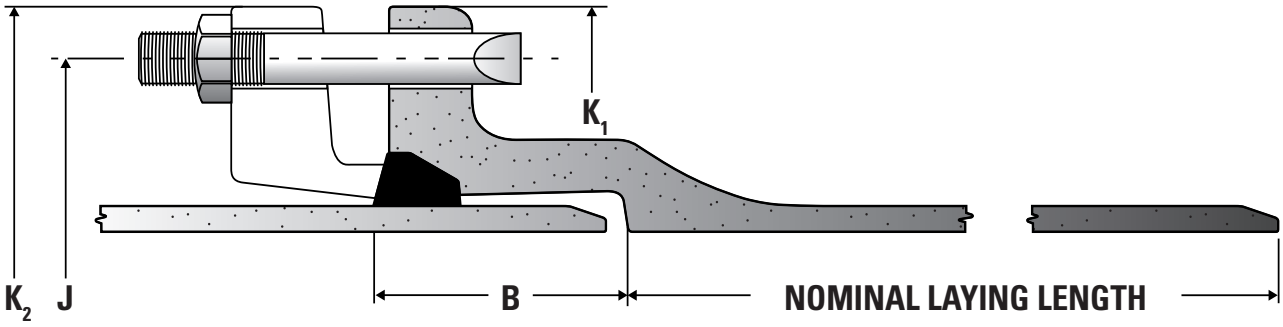
McWANE DUCTILE

IRON STRONG

DUCTILE IRON PIPE

MECHANICAL JOINT PIPE

3"–24"



PIPE SIZE IN.	PIPE THICKNESS IN.		OUTSIDE DIAMETER	*DIMENSIONS IN.					T-HEAD BOLTS		BELL WEIGHT LB.	GLAND** BOLTS GASKET WEIGHT LB.
	FROM	TO	IN.	B	J	K_1	K_2	NO.	SIZE IN.	LEN IN.		
3	.25	.40	3.96	2.50	6.19	7.62	7.69	4	5/8	3	11	7
4	.26	.41	4.80	2.50	7.50	9.06	9.12	4	3/4	3-1/2	16	10
6	.25	.43	6.90	2.50	9.50	11.06	11.12	6	3/4	3-1/2	18	16
8	.27	.45	9.05	2.50	11.75	13.31	13.37	6	3/4	4	24	25
10	.29	.47	11.10	2.50	14.00	15.62	15.62	8	3/4	4	31	30
12	.31	.49	13.20	2.50	16.25	17.88	17.88	8	3/4	4	37	40
14	.33	.51	15.30	3.50	18.75	20.25	20.25	10	3/4	4-1/2	61	45
16	.34	.52	17.40	3.50	21.00	22.50	22.50	12	3/4	4-1/2	74	55
18	.35	.53	19.50	3.50	23.25	24.75	24.75	12	3/4	4-1/2	85	65
20	.36	.54	21.60	3.50	25.50	27.00	27.00	14	3/4	4-1/2	98	85
24	.38	.56	25.80	3.50	30.00	31.50	31.50	16	3/4	5	123	105

* Nominal laying length is 18 ft. ** Weight shown for regular grey cast iron follower gland, corten bolts and rubber gasket.

ASSEMBLY INSTRUCTIONS

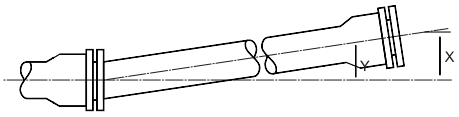
STEP 1. Clean the bell socket and spigot or plain end. Lubricate both the gasket and plain end by brushing an approved pipe lubricant. **Note:** Use only lube as supplied and/or approved by the manufacturer. *Currently approved lubricants provided by McWane Ductile include Phoenix XL-27 and Black Swan.*

STEP 2. Place the gland on the plain end with the lip extension toward the plain end. Place the gasket on the plain end with the narrow edge facing the plain end.

STEP 3. Insert the plain end into the bell and press the gasket into the bell recess. Push the gland toward the socket and center it around the pipe with the gland lip against the gasket.

STEP 4. Insert and tighten the bolts. It is important to maintain the same distance between the gland and the bell face at all times. This is best done by alternating side to side and top to bottom, while tightening the bolts.

NOTE: Achieving the recommended bolt torque, particularly with large diameter pipe, may require repeating the process up to 5 times or more. Recommended bolt torque ranges are as follows:



MECHANICAL JOINT PIPE

MAXIMUM ALLOWABLE JOINT DEFLECTION

PIPE SIZE IN.	Y-MAXIMUM JOINT DEFLECTION IN DEGREES	X DEFLECTION IN INCHES 18 FT. LENGTH	APPROXIMATE RADIUS IN FT. OF CURVE PRODUCED BY SUCCESSION OF JOINTS 18 FT. LENGTH
6	7°–7'	27	145
8	5°–21'	20	195
10	5°–21'	20	195
12	5°–21'	20	195
14	3°–35'	13.5	285
16	3°–35'	13.5	285
18	3°–0'	11	340
20	3°–0'	11	340
24	2°–23'	9	450

TORQUE REQUIREMENTS

PIPE SIZE IN.	BOLT DIAMETER IN.	NUT ACROSS FLATS IN.	WRENCH LENGTH IN.	TORQUE RANGE FOOT LBS.
3	5/8	1-1/16	8	45 to 60
4–24	3/4	1-1/14	10	75 to 90

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