

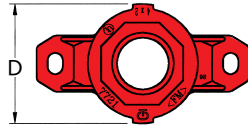
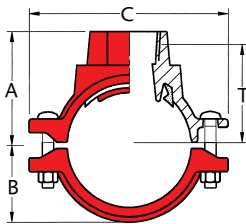


Mechanical Tee

Class 7721 Threaded Outlet

Technical Features

- Available coupling sizes (Nominal) : From DN50/2" x DN15/1 1/2" to DN200/8" x DN100/4".
- Max Working Pressure : Rated to 20,7 bar (300 psi)
- 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 7721 Threaded Outlet

Physical Data

Pipe O.D.		Hole Dimensions		Dimensions (mm/inch)					Bolt Size Ø x L Inches	Weight Kgs/lbs	Reference	
metric	inches	Hole Saw	Max. Dia.	T [§]	A	B	C	D			Painted	Galvanized
60.3 x DN15	2 x 0.5	38 / 1.50	41 / 1.63	50 / 1.97	64 / 2.50	40 / 1.57	128 / 5.04	73 / 2.87	3/8 x 2 1/8	11 / 2.4	7721/060021B	7721/060021BG
60.3 x DN20	2 x 0.75	38 / 1.50	41 / 1.63	50 / 1.97	64 / 2.50	40 / 1.57	128 / 5.04	73 / 2.87	3/8 x 2 1/8	11 / 2.4	7721/060027B	7721/060027BG
60.3 x DN25	2 x 1.0	38 / 1.50	41 / 1.63	51 / 2.00	68 / 2.68	40 / 1.57	128 / 5.04	73 / 2.87	3/8 x 2 1/8	1.2 / 2.7	7721/060034B	7721/060034BG
60.3 x DN32	2 x 1.25	45 / 1.75	48 / 1.88	53 / 2.08	71 / 2.80	40 / 1.57	128 / 5.04	82 / 3.22	3/8 x 2 1/8	1.3 / 2.9	7721/060042B	7721/060042BG
60.3 x DN40	2 x 1.5	45 / 1.75	48 / 1.88	53 / 2.08	71 / 2.80	40 / 1.57	128 / 5.04	82 / 3.22	3/8 x 2 1/8	1.3 / 2.9	7721/060048B	7721/060048BG
76.1 x DN15	2.5 x 3OD x 0.5	38 / 1.50	41 / 1.63	57 / 2.25	71 / 2.80	48 / 1.89	146 / 5.75	73 / 2.87	1/2 x 3	14 / 3.1	7721/076021B	7721/076021BG
76.1 x DN20	2.5 x 3OD x 0.75	38 / 1.50	41 / 1.63	59 / 2.32	71 / 2.80	48 / 1.89	146 / 5.75	73 / 2.87	1/2 x 3	14 / 3.1	7721/076027B	7721/076027BG
76.1 x DN25	2.5 x 3OD x 1.0	38 / 1.50	41 / 1.63	58 / 2.28	75 / 2.95	48 / 1.89	146 / 5.75	73 / 2.87	1/2 x 3	1.5 / 3.3	7721/076034B	7721/076034BG
76.1 x DN32	2.5 x 3OD x 1.25	51 / 2.00	54 / 2.13	61 / 2.40	79 / 3.11	48 / 1.89	146 / 5.75	82 / 3.22	1/2 x 3	1.6 / 3.5	7721/076042B	7721/076042BG
76.1 x DN40	2.5 x 3OD x 1.5	51 / 2.00	54 / 2.13	61 / 2.40	79 / 3.11	48 / 1.89	146 / 5.75	82 / 3.22	1/2 x 3	1.6 / 3.5	7721/076048B	7721/076048BG
88.9 x DN15	3 x 0.5	38 / 1.50	41 / 1.63	63 / 2.47	81 / 3.19	56 / 2.20	160 / 6.39	67 / 2.63	1/2 x 3	1.6 / 3.5	7721/089021B	7721/089021BG
88.9 x DN20	3 x 0.75	38 / 1.50	41 / 1.63	62 / 2.44	81 / 3.19	56 / 2.20	160 / 6.39	67 / 2.63	1/2 x 3	1.6 / 3.5	7721/089027B	7721/089027BG
88.9 x DN25	3 x 1.0	38 / 1.50	41 / 1.63	64 / 2.50	81 / 3.19	56 / 2.20	160 / 6.39	67 / 2.63	1/2 x 3	1.7 / 3.7	7721/089034B	7721/089034BG
88.9 x DN32	3 x 1.25	51 / 2.00	54 / 2.13	71 / 2.80	89 / 3.50	56 / 2.20	160 / 6.39	88 / 3.46	1/2 x 3	1.9 / 4.2	7721/089042B	7721/089042BG
88.9 x DN40	3 x 1.5	51 / 2.00	54 / 2.13	71 / 2.80	89 / 3.50	56 / 2.20	160 / 6.39	88 / 3.46	1/2 x 3	2.0 / 4.4	7721/089048B	7721/089048BG
88.9 x DN50	3 x 2	64 / 2.50	67 / 2.63	72 / 2.83	91 / 3.58	56 / 2.20	160 / 6.39	101 / 3.98	1/2 x 3	2.3 / 5.1	7721/089060B	7721/089060BG
114.3 x DN15	4 x 0.5	38 / 1.50	41 / 1.63	76 / 3.00	94 / 3.70	72 / 2.83	190 / 7.48	67 / 2.63	1/2 x 3	1.9 / 4.2	7721/114021B	7721/114021BG
114.3 x DN20	4 x 0.75	38 / 1.50	41 / 1.63	75 / 2.95	94 / 3.70	72 / 2.83	190 / 7.48	67 / 2.63	1/2 x 3	1.9 / 4.2	7721/114027B	7721/114027BG
114.3 x DN25	4 x 1.0	38 / 1.50	41 / 1.63	77 / 3.03	94 / 3.70	72 / 2.83	190 / 7.48	67 / 2.63	1/2 x 3	2.0 / 4.4	7721/114034B	7721/114034BG
114.3 x DN32	4 x 1.25	51 / 2.00	54 / 2.13	81 / 3.19	99 / 3.89	72 / 2.83	190 / 7.48	85 / 3.35	1/2 x 3	2.2 / 4.8	7721/114042B	7721/114042BG
114.3 x DN40	4 x 1.5	51 / 2.00	54 / 2.13	81 / 3.19	99 / 3.89	72 / 2.83	190 / 7.48	85 / 3.35	1/2 x 3	2.3 / 5.1	7721/114048B	7721/114048BG
114.3 x DN50	4 x 2	64 / 2.50	67 / 2.63	86 / 3.38	105 / 4.13	72 / 2.83	190 / 7.48	101 / 3.98	1/2 x 3	2.7 / 5.9	7721/114060B	7721/114060BG
114.3 x DN65US (73.0)	4 x 2.5	70 / 2.75	73 / 2.88	82 / 3.23	111 / 4.37	72 / 2.83	190 / 7.48	112 / 4.40	1/2 x 3	3.3 / 7.3	7721/114073B	7721/114073BG
114.3 x DN65EU (76.1)	4 x 2.5	70 / 2.75	73 / 2.88	82 / 3.23	111 / 4.37	72 / 2.83	190 / 7.48	112 / 4.40	1/2 x 3	3.3 / 7.3	7721/114076B	7721/114076BG
114.3 x DN80	4 x 3	89 / 3.50	92 / 3.63	82 / 3.23	112 / 4.40	72 / 2.83	190 / 7.48	136 / 5.35	1/2 x 3	5.6 / 12.3	7721/114089B	7721/114089BG
141.3 x DN50*	5 x 1	64 / 2.50	67 / 2.63	105 / 4.13	124 / 4.88	86 / 3.39	236 / 9.29	102 / 4.00	5/8 x 3 1/2	4.2 / 9.2	7721/141060B	7721/141060BG
141.3 x DN65US (73.0)*	5 x 2.5	70 / 2.75	73 / 2.88	99 / 3.89	127 / 5.00	86 / 3.39	236 / 9.29	118 / 4.65	5/8 x 3 1/2	4.5 / 9.9	7721/141073B	7721/141073BG
141.3 x DN65EU (76.1)*	5 x 2.5	70 / 2.75	73 / 2.88	99 / 3.89	127 / 5.00	86 / 3.39	236 / 9.29	118 / 4.65	5/8 x 3 1/2	4.5 / 9.9	7721/141076B	7721/141076BG
168.3 x DN32**	6 x 1.25	51 / 2.00	54 / 2.13	109 / 4.29	127 / 5.00	98 / 3.86	256 / 10.07	93 / 3.66	5/8 x 5 1/16	4.4 / 9.7	7721/168042B	7721/168042BG
168.3 x DN40**	6 x 1.5	51 / 2.00	54 / 2.13	109 / 4.29	127 / 5.00	98 / 3.86	256 / 10.07	93 / 3.66	5/8 x 5 1/16	4.4 / 9.7	7721/168048B	7721/168048BG
168.3 x DN50**	6 x 2	64 / 2.50	67 / 2.63	113 / 4.45	132 / 5.29	98 / 3.86	256 / 10.07	101 / 3.98	5/8 x 5 1/16	4.8 / 10.6	7721/168060B	7721/168060BG
168.3 x DN65US (73.0)**	6 x 2.5	70 / 2.75	73 / 2.88	111 / 4.37	140 / 5.50	98 / 3.86	256 / 10.07	118 / 4.65	5/8 x 5 1/16	5.4 / 11.9	7721/168073B	7721/168073BG
168.3 x DN65EU (76.1)**	6 x 2.5	70 / 2.75	73 / 2.88	111 / 4.37	140 / 5.50	98 / 3.86	256 / 10.07	118 / 4.65	5/8 x 5 1/16	5.4 / 11.9	7721/168076B	7721/168076BG
168.3 x DN80**	6 x 3	89 / 3.50	92 / 3.63	110 / 4.33	140 / 5.50	98 / 3.86	256 / 10.07	137 / 5.39	5/8 x 5 1/16	6.0 / 13.2	7721/168089B	7721/168089BG
168.3 x DN100**	6 x 4	114 / 4.50	117 / 4.63	107 / 4.21	140 / 5.50	98 / 3.86	256 / 10.07	164 / 6.46	5/8 x 5 1/16	6.6 / 14.5	7721/168114B	7721/168114BG
219.1 x DN50	8 x 2	70 / 2.75	73 / 2.88	135 / 5.31	166 / 6.54	120 / 4.72	327 / 12.87	101 / 3.98	3/4 x 4 3/4	6.2 / 13.6	7721/219060B	7721/219060BG
219.1 x DN65US (73.0)	8 x 2.5	70 / 2.75	73 / 2.88	137 / 5.39	166 / 6.54	120 / 4.72	327 / 12.87	104 / 4.09	3/4 x 4 3/4	6.3 / 13.9	7721/219073B	7721/219073BG
219.1 x DN65EU (76.1)	8 x 2.5	70 / 2.75	73 / 2.88	137 / 5.39	166 / 6.54	120 / 4.72	327 / 12.87	104 / 4.09	3/4 x 4 3/4	6.3 / 13.9	7721/219076B	7721/219076BG
219.1 x DN80	8 x 3	89 / 3.50	92 / 3.63	136 / 5.35	166 / 6.54	120 / 4.72	327 / 12.87	128 / 5.04	3/4 x 4 3/4	7.1 / 15.6	7721/219089B	7721/219089BG
219.1 x DN100	8 x 4	114 / 4.50	117 / 4.63	133 / 5.24	166 / 6.54	120 / 4.72	327 / 12.87	164 / 6.46	3/4 x 4 3/4	8.0 / 17.6	7721/219114B	7721/219114BG

* 141.3 dimension also fits 139.7 O.D. Pipe

** 168.3 dimension also fits 165.1 O.D. Pipe

§ Centre of run to end of pipe to be engaged

Mechanical Tee

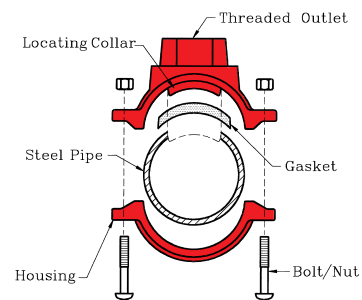
Class 7721 Threaded Outlet

Mechanical Tee - Class 7721 Threaded 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 7721

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 7721

Flow Data (Frictional Resistance)

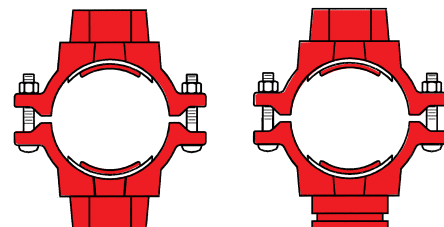
Branch Size (mm / inch)	CV Value	E.P.L. metres/feet
15 / 1/2	17	-
20 / 3/4	21	-
25 / 1	25	-
32 / 1 1/4	45	-
40 / 1 1/2	60	2.1 / 7.0
50 / 2	100	2.7 / 9.0
65 / 2 1/2	135	3.4 / 11.0
80 / 3	200	4.1 / 13.5
100 / 4	400	6.1 / 20.0

Mechanical Tee - Class 7721

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.



Threaded x Threaded
Class 7721 + Class 7721

Threaded x Grooved
Class 7721 + Class 7722