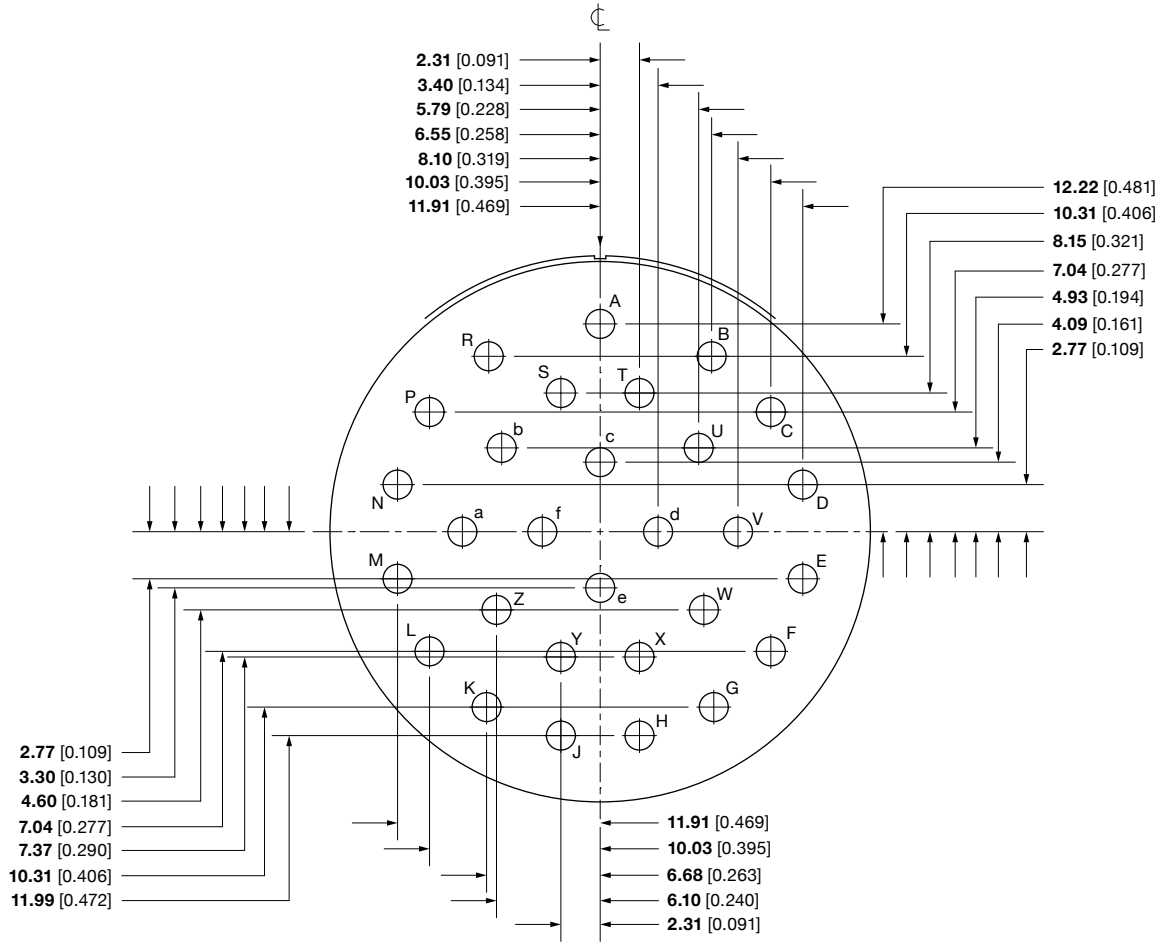


25-24





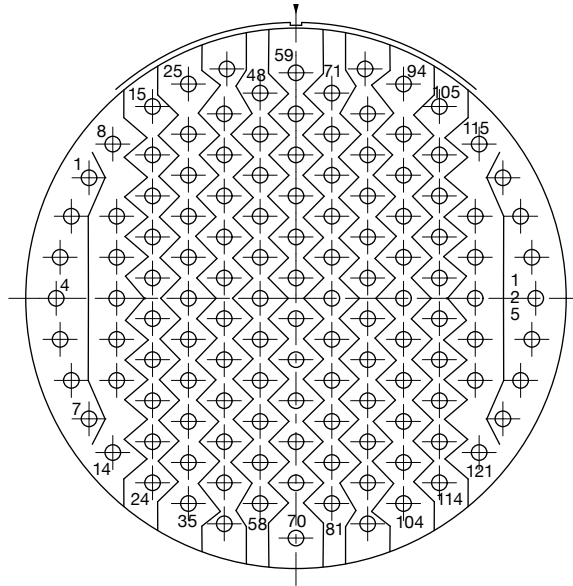
25-29







25-01, 25-35



Contact Position	Location	
	X Axis	Y Axis
1	-0.479	+0.279
2	-0.520	+0.190
3	-0.546	+0.095
4	-0.555	+0.000
5	-0.546	-0.095
6	-0.520	-0.190
7	-0.479	-0.279
8	-0.424	+0.357
9	-0.415	+0.190
10	-0.415	+0.095

Contact Position	Location	
	X Axis	Y Axis
11	-0.415	+0.000
12	-0.415	-0.095
13	-0.415	-0.190
14	-0.424	-0.357
15	-0.332	+0.444
16	-0.332	+0.332
17	-0.332	-0.237
18	-0.332	+0.142
19	-0.332	+0.047
20	-0.332	-0.047

Contact Position	Location	
	X Axis	Y Axis
21	-0.332	-0.142
22	-0.332	-0.237
23	-0.332	-0.332
24	-0.332	-0.427
25	-0.249	+0.496
26	-0.249	+0.380
27	-0.249	+0.285
28	-0.249	+0.190
29	-0.249	+0.095
30	-0.249	+0.000



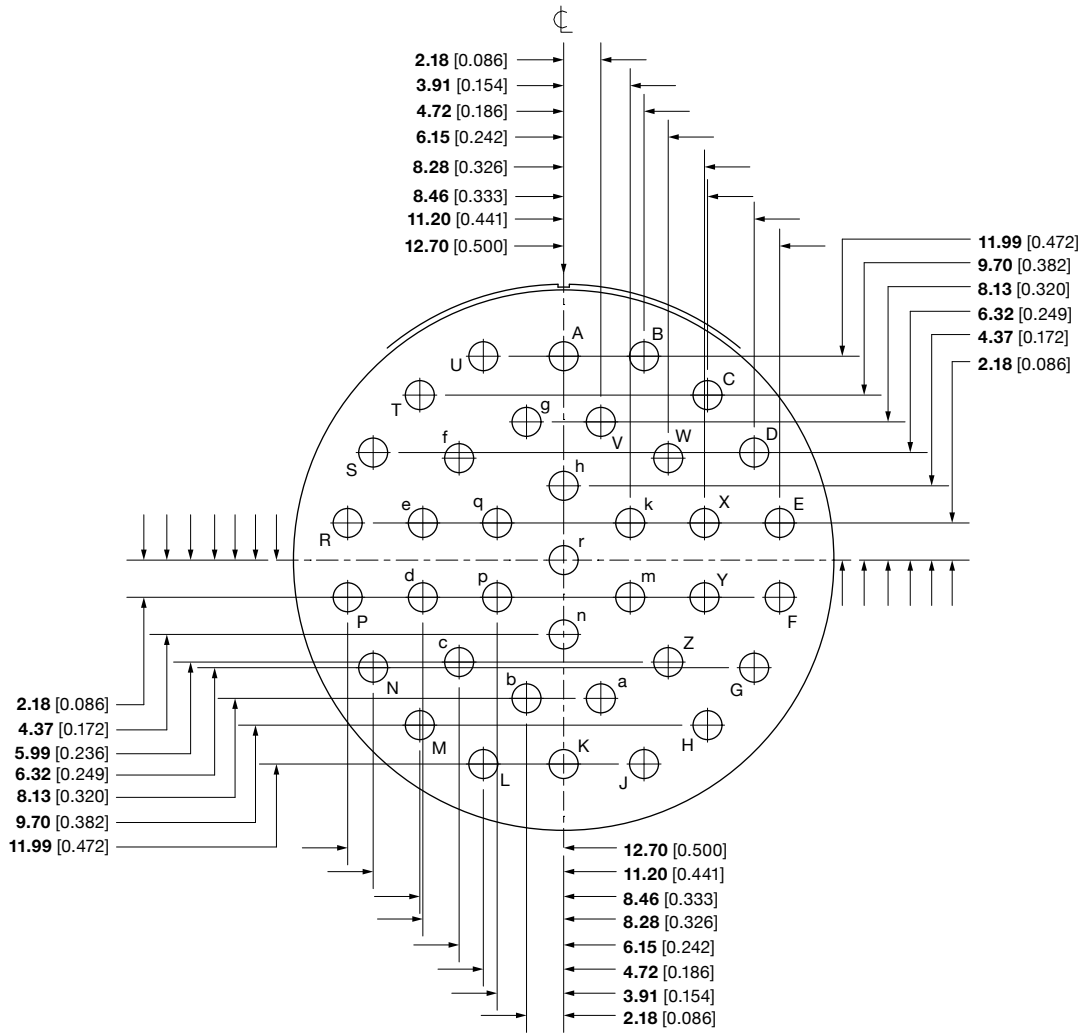
Contact Position	Location	
	X Axis	Y Axis
31	-0.249	-0.095
32	-0.249	-0.190
33	-0.249	-0.285
34	-0.249	-0.380
35	-0.249	-0.475
36	-0.160	+0.531
37	-0.166	+0.427
38	-0.166	+0.332
39	-0.166	+0.237
40	-0.166	+0.142
41	-0.166	+0.047
42	-0.166	-0.047
43	-0.166	-0.142
44	-0.166	-0.237
45	-0.166	-0.332
46	-0.166	-0.427
47	-0.166	-0.522
48	-0.083	+0.475
49	-0.083	+0.380
50	-0.083	+0.285
51	-0.083	+0.190
52	-0.083	+0.095
53	-0.083	+0.000
54	-0.083	-0.095
55	-0.083	-0.190
56	-0.083	-0.285
57	-0.083	-0.380
58	-0.083	-0.475
59	+0.000	+0.522
60	+0.000	+0.427
61	+0.000	+0.332
62	+0.000	+0.237
63	+0.000	+0.142

Contact Position	Location	
	X Axis	Y Axis
64	+0.000	+0.047
65	+0.000	-0.047
66	+0.000	-0.142
67	+0.000	-0.237
68	+0.000	-0.332
69	+0.000	-0.427
70	+0.000	-0.555
71	+0.083	+0.475
72	+0.083	+0.380
73	+0.083	+0.285
74	+0.083	+0.190
75	+0.083	+0.095
76	+0.083	+0.000
77	+0.083	-0.095
78	+0.083	-0.190
79	+0.083	-0.285
80	+0.083	-0.380
81	+0.083	-0.475
82	+0.160	+0.531
83	+0.166	+0.427
84	+0.166	+0.332
85	+0.166	+0.237
86	+0.166	+0.142
87	+0.166	+0.047
88	+0.166	-0.047
89	+0.166	-0.142
90	+0.166	-0.237
91	+0.166	-0.332
92	+0.166	-0.427
93	+0.249	-0.522
94	+0.249	+0.496
95	+0.249	+0.380
96	+0.249	+0.285

Contact Position	Location	
	X Axis	Y Axis
97	+0.249	+0.190
98	+0.249	+0.095
99	+0.249	+0.000
100	+0.249	-0.095
101	+0.249	-0.190
102	+0.249	-0.285
103	+0.249	-0.380
104	+0.249	-0.475
105	+0.332	+0.444
106	-0.232	+0.332
107	-0.232	+0.237
108	-0.232	+0.142
109	-0.232	+0.047
110	-0.232	-0.047
111	-0.232	-0.142
112	-0.232	-0.237
113	-0.232	-0.332
114	-0.232	-0.427
115	+0.424	+0.357
116	+0.415	+0.190
117	+0.415	+0.095
118	+0.415	+0.000
119	+0.415	-0.095
120	+0.415	-0.190
121	+0.424	-0.357
122	+0.479	+0.279
123	+0.520	+0.190
124	+0.546	+0.095
125	+0.555	+0.000
126	+0.546	-0.095
127	+0.520	-0.190
128	+0.479	-0.279

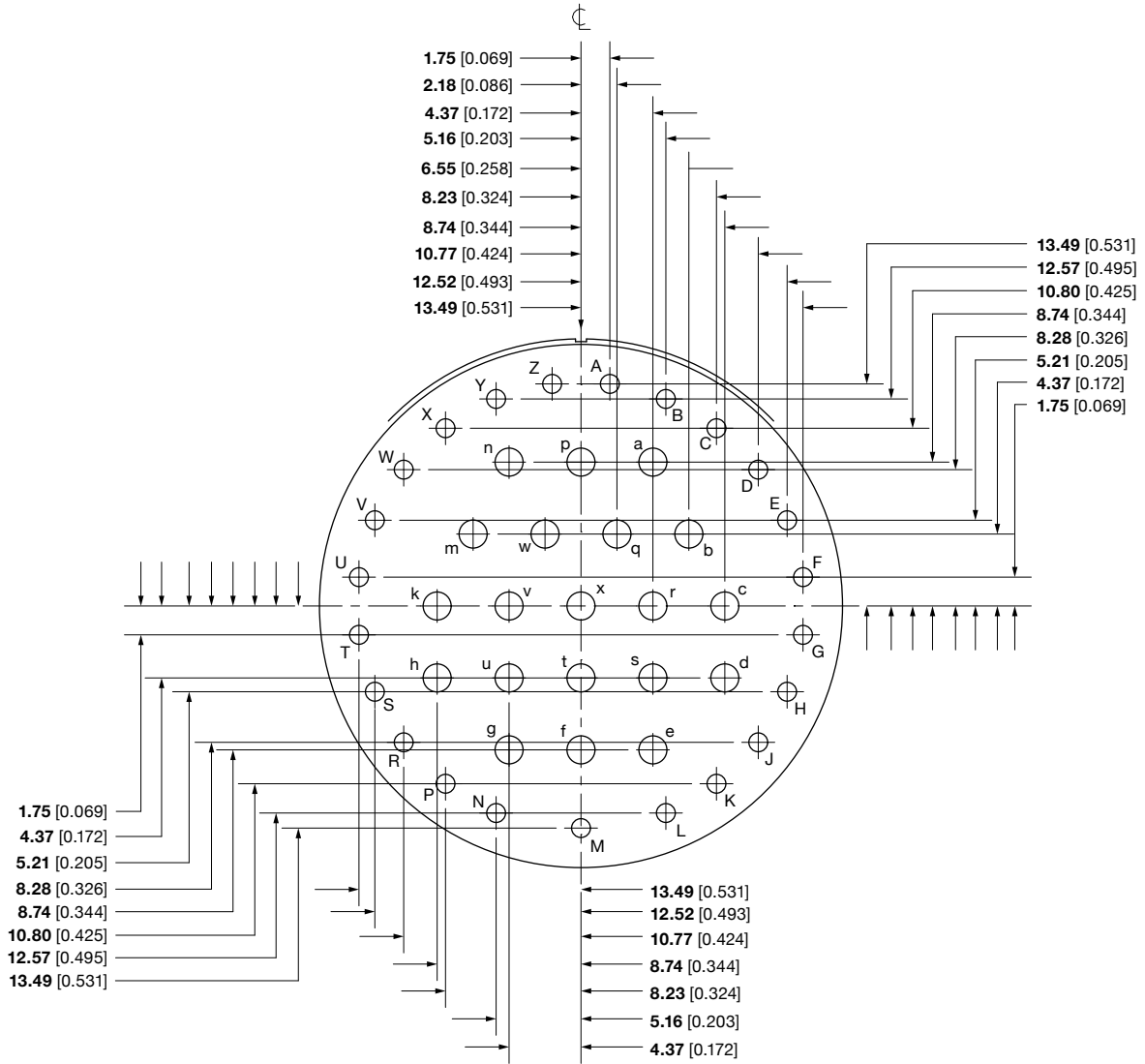


25-37



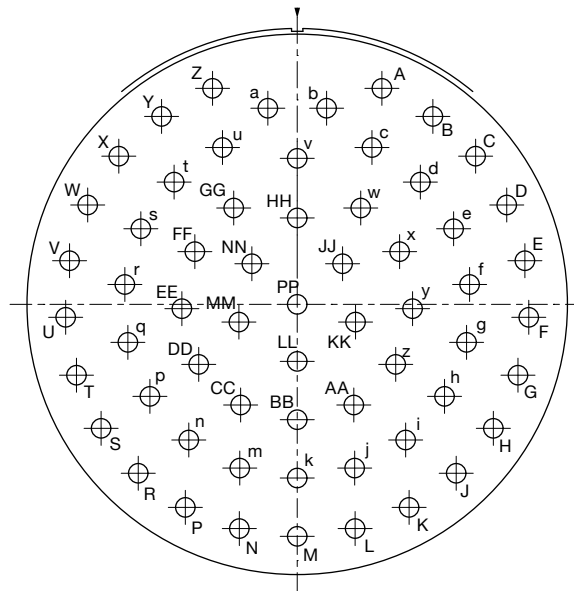


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Contact Position	Location	
	X Axis	Y Axis
A	+0.196	+0.500
B	+0.314	+0.435
C	+0.413	+0.343
D	+0.485	+0.230
E	+0.527	+0.101
F	+0.536	-0.030
G	+0.511	-0.164
H	+0.454	-0.287
J	+0.368	-0.391
K	+0.259	-0.470
L	+0.134	-0.519
M	+0.000	-0.537
N	-0.134	-0.519
P	-0.259	-0.470
R	-0.368	-0.391
S	-0.454	-0.287
T	-0.511	-0.164
U	-0.536	-0.030
V	-0.527	+0.101
W	-0.485	+0.230
X	-0.413	+0.343

Contact Position	Location	
	X Axis	Y Axis
Y	-0.314	+0.435
Z	-0.196	+0.500
a	-0.068	+0.454
b	+0.068	+0.454
c	+0.173	+0.363
d	+0.285	+0.283
e	+0.362	+0.175
f	+0.399	+0.046
g	+0.392	-0.088
h	+0.341	-0.213
i	+0.251	-0.314
j	+0.133	-0.379
k	+0.000	-0.402
m	-0.133	-0.379
n	-0.251	-0.314
p	-0.341	-0.213
q	-0.392	-0.088
r	-0.399	+0.046
s	-0.362	+0.175
t	-0.285	+0.283
u	-0.173	+0.363

Contact Position	Location	
	X Axis	Y Axis
v	+0.000	+0.338
w	+0.147	+0.223
x	+0.237	+0.122
y	+0.267	-0.010
z	+0.228	-0.139
AA	+0.131	-0.233
BB	+0.000	-0.267
CC	-0.131	-0.233
DD	-0.228	-0.139
EE	-0.267	-0.010
FF	-0.237	+0.122
GG	-0.147	+0.223
HH	+0.000	+0.200
JJ	+0.105	+0.094
KK	+0.135	-0.041
LL	+0.000	-0.132
MM	-0.135	-0.041
NN	-0.105	+0.094
PP	+0.000	+0.000
—	—	—