

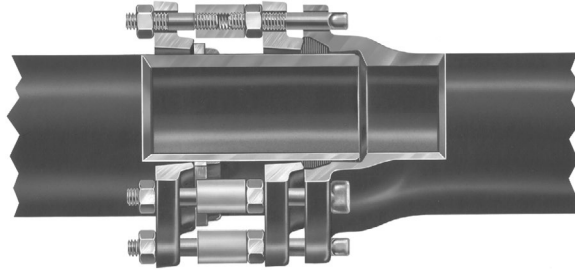


AMERICAN DUCTILE IRON PIPE

Therefore, system security and safety is maximized by filling and testing restrained sections of pipe-lines **after backfilling** as recommended by ANSI/

AWWA C600, Installation of Ductile Iron Water Mains and Their Appurtenances and AWWA M41.

AMERICAN Ductile Iron MJ Coupled Joint Pipe



The MJ Coupled Joint offers a method of providing joint restraint with a standard Mechanical Joint socket of a pipe, fitting, valve, or other product. It is available in sizes 4"-12" with a pressure rating of 350 psi and deflection capability up to 2 1/2°, and in 14"-48" with a pressure rating of 250 psi intended for installation in essentially straight alignment. Check AMERICAN if larger sizes or greater deflections are desired. The MJ Coupled Joint is commonly used as a method of joint restraint for Mechanical Joint all bell fittings and valves.

The joint material consists of a standard MJ gasket and a standard ductile iron joint gland. The restraint gland* is ductile iron and is assembled on

the pipe behind a welded-on 1/2" square alloy steel retaining ring. Coupling nuts, studs, teehead bolts and nuts, and retaining ring are all alloy steel. Teehead bolts are special-length bolts.

* The restraint gland for 30"-48" sizes is a substantially rectangular cross-section ductile iron gland.

Note: It is sometimes possible to provide for field-cutting and positive, even "drop-in" field-adaptable restraint in restrained piping areas by using modified MJ Coupled joints where the weld ring and restraint gland are intentionally moved farther away from the joint, and the standard short studs of the joint are replaced by longer threaded rods in the field. Threaded rods, of course, can also be cut to suit in the field. Similar effect can also be accomplished utilizing standard fabricated, stuffing-box couplings and similarly modified "Coupling Gland Ends" (see pg 9-28). Contact AMERICAN for additional information on this.

Assembly Instructions

1. Assemble the Mechanical Joint according to standard MJ joint procedures with the pipe and/or fitting in essentially straight alignment. Note that the bolts for this joint are not standard length; special-length bolts are furnished for this joint by AMERICAN. Where tapped holes are encountered in fittings or in valves, use studs of the same special length as specified for the THHN Bolts.

2. Thread the coupling nuts onto the tee-head bolts and hand tighten against the hex nuts. Install short, threaded end of studs into the coupling nuts.

3. Slide the gland into position and install outer hex nuts. (Note: If deflection is desired, it should be taken at this point prior to tightening the outer hex nuts.) Tighten to 20 ft-lb in order to draw gland substantially against welded-on ring on pipe. Joint is now complete.



AMERICAN Ductile Iron MJ Coupled Joint

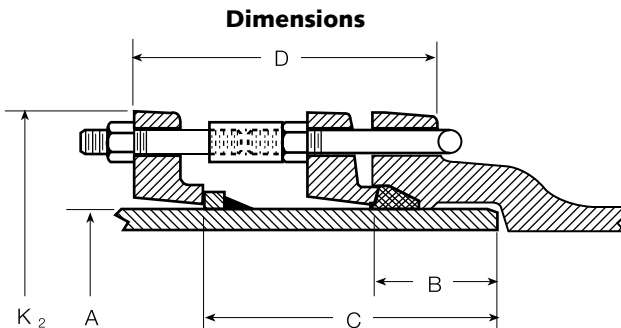


Table No. 9-8

4"-24"

Size in.	A Outside Diameter in.	B Socket Depth in.	C Plain End to Gland in.	K ₂ Gland O.D. in.	Bolts or Studs No.	Tee-Head Bolt in.	Stud in.	MJCJE & MJCJE Minimum Laying Length (ft.)
4	4.80	2.50	6.34	9.12	4	3/4 x 4	3/4 x 3 1/2	2'-3"
6	6.90	2.50	6.50	11.12	6	3/4 x 4	3/4 x 3 1/2	2'-3"
8	9.05	2.50	6.64	13.37	6	3/4 x 4 1/2	3/4 x 3 1/2	2'-3"
10	11.10	2.50	6.71	15.69	8	3/4 x 4 1/2	3/4 x 3 1/2	2'-3"
12	13.20	2.50	6.77	17.94	8	3/4 x 4 1/2	3/4 x 3 1/2	2'-3"
14	15.30	3.50	8.88	20.31	10	3/4 x 5	3/4 x 5	2'-9"
16	17.40	3.50	8.88	22.56	12	3/4 x 5	3/4 x 5	2'-9"
18	19.50	3.50	8.88	24.83	12	3/4 x 5	3/4 x 5	3'-0"
20	21.60	3.50	8.88	27.08	14	3/4 x 5 1/2	3/4 x 5	3'-0"
24	25.80	3.50	8.88	31.58	16	3/4 x 5 1/2	3/4 x 5	3'-0"

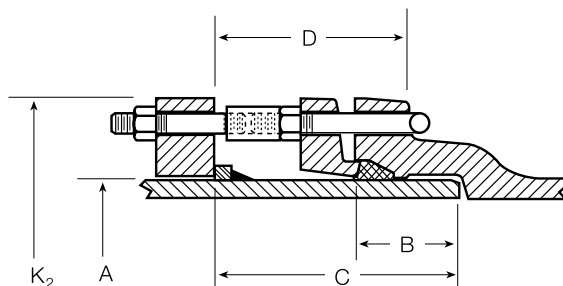


Table No. 9-9

30"-48"

Size in.	A Outside Diameter in.	B Socket Depth in.	C Plain End to Gland in.	K ₂ Gland O.D. in.	Bolts or Studs No.	Tee-Head Bolt in.	Stud in.	MJCJE & MJCJE Minimum Laying Length (ft.)
30	32.00	4.00	10.88	39.12	20	1 x 7	1 x 6	3'-6"
36	38.30	4.00	10.88	46.00	24	1 x 7	1 x 6	3'-6"
42	44.50	4.00	11.63	53.12	28	1 1/4 x 7	1 1/4 x 7	4'-0"
48	50.80	4.00	11.63	60.00	32	1 1/4 x 7	1 1/4 x 7	4'-0"