

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.

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. The maximum working pressure for all sizes is 500 PSI (34.5 bar) when assembled on standard wall steel pipe.

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 —
 Thd x Thd and Gr. x Thd.
 Sizes — 2" x 1/2" through 8" x 4"

CLAMP-T FLOW DATA (FRICTIONAL RESISTANCE)		
Branch Size Inches	Fig. 7045 Threaded Branch	
	C.V. Value	Equiv. Pipe Length Feet
DN/mm	Meters	
1/2	22	1.0
15	-	0.3
3/4	25	2.0
20	-	0.6
1	44	2.0
25	-	0.6
1 1/4	76	2.5
32	-	0.8
1 1/2	89	4.0
40	-	1.2
2	164	3.5
50	-	1.1
2 1/2	152	12.5
65	-	3.8
3	318	8.5
80	-	2.6
4	536	8.0
100	-	2.4

MATERIAL SPECIFICATIONS

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 are zinc electroplated followed by a yellow chromate dip.

U-BOLT:

Cold drawn steel and zinc plated.

HOUSING:

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

COATINGS:

Rust inhibiting paint – Color: ORANGE (standard)
 Hot Dipped Zinc Galvanized (optional)
 Other Colors Available (IE: RAL3000 and RAL9000)
 For other Coating requirements Contact an Anvil Representative for more information.

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 other chemical services.
 NOT FOR USE IN PETROLEUM APPLICATIONS.

Grade “T” Nitrile (Orange color code)

-20°F to 180°F (Service Temperature Range)(-29°C to 82°C)
 Recommended for petroleum applications. air with oil vapors and vegetable and mineral oils.
 NOT FOR USE IN HOT WATER OR HOT AIR.

LUBRICATION:

Standard Gruvlok
 Gruvlok Xtreme™ (Do Not use with Grade “L”)

FIG. 7045
Clamp-T, FPT Branch

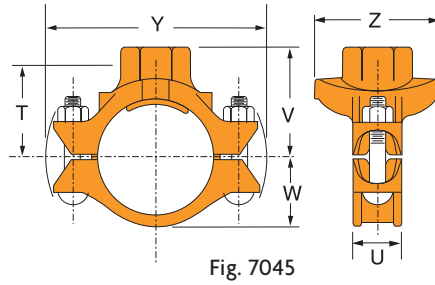


Fig. 7045

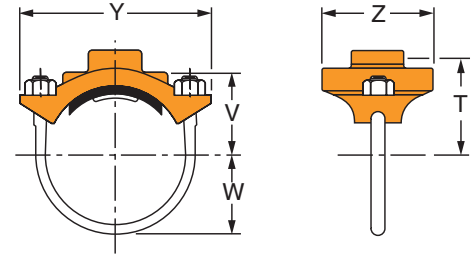


Fig. 7045 (U-Bolt)

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. Each
		Min. Diameter	Max. Diameter		T	U	V Threaded	W	Y	Z		Min.	Max.	
<i>In./DN(mm)</i>	<i>In./mm</i>	<i>In./mm</i>	<i>In./mm</i>	<i>PSI/bar</i>	<i>In./mm</i>	<i>In./mm</i>	<i>In./mm</i>	<i>In./mm</i>	<i>In./mm</i>	<i>In./mm</i>	<i>In./mm</i>	<i>Ft.-Lbs/N-m</i>	<i>Lbs./Kg</i>	
2 x 1/2 50 x 15	2.375 x 0.840 60.3 x 21.3	1 1/2 38	1 5/8 41	500 34.5	2 3/16 56	9/16 14	2 5/8 67	1/2 12	5 1/2 140	3 76	1/2 U-Bolt -	30 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 5/8 41	500 34.5	2 1/16 52	9/16 14	2 5/8 67	1 1/2 38	5 1/2 140	3 76	1/2 U-Bolt -	30 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 5/8 41	500 34.5	1 15/16 51	9/16 14	2 5/8 67	1 1/2 38	5 1/2 140	3 76	1/2 U-Bolt -	30 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	9/16 14	2 7/8 73	1 1/2 38	5 1/2 140	3 1/2 89	1/2 U-Bolt -	30 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	9/16 14	2 7/8 73	1 1/2 38	7 178	3 1/2 89	1/2 U-Bolt -	30 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 5/8 41	500 34.5	2 7/16 62	9/16 14	2 7/8 73	1 3/4 44	5 1/2 140	3 76	1/2 U-Bolt -	30 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 5/8 41	500 34.5	2 5/16 59	9/16 14	2 7/8 73	1 3/4 44	5 1/2 140	3 76	1/2 U-Bolt -	30 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 5/8 41	500 34.5	2 3/16 55	9/16 14	2 7/8 73	1 3/4 44	6 1/8 156	3 76	1/2 U-Bolt -	30 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 7/16 62	9/16 14	3 1/8 79	1 3/4 44	6 1/8 156	3 3/8 86	1/2 U-Bolt -	30 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 7/16 62	9/16 14	3 1/8 79	1 3/4 44	6 1/8 156	3 3/8 86	1/2 U-Bolt -	30 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 5/8 41	500 34.5	2 9/16 65	9/16 14	3 76	2 1/8 54	7 178	3 3/4 95	1/2 U-Bolt -	30 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 5/8 41	500 34.5	2 7/16 62	9/16 14	3 76	2 1/8 54	7 178	3 3/4 95	1/2 U-Bolt -	30 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 5/8 41	500 34.5	2 5/16 59	9/16 14	3 76	2 1/8 54	7 178	3 3/4 95	1/2 U-Bolt -	30 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	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	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	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 5/8 41	500 34.5	3 1/16 76	9/16 14	3 1/2 89	2 5/8 67	7 3/4 197	3 3/4 95	1/2 U-Bolt -	30 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 5/8 41	500 34.5	3 1/16 78	9/16 14	3 1/2 89	2 5/8 67	7 3/4 197	3 3/4 95	1/2 U-Bolt -	30 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 5/8 41	500 34.5	2 13/16 73	9/16 14	3 1/2 89	2 5/8 67	7 3/4 197	3 3/4 95	1/2 U-Bolt -	30 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	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	4.6 2.1	
4 x 2 100 x 50	4.500 x 2.375 114.3 x 60.3	2 1/2 64	2 5/8 67	500 34.5	3 5/16 84	1 7/8 48	4 102	2 5/8 67	7 1/2 191	4 1/8 105	1/2 x 2 3/4 -	80 100	7.7 3.5	
4 x 2 1/2 100 x 65	4.500 x 2.875 114.3 x 73.0	2 3/4 70	2 7/8 73	500 34.5	3 11/16 78	1 7/8 48	4 102	2 5/8 67	7 1/2 191	4 3/8 111	1/2 x 2 3/4 -	80 100	5.2 2.4	
4 x 3 O.D. 100 x 80	4.500 x 2.996 114.3 x 76.1	2 3/4 70	2 7/8 73	500 34.5	3 76	1 7/8 48	4 102	2 5/8 67	7 1/2 191	4 3/8 111	1/2 x 2 3/4 -	80 100	5.2 2.4	
4 x 3 100 x 80	4.500 x 3.500 114.3 x 88.9	3 1/2 89	3 5/8 92	500 34.5	3 1/4 83	1 7/8 48	4 1/4 108	2 5/8 67	7 1/2 191	5 1/4 133	1/2 x 3 1/2 -	80 100	6.5 2.9	

NOTE:
2 1/2", 5" and 6" Nom. Run pipe size Clamp-T may be used on 3" O.D., 5 1/2" O.D. and 6 1/2" O.D. pipe.

(Additional larger sizes on next page.)

▼ Based on use with standard wall pipe.
\$ - For additional Bolt Torque information, see page 204.
See Installation & Assembly directions on page 180.
Not for use with copper systems.