

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).

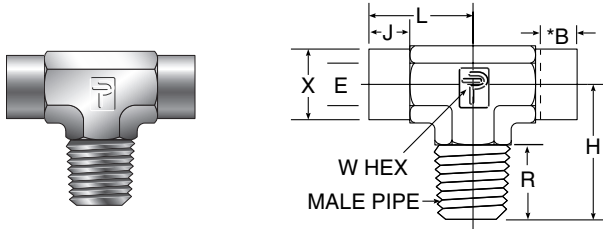
Material: Stainless Steel - SS (316L)

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.

MALE BRANCH TEE – SOCKET WELD – MALE OUTLET TEE

SERIES SW



Part No.	Tube O.D.	Male Pipe	E Small Bore	L	H	X Dia.	W Hex	*B	J	R	Work Pres.
2 SW	1/8	1/8	.09	.70	.74	.375	1/2	1.56	.34	.38	9,100
3 SW	3/16	1/8	.14	.75	.75	.438	1/2	.203	.39	.38	9,100
4 SW	1/4	1/8	.19	.84	.79	.500	9/16	.250	.44	.38	9,100
5 SW	5/16	1/8	.19	.90	.79	.594	9/16	.313	.50	.38	9,100
6 SW	3/8	1/4	.28	1.08	1.12	.625	13/16	.344	.53	.56	7,500
8 SW	1/2	3/8	.41	1.14	1.12	.781	13/16	.406	.59	.56	7,200
10 SW	5/8	1/2	.50	1.36	1.47	.938	1-1/16	.469	.66	.75	5,800
12 SW	3/4	3/4	.66	1.39	1.46	1.094	1-1/16	.500	.69	.75	6,000
14 SW	7/8	3/4	.72	1.58	1.65	1.312	1-3/8	.500	.69	.75	5,700
16 SW	1	1	.91	1.84	2.03	1.438	1-5/16	.563	.75	.94	4,400
20 SW	1-1/4	1-1/4	1.06	2.10	2.27	1.750	1-7/8	.625	.81	.97	3,500
24 SW	1-1/2	1-1/2	1.31	2.54	2.70	2.000	2-1/2	.670	.86	1.00	2,900
32 SW	2	2	1.81	2.78	2.85	2.625	2-13/16	.781	.97	1.03	2,600

*Socket Depth

NOTE: Other drop sizes available upon request. Dimensions for reference only, subject to change.