

FIG. 7045 Clamp-T®, FPT Branch



For Listings/Approval Details and Limitations, visit our website at www.anvilintl.com or contact an Anvil® Sales Representative.

- Available galvanized.



The Gruvlok® Clamp-T provides a quick and easy outlet at any location along the pipe. A hole drilled or cut in the pipe to receive the locating collar of the Clamp-T is all that is required. The full, smooth outlet area provides for optimum flow characteristics.

The Clamp-T housing is specially engineered to conform to the pipe O.D. and the Clamp-T gasket providing a leak tight reliable seal in both positive pressure and vacuum conditions. Working pressure ratings shown are for reference only and are based on Schedule 40 pipe. For the latest UL/ULC listed, LPCB, VdS and FM Approved pressure ratings versus pipe schedule, see www.anvilintl.com or contact your local Anvil Representative.

The Gruvlok Clamp-T provides for a branch or cross connection in light wall or standard wall steel pipe.

The Fig. 7045 Clamp-T female pipe thread branch is available with NPT or ISO 7/1 connection and the Fig. 7046 Clamp-T has grooved-end branch connection.

Clamp-T cross connections are available in various sizes allowing greater versatility in piping design.

NOTE: Variable End Configurations are Possible — 2" x 1/2" through 8" x 4" Thd x Thd and Gr. x Thd. Sizes

MATERIAL SPECIFICATIONS

HOUSING:

Ductile Iron conforming to ASTM A-536, Grade 65-45-12

ANSI BOLTS & HEAVY HEX NUTS:

Heat treated, oval neck track head bolts conforming to ASTM A-183 Grade 2 with a minimum tensile strength of 110,000 psi and heavy hex nuts of carbon steel conforming to ASTM A-563 Grade A or Grade B, or J995 Grade 2. Bolts and nuts are provided zinc electroplated as standard.

METRIC BOLTS & HEAVY HEX NUTS:

Heat treated, zinc electroplated oval-neck track head bolts made of carbon steel with mechanical properties per ISO 898-1 Class 8.8. Hex nuts and bolts are zinc electroplated followed by a yellow chromate dip.

U-BOLT:

Cold drawn steel and zinc plated.

COATINGS:

- Rust inhibiting paint Color: ORANGE (standard)
 - Hot Dipped Zinc Galvanized (optional)
 - Other available options: Example: RAL3000 or RAL9000 Series
- For other coating requirements contact an Anvil Representative.

LUBRICATION:

- Standard Gruvlok
- Gruvlok Xtreme™ required for dry pipe systems and freezer applications.

GASKETS: Materials

Properties as designated in accordance with ASTM D-2000.

- Grade "E" EPDM** (Green color code)
-40°F to 230°F (Service Temperature Range)(-40°C to 110°C)
Recommended for water service, diluted acids, alkalies solutions, oil-free air and many chemical services.
NOT FOR USE IN PETROLEUM APPLICATIONS.
- Grade "EP" EPDM** (Green and Red color code)
-40°F to 250°F (Service Temperature Range)(-40°C to 121°C)
Recommended for water service, diluted acids, alkalies solutions, oil-free air and many other chemical services.
NOT FOR USE IN PETROLEUM APPLICATIONS.

CLAMP-T FLOW DATA (FRICTIONAL RESISTANCE)

Branch Size <i>In./DN(mm)</i>	Fig. 7045 Threaded Branch	
	C.V. Value	Equiv. Pipe Length <i>Ft./m</i>
1/2 15	22 -	1.0 0.3
3/4 20	25 -	2.0 0.6
1 25	44 -	2.0 0.6
1 1/4 32	76 -	2.5 0.8
1 1/2 40	89 -	4.0 1.2

Branch Size <i>In./DN(mm)</i>	Fig. 7045 Threaded Branch	
	C.V. Value	Equiv. Pipe Length <i>Ft./m</i>
2 50	164 -	3.5 1.1
2 1/2 65	152 -	12.5 3.8
3 80	318 -	8.5 2.6
4 100	536 -	8.0 2.4

PROJECT INFORMATION

APPROVAL STAMP

Project:	<input type="checkbox"/> Approved
Address:	<input type="checkbox"/> Approved as noted
Contractor:	<input type="checkbox"/> Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

FIG. 7045 Clamp-T®, FPT Branch

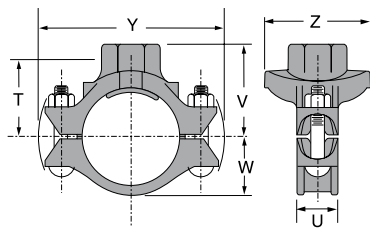


Fig. 7045

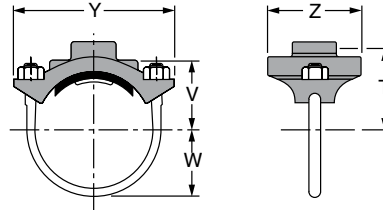


Fig. 7045 (U-Bolt)

WARNING
 For dry pipe systems and freezer applications lubrication of the gasket is required, Gruvlok® Xtreme™ Lubricant is required.

FIGURE 7045 FPT BRANCH (TABLE CONTINUES TO NEXT PAGE)

Nominal Size	O.D.	Hole Dimensions		Max. Working Pressure▲	Clamp-T Dimensions						Bolt Size	Specified Torque §		Approx. Wt. Ea.
		Min. Diameter	Max. Diameter		T	U	V Threaded	W	Y	Z		Min.	Max.	
In./DN(mm)	In./mm	In./mm	In./mm	PSI/bar	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	Ft.-Lbs./N-m	Lbs./Kg	
2 x 1/2 50 x 15	2.375 x 0.840 60.3 x 21.3	1 1/2 38	1 3/8 41	500 34.5	2 3/16 56	3/16 14	2 5/8 67	1/2 12	5 1/2 140	3 76	1/2 U-Bolt -	30 40	40 2.3 1.0	
2 x 3/4 50 x 20	2.375 x 1.050 60.3 x 26.7	1 1/2 38	1 3/8 41	500 34.5	2 1/16 52	3/16 14	2 5/8 67	1 1/2 38	5 1/2 140	3 76	1/2 U-Bolt -	30 40	40 2.3 1.0	
2 x 1 50 x 25	2.375 x 1.315 60.3 x 33.7	1 1/2 38	1 3/8 41	500 34.5	1 15/16 51	3/16 14	2 5/8 67	1 1/2 38	5 1/2 140	3 76	1/2 U-Bolt -	30 40	40 2.6 1.2	
2 x 1 1/4 50 x 32	2.375 x 1.660 60.3 x 42.4	2 51	2 1/8 54	500 34.5	2 3/16 55	3/16 14	2 5/8 73	1 1/2 38	5 1/2 140	3 1/2 89	1/2 U-Bolt -	30 40	40 2.7 1.2	
2 x 1 1/2 50 x 40	2.375 x 1.900 60.3 x 48.3	2 51	2 1/8 54	500 34.5	2 3/16 55	3/16 14	2 5/8 73	1 1/2 38	7 178	3 1/2 89	1/2 U-Bolt -	30 40	40 2.5 1.1	
2 1/2 x 1/2 65 x 15	2.875 x 0.840 73.0 x 21.3	1 1/2 38	1 3/8 41	500 34.5	2 1/16 62	3/16 14	2 5/8 73	1 3/4 44	5 1/2 140	3 76	1/2 U-Bolt -	30 40	40 3.0 1.4	
2 1/2 x 3/4 65 x 20	2.875 x 1.050 73.0 x 26.7	1 1/2 38	1 3/8 41	500 34.5	2 3/16 59	3/16 14	2 5/8 73	1 3/4 44	5 1/2 140	3 76	1/2 U-Bolt -	30 40	40 2.9 1.3	
2 1/2 x 1 65 x 25	2.875 x 1.315 73.0 x 33.7	1 1/2 38	1 3/8 41	500 34.5	2 3/16 55	3/16 14	2 5/8 73	1 3/4 44	6 1/8 156	3 76	1/2 U-Bolt -	30 40	40 2.9 1.3	
2 1/2 x 1 1/4 65 x 32	2.875 x 1.660 73.0 x 42.4	2 51	2 1/8 54	500 34.5	2 1/16 62	3/16 14	3 1/8 79	1 3/4 44	6 1/8 156	3 3/8 86	1/2 U-Bolt -	30 40	40 3.4 1.5	
2 1/2 x 1 1/2 65 x 40	2.875 x 1.900 73.0 x 48.3	2 51	2 1/8 54	500 34.5	2 1/16 62	3/16 14	3 1/8 79	1 3/4 44	6 1/8 156	3 3/8 86	1/2 U-Bolt -	30 40	40 3.4 1.5	
3 x 1/2 80 x 15	3.500 x 0.840 88.9 x 21.3	1 1/2 38	1 3/8 41	500 34.5	2 3/16 65	3/16 14	3 76	2 1/8 54	7 178	3 3/4 95	1/2 U-Bolt -	30 40	40 2.8 1.2	
3 x 3/4 80 x 20	3.500 x 1.050 88.9 x 26.7	1 1/2 38	1 3/8 41	500 34.5	2 1/16 62	3/16 14	3 76	2 1/8 54	7 178	3 3/4 95	1/2 U-Bolt -	30 40	40 2.7 1.2	
3 x 1 80 x 25	3.500 x 1.315 88.9 x 33.7	1 1/2 38	1 3/8 41	500 34.5	2 5/16 59	3/16 14	3 76	2 1/8 54	7 178	3 3/4 95	1/2 U-Bolt -	30 40	40 2.7 1.2	
3 x 1 1/4 80 x 32	3.500 x 1.660 88.9 x 42.4	2 51	2 1/8 54	500 34.5	2 11/16 68	1 1/2 38	3 3/8 86	2 1/8 54	6 1/8 175	3 3/4 95	1/2 x 2 3/4 -	80 100	100 3.4 1.5	
3 x 1 1/2 80 x 40	3.500 x 1.900 88.9 x 48.3	2 51	2 1/8 54	500 34.5	2 11/16 68	1 1/2 38	3 3/8 86	2 1/8 54	6 1/8 175	3 3/4 95	1/2 x 2 3/4 -	80 100	100 4.4 2.0	
3 x 2 80 x 50	3.500 x 2.375 88.9 x 60.3	2 1/2 64	2 5/8 67	500 34.5	2 11/16 68	1 1/2 38	3 3/8 86	2 1/8 54	6 1/8 175	4 1/8 105	1/2 x 2 3/4 -	80 100	100 4.6 2.1	
4 x 1/2 100 x 15	4.500 x 0.840 114.3 x 21.3	1 1/2 38	1 3/8 41	500 34.5	3 1/16 76	3/16 14	3 1/2 89	2 5/8 67	7 3/4 197	3 3/4 95	1/2 U-Bolt -	30 40	40 2.9 1.3	
4 x 3/4 100 x 20	4.500 x 1.050 114.3 x 26.7	1 1/2 38	1 3/8 41	500 34.5	3 1/16 78	3/16 14	3 1/2 89	2 5/8 67	7 3/4 197	3 3/4 95	1/2 U-Bolt -	30 40	40 2.8 1.3	
4 x 1 100 x 25	4.500 x 1.315 114.3 x 33.7	1 1/2 38	1 3/8 41	500 34.5	2 13/16 73	3/16 14	3 1/2 89	2 5/8 67	7 3/4 197	3 3/4 95	1/2 U-Bolt -	30 40	40 2.7 1.2	
4 x 1 1/4 100 x 32	4.500 x 1.660 114.3 x 42.4	2 51	2 1/8 54	500 34.5	3 3/16 81	1 7/8 48	3 7/8 98	2 5/8 67	7 1/2 191	3 3/4 95	1/2 x 2 3/4 -	80 100	100 4.5 2.0	
4 x 1 1/2 100 x 40	4.500 x 1.900 114.3 x 48.3	2 51	2 1/8 54	500 34.5	3 3/16 81	1 7/8 48	3 7/8 98	2 5/8 67	7 1/2 191	3 3/4 95	1/2 x 2 3/4 -	80 100	100 4.6 2.1	

NOTE: 2 1/2", 5" and 6" Nominal size run pipe may be used on 3" O.D., 5 1/2" O.D. and 6 1/2" O.D. pipe.

▲ – Working Pressure Ratings are for reference only and based on Sch. 40 pipe. For the latest UL/UIC, FM, VdS and LPCB pressure ratings versus pipe schedule, please visit anvilint.com or contact your local Anvil Representative.

Not for use in copper systems.

§ – For additional Bolt Torque information, see Technical Data Section. (Additional larger sizes on next page)

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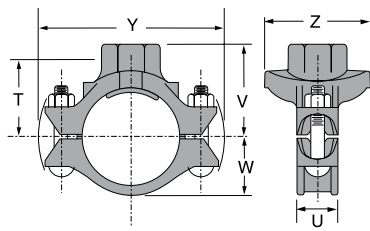


Fig. 7045

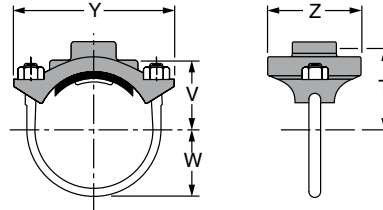


Fig. 7045 (U-Bolt)

WARNING
 For dry pipe systems and freezer applications lubrication of the gasket is required, Gruvlok® Xtreme™ Lubricant is required.

FIGURE 7045 FPT BRANCH (CONTINUED FROM PREVIOUS PAGE)

Nominal Size	O.D.	Hole Dimensions		Max. Working Pressure▲	Clamp-T Dimensions						Bolt Size	Specified Torque §		Approx. Wt. Ea.
		Min. Diameter	Max. Diameter		T	U	V Threaded	W	Y	Z		Min.	Max.	
In./DN(mm)	In./mm	In./mm	In./mm	PSI/bar	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	Ft.-Lbs./N-m	Lbs./Kg
4 x 2 100 x 50	4.500 x 2.375 114.3 x 60.3	2½ 64	2⅝ 67	500 34.5	3⅝ 84	1⅞ 48	4 102	2⅝ 67	7½ 191	4⅞ 105	½ x 2¾ -	80 100	100	7.7 3.5
4 x 2½ 100 x 65	4.500 x 2.875 114.3 x 73.0	2¾ 70	2⅞ 73	500 34.5	3⅞ 78	1⅞ 48	4 102	2⅝ 67	7½ 191	4⅞ 111	½ x 2¾ -	80 100	100	5.2 2.4
4 x 3 O.D. 100 x 80	4.500 x 2.996 114.3 x 76.1	2¾ 70	2⅞ 73	500 34.5	3 76	1⅞ 48	4 102	2⅝ 67	7½ 191	4⅞ 111	½ x 2¾ -	80 100	100	5.2 2.4
4 x 3 100 x 80	4.500 x 3.500 114.3 x 88.9	3½ 89	3⅝ 92	500 34.5	3¼ 83	1⅞ 48	4¼ 108	2⅝ 67	7½ 191	5¼ 133	½ x 3½ -	80 100	100	6.5 2.9
5 x 1¼ 125 x 32	5.563 x 1.660 141.3 x 42.4	2 51	2⅞ 54	500 34.5	3⅞ 94	1⅞ 48	4⅞ 111	3¼ 83	9⅞ 232	3¼ 95	⅝ x 3¼ -	100 130	130	5.4 2.4
5 x 1½ 125 x 40	5.563 x 1.900 141.3 x 48.3	2 51	2⅞ 54	500 34.5	3⅞ 94	1⅞ 48	4⅞ 111	3¼ 83	9⅞ 232	3¼ 95	⅝ x 3¼ -	100 130	130	5.5 2.5
5 x 2 125 x 50	5.563 x 2.375 141.3 x 60.3	2½ 64	2⅝ 67	500 34.5	3⅞ 97	1⅞ 48	4½ 114	3¼ 83	9⅞ 232	4⅞ 105	⅝ x 3¼ -	100 130	130	5.7 2.6
5 x 2½ 125 x 65	5.563 x 2.875 141.3 x 73.0	2¾ 70	2⅞ 73	500 34.5	3⅞ 97	1⅞ 48	4¾ 121	3¼ 83	9⅞ 232	4⅞ 111	⅝ x 3¼ -	100 130	130	7.0 3.2
5 x 3 O.D. 125 x 80	5.563 x 2.996 141.3 x 76.1	2¾ 70	2⅞ 73	500 34.5	3¾ 95	1⅞ 48	4¾ 121	3¼ 83	9⅞ 232	4⅞ 111	⅝ x 3¼ -	130 180	180	7.0 3.2
5 x 3 125 x 80	5.563 x 3.500 141.3 x 88.9	3½ 89	3⅝ 92	500 34.5	4 102	1⅞ 48	5 127	3¼ 83	9⅞ 232	5¼ 133	⅝ x 3¼ -	100 130	130	8.7 3.9
6 x 1¼ 150 x 32	6.625 x 1.660 168.3 x 42.4	2 51	2⅞ 54	500 34.5	4⅞ 106	2 51	4⅞ 124	3⅞ 98	10⅞ 257	3¾ 95	⅝ x 4¼ -	100 130	130	7.8 3.5
6 x 1½ 150 x 40	6.625 x 1.900 168.3 x 48.3	2 51	2⅞ 54	500 34.5	4⅞ 106	2 51	4⅞ 124	3⅞ 98	10⅞ 257	3¾ 95	⅝ x 4¼ -	100 130	130	7.8 3.5
6 x 2 150 x 50	6.625 x 2.375 168.3 x 60.3	2½ 64	2⅝ 67	500 34.5	4⅞ 106	2 51	4⅞ 124	3⅞ 98	10⅞ 257	4⅞ 105	⅝ x 4¼ -	100 130	130	7.8 3.5
6 x 2½ 150 x 65	6.625 x 2.875 168.3 x 73.0	2¾ 70	2⅞ 73	500 34.5	4⅞ 106	2 51	5⅞ 130	3⅞ 98	10⅞ 257	4⅞ 111	⅝ x 4¼ -	100 130	130	8.4 3.8
6 x 3 O.D. 150 x 80	6.625 x 2.996 168.3 x 76.1	2¾ 70	2⅞ 73	500 34.5	4⅞ 105	2 51	5⅞ 130	3⅞ 98	10⅞ 257	4⅞ 111	⅝ x 4¼ -	100 130	130	8.4 3.8
6 x 3 150 x 80	6.625 x 3.500 168.3 x 88.9	3½ 89	3⅝ 92	500 34.5	4⅞ 111	2 51	5⅞ 137	3⅞ 98	10⅞ 257	5¼ 133	⅝ x 4¼ -	100 130	130	9.6 4.4
6 x 4 150 x 100	6.625 x 4.500 168.3 x 114.3	4½ 114	4⅞ 117	500 34.5	4⅞ 111	2 51	5½ 140	3⅞ 98	10⅞ 257	6½ 165	⅝ x 4¼ -	100 130	130	10.5 4.8
8 x 2 200 x 50	8.625 x 2.750 219.1 x 70.0	2½ 64	2⅞ 67	500 34.5	5⅞ 132	2¼ 57	5⅞ 149	5 127	12¾ 324	4⅞ 105	¾ x 4¼ -	130 180	180	11.3 5.1
8 x 2½ 200 x 65	8.625 x 2.875 219.1 x 73.0	2¾ 70	2⅞ 73	500 34.5	5⅞ 134	2¼ 57	6¼ 159	5 127	12¾ 324	4⅞ 111	¾ x 4½ -	130 180	180	11.1 5.0
8 x 3 O.D. 200 x 80	8.625 x 2.996 219.1 x 76.1	2¾ 70	2⅞ 73	500 34.5	5¼ 133	2¼ 57	6¼ 159	5 127	12¾ 324	4⅞ 111	¾ x 4½ -	130 180	180	11.1 5.0
8 x 3 200 x 80	8.625 x 3.500 219.1 x 88.9	3½ 89	3⅝ 92	500 34.5	5⅞ 137	2¼ 57	6⅞ 162	5 127	12¾ 324	5¼ 133	¾ x 4½ -	130 180	180	13.0 5.9
8 x 4 200 x 100	8.625 x 4.500 219.1 x 114.3	4½ 114	4⅞ 117	500 34.5	5⅞ 137	2¼ 57	6½ 165	5 127	12¾ 324	6½ 165	¾ x 4½ -	130 180	180	16.2 7.3

NOTE: 2½", 5" and 6" Nominal size run pipe may be used on 3" O.D., 5½" O.D. and 6½" O.D. pipe.

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