

JCM 301 Flanged Coupling Adapters

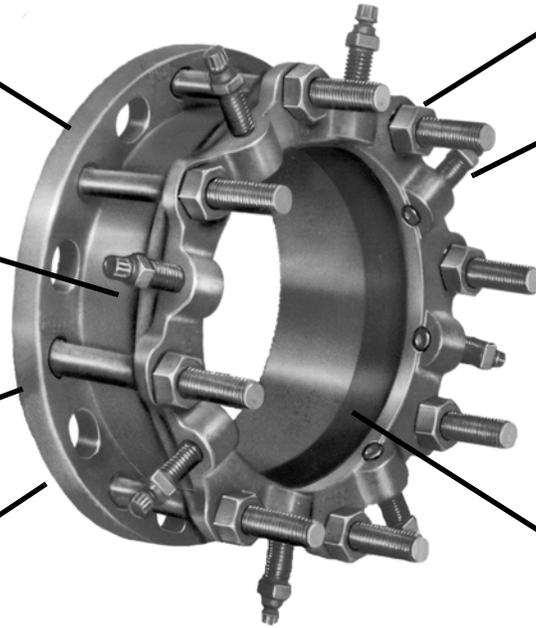
The Quick, Simple, Economical way to join flanged fittings, valves and meters to plain end pipe.

Ductile Iron body and flange and corrosion resistant high strength alloy bolts provide high strength and corrosion resistance to installations.

Laying length provides extra margin of safety for field cutting of pipe, yet is short enough for close quarter installations.

Full bolting to compression flange provides proper gasket compression. Many adapters use half the number of the standard flange.

Special flange gasket provides extra sealing capability on new and old flanged fittings and equipment. The wide molded gasket has a special lip which increases its sealing pressure with increases in line pressure.

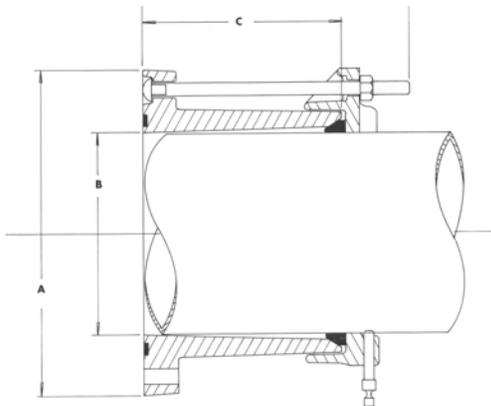


Special flange design provides extra versatility which makes it an excellent means for installing wafer type valves, fittings and equipment.

Optional retainer set screws anchor the adapter on steel, cast iron and ductile iron pipe eliminating the need for tie rods, thrust blocks and additional joint restraint. Retainer set screws are not exposed to the line contents and do not require drilling of pipe.

Special wide range gaskets, which are interchangeable with JCM Ductile Iron Couplings, provide extra field versatility necessary on installations involving deflection, oversize pipe, out-of-round and uneven pipe ends.

JCM 301 Flanged Coupling Adapter Dimensions



Nominal Size	A	B	C	D
3	8-1/8	5-1/4	3	5
4	9-1/8	5-1/4	3	5
6	11-1/8	7-5/16	3-1/2	5
8	13-1/2	9-9/16	3-1/2	5
10	16-1/4	11-9/16	4	6-1/2
12	19	13-5/8	4	6-1/2

The JCM 301 Flanged Coupling Adapter combines a flange with a ductile iron flexible coupling to provide a compact adapter fitting to connect plain end pipe to flanged fittings, meters, valves and equipment. The JCM 301 can be used to make on-site flanged spools and, when used with the optional set screws, eliminates the need for extra tie rods or harnessing assemblies on flanged equipment.

JCM 301 Flanged Coupling Adapters



301 Standard Flanged Coupling Adapter

301 Standard Flexible Flanged Coupling Adapter

The JCM 301 FCA provides a quick simple means of joining flanged fittings to plain end pipe. The 301 will absorb vibration, accommodate pipe deflection and expansion, provide for easy equipment removal and reinstallation, and eliminate the need for exact measurements.

301 Optional Restrained Flanged Adapter

Applications especially advantageous for using JCM FCA's

- Valve insertions
- Equipment connections and offset adjustment
- Converting flanged fittings to mechanical joint or push on type
- Dampening vibration
- Providing for field fitting of flanged spool pieces

301 FLANGED COUPLING ADAPTERS

NOM. PIPE SIZE (IN.)	PIPE O.D. RANGE (IN.)	CATALOG NUMBER	QTY OPTIONAL SET SCREWS	APPR. WT EACH (LBS.)
3	3.50	301-0350	4	17
	3.80 - 4.17	301-0396	4	17
4	4.00	301-0400	N/A	22
	4.50	301-0450	4	22
	4.80 - 5.10	301-0480	4	22
6	6.00	301-0600	N/A	37
	6.63	301-0663	8	37
	6.90 - 7.20	301-0690	8	37
8	8.00	301-0800	N/A	44
	8.63	301-0863	8	44
	9.05 - 9.40	301-0905	8	44
10	10.75	301-1075	12	67
	11.10 - 11.40	301-1110	12	67
12	12.75	301-1275	12	94
	13.20 - 13.50	301-1320	12	94

*Set Screws are not for use on Asbestos Cement, HDPE or PVC pipe.

Add (R) to end of Catalog Number to indicate optional set screws.

Note: Applications in which pipe may move out of the coupling, proper anchorage of the pipe must be provided.

Material Specifications:

Body & Flange: Ductile Iron ASTM A536

Gasket: Specially compounded new rubber polymer for superior shelf life and resistance to permanent set. Recommended for water, salt solutions, mild acids & bases.

Bolts: High strength, low alloy AWWA C-111, ANSI A21.11.

Finish: Heavy coating of corrosion resistant shop coat primer. Optional Fusion Epoxy Coating Available.



JCM 301 Flanged Coupling Adapter Typical Specifications

JCM 301 Flanged Coupling Adapter

Flanged Coupling Adapters 3" - 12" shall be of a design which utilizes separate flange and coupling end gaskets, same number of bolts on coupling end as flange end and has retaining capability built in to the coupling follower flange (retainer set screws shall not be in waterway). Flanged Coupling Adapters shall be suitable for use with the standard and wafer type valves. Flanged Coupling Adapter shall be JCM 301 or approved equal.

JCM 300 Series Flange Coupling Adapters (FCA) are ANSI/NSF Standard 61 Certified.

Note: For applications with High Density Polyethylene Pipe, refer to the JCM HDPE Fittings Manual or contact JCM Industries.



JCM 301 Flanged Coupling Adapter Material Specifications

JCM 301 Flanged Coupling Adapter

BODY AND FLANGE: Ductile Iron Per ASTM A-536

GASKETS: Specially compounded new rubber polymer for superior shelf life and resistance to permanent set. Recommended for use on water, salt solutions, mild acids and bases.

BOLTS: Corrosion resistant, high strength low alloy bolts and nuts per AWWA C-111, ANSI 21.11. Optional stainless steel type 304.

COATING: Corrosion resistant shop coat paint primer. Optional fusion applied epoxy coating per AWWA C-213.

1. Clean pipe surface of all dirt, rust, mud or loose scale from pipe ends. Inspect the pipe ends where gaskets will contact the pipe for any gouges, grooves, irregularities or imperfections that will interfere with the gasket seal. Measure the cleaned pipe diameter to confirm proper size of coupling for application. Inspection of the pipe's integrity for product application is the responsibility of the end user. ***TIP*** *Difficult to reach or cramped areas on the backside or underside of the pipe can be visually checked by using a mirror.*
2. Install follower ring, gasket and flanged adapter body onto the plain end of pipe. **NOTE:** Flat side of the gasket face meets the follower ring, the tapered side inserts into the adapter body. ***TIP*** *To ease installation of the gaskets, pipe should be lubricated with water or soapy-water mixture. Alcohol may be added to water in freezing weather. **DO NOT** use pipe lubricant or grease based products to lubricate.*
3. Insert the valve bolts into the flanged adapter body facing toward the valve or flanged fitting end.
4. Insert the flanged coupling adapter bolts to make up the coupling side. Loosely make up the FCA on the pipe end making certain the pipe extends past the gasket a minimum of one inch after deflection has occurred. Mark pipe to make certain FCA does not slide during tightening.
5. Align bolt holes of the adapter and flange and loosely make up flange connection. Tighten flange bolts and nuts, alternating bolts in a star pattern.

Recommended Torque:

5/8" Bolts

75 Foot Pounds

3/4" Bolts

90 Foot Pounds

6. **Lift the middle ring to insure that the gasket is evenly centered in the end.** Tighten flange coupling adapter bolts to make up the coupling side, alternating from side to side drawing the follower flange in evenly until all bolts have been tightened to 50 - 60 Foot Pounds. Check torque of bolts prior to completion.

Optional 301 Restrained Flange Coupling Adapter Set Screws are NOT RECOMMENDED for Asbestos Cement, PVC, HDPE, Fiberglass or any other types of non-rigid or brittle pipe materials. Inspection of pipe integrity is the responsibility of the end user. Use of restraining torque head set screws eliminates flexibility. The fitting is a rigid joint that will not accommodate deflection or movement after fitting installation.

7. Using a 12 point 7/16" socket wrench, evenly tighten all set screws until they are in contact with the pipe. Then alternately tighten them in a star pattern to approximately 50 Foot Pounds of torque. To complete installation, tighten all set screws in a star pattern until the special break away head shears off. This indicates that the pre-set optimum torque value of the set screw (80 -90 ft/lbs) has been reached. The 5/8" square head remaining of the set screw is for the convenience of removing the set screw should removal be necessary.

INT301-0800