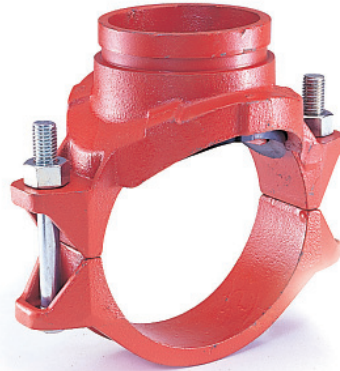
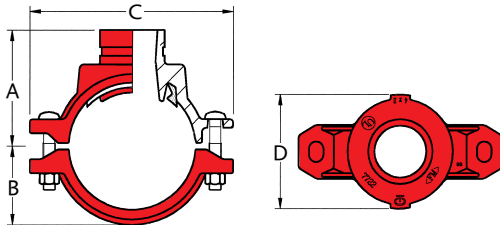


Mechanical Tee

Class 7722 Grooved Outlet

Technical Features

- Available coupling sizes (Nominal) : From DN50/2" x DN32/1 1/2" to DN200/8" x DN100/4".
- Max Working Pressure : See table below
- Material : Ductile Iron to ASTM A536, Gr. 65-45-12. Grade "E" EPDM rubber (Grade "T" Nitrile optional). Plated Track Bolts to ASTM A449-83a (or A183 Gr.2) and Nuts to ASTM A563.
- Finish : RAL3000 Red, Optionally Galvanised or Epoxy Coated.



Grooved Products

Mechanical Tee - Class 7722 Grooved Outlet

Physical Data

Pipe O.D.		Nominal Size Run x Branch		Max. Wk. Pressure (Mpa/psi)	Dimensions (mm/inch)				Bolt Size Ø x L Inches	Weight Kgs/lbs	Reference		
metric	inches	metric	inches		Hole Saw ¹	A	B	C			D	Painted	Galvanized
60.3 x 42.2	2.375 x 1.660	50 x 32	2" x 1 1/4"	2.0 / 300	45 / 1.75	71 / 2.80	40 / 1.57	128 / 5.04	82 / 3.22	3/8 x 2 1/8	1.0 / 2.2	7722/060042	7722/060042G
60.3 x 48.3	2.375 x 1.900	50 x 40	2" x 1 1/2"	2.0 / 300	45 / 1.75	71 / 2.80	40 / 1.57	128 / 5.04	82 / 3.22	3/8 x 2 1/8	1.2 / 2.6	7722/060048	7722/060048G
76.1 x 42.2	3.000 x 1.660	65 x 32	2 1/2" x 1 1/4"	2.0 / 300	51 / 2.00	79 / 3.10	48 / 1.89	146 / 5.75	82 / 3.22	1/2 x 3	1.7 / 3.7	7722/076042	7722/076042G
76.1 x 48.3	3.000 x 1.900	65 x 40	2 1/2" x 1 1/2"	2.0 / 300	51 / 2.00	79 / 3.10	48 / 1.89	146 / 5.75	82 / 3.22	1/2 x 3	1.9 / 4.2	7722/076048	7722/076048G
88.9 x 42.2	3.500 x 1.660	80 x 32	3" x 1 1/4"	2.0 / 300	51 / 2.00	89 / 3.50	56 / 2.20	160 / 6.30	88 / 3.46	1/2 x 3	1.8 / 4.0	7722/089042	7722/089042G
88.9 x 48.3	3" x 1-1/2"	80 x 40	3" x 1 1/2"	2.0 / 300	51 / 2.00	89 / 3.50	56 / 2.20	160 / 6.30	88 / 3.46	1/2 x 3	1.9 / 4.2	7722/089048	7722/089048G
88.9 x 60.3	3.500 x 2.375	80 x 55	3" x 2"	2.0 / 300	64 / 2.50	91 / 3.58	56 / 2.20	160 / 6.30	101 / 3.98	1/2 x 3	2.2 / 4.8	7722/089060	7722/089060G
114.3 x 42.2	4.500 x 1.660	100 x 32	4" x 1 1/4"	2.0 / 300	51 / 2.00	99 / 3.89	72 / 2.83	190 / 7.48	85 / 3.35	1/2 x 3	2.1 / 4.6	7722/114042	7722/114042G
114.3 x 48.3	4.500 x 1.900	100 x 40	4" x 1 1/2"	2.0 / 300	51 / 2.00	99 / 3.89	72 / 2.83	190 / 7.48	85 / 3.35	1/2 x 3	2.2 / 4.8	7722/114048	7722/114048G
114.3 x 60.3	4.500 x 2.375	100 x 50	4" x 2"	2.0 / 300	64 / 2.50	105 / 4.13	72 / 2.83	190 / 7.48	101 / 3.98	1/2 x 3	2.7 / 5.9	7722/114060	7722/114060G
114.3 x 73.0	4.500 x 2.875	100 x 65	4" x 2 1/2"	2.0 / 300	70 / 2.75	111 / 4.37	72 / 2.83	190 / 7.48	112 / 4.40	1/2 x 3	3.0 / 6.6	7722/114073	7722/114073G
114.3 x 76.1	4.500 x 3.000	100 x 65	4" x 2 1/2"	2.0 / 300	70 / 2.75	111 / 4.37	72 / 2.83	190 / 7.48	112 / 4.40	1/2 x 3	3.0 / 6.6	7722/114076	7722/114076G
114.3 x 88.9	4.500 x 3.500	100 x 80	4" x 3"	2.0 / 300	89 / 3.50	112 / 4.40	72 / 2.83	190 / 7.48	136 / 5.35	5/8 x 3 1/2	5.2 / 11.4	7722/114089	7722/114089G
141.3 x 60.3	5.563 x 2.375	125 x 50	5" x 2"	2.0 / 300	64 / 2.50	124 / 4.88	86 / 3.39	236 / 9.29	102 / 4.00	5/8 x 3 1/2	4.2 / 9.2	7722/141060	7722/141060G
141.3 x 73.0	5.563 x 2.875	125 x 65	5" x 2 1/2"	2.0 / 300	70 / 2.75	127 / 5.00	86 / 3.39	236 / 9.29	118 / 4.65	5/8 x 5 1/6	4.2 / 9.2	7722/141073	7722/141073G
141.3 x 76.1	5.563 x 3.000	125 x 65	5" x 1 1/2"	2.0 / 300	70 / 2.75	127 / 5.00	86 / 3.39	236 / 9.29	118 / 4.65	5/8 x 5 1/6	4.3 / 9.5	7722/141076	7722/141076G
168.3 x 42.2	6.625 x 1.660	150 x 32	6" x 1 1/2"	2.0 / 300	51 / 2.00	127 / 5.00	98 / 3.86	256 / 10.08	93 / 3.66	5/8 x 5 1/6	4.2 / 9.2	7722/168042	7722/168042G
168.3 x 48.3	6.625 x 1.900	150 x 40	6" x 1 1/2"	2.0 / 300	51 / 2.00	127 / 5.00	98 / 3.86	256 / 10.08	93 / 3.66	5/8 x 5 1/6	4.3 / 9.5	7722/168048	7722/168048G
168.3 x 60.3	6.625 x 2.375	150 x 50	6" x 2"	2.0 / 300	64 / 2.50	132 / 5.20	98 / 3.86	256 / 10.08	101 / 3.98	5/8 x 5 1/6	4.8 / 10.6	7722/168060	7722/168060G
168.3 x 73.0	6.625 x 2.375	150 x 65	6" x 2 1/2"	2.0 / 300	70 / 2.75	140 / 5.50	98 / 3.86	256 / 10.08	118 / 4.65	5/8 x 5 1/6	5.5 / 12.1	7722/168073	7722/168073G
168.3 x 88.9	6.625 x 3.500	150 x 80	6" x 3"	2.0 / 300	89 / 3.50	140 / 5.50	98 / 3.86	256 / 10.08	137 / 5.39	5/8 x 5 1/6	5.6 / 12.3	7722/168089	7722/168089G
168.3 x 114.3	6.625 x 4.500	150 x 100	6" x 4"	2.0 / 300	114 / 4.50	140 / 5.50	98 / 3.86	256 / 10.08	164 / 6.46	5/8 x 5 1/6	7.0 / 15.4	7722/168114	7722/168114G
219.1 x 60.3	8.625 x 2.375	200 x 50	8" x 2"	2.0 / 300	70 / 2.75	166 / 6.54	120 / 4.72	327 / 12.87	104 / 3.89	3/4 x 4 3/4	5.8 / 12.8	7722/219060	7722/219060G
219.1 x 76.1	8.625 x 3.000	200 x 65	8" x 3" OD	2.0 / 300	70 / 2.75	166 / 6.54	120 / 4.72	327 / 12.87	104 / 3.89	3/4 x 4 3/4	6.0 / 13.2	7722/219076	7722/219076G
219.1 x 88.9	8.625 x 3.500	200 x 80	8" x 3"	2.0 / 300	89 / 3.50	166 / 6.54	120 / 4.72	327 / 12.87	128 / 5.04	3/4 x 4 3/4	7.2 / 15.8	7722/219089	7722/219089G
219.1 x 114.3	8.625 x 4.500	200 x 100	8" x 4"	2.0 / 300	114 / 4.50	166 / 6.54	120 / 4.72	327 / 12.87	164 / 6.46	3/4 x 4 3/4	7.5 / 16.5	7722/219114	7722/219114G

1 +3.2, -0 / +0.13, -0 (mm/inch)

1 +3.2, -0 / +0.13, -0 (mm/inch)

Mechanical Tee

Class 7722 Grooved Outlet

Mechanical Tee - Class 7722 Grooved Outlet

Installation

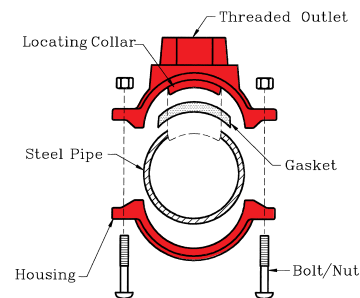
The King System hole-cut mechanical tee provides a fast and easy mid-point branch outlet without welding. First a hole is cut or drilled at the desired outlet location. The mechanical tee is then positioned so that the built-in locating collar fits within the hole.

As the housing bolts are tightened the pressure moulded gasket forms a leak-tight seal. Use of the King mechanical tee can eliminate the need for multiple couplings and fittings. Bolts should be tightened equally and evenly.

Mechanical Tee - Class 7722

Bolt Fastening Torque

Bolt Size	Torque N-m/Ft-Lb
3/8 Ø	68 / 50
1/2 Ø	75 / 55
5/8 Ø	136 / 100
3/4 Ø	150 / 110



Mechanical Tee - Class 7722

Bolt Fastening Torque

All mechanical tees and crosses are designed with a gap between the bolt pads. Do not attempt to bring the bolt pads together (metal-to-metal) when

tightening the housings. Excessive torque may result in joint failure. Apply the recommended bolt fastening torque given in the table above.

Mechanical Tee - Class 7722

Flow Data (Frictional Resistance)

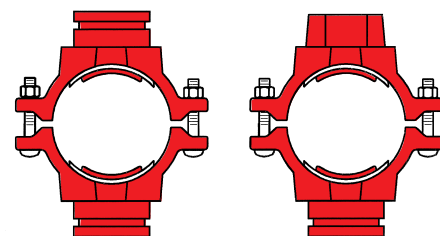
Branch Size (mm / inch)	CV Value	E.P.L. metres/feet
40 / 1 1/2	60	2.1 / 7.0
50 / 2	100	2.7 / 9.0
65 / 2 1/2	135	3.4 / 11.0
80 / 3	200	4.1 / 13.5
100 / 4	400	6.1 / 20.0

Mechanical Tee - Class 7722

Mechanical Cross Connections

A mechanical cross connection can be made by combining two mechanical tee upper housing segments. While the housing segments must be the same size the branch outlets can be of the same or differing sizes and configurations as shown.

Caution: Piping practices require that main and branch connections are at a true 90° angle. Also be certain that the locating collar is securely positioned inside the outlet hole before tightening the housing. When mechanical tees or mechanical crosses are used as transition pieces between two runs, the tees or crosses shall be assembled prior to making the branch connections.



Grooved x Grooved Threaded x Grooved
Class 7722 + Class 7722 Class 7721 + Class 7722