



Flange Adapters series 200

For Steel and Ductile Iron Pipe - Flange Drilling ANSI B16.1 125 lbs
Working Pressure: 3"-8" 200 PSI, 10"-12" 175 PSI



Flange Adapter Series 200 for Steel and Ductile Iron Pipe

INFORMATION

The Series 200 Flange Adapter provides restraint by utilizing set screws in a locking device similar to the mechanical joint retainer glands. This adapter eliminates the need for thrust blocks and other restraining devices and has been used throughout the world for more than 40 years.

Used Throughout the World

FEATURES & ADVANTAGES

- Flange adapters are made of Ductile Iron - ASTM A536 Grade 65-45-12.
- Sizes 3"-12" are Underwriters Laboratories Listed.
- Bolt hole drilling is to ANSI B16.1 class 125.
- Uses standard mechanical joint gasket for seal.
- Pipe fabrication can be done on site, using plain end pipe.
- Flange Adapters are ideal for jobs involving retro-fitting.
- Can be used on Ductile Iron or Steel Pipe
- Can be used in above or below ground applications
- If future maintenance is required, Flange Adapters can be easily disassembled.
- Standard gland color is Coral Red (RAL 3016).

Note: See page 36 for Technical information and page 38 for installation instructions.

SAMPLE SPECIFICATIONS

Flange Adapter for use on iron or steel pipe shall be manufactured of high strength ductile iron in accordance to ASTM A36 Grade 65-45-12 for all sizes. Applicable dimensions shall conform to ANSI/AWWA C111/A21.11, C110/A21.10 and C153/A21.53. Flange ends to meet ANSI Class 125/150 & ANSI/AWWA C115/A21.15.

The device shall be Underwriters Laboratories Listed for sizes 3"-12" and Factory Mutual Research approved for sizes 3"-10". Flange Adapter shall have a working pressure rating of 200 PSI for sizes 3"-8", 175 PSI for 10"-12" and have a minimum safety factor of 2:1 (i.e. twice the working pressure).

Flange adapters shall be Star® Pipe Products Flange adapter Series 200 or an approved equal.

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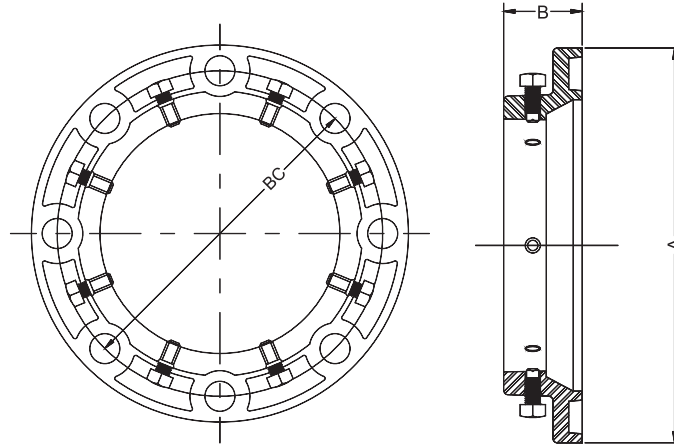
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Flange Adapters series 200/400

For Steel and Ductile Iron Pipe - Flange Drilling ANSI B16.1 125 lbs

TECHNICAL INFORMATION



FLANGE ADAPTER 200 SPECIFICATIONS*

NOM. SIZE	DUCTILE PIPE		STEEL PIPE		APPROX. WT. (LBS)	A	B	BC	BOLT HOLE DIA.	SET SCREWS	
	O.D.	ITEM CODE	O.D.	ITEM CODE						QTY	SIZE
3	3.96	SF203G	3.50	SF203TG	6.00	7.50	2.00	6.00	3/4	4	1/2 X 1 1/4
4	4.80	SF204G	4.50	SF204TG	9.00	9.00	2.07	7.50	3/4	4	1/2 X 1 1/4
6	6.90	SF206G	6.63	SF206TG	12.00	11.00	2.19	9.50	7/8	8	1/2 X 1 1/4
8	9.05	SF208G	8.63	SF208TG	19.00	13.50	2.31	11.75	7/8	8	5/8 X 1 1/2
10	11.10	SF210G	10.75	SF210TG	27.00	16.00	2.50	14.25	1	12	5/8 X 1 1/2
12	13.20	SF212G	12.75	SF212TG	37.00	19.00	2.50	17.00	1	12	5/8 X 1 1/2

*All dimensions in inches except where indicated. See page 38 for installation instructions.

FLANGE ADAPTER 400 SPECIFICATIONS*

NOM. SIZE	DUCTILE PIPE		STEEL PIPE		APPROX. WT. (LBS)	A	B	BC	BOLT HOLE DIA.	SET SCREWS	
	O.D.	ITEM CODE	O.D.	ITEM CODE						QTY	SIZE
4	4.80	SF404G	4.50	SF404TG	11.00	9.00	2.06	7.50	3/4	8	1/2 X 1 1/4
6	6.90	SF406G	6.63	SF406TG	14.00	11.00	2.13	9.50	7/8	8	1/2 X 1 1/4
8	9.05	SF408G	8.63	SF408TG	21.00	13.50	2.13	11.75	7/8	8	5/8 X 1 1/2
10	11.10	SF410G	10.75	SF410TG	38.00	16.00	2.19	14.25	1	12	5/8 X 1 1/2
12	13.20	SF412G	12.75	SF412TG	56.00	19.00	2.25	17.00	1	12	5/8 X 1 1/2
14	15.30	SF414G	N/A	N/A	70.00	21.00	2.75	18.75	1 1/8	12	5/8 X 1 1/2
16	17.40	SF416G	N/A	N/A	79.00	23.50	2.75	21.25	1 1/8	16	5/8 X 1 1/2
18	19.50	SF418G	N/A	N/A	90.00	25.00	3.25	22.75	1 1/4	16	3/4 X 2
20	21.60	SF420G	N/A	N/A	145.00	27.50	3.25	25.00	1 1/4	20	3/4 X 2
24	25.80	SF424G	N/A	N/A	175.00	32.00	3.69	29.50	1 3/8	20	3/4 X 2
30	32.00	SF430G	N/A	N/A	270.00	38.75	4.25	36.00	1 3/8	28	1 X 2 1/4
36	38.30	SF436G	N/A	N/A	400.00	46.00	4.38	42.75	1 5/8	32	1 X 2 1/4

*All dimensions in inches except where indicated. See page 37 for features & advantages and page 36 for installation instructions.

STAR® PIPE PRODUCTS



Flange Adapters series 400

For Steel and Ductile Iron Pipe Flange - Drilling ANSI B16.1 125 lbs
Working Pressure: 4"-12" 250 PSI, 14"-24" 150 PSI, 30"-36" 100 PSI



Flange Adapter Series 400 for Steel and Ductile Iron Pipe

INFORMATION

Flange adapters can be used to restrain plain end ductile iron pipe to flange fittings instead of using threaded or welded flanges on plain end ductile iron pipe. Flange adapters provide restraint by use of a set screw locking device similar to that used in mechanical joint restrainer gland.

FEATURES & ADVANTAGES

- Flange adapters are made of Ductile Iron - ASTM A536 Grade 65-45-12.
- Bolt hole drilling is to ANSI B16.1 class 125.
- Uses standard mechanical joint gasket for seal
- Pipe fabrication can be done on site, using plain end pipe.
- Flange Adapters are ideal for jobs involving retro-fitting.
- Can be used on Ductile Iron 4"-36" and steel pipe 4"-12"
- Can be used in above or below ground applications
- If future maintenance is required, Flange Adapters can be easily disassembled.
- Standard gland color is Coral Red (RAL 3016).

Note: See page 36 for Technical information and page 38 for installation instructions.

SAMPLE SPECIFICATIONS

Flange Adapter for use on iron or steel pipe shall be manufactured of high strength ductile iron in accordance to ASTM A36 Grade 65-45-12 for all sizes. Applicable dimensions shall conform to ANSI/AWWA C111/A21.11, C110/A21.10 and C153/A21.53. Flange ends to meet ANSI Class 125/150 & ANSI/AWWA C115/A21.15.

Flange Adapter shall have a working pressure rating of 250 PSI for sizes 4"-12", 150 PSI for sizes 14"-24", 100 PSI for 30"-36" and have a safety factor of 2:1 (i.e. twice the working pressure).

Flange adapters shall be Star® Pipe Products Flange adapter Series 400 or an approved equal.

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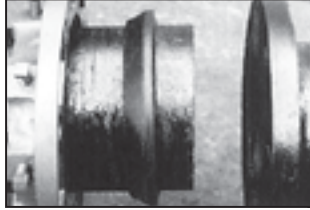
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Flange Adapters series 200/400

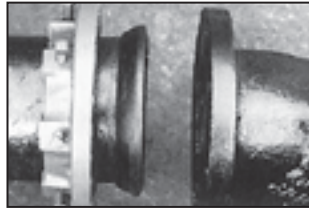
For Steel and Ductile Iron Pipe Flange - Drilling ANSI B16.1 125 lbs

INSTALLATION INSTRUCTIONS - SIZES 3" - 36"



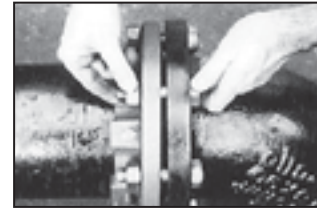
STEP 1

Pipe should be cut square and be free of burrs. Series 200/400 adapter flanges should not be used on beveled end of pipe. Clean the plain end of the pipe. Thoroughly lubricate the pipe and gasket with soap based lubricant. Slide the flange onto the pipe with the gasket cavity facing the end of the pipe. Slide the lubricated gasket over the pipe end, with the taper end facing the gasket cavity in the flange.



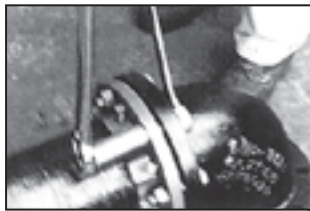
STEP 2

Slide the flange forward until the gasket is evenly seated in the flange cavity, with the leading edge of the gasket flush with the end of the pipe. Butt the end of the pipe against the facing flange.



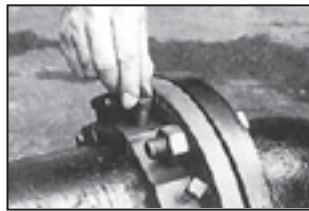
STEP 3

Using conventional flange bolts, mate the Flange Adapter to the standard flange.



STEP 4

Be sure to evenly tighten the bolts alternately on opposite sides. Do not over tighten the flange bolts. It is not necessary to bring the Flange Adapter to a face to face contact with the standard flange. A gap of approximately 1/8" between flanges is normal.



STEP 5

Hand tighten all set screws until they come in contact with the pipe.



STEP 6

Tighten in an alternating manner going on opposite sides (star method) to the torque values shown on the chart below.

For Auto-Tork® screw, simply use a 7/16" 12' - point socket wrench. Tighten alternately on opposite sides until.

Note: Not to be used on plain end fittings or PVC and HDPE pipe.

RECOMMENDED SET SCREW TORQUE VALUES									
FLANGE SIZE	SET SCREW SIZE	RECOMMENDED SET SCREW TORQUE VALUE (FT/LBS)							
		DUCTILE IRON PIPE (CLASS)				STEEL PIPE (SCHEDULE)			
		50	51	52	53+	10	20	30	40+
3"	1/2" x 1 1/4"	-	50	70	70	30	-	-	70
4"	1/2" x 1 1/4"	-	50	70	70	30	-	-	70
6"	1/2" x 1 1/4"	50	60	80	90	30	-	-	90
8"	5/8" x 1 1/2"	50	60	80	90	30	50	50	90
10"	5/8" x 1 1/2"	50	60	80	90	40	50	50	90
12"	5/8" x 1 1/2"	50	60	80	90	40	50	60	90
14"	5/8" x 1 1/2"	60	70	90	90	N/A	N/A	N/A	N/A
16"	5/8" x 1 1/2"	60	70	90	90	N/A	N/A	N/A	N/A
18"	3/4" x 2"	70	80	115	115	N/A	N/A	N/A	N/A
20"	3/4" x 2"	70	80	115	115	N/A	N/A	N/A	N/A
24"	3/4" x 2"	70	80	115	115	N/A	N/A	N/A	N/A
30"	1" x 2 1/4"	90	110	125	125	N/A	N/A	N/A	N/A
36"	1" x 2 1/4"	90	110	125	125	N/A	N/A	N/A	N/A

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