

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
Fitting Size	Welding Fitting Type	Machining Type		Material

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).

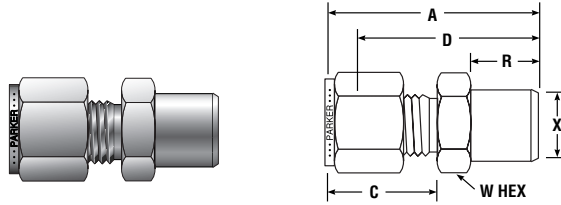
Material: Stainless Steel - SS (316L)

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.

BUTTWELD CONNECTOR – FRACTIONAL PIPE FOR CPI™ TO PIPE BUTTWELD CONNECTION

SERIES ZHBW2



Part No.	Inter-Changes With	Tube O.D.	Buttweld Pipe Size	A	C	D	R	X Buttweld O.D.	W Hex
1-1/8 ZHBW2	200-1-2W	1/16	1/8	1.03	.43	.88	.38	.41	7/16
2-1/8 ZHBW2	200-1-2W	1/8	1/8	1.20	.60	.94	.38	.41	7/16
2-1/4 ZHBW2	200-1-4W	1/8	1/4	1.40	.60	1.14	.56	.54	9/16
2-1/2 ZHBW2	200-1-8W	1/8	1/2	1.67	.60	1.41	.75	.84	7/8
3-1/8 ZHBW2	300-1-2W	3/16	1/8	1.24	.64	.97	.38	.41	7/16
4-1/8 ZHBW2	400-1-2W	1/4	1/8	1.29	.70	1.00	.38	.41	1/2
4-1/4 ZHBW2	400-1-4W	1/4	1/4	1.50	.70	1.20	.56	.54	5/8
4-3/8 ZHBW2	400-1-6W	1/4	3/8	1.54	.70	1.25	.56	.68	3/4
4-1/2 ZHBW2	400-1-8W	1/4	1/2	1.76	.70	1.47	.75	.84	7/8
4-3/4 ZHBW2	400-1-12W	1/4	3/4	1.82	.70	1.53	.75	1.05	1-1/8
4-1 ZHBW2	400-1-16W	1/4	1	2.10	.70	1.81	.94	1.32	1-3/8
5-1/8 ZHBW2	500-1-2W	5/16	1/8	1.34	.73	1.05	.38	.41	9/16
5-1/4 ZHBW2	500-1-4W	5/16	1/4	1.52	.73	1.23	.56	.54	9/16
5-1/2 ZHBW2	500-1-8W	5/16	1/2	1.79	.73	1.50	.75	.84	7/8
6-1/4 ZHBW2	600-1-4W	3/8	1/4	1.57	.76	1.28	.56	.54	5/8
6-3/8 ZHBW2	600-1-6W	3/8	3/8	1.57	.76	1.28	.56	.68	3/4
6-1/2 ZHBW2	600-1-8W	3/8	1/2	1.82	.76	1.53	.75	.84	7/8
6-3/4 ZHBW2	600-1-12W	3/8	3/4	1.88	.76	1.59	.75	1.05	1-1/8
6-1 ZHBW2	600-1-16W	3/8	1	2.17	.76	1.88	.94	1.32	1-3/8
6-1-1/2 ZHBW2	600-1-24W	3/8	1-1/2	2.39	.76	2.10	1.03	1.90	2
6-2 ZHBW2	600-1-32W	3/8	2	2.58	.76	2.29	1.06	2.38	2-1/2
8-1/8 ZHBW2	810-1-2W	1/2	1/8	1.53	.87	1.13	.38	.41	13/16
8-1/4 ZHBW2	810-1-4W	1/2	1/4	1.71	.87	1.31	.56	.54	13/16
8-3/8 ZHBW2	810-1-6W	1/2	3/8	1.71	.87	1.31	.56	.68	13/16
8-1/2 ZHBW2	810-1-8W	1/2	1/2	1.93	.87	1.53	.75	.84	7/8
8-3/4 ZHBW2	810-1-12W	1/2	3/4	1.99	.87	1.59	.75	1.05	1-1/8
8-1 ZHBW2	810-1-16W	1/2	1	2.28	.87	1.88	.94	1.32	1-3/8
8-1-1/2 ZHBW2	810-1-24W	1/2	1-1/2	2.50	.87	2.10	1.03	1.90	2
10-1/4 ZHBW2	1010-1-4W	5/8	1/4	1.74	.87	1.34	.56	.54	15/16
10-3/8 ZHBW2	1010-1-6W	5/8	3/8	1.74	.87	1.34	.56	.67	15/16
10-1/2 ZHBW2	1010-1-8W	5/8	1/2	1.93	.87	1.53	.75	.84	15/16
10-3/4 ZHBW2	1010-1-12W	5/8	3/4	1.99	.87	1.59	.75	1.05	1-1/8
12-3/8 ZHBW2	1210-1-6W	3/4	3/8	1.81	.87	1.41	.56	.67	1-1/8
12-1/2 ZHBW2	1210-1-8W	3/4	1/2	1.99	.87	1.59	.75	.84	1-1/8
12-3/4 ZHBW2	1210-1-12W	3/4	3/4	1.99	.87	1.59	.75	1.05	1-1/8
12-1 ZHBW2	1210-1-16W	3/4	1	2.28	.87	1.88	.94	1.32	1-3/8
16-1/2 ZHBW2	1610-1-8W	1	1/2	2.18	1.05	1.78	.75	.84	1-3/8
16-3/4 ZHBW2	1610-1-12W	1	3/4	2.27	1.05	1.78	.75	1.05	1-3/8
16-1 ZHBW2	1610-1-16W	1	1	2.46	1.05	1.97	.94	1.32	1-3/8
16-1-1/4 ZHBW2	1610-1-20W	1	1-1/4	2.56	1.05	2.07	.94	1.66	1-3/4
16-1-1/2 ZHBW2	1610-1-24W	1	1-1/2	2.68	1.05	2.19	1.03	1.90	2
20-1 ZHBW2	2000-1-16W	1-1/4	1	3.06	1.52	2.20	.94	1.32	1-3/4
20-1-1/4 ZHBW2	2000-1-20W	1-1/4	1-1/4	3.03	1.52	2.17	.94	1.66	1-3/4
20-1-1/2 ZHBW2	2000-1-24W	1-1/4	1-1/2	3.16	1.52	2.30	1.03	1.90	2
24-1 ZHBW2	2400-1-16W	1-1/2	1	3.50	1.77	2.44	.94	1.32	2-1/8
24-1-1/4 ZHBW2	2400-1-20W	1-1/2	1-1/4	3.36	1.77	2.30	.94	1.66	2-1/8
24-1-1/2 ZHBW2	2400-1-24W	1-1/2	1-1/2	3.50	1.77	2.44	1.03	1.90	2-1/8
32-2 ZHBW2	3200-1-32W	2	2	4.47	2.47	3.00	1.06	2.38	2-3/4

NOTE: A and C dimensions are typical finger-tight. Dimensions for reference only, subject to change. Pipe Buttweld end will conform to Schedule 80 unless otherwise noted. For A-LOK® tube fitting double ferrule system replace "B" (ZHBW2) with a "L" (ZHLW2)