



Style 301 Mechanical Tee with groove outlet provides a direct branch connection at any location where a hole can be cut in the pipe. Gasket is a pressure responsive design which provides the seal.

Style 303 assemblies can be achieved with the use of two Style 301 of same run size and the same or differing outlet size. Style 305 can be achieved with the use of one Style 301 outlet parts and one Style 302 outlet parts.

Size:

- DN50x25-DN200x100 | 2x1-8x4"
- 10" and larger, Reducing Tee is recommended to use.

Maximum Working Pressure:

- UL listed and FM approved is 300psi (21Bar).

Material Specifications**Housing:**

Ductile iron confirming to ASTM A536, Grade 65-45-12, other material also available, please consult VISION.

Coating:

Orange-Standard

Red- Optional

Hot-Dipped, Zinc Galvanized-Optional

Bolts/Nuts:

Heat-treated plated carbon steel, trackhead meeting the physical and chemical requirements of ASTM A-449 and physical requirements of ASTM A-183.

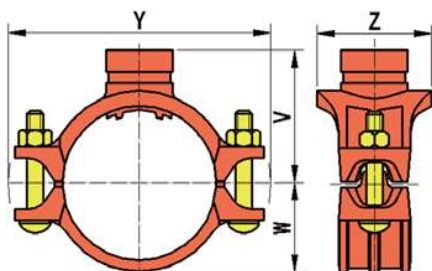
Gasket:

Grade "E" EPDM gaskets have a green striped color code identification and conform to ASTM D2000 for service temperatures from -34°C to 110°C(-30°F to 230°F). They are recommended for hot water not to exceed 110°C(230°F), plus a variety of dilute acids, oil free air, and many chemical service.

Grade "T" Nitrile gaskets have an orange striped color code identification and conform to ASTM D2000 for service temperatures from -29°C to 82°C(-20°F to 180°F). They are recommended for petroleum products, vegetable oils, mineral oils, and air with oil vapors. For more material of the gaskets, please refer to VISION publication 09.05.

Mechanical Tee Style 301

VISION



OD	Work Pressure	Hole Size	W	Y	Z	V	Bolts	Size	Approx. Wt. Ea.
In/mm	Psi/bar	In/mm	In/mm	In/mm	In/mm	In/mm	In/mm		Lbs./kg
2x1	300	1.50	1.42	5.47	2.72	2.64	½x2½		2.2
60.3x33.7	20.7	38.1	36	139	69	67	M12x60		1.0
2x1¼	300	1.75	1.42	5.47	2.95	2.64	½x2½		2.4
60.3x42.4	20.7	44.5	36	139	75	67	M12x60		1.1
2x1½	300	1.75	1.42	5.47	3.27	2.68	½x2½		2.6
60.3x48.3	20.7	44.5	36	139	83	68	M12x60		1.2
2½x1	300	1.50	1.69	6.02	2.72	2.91	½x3		2.4
73.0x33.7	20.7	38.1	43	153	69	74	M12x75		1.1
2½x1¼	300	1.75	1.69	6.02	2.95	2.91	½x3		2.6
73.0x42.4	20.7	44.5	43	153	75	74	M12x75		1.2
2½x1½	300	2.00	1.69	6.02	3.27	2.91	½x3		2.9
73.0x48.3	20.7	50.8	43	153	83	74	M12x75		1.3
3ODx1	300	1.50	1.77	6.14	2.72	2.99	½x3		2.4
76.1x33.7	20.7	38.1	45	156	69	76	M12x75		1.1
3ODx1¼	300	1.75	1.77	6.14	2.95	2.99	½x3		2.6
76.1x42.4	20.7	44.5	45	156	75	76	M12x75		1.2
3ODx1½	300	2.00	1.77	6.14	3.27	2.99	½x3		2.9
76.1x48.3	20.7	50.8	45	156	83	76	M12x75		1.3
3x1	300	1.50	2.01	6.54	2.72	3.23	½x3		2.6
88.9x33.7	20.7	38.1	51	166	69	82	M12x75		1.2
3x1¼	300	1.75	2.01	6.54	2.95	3.23	½x3		2.9
88.9x42.4	20.7	44.5	51	166	75	82	M12x75		1.3
3x1½	300	2.00	2.01	6.54	3.27	3.23	½x3		3.1
88.9x48.3	20.7	50.8	51	166	83	82	M12x75		1.4
3x2	300	2.50	2.01	6.54	3.74	3.23	½x3		3.3
88.9x60.3	20.7	63.5	51	166	95	82	M12x75		1.5
4x1	300	1.50	2.52	7.52	2.72	3.78	½x3		3.1
114.3x33.7	20.7	38.1	64	191	69	96	M12x75		1.4
4x1¼	300	1.75	2.52	7.52	2.95	3.78	½x3		3.3
114.3x42.4	20.7	44.5	64	191	75	96	M12x75		1.5
4x1½	300	2.00	2.52	7.52	3.27	3.78	½x3		3.5
114.3x48.3	20.7	50.8	64	191	83	96	M12x75		1.6
4x2	300	2.50	2.52	7.52	3.74	3.78	½x3		3.7
114.3x60.3	20.7	63.5	64	191	95	96	M12x75		1.7
4x2½	300	2.75	2.52	7.52	4.02	3.82	½x3		4.2
114.3x73.0	20.7	69.9	64	191	102	97	M12x75		1.9
4x3OD	300	2.75	2.52	7.52	4.02	3.82	½x3		4.2
114.3x76.1	20.7	69.9	64	191	102	97	M12x75		1.9
4x3	300	3.50	2.52	7.52	4.80	3.82	½x3		4.8
114.3x88.9	20.7	88.9	64	191	122	97	M12x75		2.2
5½ODx1	300	1.50	3.07	9.21	2.72	4.33	¾x3¾		4.4
139.7x33.7	20.7	38.1	78	234	69	110	M16x90		2.0
5½ODx1¼	300	1.75	3.07	9.21	2.95	4.33	¾x3¾		4.6
139.7x42.4	20.7	44.5	78	234	75	110	M16x90		2.1
5½ODx1½	300	2.00	3.07	9.21	3.27	4.33	¾x3¾		4.8
139.7x48.3	20.7	50.8	78	234	83	110	M16x90		2.2
5½ODx2	300	2.50	3.07	9.21	3.74	4.33	¾x3¾		5.3
139.7x60.3	20.7	63.5	78	234	95	110	M16x90		2.4
5½ODx3OD	300	2.75	3.07	9.21	4.02	4.33	¾x3¾		5.9
139.7x76.1	20.7	69.9	78	234	102	110	M16x90		2.7
5½ODx3	300	3.50	3.07	9.21	4.80	4.33	¾x3¾		6.4
139.7x88.9	20.7	88.9	78	234	122	110	M16x90		2.9
5x1	300	1.50	3.11	9.25	2.72	4.37	¾x3¾		4.6
141.3x33.7	20.7	38.1	79	235	69	111	M16x90		2.1
5x1¼	300	1.75	3.11	9.25	2.95	4.37	¾x3¾		4.6
141.3x42.4	20.7	44.5	79	235	75	111	M16x90		2.1
5x1½	300	2.00	3.11	9.25	3.27	4.37	¾x3¾		4.8
141.3x48.3	20.7	50.8	79	235	83	111	M16x90		2.2



Shanghai Vision Mechanical Joint Ltd., Co.,

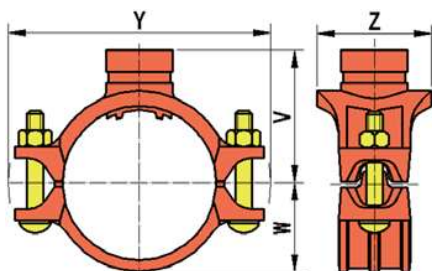
Address: Jinlan Rd. 221, Jiading Industrial Park, Shanghai, China

Tel: 0086-21-5954-6862, 5954-6811, Fax: 0086-21--5954-3888 Web: www.visionmfr.com

D-1022E

Mechanical Tee Style 301

VISION



OD	Work Pressure	Hole Size	W	Y	Z	V	Bolts	Size	Approx. Wt. Ea.
In/mm	Psi/bar	In/mm	In/mm	In/mm	In/mm	In/mm	In/mm		Lbs./kg
5x2	300	2.50	3.11	9.25	3.74	4.37	3/8x3 1/2		5.1
141.3x60.3	20.7	63.5	79	235	95	111	M16x90		2.3
5x2 1/2	300	2.75	3.11	9.25	4.02	4.41	3/8x3 1/2		5.7
141.3x73.0	20.7	69.9	79	235	102	112	M16x90		2.6
5x3	300	3.50	3.11	9.25	4.80	4.41	3/8x3 1/2		6.4
141.3x88.9	20.7	88.9	79	235	122	112	M16x90		2.9
6%ODx1	300	1.50	3.11	9.25	2.72	4.88	3/8x3 1/2		5.1
165.1x33.7	20.7	38.1	79	235	69	124	M16x90		2.3
6%ODx1 1/4	300	1.75	3.58	10.16	2.95	4.88	3/8x3 1/2		5.1
165.1x42.4	20.7	44.5	91	258	75	124	M16x90		2.3
6%ODx1 1/2	300	2.00	3.58	10.16	3.27	4.88	3/8x3 1/2		5.3
165.1x48.3	20.7	50.8	91	258	83	124	M16x90		2.4
6%ODx2	300	2.50	3.58	10.16	3.74	4.88	3/8x3 1/2		5.7
165.1x60.3	20.7	63.5	91	258	95	124	M16x90		2.6
6%ODx3OD	300	2.75	3.58	10.16	4.02	4.88	3/8x3 1/2		6.4
165.1x76.1	20.7	69.9	91	258	102	124	M16x90		2.9
6%ODx3	300	3.50	3.58	10.16	4.80	4.88	3/8x3 1/2		7.0
165.1x88.9	20.7	88.9	91	258	122	124	M16x90		3.2
6%ODx4	300	4.50	3.58	10.16	5.75	4.96	3/8x3 1/2		7.3
165.1x114.3	20.7	114.3	91	258	146	126	M16x90		3.3
6x1	300	1.50	3.66	10.28	2.72	4.96	3/8x3 1/2		5.1
168.3x33.7	20.7	38.1	93	261	69	126	M16x90		2.3
6x1 1/4	300	1.75	3.66	10.28	2.95	4.96	3/8x3 1/2		5.3
168.3x42.4	20.7	44.5	93	261	75	126	M16x90		2.4
6x1 1/2	300	2.00	3.66	10.28	3.27	4.96	3/8x3 1/2		5.5
168.3x48.3	20.7	50.8	93	261	83	126	M16x90		2.5
6x2	300	2.50	3.66	10.28	3.74	4.96	3/8x3 1/2		5.9
168.3x60.3	20.7	63.5	93	261	95	126	M16x90		2.7
6x2 1/2	300	2.75	3.66	10.28	4.02	4.96	3/8x3 1/2		6.8
168.3x73.0	20.7	69.9	93	261	102	126	M16x90		3.1
6x3OD	300	2.75	3.66	10.28	4.02	4.96	3/8x3 1/2		7.0
168.3x76.1	20.7	69.9	93	261	102	126	M16x90		3.2
6x3	300	3.50	3.66	10.28	4.80	4.96	3/8x3 1/2		7.7
168.3x88.9	20.7	88.9	93	261	122	126	M16x90		3.5
6x4	300	4.50	3.66	10.28	5.75	5.04	3/8x3 1/2		7.9
168.3x114.3	20.7	114.3	93	261	146	128	M16x90		3.6
8x1	300	1.50	4.72	12.99	2.72	5.98	3/4x4		7.7
219.1x33.7	20.7	38.1	120	330	69	152	M20x100		3.5
8x1 1/4	300	1.75	4.72	12.99	2.95	5.98	3/4x4		7.9
219.1x42.4	20.7	44.5	120	330	75	152	M20x100		3.6
8x1 1/2	300	2.00	4.72	12.99	3.27	5.98	3/4x4		8.4
219.1x48.3	20.7	50.8	120	330	83	152	M20x100		3.8
8x2	300	2.50	4.72	12.99	3.74	5.98	3/4x4		8.8
219.1x60.3	20.7	63.5	120	330	95	152	M20x100		4.0
8x2 1/2	300	2.75	4.72	12.99	4.02	5.98	3/4x4		9.7
219.1x73.0	20.7	69.9	120	330	102	152	M20x100		4.4
8x3OD	300	2.75	4.72	12.99	4.02	5.98	3/4x4		10.1
219.1x76.1	20.7	69.9	120	330	102	152	M20x100		4.6
8x3	300	3.50	4.72	12.99	4.80	5.98	3/4x4		10.1
219.1x88.9	20.7	88.9	120	330	122	152	M20x100		4.6
8x4	300	4.50	4.72	12.99	5.67	6.06	3/4x4		11.0
219.1x114.3	20.7	114.3	120	330	144	154	M20x100		5.0



Shanghai Vision Mechanical Joint Ltd., Co.,

Address: Jinlan Rd. 221, Jiading Industrial Park, Shanghai, China

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D-1022E



Style 302 Mechanical Tee with thread outlet provides a direct branch connection at any location where a hole can be cut in the pipe. Gasket is a pressure responsive design which provides the seal.

Style 304 assemblies can be achieved with the use of two Style 302 of same run size and the same or differing outlet size. Style 305 can be achieved with the use of one Style 302 outlet parts and one Style 301 outlet parts.

Size:

- DN50x25-DN200x80 | 2x1-8x3''
- 10'' and larger, Reducing Tee is recommended to use.

Maximum Working Pressure:

- UL listed and FM approved is 300psi (21Bar).

Material Specifications**Housing:**

Ductile iron confirming to ASTM A536, Grade 65-45-12, other material also available, please consult VISION.

Coating:

Orange-Standard

Red- Optional

Hot-Dipped, Zinc Galvanized-Optional

Bolts/Nuts:

Heat-treated plated carbon steel, trackhead meeting the physical and chemical requirements of ASTM A-449 and physical requirements of ASTM A-183.

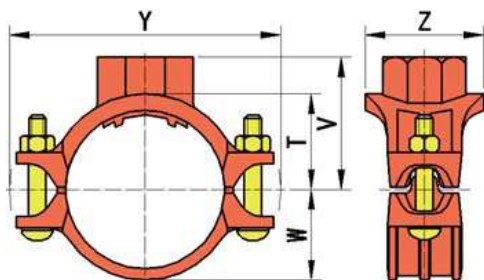
Gasket:

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Grade "T" Nitrile gaskets have an orange striped color code identification and conform to ASTM D2000 for service temperatures from -29°C to 82°C(-20°F to 180°F). They are recommended for petroleum products, vegetable oils, mineral oils, and air with oil vapors. For more material of the gaskets, please refer to VISION publication 09.05.

Mechanical Tee Style 302

VISION



OD	Work Pressure	Hole Size	W	Y	Z	T	V	Bolts Size	Approx. Wt. Ea.
In/mm	Psi/bar	In/mm	In/mm	In/mm	In/mm	In/mm	In/mm	In/mm	Lbs./kg
2x1	300	1.50	1.42	5.47	2.72	1.73	2.48	½x2½	2.2
60.3x33.7	20.7	38.1	36	139	69	44	63	M12x60	1.0
2x1½	300	1.75	1.42	5.47	2.95	1.81	2.64	½x2½	2.4
60.3x42.4	20.7	44.5	36	139	75	46	67	M12x60	1.1
2x1½	300	1.75	1.42	5.47	3.27	1.81	2.64	½x2½	2.6
60.3x48.3	20.7	44.5	36	139	83	46	67	M12x60	1.2
2½x1	300	1.50	1.69	6.02	2.72	1.97	2.72	½x3	2.4
73.0x33.7	20.7	38.1	43	153	69	50	69	M12x75	1.1
2½x1½	300	1.75	1.69	6.02	2.95	2.01	2.83	½x3	2.6
73.0x42.4	20.7	44.5	43	153	75	51	72	M12x75	1.2
2½x1½	300	2.00	1.69	6.02	3.27	2.01	2.83	½x3	2.9
73.0x48.3	20.7	50.8	43	153	83	51	72	M12x75	1.3
3ODx1	300	1.50	1.77	6.14	2.72	1.85	2.60	½x3	2.4
76.1x33.7	20.7	38.1	45	156	69	47	66	M12x75	1.1
3ODx1½	300	1.75	1.77	6.14	2.95	1.89	2.72	½x3	2.6
76.1x42.4	20.7	44.5	45	156	75	48	69	M12x75	1.2
3ODx1½	300	2.00	1.77	6.14	3.27	1.89	2.72	½x3	2.9
76.1x48.3	20.7	50.8	45	156	83	48	69	M12x75	1.3
3x1	300	1.50	2.01	6.54	2.72	2.13	2.87	½x3	2.6
88.9x33.7	20.7	38.1	51	166	69	54	73	M12x75	1.2
3x1½	300	1.75	2.01	6.54	2.95	2.13	2.95	½x3	2.9
88.9x42.4	20.7	44.5	51	166	75	54	75	M12x75	1.3
3x1½	300	2.00	2.01	6.54	3.27	2.13	2.95	½x3	3.1
88.9x48.3	20.7	50.8	51	166	83	54	75	M12x75	1.4
3x2	300	2.50	2.01	6.54	3.74	2.13	3.11	½x3	3.3
88.9x60.3	20.7	63.5	51	166	95	54	79	M12x75	1.5
4x1	300	1.50	2.52	7.52	2.72	2.68	3.43	½x3	3.3
114.3x33.7	20.7	38.1	64	191	69	68	87	M12x75	1.5
4x1½	300	1.75	2.52	7.52	2.95	2.68	3.50	½x3	3.5
114.3x42.4	20.7	44.5	64	191	75	68	89	M12x75	1.6
4x1½	300	2.00	2.52	7.52	3.27	2.68	3.50	½x3	3.7
114.3x48.3	20.7	50.8	64	191	83	68	89	M12x75	1.7
4x2	300	2.50	2.52	7.52	3.74	2.68	3.66	½x3	4.2
114.3x60.3	20.7	63.5	64	191	95	68	93	M12x75	1.9
4x2½	300	2.75	2.52	7.52	4.02	2.64	3.82	½x3	4.6
114.3x73.0	20.7	69.9	64	191	102	67	97	M12x75	2.1
4x3OD	300	2.75	2.52	7.52	4.02	2.64	3.82	½x3	4.6
114.3 × 76.1	20.7	69.9	64	191	102	67	97	M12x75	2.1
4x3	300	3.50	2.52	7.52	4.80	2.64	3.94	½x3	5.3
114.3x88.9	20.7	88.9	64	191	122	67	100	M12x75	2.4
5½ODx1	300	1.50	3.07	9.21	2.72	3.31	4.06	¾x3½	4.6
139.7x33.7	20.7	38.1	78	234	69	84	103	M16x90	2.1
5½ODx1½	300	1.75	3.07	9.21	2.95	3.43	4.25	¾x3½	4.8
139.7x42.4	20.7	44.5	78	234	75	87	108	M16x90	2.2
5½ODx1½	300	2.00	3.07	9.21	3.27	3.43	4.25	¾x3½	5.1
139.7x48.3	20.7	50.8	78	234	83	87	108	M16x90	2.3
5½ODx2	300	2.50	3.07	9.21	3.74	3.31	4.33	¾x3½	5.5
139.7x60.3	20.7	63.5	78	234	95	84	110	M16x90	2.5
5½ODx3OD	300	2.75	3.07	9.21	4.02	3.35	4.53	¾x3½	6.4
139.7x76.1	20.7	69.9	78	234	102	85	115	M16x90	2.9
5½ODx3	300	3.50	3.07	9.21	4.80	3.43	4.72	¾x3½	6.6
139.7x88.9	20.7	88.9	78	234	122	87	120	M16x90	3.0



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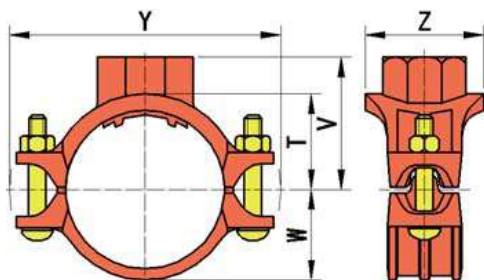
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Mechanical Tee Style 302

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OD	Work Pressure	Hole Size	W	Y	Z	T	V	Bolts Size	Approx. Wt. Ea.
In/mm	Psi/bar	In/mm	In/mm	In/mm	In/mm	In/mm	In/mm	In/mm	Lbs./kg
5x1	300	1.50	3.11	9.25	2.72	3.31	4.37	¾x3½	4.6
141.3x33.7	20.7	38.1	79	235	69	84	111	M16x90	2.1
5x1¼	300	1.75	3.11	9.25	2.95	3.35	4.37	¾x3½	4.8
141.3x42.4	20.7	44.5	79	235	75	85	111	M16x90	2.2
5x1½	300	2.00	3.11	9.25	3.27	3.35	4.37	¾x3½	5.1
141.3x48.3	20.7	50.8	79	235	83	85	111	M16x90	2.3
5x2	300	2.50	3.11	9.25	3.74	3.31	4.37	¾x3½	5.5
141.3x60.3	20.7	63.5	79	235	95	84	111	M16x90	2.5
5x2½	300	2.75	3.11	9.25	4.02	3.31	4.41	¾x3½	6.2
141.3x73.0	20.7	69.9	79	235	102	84	112	M16x90	2.8
5x3	300	3.50	3.11	9.25	4.80	3.35	4.41	¾x3½	6.8
141.3x88.9	20.7	88.9	79	235	122	85	112	M16x90	3.1
6¾ODx1	300	1.50	3.58	10.16	2.72	3.74	4.49	¾x3½	5.1
165.1x33.7	20.7	38.1	91	258	69	95	114	M16x90	2.3
6¾ODx1¼	300	1.75	3.58	10.16	2.95	3.74	4.57	¾x3½	5.3
165.1x42.4	20.7	44.5	91	258	75	95	116	M16x90	2.4
6¾ODx1½	300	2.00	3.58	10.16	3.27	3.78	4.61	¾x3½	5.5
165.1x48.3	20.7	50.8	91	258	83	96	117	M16x90	2.5
6¾ODx2	300	2.50	3.58	10.16	3.74	3.70	4.72	¾x3½	5.9
165.1x60.3	20.7	63.5	91	258	95	94	120	M16x90	2.7
6¾ODx3OD	300	2.75	3.58	10.16	4.02	3.70	4.88	¾x3½	6.8
165.1x76.1	20.7	69.9	91	258	102	94	124	M16x90	3.1
6¾ODx3	300	3.50	3.58	10.16	4.80	3.70	5.00	¾x3½	7.5
165.1x88.9	20.7	88.9	91	258	122	94	127	M16x90	3.4
6x1	300	1.50	3.66	10.28	2.72	3.82	4.57	¾x3½	5.3
168.3x33.7	20.7	38.1	93	261	69	97	116	M16x90	2.4
6x1¼	300	1.75	3.66	10.28	2.95	3.90	4.65	¾x3½	5.5
168.3x42.4	20.7	44.5	93	261	75	99	118	M16x90	2.5
6x1½	300	2.00	3.66	10.28	3.27	3.86	4.69	¾x3½	5.7
168.3x48.3	20.7	50.8	93	261	83	98	119	M16x90	2.6
6x2	300	2.50	3.66	10.28	3.74	3.98	4.80	¾x3½	6.2
168.3x60.3	20.7	63.5	93	261	95	101	122	M16x90	2.8
6x2½	300	2.75	3.66	10.28	4.02	3.90	4.92	¾x3½	6.8
168.3x73.0	20.7	69.9	93	261	102	99	125	M16x90	3.1
6x3OD	300	2.75	3.66	10.28	4.02	3.94	5.12	¾x3½	7.0
168.3x76.1	20.7	69.9	93	261	102	100	130	M16x90	3.2
6x3	300	3.50	3.66	10.28	4.80	3.78	5.08	¾x3½	7.7
168.3x88.9	20.7	88.9	93	261	122	96	129	M16x90	3.5
8x1	300	1.50	4.72	12.99	2.72	4.96	5.71	¾x4	7.7
219.1x33.7	20.7	38.1	120	330	69	126	145	M20x100	3.5
8x1¼	300	1.75	4.72	12.99	2.95	4.88	5.71	¾x4	7.9
219.1x42.4	20.7	44.5	120	330	75	124	145	M20x100	3.6
8x1½	300	2.00	4.72	12.99	3.27	4.88	5.71	¾x4	8.4
219.1x48.3	20.7	50.8	120	330	83	124	145	M20x100	3.8
8x2	300	2.50	4.72	12.99	3.74	4.80	5.83	¾x4	8.8
219.1x60.3	20.7	63.5	120	330	95	122	148	M20x100	4.0
8x2½	300	2.75	4.72	12.99	4.02	4.80	5.98	¾x4	9.7
219.1x73.0	20.7	69.9	120	330	102	122	152	M20x100	4.4
8x3OD	300	2.75	4.72	12.99	4.02	4.80	5.98	¾x4	9.7
219.1x76.1	20.7	69.9	120	330	102	122	152	M20x100	4.4
8x3	300	3.50	4.72	12.99	4.80	4.80	6.10	¾x4	10.1
219.1x88.9	20.7	88.9	120	330	122	122	155	M20x100	4.6



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