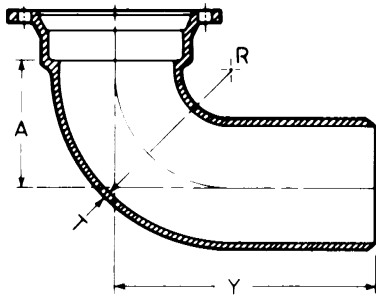
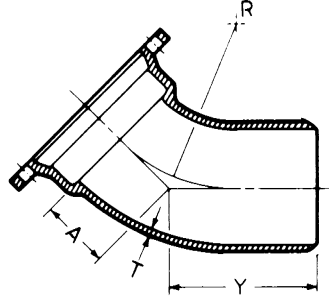


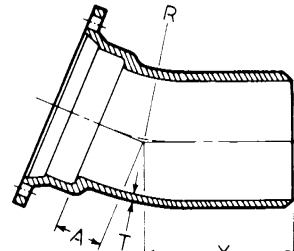
### BENDS



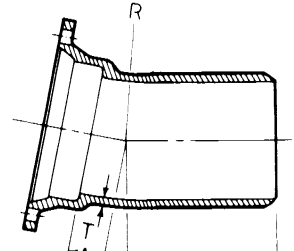
90° Bend MJ x PE (1/4)



45° Bend MJ x PE (1/8)

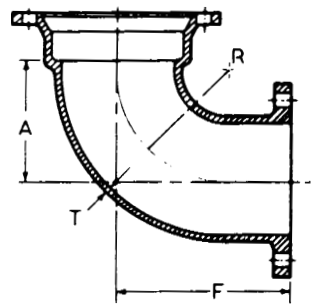


22 1/2° Bend MJ x PE (1/16)

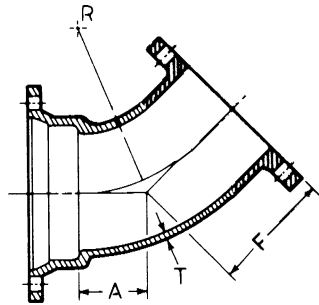


11 1/4° Bend MJ x PE (1/32)

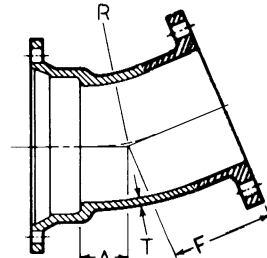
Size	Dimensions					Weight	Dimensions				Weight	Dimensions				Weight	
	T	A	Y	R	A		Y	R	A	Y		R	A	Y	R		
3	.34	4.5	10.0	4.0	18	2.0	7.5	3.62	17	1.50	7.00	4.98	19	1.25	6.75	7.62	15
4	.35	5.0	10.5	4.5	26	2.5	8.0	4.81	22	1.82	7.32	6.66	20	1.55	7.05	10.70	20
6	.37	6.5	12.0	6.0	45	3.5	9.0	7.25	38	2.58	8.08	13.50	33	1.80	7.30	13.26	32
8	.39	7.5	13.0	7.0	64	4.0	9.5	8.44	55	2.84	8.34	11.80	51	2.05	7.55	15.80	44
10	.41	9.5	15.0	9.0	108	5.0	10.5	10.88	78	3.35	8.85	14.35	66	2.31	7.81	18.36	60
12	.43	10.5	16.0	10.0	114	6.0	11.5	13.25	104	3.86	9.36	16.90	89	2.56	8.06	20.90	79
14	.51	12.0	20.0	11.5	219	5.5	13.5	12.06	165	3.93	11.93	17.25	152	2.59	10.59	21.25	137
16	.52	13.0	21.0	12.5	254	6.0	14.0	13.25	206	3.98	11.98	17.50	181	2.62	10.62	21.50	161
24	.62	17.0	25.0	15.58	710	7.5	16.2	14.69	460	9.00	17.00	37.69	455	9.00	17.00	76.12	475
30	* (Available Soon see List Prices)					* (Available Soon see List Prices)				* (Available Soon see List Prices)				* (Available Soon see List Prices)			



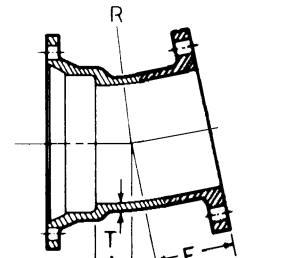
90° Bend MJ x Flange (1/4)



45° Bend MJ x Flange (1/8)



22 1/2° Bend MJ x Flange (1/16)



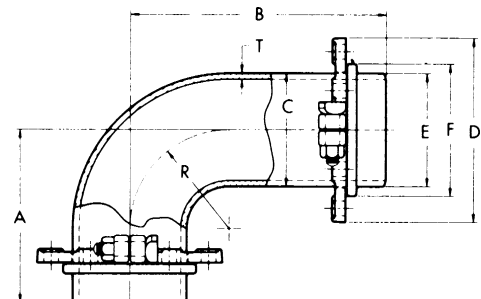
11 1/4° Bend MJ x Flange (1/32)

Size	Dimensions					Weight	Dimensions				Weight	Dimensions				Weight	
	T	A	R	F	A		R	F	A	R		F	A	R	F		
3	.34	4.5	4.0	5.5	21	...	...	...	...	...	...	...	...	...	...	...	
4	.35	5.0	4.5	6.5	28	2.50	3.56	4.0	34	1.75	3.81	4.0	34	1.50	5.12	4.0	19
6	.37	6.5	6.0	8.0	45	3.25	5.49	5.0	57	2.25	6.35	5.0	57	1.50	5.12	5.0	30
8	.39	7.5	7.0	9.0	73	4.25	7.93	5.5	83	2.50	7.62	5.5	83	1.75	7.70	5.5	50
10	.41	9.5	9.0	11.0	113	5.00	9.76	6.5	122	3.00	10.16	6.5	122	2.00	10.25	6.5	75
12	.43	10.5	10.0	12.0	141	6.00	12.19	7.5	159	3.50	12.70	7.5	159	2.25	12.82	7.5	88
14	.51	12.0	11.5	14.0	217	5.50	10.85	8.5	207								
16	.52	13.0	12.5	15.0	280	6.00	12.02	9.5	290								

### 90° Swivel x Swivel Hydrant Ell

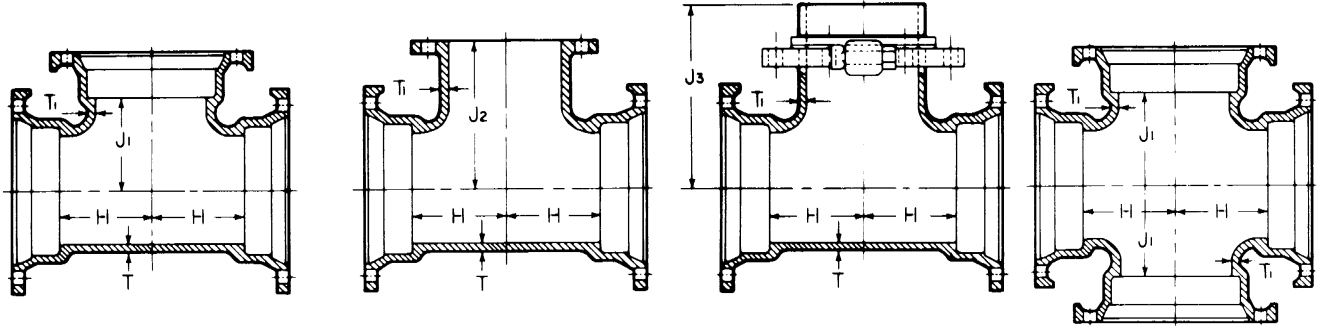
Size	Dimensions									*Weight
	T	A	B	C	D	E	F	R		
6	.37	10.5	15.5	6.90	11.2	6.81	7.98	6.0	74	

\* Weight includes two swivel glands.



### TEES

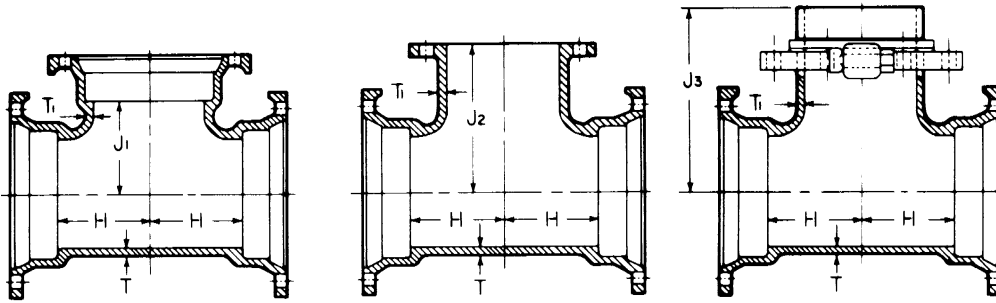
### CROSS



Size	T	T <sup>1</sup>	H	Dimensions			MJ	MJxFE	Weights	
				J <sup>1</sup>	J <sup>2</sup>	J <sup>3</sup>			MJxS <sup>†</sup>	Cross
3	.34	.34	3.5	3.50	5.5	...	26	29	...	31
<b>4x3</b>	<b>.35</b>	<b>.34</b>	<b>3.5</b>	<b>4.00</b>	<b>6.5</b>	...	<b>35</b>	<b>34</b>	...	<b>39</b>
4	.35	.35	4.0	4.00	6.5	...	36	39	...	45
<b>6x3</b>	<b>.37</b>	<b>.34</b>	<b>3.5</b>	<b>5.00</b>	<b>8.0</b>	...	<b>51</b>	<b>54</b>	...	...
6x4	.37	.35	4.0	5.00	8.0	...	52	57	...	62
<b>6</b>	<b>.37</b>	<b>.37</b>	<b>5.0</b>	<b>5.00</b>	<b>8.0</b>	<b>10.50</b>	<b>66</b>	<b>68</b>	<b>77</b>	<b>79</b>
8x3	.39	.34	4.0	6.50	9.0	...	56	...	...	...
<b>8x4</b>	<b>.39</b>	<b>.35</b>	<b>4.5</b>	<b>6.50</b>	<b>9.0</b>	...	<b>72</b>	<b>82</b>	...	<b>84</b>
8x6	.39	.37	5.5	6.50	9.0	11.50	79	81	105	98
<b>8</b>	<b>.39</b>	<b>.39</b>	<b>6.5</b>	<b>6.50</b>	<b>9.0</b>	<b>11.50</b>	<b>90</b>	<b>101</b>	<b>116</b>	<b>112</b>
10x3	.41	.34	4.0	7.50	11.0	...	80	...	...	...
<b>10x4</b>	<b>.41</b>	<b>.35</b>	<b>4.5</b>	<b>7.50</b>	<b>11.0</b>	...	<b>82</b>	<b>92</b>	...	<b>98</b>
10x6	.41	.37	5.5	7.50	11.0	13.00	99	116	114	121
<b>10x8</b>	<b>.41</b>	<b>.39</b>	<b>6.5</b>	<b>7.50</b>	<b>11.0</b>	<b>13.00</b>	<b>116</b>	<b>128</b>	<b>138</b>	<b>135</b>
10	.41	.41	7.5	7.50	11.0	...	132	144	...	156
<b>12x3</b>	<b>.43</b>	<b>.34</b>	<b>4.0</b>	<b>8.75</b>	<b>12.0</b>	...	<b>99</b>	...	...	...
12x4	.43	.35	4.5	8.75	12.0	...	108	118	...	119
<b>12x6</b>	<b>.43</b>	<b>.37</b>	<b>5.5</b>	<b>8.75</b>	<b>12.0</b>	<b>14.25</b>	<b>119</b>	<b>133</b>	<b>132</b>	<b>138</b>
12x8	.43	.39	6.5	8.75	12.0	14.25	126	146	149	149
<b>12x10</b>	<b>.43</b>	<b>.41</b>	<b>7.5</b>	<b>8.75</b>	<b>12.0</b>	...	<b>159</b>	<b>174</b>	...	<b>187</b>
12	.43	.43	8.75	8.75	12.0	...	171	198	...	202
<b>14x6</b>	<b>.51</b>	<b>.44</b>	<b>6.5</b>	<b>10.50</b>	<b>14.0</b>	<b>16.00</b>	<b>183</b>	<b>205</b>	<b>211</b>	<b>210</b>
14x8	.51	.45	7.5	10.50	14.0	...	211	...	...	231
<b>14x10</b>	<b>.51</b>	<b>.46</b>	<b>8.5</b>	<b>10.50</b>	<b>14.0</b>	...	<b>229</b>	<b>244</b>	...	<b>255</b>
14x12	.51	.47	9.5	10.50	14.0	...	245	284	...	269
<b>14</b>	<b>.51</b>	<b>.51</b>	<b>10.5</b>	<b>10.50</b>	<b>14.0</b>	...	<b>281</b>	<b>291</b>	...	<b>299</b>
16x6	.52	.45	6.5	11.50	15.0	17.00	222	230	243	250
<b>16x8</b>	<b>.52</b>	<b>.46</b>	<b>7.5</b>	<b>11.50</b>	<b>15.0</b>	...	<b>245</b>	<b>248</b>	...	<b>264</b>
16x10	.52	.47	8.5	11.50	15.0	...	265	287	...	286
<b>16x12</b>	<b>.52</b>	<b>.48</b>	<b>9.5</b>	<b>11.50</b>	<b>15.0</b>	...	<b>277</b>	<b>312</b>	...	<b>312</b>
16x14	.52	.51	10.5	11.50	15.0	...	317	348	...	...
<b>16</b>	<b>.52</b>	<b>.52</b>	<b>11.5</b>	<b>11.50</b>	<b>15.0</b>	...	<b>337</b>	<b>324</b>	...	<b>457</b>

† Weights include swivel gland

### TEES (Continued)



MJ Tee

MJ x FE Tee

MJ x Swivel Tee

Size	T	T <sup>1</sup>	H	Dimensions			MJ	Weights		
				J <sup>1</sup>	J <sup>2</sup>	J <sup>3</sup>		MJxFE	†MJxS	
18x6	.59	.44	6.5	12.5	15.5	18.0	275	261	279	
<b>18x8</b>	<b>.59</b>	<b>.45</b>	<b>7.5</b>	<b>12.5</b>	...	...	<b>280</b>	<b>351</b>	...	
18x10	.59	.47	8.5	12.5	...	...	286	...	...	
<b>18x12</b>	<b>.59</b>	<b>.49</b>	<b>9.5</b>	<b>12.5</b>	...	...	<b>372</b>	...	...	
18x14	.59	.56	10.5	12.5	...	...	415	...	...	
<b>18x16</b>	<b>.59</b>	<b>.57</b>	<b>11.5</b>	<b>12.5</b>	...	...	<b>445</b>	...	...	
18	.59	.59	12.5	12.5	...	...	490	...	...	
<b>20x6</b>	<b>.60</b>	<b>.44</b>	<b>7.0</b>	<b>14.0</b>	<b>17.0</b>	<b>19.5</b>	<b>335</b>	<b>362</b>	<b>358</b>	
20x8	.60	.45	8.0	14.0	...	...	390	...	...	
<b>20x10</b>	<b>.60</b>	<b>.47</b>	<b>9.0</b>	<b>14.0</b>	...	...	<b>417</b>	...	...	
20x12	.60	.49	10.0	14.0	...	...	460	...	...	
<b>20x14</b>	<b>.60</b>	<b>.56</b>	<b>11.0</b>	<b>14.0</b>	...	...	<b>475</b>	...	...	
20x16	.60	.57	12.0	14.0	...	...	530	...	...	
<b>20x18</b>	<b>.60</b>	<b>.59</b>	<b>13.0</b>	<b>14.0</b>	...	...	<b>560</b>	...	...	
20	.60	.60	14.0	14.0	...	...	605	...	...	
<b>24x6</b>	<b>.62</b>	<b>.44</b>	<b>7.0</b>	<b>16.0</b>	<b>19.0</b>	<b>21.5</b>	<b>465</b>	<b>451</b>	<b>457</b>	
24x8	.62	.45	8.0	16.0	...	...	475	...	...	
<b>24x10</b>	<b>.62</b>	<b>.47</b>	<b>9.0</b>	<b>16.0</b>	...	...	<b>516</b>	...	...	
24x12	.62	.49	10.0	16.0	...	...	549	580	...	
<b>24x14</b>	<b>.62</b>	<b>.56</b>	<b>11.0</b>	<b>16.0</b>	...	...	<b>585</b>	...	...	
24x16	.62	.57	12.0	16.0	...	...	625	744	...	
<b>24x18</b>	<b>.62</b>	<b>.59</b>	<b>13.0</b>	<b>16.0</b>	...	...	<b>675</b>	...	...	
24x20	.62	.60	15.0	17.0	...	...	740	...	...	
<b>24</b>	<b>.62</b>	<b>.62</b>	<b>17.0</b>	<b>17.0</b>	...	...	<b>844</b>	...	...	
30x6	* (Available Soon see List Prices)							...	...	...
<b>30x8</b>	* (Available Soon see List Prices)							...	...	...
30x12	* (Available Soon see List Prices)							...	...	...
<b>30x16</b>	* (Available Soon see List Prices)							...	...	...
30x20	* (Available Soon see List Prices)							...	...	...
<b>30x24</b>	* (Available Soon see List Prices)							...	...	...
30	* (Available Soon see List Prices)							...	...	...
<b>36x16</b>	* (Available Soon see List Prices)							...	...	...
36x24	* (Available Soon see List Prices)							...	...	...
<b>36x30</b>	* (Available Soon see List Prices)							...	...	...
36	* (Available Soon see List Prices)							...	...	...

† Weights include swivel gland.

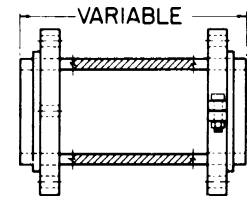
### MJ GLANDS



Glands

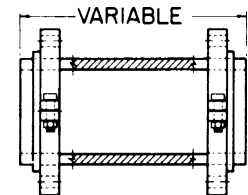
Size	Weight	Size	Weight
3	3	12	10
4	4	14	17
6	5	16	21
8	6	18	22
10	9	20	32
		24	37

Swivel Glands, page 21  
Retainer Glands, page 8



Swivel x Solid Adapter with Swivel Gland

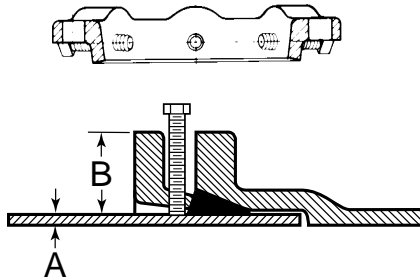
Size by Laying Length	Wall Thickness	Weight
6x13	.37	52
<b>6x18</b>	<b>.37</b>	<b>65</b>
6x24	.37	69
<b>8x12</b>	<b>.39</b>	<b>52</b>



Swivel x Swivel Adapter

Size by Laying Length	Wall Thickness	Weight
6x12	.37	28
<b>6x18</b>	<b>.37</b>	<b>49</b>
6x24	.37	52

### \*RETAINER GLAND ASSEMBLY



See Installations Instructions ..... Page 49

Size	Pressure Rating, psi	Gland O.D. B	Pipe O.D. O.D. A	D.I. Pipe Wall Class	No of Set Screws	Size of Set Screws	Gland Weight	Weight w/Access.
3	350	7.69	3.96	50-56	4	5/8x2	4	8
4	350	9.12	4.80	50-56	4	5/8x2	5	11
6	350	11.12	6.90	50-56	6	5/8x2	9	16
8	250	13.37	9.05	50-56	9	5/8x2	13	21
10	250	15.62	11.10	50-56	12	5/8x2	17	26
12	150	17.88	13.20	50-56	16	5/8x2	20	28
14	250	20.25	15.30	53-56	20	5/8x2 1/2	44	55
16	200	22.50	17.40	53-56	24	5/8x2 1/2	54	64
18	200	24.75	19.50	53-56	24	5/8x2 1/2	62	72
20	200	27.00	21.60	53-56	28	5/8x3	76	91
24	150	31.50	25.80	53-56	32	5/8x3	103	118

\* Not included in AWWA C110

### Pipe Wall Thickness:

Sizes 3"-12" are recommended for ductile iron pipe class 50 thru 56. Sizes 14" thru 24" are recommended for ductile iron pipe class 53 thru 56.

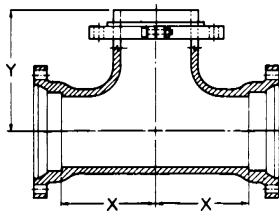
### DUCTILE IRON RETAINER GLANDS

Mechanical Joint Retainer Glands are designed to provide a method for restraining mechanical joint pipe and fittings and other standardized mechanical joints against possible joint separation, rupture or blow-out caused by internal water pressure.

The set screws are square-headed with Type C knurled cup points, and are shipped already assembled in the Glands. They are manufactured of 4140 grade alloy steel, and are heat treated to a Rockwell "C" 45/53 case hardness. Tee-head bolts and gaskets are not included, but may be ordered separately. Recommended torque for set screws is 75 foot pounds, and set screws on opposite sides of the glands should be tightened alternately.

Tee-head bolt hole size and spacing are equal to MJ Glands as shown in AWWA C-111. Standard mechanical Joint gaskets as shown in C-111 should be used.

### TEES



MJ x MJ x Swivel

Size	Dimensions		Weight
	X	Y	
6	8.0	10.5	150
8x6	9.0	11.5	199
8	9.0	11.5	210
10x6	11.0	13.5	267
12x6	12.0	14.5	346
16x6	15.0	17.5	619
16x8	15.0	17.5	649
30x6	18.0	24.5	2070

All weights shown include the Swivel Gland

### MJ GLAND

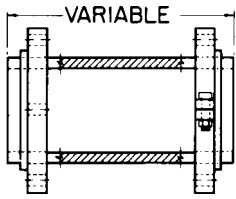


Size	Gland Wt. Pack	Weight Gland Only
2	5	3
3	7	4
4	10	6
6	16	10
8	25	16
10	30	19
12	40	26
14	45	34
16	55	54
18	65	52
20	85	73
24	105	91
30	220	90
36	301	127

ANSI/AWWA C110/A21.10, ANSI/AWWA C111/A21.11

Tyler Pipe/Utilities Division • P.O. Box 2027 • Tyler, Texas 75710 • (903) 882-5511  
 Union Foundry Company • P.O. Box 309 • Anniston, Alabama 36202 • (256) 236-7601

### ADAPTERS

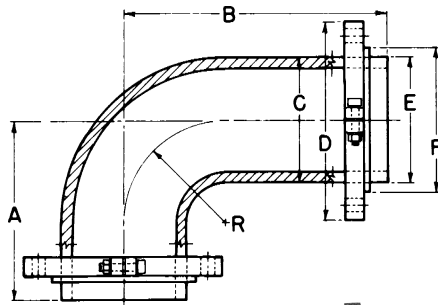


Swivel x Solid Adapter			
Size by Laying Length	Wall		Weight*
	Thickness		
4x13	.52		52
6x12	.55		84
<b>6x18</b>	<b>.55</b>		<b>91</b>
6x24	.55		105
<b>6x36</b>	<b>.55</b>		<b>156</b>
8x13	.60		126
<b>12x13</b>	<b>.75</b>		<b>186</b>

\*Weights with Gland.

Other Swivel Hydrant Fittings, Pages 3, 4 and 5.

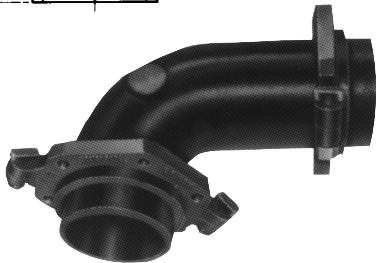
### ELLS



\*90° Swivel x Swivel Ell (Not Included In AWWA C110)

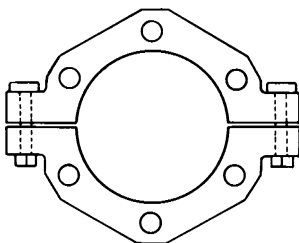
Size	Wall Thickness	Dimensions							*Weight
		A	B	C	D	E	F	R	
6	.55	10.5	15.5	7.10	11.12	6.90	8.02	6.0	106
8	.60	11.5	16.5	9.20	13.37	9.05	10.17	7.0	156

\* With 2 Swivel Glands



### SWIVEL GLAND ASSEMBLY

Used with swivel fittings, the TYLER Swivel Gland, with its rotating feature, permits the installer to meet any grade requirements regardless of bolt-hole alignment. In addition, the system permits stiff connections without braces, blocking or strapping.



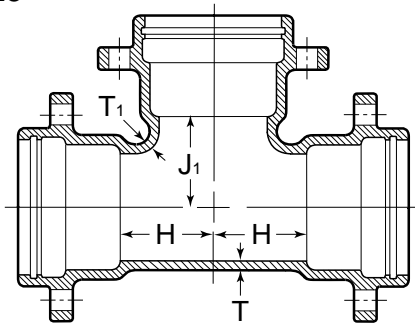
#### Swivel Glands\*\*

Size	Weight
4	12
<b>6</b>	<b>17</b>
8	23
<b>12</b>	<b>30</b>

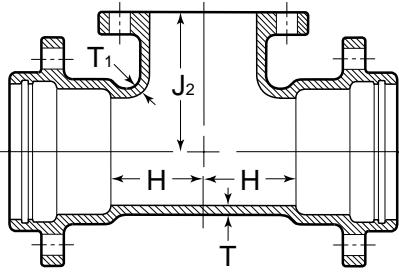
\*\* Not included in AWWA C110.

**NOTE:** When ordering glands separately,  
 (1) Specify TYLER UPC Code Number,  
 (2) Description, and  
 (3) Size of fitting to be joined.

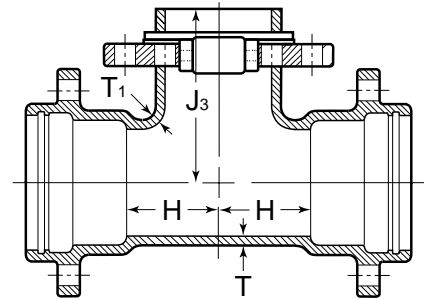
### TEES



UT x UT Tees



UT x Flange Tees



UT x Swivel Tees

Size	Dimensions						Weights		
	T	T1	H	J1	J2	J3	UT x UT	UT x Flange	UT x Swivel
4	.35	.35	4.5	4.5	6.5	...	44	45	...
<b>6x4</b>	<b>.37</b>	<b>.35</b>	<b>5.0</b>	<b>6.0</b>	<b>8.0</b>	...	<b>68</b>	<b>56</b>	...
6	.37	.37	6.0	6.0	8.0	9.5	69	71	65
<b>8x4</b>	<b>.39</b>	<b>.35</b>	<b>5.0</b>	<b>7.0</b>	<b>9.0</b>	...	<b>73</b>	<b>89</b>	...
8x6	.39	.37	6.0	7.0	9.0	10.5	96	101	100
<b>8</b>	<b>.39</b>	<b>.39</b>	<b>7.0</b>	<b>7.0</b>	<b>9.0</b>	<b>10.5</b>	<b>116</b>	<b>117</b>	<b>110</b>
10x4	.41	.35	6.0	9.0	11.0	...	102	115	...
<b>10x6</b>	<b>.41</b>	<b>.37</b>	<b>7.0</b>	<b>9.0</b>	<b>11.0</b>	<b>12.5</b>	<b>113</b>	<b>128</b>	<b>130</b>
10x8	.41	.39	8.0	9.0	11.0	12.5	145	145	156
<b>10</b>	<b>.41</b>	<b>.41</b>	<b>9.0</b>	<b>9.0</b>	<b>11.0</b>	...	<b>155</b>	<b>158</b>	...
12x4	.43	.35	6.0	10.0	12.0	...	119	138	...
<b>12x6</b>	<b>.43</b>	<b>.37</b>	<b>7.0</b>	<b>10.0</b>	<b>12.0</b>	<b>13.5</b>	<b>141</b>	<b>148</b>	<b>162</b>
12x8	.43	.39	8.0	10.0	12.0	13.5	177	170	158
<b>12x10</b>	<b>.43</b>	<b>.41</b>	<b>9.0</b>	<b>10.0</b>	<b>12.0</b>	...	<b>160</b>	<b>162</b>	...
12	.43	.43	10.0	10.0	12.0	...	217	183	...
<b>14x6</b>	<b>.51</b>	<b>.44</b>	<b>6.5</b>	<b>10.5</b>	<b>12.5</b>	<b>14.0</b>	<b>176</b>	<b>212</b>	<b>202</b>
14x10	.51	.46	8.5	10.5	12.5	...	195	246	...
<b>14x12</b>	<b>.51</b>	<b>.47</b>	<b>9.5</b>	<b>10.5</b>	<b>12.5</b>	...	<b>196</b>	<b>296</b>	...
14	.51	.51	10.5	10.5	14.0	...	209	321	...
<b>16x6</b>	<b>.52</b>	<b>.45</b>	<b>6.5</b>	<b>11.5</b>	<b>13.5</b>	<b>15.0</b>	<b>266</b>	<b>160</b>	<b>229</b>
16x8	.52	.46	7.5	11.5	13.5	15.0	292	270	292
<b>16x10</b>	<b>.52</b>	<b>.47</b>	<b>8.5</b>	<b>11.5</b>	<b>13.5</b>	...	<b>232</b>	<b>330</b>	...
16x12	.52	.48	9.5	11.5	13.5	...	239	321	...
<b>16x14</b>	<b>.52</b>	<b>.51</b>	<b>10.5</b>	<b>11.5</b>	<b>15.0</b>	...	<b>349</b>	<b>342</b>	...
16	.52	.52	11.5	11.5	15.0	...	261	355	...
<b>18x6</b>	<b>.59</b>	<b>.44</b>	<b>6.5</b>	<b>12.5</b>	<b>14.5</b>	<b>16.13</b>	<b>348</b>	<b>301</b>	<b>348</b>
18x8	.59	.45	7.5	12.5	14.5	16.13	325	319	324
<b>18x10</b>	<b>.59</b>	<b>.47</b>	<b>8.5</b>	<b>12.5</b>	<b>14.5</b>	...	<b>344</b>	<b>337</b>	...
18x14	.59	.56	10.5	12.5	16.0	...	342	393	...
<b>18x16</b>	<b>.59</b>	<b>.57</b>	<b>11.5</b>	<b>12.5</b>	<b>16.0</b>	...	<b>362</b>	<b>420</b>	...
20x6	.60	.44	7.0	14.0	16.0	17.5	355	341	400
<b>20x10</b>	<b>.60</b>	<b>.47</b>	<b>9.0</b>	<b>14.0</b>	<b>16.0</b>	...	<b>369</b>	<b>420</b>	...
20x14	.60	.56	11.0	14.0	17.5	...	484	474	...
<b>20x16</b>	<b>.60</b>	<b>.57</b>	<b>12.0</b>	<b>14.0</b>	<b>17.5</b>	...	<b>610</b>	<b>498</b>	...
20x18	.60	.59	13.0	14.0	17.5	...	539	...	...
<b>24x6</b>	<b>.62</b>	<b>.44</b>	<b>7.0</b>	<b>16.0</b>	<b>18.0</b>	<b>19.5</b>	<b>385</b>	<b>512</b>	<b>525</b>
24x10	.62	.47	9.0	16.0	18.0	...	478	468	...
<b>24x12</b>	<b>.62</b>	<b>.49</b>	<b>10.0</b>	<b>16.0</b>	<b>18.0</b>	...	<b>663</b>	<b>503</b>	...
24x14	.62	.56	11.0	16.0	19.5	...	542	531	...
<b>24x16</b>	<b>.62</b>	<b>.57</b>	<b>12.0</b>	<b>16.0</b>	<b>19.5</b>	...	<b>566</b>	<b>555</b>	...
24x18	.62	.59	13.0	16.0	...	...	593	...	...
<b>24x20</b>	<b>.62</b>	<b>.60</b>	<b>15.0</b>	<b>17.0</b>	...	...	<b>628</b>	...	...
24	.62	.62	17.0	17.0	...	...	884	...	...