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grooved couplings, fittings & components for copper tubing

The Shurjoint copper series is the most complete line of grooved components available for installation on copper tubing (CTS) in sizes 2" - 6" (50 mm - 150 mm) Shurjoint grooved mechanical components provide a fast, easy, economical and durable joining method of copper tubing without the use of heat or solder.

Grooved-end fittings are produced from wrought copper and or bronze castings. Wrought copper conforms to ASTM B75 UNC C12200 (99.9% copper). Bronze castings are produced from lead-free alloys C83470 and or C89836 bismuth copper alloy per ASTM B584. Materials are in compliance with NSF/ANSI 61 and NSF/ANSI 372 for potable water service applications.

copper tubing - dimension & pressure ratings

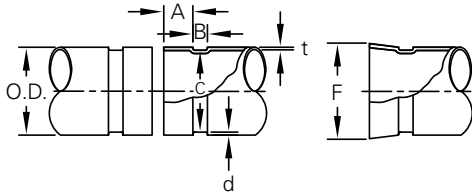
ASTM B88 & B306

nom. size	type	D pipe O.D.	t thickness		P max. pressure	
			in	mm	psi	bar
2" 50	K	2.125" (54 mm)	0.083"	2.11 mm	484 psi	33 bar
	L		0.070"	1.78 mm	406 psi	28 bar
	M		0.058"	1.47 mm	335 psi	23 bar
	DWV		0.042"	1.07 mm	241 psi	17 bar
2½" 65	K	2.625" (66.7 mm)	0.095"	2.41 mm	4473 psi	1 bar
	L		0.080"	2.03 mm	375 psi	26 bar
	M		0.065"	1.65 mm	303 psi	21 bar
	DWV		N/A	N/A	N/A	N/A
3" 80	K	3.125" (79.4 mm)	0.109"	2.77 mm	431 psi	30 bar
	L		0.090"	2.29 mm	354 psi	24 bar
	M		0.072"	1.83 mm	282 psi	19 bar
	DWV		0.045"	1.14 mm	175 psi	12 bar
4" 100	K	4.125" (104.8 mm)	0.134"	3.40 mm	400 psi	28 bar
	L		0.110"	2.79 mm	327 psi	23 bar
	M		0.095"	2.41 mm	282 psi	19 bar
	DWV		0.058"	1.47 mm	171 psi	12 bar
5" 125	K	5.125" (130.2 mm)	0.160"	4.06 mm	384 psi	26 bar
	L		0.123"	3.12 mm	294 psi	20 bar
	M		0.109"	2.77 mm	260 psi	18 bar
	DWV		0.072"	1.83 mm	171 psi	12 bar
6 150	K	6.125" (155.6 mm)	0.192"	4.88 mm	386 psi	27 bar
	L		0.140"	3.56 mm	279 psi	19 bar
	M		0.122"	3.10 mm	243 psi	17 bar
	DWV		0.083"	2.11 mm	164 psi	11 bar

notes:

1. Design stress: 6000 psi (41.4 MPa)
2. Pressures are based on water at 73.4°F (23°C).

standard roll groove for U.S. standard copper tubing



pipe O.D.

Maximum allowable tolerances from square cut ends is 0.03" for 2" thru 3"; 0.045" for 4" thru 6"; and 0.060" for sizes 8".

gasket seating surface

The gasket seating surface shall be free from deep scores, marks, or ridges that would prevent a positive seal.

groove width

Groove width is to be measured between vertical flanks of the groove side walls.

groove diameter

The "C" diameters are average values. The groove must be of uniform depth around the entire pipe circumference.

groove depth

The "d" is for reference use only. The groove dimension shall be determined by the groove diameter "C".

minimum wall thickness

The DWV pipe (ASTM B-306) is minimum wall thickness that may be roll grooved.

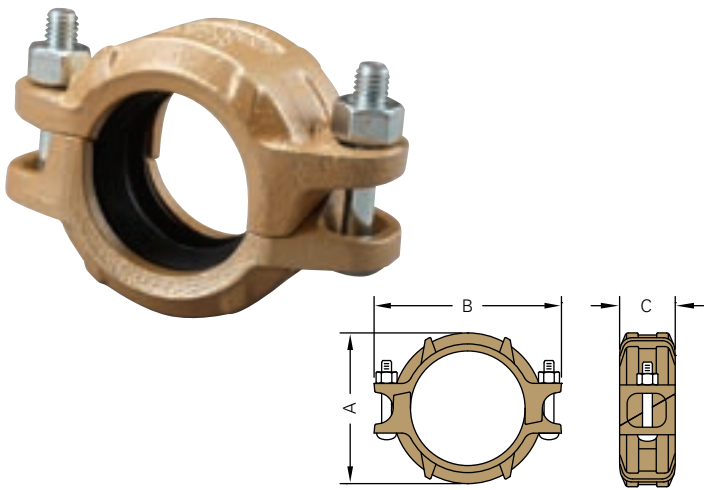
flare diameter

The pipe end that may flare when the groove is rolled shall be within this limit when measured at the extreme end of the pipe.

nom. size	pipe O.D. basic size	A gasket seat $\pm 0.03 / \pm 0.79$	B groove width $\pm 0.03 / \pm 0.79$	C groove dia. $+0/-0.02 / +0/-0.51$	d groove depth (def.)	t min. allowed wall thick.	F max. allowed flare dia.
2"	2.125"	0.610"	0.300"	2.029"	0.048"	0.064"	2.220"
50	(54.0 mm)	(15.5 mm)	(7.6 mm)	(51.5 mm)	(1.2 mm)	(1.6 mm)	(56.4 mm)
2½"	2.625"	0.610"	0.300"	2.525"	0.050"	0.065"	2.720"
65	(66.7 mm)	(15.5 mm)	(7.6 mm)	(64.1 mm)	(1.3 mm)	(1.7 mm)	(69.1 mm)
3"	3.125"	0.610"	0.300"	3.025"	0.050"	DWV	3.220"
80	(79.4 mm)	(15.5 mm)	(7.6 mm)	(76.8 mm)	(1.3 mm)	DWV	(81.8 mm)
4"	4.125"	0.610"	0.300"	4.019"	0.053"	DWV	4.220"
100	(104.8 mm)	(15.5 mm)	(7.6 mm)	(102.1 mm)	(1.4 mm)	DWV	(107.2 mm)
5"	5.125"	0.610"	0.300"	4.999"	0.053"	DWV	5.220"
125	(130.2 mm)	(15.5 mm)	(7.6 mm)	(127.0 mm)	(1.4 mm)	DWV	(132.6 mm)
6"	6.125"	0.610"	0.300"	5.999"	0.063"	DWV	6.220"
150	(155.6 mm)	(15.5 mm)	(7.6 mm)	(152.3 mm)	(1.6 mm)	DWV	(158.0 mm)

caution: as copper tubing is thinner than carbon steel pipe, always use a roll set specifically designed for use on copper tubing

C305 rigid coupling for copper tubing (CTS)



The Model C305 features angle bolt pad design for a rigid joint and easy swing-over installation. The C305 couplings are comprised of epoxy coated ductile iron housings and EPDM GapSeal gaskets and are rated up to 300 psi (20 Bar), depending on the type and size of copper tubing used.

dimensions

type K,L,M (ASTM B-88) & type DWV (ASTM B306)



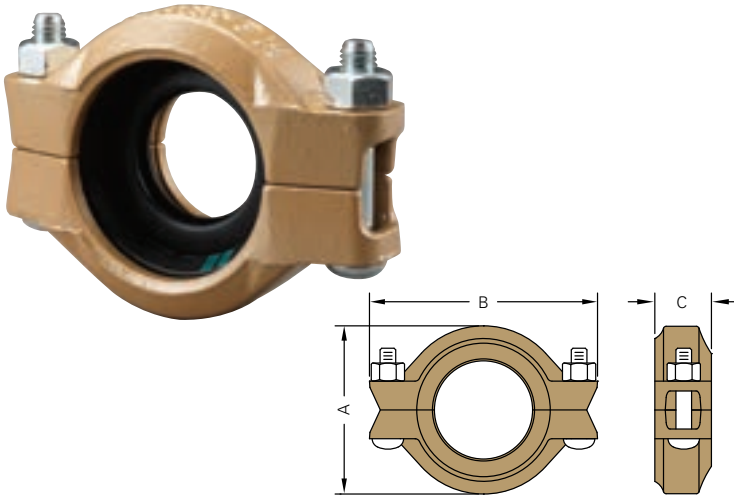
nom. size	pipe O.D.	max working pressure (CWP)*	max. end load (CWP)	pipe end seperation	dimensions			bolt size	weight
					A	B	C		
2"	2.125" (54.0 mm)	300 psi (20 bar)	1060" (4.58 mm)	0.06" (1.5 mm)	3.17" (81 mm)	4.63" (118 mm)	1.89" (48 mm)	3/8 x 2 1/8"	1.8 lbs (0.8 Kgs)
2 1/2"	2.625" (66.7 mm)	300 psi (20 bar)	1620" (6.98 mm)	0.06" (1.5 mm)	3.66" (93 mm)	5.28" (134 mm)	1.89" (48 mm)	3/8 x 2 1/8"	2.0 lbs (0.9 Kgs)
3"	3.125" (79.4 mm)	300 psi (20 bar)	2290" (9.90 mm)	0.06" (1.5 mm)	4.21" (107 mm)	6.06" (154 mm)	1.89" (48 mm)	1/2 x 3"	2.8 lbs (1.3 Kgs)
4"	4.125" (104.8 mm)	300 psi (20 bar)	4000" (17.24 mm)	0.06" (1.5 mm)	5.20" (132 mm)	7.28" (185 mm)	1.89" (48 mm)	1/2 x 3"	3.5 lbs (1.6 Kgs)
5"	5.125" (130.2 mm)	300 psi (20 bar)	6180" (26.61 mm)	0.06" (1.5 mm)	6.26" (159 mm)	8.66" (220 mm)	1.89" (48 mm)	5/8 x 3 1/2"	4.6 lbs (2.2 Kgs)
6"	6.125" (155.6 mm)	300 psi (20 bar)	8830" (38.01 mm)	0.06" (1.5 mm)	7.24" (184 mm)	9.76" (248 mm)	1.89" (48 mm)	5/8 x 3 1/2"	5.5 lbs (2.5 Kgs)

* Working pressure is for connection with roll-grooved Type K copper tubing.
Notes / Options: Couplings with rubber gaskets are likely to function as an insulator. Where electrical continuity is required, the Shurjoint Model 96 Continuity Clip will restore electrical continuity to the system. The continuity clip satisfies IEE Wiring Regulations.

BS EN 1057

nom. size	pipe O.D.	pipe end seperation	dimensions			bolt size	weight
			A	B	C		
50 mm	54.0 mm	1.5 mm	81 mm	118 mm	48 mm	M10 x 55 mm	0.8 Kgs
65 mm	66.7 mm	1.5 mm	93 mm	134 mm	48 mm	M10 x 55 mm	0.9 Kgs
80 mm	76.1 mm	1.5 mm	104 mm	136 mm	48 mm	M10 x 55 mm	1.3 Kgs
100 mm	108.0 mm	3.2 mm	138 mm	176 mm	48 mm	M12 x 75 mm	1.6 Kgs
125 mm	133.0 mm	3.2 mm	165 mm	220 mm	48 mm	M16 x 90 mm	2.2 Kgs
150 mm	159.0 mm	3.2 mm	190 mm	248 mm	48 mm	M16 x 90 mm	2.5 Kgs

C306 reducing coupling for copper tubing (CTS)



The Model C306 Reducing Coupling allows direct reduction on a piping run and eliminates the need for a concentric reducer and couplings. The epoxy coated ductile iron coupling housings help eliminate galvanic local cell and stray current problems. The specially designed rubber gasket prevents the smaller pipe from telescoping into the larger pipe during vertical installation.

dimensions



nom. size	pipe O.D.	max working pressure (CWP)*	max. end load (CWP)	pipe end separation	deflection		dimensions			bolt size	weight
					deg. per coupling	pipe	A	B	C		
2½ x 2"	2.625 x 2.215"	300 psi	1622 lbs	0.06"	1° - 22'	0.29"/ft	3.70"	5.55"	1.77"	½ x 3"	2.9 lbs
65 x 50	(66.7 x 54.0 mm)	(20 bar)	(6.98 kN)	(1.6 mm)		(24.0 mm/m)	(94 mm)	(141 mm)	(45 mm)		(1.3 Kgs)
3 x 2"	3.125 x 2.125"	300 psi	2300 lbs	0.06"	1° - 09'	0.24"/ft	4.21"	5.98"	1.77"	½ x 3"	3.3 lbs
80 x 50	(79.4 x 54.0 mm)	(20 bar)	(9.89 kN)	(1.6 mm)		(20.0 mm/m)	(107 mm)	(152 mm)	(45 mm)		(1.5 Kgs)
3 x 2½"	3.125 x 2.625"	300 psi	2300 lbs	0.06"	1° - 09'	0.24"/ft	4.21"	5.98"	1.77"	½ x 3"	3.0 lbs
80 x 65	(79.4 x 66.7 mm)	(20 bar)	(9.89 kN)	(1.6 mm)		(20.0 mm/m)	(107 mm)	(152 mm)	(45 mm)		(1.4 Kgs)
4 x 2½"	4.125 x 2.625"	300 psi	4007 lbs	0.06"	0° - 53'	0.18"/ft	5.20"	7.20"	1.77"	½ x 3"	4.2 lbs
100 x 65	(104.8 x 66.7 mm)	(20 bar)	(17.23 kN)	(1.6 mm)		(15.0 mm/m)	(132 mm)	(183 mm)	(45 mm)		(1.9 Kgs)
4 x 3"	4.125 x 3.125"	300 psi	4007 lbs	0.06"	0° - 53'	0.18"/ft	5.20"	7.20"	1.77"	½ x 3"	4.0 lbs
100 x 80	(104.8 x 79.4 mm)	(20 bar)	(17.23 kN)	(1.6 mm)		(15.0 mm/m)	(132 mm)	(183 mm)	(45 mm)		(1.8 Kgs)
5 x 4"	5.125 x 4.125"	300 psi	6186 lbs	0.06"	0° - 42'	0.15"/ft	6.30"	8.82"	1.77"	¾ x 3½"	5.5 lbs
125 x 100	(130.2 x 104.8 mm)	(20 bar)	(26.60 kN)	(1.6 mm)		(12.0 mm/m)	(160 mm)	(224 mm)	(45 mm)		(2.5 Kgs)
6 x 4"	6.125 x 4.125"	300 psi	8835 lbs	0.06"	0° - 36'	0.13"/ft	7.28"	9.88"	1.77"	¾ x 3½"	7.3 lbs
150 x 100	(155.6 x 104.8 mm)	(20 bar)	(37.99 kN)	(1.6 mm)		(10.3 mm/m)	(185 mm)	(251 mm)	(45 mm)		(3.3 Kgs)

* Working pressure is for connection with roll-grooved Type K copper tubing.

Notes / Options: Couplings with rubber gaskets are likely to function as an insulator. Where electrical continuity is required, the Shurjoint Model 96 Continuity Clip will restore electrical continuity to the system. The continuity clip satisfies IEE Wiring Regulations.

96 continuity clip



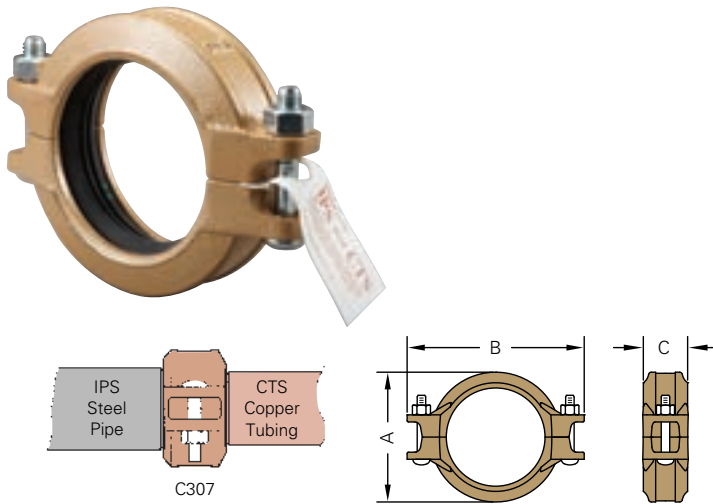
Couplings with rubber gaskets are likely to function as an insulator. Where electrical continuity is required, the Shurjoint continuity clip will restore electrical continuity to the system. The electrical continuity clip satisfies IEE Wiring Regulations. Material: Copper or Brass plate.

Note: The pipe surface where continuity clips come in contact must be conductive. If the surface is painted, the paint should be removed to expose bare metal.

dimensions

model	coupling size	carton Q'ty/pcs
96-1	1" - 3"	600
96-2	4" - 6"	600
96-3	8" - 12"	600

C307 transition coupling (IPS x CTS)



The Model C307 Transition Coupling provides for a direct connection and transition between grooved end IPS steel pipe, fittings or valves and grooved end CTS copper tubing. The rubber gasket isolates the fluid from coupling housings and the epoxy coated housings help eliminate galvanic local cell and stray current problems. The C307 is rated to 300 psi (20 Bar).

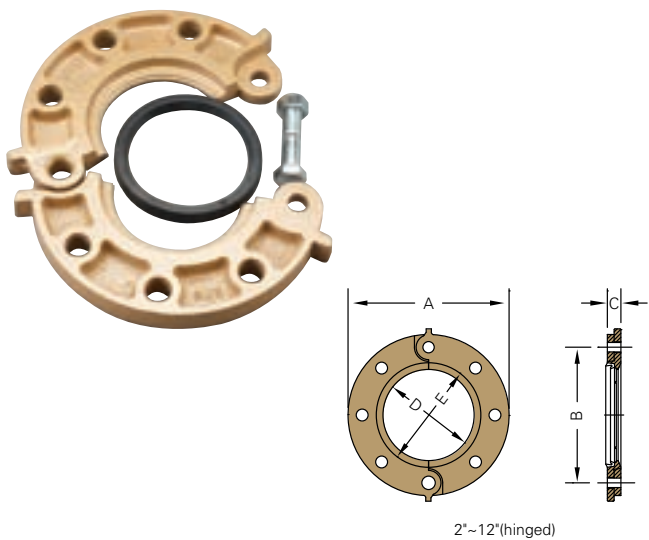
dimensions

nom. size	pipe O.D. ips x cts	max. working pressure (CWP)*	axial displacement	dimensions			bolt size	weight
				A	B	C		
2"	2.375 x 2.125"	300 psi	0 - 0.06"	3.31"	5.00"	1.81"	½ x 2⅝"	2.0 lbs
50	(60.3 x 54.0 mm)	(20 bar)	(0 - 1.6 mm)	(84 mm)	(127 mm)	(46 mm)		(0.9 Kgs)
2½"	2.875 x 2.625"	300 psi	0 - 0.06"	3.90"	5.59"	1.81"	⅝ x 2⅝"	2.2 lbs
65	(73.0 x 66.7 mm)	(20 bar)	(0 - 1.6 mm)	(99 mm)	(142 mm)	(46 mm)		(1.0 Kgs)
3"	3.500 x 3.125"	300 psi	0 - 0.06"	4.57"	6.38"	1.81"	½ x 3"	3.0 lbs
80	(88.9 x 79.4 mm)	(20 bar)	(0 - 1.6 mm)	(116 mm)	(162 mm)	(46 mm)		(1.4 Kgs)
4"	4.500 x 4.125"	300 psi	0 - 0.06"	5.71"	6.69"	1.85"	½ x 3"	4.2 lbs
100	(114.3 x 104.8 mm)	(20 bar)	(0 - 1.6 mm)	(145 mm)	(170 mm)	(47 mm)		(1.9 Kgs)
6"	6.625 x 6.125"	300 psi	0 - 0.06"	8.03"	10.59"	1.97"	⅝ x 3½"	7.3 lbs
150	(168.3 x 155.6 mm)	(20 bar)	(0 - 1.6 mm)	(204 mm)	(269 mm)	(50 mm)		(3.3 Kgs)

* Working pressure is for connection with roll-grooved Type K copper tubing.

Notes / Options: Couplings with rubber gaskets are likely to function as an insulator. Where electrical continuity is required, the Shurjoint Model 96 Continuity Clip will restore electrical continuity to the system. The continuity clip satisfies IEE Wiring Regulations.

C341 flange adapter for copper tubing (CTS)



The Shurjoint Model C341 Flange Adapter allows for the direct connection of grooved-end copper tubing with ANSI Class 125/150 (steel) or ASME B16.24 (copper) Class 150 flanged components without the need for heat or solder. The pressure responsive gasket seals on the outside diameter of the copper tubing and isolates the flange segments from the internal fluid.

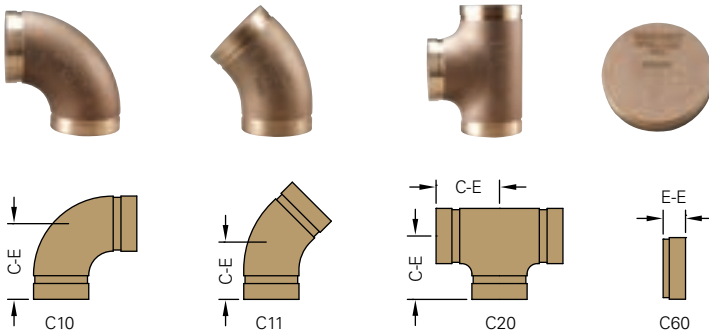
dimensions			dimensions					bolt		weight
nom. size	pipe O.D.	max. working pressure (CWP)*	A	B	C	D	E	no.	size	
2"	2.125"	300 psi	6.00"	4.75"	0.75"	2.13"	3.20"	4	5/8 x 3"	4.6 lbs
50	(54.0 mm)	(20 bar)	(152 mm)	(121 mm)	(19 mm)	(54 mm)	(81 mm)			(2.1 Kgs)
2½"	2.625"	300 psi	7.00"	5.50"	0.87"	2.63"	3.91"	4	5/8 x 3"	6.6 lbs
65	(66.7 mm)	(20 bar)	(178 mm)	(140 mm)	(22 mm)	(67 mm)	(99 mm)			(3.0 Kgs)
3"	3.125"	300 psi	7.50"	6.00"	0.94"	3.13"	4.53"	4	5/8 x 3"	7.7 lbs
80	(79.4 mm)	(20 bar)	(190 mm)	(152 mm)	(24 mm)	(80 mm)	(115 mm)			(3.5 Kgs)
4"	4.125"	300 psi	9.00"	7.50"	0.94"	4.13"	5.53"	4	5/8 x 3"	9.5 lbs
100	(104.8 mm)	(20 bar)	(229 mm)	(191 mm)	(24 mm)	(105 mm)	(140 mm)			(4.3 Kgs)
5"	5.125"	300 psi	10.00"	8.50"	0.94"	5.13"	6.71"	8	¾ x 3½"	12.8 lbs
125	(130.2 mm)	(20 bar)	(254 mm)	(216 mm)	(24 mm)	(130 mm)	(170 mm)			(5.8 Kgs)
6"	6.125"	300 psi	11.00"	9.50"	1.00"	6.13"	7.79"	8	¾ x 3½"	13.6 lbs
150	(155.6 mm)	(20 bar)	(279 mm)	(241 mm)	(25 mm)	(156 mm)	(198 mm)			(6.2 Kgs)

* Working Pressure is for connection with roll-grooved Type K copper tubing
** Please note that 2", 2½", and 3" Model C341 Flanges cannot be used for making direct connections to Model SJ-C300 Butterfly Valves due to bolt pad interference with the valve.

grooved fittings for copper tubing

Shurjoint Grooved-end fittings are produced from bronze castings. Bronze castings are produced from lead-free alloys C83470 or C89836 bismuth alloy per ASTM B584. Materials are in compliance with NSF/ANSI 61 and NSF/ANSI 372 for potable water service applications. Shurjoint fittings are designed for use with Shurjoint CTS couplings, components and ASTM B88 roll grooved copper tubing type K, L, M and ASTM B-306 DWV.

C10 90° elbow
C11 45° elbow
C20 tee
C60 cap



The Shurjoint Model C341 Flange Adapter allows for the direct connection of grooved-end copper tubing with ANSI Class 125/150 (steel) or ASME B16.24 (copper) Class 150 flanged components without the need for heat or solder. The pressure responsive gasket seals on the outside diameter of the copper tubing and isolates the flange segments from the internal fluid.

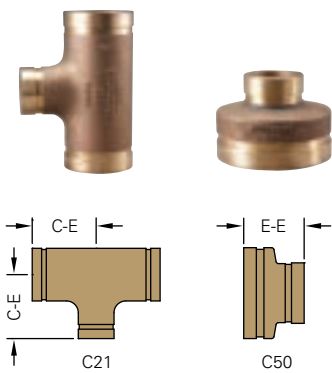
dimensions

nom. size	pipe O.D.	C10 90° elbow		C11 45° elbow		C20 tee		C60 cap	
		C-E	weight	C-E	weight	C-E	weight	E-E	weight
2"	2.125"	2.91"	1.5 lbs	2.19"	1.7 lbs	2.44"	1.8 lbs	0.96"	0.6 lbs
50	(54.0 mm)	(74 mm)	(0.7 Kgs)	(56 mm)	(0.8 Kgs)	(62 mm)	(0.8 Kgs)	(24 mm)	(0.3 Kgs)
2½"	2.625"	3.31"	2.0 lbs	2.31"	2.1 lbs	3.20"	2.9 lbs	0.96"	0.9 lbs
65	(66.7 mm)	(84 mm)	(0.9 Kgs)	(59 mm)	(1.0 Kgs)	(81 mm)	(1.3 Kgs)	(24 mm)	(0.4 Kgs)
3"	3.125"	3.81"	2.6 lbs	2.59"	3.2 lbs	3.50"	3.7 lbs	0.96"	1.2 lbs
80	(79.4 mm)	(97 mm)	(1.2 Kgs)	(66 mm)	(1.4 Kgs)	(89 mm)	(1.7 Kgs)	(24 mm)	(0.6 Kgs)
4"	4.125"	4.75"	5.5 lbs	3.35"	5.5 lbs	4.25"	7.3 lbs	0.96"	2.1 lbs
100	(104.8 mm)	(121 mm)	(2.5 Kgs)	(85 mm)	(2.5 Kgs)	(108 mm)	(3.3 Kgs)	(24 mm)	(1.0 Kgs)
5"	5.125"	5.94"	11.5 lbs	3.25"	7.9 lbs	5.94"	17.2 lbs	0.96"	3.5 lbs
125	(130.2 mm)	(151 mm)	(5.2 Kgs)	(83 mm)	(3.6 Kgs)	(151 mm)	(7.8 Kgs)	(24 mm)	(1.6 Kgs)
6"	6.125"	6.94"	16.5 lbs	3.63"	10.2 lbs	6.94"	26.2 lbs	0.96"	4.4 lbs
150	(155.6 mm)	(176 mm)	(7.5 Kgs)	(92 mm)	(4.6 Kgs)	(176 mm)	(11.9 Kgs)	(24 mm)	(2.0 Kgs)

* Working Pressure is for connection with roll-grooved Type K copper tubing

** Please note that 2", 2½", and 3" Model C341 Flanges cannot be used for making direct connections to Model SJ-C300 Butterfly Valves due to bolt pad interference with the valve.

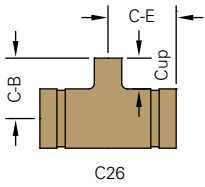
C21 reducing tee
C50 concentric reducer



dimensions

nom. size	pipe O.D.	C21 reducing tee		C50 concentric reducer	
		C-E	weight	E-E	weight
2½ x 2"	2.625 x 2.125"	3.20"	3.6 lbs	2.50"	1.2 lbs
65 x 50	(66.7 x 54.0 mm)	(81 mm)	(1.6 Kgs)	(64 mm)	(0.6 Kgs)
3 x 2"	3.125 x 2.125"	3.50"	4.8 lbs	2.50"	1.5 lbs
80 x 50	(79.4 x 54.0 mm)	(89 mm)	(2.2 Kgs)	(64 mm)	(0.7 Kgs)
3 x 2½"	3.125 x 2.625"	3.50"	4.8 lbs	2.50"	1.5 lbs
80 x 65	(79.4 x 66.7 mm)	(89 mm)	(2.2 Kgs)	(64 mm)	(0.7 Kgs)
4 x 2"	4.125 x 2.125"	4.25"	7.7 lbs	3.00"	2.5 lbs
100 x 50	(104.8 x 54.0 mm)	(108 mm)	(3.5 Kgs)	(76 mm)	(1.2 Kgs)
4 x 2½"	4.125 x 2.625"	4.25"	7.9 lbs	3.00"	2.6 lbs
100 x 65	(104.8 x 66.7 mm)	(108 mm)	(3.6 Kgs)	(76 mm)	(1.2 Kgs)
4 x 3"	4.125 x 3.125"	4.25"	8.1 lbs	3.00"	2.5 lbs
100 x 80	(104.8 x 79.4 mm)	(108 mm)	(3.7 Kgs)	(76 mm)	(1.1 Kgs)
5 x 3"	5.125 x 3.125"	5.94"	16.7 lbs	3.50"	4.4 lbs
125 x 80	(130.2 x 79.4 mm)	(151 mm)	(7.6 Kgs)	(89 mm)	(2.0 Kgs)
5 x 4"	5.125 x 4.125"	5.94"	17.2 lbs	3.50"	4.4 lbs
125 x 100	(130.2 x 104.8 mm)	(151 mm)	(7.8 Kgs)	(89 mm)	(2.0 Kgs)
6 x 2½"	6.125 x 2.625"	6.94"	22.9 lbs	4.00"	6.0 lbs
150 x 65	(155.6 x 66.7 mm)	(176 mm)	(10.4 Kgs)	(102 mm)	(2.7 Kgs)
6 x 3"	6.125 x 3.125"	6.94"	23.5 lbs	4.00"	6.0 lbs
150 x 80	(155.6 x 79.4 mm)	(176 mm)	(10.7 Kgs)	(102 mm)	(2.7 Kgs)
6 x 4"	6.125 x 4.125"	6.94"	23.5 lbs	4.00"	5.8 lbs
150 x 100	(155.6 x 104.8 mm)	(176 mm)	(10.7 Kgs)	(102 mm)	(2.7 Kgs)
6 x 5"	6.125 x 5.125"	6.94"	26.2 lbs	4.00"	5.9 lbs
150 x 125	(155.6 x 130.2 mm)	(176 mm)	(11.9 Kgs)	(102 mm)	(2.7 Kgs)

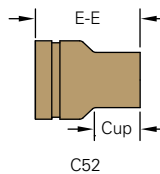
C26 reducing tee (GR x GR x CUP) - (CAST)



dimensions

C26 red. tee (gr x gr x cup)				
nom. size	C-E	C-B	cup	weight
2 x 2 x ¼"	2.20"	1.97"	0.75"	1.6 lbs
50 x 50 x 20	(56 mm)	(50 mm)	(19 mm)	(0.7 Kgs)
2 x 2 x 1"	2.33"	2.2"	0.91"	1.6 lbs
50 x 50 x 25	(59 mm)	(56 mm)	(23 mm)	(0.7 Kgs)
2 x 2 x 1¼"	2.48"	2.36"	0.97"	1.7 lbs
50 x 50 x 32	(63 mm)	(60 mm)	(25 mm)	(0.8 Kgs)
2 x 2 x 1½"	2.56"	2.28"	1.09"	2.0 lbs
50 x 50 x 40	(65 mm)	(58 mm)	(28 mm)	(0.9 Kgs)
2½ x 2½ x ¾"	2.25"	2.25"	0.75"	1.9 lbs
65 x 65 x 20	(57 mm)	(57 mm)	(19 mm)	(0.9 Kgs)
2½ x 2½ x 1"	2.40"	2.41"	0.91"	2.2 lbs
65 x 65 x 25	(61 mm)	(61 mm)	(23 mm)	(1.0 Kgs)
2½ x 2½ x 1¼"	2.52"	2.55"	0.97"	2.3 lbs
65 x 65 x 32	(64 mm)	(65 mm)	(25 mm)	(1.1 Kgs)
2½ x 2½ x 1½"	2.70"	2.67"	1.09"	2.6 lbs
65 x 65 x 40	(69 mm)	(68 mm)	(28 mm)	(1.2 Kgs)
2½ x 2½ x 2"	2.95"	2.84"	1.34"	3.0 lbs
65 x 65 x 50	(75 mm)	(72 mm)	(34 mm)	(1.4 Kgs)
3 x 3 x ¾"	2.44"	2.50"	0.75"	2.9 lbs
80 x 80 x 20	(62 mm)	(64 mm)	(19 mm)	(1.3 Kgs)
3 x 3 x 1"	2.55"	2.80"	0.91"	2.9 lbs
80 x 80 x 25	(65 mm)	(71 mm)	(23 mm)	(1.3 Kgs)
3 x 3 x 1¼"	2.63"	2.87"	0.97"	3.1 lbs
80 x 80 x 32	(67 mm)	(73 mm)	(25 mm)	(1.4 Kgs)
3 x 3 x 1½"	2.85"	2.99"	1.09"	3.3 lbs
80 x 80 x 40	(72 mm)	(76 mm)	(28 mm)	(1.5 Kgs)
3 x 3 x 2"	3.11"	3.09"	1.34"	3.7 lbs
80 x 80 x 50	(79 mm)	(78 mm)	(34 mm)	(1.7 Kgs)
4 x 4 x ¾"	3.00"	2.95"	0.75"	4.8 lbs
100 x 100 x 20	(76 mm)	(75 mm)	(19 mm)	(2.2 Kgs)
4 x 4 x 1"	3.10"	3.23"	0.91"	5.1 lbs
100 x 100 x 25	(79 mm)	(82 mm)	(23 mm)	(2.3 Kgs)
4 x 4 x 1¼"	3.25"	3.46"	0.97"	5.5 lbs
100 x 100 x 32	(83 mm)	(88 mm)	(25 mm)	(2.5 Kgs)
4 x 4 x 1½"	3.35"	3.66"	1.09"	5.6 lbs
100 x 100 x 40	(85 mm)	(93 mm)	(28 mm)	(2.5 Kgs)
4 x 4 x 2"	3.62"	3.59"	1.34"	5.9 lbs
100 x 100 x 50	(92 mm)	(91 mm)	(34 mm)	(2.7 Kgs)

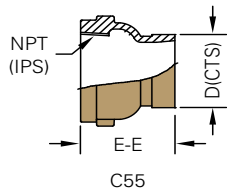
C52 concentric reducer
(GR x CUP) - (CAST)



dimensions

C52 conc. reducer (gr x cup)			
nom. size	E-E	cup	weight
2 x ¾"	---	---	---
50 x 20	---	---	---
2 x 1"	2.70"	0.91"	0.7 lbs
50 x 25	(69 mm)	(23 mm)	(0.3 Kgs)
2 x 1¼"	3.00"	0.97"	0.8 lbs
50 x 32	(76 mm)	(25 mm)	(0.4 Kgs)
2 x 1½"	2.94"	1.09"	0.8 lbs
50 x 40	(75 mm)	(28 mm)	(0.4 Kgs)
2½ x ¾"	---	---	---
65 x 20	---	---	---
2½ x 1"	3.19"	0.91"	1.2 lbs
65 x 25	(81 mm)	(23 mm)	(0.5 Kgs)
2½ x 1¼"	3.19"	0.97"	1.2 lbs
65 x 32	(81 mm)	(25 mm)	(0.5 Kgs)
2½ x 1½"	3.19"	1.09"	1.2 lbs
65 x 40	(81 mm)	(28 mm)	(0.5 Kgs)
2½ x 2"	3.19"	1.34"	1.2 lbs
65 x 50	(81 mm)	(34 mm)	(0.5 Kgs)
3 x ¾"	---	---	---
80 x 20	---	---	---
3 x 1"	---	---	---
80 x 25	---	---	---
3 x 1¼"	---	---	---
80 x 32	---	---	---
3 x 1½"	3.68"	1.09"	1.7 lbs
80 x 40	(93 mm)	(28 mm)	(0.8 Kgs)
3 x 2"	3.94"	1.34"	1.9 lbs
80 x 50	(100 mm)	(34 mm)	(0.9 Kgs)
4 x ¾"	---	---	---
100 x 20	---	---	---
4 x 1"	---	---	---
100 x 25	---	---	---
4 x 1¼"	---	---	---
100 x 32	---	---	---
4 x 1½"	---	---	---
100 x 40	---	---	---
4 x 2"	4.56"	1.34"	3.2 lbs
100 x 50	(116 mm)	(34 mm)	(1.4 Kgs)

C55 transition adapter
(IPS x CTS)

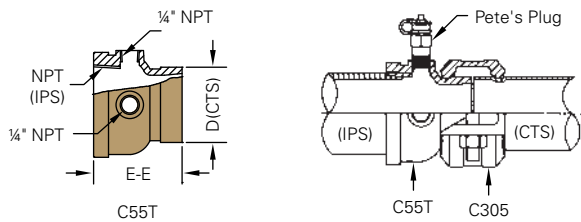


The Shurjoint Model C55 Transition Adapter provides a direct transition between male threaded-end steel pipe (IPS) and grooved-end copper tubing. The C55 is UL classified to NSF/ANSI 61 and NSF/ANSI 372 for use in potable water systems.

dimensions

nom. size IPS (NPT) x CTS (GRV)	actual pipe O.D.		E-E	weight
	steel pipe (IPS) O.D.	copper tubing (CTS) D		
1½ x 2"	1.900"	2.125"	2.50"	1.3 lbs
40 x 50	(48.3 mm)	(54.0 mm)	(63 mm)	(0.6 Kgs)
2 x 2"	2.375"	2.125"	2.50"	1.4 lbs
50 x 50	(60.3 mm)	(54.0 mm)	(63 mm)	(0.7 Kgs)
2½ x 2½"	2.875"	2.625"	2.75"	2.4 lbs
65 x 65	(73.0 mm)	(66.7 mm)	(70 mm)	(1.1 Kgs)
3 x 3"	3.500"	3.125"	3.00"	3.3 lbs
80 x 80	(88.9 mm)	(79.4 mm)	(76 mm)	(1.5 Kgs)

C55T transition adapter
(IPS/FT x CTS/GR with ¼" taps)

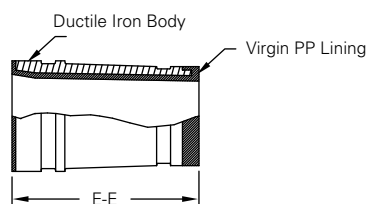


Allows for the installation of gauges or Pete's Plugs for measuring temperature and or pressure.

dimensions

nom. size IPS (NPT) x CTS (GRV)	steel pipe (IPS) O.D.	copper tubing (CTS)		weight
		D	E-E	
1½ x 2"	1.900"	2.125"	2.50"	1.1 lbs
40 x 50	(48.3 mm)	(54.0 mm)	(63 mm)	(0.5 Kgs)
2 x 2"	2.375"	2.125"	2.50"	1.3 lbs
50 x 50	(60.3 mm)	(54.0 mm)	(63 mm)	(0.6 Kgs)
2½ x 2½"	2.875"	2.625"	2.75"	2.0 lbs
65 x 65	(73.0 mm)	(66.7 mm)	(70 mm)	(0.9 Kgs)

DE30-GG dielectric transition fitting (IPS x CTS)

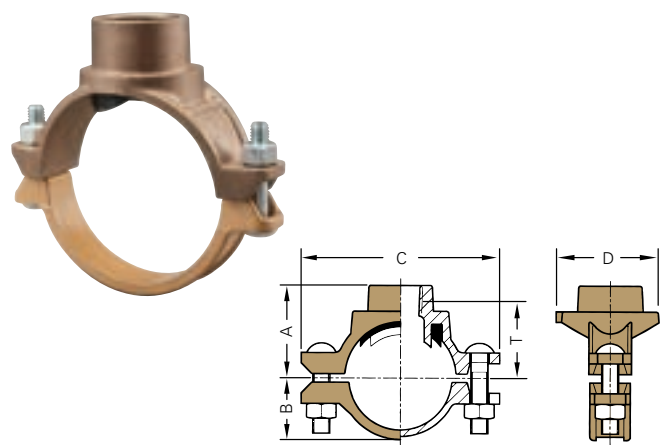


The Model DE30-GG Dielectric Transition Fitting provides a direct transition between grooved-end steel pipe (IPS) and grooved-end copper tubing (CTS). The internal PP lining effectively eliminates galvanic local cell and stray current problems.

dimensions

nom. size	actual pipe O.D.		E-E	weight
	steel pipe	copper tubing		
2"	2.375"	2.125"	4.00"	1.3 lbs
50	(60.3 mm)	(54.0 mm)	(102 mm)	(0.6 Kgs)
2½"	2.875"	2.625"	4.00"	1.9 lbs
65	(73.0 mm)	(66.7 mm)	(102 mm)	(0.9 Kgs)
3"	3.500"	3.125"	4.00"	2.9 lbs
80	(88.9 mm)	(79.4 mm)	(102 mm)	(1.3 Kgs)
4"	4.500"	4.125"	4.00"	3.3 lbs
100	(114.3 mm)	(104.8 mm)	(102 mm)	(1.5 Kgs)
5"	5.563"	5.125"	4.00"	5.2 lbs
125	(141.3 mm)	(130.2 mm)	(102 mm)	(2.4 Kgs)
6"	6.625"	6.125"	4.00"	6.9 lbs
150	(168.3 mm)	(155.6 mm)	(102 mm)	(3.1 Kgs)
8"	8.625"	8.125"	4.00"	9.4 lbs
200	(219.1 mm)	(206.4 mm)	(102 mm)	(4.3 Kgs)

C723 bronze mechanical tee for copper tubing (CTS)



note: Use a torque wrench and tighten the nuts to an approximate torque value of 5 Lbs-Ft ~ 9 Lbs-Ft (7 Nm ~ 12 Nm). Excess torque may cause joint failure.

The Shurjoint Model C723 provides a fast, easy and reliable branch connection from copper tubing (CTS). The fitting consists of a bronze upper housing, ductile iron lower housing, o-ring and carbon steel track bolts and nuts. The fitting is available with a female threaded outlet, NPT or BSPT.

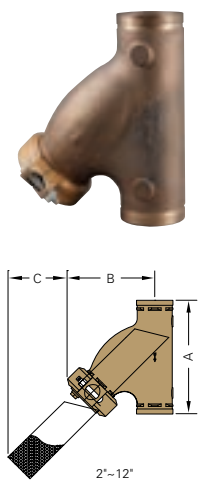
dimensions



nom. CTS x NPT	max working pressure (CWP)*	hole dia. +0.063, -0 / +1.6, -0	dimensions					bolt size	weight
			A	B	C	D	T		
2½ x ½"	200 psi (14 bar)	1.18" (30 mm)	2.56" (65 mm)	1.61" (41 mm)	4.65" (118 mm)	1.89" (48 mm)	2.09" (53 mm)	¾ x 2½"	1.5 lbs (0.7 Kgs)
2½ x ¾"	200 psi (14 bar)	1.18" (30 mm)	2.56" (65 mm)	1.61" (41 mm)	4.65" (118 mm)	2.01" (51 mm)	2.05" (52 mm)	¾ x 2½"	1.5 lbs (0.7 Kgs)
2½ x 1"	200 psi (14 bar)	1.18" (30 mm)	2.56" (65 mm)	1.61" (41 mm)	4.65" (118 mm)	1.89" (48 mm)	1.93" (49 mm)	¾ x 2½"	1.5 lbs (0.7 Kgs)
2½ x 1¼"	200 psi (14 bar)	1.77" (45 mm)	2.68" (68 mm)	1.61" (41 mm)	4.65" (118 mm)	2.64" (67 mm)	2.15" (55 mm)	¾ x 2½"	2.2 lbs (1.0 Kgs)
3 x ¾"	200 psi (14 bar)	1.18" (30 mm)	2.80" (71 mm)	1.89" (48 mm)	5.16" (131 mm)	2.01" (51 mm)	2.28" (58 mm)	¾ x 2½"	1.5 lbs (0.7 Kgs)
3 x 1"	200 psi (14 bar)	1.18" (30 mm)	2.80" (71 mm)	1.89" (48 mm)	5.16" (131 mm)	1.89" (48 mm)	2.20" (56 mm)	¾ x 2½"	1.8 lbs (0.8 Kgs)
3 x 1¼"	200 psi (14 bar)	1.77" (45 mm)	2.95" (75 mm)	1.89" (48 mm)	5.16" (131 mm)	2.64" (67 mm)	2.59" (66 mm)	¾ x 2½"	2.2 lbs (1.0 Kgs)
4 x ¾"	200 psi (14 bar)	1.18" (30 mm)	3.35" (85 mm)	2.36" (60 mm)	6.22" (158 mm)	2.01" (51 mm)	2.80" (71 mm)	¾ x 2½"	1.8 lbs (0.8 Kgs)
4 x 1"	200 psi (14 bar)	1.18" (30 mm)	3.35" (85 mm)	2.36" (60 mm)	6.22" (158 mm)	1.89" (48 mm)	3.11" (79 mm)	¾ x 2½"	1.8 lbs (0.8 Kgs)
4 x 1¼"	200 psi (14 bar)	1.77" (45 mm)	3.35" (85 mm)	2.36" (60 mm)	6.22" (158 mm)	2.64" (67 mm)	3.11" (79 mm)	¾ x 2½"	1.9 lbs (0.9 Kgs)

* Working pressure is for connection with Type K copper tubing.
**T: Center of run to engaged pipe end (approx.).

C726 y-strainer for copper tubing
(CTS)



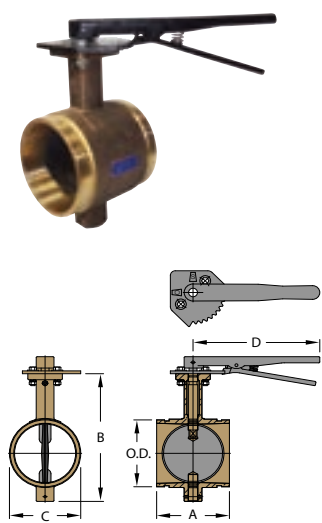
The Shurjoint Model C726 Y-Strainer can be installed quickly and easily with two mechanical couplings and the straight flow through design provides for lower pressure drop.

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions			drain plug size	weight
			A	B	C		
2"	2.125"	300 psi	8.75"	6.38"	3.18"	½"	8.8 lbs
50	(54.0 mm)	(20 bar)	(222 mm)	(162 mm)	(81 mm)	15	(4.0 Kgs)
2½"	2.625"	300 psi	9.75"	6.97"	4.72"	½"	11.3 lbs
65	(66.7 mm)	(20 bar)	(248 mm)	(177 mm)	(120 mm)	15	(5.1 Kgs)
3"	3.125"	300 psi	10.63"	7.71"	4.50"	½"	15.0 lbs
80	(79.4 mm)	(20 bar)	(270 mm)	(196 mm)	(114 mm)	15	(6.8 Kgs)
4"	4.125"	300 psi	13.00"	9.60"	6.00"	1"	27.5 lbs
100	(104.8 mm)	(20 bar)	(330 mm)	(244 mm)	(152 mm)	25	(12.5 Kgs)
6"	6.125"	300 psi	17.00"	12.91"	8.00"	1"	59.3 lbs
150	(155.6 mm)	(20 bar)	(432 mm)	(328 mm)	(203 mm)	25	(26.9 Kgs)

* Working pressure is for connection with roll-grooved Type K copper tubing.

SJ-C300 butterfly valve for copper tubing (CTS)



The Shurjoint Model SJ-C300 is a lever handle bronze body butterfly valve designed for use with grooved copper tubing (CTS), fittings and couplings. The lead-free bronze body material is lead free copper alloy C83470 or C89836 bismuth lead free alloy, and is UL classified in accordance with NSF/ANSI 61 and NSF/ANSI 372.

dimensions

nom. size	pipe O.D.	max. working pressure (CWP)*	dimensions				weight
			A	B	C	D	
2"	2.125"	300 psi	3.19"	5.31"	2.45"	10.0"	5.9 lbs
50	(54 mm)	(20 bar)	(81 mm)	(135 mm)	(57 mm)	(254 mm)	(2.7 Kgs)
2½"	2.625"	300 psi	3.78"	5.87"	2.87"	10.0"	7.3 lbs
65	(66.7 mm)	(20 bar)	(96 mm)	(149 mm)	(73 mm)	(254 mm)	(3.3 Kgs)
3"	3.125"	300 psi	3.78"	6.42"	3.27"	10.0"	7.7 lbs
80	(79.4 mm)	(20 bar)	(96 mm)	(163 mm)	(83 mm)	(254 mm)	(3.5 Kgs)
4"	4.125"	300 psi	4.65"	8.19"	4.29"	10.0"	11.0 lbs
100	(104.8 mm)	(20 bar)	(118 mm)	(208 mm)	(109 mm)	(254 mm)	(5.0 Kgs)
5"	5.125"	300 psi	5.28"	9.80"	5.36"	10.0"	16.9 lbs
125	(130.2 mm)	(20 bar)	(134 mm)	(249 mm)	(136 mm)	(254 mm)	(7.7 Kgs)
6"	6.125"	300 psi	5.28"	10.79"	6.42"	10.0"	16.9 lbs
150	(155.6 mm)	(20 bar)	(134 mm)	(274 mm)	(163 mm)	(254 mm)	(7.7 Kgs)

*Working pressure is for connection with roll-grooved Type K copper tubing.
** Please note that 2", 2½", and 3" Model C341 Flanges cannot be used for making direct connections to Model SJ-C300 Butterfly Valves due to bolt pad interference with the valve.