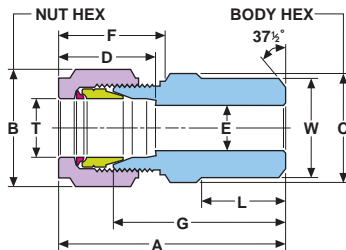


Butt Weld Connector: CBW

connects fractional tube to pipe



Metric fitting shown



Part Number*	T	W	Nom.	Dimensions — inches							
	Tube O.D.	Butt Weld O.D.	Pipe Size	A	B Hex Flat	C Hex Flat	D	E min	F	G	L
2CBW2 []	1/8	.41	1/8	1.22	7/16	7/16	.56	.22	.67	.91	.38
3CBW2 []	3/16	.41	1/8	1.27	1/2	7/16	.59	.22	.70	.95	.38
4CBW2 []	1/4	.41	1/8	1.33	9/16	1/2	.64	.22	.77	1	.38
4CBW4 []	1/4	.54	1/4	1.52	9/16	9/16	.64	.30	.77	1.19	.56
6CBW4 []	3/8	.54	1/4	1.63	11/16	5/8	.72	.30	.83	1.28	.56
6CBW6 []	3/8	.68	3/8	1.63	11/16	11/16	.72	.42	.83	1.28	.56
6CBW8 []	3/8	.84	1/2	1.84	11/16	7/8	.72	.55	.83	1.50	.75
8CBW4 []	1/2	.54	1/4	1.69	7/8	13/16	.97	.30	.92	1.22	.56
8CBW6 []	1/2	.68	3/8	1.78	7/8	13/16	.97	.42	.92	1.31	.56
8CBW8 []	1/2	.84	1/2	1.97	7/8	7/8	.97	.55	.92	1.50	.75
10CBW8 []	5/8	.84	1/2	1.97	1	15/16	1	.55	.97	1.53	.75
12CBW12 []	3/4	1.05	3/4	2.03	1 1/8	1 1/16	1	.78	.97	1.59	.75
16CBW16 []	1	1.32	1	2.53	1 1/2	1 3/8	1.31	1	1.08	1.97	.94
20CBW20 []	1 1/4	1.25	2	3.04	2	1 3/4	1.62	1.09	1.53	2.17	.94
24CBW24 []	1 1/2	1.50	2 1/4	3.50	2 1/4	2 1/8	1.97	1.34	1.78	2.43	1.03
32CBW32 []	2	2	3	4.47	3	2 3/4	2.66	1.88	2.47	3	1.06

Butt Weld Connector: CBW/ME

connects metric tube to pipe

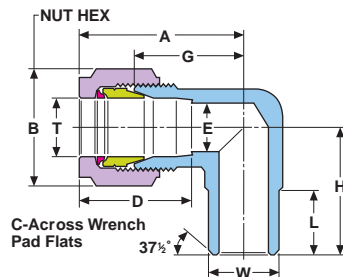
Part Number*	T	W	Nom.	Dimensions — mm							
	Tube O.D.	Butt Weld O.D.	Pipe Size	A	B Hex Flat	C Hex Flat	D	E min	F	G	L
3CBW2 []ME	3	10.3	1/8	31.0	11.1	11.1	14.3	2.2	17.1	23.0	9.5
4CBW2 []ME	4	10.3	1/8	34.1	12.7	11.1	15.1	2.4	17.9	26.3	9.5
6CBW2 []ME	6	10.3	1/8	35.0	14.3	12.7	16.3	3.8	19.5	26.7	9.5
6CBW4 []ME	6	13.7	1/4	39.9	14.3	14.3	16.3	3.8	19.5	31.5	14.3
8CBW2 []ME	8	10.3	1/8	34.5	15.9	14.3	16.7	3.8	19.1	26.5	9.5
8CBW4 []ME	8	13.7	1/4	39.4	15.9	14.3	16.7	5.8	19.1	31.4	14.3
8CBW6 []ME	8	17.2	3/8	39.4	15.9	17.5	16.7	5.8	19.1	31.4	14.2
8CBW8 []ME	8	21.5	1/2	45.0	15.9	22.2	16.7	5.8	19.1	37.0	19.1
10CBW4 []ME	10	13.7	1/4	40.5	19.1	17.5	17.5	7.7	19.8	32.5	14.3
10CBW6 []ME	10	17.2	3/8	41.5	19.1	17.5	17.5	7.9	19.8	33.5	14.2
10CBW8 []ME	10	21.3	1/2	46.1	19.1	22.2	17.5	7.9	19.8	38.1	19.1
12CBW4 []ME	12	13.7	1/4	43.7	22.2	20.6	24.6	7.7	23.4	31.8	14.3
12CBW6 []ME	12	17.2	3/8	44.0	22.2	22.2	24.6	7.9	23.4	32.0	14.2
12CBW8 []ME	12	21.3	1/2	50.0	22.2	22.2	24.6	9.9	23.4	38.1	19.1
12CBW12 []ME	12	26.7	3/4	51.8	22.2	27.0	24.6	9.9	23.4	39.9	19.1
14CBW8 []ME	14	21.3	1/2	47.5	23.8	22.2	22.2	11.9	21.0	38.1	19.1
16CBW8 []ME	16	21.3	1/2	50.0	25.4	23.8	25.0	12.7	23.4	38.9	19.1
18CBW8 []ME	18	21.3	1/2	51.2	28.6	27.0	25.4	13.8	24.6	41.3	19.1
22CBW16 []ME	22	33.4	1	57.4	31.8	34.9	27.0	17.9	24.6	46.2	23.8
25CBW16 []ME	25	33.4	1	64.0	38.1	34.9	33.3	21.7	27.4	50.0	23.8

Butt Weld Elbow: LBW

connects fractional tube to pipe



Metric fitting shown



Part Number*	T	W	Nom.	Dimensions — inches							
	Tube O.D.	Butt Weld O.D.	Pipe Size	A	B Hex Flat	C	D	E min	G	H	L
2LBW2 []	1/8	.41	1/8	.97	7/16	7/16	.56	.09	.66	.72	.41
3LBW2 []	3/16	.41	1/8	1	1/2	7/16	.59	.13	.69	.75	.45
4LBW2 []	1/4	.41	1/8	1.05	9/16	7/16	.64	.19	.72	.78	.48
4LBW4 []	1/4	.54	1/4	1.11	9/16	1/2	.64	.19	.78	.94	—
6LBW4 []	3/8	.54	1/4	1.19	11/16	1/2	.72	.30	.84	1	—
8LBW6 []	1/2	.68	3/8	1.44	7/8	11/16	.97	.42	.97	1.13	—
8LBW8 []	1/2	.84	1/2	1.50	7/8	13/16	.97	.42	1.03	1.31	—
10LBW8 []	5/8	.84	1/2	1.47	1	13/16	1	.50	1.03	1.38	—
12LBW12 []	3/4	1.05	3/4	1.59	1 1/8	13/16	1	.66	1.16	1.50	—
16LBW12 []	1	1.05	3/4	1.88	1 1/2	1 1/4	1.31	.88	1.31	1.66	.86
16LBW16 []	1	1.32	1	1.88	1 1/2	1 1/4	1.31	.88	1.31	1.84	—

Butt Weld Elbow: LBW/ME

connects metric to pipe

Part Number*	T	W	Nom.	Dimensions — mm							
	Tube O.D.	Butt Weld O.D.	Pipe Size	A	B Hex Flat	C	D	E min	G	H	L
3LBW2 []ME	3	10.3	1/8	25.0	11.1	11.0	14.3	2.2	17.0	19.0	9.5
6LBW2 []ME	6	10.3	1/8	26.5	14.3	11.0	16.3	3.8	18.5	20.0	9.5
6LBW4 []ME	6	13.7	1/4	28.0	14.3	12.5	16.3	3.8	18.5	25.5	14.3
12LBW12 []ME	12	26.7	3/4	38.1	22.2	25.4	24.6	9.9	26.2	38.1	19.1
16LBW8 []ME	16	21.3	1/2	37.5	25.4	21.5	25.0	12.7	26.0	33.5	19.1
18LBW8 []ME	18	21.3	1/2	39.4	28.6	25.4	25.4	13.9	29.5	38.1	19.1

* [] see page 6 for material specifications.