JCM Ductile Iron Couplings

JCM Ductile Iron Couplings employ the mechanical compression joint principle to join two pieces of plain end pipe. This stress relieving flexible joint eliminates precise cutting and fitting in the field while providing for deflection, expansion-contraction, pipe settlement and a quick easy means of disassembling the system for maintenance.

210 DUCTILE IRON COUPLINGS

NOM. PIPE SIZE (IN.)	PIPE O.D. RANGE (IN.)	CATALOG NUMBER	FITS TYPE AND CLASS OF PIPE	NO. OF BOLTS	SLEEVE LENGTH	APPR. WT. EACH (LBS.)
2	2.34 - 2.63	210-0250	STEEL, PVC, CI	2	5	8
2-1/4, 2-1/2	2.62 - 2.92	210-0288	CI, STEEL, PVC	2	5	9
3	3.80 - 4.17	210-0396	CI, DI, A/C 150	3	6	15
4	4.80 - 5.10	210-0480	CI, DI, A/C 150, C-900PVC	4	6	20
4	5.10 - 5.40	210-0535	A/C	4	6	22
6	6.90 - 7.20	210-0690	CI, DI, A/C 150, C-900 PVC	5	6	24
6	7.20 - 7.55	210-0740	A/C	5	6	31
8	9.05 - 9.40	210-0905	CI, DI, A/C 150, C-900 PVC	6	6	36
8	9.40 - 9.75	210-0960	A/C	6	6	41
10	11.10 - 11.40	210-1110	CI, DI, C-900 PVC	7	6	46
10	11.60 - 12.05	210-1200	A/C	7	6	55
12	13.20 - 13.50	210-1320	CI, DI, C-900 PVC	8	6	62
12	13.92 - 14.40	210-1420	A/C, STEEL	8	6	68
14	15.20 - 15.40	210-1530	CI, DI, C-905 PVC	10	7	75
14	15.56 - 15.75	210-1565	CI	10	7	75
16	17.32 - 17.50	210-1740	CI, DI, C-905 PVC	10	7	86
16	17.72 - 17.94	210-1780	CI	10	7	86

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

211 DUCTILE IRON COUPLINGS FOR PVC AND STEEL PIPE

NOM. PIPE SIZE (IN.)	PIPE O.D. RANGE (IN.)	CATALOG NUMBER	FITS SIZES OF PIPE STEEL	FITS SIZES OF PIPE PVC	NO. OF BOLTS	SLEEVE LENGTH	APPR. WT. EA. (LBS.)
2	2.38	210-0250	STANDARD IPS & SCHEDULE PIPE	IPS O.D.	2	5	8
2-1/2	2.88	210-0288	STANDARD IPS & SCHEDULE PIPE	IPS O.D.	2	5	9
3	3.50	211-0350	STANDARD IPS & SCHEDULE PIPE	IPS O.D.	3	6	15
4	4.50	211-0450	STD. IPS, SCHEDULE PIPE, HDPE	IPS O.D.	4	6	20
6	6.63	211-0663	STD. IPS, SCHEDULE PIPE, HDPE	IPS O.D.	5	6	25
8	8.63	211-0863	STD. IPS, SCHEDULE PIPE, HDPE	IPS O.D.	6	6	38
10	10.75	211-1075	STD. IPS,SCHEDULE PIPE, HDPE	IPS O.D.	7	6	46
12	12.75	211-1275	STD. IPS, SCHEDULE PIPE, HDPE	IPS O.D.	8	6	64

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

JCM 212 Ductile Iron Transition Couplings

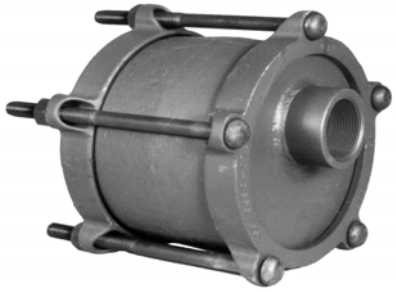
The JCM 212 Ductile Iron Transition Coupling is part of a uniquely simple coupling system which provides an easy means of joining plain end pipe. These transition couplings join pipe of the same nominal size that have different outside diameter dimensions. At the same time they help overcome common installation problems such as pipe misalignment, stress build up, corrosive environments and working in a limited space.

212 DUCTILE IRON TRANSITION COUPLINGS

NOM. PIPE SIZE (IN.)	FROM O.D. RANGE (IN.)	TRANSITION TO O.D. RANGE (IN.)	CATALOG NUMBER	NO. OF BOLTS	SLEEVE LENGTH	APPR. WT. EACH (LBS.)
2, 2-1/2	2.62 - 2.92	2.38 - 2.50	212-0288-0238	2	5	9
3	3.80 - 4.17	3.50	212-0396-0350	3	6	15
4	4.50	4.00	212-0450-0400	4	6	20
4	4.50	4.22	212-0450-0422	4	6	20
4	4.80 - 5.10	4.00	212-0480-0400	4	6	20
4	4.80 - 5.10	4.22	212-0480-0422	4	6	20
4	4.80 - 5.10	4.50	212-0480-0450	4	6	20
4	5.10 - 5.40	4.50	212-0535-0450	4	6	22
4	5.10 - 5.40	4.80	212-0535-0480	4	6	22
6	6.63	6.00	212-0663-0600	5	6	26
6	6.63	6.30	212-0663-0630	5	6	26
6	6.90 - 7.20	6.00	212-0690-0600	5	6	26
6	6.90 - 7.20	6.30	212-0690-0630	5	6	26
6	6.90 - 7.20	6.63	212-0690-0663	5	6	26
6	7.20 - 7.55	6.63	212-0740-0663	5	6	31
6	7.20 - 7.55	6.90	212-0740-0690	5	6	31
8	8.63	8.00	212-0863-0800	6	6	38
8	8.63	8.40	212-0863-0840	6	6	38
8	9.05 - 9.40	8.00	212-0905-0800	6	6	38
8	9.05 - 9.40	8.40	212-0905-0840	6	6	38
8	9.05 - 9.40	8.63	212-0905-0863	6	6	38
8	9.40 - 9.75	8.63	212-0960-0863	6	6	41
8	9.40 - 9.75	9.05	212-0960-0905	6	6	41
10	10.75	10.50	212-1075-1050	7	6	46
10	11.10 - 11.40	10.50	212-1110-1050	7	6	46
10	11.10 - 11.40	10.75	212-1110-1075	7	6	46
10	11.60 - 12.05	10.75	212-1200-1075	7	6	57
10	11.60 - 12.05	11.10	212-1200-1110	7	6	57
12	12.75	12.50	212-1275-1250	8	6	64
12	13.20 - 13.50	12.50	212-1320-1250	8	6	64
12	13.20 - 13.50	12.75	212-1320-1275	8	6	64
12	13.92 - 14.40	12.75	212-1420-1275	8	6	70
12	13.92 - 14.40	13.20	212-1420-1320	8	6	70
14	15.56 - 15.75	15.20 - 15.40	212-1565-1530	10	7	75
16	17.72 - 17.94	17.32 - 17.50	212-1780-1740	10	7	86

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

JCM 214 Pipe End Cap Couplings
JCM 219 Restrained Ductile Iron Couplings



The JCM 214 Pipe End Cap Coupling is a quick, simple means of capping plain end pipe in either permanent or temporary installations. Furnished standard with a threaded outlet, this fitting is often used as a test cap, air release or as a means of reduction for a smaller line extension. The optional restrained coupling end eliminates the need for required thrust blocks.

214 PIPE END CAP COUPLINGS (WITH 2" IPS OUTLET)

NOM. PIPE SIZE (IN.)	PIPE O.D. RANGE (IN.)	CATALOG NUMBER	FITS TYPES & CLASSES OF PIPE	NO. OF BOLTS	SLEEVE LENGTH	APPR. WT. EACH (LBS.)
3	3.50	214-0350	STEEL, PVC	3	6	19
3	3.80 - 4.17	214-0396	CI, DI, A/C 150	3	6	19
4	4.50	214-0450	STEEL, PVC	4	6	25
4	4.80 - 5.10	214-0480	CI, DI, A/C I50, C-900 PVC	4	6	25
4	5.10 - 5.40	214-0535	A/C	4	6	27
6	6.63	214-0663	STEEL, PVC	5	6	32
6	6.90 - 7.20	214-0690	CI, DI, A/C 150, C-900 PVC	5	6	32
6	7.20 - 7.55	214-0740	A/C	5	6	41
8	8.63	214-0863	STEEL, PVC	6	6	51
8	9.05 - 9.40	214-0905	CI, DI, A/C 150, C-900 PVC	6	6	49
8	9.40 - 9.75	214-0960	A/C	6	6	56
10	10.75	214-1075	STEEL, PVC	7	6	64
10	11.10 - 11.40	214-1110	CI, DI, A/C 150, C-900 PVC	7	6	64
10	11.60 - 12.05	214-1200	A/C	7	6	78
12	12.75	214-1275	STEEL, PVC	8	6	88
12	13.20 - 13.50	214-1320	CI, DI, A/C 150, C-900 PVC	8	6	86
12	13.92 - 14.40	214-1420	A/C, STEEL	8	6	99

*Pipe sizes 3.50 & 3.96 have 1-1/2" IPS outlet.
Requires thrust blocks or restraint. Restrained ends available sizes 4" -12". Add (R) to end of catalog number to indicate restrained ends. (Not for use A/C pipe, HDPE or PVC pipe).
Note: Applications in which pipe may move out of the coupling, correct anchorage of the pipe must be provided.

The JCM 219 Restrained Ductile Iron Coupling simplifies piping installations requiring tie rods or other types of thrust restraint. The Ductile Iron Coupling eliminates the need for exact pipe fit, alignment and end preparation. The integral restraining set screws provide restraint equal to restrained M.J. glands and eliminate the need for cumbersome tie rods or harness assemblies.

219 RESTRAINED DUCTILE IRON COUPLINGS

NOM. PIPE SIZE (IN.)	PIPE O.D. RANGE (IN.)	CATALOG NUMBER	NO. OF BOLTS	NO. OF SET SCREWS EA. END	APPR. WT. EACH (LBS.)
3	3.80 - 4.17	219-0396	3	3	19
4	4.80 - 5.10	219-0480	4	4	22
6	6.90 - 7.20	219-0690	8	8	38
8	9.05 - 9.40	219-0905	8	8	46
10	11.10 -11.40	219-1110	12	12	67
12	13.20 -13.50	219-1320	12	12	81

Larger Sizes available upon request.
NOTE: Restrained ends are not for use on Asbestos Cement, HDPE or PVC pipe.
Note: Applications in which pipe may move out of the coupling, correct anchorage of the pipe must be provided.

JCM Transition Gaskets

For Models 210, 211, 212, 214, 215, 216, 301, 306, 307 Couplings and FCA's

The uniquely simple JCM Wide Range Coupling and Flanged Coupling Adapter system utilizes self-centering, extra wide transition gaskets eliminating the need for stocking special transition couplings or color coded flanges and gaskets. Stock JCM Ductile Iron Coupling and JCM Flanged Coupling Adapters and change only gaskets to make a transition between A/C, Cast Iron, Ductile Iron, Steel and PVC pipe. Use the same size gasket on both ends to make a straight coupling.

GASKETS FOR STANDARD SIZE 210 DUCTILE IRON COUPLINGS

NOM. PIPE SIZE (IN.)	FITS COUPLING SLEEVE	GASKET O.D. RANGE (IN.)	FITS TYPES & CLASSES OF PIPE	GASKET NUMBER
2-1/4, 2-1/2	210-0288	2.62 - 2.92 2.38 - 2.50	CI, 2-1/2" PVC, STEEL 2" PVC, STEEL, CI	G212-0288 G212-0288-0238*
3	210-0396	3.80 - 4.17 3.50	CI, DI, A/C 150, C-900 PVC IPS PVC, STEEL	G212-0396 G212-0396-0350*
4	210-0480	4.74 - 5.10 4.50 4.22 4.00	CI, DI, A/C 150, C-900 PVC IPS PVC, STEEL, HDPE SDR 35 STEEL TUBING	G212-0480 G212-0480-0450 G212-0480-0422 G212-0480-0400
6	210-0690	6.84 -7.26 6.63 6.30 6.00	CI, DI, A/C 150, C-900 PVC IPS PVC, STEEL, HDPE SDR 35 STEEL TUBING	G212-0690 G212-0690-0663 G212-0690-0630 G212-0690-0600
8	210-0905	8.99 - 9.42 8.63 8.40 8.00	CI, DI, A/C 150, C-900 PVC IPS PVC, STEEL, HDPE SDR 35 STEEL TUBING	G212-0905 G212-0905-0863 G212-0905-0840 G212-0905-0800
10	210-1110	11.04 - 11.40 10.75 10.50	CI, DI, C-900 PVC IPS PVC, STEEL, HDPE SDR 35	G212-1110 G212-1110-1075 G212-1110-1050
12	210-1320	13.14 -13.50 12.75 12.50	CI, DI, C-900 PVC IPS PVC, STEEL, HDPE SDR 35	G212-1320 G212-1320-1275 G212-1320-1250
14	210-1565	15.20 - 15.40 15.56 - 15.75	CI, DI, C-905 PVC CI	G212-1530 G212-1565
16	210-1780	17.32 - 17.50 17.72 - 17.94	CI, DI, C-905 PVC CI	G212-1740 G212-1780

*This size gasket does not have extended lip.

GASKETS FOR OVERSIZED 210 DUCTILE IRON COUPLINGS

NOM. PIPE SIZE (IN.)	FITS COUPLING SLEEVE	GASKET O.D. RANGE	FITS TYPES & CLASSES OF PIPE	GASKET NUMBER
4	210-0535	5.06 - 5.40 4.80 - 5.10 4.50	A/C CI, DI, C-900 PVC IPS PVC, STEEL, HDPE	G212-0535 G212-0535-0480 G212-0535-0450
6	210-0740	7.17 - 7.55 6.90 - 7.10 6.63	A/C CI, DI, C-900 PVC IPS PVC, STEEL, HDPE	G212-0740 G212-0740-0690 G212-0740-0663
8	210-0960	9.32 - 9.75 9.05 - 9.30 8.63	A/C CI, DI, C-900 PVC IPS PVC, STEEL, HDPE	G212-0967 G212-0967-0905 G212-0967-0863
10	210-1200	11.60 - 12.05 11.10 - 11.30 10.75	A/C CI, DI, C-900 PVC IPS PVC, STEEL, HDPE	G212-1200 G212-1200-1110 G212-1200-1075
12	210-1420	13.92 - 14.40 13.20 - 13.50 12.75	A/C CI, DI, C-900 PVC IPS PVC, STEEL, HDPE	G212-1420 G212-1420-1320 G212-1420-1275

JCM SBR Gasket Material Specifications

JCM SBR Gasket Material

Styrene Butadiene Rubber (SBR) has good physical properties. It has excellent abrasion resistance and is suitable for application with water, salt solutions, mild acids and bases. It has a maximum operating temperature rating of 180o F. The material is not recommended for use on oil, ozone or weather resistant applications.

The following is a list of JCM products that are furnished with SBR gaskets as standard material.

210, 211, 212 Ductile Iron Couplings
219 Restrained Ductile Iron Coupling
301, 306, 307 Flanged Coupling Adapters

JCM SBR Gasket Material used in JCM Fittings is ANSI/NSF Standard 61 Certified with the product in which it is supplied. JCM SBR Rubber meets ASTM D-2000 Standard.

JCM 210 Ductile Iron Coupling
Typical Specifications

JCM 210 Ductile Iron Couplings

Couplings for pipe sizes 2" - 16" shall be of ductile iron construction. Couplings shall be of the wide range type to fit Steel, Cast Iron, Ductile Iron, PVC, HDPE and Asbestos-Cement with only a change of gaskets. Coupling sleeves shall be 5" in length on 2" - 2-1/2" pipe sizes, 6" in length on pipe sizes 3" - 12" and 7" in length on pipe sizes 14" and 16". Ductile Iron couplings shall be JCM 210, 211, 212, or approved equal.

JCM 200 Series Ductile Iron Couplings are ANSI/NSF Standard 61 Certified.

JCM 200 Series Ductile Iron Coupling

Nominal Pipe Size	Sleeve Length	Number of Bolts
2	"5	"2
2-1/2	"5	"2
3	"6	"3
4	"6	"4
6	"6	"5
8	"6	"6
10	"6	"7
12	"6	"8
14	"7	"10
16	"7	"10

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

JCM 212 Ductile Iron Transition Coupling Typical Specifications

JCM 212 Ductile Iron Transition Couplings

Transition Couplings for pipe sizes 4" - 12" shall be of ductile iron construction. Couplings shall be of the wide range type to fit Steel, Cast Iron, Ductile Iron, PVC, SDR-35, HDPE and Class 100/150 Asbestos-Cement with only a change of gaskets. SDR-35 Transition Gaskets shall have self-centering ring to ensure coupling, follower and gasket are centered on the pipe. Coupling sleeves shall be 6" in length on pipe sizes 4" - 12". Ductile Iron Transition Couplings shall be JCM 212 or approved equal.

JCM 200 Series Ductile Iron Couplings are ANSI/NSF Standard 61 Certified.

JCM 200 Series Ductile Iron Coupling

Nominal Pipe Size	Sleeve Length	Number of Bolts
2	"5	"2
2-1/2	"5	"2
3	"6	"3
4	"6	"4
6	"6	"5
8	"6	"6
10	"6	"7
12	"6	"8
14	"7	"10
16	"7	"10

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

JCM

JCM Ductile Iron Coupling
Material Specifications

JCM 200 Series Ductile Iron Couplings - 210, 211, 212

SLEEVE AND FLANGES: 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 18-8 Type 304.

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

JCM Ductile Coupling Pressure Ratings Typical Specifications

JCM Ductile Iron Couplings are manufactured from ASTM A-536 Ductile Iron and have low alloy bolts to ANSI 21.11. These heavy-duty couplings have a heavy gasket, which is recommended for water, salt solutions, mild acids and bases.

Pressure ratings on these couplings represent the sealing capability of the product. Note: where pipe movement out of the coupling might occur, proper anchorage of the pipe must be provided.

Coupling Model Number	Nominal Pipe Size	Type of Pipe	Pressure Rating
210	2" - 12	"Ductile Iron, Cast Iron, A/C	250 PSI
211	2" - 12	"Steel, PVC	250 PSI
212	2" - 12	"CI, DI, to Steel, PVC	250 PSI
212	3" - 8	"A/C to CI, DI	250 PSI
212	10"- 12	"A/C to CI, DI	150 PSI
212	4" - 12	"Oversized A/C to Steel	150 PSI
212	4" - 8	"A/C, CI, DI, to O.D. Steel Pipe	150 PSI

For higher pressure applications, contact JCM Industries.

JCM 210 Ductile Iron Couplings for Cast Iron (CI), Ductile Iron (DI), C-900 PVC and Asbestos Cement (A/C)

JCM 211 Ductile Iron Couplings for Steel Pipe and IPS Size PVC

JCM 212 Ductile Iron Transition Couplings to join pipe of different outside diameters.

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

JCM 200 Series Ductile Iron Couplings
Installation Instructions

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. Measure back on each pipe end one-half of the middle ring length plus two inches and place a reference mark. These marks will be a visual reference point for centering the middle ring over the joint. ***TIP*** *Couplings perform at optimal effectiveness when centered over joint area.*

3. Install follower rings, then gasket onto the pipe ends. **NOTE:** Flat side of the gasket face meets the follower ring, the tapered side inserts into the middle ring. ***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.*

4. Install middle ring on one pipe end. Insert other pipe end into middle ring and center the middle ring over the joint, between the reference marks.

5. Torque coupling bolts on opposite sides, using a star rotation pattern, drawing up the followers evenly until all bolts have been tightened to a minimum of 75 foot pounds of torque.

   NOTES: On joints that do not permit centering of the coupling, the pipe ends must be inserted past the end of the gasket a minimum of one and one-half (1-1/2") inch.

   For applications with deflection or offset pipe ends, the pipe end must be inserted a minimum of one and one-half (1-1/2") inch past the end of the gasket after the deflection/offset has occurred. Do not exceed a recommended 4° of pipe deflection with the coupling without inspecting the centering and sealing of the gasket in the middle ring and follower ring. Excessive deflection will cause the gasket to improperly seal. **Lift the middle ring to insure that the gasket is evenly centered in the ends.**

   IMPORTANT: Standard couplings do not provide for axial pipe movement. In applications in which lateral pipe pull out may occur, pipe restraint must be provided. See fitting manufacturer recommendations for applications on High Density Polyethylene Pipe.

INT210-0302

JCM 219 Restrained Ductile Iron Coupling Installation Instructions

JCM RESTRAINED FITTINGS USING TORQUE HEAD 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.

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. Measure back on each pipe end one-half of the middle ring length plus two inches and place a reference mark. These marks will be a visual reference point for centering the middle ring over the joint. ***TIP*** *Couplings perform at optimal effectiveness when centered over joint area.*

3. Install follower rings, then gasket onto the pipe ends. **NOTE:** Flat side of the gasket face meets the follower ring, the tapered side inserts into the middle ring. ***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.*

4. Install middle ring on one pipe end. Insert other pipe end into middle ring and center the middle ring over the joint, between the reference marks. **Lift the middle ring to insure that the gasket is evenly centered in the ends.**

5. Torque coupling bolts on opposite sides, using a star rotation pattern, drawing up the followers evenly until all bolts have been tightened to 60 to 75 foot pounds of torque.

6. Using a 12 point 7/16" socket wrench, evenly tighten all restraining set screws until they are in contact with the pipe. Then alternately tighten them in a star rotation 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 (80-90ft/lbs) has been reached. The 5/8" square head remaining on the set screw is for the convenience of removing the set screw should removal of the fitting be necessary.

SEE NOTES AND IMPORTANT INFORMATION ON REVERSE

INT219-0700

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JCM 219 Restrained Ductile Iron Coupling
Installation Instructions
Continued

NOTES: On joints that do not permit centering of the coupling, the pipe ends must be inserted past the end of the gasket a minimum of one inch.

For applications with deflection of offset pipe ends, the pipe end must be inserted a minimum of one inch past the end of the gasket after the deflection/offset has occurred. Do not exceed a recommended 4° of pipe deflection with the coupling without inspecting the centering and sealing of the gasket in the middle ring and follower ring. Excessive deflection will cause the gasket to improperly seal. **Lift the middle ring to insure that the gasket is evenly centered in the ends.**

Ductile iron couplings and flanged coupling adapters create a flexible joint that allows minimal deflection and movement of the pipe at the joint. Use of restraining torque head set screws eliminates this flexibility and changes the fitting to a rigid joint that no longer accommodates deflection or movement after fitting installation.

IMPORTANT: Standard couplings do not provide for axial pipe movement. In applications in which lateral pipe pull out may occur, pipe restraint must be provided.