

ASB offers you the absolute best tubular element, available 0.260" 0.315" 0.375" & 0.430" sheath O.D.

Tubular elements are the most versatile, dependable and rugged of any heat generating device. These qualities make it an ideal heat source for many applications. The Tubular Element is the core of the most common heating solutions found today.

ASB Tubular Elements are manufactured from the highest quality materials. This gives you the most dependable heat source for your specific needs.

Experts in Element Design

With many years experience designing and applying heating elements, we have mastered both the science and the art of tubular element manufacturing. Your ASB heater will perform as you expect.

Components

ASB uses 80-20 ni-chrome wire, "A" grade magnesium oxide and the highest quality tubing. Filling machines and roll reduction equipment are expertly maintained to manufacturer's tolerances, and final test equipment is fully calibrated. You can expect high quality from ASB.

Applications Expertise

Our technical staff is available to help you solve your heating situation. Use our experience and skills, and together we can get you the heating results you need.

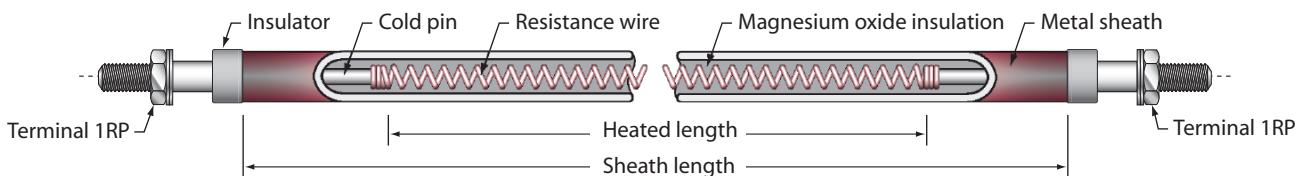


Figure 1A

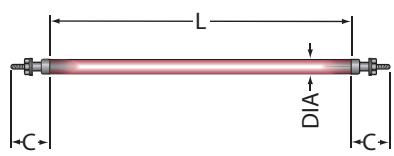


Figure 2A

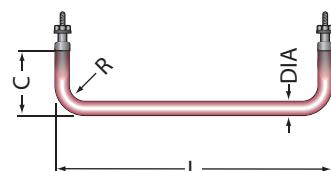


Figure 3A

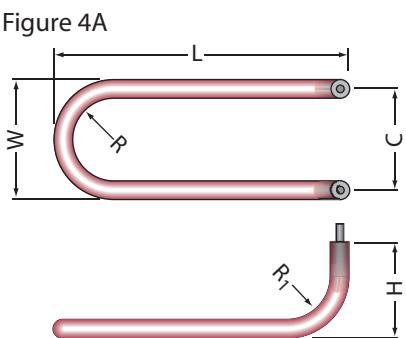


Figure 5A

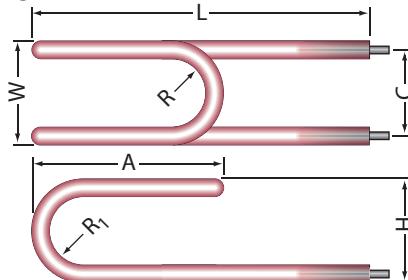


Figure 6A

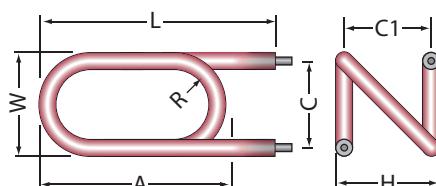


Figure 7A

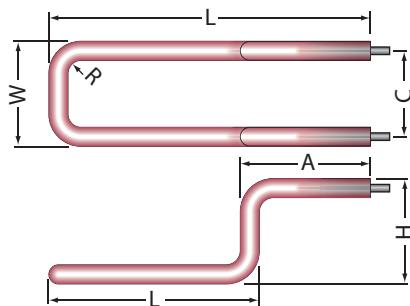


Figure 8A

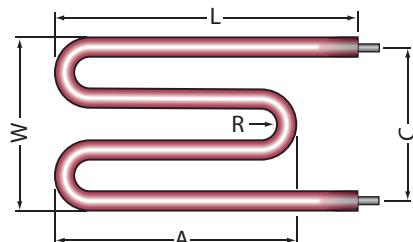


Figure 9A

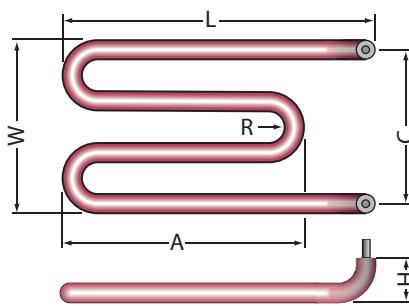


Figure 10A

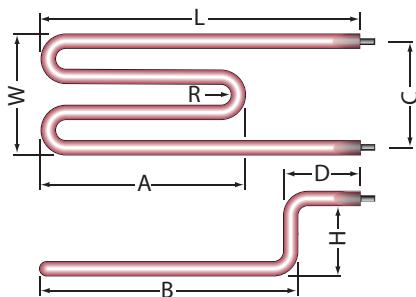


Figure 11A

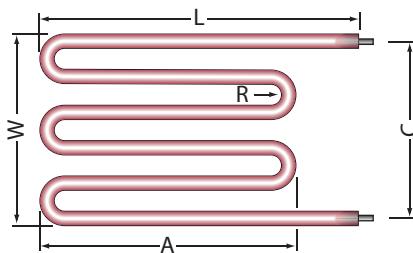


Figure 12A

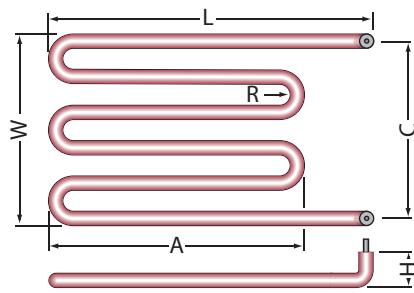


Figure 13A

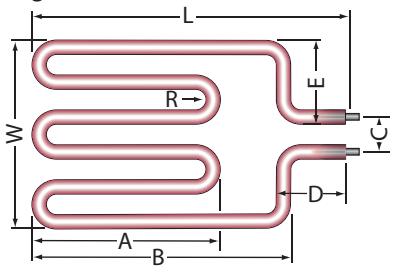


Figure 14A

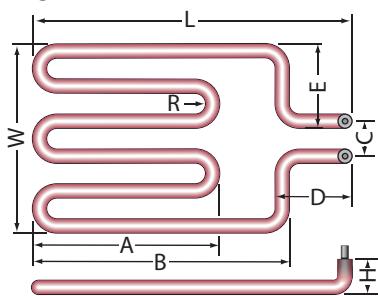


Figure 15A

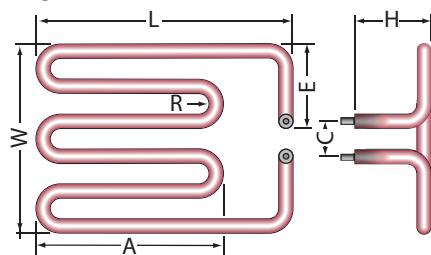


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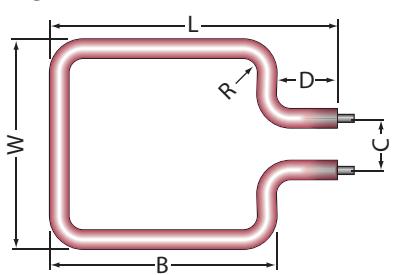


Figure 17A

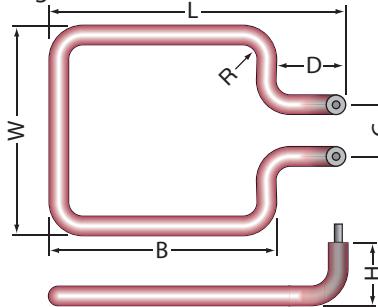


Figure 18A

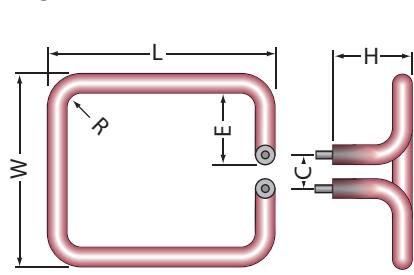


Figure 19A

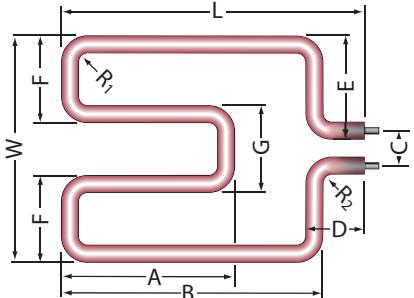


Figure 20A

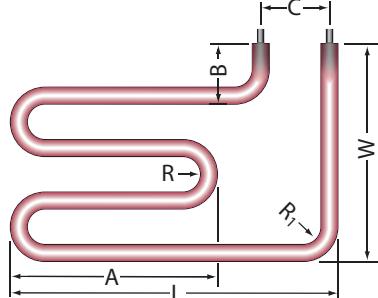


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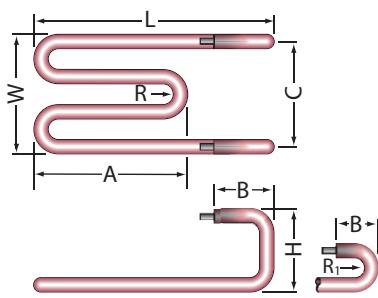


Figure 21A-1

Figure 22A

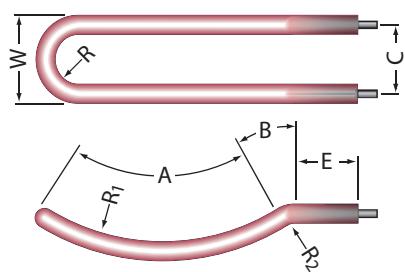


Figure 23A

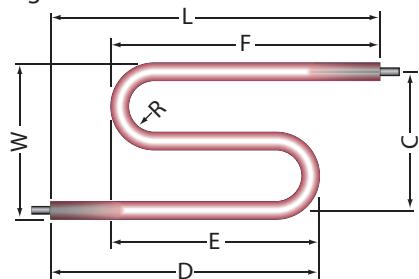


Figure 24A

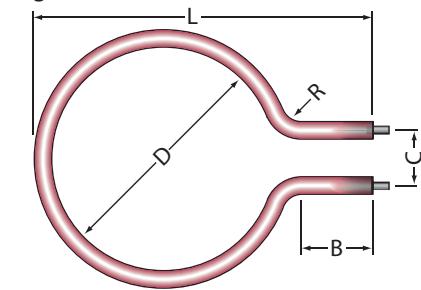


Figure 25A

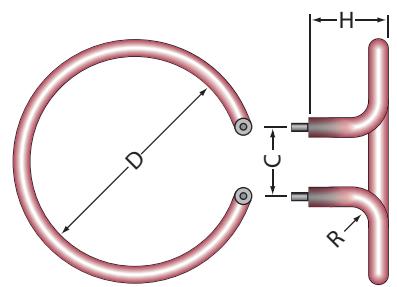


Figure 26A

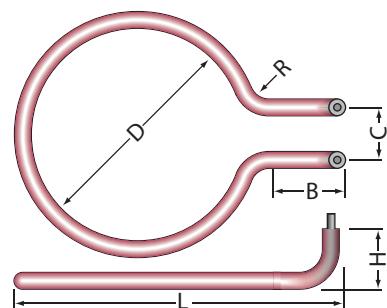


Figure 27A

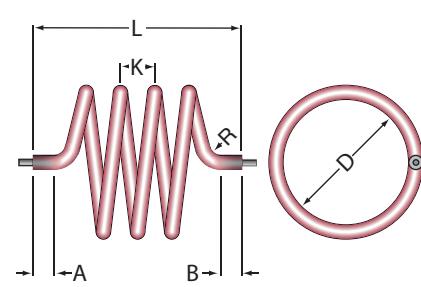


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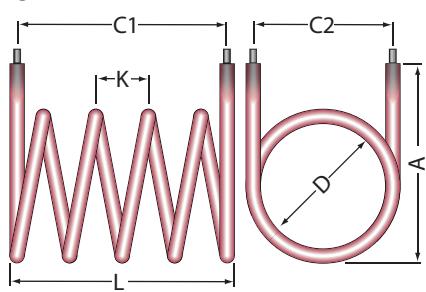


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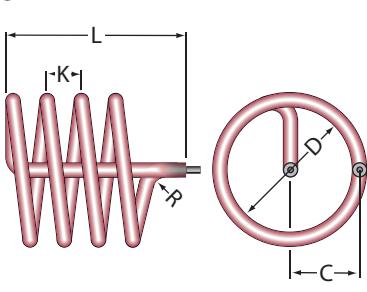


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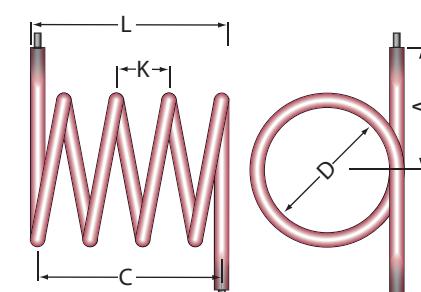


Figure 31A

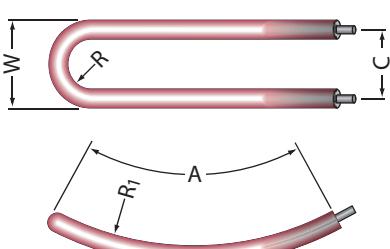


Figure 32A

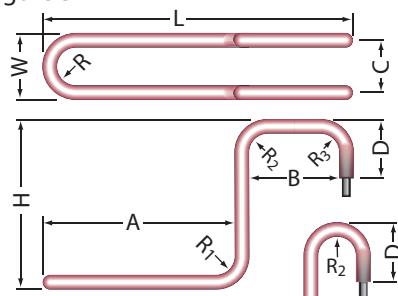


Figure 33A

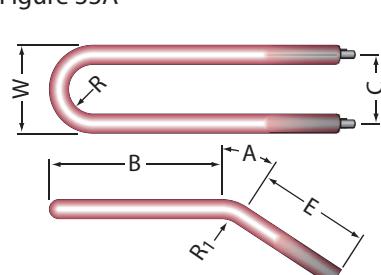


Figure 32A-1

Figure 34

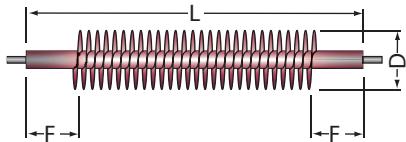


Figure 35

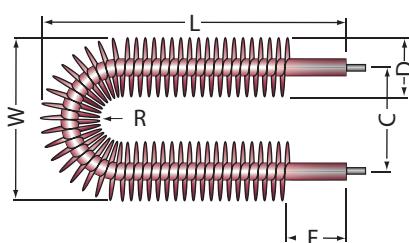
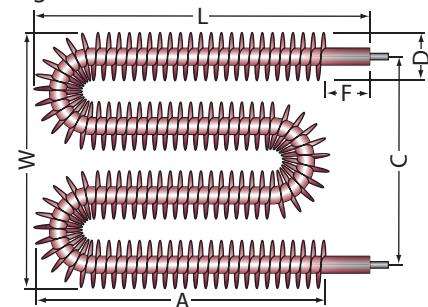


Figure 36



Sheath and fin material are mild steel. Stainless steel sheath and fin material is available

0.315" dia. element, "D" = $15/16$ " diameter nominal

Figure 34

kw	L	part no.
1	19	ASB-301S
2	34	ASB-302S
3	49	ASB-303S
4	64	ASB-304S
5	79	ASB-305S
6	94	ASB-306S

nominal dimensions

$$F = \frac{5}{8}$$

Figure 35

kw	L	part no.
1	9	ASB-301U-A
2	16	ASB-302U-A
3	24	ASB-303U-A
4	31	ASB-304U-A
5	39	ASB-305U-A
6	46	ASB-306U-A

nominal dimensions

$$C = 2\frac{1}{2}$$

$$F = \frac{5}{8}$$

$$R = 1\frac{9}{16}$$

$$W = 3\frac{3}{8}$$

Figure 36

kw	L	part no.
1	6	ASB-301W-A
2	10	ASB-302W-A
3	13	ASB-303W-A
4	17	ASB-304W-A
5	20	ASB-305W-A
6	24	ASB-306W-A

nominal dimensions

$$A = L - F$$

$$C = 6$$

$$F = \frac{5}{8}$$

$$W = 6\frac{7}{8}$$

0.430" dia. element, "D" = 1" diameter nominal

Figure 34

kw	L	part no.
2	27	ASB-402S
3	39	ASB-403S
4	52	ASB-404S
5	64	ASB-405S
6	77	ASB-406S
7	89	ASB-407S
8	102	ASB-408S

nominal dimensions

$$F = \frac{5}{8}$$

Figure 35

kw	L	part no.
2	13	ASB-402U-A
3	20	ASB-403U-A
4	26	ASB-404U-A
5	32	ASB-405U-A
6	38	ASB-406U-A
7	44	ASB-407U-A
8	51	ASB-408U-A

nominal dimensions

$$C = 3$$

$$F = \frac{5}{8}$$

$$R = 2$$

$$W = 4$$

Figure 36

kw	L	part no.
2	7	ASB-402W-A
3	10	ASB-403W-A
4	14	ASB-404W-A
5	17	ASB-405W-A
6	20	ASB-406W-A
7	23	ASB-407W-A
8	26	ASB-408W-A

nominal dimensions

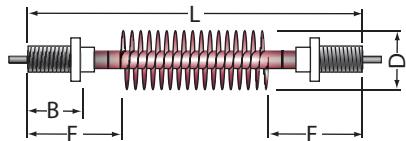
$$A = L - F$$

$$C = 7\frac{1}{2}$$

$$F = \frac{5}{8}$$

$$W = 8\frac{1}{2}$$

Figure 37



Fitting 1/2-20 for 0.315" O.D element
5/8-18 for 0.430" O.D element } Brass crimped on

Figure 38

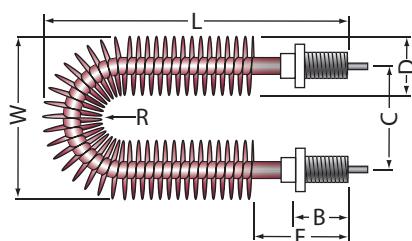
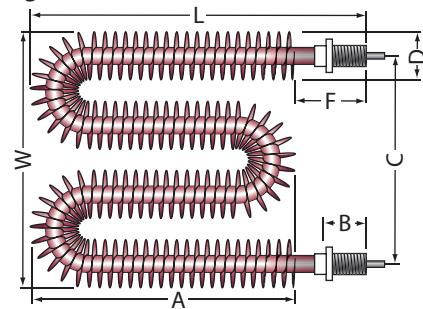


Figure 39



Sheath and fin material are mild steel. Stainless steel sheath and fin material is available

**0.315" dia. element, "D" = 15/16" diameter nominal on formed elements
"D" = 1" diameter nominal on straight elements**

Figure 37

kw	L	part no.
1	20.5	ASB-301SF
2	35.5	ASB-302SF
3	50.5	ASB-303SF
4	65.5	ASB-304SF
5	80.5	ASB-305SF
6	95.5	ASB-306SF

nominal dimensions

$$B = \frac{1}{2}''$$

$$F = 2\frac{1}{8}''$$

Figure 38

kw	L	part no.
1	10.5	ASB-301UF-A
2	17.5	ASB-302UF-A
3	25.5	ASB-303UF-A
4	32.5	ASB-304UF-A
5	40.5	ASB-305UF-A
6	47.5	ASB-306UF-A

nominal dimensions

$$B = \frac{1}{2}''$$

$$C = 2\frac{1}{2}''$$

$$F = 2\frac{1}{8}''$$

$$R = 1\frac{9}{16}''$$

$$W = 3\frac{3}{8}''$$

Figure 39

kw	L	part no.
1	7.5	ASB-301WF-A
2	11.5	ASB-302WF-A
3	14.5	ASB-303WF-A
4	18.5	ASB-304WF-A
5	21.5	ASB-305WF-A
6	25.5	ASB-306WF-A

nominal dimensions

$$A = L - F$$

$$B = \frac{1}{2}''$$

$$C = 6''$$

$$F = 2\frac{1}{8}''$$

$$W = 6\frac{7}{8}''$$

0.430" dia. element, "D" = 1" diameter nominal on formed elements

"D" = 11/16" diameter nominal on straight elements

Figure 37

kw	L	part no.
2	28.5	ASB-402SF
3	40.5	ASB-403SF
4	53.5	ASB-404SF
5	65.5	ASB-405SF
6	78.5	ASB-406SF
7	90.5	ASB-407SF
8	103.5	ASB-408SF

nominal dimensions

$$B = \frac{5}{8}''$$

$$F = 2\frac{1}{8}''$$

Figure 38

kw	L	part no.
2	14.5	ASB-402UF-A
3	21.56	ASB-403UF-A
4	27.5	ASB-404UF-A
5	33.5	ASB-405UF-A
6	39.5	ASB-406UF-A
7	45.5	ASB-407UF-A
8	52.5	ASB-408UF-A

nominal dimensions

$$B = \frac{5}{8}''$$

$$C = 2''$$

$$F = 2\frac{1}{8}''$$

$$R = 1''$$

$$W = 3\frac{1}{8}''$$

Figure 39

kw	L	part no.
2	8.5	ASB-402WF-A
3	11.5	ASB-403WF-A
4	15.5	ASB-404WF-A
5	18.5	ASB-405WF-A
6	21.5	ASB-406WF-A
7	24.5	ASB-407WF-A
8	27.5	ASB-408WF-A

nominal dimensions

$$A = L - F$$

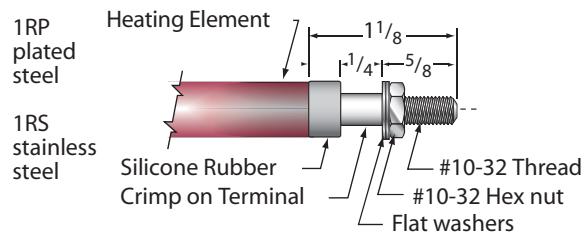
$$B = \frac{5}{8}''$$

$$C = 6''$$

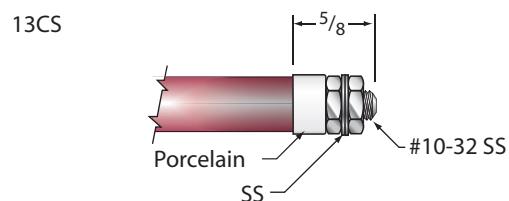
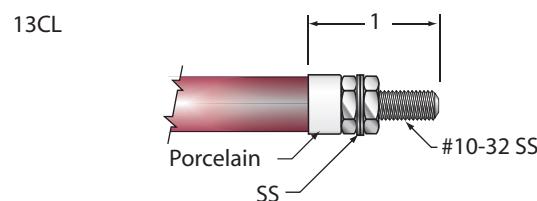
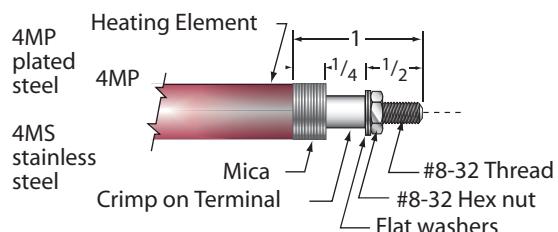
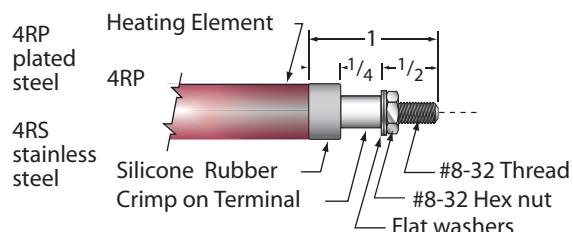
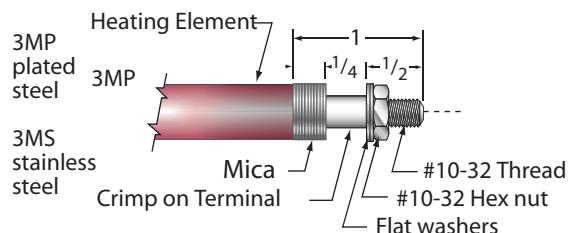
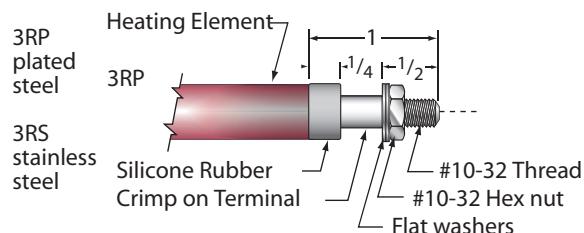
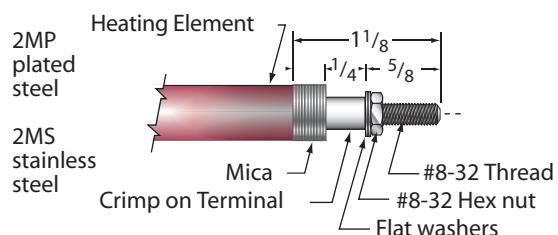
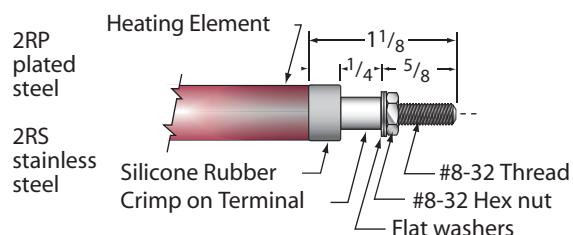
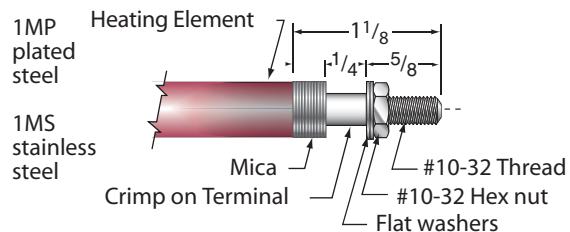
$$F = 2\frac{1}{8}''$$

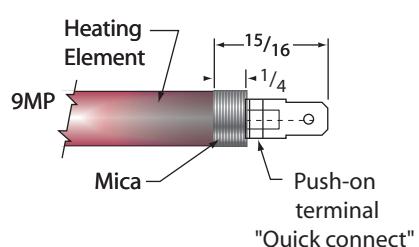
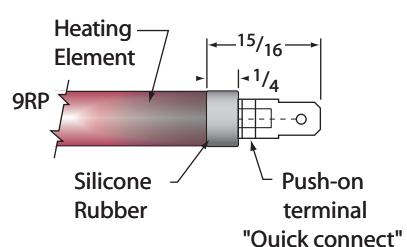
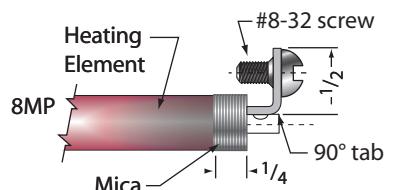
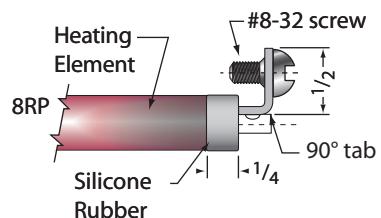
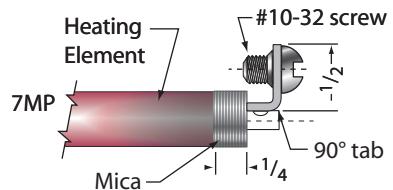
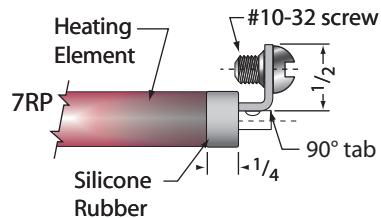
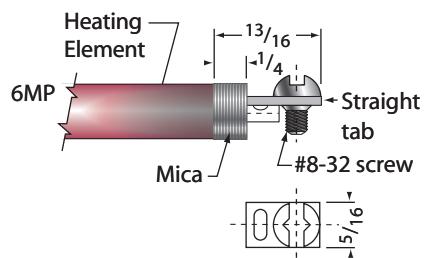
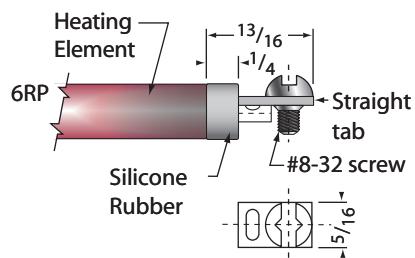
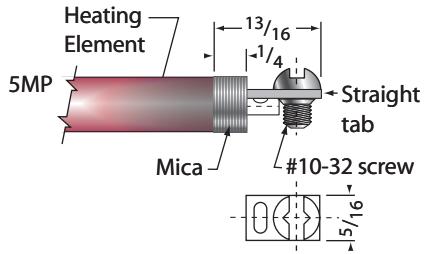
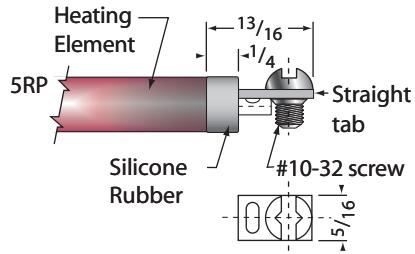
$$W = 7\frac{1}{8}''$$

Silicone rubber insulator (R)
200C maximum ambient at terminal

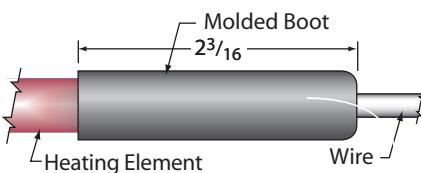
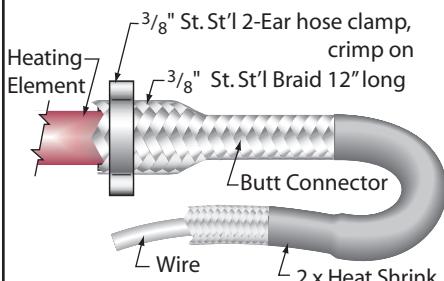
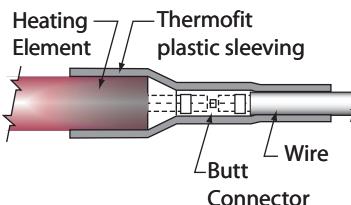
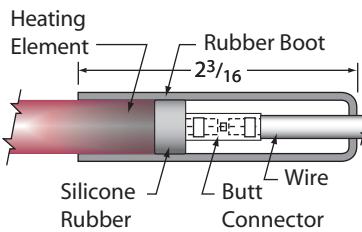
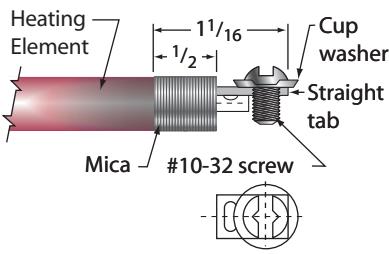


Mica insulator (M)
450C maximum ambient at terminal

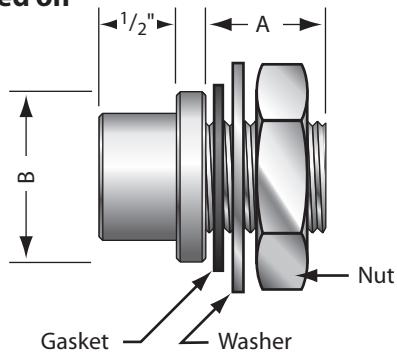




Other terminals



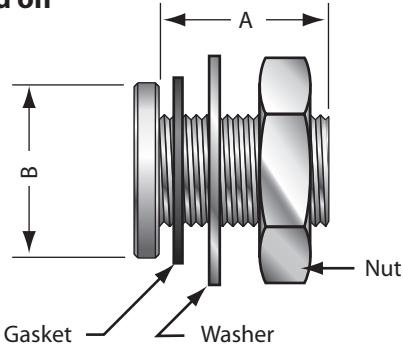
Crimped on



Crimped on

Element Dia.	Fitting material	Liquid tight seal	A	B	Thread	Fitting No.
0.315"	Brass	No	1/2	3/4	1/2-20	C1A
			5/8	7/8	9/16-18	C2A
0.430	Brass		5/8	7/8	5/8-18	C3A

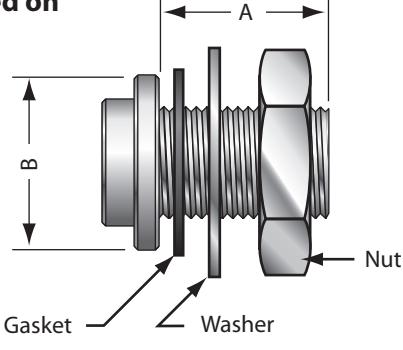
Brazed on



Brazed

Element Dia.	Fitting material	Liquid tight seal	A	B	Thread	Fitting No.
0.315	Brass	Yes	1/2	3/4	1/2-20	B1A
			1/2	1	5/8-18	B2A
			1/2	3/4	1/2-20	B3A
	SS		7/8	1	5/8-18	B4A
	Brass		1	7/8	1/2-20	B5A
			1	3/4	9/16-18	B6A
	SS		1 3/8	3/4	1/2-20	B7A
	Brass hex		3/4	3/4 hex	1/2-20	B8A
	SS hex		5/8		1/2-20	B9A
	Brass hex		3/4		1/2-20	B10A
0.375	Brass		1/2	3/4	1/2-20	B11A
	SS		7/8	1	5/8-18	B12A
	Brass		1	7/8	1/2-20	B13A
	SS hex		5/8	3/4 hex	1/2-20	B14A
	Brass		7/8	1	5/8-18	B15A
0.430	SS		7/8	1	5/8-18	B16A
	Brass		1	1	3/4-16	B17A
	Brass		1 1/8	1	5/8-18	B18A
	Brass		13/16	1 1/4	7/8-14	B19A

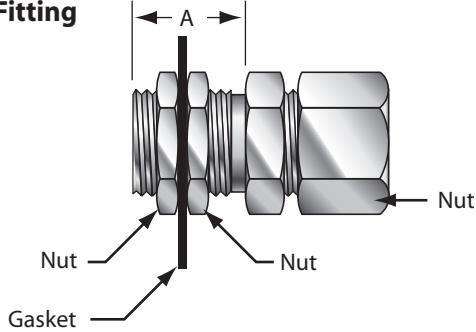
Welded on



Welded

Element Dia.	Fitting material	Liquid tight seal	A	B	Thread	Fitting No.
0.430	Stainless Steel	Yes	7/8	1	5/8-18	W1A
			1 1/8	1	3/4-16	W2A
			1 1/8	1	5/8-18	W3A

Compression Fitting



Compression Fitting

Element Dia.	Fitting material	Liquid tight seal	A	B	Thread	Fitting No.
0.430	Brass	Yes	5/8		5/8-18	CF8

Compression Fitting uses

- Tank immersion applications where permanently attached fittings are unacceptable
- Oven applications where tubular has to pass through insulation
- Fitting location adjustable to meet field requirements
- removable terminal boxes

Figure 40

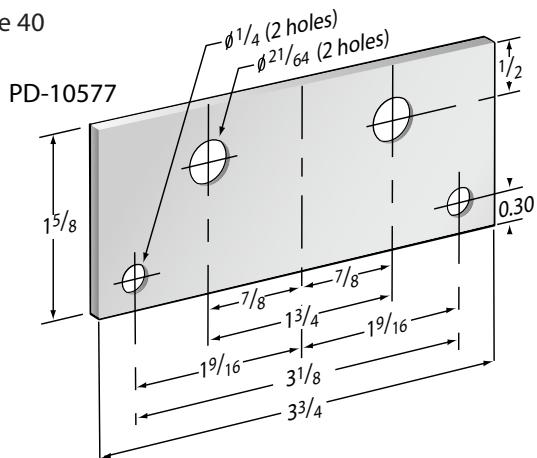


Figure 42

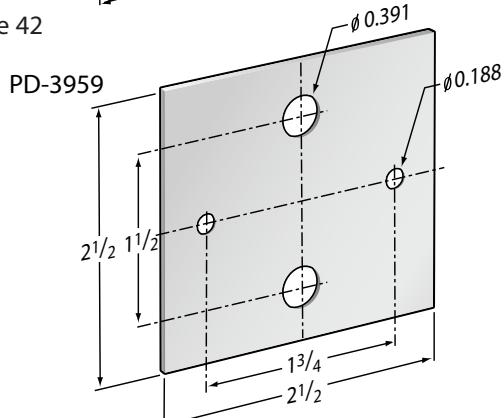


Figure 44

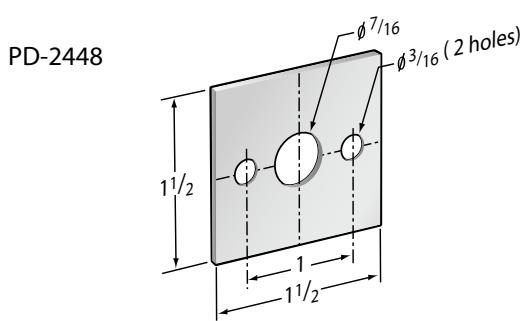


Figure 46

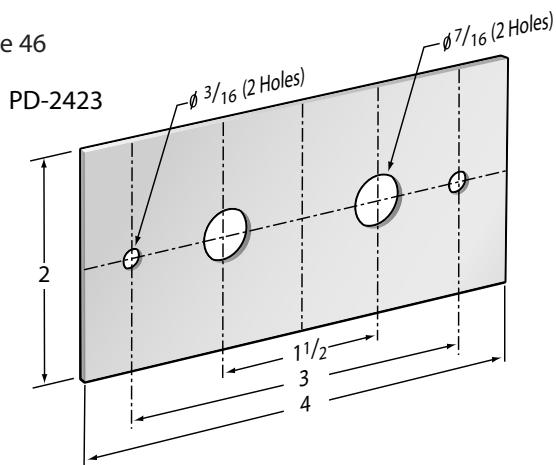


Figure 41

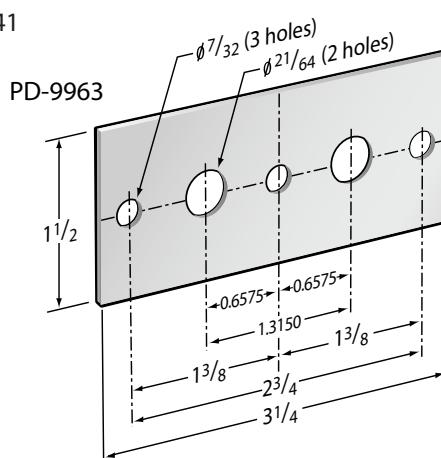


Figure 43

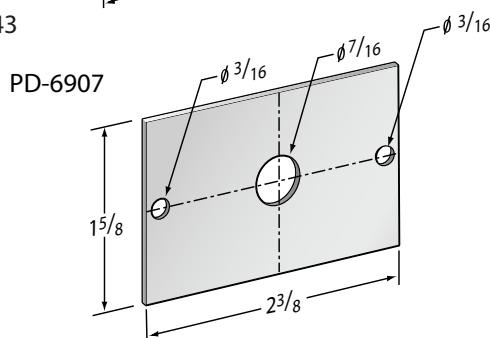


Figure 45

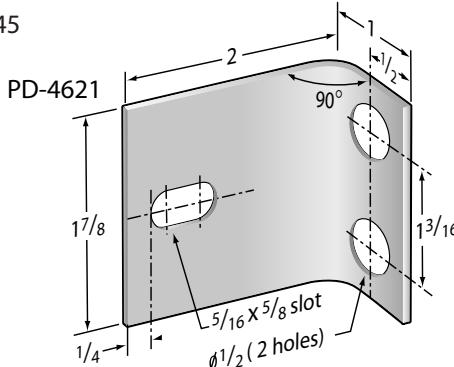


Figure 47

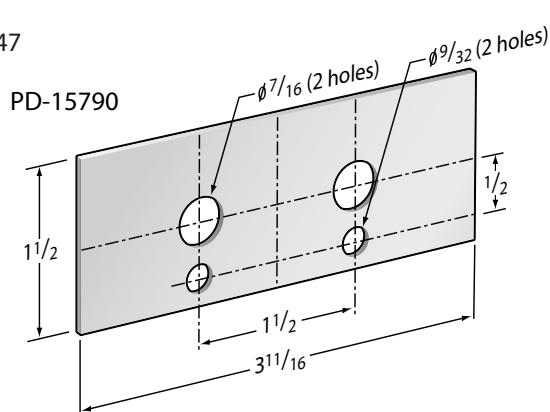


Figure 48

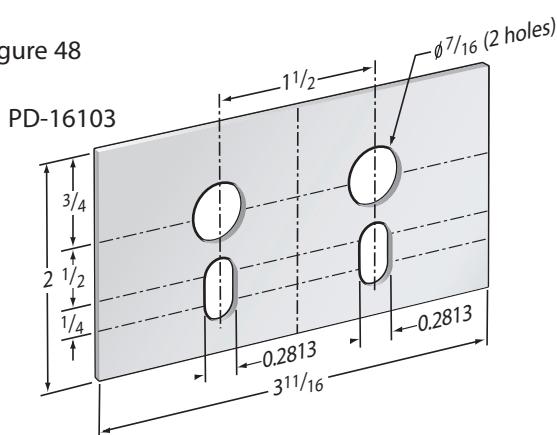


Figure 49

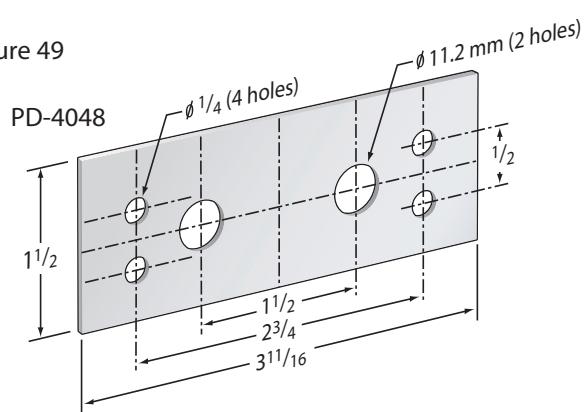


Figure 50

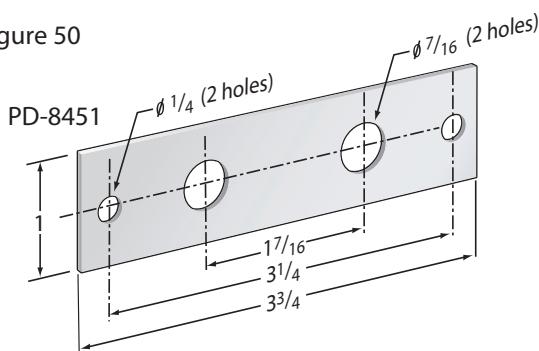


Figure 51

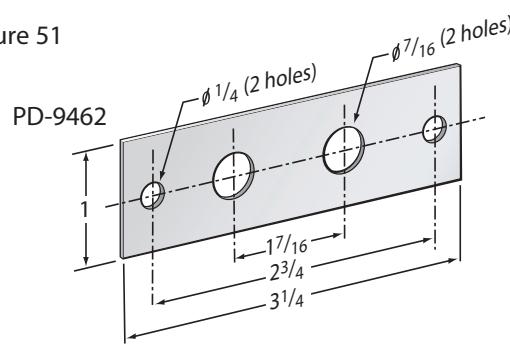


Figure 52

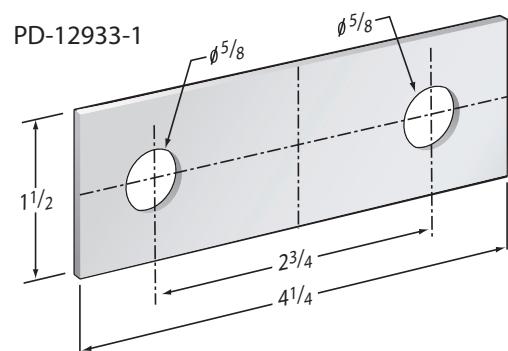


Figure 53

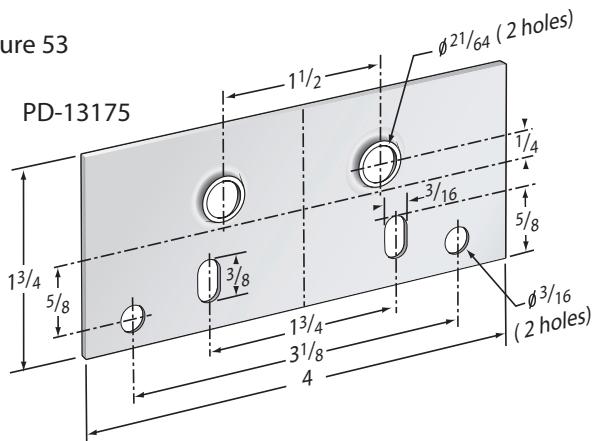


Figure 54

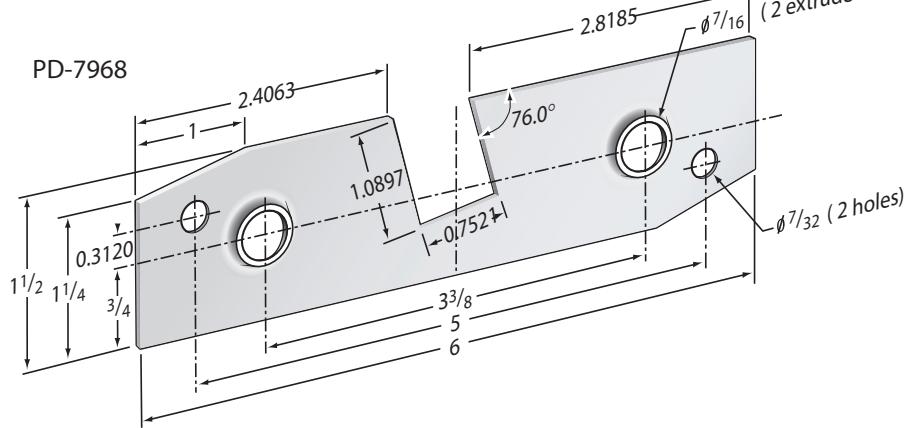


Figure 55

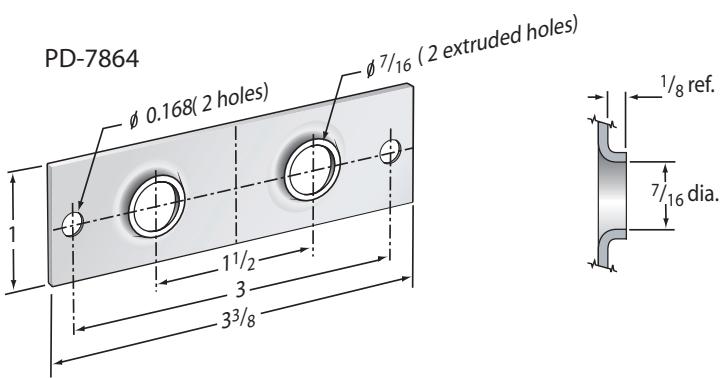


Figure 56

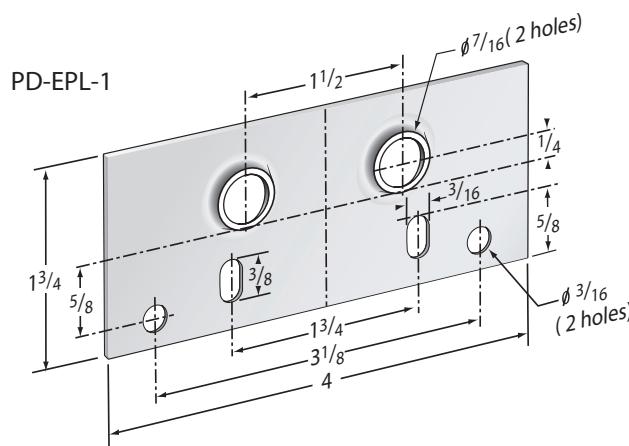


Figure 57

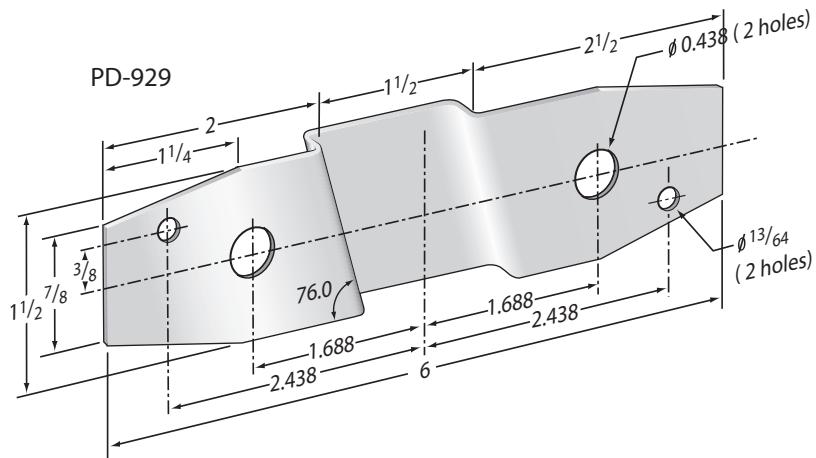


Figure 58

