

**General Description:** The weld used in joining a tube to a socket weld tube fitting is like any other type of “tee” weld. The root (i.e., the point of intersection of the outside of the tube and annular end area of the fitting) must be included in the weld zone.

Careful welding procedures are normally followed to ensure that this root area is included in the weld. If penetration is not achieved, the joint will have two built-in stress risers which may greatly reduce the strength of the weld. Upon application of an extreme load, these stress risers could result in cracks which could propagate out through the weld or tube depending upon the direction of the greatest load.

Often to achieve full root penetration in TIG welding of stainless steels, a fusion pass will be made first, followed by a final pass utilizing a filler rod to achieve the desired fillet size.

**WELD-LOK®**

**HOW TO ORDER**

Parker Weld-lok® components are ordered by part number as listed in this catalog.

**Example:** If your system requires a 90° elbow fitting going from 1/4" tubing to 1/4" tubing, you would order the following part:

4 - 4	E	W	-	SS
<b>Fitting Size</b>	<b>Welding Fitting Type</b>	<b>Machining Type</b>		<b>Material</b>

**Fitting Size:** The first two numbers denote the fitting size which matches the tubing O.D.

**Machining Type:** Weld-lok® (W)

**Welded Fitting Type:** Straight (H), Union tee (J), Union elbow (E).

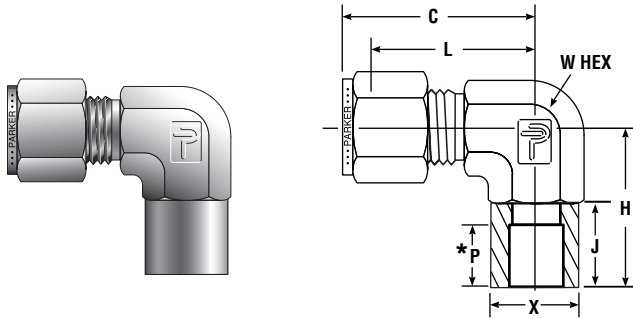
**Material:** Stainless Steel - SS (316L)

*Size:* Tube and pipe thread sizes are designated by the number of sixteenths of an inch (1/4" tube = 4/16" = size 4), (3/8" tube = 6/16" = 6), and (1/2" tube = 8/16" = size 8).

*Special Fittings:* If a special fitting configuration is required, it is suggested that a sketch or drawing be submitted for review.

**SOCKET WELD CONNECTION – FOR CPI™ TO TUBING FOR FRACTIONAL TUBE**

**SERIES ZEBW**



Part No.	Inter-Changes With	Tube O.D.	C	L	H	J	*P	X Dia.	W Hex
2-2 ZEBW	200-9-2W	1/8	.93	.70	.70	.34	.16	.38	1/2
3-3 ZEBW	300-9-3W	3/16	1.01	.74	.75	.39	.20	.44	1/2
4-4 ZEBW	400-9-4W	1/4	1.07	.78	.78	.44	.25	.50	9/16
6-6 ZEBW	600-9-6W	3/8	1.31	1.02	1.08	.53	.34	.63	3/4
6-12 ZEBW	600-9-12W	3/8	1.46	1.17	1.39	.69	.50	1.09	1 1/16
6-16 ZEBW	600-9-16W	3/8	1.84	1.55	1.84	.75	.56	1.44	1-5/8
8-4 ZEBW	800-9-4W	1/2	1.42	1.02	.99	.44	.25	.50	13/16
8-8 ZEBW	800-9-8W	1/2	1.42	1.02	1.14	.59	.41	.78	13/16
8-10 ZEBW	800-9-10W	1/2	1.57	1.17	1.36	.66	.47	.94	1 1/16
8-12 ZEBW	800-9-12W	1/2	1.57	1.17	1.34	.69	.50	1.09	1 1/16
8-16 ZEBW	800-9-16W	1/2	1.95	1.55	1.84	.75	.56	1.44	1 5/8
10-6 ZEBW	1010-9-6W	5/8	1.50	1.10	1.16	.53	.34	.63	15/16
10-8 ZEBW	1010-9-8W	5/8	1.50	1.10	1.22	.59	.41	.78	15/16
10-10 ZEBW	1010-9-10W	5/8	1.57	1.17	1.36	.66	.47	.94	1 1/16
10-16 ZEBW	1010-9-16W	5/8	1.95	1.55	1.84	.75	.56	1.44	1 5/8
12-12 ZEBW	1210-9-12W	3/4	1.57	1.17	1.39	.69	.50	1.09	1 1/16
14-12 ZEBW	1410-9-12W	7/8	1.76	1.36	1.58	.69	.50	1.09	1 3/8
16-14 ZEBW	1610-9-14W	1	1.94	1.45	1.58	.69	.50	1.31	1 3/8
16-16 ZEBW	1610-9-16W	1	2.14	1.65	1.84	.75	.56	1.44	1 5/8

\*Socket Depth

**NOTE:** C dimension is typical finger-tight. Dimensions for reference only, subject to change.  
 For A-LOK® tube fitting double ferrule system replace "B" (ZEBW) with a "L" (ZELW)