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# Grinnell Grooved Fire Protection Products Figure 730 Mechanical Tees - Threaded / Grooved

General Description



See Fire Protection Submittal Sheet for Pressure Rating and Listing/Approval Information

The Figure 730 Mechanical Tees may be used for any tee connection where a threaded or grooved outlet is needed. They may be converted into a cross when necessary.

#### WARNING

The Figure 730 Mechanical Tee described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the National Fire Protection Association, in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of this device.

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. The installing contractor or sprinkler manufacturer should be contacted with any questions.

#### Technical Data

Figure: 730

Outlet: Threaded or Grooved

**Approvals:** UL, FM, ULC, VdS, and LPCB; See Fire Protection Submittal Sheet for exact

Listing / Approval information. **Housing:** Ductile iron conforming to ASTM A-536, Grade 65-45-12

#### **Protective Coatings:**

- Non-lead orange paint
- Fire brigade red (optional) non-lead paint
- Hot dipped galvanized conforming to ASTM A-153

**Bolt/Nuts:** Track Head Bolts - conforming to ASTM A-183, Zinc Plated, (Min. Tensile = 110,000 psi/758,422 kPa)

Metric - conforming to ASTM F568M **Gasket:** (specify when ordering)

Grade "E" EPDM, green color code

(See Data Sheet TFP1895 for aid in selecting proper gasket)

### Ordering Procedure

When placing an order, indicate the full product name. Please specify the quantity, figure number, type of gasket, Grade "E" EPDM, and size. Grinnell Grooved Piping Products, valves, accessories and other products are available throughout the U.S., Canada, and internationally, through a network of distribution centers. You may write directly or call 215-362-0700 for the distributor nearest you.

#### Care and Maintenance

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in accordance with the applicable standards of the National Fire Protection Association (e.g., NFPA 25), in addition to the standards of any authority having jurisdiction. The installing contractor or product manufacturer should be contacted relative to any questions. Any impairment must be immediately corrected. It is recommended that automatic sprinkler systems be inspected, tested, and maintained by a qualified Inspection Service.

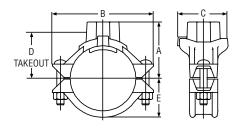
### Limited Warranty

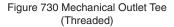
Products manufactured by Tyco Fire Products are warranted solely to the original Buyer for ten (10) years against defects in material and workmanship when paid for and properly installed and maintained under normal use and service. This warranty will expire ten (10) years from date of shipment by Tyco Fire Products. No warranty is given for products or components manufactured by companies not affiliated by ownership with Tyco Fire Products or for products and components which have been subject to misuse, improper installation, corrosion, or which have not been installed, maintained, modified or repaired in accordance with applicable Standards of the National Fire Protection Association (NFPA), and/or the standards of any other Authorities Having Jurisdiction. Materials found by Tyco Fire Products to be defective shall be either repaired or replaced, at Tyco Fire Products' sole option. Tyco Fire Products neither assumes, nor authorizes any person to assume for it, any other obligation in connection with the sale of products or parts of products. Tyco Fire Products shall not be responsible for sprinkler system design errors or inaccurate or incomplete information supplied by Buyer or Buyer's representatives.

IN NO EVENT SHALL TYCO FIRE PRODUCTS BE LIABLE, IN CONTRACT, TORT, STRICT LIABILITY OR UNDER ANY OTHER LEGAL THEORY, FOR INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUTNOT LIMITED TO LABOR CHARGES, REGARDLESS OF WHETHER TYCO FIRE PRODUCTS WAS INFORMED ABOUT THE POSSIBILITY OF SUCH DAMAGES, AND IN NO EVENT SHALL TYCO FIRE PRODUCTS' LIABILITY EXCEED AN AMOUNT EQUAL TO THE SALES PRICE.

THE FOREGOING WARRANTY IS MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Page 2 of 4 TFP1860

## Figure 730 Mechanical Outlet Tee and Cross (Threaded)





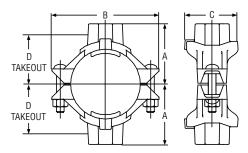


Figure 730 Mechanical Outlet Cross (Threaded)

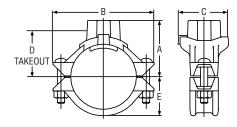
Nom. Size	Hole	Dia.‡		Nomin	al Dimen	Dalt	Tee	Cross		
	Hole	Max.	Α	В	С	D	E	Bolt	Net Wt.	Net Wt.
Run x Branch	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Size**	Lbs.	Lbs.
	mm	mm	mm	mm	mm	mm	mm	Dia. x Lg.	Kg.	Kg.
01 1/1 2/1 41	1.50	1.63	2.62	4.88	3.07	2.12	1.59	3/8" x 21/4"	2.2	2.6
2" x <sup>1</sup> / <sub>2</sub> ", <sup>3</sup> / <sub>4</sub> ", 1"	38.1	41.3	66.5	124.0	78.0	53.8	40.4	M10 x 57	1.0	1.2
	1.75	1.88	2.78	4.88	3.32	1.93	1.59	3/8" x 21/4"	2.5	3.3
2" x 1 <sup>1</sup> / <sub>4</sub> "	44.5	47.6	70.6	124.0	84.3	49.0	40.4	M10 x 57	1.1	1.5
	1.75	1.88	2.75	4.88	3.32	1.93	1.59	3/8" x 21/4"	2.5	3.7
2" x 1 <sup>1</sup> / <sub>2</sub> "	44.5	47.6	69.9	124.0	84.3	49.0	40.4	M10 x 57	1.1	1.7
	1.50	1.63	2.88	5.25	3.07	2.38	1.81	3/8" x 21/4"	2.7	3.1
$2^{1/2}$ " x $^{1/2}$ ", $^{3/4}$ ", 1"	38.1	41.3	73.2	133.4	78.0	60.5	46.0	M10 x 57	1.2	1.4
	2.00	2.13	3.00	5.25	3.56	2.19	1.81	3/8" x 21/4"	3.1	3.9
2 <sup>1</sup> / <sub>2</sub> " x 1 <sup>1</sup> / <sub>4</sub> "	50.8	54.0	76.2	133.4	90.4	55.6	46.0	M10 x 57	1.4	1.8
	2.00	2.13	3.07	5.25	3.59	2.17	1.81	3/8" x 21/4"	3.3	4.3
2 <sup>1</sup> / <sub>2</sub> " x 1 <sup>1</sup> / <sub>2</sub> "	50.8	54.0	78.0	133.4	91.2	55.1	46.0	M10 x 57	1.5	1.9
	2.00	2.13	3.19	5.25	4.00	2.44	1.81	3/8" x 2 <sup>1</sup> / <sub>4</sub> "	3.5	4.4
2 <sup>1</sup> / <sub>2</sub> " x 2"	50.8	54.0	81.0	133.4	101.6	62.0	46.0		1.6	2.0
								M10 x 57		
76.1 <sub>mm</sub> x <sup>1</sup> / <sub>2</sub> ", <sup>3</sup> / <sub>4</sub> ", 1"	1.50	1.63	2.94	5.62	3.07	2.44	1.87	M10 x 57	2.7	3.1
	38.1	41.3	74.5	142.7	78.0	62.0	47.5			
76.1 <sub>mm</sub> x 1 <sup>1</sup> / <sub>4</sub> "	2.00	2.13	3.06	5.62	3.56	2.25	1.87	M10 x 57		1
	50.8	54.0	77.7	142.7	90.4	57.2	47.5			
76.1 <sub>mm</sub> x 1 <sup>1</sup> / <sub>2</sub> "	2.00	2.13	3.13	5.62	3.56	2.25	1.87	M10 x 57		1
	50.8	54.0	79.5	142.7	90.4	57.2	47.5	WITO X O7		
76.1 <sub>mm</sub> x 2"	2.50	2.63	3.25	5.62	4.00	2.50	1.87	M10 x 57		1
7 O. Tilliii X Z	63.5	66.7	82.6	142.7	101.6	63.5	47.5		1.9	2.7
3" x <sup>1</sup> / <sub>2</sub> ", <sup>3</sup> / <sub>4</sub> ", 1"	1.50	1.63	3.19	6.13	3.07	2.56	2.21	1/2" x 3"	3.7	4.5
O X /2 , /4 , I	38.1	41.3	81.0	155.7	78.0	65.0	56.1	M12 x 76	1.7	2.0
3" x 1 <sup>1</sup> / <sub>4</sub> "	1.75*	1.88	3.34	6.13	3.32	2.50	2.21	1/2" x 3"	1.2     1.4       3.1     3.9       1.4     1.8       3.3     5.1       1.5     2.3       4.1     5.9       1.9     2.7       3.7     4.5       1.7     2.0       3.9     4.9       1.8     2.2       4.2     5.5       1.9     2.5	4.9
3 X 1 /4	44.5	47.6	84.8	155.7	84.3	63.5	56.1	M12 x 76	1.8	2.3 5.9 2.7 4.5 2.0 4.9 2.2 5.5
011 41/ 11	2.00	2.13	3.38	6.13	3.56	2.48	2.21	1/2" x 3"	4.2	5.5
3" x 1 <sup>1</sup> / <sub>2</sub> "	50.8	54.0	85.9	155.7	90.4	63.0	56.1	M12 x 76	1.9	2.5
011 011	2.50	2.63	3.50	6.13	4.09	2.75	2.21	1/2" x 3"	4.7	6.5
3" x 2"	63.5	66.7	88.9	155.7	103.9	69.9	56.1	M12 x 76	2.1	2.9
411 1/11 2/11 411	1.50	1.63	3.69	7.13	3.07	3.06	2.78	1/2" x 3"	5.5	7.1
4" x <sup>1</sup> / <sub>2</sub> ", <sup>3</sup> / <sub>4</sub> ", 1"	38.1	41.3	93.7	181.1	78.0	77.7	70.6	M12 x 76	2.5	3.2
	1.75*	1.88	3.92	7.13	3.32	3.00	2.78	1/2" x 3"	5.5	7.1
4" x 1 <sup>1</sup> / <sub>4</sub> "	44.5	47.6	99.6	181.1	84.3	76.2	70.6	M12 x 76	2.5	3.2
	2.00	2.13	4.00	7.13	3.56	2.98	2.78	1/2" x 3"	5.5	7.1
4" x 1 <sup>1</sup> / <sub>2</sub> "	50.8	54.0	101.6	181.1	90.4	75.7	70.6	M12 x 76	2.5	3.2
	2.50	2.63	4.00	7.13	4.06	3.25	2.78	1/2" x 3"	6.0	8.1
4" x 2"	63.5	66.7	101.6	181.1	103.1	82.6	70.6	M12 x 76	2.7	3.7
	2.75	2.88	4.00	7.13	4.38	3.12	2.78	1/2" x 3"	6.0	8.1
4" x 2 <sup>1</sup> / <sub>2</sub> "	69.9	73.0	101.6	181.1	111.3	79.2	70.6	M12 x 76	2.7	3.7
								IVI I Z X / D		
4" x 76.1 <sub>mm</sub>	2.75	2.88	4.00	7.13	4.38	3.12	2.78	M12 x 76	6.0	8.1
	69.9	73.0	101.6	181.1	111.3	79.2	70.6		2.7	3.7
4" x 3"	3.50	3.63	4.13	7.13	5.13	3.31	2.78	1/2" x 3"	7.0	13.5
	88.9	92.1	104.9	181.1	130.3	84.1	70.6	M12 x 76	3.2	6.1

<sup>‡</sup> Proper hole preparation is required for effective sealing and performance. Check the pipe seal surface within 5/s" of the hole to be certain it is free from conditions that would affect proper gasket sealing. Remove any sharp or rough edges from the hole or upper housing contact area, that might affect assembly, proper seating of the locating collar or flow from the outlet. Check gasket grade to be certain it is suitable for the service. For crosses, ensure double outlet holes are aligned on opposite sides of the pipe. The use of threaded products other than steel pipe, such as dry pendents, etc. may not be compatible with the female threaded outlet on the Mechanical Tee. Always confirm compatibility by contacting Tyco Fire Products.

<sup>\*\*</sup> Gold color coded metric bolt sizes are available upon request.

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### Figure 730 Mechanical Outlet Tee and Cross (Threaded)



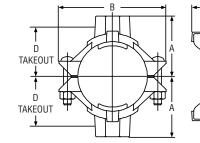


Figure 730 Mechanical Outlet Tee (Threaded)

Figure 730 Mechanical Outlet Cross (Threaded)

	(Inreade	u)	(Inreaded)										
Nom. Size	Hole	Dia.‡		Nomin		Bolt	Tee	Cross					
	Hole	Max.	Α	В	С	D	Е	Size**	Net Wt.	Net Wt.			
Run x Branch	Inches	Inches	Inches	Inches	Inches	Inches	Inches		Lbs.	Lbs.			
	mm	mm	mm	mm	mm	mm	mm	Dia. x Lg.	Kg.	Kg.			
	2.00	2.13	4.63	8.13	3.56	4.00	3.37	5/8" x 4 <sup>3</sup> / <sub>4</sub> "	6.5	7.7			
5" x 1 <sup>1</sup> / <sub>2</sub> "	50.8	54.0	117.6	206.5	90.4	101.6	85.6	M16 x 121	2.9	3.5			
	2.50	2.63	4.63	8.13	4.06	3.88	3.37	5/8" x 4 <sup>3</sup> / <sub>4</sub> "	7.1	8.1			
5" x 2"	63.5	66.7	117.6	206.5	103.1	98.6	85.6	M16 x 121	3.2	3.7			
	2.75	2.88	4.75	8.13	4.38	3.88	3.37	5/8" x 4 <sup>3</sup> / <sub>4</sub> "	7.3	8.7			
5" x 2 <sup>1</sup> / <sub>2</sub> "	69.9	73.0	120.7	206.5	111.3	98.6	85.6	M16 x 121	3.3	3.9			
	2.75	2.88	4.75	8.13	4.38	3.88	3.37		7.3	8.7			
5" x 76.1 <sub>mm</sub>	69.9	73.0	120.7	206.5	111.3	98.6	85.6	M16 x 121	3.3	3.9			
	3.50	3.63	5.00	8.13	5.13	4.06	3.37	5/8" x 4 <sup>3</sup> / <sub>4</sub> "	7.6	14.7			
5" x 3"	88.9	92.1	127.0	206.5	130.3	103.1	85.6	M16 x 121	3.4	6.7			
	2.00	2.13	5.13	9.25	3.56	4.25	3.90		6.9	7.9			
165.1 <sub>mm</sub> x 1 <sup>1</sup> / <sub>4</sub> "	50.8	54.0	130.3	235.0	90.4	108.0	99.1	M16 x 121	3.1	3.6			
	2.00	2.13	5.13	9.25	3.56	4.04	3.90		7.4	8.9			
165.1 <sub>mm</sub> x 1 <sup>1</sup> / <sub>2</sub> "	50.8	54.0	130.3	235.0	90.4	102.6	99.1	M16 x 121	3.4	4.0			
	2.50	2.63	5.13	9.25	4.06	4.31	3.90		7.5	8.9			
165.1 <sub>mm</sub> x 2"	63.5	66.7	130.3	235.0	103.1	109.5	99.1	M16 x 121	3.4	4.0			
	2.75	2.88	5.13	9.25	4.38	4.18	3.90		7.5	11.1			
165.1 <sub>mm</sub> x 2 <sup>1</sup> / <sub>2</sub> "	69.9	73.0	130.3	235.0	111.3	106.2	99.1	M16 x 121	3.4	5.0			
	2.75	2.88	5.13	9.25	4.38	4.18	3.90		7.5	11.1			
165.1mm x 76.1mm	69.9	73.0	130.3	235.0	111.3	106.2	99.1	M16 x 121	3.4	5.0			
	3.50	3.63	5.50	9.25	5.13	4.37	3.90		9.5	14.1			
165.1 <sub>mm</sub> x 3"	88.9	92.1	139.7	235.0	130.3	111.0	99.1	M16 x 121	4.3	6.4			
	4.50	4.63	5.38	9.25	6.13	4.56	3.90		10.0	20.1			
165.1 <sub>mm</sub> x 4"	114.3	117.5	136.7	235.0	155.7	115.8	99.1	M16 x 121	4.5	9.1			
	2.00	2.13	5.13	9.25	3.56	4.25	3.90	5/8" x 4 <sup>3</sup> / <sub>4</sub> "	6.9	7.9			
6" x 1 <sup>1</sup> / <sub>4</sub> "	50.8	54.0	130.3	9.25 235.0	90.4	108.0	99.1	M16 x 121	3.1	3.6			
	2.00	2.13	5.13	9.25	3.56	4.04	3.90	5/8" x 4 <sup>3</sup> / <sub>4</sub> "	7.4	8.9			
6" x 1 <sup>1</sup> / <sub>2</sub> "			130.3	9.25 235.0	90.4	102.6	99.1	M16 x 121	3.4	4.0			
	50.8	54.0											
6" x 2"	2.50	2.63	5.13 <i>130.3</i>	9.25	4.06 <i>103.1</i>	4.31 <i>109.5</i>	3.90 <i>99.1</i>	5/8" x 4 <sup>3</sup> / <sub>4</sub> "	7.5 <i>3.4</i>	8.9 <i>4.0</i>			
-	63.5	66.7		235.0				M16 x 121					
6" x 2 <sup>1</sup> / <sub>2</sub> "	2.75	2.88	5.13	9.25	4.38	4.18	3.90	<sup>5</sup> / <sub>8</sub> " x 4 <sup>3</sup> / <sub>4</sub> "	7.5	11.1			
	69.9	73.0	130.3	235.0	111.3	106.2	99.1	M16 x 121	3.4	5.0			
6" x 76.1 <sub>mm</sub>	2.75	2.88	5.13	9.25	4.38	4.18	3.90	M16 x 121	7.5	11.1			
	69.9	73.0	130.3	235.0	111.3	106.2	99.1	5/11 42/11	3.4	5.0			
6" x 3"	3.50	3.63	5.50	9.25	5.13	4.37	3.90	5/8" x 4 <sup>3</sup> / <sub>4</sub> "	9.5	14.1			
	88.9	92.1	139.7	235.0	130.3	111.0	99.1	M16 x 121	4.3	6.4			
6" x 4"	4.50	4.63	5.38	9.25	6.13	4.56	3.90	<sup>5</sup> / <sub>8</sub> " x 4 <sup>3</sup> / <sub>4</sub> "	10.0	20.1			
U X 4	114.3	117.5	136.7	235.0	155.7	115.8	99.1	M16 x 121	4.5	9.1			
8" x 2 <sup>1</sup> / <sub>2</sub> "	2.75	2.88	6.25	12.50	4.38	5.12	4.90	3/4" x 43/4"	10.2	12.1			
O A Z 72	69.9	73.0	158.8	317.5	111.3	130.0	124.5	M20 x 121	4.6	5.5			
8" x 76.1 <sub>mm</sub>	2.75	2.88	6.25	12.50	4.38	5.12	4.90	M20 x 121	10.2	12.1			
O X / O. Imm	69.9	73.0	158.8	317.5	111.3	130.0	124.5		4.6	5.5			
8" x 3"	3.50	3.63	6.50	12.50	5.13	5.37	4.90	<sup>3</sup> / <sub>4</sub> " x 4 <sup>3</sup> / <sub>4</sub> "	12.5	15.1			
о x 3	88.9	92.1	165.1	317.5	130.3	136.4	124.5	M20 x 121	5.7	6.8			
011 411	4.50	4.63	6.38	12.50	6.13	5.56	4.90	3/4" x 43/4"	12.5	21.1			
8" x 4"	114.3	117.5	162.1	317.5	155.7	141.2	124.5	M20 x 121	5.7	9.6			
paration is required for effective	-	. ,	011-4										

<sup>‡</sup> Proper hole preparation is required for effective sealing and performance. Check the pipe seal surface within 5/8" of the hole to be certain it is free from conditions that would affect proper gasket sealing. Remove any sharp or rough edges from the hole or upper housing contact area, that might affect assembly, proper seating of the locating collar or flow from the outlet. Check gasket grade to be certain it is suitable for the service. For crosses, ensure double outlet holes are aligned on opposite sides of the pipe. The use of threaded products other than steel pipe, such as dry pendents, etc. may not be compatible with the female threaded outlet on the Mechanical Tee. Always confirm compatibility by contacting Tyco Fire Products.

\*\*\* Gold color coded metric bolt sizes are available upon request.

Note: Outlet threads conforming to ISO 7-1 are available, contact Tyco Fire Products for details.

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# Figure 730 Mechanical Outlet Tee and Cross (Grooved)

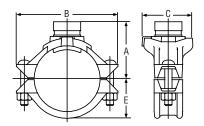


Figure 730 Mechanical Outlet Grooved Tee

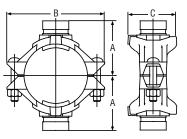


Figure 730 Mechanical Outlet Grooved Cross

Nominal	Hole	Dia.‡	Nominal Dimensions			19		Tee	Cross	Nominal	Nominal Hole Dia.‡				Nominal Dimensions				Cross
Size	Hole	Max.	A	В	С	E	Bolt	Net Wt.	Net Wt.	Size	Hole	Max.	A	В	С	E	Bolt	Tee Net Wt.	Net Wt.
Run x	Inches	Inches	Inches	Inches	Inches	Inches	Size**	Lbs.	Lbs.	Run x	Inches	Inches	Inches	Inches	Inches	Inches	Size**	Lbs.	Lbs.
Branch	mm	mm	mm	mm	mm	mm	Dia. x Lg.	Kg.	Kg.	Branch	mm	mm	mm	mm	mm	mm	Dia. x Lg.	Kg.	Kg.
	1.75	1.88	2.78	4.88	3.32	1.59	3/8" x 21/4"	2.5	3.3	5" x 76.1 <sub>mm</sub>	2.75	2.88	4.75	8.13	4.38	3.37	M16 x 121	7.3	8.7
2" x 1 <sup>1</sup> / <sub>4</sub> "	44.5	47.6	70.6	124.0	84.3	40.4	M10 x 57	1.1	1.5		69.9	73.0	120.7	206.5	111.3	85.6		3.3	3.9
	1.75	1.88	2.62	4.88	3.32	1.59	3/8" x 21/4"	2.5	3.7	5" x 3"	3.50	3.63	5.00	8.13	5.13	3.37	5/8" x 4 <sup>3</sup> /4"	7.6	14.7
2" x 1 <sup>1</sup> / <sub>2</sub> "	44.5	47.6	66.5	124.0	84.3	40.4	M10 x 57	1.1	1.7		88.9	92.1	127.0	206.5	130.3	85.6	M16 x 121	3.4	6.7
	2.00	2.13	3.00	5.25	3.56	1.81	3/8" x 21/4"	3.1	3.9	105.111/1	2.00	2.13	5.13	9.25	3.56	3.90	M16 x 121	6.9	7.9
2 <sup>1</sup> / <sub>2</sub> " x 1 <sup>1</sup> / <sub>4</sub> "	50.8	54.0	76.2	133.4	90.4	46.0	M10 x 57	1.4	1.8	165.1 <sub>mm</sub> x 1 <sup>1</sup> / <sub>4</sub> "	50.8	54.0	130.3	235.0	90.4	99.1		3.1	3.6
	2.00	2.13	3.07	5.25	3.59	1.81	3/8" x 21/4"	3.3	4.3	405 441/1	2.00	2.13	5.13	9.25	3.56	3.90		7.4	8.9
2 <sup>1</sup> / <sub>2</sub> " x 1 <sup>1</sup> / <sub>2</sub> "	50.8	54.0	78.0	133.4	91.2	46.0	M10 x 57	1.5	1.9	165.1 <sub>mm</sub> x 1 <sup>1</sup> / <sub>2</sub> "	50.8	54.0	130.3	235.0	90.4	99.1	M16 x 121	3.4	4.0
	2.00	2.13	3.19	5.25	4.00	1.81	3/8" x 21/4"	3.5	4.4	105 1 01	2.50	2.63	5.13	9.25	4.06	3.90		7.5	8.9
21/2" x 2"	50.8	54.0	81.0	133.4	101.6	46.0	M10 x 57	1.6	2.0	165.1 <sub>mm</sub> x 2"	63.5	66.7	130.3	235.0	103.1	99.1	M16 x 121	3.4	4.0
	2.00	2.13	3.06	5.62	3.56	1.87		3.1	3.9		2.75	2.88	5.13	9.25	4.38	3.90	<del></del>	7.5	11.1
76.1 <sub>mm</sub> x 1 <sup>1</sup> / <sub>4</sub> "	50.8	54.0	77.7	142.7	90.4	47.5	M10 x 57	1.4	1.8	165.1 <sub>mm</sub> x 2 <sup>1</sup> / <sub>2</sub> "	69.9	73.0	130.3	235.0	111.3	99.1	M16 x 121	3.4	5.0
	2.00	2.13	3.13	5.62	3.56	1.87		3.3	5.1		2.75	2.88	5.13	9.25	4.38	3.90		7.5	11.1
76.1 <sub>mm</sub> x 1 <sup>1</sup> / <sub>2</sub> "	50.8	54.0	79.5	142.7	90.4	47.5	M10 x 57	1.5	2.3	165.1 <sub>mm</sub> x 76.1 <sub>mm</sub>	69.9	73.0	130.3	235.0	111.3	99.1	M16 x 121	3.4	5.0
	2.50	2.63	3.25	5.62	4.00	1.87		4.1	5.9	165.1 <sub>mm</sub> x 3"	3.50	3.63	5.50	9.25	5.13	3.90	M16 x 121	9.5	14.1
76.1 <sub>mm</sub> x 2"	63.5	66.7	82.6	142.7	101.6	47.5	M10 x 57	1.9	2.7		88.9	92.1	139.7	235.0	130.3	99.1		4.3	6.4
	1.75*	1.88	3.34	24 613 322 221 1/2" \ 2" 3.0 4.0	105 / 41	4.50	4.63	5.38	9.25	6.13	3.90		10.0	20.1					
3" x 1 <sup>1</sup> / <sub>4</sub> "	44.5	47.6	84.8	155.7	84.3	56.1	M12 x 76	1.8	2.2	165.1 <sub>mm</sub> x 4"	114.3	117.5	136.7	235.0	155.7	99.1	M16 x 121	4.5	9.1
	2.00	2.13	3.38	6.13	3.56	2.21	1/2" x 3"	4.2	5.5	6" x 1 <sup>1</sup> / <sub>4</sub> "	2.00	2.13	5.13	9.25	3.56	3.90	5/8" x 4 <sup>3</sup> /4"	6.9	7.9
3" x 1 <sup>1</sup> / <sub>2</sub> "	50.8	54.0	85.9	155.7	90.4	56.1	M12 x 76	1.9	2.5		50.8	54.0	130.3	235.0	90.4	99.1	M16 x 121	3.1	3.6
	2.50	2.63	3.50	6.13	4.09	2.21	1/2" x 3"	4.7	6.5	6" x 1 <sup>1</sup> / <sub>2</sub> "	2.00	2.13	5.13	9.25	3.56	3.90	5/8" x 4 <sup>3</sup> / <sub>4</sub> "	7.4	8.9
3" x 2"	63.5	66.7	88.9	155.7	103.9	56.1	M12 x 76	2.1	2.9		50.8	54.0	130.3	235.0	90.4	99.1	M16 x 121	3.4	4.0
	1.75*	1.88	3.92	7.13	3.32	2.78	1/2" x 3"	5.5	7.1	0" 0"	2.50	2.63	5.13	9.25	4.06	3.90	5/8" x 4 <sup>3</sup> / <sub>4</sub> "	7.5	8.9
4" x 11/4"	44.5	47.6	99.6	181.1	84.3	70.6	M12 x 76	2.5	3.2	6" x 2"	63.5	66.7	130.3	235.0	103.1	99.1	M16 x 121	3.4	4.0
	2.00	2.13	4.00	7.13	3.56	2.78	1/2" x 3"	5.5	7.1	011 04/11	2.75	2.88	5.13	9.25	4.38	3.90	5/8" x 4 <sup>3</sup> / <sub>4</sub> "	7.5	11.1
4" x 1 <sup>1</sup> / <sub>2</sub> "	50.8	54.0	101.6	181.1	90.4	70.6	M12 x 76	2.5	3.2	6" x 2 <sup>1</sup> / <sub>2</sub> "	69.9	73.0	130.3	235.0	111.3	99.1	M16 x 121	3.4	5.0
<u> </u>	2.50	2.63	4.00	7.13	4.06	2.78	1/2" x 3"	6.0	8.1		2.75	2.88	5.13	9.25	4.38	3.90		7.5	11.1
4" x 2"	63.5	66.7	101.6	181.1	103.1	70.6	M12 x 76	2.7	3.7	6" x 76.1 <sub>mm</sub>	69.9	73.0	130.3	235.0	111.3	99.1	M16 x 121	3.4	5.0
	2.75	2.88	4.00	7.13	4.38	2.78	1/2" x 3"	6.0	8.1	0, 0,	3.50	3.63	5.50	9.25	5.13	3.90	5/8" x 4 <sup>3</sup> /4"	9.5	14.1
4" x 2 <sup>1</sup> / <sub>2</sub> "	69.9	73.0	101.6	181.1	111.3	70.6	M12 x 76	2.7	3.7	6" x 3"	88.9	92.1	139.7	235.0	130.3	99.1	M16 x 121	4.3	6.4
<u> </u>	2.75	2.88	4.00	7.13	4.38	2.78		6.0	8.1		4.50	4.63	5.38	9.25	6.13	3.90	5/8" x 4 <sup>3</sup> / <sub>4</sub> "	10.0	20.1
4" x 76.1 <sub>mm</sub>	69.9	73.0	101.6	181.1	111.3	70.6	M12 x 76	2.7	3.7	6" x 4"	114.3	117.5	136.7	235.0	155.7	99.1	M16 x 121	4.5	9.1
	3.50	3.63	4.13	7.13	5.13	2.78	1/2" x 3"	7.0	13.5		2.75	2.88	6.25	12.50	4.38	4.90		10.2	12.1
4" x 3"	88.9	92.1	104.9	181.1	130.3	70.6	M12 x 76	3.2	13.5 6.1	8" x 21/2"	69.9	73.0	158.8	317.5	111.3	124.5		4.6	5.5
<u> </u>	2.00	2.13	4.63	8.13	3.56	3.37	5/8" x 4 <sup>3</sup> / <sub>4</sub> "	6.5	7.7	8" x 76.1 <sub>mm</sub>	2.75	2.88	6.25	12.50	4.38	4.90	<i>M20 x 121</i> M20 x 121	10.2	12.1
5" x 1 <sup>1</sup> / <sub>2</sub> "	50.8	54.0	117.6	206.5	90.4	85.6	M16 x 121	2.9	7.7 3.5		69.9	73.0	158.8	317.5	4.30 111.3	124.5		4.6	5.5
<u> </u>	2.50	2.63	4.63	8.13	4.06	3.37	5/8" x 4 <sup>3</sup> /4"	7.1	8.1		3.50	3.63	6.50	12.50	5.13	4.90	3/4" x 43/4"	12.5	15.1
5" x 2"	63.5	66.7		206.5	4.06 103.1	85.6		3.2	3.7	8" x 3"	88.9	92.1		317.5	5.13 130.3			5.7	6.8
	2.75	2.88	<i>117.6</i> 4.75	-	4.38	3.37	M16 x 121	7.3		<b>—</b>	4.50	4.63	165.1	12.50	6.13	124.5	M20 x 121	12.5	_
5" x 2 <sup>1</sup> / <sub>2</sub> "				8.13				ı	8.7	8" x 4"		l .	6.38			4.90	3/4" x 43/4"	1	21.1
/-	69.9	73.0	120.7	206.5	111.3	85.6	M16 x 121	3.3	3.9		114.3	117.5	162.1	317.5	155.7	124.5	M20 x 121	5.7	9.6

<sup>‡</sup> Proper hole preparation is required for effective sealing and performance. Check the pipe seal surface within 5/8" of the hole to be certain it is free from conditions that would affect proper gasket sealing. Remove any sharp or rough edges from the hole or upper housing contact area, that might affect assembly, proper seating of the locating collar or flow from the outlet. Check gasket grade to be certain it is suitable for the service. For crosses, ensure double outlet holes are aligned on opposite sides of the pipe. The use of threaded products other than steel pipe, such as dry pendents, etc. may not be compatible with the female threaded outlet on the Mechanical Tee. Always confirm compatibility by contacting Tyco Fire Products.

General Notes: It is the Designer's responsibility to select products suitable for the intended service and to ensure that pressure ratings and performance data is not exceeded. Always read and understand the installation instructions (IH-1000). Never remove any piping component or correct or modify any piping deficiencies without first depressurizing and draining the system. Material and gasket selection should be verified to be compatible for the specific application.



<sup>\*\*</sup> Gold color coded metric bolt sizes are available upon request.