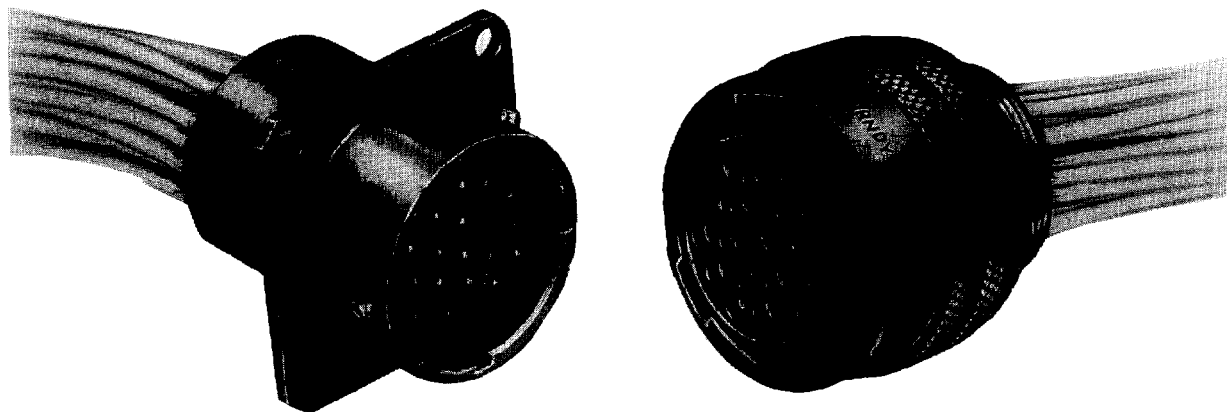


## Bantamate

Trim Trio BANTAMATE connectors are available in a full range of sizes, styles, and termination to fit every application. Sizes range from 4 to 48 contact positions. There are 9 shell styles available with 6 terminations including general duty, strain relief, potting boot, and 90° elbow.



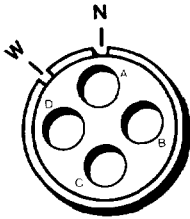
8-18

### Performance Characteristics

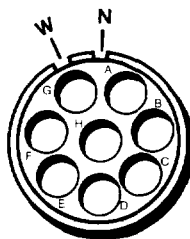
<b>Operating Temperature</b>	-55° C to +125° C
<b>Insulation Resistance</b>	5,000 megohms
<b>Test Potential—Dielectric Withstanding Voltage</b>	2,000 VAC, 60 HZ for 1 minute
<b>Contact Retention</b>	20 lb (machined), 15 lb (formed)
<b>Corrosion</b>	Salt spray per MIL-STD-202, method 101
<b>Vibration Resistance</b>	Per MIL-STD-202, method 204
<b>Shock</b>	Per MIL-STD-202, method 207
<b>Durability</b>	500 cycles

## Polarizations

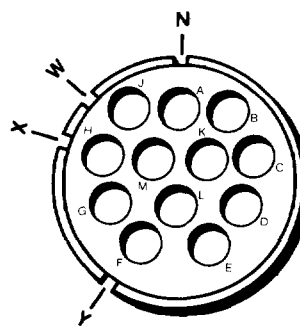
10-4



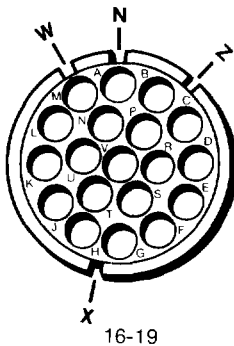
12-88



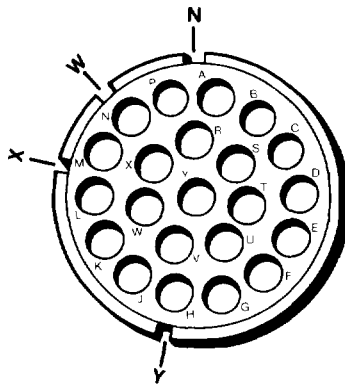
14-92†



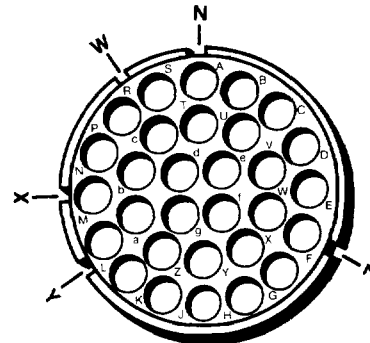
16-19



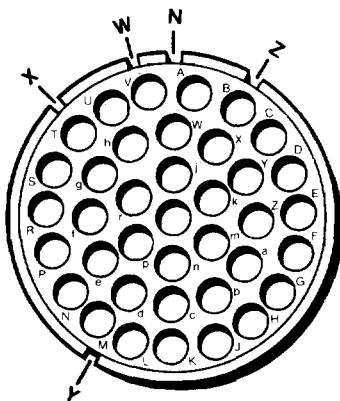
18-22†



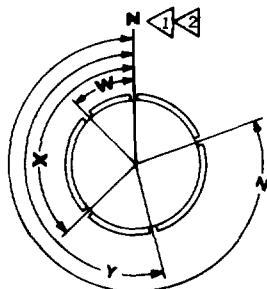
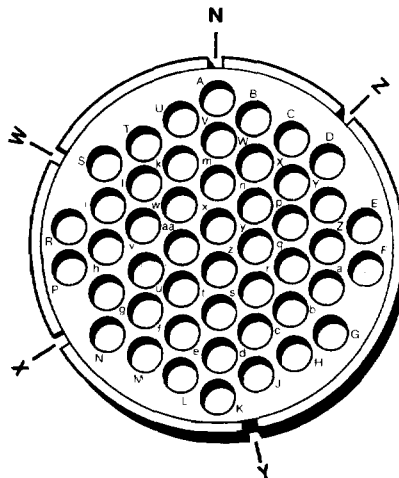
20-30†



22-38†



24-48†



### ALTERNATE KEYWAY POSITIONS

- 1 Typical mating face of pin insert shown. (Socket insert opposite). "N" Normal position 0°. Polarization letters show master key position with respect to contact hole identification characters.
- 2 Unless otherwise specified, "N" keyway is standard position on all keyways. Angles given are counter-clockwise from "N" position, (socket insert opposite).

**G O A 16 19 P N H\***

**Trim Trio Bantam**

**Shell Style**

- 0 MS 3120 Wall Mounting flange
- 1 MS 3121 Cable connecting receptacle
- 2 MS 3122 Box mounting flange receptacle
- 6 MS 3126 Straight plug
- 4 MS 3124 Jam nut rear mounting receptacle
- 3 Jam nut rear mounting receptacle without accessory back
- 7 MS 3127 Box mounting large flange receptacle for rear panel mounting
- 8 MS 3128 Wall mounting large flange receptacle for rear panel mounting
- 9 Straight Plug-Grounding

**Termination Class**

- A Adaptor for use with conduit and/or MS3057 cable clamp
- B No termination
- F Wire strain relief clamp
- L 90° elbow with strain relief clamp
- J Jacketed cable
- JF Jacketed cable-strain relief
- P Potting boot

**Shell size**

**Insert arrangement**

**Contact (pin or socket)**

**Insert polarization**

**Finish**

UL approved file no.-E31151

**\*FINISH**

- H --- Cadmium plate with olive drab chromate conversion coating as specified in MIL-C-26482
- E --- Cadmium plate with clear chromate conversion coating.

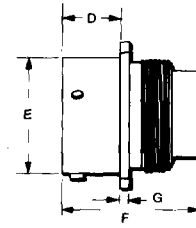
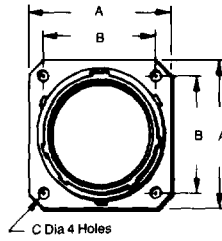
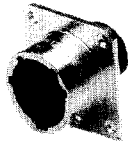
†Also available in an interfacial seal version

Shell Size	Arrang. No.	Insert Position in Shell			
		W	X	Y	Z
10	4	45°	—	—	—
12	88	26°	—	—	—
14	92	49°	71°	145°	—
16	19	30°	165°	—	315°
18	22	39°	77°	167°	—
20	30	34°	90°	123°	259°
22	38	15°	47°	150°	331°
24	48	60°	120°	189°	315°

8-20

## Wall Mounting Flange Receptacle

Shell Style 0  
MS3120

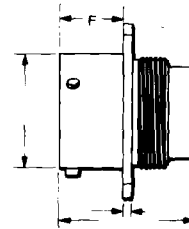
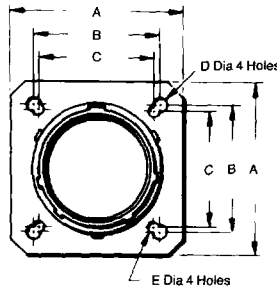


Shell Size	A	B	C	D	E	F	G
10	0.954	0.719	.120	.431	0.590	1.232	.062
12	1.047	0.812	.120	.431	0.750	1.232	.062
14	1.141	0.906	.120	.431	0.875	1.232	.062
16	1.234	0.969	.120	.431	1.000	1.232	.062
18	1.328	1.062	.120	.431	1.125	1.232	.062
20	1.453	1.156	.120	.556	1.250	1.294	.094
22	1.578	1.250	.120	.556	1.375	1.294	.094
24	1.703	1.375	.147	.589	1.500	1.294	.094

8-21

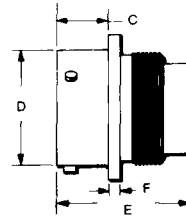
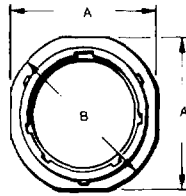
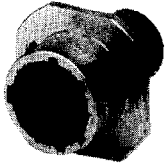
## Large Flange Wall Mounting Receptacle

Shell Style 8  
MS3128



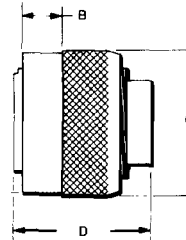
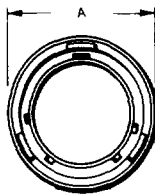
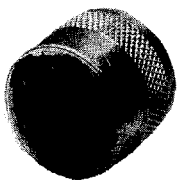
Shell Size	A	B	C	D	E	F	G	H	I
10	1.141	0.812	0.719	.150	.120	.462	0.590	1.232	.062
12	1.266	0.938	0.812	.150	.120	.556	1.375	1.586	.094
14	1.360	1.031	0.906	.150	.120	.462	0.875	1.223	.062
16	1.453	1.125	0.969	.150	.120	.462	1.000	1.232	.062
18	1.532	1.203	1.062	.150	.120	.462	1.125	1.232	.062
20	1.688	1.297	1.156	.150	.120	.556	1.250	1.294	.094
22	1.766	1.375	1.250	.150	.120	.556	1.375	1.586	.094
24	1.891	1.500	1.375	.150	.147	.589	1.500	1.294	.094

**Cable Connecting  
Receptacle  
Shell Style 1  
MS3121**



Shell Size	A	B	C	D	E	F
10	0.954	1.082	400	0.590	1.232	.094
12	1.047	1.176	400	0.750	1.232	.094
14	1.141	1.270	400	0.875	1.232	.094
16	1.234	1.364	400	1.000	1.232	.094
18	1.328	1.458	400	1.125	1.232	.094
20	1.453	1.582	535	1.250	1.294	.115
22	1.578	1.708	535	1.375	1.294	.115
24	1.703	1.832	566	1.500	1.294	.115

**Straight Plug  
Shell Style 6\*  
MS3126**



Shell Size	A	B	C	D
10	0.895	.353	0.889	1.223
12	1.031	.353	1.031	1.232
14	1.156	.353	1.156	1.232
16	1.281	.353	1.281	1.223
18	1.391	.353	1.391	1.223
20	1.531	.415	1.531	1.223
22	1.656	.415	1.656	1.223
24	1.777	.415	1.777	1.223

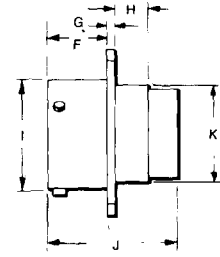
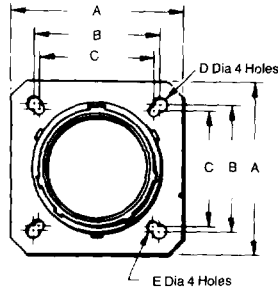
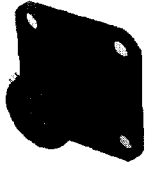
\*Available with grounding finger — Shell Style 9

**COMMERCIAL CIRCULAR**

8-22

## Large Flange Box Mounting Receptacle

Shell Style 7  
MS3127

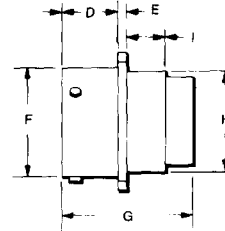
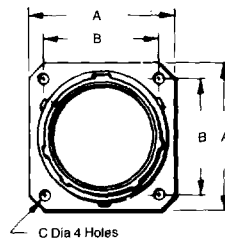


Shell Size	A	B	C	D	E	F	G	H	I	J	K
10	1.141	0.812	0.719	.150	.120	.462	.062	.312	0.590	1.232	0.561
12	1.266	0.938	0.812	.150	.120	.462	.062	.312	0.750	1.232	0.686
14	1.360	1.031	0.906	.150	.120	.462	.062	.312	0.875	1.232	0.811
16	1.453	1.125	0.969	.150	.120	.462	.062	.312	1.000	1.232	
18	1.532	1.203	1.062	.150	.120	.462	.062	.312	1.125	1.232	1.061
20	1.688	1.297	1.156	.150	.120	.556	.094	.406	1.250	1.294	
22	1.766	1.375	1.250	.150	.120	.556	.094	.406	1.375	1.294	1.311
24	1.891	1.500	1.375	.150	.147	.589	.094	.406	1.500	1.294	1.436

8-23

## Box Mounting Flange Receptacle

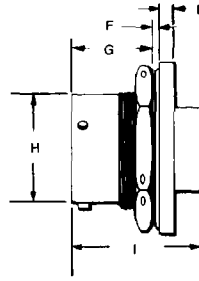
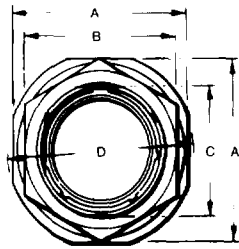
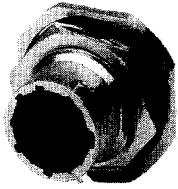
Shell Style 2  
MS3122



Shell Size	A	B	C	D	E	F	G	H	I
10	0.954	0.719	.120	.431	.062	0.590	1.232	0.561	
12	1.047	0.812	.120	.431	.062	0.750	1.232	0.686	.312
14	1.141	0.906	.120	.431	.062	0.875	1.232	0.811	.312
16	1.234	0.969	.120	.431	.062	1.000	1.232	0.936	.312
18	1.328	1.062	.120	.431	.062	1.125	1.232	1.061	.312
20	1.453	1.156	.120	.556	.094	1.250	1.294	1.186	.406
22	1.578	1.250	.120	.556	.094	1.375	1.294	1.311	.406
24	1.703	1.375	.147	.589	.094	1.500	1.294	1.436	.406

**Jam Nut Rear Mounting  
Receptacle**

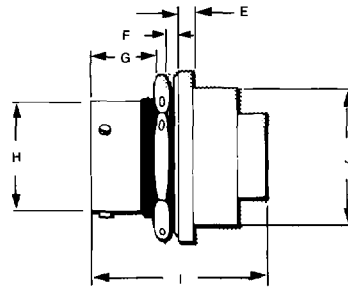
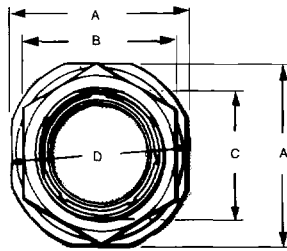
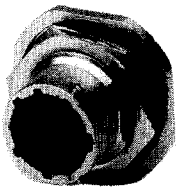
Shell Style 3



Shell Size	A	B	C	D	I	I	G	H	I
10	1.078	0.892	0.655	1.203	.117	.062/125	.691	0.590	1.232
12	1.266	1.079	0.818	1.391	.117	.062/125	.691	0.750	1.232
14	1.391	1.205	0.942	1.516	.117	.062/125	.691	0.875	1.232
16	1.516	1.329	1.066	1.641	.117	.062/125	.691	1.000	1.232
18	1.641	1.455	1.191	1.766	.117	.062/125	.691	1.125	1.232
20	1.828	1.579	1.316	1.954	.148	.062/250	.879	1.250	1.294
22	1.954	1.705	1.441	2.078	.148	.062/250	.879	1.375	1.294
24	2.078	1.829	1.566	2.203	.148	.062/250	.912	1.500	1.294

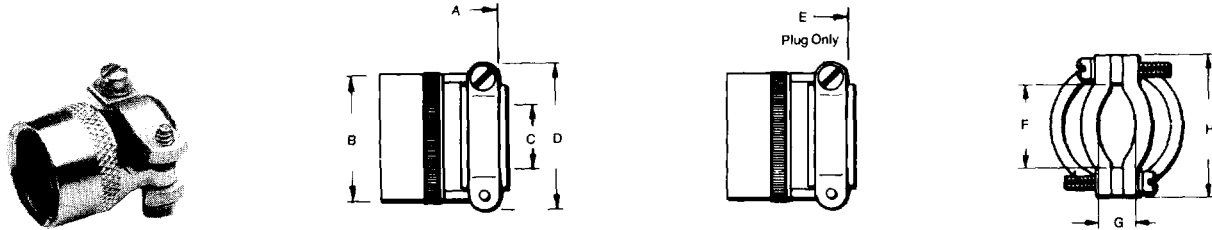
**Jam Nut Rear Mounting  
Receptacle**

Shell Style 4  
MS3124



Shell Size	A	B	C	D	I	I	G	H	I	J
10	1.078	0.892	0.655	1.203	.117	.062/125	.691	0.590	1.232	0.875
12	1.266	1.079	0.818	1.391	.117	.062/125	.691	0.750	1.232	1.000
14	1.391	1.205	0.942	1.516	.117	.062/125	.691	0.875	1.232	1.125
16	1.516	1.329	1.066	1.641	.117	.062/125	.691	1.000	1.232	1.250
18	1.641	1.455	1.191	1.766	.117	.062/125	.691	1.125	1.232	1.375
20	1.828	1.579	1.316	1.954	.148	.062/250	.879	1.250	1.294	1.531
22	1.954	1.705	1.441	2.078	.148	.062/250	.879	1.375	1.294	1.656
24	2.078	1.829	1.566	2.203	.148	.062/250	.912	1.500	1.294	1.781

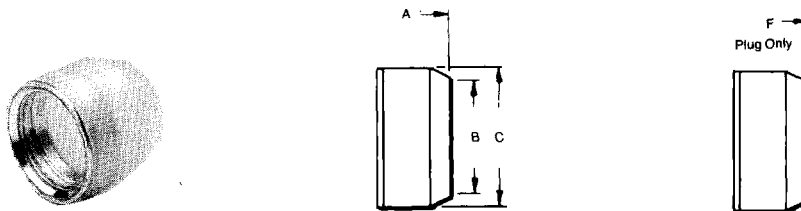
## F Strain Relief Clamps



Shell Size	A	B	C	D	E	F	G	H
10	1.808	0.734	.188	0.891	1.799	.297	.187	0.891
12	1.802	0.858	.312	1.016	1.793	.422	.281	1.016
14	1.802	0.984	.375	1.141	1.793	.547	.325	1.141
16	1.934	1.110	.500	1.203	1.925	.609	.356	1.203
18	1.934	1.234	.625	1.469	1.925	.734	.456	1.469
20	2.200	1.360	.625	1.469	2.129	.734	.519	1.469
22	2.200	1.484	.750	1.656	2.129	.922	.519	1.656
24	2.264	1.610	.800	1.750	2.192	.964	.657	1.750

8-25

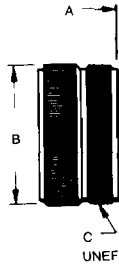
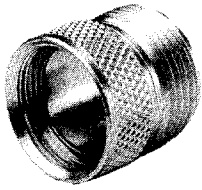
## P Potting Boot



Shell Size	A	B	C	F
10	1.655	0.434	0.734	1.750
12	1.656	0.548	0.858	1.750
14	1.656	0.673	0.984	1.750
16	1.656	0.798	1.110	1.750
18	1.656	0.899	1.234	1.750
20	1.750	1.024	1.360	1.750
22	1.750	1.149	1.484	1.750
24	1.782	1.274	1.610	1.766



## H General Duty

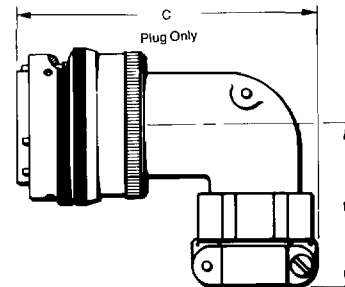
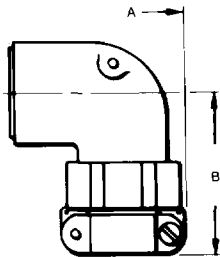
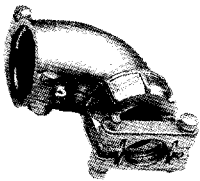


Shell Size	A	B	C	D
10	1.771	0.717	0.625-24	1.762
12	1.771	0.834	0.750-20	1.762
14	1.771	0.970	0.875-20	1.762
16	1.771	1.088	1.000-20	1.762
18	1.771	1.216	1.188-18	1.762
20	1.904	1.332	1.188-18	1.833
22	1.904	1.460	1.438-18	1.833
24	2.030	1.587	1.438-18	2.030

**COMMERCIAL CIRCULAR**

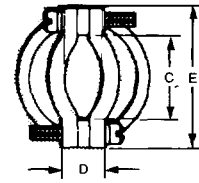
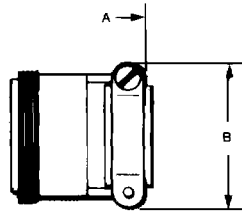
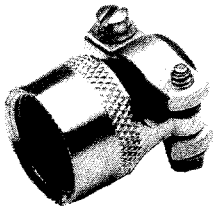
8-26

## L 90° Elbow



Shell Size	A	B	C	D
10	2.064	1.500	2.055	1.500
12	2.235	1.594	2.225	1.594
14	2.475	1.688	2.466	1.688
16	2.480	1.781	2.471	1.781
18	2.802	1.969	2.793	1.969
20	2.930	2.000	2.659	2.000
22	3.306	2.125	3.235	2.125
24	3.360	2.125	3.300	2.125

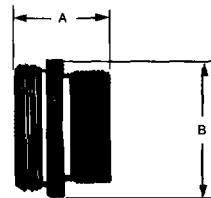
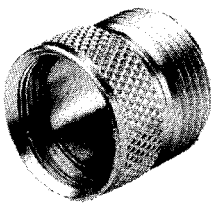
## F Strain Relief Clamps



Shell Size	A	B	C	D	F
10	1.915	0.891	297	187	0.891
12	1.915	1.016	422	281	1.016
14	1.915	1.141	547	325	1.141
16	2.051	1.203	609	356	1.203
18	2.051	1.469	734	456	1.469
20	2.318	1.469	734	519	1.469
22	2.318	1.656	922	519	1.656
24	2.381	1.750	984	657	1.750

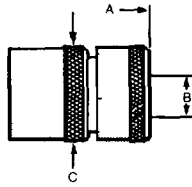
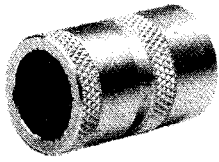
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## H General Duty



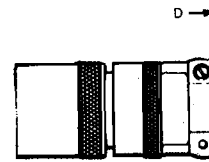
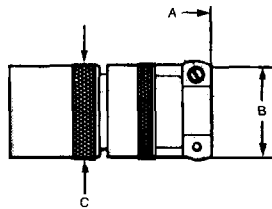
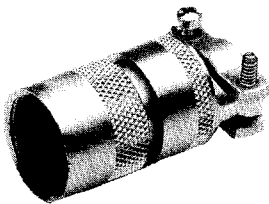
Shell Size	A	B
10	1.805	0.872
12	1.805	0.997
14	1.805	1.122
16	1.805	1.247
18	1.805	1.372
20	2.103	1.528
22	2.103	1.653
24	2.166	1.778

## J Compression Clamp



Shell Size	A	B	C
8	1.781	168/230	0.608
10	2.125	205/312	0.734
12	2.250	338/442	0.858
14	2.469	416/539	0.984
16	2.703	550/616	1.110
18	2.969	600/672	1.234
20	3.594	635/747	1.360
22	3.750	670/846	1.484
24	4.125	740/894	1.610

## JF Compression Clamp



Shell Size	A	B	C	D
8	2.250	0.828	0.608	—
10	2.271	0.891	0.734	—
12	2.411	1.016	0.858	2.375
14	2.599	1.141	0.984	—
16	2.943	1.203	1.110	—
18	3.172	1.402	1.234	—
20	3.610	1.402	1.360	—
22	3.766	1.590	1.484	—
24	3.985	1.652	1.610	—

COMMERCIAL CIRCULAR

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