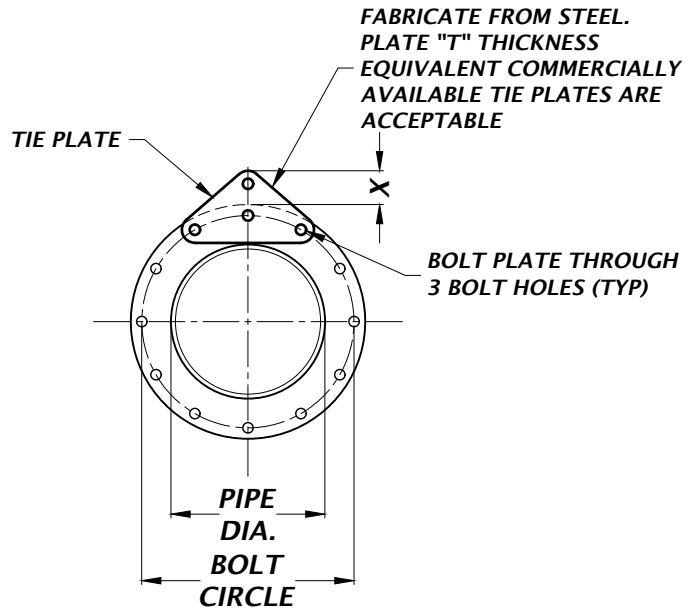


TIE ROD SCHEDULE			
TEST PRESSURE		150 PSI	
PIPE DIAM. (IN.)	MIN. PIPE WALL THICKNESS (IN.)	TIE RODS	
		DIA. (IN.)	NO. REQ'D
4	3/16	5/8	2
6	3/16	5/8	2
8	3/16	5/8	2
10	3/16	5/8	4
12	3/16	5/8	4
14	3/16	5/8	6
16	3/16	5/8	6



TIE PLATE SCHEDULE		
PIPE SIZE	X	T @ TEST PRESS <150 PSI
4"	2 3/4"	5/8"
6"	2 3/4"	5/8"
8"	2 3/4"	5/8"
10"	2 3/4"	5/8"
12"	3"	3/4"
14"	3 1/4"	3/4"
16"	3 1/4"	1"

NOTES:

1. TIE RODS AND NUTS SHALL CONFORM TO AWWA/ANSI C111/A21.11
2. TIE RODS AND NUTS SHALL PROVIDE MIN YIELD AND TENSILE STRENGTHS OF 45,000 PSI AND 60,000 PSI RESPECTIVELY.
3. PLATE SHALL CONFORM TO ASTM A 283 GRADE D.
4. TIE ROD NUTS SHALL BE TIGHTENED GRADUALLY AND EQUALLY IN STAGES TO PREVENT UNEVEN ALIGNMENT AND TO ALLOW EQUAL STRESS ON ALL TIE RODS UNDER PRESSURE. TIGHTEN UNTIL SNUG. THREADS SHALL PROTRUDE FROM NUTS. PEEN THREADS AFTER TIGHTENING NUTS.
5. CONTRACTOR SHALL FURNISH TIE RODS AND TIE PLATES SUITABLE FOR 150 PSI, EVEN THOUGH PROJECT TEST PRESSURES MIGHT BE LESS.
6. OTHER RESTRAINT PARAMETERS:
 - TEST FITTING = 90 DEG ELBOW
 - SAFETY FACTOR = 1.5

266G

**THRUST TIE ROD / TIE PLATE
NTS**

