

DATE: 12/18/2019

CIMSCO, INC.  
1840 L & A ROAD  
METAIRIE, LA 70001

Page: 5

BID NO.: 50-00129070

**BID FORM**  
Non Public Works

All Public Work Projects are required to use the Louisiana Uniform Public Work Bid Form

All prices must be held firm unless an escalation provision is requested in this bid. Jefferson Parish will allow one escalation during the term of the contract, which may not exceed the U.S. Bureau of Labor Statistics National Index for all Urban Consumers, unadjusted 12 month figure. The most recently published figure issued at the time an adjustment is requested will be used. A request must be made in writing by the vendor, and the escalation will only be applied to purchases made after the request is made.

Are you requesting an escalation provision?

YES \_\_\_\_\_ NO ✓

MAXIMUM ESCALATION PERCENTAGE REQUESTED \_\_\_\_\_%

INITIAL BID PRICES WILL REMAIN FIRM THROUGH THE DATE OF 1-16-2021

For the purposes of comparison of bids when an escalation provision is requested, Jefferson Parish will apply the maximum escalation percentage quoted by the bidder to the period to which it is applied in the bid. The initial price and the escalation will be used to calculate the total bid price. It will be assumed, for comparison of prices only, that an equal amount of material or labor is purchased each month throughout the entire contract.

**DELIVERY: FOB JEFFERSON PARISH**

INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES

Stock to 3 weeks

LOUISIANA CONTRACTOR'S LICENSE NO.: (if applicable) \_\_\_\_\_

**THIS SECTION MUST BE COMPLETED BY BIDDER:**

FIRM NAME: CIMSCO INC

ADDRESS: 1840 L & A ROAD

CITY, STATE: Metairie LA ZIP: 70001

TELEPHONE: 504, 835-7319 FAX: 504, 832-0820

EMAIL ADDRESS: Tim@CIMSCOINC.COM

In the event that addenda are issued with this bid, bidders MUST acknowledge all addenda on the bid form. Bidder must acknowledge receipt of an addendum on the bid form as indicated. Failure to acknowledge any addendum on the bid form will result in bid rejection.

Acknowledge Receipt of Addenda: NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

TOTAL PRICE OF ALL BID ITEMS: \$ 276,821.10

AUTHORIZED SIGNATURE: Timothy Randall

TITLE: MUNICIPAL SALES

Timothy Randall  
Printed Name

SIGNING INDICATES YOU HAVE READ AND COMPLY WITH THE INSTRUCTIONS AND CONDITIONS.

NOTE: All bids should be returned with the BID NUMBER and BID OPENING DATE indicated on the outside of the envelope submitted to the Purchasing Department.

## INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00129070

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
			ONE (1) YEAR CONTRACT FOR A SUPPLY OF COUPLINGS, RESTRAINING DEVICES & RELATED GASKETS FOR THE JEFFERSON PARISH DEPT OF PUBLIC WORKS, WATER & SEWERAGE AND ALL JEFF. PARISH AGENCIES & MUNICIPALITIES		
1	2.00	EA	0010 - 3 INCH FLANGE RESTRAINER PART #1003 (38418)	16.50	33.00
2	2.00	EA	0020 - 4 INCH FLANGE RESTRAINER PART #1004 (38417)	38.11	76.22
3	2.00	EA	0030 - 6 INCH FLANGE RESTRAINER PART #1006 (38415)	29.50	59.00
4	2.00	EA	0040 - 8 INCH FLANGE RESTRAINER PART #1008 (38416)	40.75	81.50
5	2.00	EA	0050 - 10 INCH FLANGE RESTRAINER PART #1010 (38419)	64.00	128.00
6	2.00	EA	0060 - 12 INCH FLANGE RESTRAINER PART #1012 (38411)	82.00	164.00
7	2.00	EA	0070 - 14 INCH FLANGE RESTRAINER PART #1014 (38412)	155.00	310.00
8	2.00	EA	0080 - 16 INCH FLANGE RESTRAINER PART #1016 (38413)	242.00	484.00
9	2.00	EA	0090 - 18 INCH FLANGE RESTRAINER PART #1018 (38424)	262.00	524.00
10	2.00	EA	0100 - 20 INCH FLANGE RESTRAINER PART #1020 (38420)	325.00	650.00
11	2.00	EA	0110 - 24 INCH FLANGE RESTRAINER PART #1024 (38414)	437.00	874.00
12	2.00	EA	0120 - 4 INCH BELL RESTRAINT HARNESS C900 SPLIT SERRATED RING	35.50	71.00

**CIMSCO, INC.**  
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## INVITATION TO BID FROM JEFFERSON PARISH - continued

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SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
13	2.00	EA	PART #1504 (51240) 0130 - 6 INCH BELL RESTRAINT HARNESS C900	59.95	119.90
14	2.00	EA	SPLIT SERRATED RING PART #1506 (51241) 0140 - 8 INCH BELL RESTRAINT HARNESS C900 SPLIT SERRATED RING	66.00	132.00
15	2.00	EA	PART #1508 (51242) 0150 - 4 INCH BELL RESTRAINT HARNESS C900 SERRATED & NON-SERRATED RING	35.50	71.00
16	2.00	EA	PART #1604 0160 - 6 INCH BELL RESTRAINT HARNESS C900 SERRATED & NON-SERRATED RING	59.95	119.90
17	2.00	EA	PART #1606 (51241A) 0170 - 8 INCH BELL RESTRAINT HARNESS C900 SERRATED & NON-SERRATED RING	66.00	132.00
18	2.00	EA	PART #1608 (51242A) 0180 - 10 INCH BELL RESTRAINT HARNESS C900 SERRATED & NON-SERRATED RING	105.00	210.00
19	2.00	EA	PART #1610 (51243) 0190 - 4 INCH BELL RESTRAINT HARNESS D.I. PART #1704	35.50	71.00
20	2.00	EA	0200 - 6 INCH BELL RESTRAINT HARNESS D.I. PART #1706	59.95	119.90
21	1.00	EA	0210 - 8 INCH BELL RESTRAINT HARNESS D.I. PART #1708	66.00	132.00
22	2.00	EA	0220 - 10 INCH BELL RESTRAINT HARNESS D.I. PART #1710 (51254)	105.00	210.00
23	2.00	EA	0230 - 12 INCH BELL RESTRAINT HARNESS D.I.	126.00	252.00

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## INVITATION TO BID FROM JEFFERSON PARISH - continued

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ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
24	2.00	EA	PART #1712 0240 - 14 INCH BELL RESTRAINT HARNESS D.I.	178.00	356.00
25	2.00	EA	PART #1714 0250 - 16 INCH BELL RESTRAINT HARNESS D.I.	236.00	472.00
26	2.00	EA	PART #1716 (51253) 0260 - 18 INCH BELL RESTRAINT HARNESS D.I.	241.00	482.00
27	2.00	EA	PART #1718 0270 - 20 INCH BELL RESTRAINT HARNESS D.I.	255.00	510.00
28	2.00	EA	PART #1720 0280 - 24 INCH BELL RESTRAINT HARNESS D.I.	540.00	1080.00
29	2.00	EA	PART #1724 0290 - 30 INCH BELL RESTRAINT HARNESS D.I.	790.00	1580.00
30	2.00	EA	PART #1730 0300 - 36 INCH BELL RESTRAINT HARNESS D.I.	1069.00	2138.00
31	2.00	EA	PART #1736 0310 - 1.5 INCH FLANGE COUPLING ADAPTER EPOXY COATED; PART #2100-0213-260 (17980)	106.00	212.00
32	2.00	EA	0320 - 2 INCH FLANGE COUPLING ADAPTER EPOXY COATED; PART #2100-0303-260 (17981)	112.00	224.00
33	2.00	EA	0330 - 3 INCH FLANGE COUPLING ADAPTER EPOXY COATED; PART #2100-0433-260 (17982)	158.00	316.00

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## INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00129070

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
34	24.00	EA	0340 - 4 INCH FLANGE COUPLING ADAPTER EPOXY COATED; PART #2100-0563-260 (17984)	259.00	6216.00
35	12.00	EA	0350 - 6 INCH FLANGE COUPLING ADAPTER EPOXY COATED; PART #2100-0768-260 (17985)	297.00	3564.00
36	16.00	EA	0360 - 8 INCH FLANGE COUPLING ADAPTER EPOXY COATED; PART #2100-0984-260 (17986)	365.00	5840.00
37	2.00	EA	0370 - 10 INCH FLANGE COUPLING ADAPTER  EPOXY COATED; PART #2100-1226-260 (17988)	605.00	1210.00
38	2.00	EA	0380 - 12 INCH FLANGE COUPLING ADAPTER EPOXY COATED; PART #2100-1366-260 (17989)	715.00	1430.00
39	2.00	EA	0390 - 12 INCH FLANGE COUPLING ADAPTER EPOXY COATED; PART #2100-1441-260 (17990)	715.00	1430.00
40	2.00	EA	0400 - 3 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2103 (17999A)	55.00	110.00
41	2.00	EA	0410 - 4 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2104 (18000A)	57.00	114.00
42	2.00	EA	0420 - 6 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2106 (18001A)	78.00	156.00
43	2.00	EA	0430 - 8 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2108 (18002A)	122.00	244.00
44	2.00	EA	0440 - 10 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2110 (18003A)	190.00	380.00

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## INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00129070

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ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
45	2.00	EA	0450 - 12 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2112 (18004A)	245.00	490.00
46	2.00	EA	0460 - 14 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2114 (18005A)	529.00	1058.00
47	2.00	EA	0470 - 16 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2116 (18006A)	688.00	1376.00
48	2.00	EA	0480 - 18 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2118 (18015A)	705.00	1410.00
49	2.00	EA	0490 - 20 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2120 (18016A)	810.00	1620.00
50	2.00	EA	0500 - 24 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2124 (18017A)	1170.00	2340.00
51	2.00	EA	0510 - 30 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2130 (18018A)	1810.00	3620.00
52	2.00	EA	0520 - 36 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2136 (18019A)	2090.00	4180.00
53	2.00	EA	0530 - 42 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2142 (18014A)	5400.00	10800.00
54	2.00	EA	0540 - 48 INCH FLANGE COUPLING ADAPTER TEFLON COATED; PART #2148 (18013A)	7300.00	14,600.
55	36.00	EA	0550 - 1.5 INCH TRANSITION COUPLING PART #2000-0213-260 (18019)	75.00	2,700.00
56	60.00	EA	0560 - 2 INCH TRANSITION COUPLING PART #2000-0303-260 (18020)	105.00	6300.00
57	48.00	EA	0570 - 4 INCH TRANSITION COUPLING PART #2000-0563-260 (18031)	155.00	7,440.00

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## INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00129070

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
58	250.00	EA	0580 - 6 INCH TRANSITION COUPLING PART #2000-0768-260 (18041)	192.00	48,000.00
59	150.00	EA	0590 - 8 INCH TRANSITION COUPLING PART #2000-0984-260 (18151)	208.00	31,200.00
60	30.00	EA	0600 - 10 INCH TRANSITION COUPLING PART #2000-1226-260 (18079)	290.00	8,700.00
61	24.00	EA	0610 - 12 INCH TRANSITION COUPLING PART #2000-1441-260 (18155)	378.00	9,072.00
62	2.00	EA	0620 - 14 INCH TRANSITION COUPLING PART #2000-1710-260 (18297A)	775.00	1550.00
63	2.00	EA	0630 - 16 INCH TRANSITION COUPLING PART #2000-1920-260 (18299)	789.00	1578.00
64	2.00	EA	0640 - 18 INCH TRANSITION COUPLING PART #2000-2160-260 (18300)	810.00	1620.00
65	2.00	EA	0650 - 20 INCH TRANSITION COUPLING PART #2000-2360-260 (18308)	875.00	1750.00
66	2.00	EA	0660 - 3 INCH JOINT RESTRAINER (D.I.) PART # 1103 DEC (51799)	18.00	36.00
67	2.00	EA	0670 - 4 INCH JOINT RESTRAINER (D.I.) PART # 1104 DEC (51800)	23.00	46.00
68	24.00	EA	0680 - 6 INCH JOINT RESTRAINER (D.I.) PART # 1106 DEC (51801)	41.00	984.00
69	1.00	EA	0690 - 8 INCH JOINT RESTRAINER (D.I.) PART # 1108 DEC (51802)	44.00	44.00
70	2.00	EA	0700 - 10 INCH JOINT RESTRAINER (D.I.) PART # 1110 DEC (51803)	62.00	124.00

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## INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00129070

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ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
71	1.00	EA	0710 - 12 INCH JOINT RESTRAINER (D.I.) PART # 1112 DEC (51804)	88.00	88.00
72	2.00	EA	0720 - 14 INCH JOINT RESTRAINER (D.I.) PART # 1114 DEC (51805)	98.00	196.00
73	2.00	EA	0730 - 16 INCH JOINT RESTRAINER (D.I.) PART # 1116 DEC (51806)	169.00	338.00
74	2.00	EA	0740 - 18 INCH JOINT RESTRAINER (D.I.) PART # 1118 DEC (51807)	140.00	280.00
75	6.00	EA	0750 - 20 INCH JOINT RESTRAINER (D.I.) PART # 1120 DEC (51808)	181.00	1086.00
76	2.00	EA	0760 - 24 INCH JOINT RESTRAINER (D.I.) PART # 1124 DEC (51809)	260.00	520.00
77	1.00	EA	0770 - 30 INCH JOINT RESTRAINER (D.I.) PART # 1130 DEC (51810)	750.00	750.00
78	1.00	EA	0780 - 36 INCH JOINT RESTRAINER (D.I.) PART # 1136 DEC (51811)	790.00	790.00
79	2.00	EA	0790 - 42 INCH JOINT RESTRAINER (D.I.) PART # 1142 DEC (51812)	1205.00	2410.00
80	2.00	EA	0800 - 48 INCH JOINT RESTRAINER (D.I.) PART # 1148 DEC (51813)	1525.00	3050.00
81	2.00	EA	0810 - 3 INCH JOINT RESTRAINER (C900) PART # 2003PEC (51819)	25.00	50.00
82	120.00	EA	0820 - 4 INCH JOINT RESTRAINER (C900) PART # 2004PEC (51820)	29.00	3480.00
83	300.00	EA	0830 - 6 INCH JOINT RESTRAINER (C900) PART # 2006PEC (51821)	40.29	12087.00

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## INVITATION TO BID FROM JEFFERSON PARISH - continued

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SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
84	200.00	EA	0840 - 8 INCH JOINT RESTRAINER (C900) PART # 2008PEC (51822)	54.03	10,806.00
85	2.00	EA	0850 - 10 INCH JOINT RESTRAINER (C900) PART # 2010PEC (51823)	82.00	164.00
86	2.00	EA	0860 - 12 INCH JOINT RESTRAINER (C900)  PART # 2012PEC (51824)	98.00	196.00
87	2.00	EA	0870 - 14 INCH JOINT RESTRAINER (C900) PART # 2014PEC (51825)	115.00	230.00
88	2.00	EA	0880 - 16 INCH JOINT RESTRAINER (C900) PART # 2016PEC (51826)	158.00	316.00
89	2.00	EA	0890 - 18 INCH JOINT RESTRAINER (C900) PART # 2018PEC (51827)	188.00	376.00
90	2.00	EA	0900 - 20 INCH JOINT RESTRAINER (C900) PART # 2020PEC (51828)	209.00	418.00
91	4.00	EA	0910 - 24 INCH JOINT RESTRAINER (C900) PART # 2024PEC (51829)	290.00	1160.00
92	1.00	EA	0920 - 30 INCH JOINT RESTRAINER (C900) PART # 2030PEC (51830)	739.00	739.00
93	1.00	EA	0930 - 36 INCH JOINT RESTRAINER (C900) PART # 2036PEC (51831)	931.00	931.00
94	8.00	EA	0940 - PIPE SIZE 6 INCH TRANSITION GASKET NOM (51132)	3.50	28.00
95	2.00	EA	0950 - PIPE SIZE 8 INCH TRANSITION GASKET NOM (51133)	5.00	10.00

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## INVITATION TO BID FROM JEFFERSON PARISH - continued

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ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
96	2.00	EA	0960 - PIPE SIZE 10 INCH TRANSITION GASKET NOM (51134)	5.50	11.00
97	2.00	EA	0970 - PIPE SIZE 12 INCH TRANSITION GASKET NOM (51135)	7.00	14.00
98	2.00	EA	0980 - PIPE SIZE 3 INCH MECHANICAL JOINT GASKET; NOM: O.D. 4.875 INCH (51220)	3.50	7.00
99	2.00	EA	0990 - PIPE SIZE 4 INCH MECHANICAL JOINT GASKET; NOM: O.D. 4.80 INCH (51221)	3.50	7.00
100	60.00	EA	1000 - PIPE SIZE 6 INCH MECHANICAL JOINT GASKET; NOM: O.D. 6.90 INCH (51222)	3.50	210.00
101	2.00	EA	1010 - PIPE SIZE 8 INCH MECHANICAL JOINT GASKET; NOM: O.D. 9.05 INCH (51223)	4.00	8.00
102	2.00	EA	1020 - PIPE SIZE 10 INCH MECHANICAL JOINT GASKET; NOM: O.D. 11.10 INCH (51224)	5.00	10.00
103	2.00	EA	1030 - PIPE SIZE 12 INCH MECHANICAL JOINT GASKET; NOM: O.D. 13.20 INCH (51225)	5.50	11.00
104	2.00	EA	1040 - PIPE SIZE 14 INCH MECHANICAL JOINT GASKET; NOM: O.D. 15.30 INCH (51226)	9.00	18.00
105	2.00	EA	1050 - PIPE SIZE 16 INCH MECHANICAL JOINT GASKET; NOM: O.D. 17.40 INCH (51227)	9.00	18.00
106	2.00	EA	1060 - PIPE SIZE 18 INCH MECHANICAL JOINT GASKET; NOM: O.D. 19.50 INCH (51228)	10.00	20.00

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## INVITATION TO BID FROM JEFFERSON PARISH - continued

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ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
107	2.00	EA	1070 - PIPE SIZE 20 INCH MECHANICAL JOINT GASKET; NOM: O.D. 21.60 INCH (51229)	11.00	22.00
108	2.00	EA	1080 - PIPE SIZE 24 INCH MECHANICAL JOINT GASKET; NOM: O.D. 25.80 INCH (51230)	13.00	26.00
109	2.00	EA	1090 - PIPE SIZE 30 INCH MECHANICAL JOINT GASKET; NOM: O.D. 32.00 INCH (51231)	32.00	64.00
110	2.00	EA	1100 - PIPE SIZE 36 INCH MECHANICAL JOINT GASKET; NOM: O.D. 38.30 INCH (51232)	34.00	68.00
111	2.00	EA	1110 - PIPE SIZE 42 INCH MECHANICAL JOINT GASKET; NOM: O.D. 44.50 INCH (51233)	71.00	142.00
112	2.00	EA	1120 - PIPE SIZE 48 INCH MECHANICAL JOINT GASKET; NOM: O.D. 50.80 INCH (51234)	76.00	152.00
113	24.00	CS	1130 - PIPE LUBRICANT (50180) (12 QUARTS PER CASE)	84.00	2,016.00
114	2.00	EA	1140 - 4 INCH DUCTILE IRON BODY TRANSITIONAL COUPLINGS 4 - 12 INCHES (NON-RESTRAINED)	180.00	360.00
115	2.00	EA	1150 - 6 INCH DUCTILE IRON BODY TRANSITIONAL COUPLINGS 4 - 12 INCHES (NON-RESTRAINED)	225.00	450.00
116	2.00	EA	1160 - 8 INCH DUCTILE IRON BODY TRANSITIONAL COUPLINGS 4 - 12 INCHES (NON-RESTRAINED)	260.00	520.00
117	2.00	EA	1170 - 10 INCH DUCTILE IRON BODY TRANSITIONAL COUPLINGS 4 - 12 INCHES	345.00	690.00
CIMSCO, INC. 1840 L & A ROAD METAIRIE, LA 70001					



## INVITATION TO BID FROM JEFFERSON PARISH - continued

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ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
118	2.00	EA	(NON-RESTRAINED) 1180 - 12 INCH DUCTILE IRON BODY TRANSITIONAL COUPLINGS 4 - 12 INCHES	390.00	780.00
119	24.00	EA	(NON-RESTRAINED) 1190 - 14 INCH X 12 INCH REDUCING COUPLING HYMAX #861560315035316 (18156)	1902.99	45,671.76
120	2.00	EA	LARGE O.D. RANGE 13.90-16.00 SMALL O.D. RANGE 12.40-13.66 1200 - 2 " EXTENDED RANGE TRANSITION COUPLING	84.00	168.00
121	2.00	EA	1210 - 3" EXTENDED RANGE TRANSITION COUPLING	110.00	220.00
122	2.00	EA	1220 - 4" EXTENDED RANGE TRANSITION COUPLING	141.00	282.00
123	2.00	EA	1230 - 6" EXTENDED RANGE TRANSITION COUPLING	181.00	362.00
124	2.00	EA	1240 - 8" EXTENDED RANGE TRANSITION COUPLING	201.00	402.00
125	2.00	EA	1250 - 10" EXTENDED RANGE TRANSITION COUPLING, UNDERSIZE	251.00	502.00
126	2.00	EA	1260 - 10" EXTENDED RANGE TRANSITION COUPLING, OVERSIZE	251.00	502.00
127	2.00	EA	1270 - 12" EXTENDED RANGE TRANSITION COUPLING, UNDERSIZE	329.00	658.00
128	2.00	EA	1280 - 12" EXTENDED RANGE TRANSITION COUPLING, OVERSIZE	329.00	658.00
CIMSCO, INC. 1840 L & A ROAD METAIRIE, LA 70001					

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**INVITATION TO BID FROM JEFFERSON PARISH - continued**

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ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
<p style="text-align: center;">CIMSCO, INC. 1840 L &amp; A ROAD METAIRIE, LA 70001</p>					

**CORPORATE RESOLUTION**

EXCERPT FROM MINUTES OF MEETING OF THE BOARD OF DIRECTORS OF

Cimsco, Inc.  
INCORPORATED.

AT THE MEETING OF DIRECTORS OF Cimsco, Inc.  
INCORPORATED, DULY NOTICED AND HELD ON February 5, 2019,  
A QUORUM BEING THERE PRESENT, ON MOTION DULY MADE AND SECONDED. IT  
WAS:

RESOLVED THAT Timothy Randall, BE AND IS HEREBY  
APPOINTED, CONSTITUTED AND DESIGNATED AS AGENT AND ATTORNEY-IN-  
FACT OF THE CORPORATION WITH FULL POWER AND AUTHORITY TO ACT ON  
BEHALF OF THIS CORPORATION IN ALL NEGOTIATIONS, BIDDING, CONCERNS  
AND TRANSACTIONS WITH THE PARISH OF JEFFERSON OR ANY OF ITS AGENCIES,  
DEPARTMENTS, EMPLOYEES OR AGENTS, INCLUDING BUT NOT LIMITED TO, THE  
EXECUTION OF ALL BIDS, PAPERS, DOCUMENTS, AFFIDAVITS, BONDS, SURETIES,  
CONTRACTS AND ACTS AND TO RECEIVE ALL PURCHASE ORDERS AND NOTICES  
ISSUED PURSUANT TO THE PROVISIONS OF ANY SUCH BID OR CONTRACT, THIS  
CORPORATION HEREBY RATIFYING, APPROVING, CONFIRMING, AND ACCEPTING  
EACH AND EVERY SUCH ACT PERFORMED BY SAID AGENT AND ATTORNEY-IN-  
FACT.

I HEREBY CERTIFY THE FOREGOING TO BE  
A TRUE AND CORRECT COPY OF AN  
EXCERPT OF THE MINUTES OF THE ABOVE  
DATED MEETING OF THE BOARD OF  
DIRECTORS OF SAID CORPORATION, AND  
THE SAME HAS NOT BEEN REVOKED OR  
RESCINDED.

Aimee Riviere  
SECRETARY-TREASURER

January 16, 2020  
DATE



## **Non-Public Works Bid Affidavit Instructions**

- Affidavit is supplied as a courtesy to Affiants, but it is the responsibility of the affiant to insure the affidavit they submit to Jefferson Parish complies, in both form and content, with federal, state and parish laws.
- Affidavit must be signed by an authorized representative of the entity or the affidavit will not be accepted.
- Affidavit must be notarized or the affidavit will not be accepted.
- Notary must sign name, print name, and include bar/notary number, or the affidavit will not be accepted.
- Affiant **MUST** select either A or B when required or the affidavit will not be accepted.
- Affiants who select choice A must include an attachment or the affidavit will not be accepted.
- If both choice A and B are selected, the affidavit will not be accepted.
- Affidavit marked N/A will not be accepted.
- It is the responsibility of the Affiant to submit a new affidavit if any additional campaign contributions are made after the affidavit is executed but prior to the time the council acts on the matter.

*Instruction sheet may be omitted when submitting the affidavit*

## Non-Public Works Bid

## AFFIDAVIT

STATE OF LouisianaPARISH/COUNTY OF Jefferson

BEFORE ME, the undersigned authority, personally came and appeared: Timothy Randall, (Affiant) who after being by me duly sworn, deposed and said that he/she is the fully authorized Sales Rep of CimSCO Inc. (Entity), the party who submitted a bid in response to Bid Number 50-00129070, to the Parish of Jefferson.

Affiant further said:

Campaign Contribution Disclosures

(Choose A or B, if option A is indicated please include the required attachment):

Choice A \_\_\_\_\_ Attached hereto is a list of all campaign contributions, including the date and amount of each contribution, made to current or former elected officials of the Parish of Jefferson by Entity, Affiant, and/or officers, directors and owners, including employees, owning 25% or more of the Entity during the two-year period immediately preceding the date of this affidavit or the current term of the elected official, whichever is greater. Further, Entity, Affiant, and/or Entity Owners have not made any contributions to or in support of current or former members of the Jefferson Parish Council or the Jefferson Parish President through or in the name of another person or legal entity, either directly or indirectly.

Choice B X there are NO campaign contributions made which would require disclosure under Choice A of this section.

Debt Disclosures

**(Choose A or B, if option A is indicated please include the required attachment):**

**Choice A** \_\_\_\_\_ Attached hereto is a list of all debts owed by the affiant to any elected or appointed official of the Parish of Jefferson, and any and all debts owed by any elected or appointed official of the Parish to the Affiant.

**Choice B**   X   There are **NO** debts which would require disclosure under Choice A of this section.

Affiant further said:

That Affiant has employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for Affiant; and

*[The remainder of this page is intentionally left blank.]*

That no part of the contract price received by Affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for Affiant.

Amolfo Rendall  
Signature of Affiant

Timothy Randall  
Printed Name of Affiant

SWORN AND SUBSCRIBED TO BEFORE ME

ON THE 16<sup>th</sup> DAY OF January, 2020.

Darcy L. Cooper  
Notary Public

**Darcy L. Cooper**  
Notary Public ID #87529  
Printed Name of Notary **Louisiana Statewide Jurisdiction**  
**My Commission is for Life**

\_\_\_\_\_  
Notary/Bar Roll Number

My commission expires \_\_\_\_\_.

[Print](#)

## Notary Search - Detail

**Name:** MS. DARCY L. COOPER  
**Address:** 501 GROVE AVE  
METAIRIE, LA 70003  
**Phone:** (504) 667-3103  
**Phone 2:** (504) 450-8718  
**Notary ID Number:** 87529  
**Parish:** JEFFERSON with STATEWIDE JURISDICTION  
**Agency:** N/A  
**Notary Type:** Non Attorney  
**Status:** Active  
**Commission Date:** 10/14/2009  
**Oath Date:** 10/12/2009  
**Surety Expiration Date:** 09/26/2023  
**Annual Report Current:** Yes

## Notary Events

**Suspension** From: 12/14/2012 To: 12/19/2012  
**Parish Change** Previous Parish: ST. CHARLES Previous Commission Date: 10/07/2008

Deceased, Inactivated, Leave of Absence, Pre-Assessment Registration, Pre-Assessment Taken, Resigned, Retirement, and Revoked events are not available prior to February 11, 2012.

[Back to Search Results](#)[New Search](#)



**STANDARD INSURANCE REQUIREMENTS FOR BIDDING PURPOSES**

All required insurance under this bid shall conform to Jefferson Parish Resolution No. 113646 or No. 113647, as applicable. Contractors may not commence any work under any ensuing contract unless and until all required insurance and associated evidentiary requirements thereto have been met, along with any additional specifications contained in the **Invitation to Bid**. Except as where otherwise precluded by law, the Parish Attorney or his designee, with the concurrence of the Director of Risk Management or his designee, may agree on a case-by-case basis, to deviate from Jefferson Parish's standard insurance requirements, as provided in this Section. Vendors requesting deviation therefrom shall submit such requests in writing, along with compelling substantiation, to the Purchasing Department prior to the bid's due date. Any changes to the insurance requirements will be reflected in the bid specifications and addenda. Prior to contract execution and at all times thereafter during the term of such contract, contractors must provide and continuously maintain all coverages as required by the foregoing Resolutions, and the contract documents. Failure to do so shall be grounds for suspension, discontinuation or termination of the contract.

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For bidding purposes, bidders must submit with bid submission a current (valid) insurance certificate evidencing the required coverages. Failure to comply will cause bid to be rejected. The current insurance certificate will be used for proof of insurance at time of evaluation. Thereafter, and prior to contract execution, the low bidder will be required to provide final insurance certificates to the Parish which shall name **the Jefferson Parish, its Districts Departments and Agencies under the direction of the Parish President and the Parish Council** as additional insureds regarding negligence by the contractor for the Commercial General Liability, Workmen's Compensation Insurance and the Comprehensive Automobile Liability policies. Additionally, said certificates should reflect the name of the Parish Department receiving goods and services and reference the respective Jefferson Parish bid number.

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**JEFFERSON PARISH REQUIRED STANDARD INSURANCE****☐ WORKER'S COMPENSATION INSURANCE**

As required by Louisiana State Statute, exception; Employer's Liability, Section B shall be \$1,000,000 per occurrence when Work is to be over water and involves maritime exposures to cover all employees not covered under the State Worker's Compensation Act, otherwise this limit shall be no less than \$500,000 per occurrence.

**Note: If your company is not required by law to carry workmen's compensation insurance, i.e. not a Louisiana company, sole employee of the company, then bidders must request a workmen's compensation insurance declaration affidavit prior to the bid opening date. This insurance declaration affidavit must be fully completed, signed, properly notarized and submitted with the bid. A scanned copy may be submitted with the bid; however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being**

rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

☐ **COMMERCIAL GENERAL LIABILITY**

Shall provide limits not less than the following: \$1,000,000.00 Combined Single Limit per Occurrence for bodily injury and property damage.

☐ **COMPREHENSIVE AUTOMOBILE LIABILITY**

Bodily injury liability \$1,000,000.00 each person; \$1,000,000.00 each occurrence.  
Property Damage Liability \$1,000,000.00 each occurrence.

**Note:** This category may be omitted if bidders do not/will not utilize company vehicles for the project or do not possess company vehicles. Bidder must request an automobile insurance declaration affidavit prior to the bid opening date. This insurance declaration affidavit must be fully completed, signed, properly notarized and submitted with the bid. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid; however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.

**DEDUCTIBLES** - The Parish Attorney with concurrence of the Director of Risk Management have waived the deductible section of the Terms and Conditions for all Invitations to Bid, until further notice.

**UMBRELLA LIABILITY COVERAGE**

An umbrella policy or excess may be used to meet minimum requirements.

**FOR CONSTRUCTION AND RENOVATION PROJECTS:**

The following are required unless otherwise specified in the bid. Such insurance is due upon contract execution.

1) **OWNER'S PROTECTIVE LIABILITY**

To be for the same limits of liability for bodily injury and property damage liability established for commercial general liability.

2) **BUILDER'S RISK INSURANCE**

The contractor shall maintain Builder's Risk Insurance at his own expense to insure both the owner (Parish of Jefferson) and contractor as their interest may appear.



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

8/30/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER E B Ducasse Insurance Agency, Inc 3200 Ridgeline Dr, Suite 401 Metairie LA 70002	CONTACT NAME: Darly Oser PHONE (A/C, No, Ext): (504) 840-9883 E-MAIL ADDRESS: doser@ebducasse.com INSURER(S) AFFORDING COVERAGE INSURER A: United Fire and Indemnity Co INSURER B: Technology Insurance Co INSURER C: INSURER D: INSURER E: INSURER F:	FAX (A/C, No): (504) 840-9889 NAIC # 19496 42376
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COVERAGES CERTIFICATE NUMBER: CL1983002598 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:	X		60418952	9/1/2019	9/1/2020	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 Liquor Liability Exclusion \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			60418952	9/1/2019	9/1/2020	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/> N/A		TWC3814081	9/1/2019	9/1/2020	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The general liability and auto liability policies contain a blanket additional insured and blanket waiver of subrogation if required by written contract. The general liability is primary and non contributory. Bid #5000129070, 1Yr contract for supplying couplings, restraining devices, related gaskets for Jeff Par Par of Public Works water sewage & all Jeff Par Agencies Municipalities

## CERTIFICATE HOLDER

## CANCELLATION

Jefferson Parish Purchasing Department General Government Building 200 Derbigny Street Suite 4400 Gretna, LA 70053	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE E Ducasse Sr./DARLY <i>Edward B. Ducasse, Sr.</i>
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# Request for Taxpayer Identification Number and Certification

Give Form to the  
requester. Do not  
send to the IRS.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.  
**CIMSCO, INC.**

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification; check only **one** of the following seven boxes:  
☐ Individual/sole proprietor or single-member LLC  
☒ C Corporation  
☐ S Corporation  
☐ Partnership  
☐ Trust/estate  
☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶  
Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner.  
☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):  
Exempt payee code (if any) \_\_\_\_\_  
Exemption from FATCA reporting code (if any) \_\_\_\_\_  
(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.)  
**1840 L&A ROAD**

6 City, state, and ZIP code  
**METAIRIE, LOUISIANA 70001**

7 List account number(s) here (optional)

Requester's name and address (optional)

## Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Social security number									
			-			-			
or									
Employer identification number									
7	2	-	0	5	0	9	5	0	6

## Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here  
Signature of U.S. person ▶ **CHRISTEN C RIVIERE**

Digitally signed by CHRISTEN C RIVIERE  
DN: cn=CHRISTEN C RIVIERE, o=CIMSCO, INC., ou=HR, email=CHRISTEN@CIMSCO.COM, c=US  
Date: 2017.03.20 16:15:09 -0500

Date ▶ **3/20/17**

## General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

**Future developments.** Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at [www.irs.gov/fw9](http://www.irs.gov/fw9).

### Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding?* on page 2.


By signing the filled-out form, you:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
- Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

# **HYMAX<sup>®</sup>**

Repair the past. Connect the future.

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 **KRAUSZ** is the creator of HYMAX

**331SW 57TH AVENUE, OCALA, FLORIDA 34474**

**TEL: 855-457-2879 | 855-4KRAUSZ**

**FAX: 352-304-5787**

**[info@krauszusa.com](mailto:info@krauszusa.com) | [www.krauszusa.com](http://www.krauszusa.com)**

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## PRODUCT SPECIFICATIONS

# HYMAX 2

## HYMAX<sup>®</sup> 2 COUPLING (1.5" - 12")



### FEATURES

- ADVANCED WIDE-RANGE COUPLING WITH A PATENTED FLIP GASKET
- ELIMINATES GASKET REMOVAL MISTAKES AND MAXIMIZES INSTALLER WORK EFFICIENCY
- ONLY 2-4 TOP FACING BOLTS, FOR FASTER AND SAFER INSTALLATION
- READY-TO-USE DESIGN TO ELIMINATE EXTENSIVE UNDER-PIPE DIGGING
- ALLOWS 4° DYNAMIC DEFLECTION ON EACH END, REDUCING FUTURE PIPE DAMAGE
- PATENTED HYDRAULICALLY-ASSISTED GASKET WITH 2-STAGE SEALING
- SUITABLE FOR ALL TYPES OF PIPES - DUCTILE IRON, CAST IRON, STEEL, COPPER, PE, PVC, AC, GRP
- ONE PRODUCT CAN CONNECT PIPES OF TWO DIFFERENT MATERIALS
- BASED ON THE GAME-CHANGING HYMAX THAT HAS BEEN FIELD-PROVEN IN MILLIONS OF INSTALLATIONS IN THE US
- PRODUCT PERFORMANCE, OD RANGE AND PRESSURES ARE IDENTICAL TO THOSE OF THE ORIGINAL HYMAX
- LIFTING T-HANDLE EXISTS IN SIZES 3"-12" ONLY

### SPECIFICATIONS

#### STANDARDS

HYMAX2 MEETS OR EXCEEDS STANDARDS AWWA C-219, NSF 61, NSF 372.

#### SIZE

AVAILABLE IN NOMINAL DIAMETER FROM 1.5" - 12" STANDARD. CALL KRAUSZ FOR DETAILS.

#### MATERIALS

**END RINGS** ASTM A283 / A283M GRADE C STEEL.

**CENTER RING** ASTM A53 GRADE A STEEL.

**GASKETS** EPDM COMPOUNDED FOR WATER AND SEWAGE, MEETS INTERNATIONAL STANDARDS FOR CONTACT WITH DRINKING WATER.

**BRIDGE** AVAILABLE IN AISI 304 OR SS316\* STAINLESS STEEL

**SPHERICAL SPACERS** AVAILABLE IN AISI 304 OR SS316\* STAINLESS STEEL

**COATING** 100% FUSION BONDED EPOXY FOR ENHANCED CORROSION PROTECTION. AVERAGE THICKNESS 14 MIL.

**NUTS & BOLTS** AVAILABLE IN AISI 304 OR SS316\* STAINLESS STEEL. ROLLED THREAD AND ANTI-GALLING COATING.

\* SS316 - Coming Soon

**HYMAX<sup>®</sup>**

Repair the past. Connect the future.

**KRAUSZ** is the creator of HYMAX

# PRODUCT SPECIFICATIONS

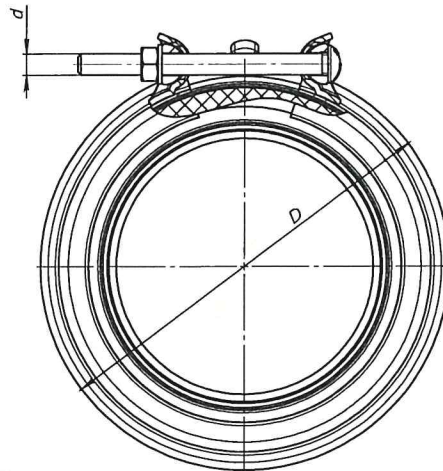
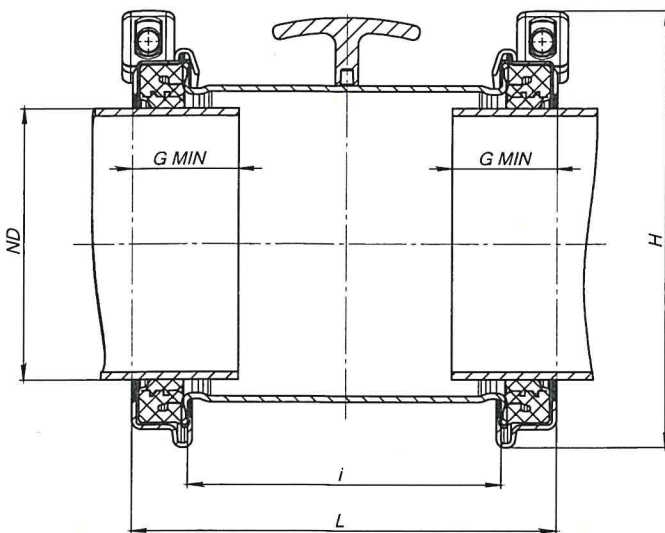
## HYMAX 2

### PRODUCT PERFORMANCE

WORKING TEMPERATURE	-20°F UP TO +125°F		
DYNAMIC DEFLECTION	UP TO 4° PER SIDE		
MIN. PIPE INSERTION	2.25"		
MAXIMUM OFFSET FOR MISALIGNED PIPES	ND 1.5" - ND 3"	ND 4" - ND 12"	
	0.39"	0.51"	
MAXIMUM OUT OF ROUNDNESS	ND 1.5"	ND 2" - ND 3"	4" - 12"
	0.08"	0.20"	0.31"
WORKING PRESSURE	260		
RATED PRESSURE	390		
VACUUM TEST	12 PSI		



### PRODUCT TABLES





# PRODUCT SPECIFICATIONS

## HYMAX 2



### PRODUCT TABLES

#### HYMAX®2 NOMINAL SIZES (1.5" - 12")

When XX = 54 - Fasteners are AISI 304

When XX = 94 - Fasteners are SS316\*

Krausz Part Number	Nominal Diameter (inch)	Overall Range (inch)	Range in closed gasket position (inch)	Range in open gasket position (inch)	Bolt Qty. and Size (mm)	Torque (Ft-Lbs)	Approx. Weight (Lbs)	Length (inch)
860-XX-0041-16	1.5	1.61-2.13	1.61-1.97	1.96-2.13	2 -M12	35	5	6.1
860-XX-0054-16	2	2.10-3.03	2.10-2.60	2.56-3.03	2 -M12	50	7.5	6.8
860-XX-0088-16	3	3.46-4.33	3.46-3.90	3.86-4.33	2 -M12	50	10.8	8.8
860-XX-0108-16	4	4.25-5.63	4.25-5.00	4.92-5.63	2 -M14	75	15	8.8
860-XX-0130-16	5	5.12-6.38	5.12-5.75	5.71-6.38	2 -M14	75	19	10.8
860-XX-0163-16	6	6.42-7.68	6.42-7.05	7.01-7.68	2 -M14	75	23	10.8
860-XX-0190-16	7	7.48-8.74	7.48-8.11	8.07-8.74	2 -M14	75	24	10.8
860-XX-0217-16	8	8.54-9.84	8.54-9.17	9.13-9.84	2 -M14	75	28	10.8
860-XX-0272-16	10	10.70-12.00	10.70-11.37	11.33-12.00	2 -M14	75	32	10.8
860-XX-0278-16	10	10.96-12.26	10.96-11.63	11.59-12.26	2 -M14	75	33	10.8
860-XX-0315-16	12	12.40-13.66	12.40-13.03	12.99-13.66	2 -M14	80	39	10.8
860-XX-0334-16	12	13.15-14.41	13.15-13.78	13.74-14.41	2 -M14	80	39	10.8

For specific sizes of products in stock, call Krausz for details. Copyright © 2017 Krausz Industries Ltd., All rights reserved

\* SS316 Coming Soon





# HYMAX® COUPLING\*

(14"-60")

**HYMAX®**  
Repair the past. Connect the future.

## PRODUCT SPECIFICATIONS

### FEATURES

- GAME-CHANGING WIDE-RANGE COUPLING, PROVEN IN OVER 1M INSTALLATIONS IN THE US
- SUITABLE FOR ALL TYPES OF PIPES - DUCTILE IRON, CAST IRON, STEEL, COPPER, PE, PVC, AC, GRP
- PATENTED HYDRAULICALLY-ASSISTED GASKET WITH 2-STAGE SEALING
- LIGHTWEIGHT CONSTRUCTION ENABLES FAST AND EASY INSTALLATION
- ALLOWS 4° DYNAMIC DEFLECTION ON EACH END, REDUCING FUTURE PIPE DAMAGE
- ONE PRODUCT CAN CONNECT PIPES OF TWO DIFFERENT MATERIALS

### SPECIFICATIONS

#### STANDARDS

HYMAX MEETS OR EXCEEDS STANDARDS AWWA C-219, NSF 61, NSF 372.

#### SIZE

AVAILABLE IN NOMINAL DIAMETER FROM 14" - 60".  
CALL KRAUSZ FOR DETAILS.

#### MATERIALS

##### END RINGS

14" - 16" ASTM A283 / A283M GRADE C STEEL.  
(OR DUCTILE IRON CASTING ASTM A536 GRADE 60-40-18).  
18" - 60" ASTM A283 / A283M GRADE C STEEL.

##### CENTER RING

14" - 60" ASTM A283 / A 283M GRADE C STEEL.

##### GASKETS

EPDM AVAILABLE. COMPOUNDED FOR WATER AND SEWAGE,  
MEETS INTERNATIONAL STANDARDS FOR CONTACT WITH DRINKING WATER.

##### BRIDGE

AISI 304 STAINLESS STEEL.

##### SPHERICAL SPACERS

AISI 304 STAINLESS STEEL.

##### COATING

100% FUSION BONDED EPOXY FOR ENHANCED CORROSION PROTECTION.  
AVERAGE THICKNESS 14 MIL.

##### NUTS AND BOLTS

AISI 304 STAINLESS STEEL. ROLLED THREAD AND ANTI-GALLING COATING.

\* REGISTERED PATENT

## PRODUCT PERFORMANCE (\*)

WORKING TEMPERATURE	EPDM: -20°F UP TO +125°F		
DYNAMIC DEFLECTION	UP TO 4° PER SIDE.		
MIN. PIPE INSERTION	14" - 60" 4"		
MAXIMUM OFFSET FOR MISALIGNED PIPES	14" - 60" 0.51"		
MAXIMUM OUT OF ROUNDNESS	14" - 60" 0.51"		
WORKING PRESSURE	1.5" - 16" 260 PSI	18" - 24" 232 PSI	26" - 60" CALL KRAUSZ FOR DETAILS.
RATED PRESSURE	14" - 16" 390 PSI	18" - 24" 350 PSI	26" - 60" CALL KRAUSZ FOR DETAILS.
VACUUM TEST	12 PSI		

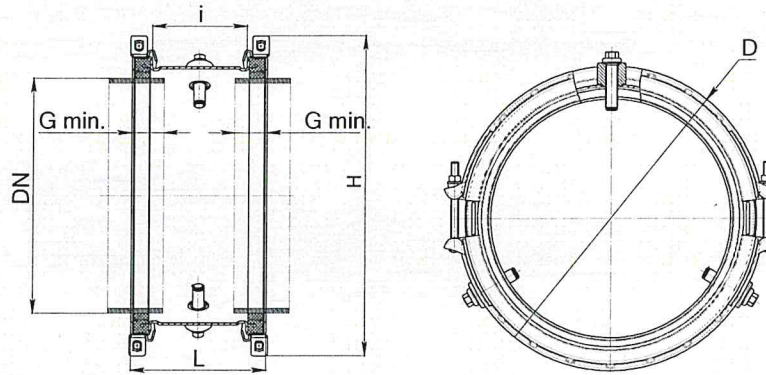
\* SEE SUBMITTAL DRAWINGS FOR DETAILS.



## PRODUCT TABLES

### Part Number 860-XX

56 -> EPDM gasket



### HYMAX NOMINAL SIZES 14"-24"

Krausz Part Number	ND (inch)	Overall Range (inch)	Before Removal of Inner Layer (inch)	After Removal of Inner Layer (inch)	D (inch)	H (inch)	i (inch)	L (inch)	G-Min Pipe Insert (inch)	Bolts Qty. and Size (mm)	Torque (Ft-Lb)	Working Pressure (PSI)	Rated Pressure (PSI)	Approx. Weight (Lbs)
860-56-0378-16P	14	15.00-17.10	15.00-16.10	16.02-17.10	Ø21.0	23.2	8.0	11.6	4.0	4 -M16	150	260	390	92
860-56-0434-16P	16	17.10-19.20	17.10-18.19	18.11-19.20	Ø23.2	25.6	8.0	11.6	4.0	4 -M16	150	260	390	101
860-56-0488-16P	18	19.20-21.30	19.20-20.29	20.21-21.30	Ø25.3	27.8	8.0	11.6	4.0	4 -M16	150	232	350	101
860-56-0497-16P	20	19.60-21.70	19.60-20.69	20.61-21.70	Ø25.6	28.1	8.0	11.6	4.0	4 -M16	150	232	350	105
860-56-0540-16P	20	21.25-23.35	21.25-22.35	22.27-23.35	Ø27.3	29.8	8.0	11.6	4.0	4 -M16	150	232	350	110
860-56-0606-16P	24	23.85-25.95	23.85-24.96	24.88-25.95	Ø29.1	31.7	8.0	11.6	4.0	4 -M16	150	232	350	120
860-56-0624-16P	24	24.60-26.70	24.60-25.67	25.59-26.70	Ø30.6	33.2	8.0	11.6	4.0	4 -M16	150	232	350	120

HYMAX 26"-60" - MTO (MADE TO ORDER) AVAILABLE  
FOR SPECIFIC SIZES OF PRODUCTS IN STOCK, CALL KRAUSZ FOR DETAILS.

# HYMAX<sup>®</sup>

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# PRODUCT SPECIFICATIONS

## HYMAX<sup>®</sup> 2 REDUCER (1.5"-12")



### FEATURES

- ADVANCED WIDE-RANGE COUPLING WITH A PATENTED FLIP GASKET
- ELIMINATES GASKET REMOVAL MISTAKES AND MAXIMIZES INSTALLER WORK EFFICIENCY
- USING THE GAME-CHANGING HYMAX TECHNOLOGY, PROVEN IN OVER 1M INSTALLATIONS IN THE US
- SUITABLE FOR ALL TYPES OF PIPES - DUCTILE IRON, CAST IRON, STEEL, COPPER, PE, PVC, AC, GRP
- PATENTED HYDRAULICALLY-ASSISTED GASKET WITH 2-STAGE SEALING
- LIGHTWEIGHT CONSTRUCTION ENABLES FAST AND EASY INSTALLATION
- ALLOWS 4° DYNAMIC DEFLECTION PER SIDE, REDUCING FUTURE PIPE DAMAGE
- ONE PRODUCT CAN CONNECT PIPES OF TWO DIFFERENT MATERIALS

### SPECIFICATIONS

#### STANDARDS

HYMAX REDUCER MEETS OR EXCEEDS REQUIREMENTS OF STANDARDS: AWWA C-219, NSF-61, NSF 372.

#### SIZE

AVAILABLE IN NOMINAL DIAMETER FROM 1.5"-12" STANDARD.

#### MATERIAL

END RING	ASTM A283 / A283M GRADE C STEEL.
CENTER RING	ASTM A53 GRADE A STEEL.
GASKET	EPDM. COMPOUNDED FOR WATER AND SEWAGE, MEET INTERNATIONAL STANDARDS FOR CONTACT WITH DRINKING WATER.
BRIDGE	AISI 304 STAINLESS STEEL.
SPHERICAL SPACERS	AISI 304 STAINLESS STEEL.
COATING	100% FUSION BONDED EPOXY FOR ENHANCED CORROSION PROTECTION. AVERAGE THICKNESS 14 MIL.
NUTS & BOLTS	AISI 304 STAINLESS STEEL. ROLLED THREAD AND ANTI-GALLING COATING.

# HYMAX<sup>®</sup>

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# PRODUCT SPECIFICATIONS

## HYMAX 2

### PRODUCT PERFORMANCE (\*)

WORKING TEMPERATURE	EPDM: -20°F UP TO +125°F		
DYNAMIC DEFLECTION	UP TO 4° PER SIDE		
MIN. PIPE INSERTION	2.25"		
MAXIMUM OFFSET FOR MISALIGNED PIPES	ND 1.5"-3"	ND 4"-12"	
	0.39"	0.51"	
MAXIMUM OUT OF ROUNDNESS	ND 1.5"	ND 2"-3"	ND 4"-12"
	0.08"	0.20"	0.31"
WORKING PRESSURE	260 PSI		
RATED PRESSURE	390 PSI		
VACUUM TEST	12 PSI		

\* SEE SUBMITTAL DRAWINGS FOR DETAILS.

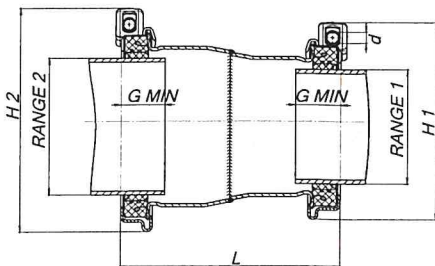




# PRODUCT SPECIFICATIONS

## HYMAX 2

### PRODUCT TABLES



### HYMAX2 REDUCER NOMINAL SIZES 1.5"-12"

Krausz Part Number	ND (inch)	Overall Range 1 (inch)	Closed Gasket Position 1 (inch)	Open Gasket Position 1 (inch)	Overall Range 2 (inch)	Closed Gasket Position 2 (inch)	Open Gasket Position 2 (inch)	Torque Side 1 (Ft-Lbs)	Torque Side 2 (Ft-Lbs)	Bolts Qty. -Size	H1 (inch)	H2 (inch)	L (inch)	Approx. Weight (Lbs)
861540041005416	1.5 x 2	1.61-2.13	1.61-1.97	1.96-2.13	2.10-3.03	2.10-2.60	2.56-3.03	35	50	2 -M12	5.0	5.7	8.6	7
861540054008816	2 x 3	2.10-3.03	2.10-2.60	2.56-3.03	3.46-4.33	3.46-3.90	3.86-4.33	50	50	2 -M12	5.7	7.1	7.8	9
861540054010816	2 x 4	2.10-3.03	2.10-2.60	2.56-3.03	4.25-5.63	4.25-5.00	4.92-5.63	50	75	2 -M14	5.7	9.3	13.7	15
861540088010816	3 x 4	3.46-4.33	3.46-3.90	3.86-4.33	4.25-5.63	4.25-5.00	4.92-5.63	50	75	2 -M14	7.1	9.3	8.8	13
861540108013016	4 x 5	4.25-5.63	4.25-5.00	4.92-5.63	5.12-6.38	5.12-5.75	5.71-6.38	75	75	2 -M14	9.3	10.0	9.8	16
861540108016316	4 x 6	4.25-5.63	4.25-5.00	4.92-5.63	6.42-7.68	6.42-7.05	7.01-7.68	75	75	2 -M14	9.3	11.3	9.8	20
861540130016316	5 x 6	5.12-6.38	5.12-5.75	5.71-6.38	6.42-7.68	6.42-7.05	7.01-7.68	75	75	2 -M14	10.0	11.3	10.8	20
861540163019016	6 x 7	6.42-7.68	6.42-7.05	7.01-7.68	7.48-8.74	7.48-8.11	8.07-8.74	75	75	2 -M14	11.3	12.2	10.8	22
861540163021716	6 x 8	6.42-7.68	6.42-7.05	7.01-7.68	8.54-9.84	8.54-9.17	9.13-9.84	75	75	2 -M14	11.3	13.1	10.8	24
861540190021716	7 x 8	7.48-8.74	7.48-8.11	8.07-8.74	8.54-9.84	8.54-9.17	9.13-9.84	75	75	2 -M14	12.2	13.1	10.8	26
861540217027216	8 x 10	8.54-9.84	8.54-9.17	9.13-9.84	10.70-12.00	10.70-11.37	11.33-12.00	75	75	2 -M14	13.1	15.6	10.8	29
861540217031516	8 x 12	8.54-9.84	8.54-9.17	9.13-9.84	12.40-13.66	12.40-13.03	12.99-13.66	75	80	2 -M14	13.1	17.5	10.8	47
861540272027816	10 x 10	10.70-12.00	10.70-11.37	11.33-12.00	10.96-12.26	10.96-11.63	11.59-12.26	75	75	2 -M14	15.6	15.8	10.8	32
861540272031516	10 x 12	10.70-12.00	10.70-11.37	11.33-12.00	12.40-13.66	12.40-13.03	12.99-13.66	75	80	2 -M14	15.6	17.5	10.8	36
861540278031516	10 x 12	10.96-12.26	10.96-11.63	11.59-12.26	12.40-13.66	12.40-13.03	12.99-13.66	75	80	2 -M14	15.8	17.5	10.8	36
861540278033416	10 x 12	10.96-12.26	10.96-11.63	11.59-12.26	13.15-14.41	13.15-13.78	13.74-14.41	75	80	2 -M14	15.8	18.1	10.8	36
861540315033416	12 x 12	12.40-13.66	12.40-13.03	12.99-13.66	13.15-14.41	13.15-13.78	13.74-14.41	80	80	2 -M14	17.5	18.1	10.8	37



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# PRODUCT SPECIFICATIONS

# HYMAX®



## FLANGE ADAPTOR (1.5"-12")



## AND FLANGE ADAPTOR LONG BODY (1.5"-12")



### FEATURES

- ADVANCED WIDE-RANGE COUPLING WITH A PATENTED FLIP GASKET
- ELIMINATES GASKET REMOVAL MISTAKES AND MAXIMIZES INSTALLER WORK EFFICIENCY
- USING THE GAME-CHANGING HYMAX TECHNOLOGY, PROVEN IN OVER 1M INSTALLATIONS IN THE US
- SUITABLE FOR ALL TYPES OF PIPES - DUCTILE IRON, CAST IRON, STEEL, COPPER, PE, PVC, AC, GRP
- PATENTED HYDRAULICALLY-ASSISTED GASKET WITH 2-STAGE SEALING
- LIGHTWEIGHT CONSTRUCTION ENABLES FAST AND EASY INSTALLATION
- ALLOWS 4° DYNAMIC DEFLECTION, REDUCING FUTURE PIPE DAMAGE

### SPECIFICATIONS

#### STANDARDS

HYMAX FLANGE ADAPTOR AND LONG BODY MEETS OR EXCEEDS REQUIREMENTS OF STANDARDS: AWWA C-219, NSF-61, NSF 372.

#### SIZE

AVAILABLE IN NOMINAL DIAMETER  
FLANGE ADAPTOR 1.5"-12"  
FLANGE ADAPTOR LONG 1.5"-12"

#### MATERIAL

**FLANGE BODY** ASTM A53 GRADE A STEEL.

<b>FLANGE</b>	<b>F/A</b>	Meets ANSI B16.5, Class 150.
	<b>F/A Long</b>	1.5"-2" OVAL FLANGE FOR FLOW METER
		3" Meets ANSI B16.5
		4"-12" Meets AWWA class D

**END RING** ASTM A283 / A283M GRADE C STEEL.

**SPHERICAL SPACERS** AVAILABLE IN AISI 304 OR SS316\*\* STAINLESS STEEL

**BRIDGE** AVAILABLE IN AISI 304 OR SS316\*\* STAINLESS STEEL

**GASKET** EPDM COMPOUNDED FOR WATER AND SEWAGE, MEETS INTERNATIONAL STANDARDS FOR CONTACT WITH DRINKING WATER.

**COATING** 100% FUSION BONDED EPOXY FOR ENHANCED CORROSION PROTECTION. AVERAGE THICKNESS 14 MIL.


**NUTS & BOLTS** AVAILABLE IN AISI 304 OR SS316\*\* STAINLESS STEEL. ROLLED THREAD AND ANTI-GALLING COATING.

\* REGISTERED PATENT

\*\* SS316 Coming Soon

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# PRODUCT SPECIFICATIONS

## HYMAX 2

Flange Adaptor / Flange Adaptor Long  
1.5"-12" 1.5"-12"



### PRODUCT PERFORMANCE

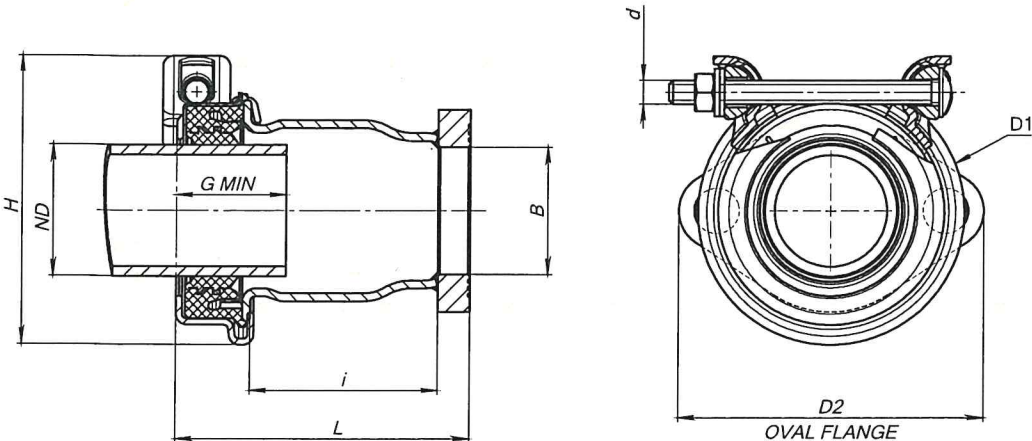
WORKING TEMPERATURE	EPDM: -20°F UP TO +125°F		
DYNAMIC DEFLECTION	UP TO 4°		
MIN. PIPE INSERTION	2.25"		
MAXIMUM OFFSET FOR MISALIGNED PIPES	F/A		
	ND 1.5"-3"	ND 4"-12"	
	0.20"	0.24"	
	F/A LONG		
	ND 2"-3"	ND 4"-12"	
	0.20"	0.24"	
MAXIMUM OUT OF ROUNDNESS	F/A		
	ND 1.5	ND 2"-3"	ND 4"-12"
	0.08"	0.20"	0.31"
	F/A LONG		
	ND 1.5	ND 2"-3"	ND 4"-12"
	0.08"	0.20"	0.31"
WORKING PRESSURE	175 PSI		
RATED PRESSURE	262 PSI		
VACUUM TEST	12 PSI		

# PRODUCT SPECIFICATIONS

## HYMAX 2

### PRODUCT TABLES

#### HYMAX 2 OVAL FLANGE AWWA D 1.5"-2"



When XX = 54 - Fasteners are AISI 304  
When XX = 94 - Fasteners are SS316\*\*

Krausz Part Number	ND (mm)	Flange (inch)	Overall Range (inch)	Range In Closed Gasket Position (Inch)	Range In Open Gasket Position (Inch)	D1 (inch)	H (inch)	i (inch)	L (inch)	D2 (inch)	B (inch)	Bolts Qty. -Size	Torque	Approx. Weight (lbs)
874-XX-01004112	1.5	1.5	1.61-2.13	1.61-1.97	1.96-2.13	Ø3.9	5.0	4.1	5.8	5.4	Ø1.95	1 -M12	35	7
874-XX-02005412	2	2	2.10-3.03	2.10-2.60	2.56-3.03	Ø5.2	5.7	3.7	5.7	6.0	Ø2.44	1 -M12	50	8

\*\* SS316 Coming Soon

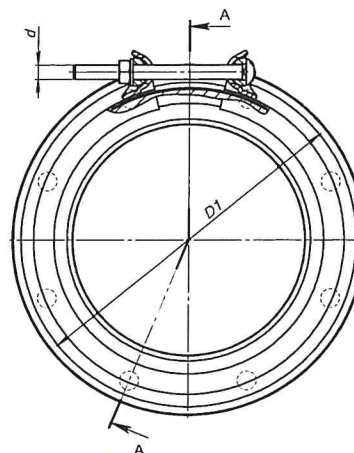
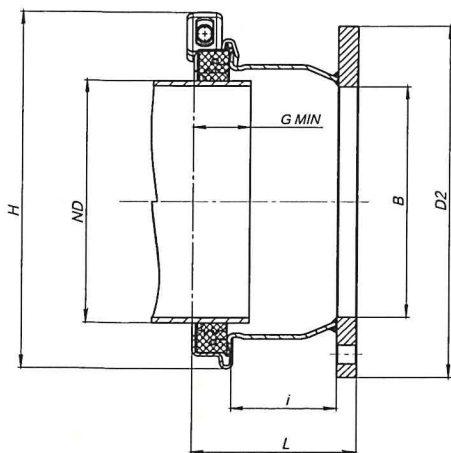


# PRODUCT SPECIFICATIONS

## HYMAX 2

### PRODUCT TABLES

#### HYMAX 2 FLANGE ADAPTOR



When XX = 54 - Fasteners are AISI 304

When XX = 94 - Fasteners are SS316\*\*

Krausz Part Number	ND (mm)	Flange (inch)	Overall Range (inch)	Range In Open Gasket Position (Inch)	Range In Closed Gasket Position (Inch)	D1 (inch)	H (inch)	i (inch)	L (inch)	D2 (inch)	B (inch)	Bolts Qty. -Size	Torque	Approx. Weight (Lbs)
874-XX-03008812	3	3	3.46-4.33	3.46-3.90	3.86-4.33	Ø6.7	7.1	2.9	4.8	Ø7.5	Ø4.02	1 -M12	50	12
874-XX-04010812	4	4	4.25-5.63	4.25-5.00	4.92-5.63	Ø8.7	9.3	2.9	5.1	Ø9.0	Ø5.24	1 -M14	75	14
874-XX-04016312	6	4	6.42-7.68	6.42-7.05	7.01-7.68	Ø10.8	11.3	8.9	11.2	Ø9.0	Ø4.57	1 -M14	75	27
874-XX-05013012	5	5	5.12-6.38	5.12-5.75	5.71-6.38	Ø9.5	10.0	4.0	6.2	Ø10.0	Ø6.14	1 -M14	75	21
874-XX-06010812	4	6	4.25-5.63	4.25-5.00	4.92-5.63	Ø8.7	9.3	2.3	4.6	Ø11.0	Ø7.24	1 -M14	75	20
874-XX-06013012	5	6	5.12-6.38	5.12-5.75	5.71-6.38	Ø9.5	10.0	4.0	6.2	Ø11.0	Ø7.24	1 -M14	75	22
874-XX-06016312	6	6	6.42-7.68	6.42-7.05	7.01-7.68	Ø10.8	11.3	4.0	6.2	Ø11.0	Ø7.24	1 -M14	75	23
874-XX-06021712	8	6	8.54-9.84	8.54-9.17	9.13-9.84	Ø12.9	13.1	4.0	6.2	Ø11.0	Ø7.24	1 -M14	75	36
874-XX-08019012	7	8	7.48-8.74	7.48-8.11	8.07-8.74	Ø11.7	12.2	4.0	6.2	Ø13.5	Ø9.41	1 -M14	75	31
874-XX-08021712	8	8	8.54-9.84	8.54-9.17	9.13-9.84	Ø12.9	13.1	4.0	6.2	Ø13.5	Ø9.41	1 -M14	75	32
874-XX-08027812	10	8	10.96-12.26	10.96-11.63	11.59-12.26	Ø15.3	15.8	9.9	12.2	Ø13.5	Ø9.41	1 -M14	75	46
874-XX-08031512	12	8	12.40-13.66	12.40-13.03	12.99-13.66	Ø16.6	17.5	11.9	14.2	Ø13.5	Ø9.41	1 -M14	75	56
874-XX-08033412	12	8	13.15-14.41	13.15-13.78	13.74-14.41	Ø17.3	18.1	11.9	14.2	Ø13.5	Ø9.41	1 -M14	75	55
874-XX-10027212	10	10	10.70-12.00	10.70-11.37	11.33-12.00	Ø15.0	15.6	4.0	6.2	Ø16.0	Ø11.61	1 -M14	75	38
874-XX-10027812	10	10	10.96-12.26	10.96-11.63	11.59-12.26	Ø15.3	15.8	4.0	6.2	Ø16.0	Ø11.61	1 -M14	75	41
874-XX-12031512	12	12	12.40-13.66	12.40-13.03	12.99-13.66	Ø16.6	17.5	4.0	6.2	Ø19.0	Ø14.02	1 -M14	80	52
874-XX-12033412	12	12	13.15-14.41	13.15-13.78	13.74-14.41	Ø17.3	18.1	4.0	6.2	Ø19.0	Ø14.02	1 -M14	80	57
874-XX-14033412	12	14	13.15-14.41	13.15-13.78	13.74-14.41	Ø17.3	18.1	8.2	10.7	Ø21.0	Ø15.43	1 -M14	80	71

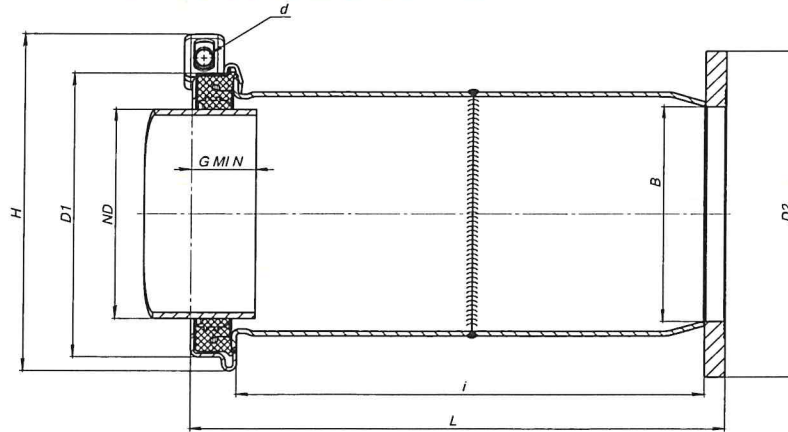
\*\* SS316 Coming Soon

# PRODUCT SPECIFICATIONS



## PRODUCT TABLES

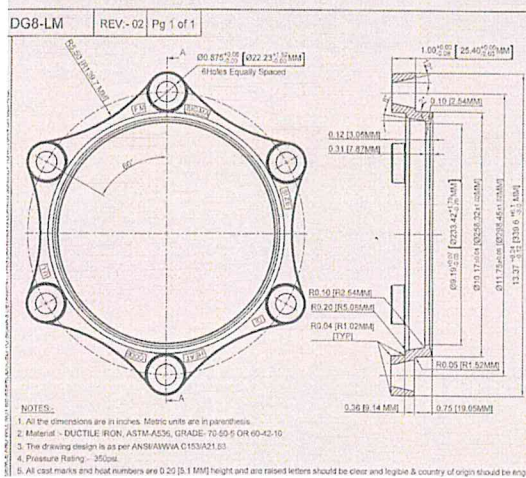
### HYMAX 2 FLANGE ADAPTOR LONG BODY SIZES 1.5"-12"



Krausz Part Number	Nominal Diameter (inch)	Flange (inch)	Overall Range (inch)	Range In Closed Gasket Position (Inch)	Range In Open Gasket Position (Inch)	Bolts Num. and Size (mm)	Approx. Weight (Lbs)	Torque	Length (inch)
974-54-01004112	1.5	1.5	1.61-2.13	1.61-1.97	1.96-2.13	1 -M12	9	35	9.2
974-54-02005412	2	2	2.10-3.03	2.10-2.60	2.56-3.03	1 -M12	10	50	9.5
974-54-03008812	3	3	3.46-4.33	3.46-3.90	3.86-4.33	1 -M12	16	50	13.4
974-54-04010812	4	4	4.25-5.63	4.25-5.00	4.92-5.63	1 -M14	23	75	13.6
974-54-05013012	5	5	5.12-6.38	5.12-5.75	5.71-6.38	1 -M14	30	75	18
974-54-06013012	5	6	5.12-6.38	5.12-5.75	5.71-6.38	1 -M14	33	75	18
974-54-06016312	6	6	6.42-7.68	6.42-7.05	7.01-7.68	1 -M14	36	75	18
974-54-08019012	7	8	7.48-8.74	7.48-8.11	8.07-8.74	1 -M14	42	75	18
974-54-08021712	8	8	8.54-9.84	8.54-9.17	9.13-9.84	1 -M14	49	75	18
974-54-10027212	10	10	10.70-12.00	10.70-11.37	11.33-12.00	1 -M14	56	75	18
974-54-12031512	10	10	10.96-12.26	10.96-11.63	11.59-12.26	1 -M14	60	75	18
974-54-12031512	12	12	12.40-13.66	12.40-13.03	12.99-13.66	1 -M14	61	80	18
974-54-12033412	12	12	13.15-14.41	13.15-13.78	13.74-14.41	1 -M14	63	80	18



## Accessory Products

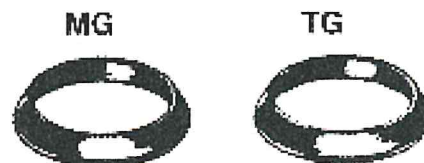
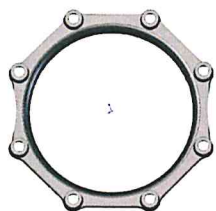


- Ductile Iron Set Screw Retainer Glands
- Mechanical Joint And Transition Gaskets
- Mechanical Joint Glands
- Mechanical Joint T-Bolts And Nuts
- Prepackaged Mechanical Joint Accessories
- SIGMASEAL™ Improved MJ Gasket

# Accessory Products

## Mechanical Joint Compact Fittings Accessories

Ductile Iron Class 350 as per ANSI/AWWA C153/A21.53



### MJ Glands

Size	Item No.	Wt.
2	DG2	2
3	DG3	4
4	DG4	5
6	DG6	6
8	DG8	7
10	DG10	10
12	DG12	15
14	DG14	23
16	DG16	28
18	DG18	30
20	DG20	43
24	DG24	50
30	DG30	85
36	DG36	115
42	DG42	180
48	DG48	275

### MJ Gland Packs

Size	Item No.	Wt.
2	DGP2	6
3	DGP3	7
4	DGP4	8
6	DGP6	12
8	DGP8	15
10	DGP10	20
12	DGP12	25
14	DGP14	37
16	DGP16	43
18	DGP18	47
20	DGP20	61
24	DGP24	72
30	DGP30	117
36	DGP36	157
42	DGP42	255
48	DGP48	361

Includes: Gland, MJ Gasket, and Standard Tee Bolts & Nuts

### MJ Gaskets & MJ Transition Gasket

Size	Item No.	Wt.	Item No.	Wt.
2	MG2		TG3	0.50
3	MG3	0.25	TG4	0.60
4	MG4	0.30	TG6	0.75
6	MG6	0.50	TG8	1.10
8	MG8	0.75	TG10	1.30
10	MG10	0.80	TG12	1.65
12	MG12	1.00		
14	MG14	1.30		
16	MG16	1.45		
18	MG18	1.60		
20	MG20	1.90		
24	MG24	2.10		
30	MG30	2.30		
36	MG36	2.75		
42	MG42	3.20		
48	MG48	3.65		

TG14-TG16 are not standard and AWWA  
TG14-TG16 are not pressure rated

### MJ Retainer Glands

Pipe Size	Item No.	Wt.	IRON PIPE O.D	Rating (psi)	Qty	Size	Torque (ft-lbs)
3	RMG3	5	3.96	350	4	5/8 X 2	85
4	RMG4	7	4.80	350	4	5/8 X 2	85
6	RMG6	12	6.90	350	6	5/8 X 2	85
8	RMG8	16	9.05	250	9	5/8 X 2	85
10	RMG10	22	11.10	250	16	5/8 X 2	85
12	RMG12	28	13.20	250	16	5/8 X 2	85
14	RMG14	45	15.30	250	20	5/8 X 2	85
16	RMG16	52	17.40	250	24	5/8 X 2	85
18	RMG18	62	19.50	200	24	5/8 X 2	85
20	RMG20	75	21.60	200	28	3/4 X	110
24	RMG24	97	25.80	200	32	3 3/4 X	110
30	RMG30	196	32.00	100	40	3 3/4 X 3	110
36	RMG36	246	38.30	100	48	3/4 X 2-1/2	110
42	RMG42	302	44.50	100	56	3/4 X 2-1/2	110
48	RMG48	380	50.80	100	64	3/4 X 2-1/2	110

RMGP (Retainer gland pack)

Available in packs: Packs include DG, T-Bolts and MG



Material: DI 65-45-12

Material of Set Screws: Low alloy carbon steel



## Packaged Accessories

Quality – Service – Commitment – Delivered.

### Retainer Gland Pack - Includes Gland, MJ Gasket and Std. T-Head Bolts

Size	Item No.	Wt.
3	RGP3	9
4	RGP4	10
6	RGP6	15
8	RGP8	19
10	RGP10	25
12	RGP12	32

### Gland Pack - Includes Gland, MJ Transition Gasket and Std. T-Head Bolts

Size (in.)	Item No.	Wt. (lb.)
3	DXP3	7
4	DXP4	8
6	DXP6	12
8	DXP8	15
10	DXP10	20
12	DXP12	25

### MJ Bolt & Gasket (Less Gland)

Size (in.)	Item No.	Wt. (lb.)
2	MGP2	2
3	MGP3	3
4	MGP4	4
6	MGP6	6
8	MGP8	7
10	MGP10	8
12	MGP12	9
14	MGP14	11
16	MGP16	12
18	MGP18	12.32
20	MGP20	14.25
24	MGP24	17.30
30	MGP30	40
36	MGP36	40
42	MGP42	76
48	MGP48	101

### MJ Transition Bolt & Gasket Pack (Less Gland)

Size (in.)	Item No.	Wt. (lb.)
2	TGP2	1
3	TGP3	3
4	TGP4	4
6	TGP6	6
8	TGP8	7
10	TG10	8
12	TGP48	9

### SIGMA SEAL MJ Gasket

Size (in.)	Item No.	Wt. (lb.)
3	MGS3	1.0
4	MGS4	.42
6	MGS6	.55
8	MGS8	.76
10	MGS10	.93
12	MGS12	1.02
14	MGS14	1.00
16	MGS16	1.00
18	MGS18	2.00
20	MGS20	2.00
24	MGS24	2.00
30	MGS30	4.2
36	MGS36	4.00
42	MGS42	5.00
48	MGS48	6.00

### MJxSDR35 Transition Gasket

Size	Item No.	Wt.
4	TSG04	0.66
6	TSG06	0.90
8	TSG08	1.22
10	TSG10	1.4
12	TSG12	1.8

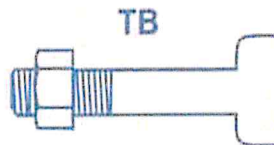
## Low Alloy, Corrosion Resistant Steel T-Head Bolts

### Standard Bolts

Size (in.)	Item No.	Wt. (lb.)
5/8x3	TB30	.50
3/4x3 1/2	TB35	.75
3/4x4	TB40	.85
3/4x4 1/2	TB45	1.00
3/4x5	TB50	1.25
1x5	TB60	1.25
1x6	TB61	2.25
1 1/4x6	TB65	2.50
1 1/4x6 1/2	TB65	4.00
3/4x7	TB70	.63
1x8	TB80	3.00
3/4x9	TB90	.72

### Anti-Rotation Bolts

Size (in.)	Item No.	Wt. (lb.)
3/4X3 1/2	ATB35	.75
3/4X4	ATB40	1.00
3/4X4 1/2	ATB45	1.25
3/4X5	ATB50	1.50



Material: Stainless Steel 304 Corten ASTM A242  
Coating: Blue or Blue Flusopolymer (available upon request)

Note: Additional sizes & dimensions available

## LOCATIONS

### Northeast Region

Cream Ridge, New Jersey (HQ)

Phone (800) 999-2550

Fax (609) 758-1158

crm-sales@sigmaco.com

Victoriaville, Quebec, Canada

Phone (888) 744-6262

Fax (819) 758-1153

jbourcher@repco.ca

Innisfil, Ontario, Canada

Phone (877) 436-3800

Fax (705) 436-6338

tanya@concordsupply.ca

### Midwest Region

Sauk Village, Illinois

Phone (888) 999-0420

Fax (708) 758-6790

chi-sales@sigmaco.com

### Southeast Region

Alexander City, Alabama

Phone (800) 824-4513

Fax (256) 234-4956

rps-sales@sigmaco.com

### Southwest Region

Houston, Texas

Phone (800) 999-0109

Fax (281) 987-0200

htn-sales@sigmaco.com

### Western Region

Ontario, California

Phone (800) 688-6230

Fax (909) 391-2033

ont-sales@sigmaco.com

Auburn, Washington

Phone (800) 688- 6230

## AWWA Ductile Iron Fittings



- 2-64" C153 Ductile Iron Mechanical Joint Class 350
- 2-48" C110 Full Body Mechanical Joint
- 2-64" C110 Cast Iron/Ductile Iron Flanged Fittings
- 3-24" C153 TRIM TYTON® Compact Push On Fittings
- 4-24" C110 Full Body Push On Fittings
- C116 Fusion Bonded Epoxy lining available
- PROTECTO 401® ceramic epoxy lining available

## Mechanical Joint Accessories



- Prepackaged and loose mechanical joint accessories
- SIGMASEAL™ improved mechanical joint gasket
- Snap-on multi-purpose gasket for ductile iron or PVC pressure pipes
- Ductile iron set screw retainer glands
- OMNI-SLEEVE™ improved wall penetration sleeve
- Specialty bolts and nuts for mechanical joint assemblies

## ONE-LOK™ Wedge Action Restraints



- 3-48" ONE-LOK SLDE restraint for ductile iron pipe (import or domestic)
- 3-36" ONE-LOK SLCE restraint for PVC pipe (import or domestic)
- 3-36" ONE-LOK SLDEH bell joint harness for ductile iron pipe
- 4-12" / 20" ONE-LOK SLDM restraint for oversized cast iron pipe
- 4-36" ONE-LOK SSLD split restraint for existing ductile iron pipe
- 4-36" ONE-LOK SSLDH split restraint harness for existing ductile iron pipe
- 3-12" ONE-LOK SLCEH bell joint harness for PVC pipe

## PV-LOK™ Serration Lock Restraints



- 4-48" PV-LOK PWM Restraint for MJ Fitting to PVC pipe
- 4-48" PV-LOK PWP Restraint for PVC bell joint restraint
- 4-48" PV-LOK PWPF Restraint for PVC fitting to PVC pipe
- 4-12" PV-LOK PWH PVC bell joint harness
- 2-12" PV-LOK PVM Restraint for MJ Fitting to IPS PVC pipe
- 2-12" PV-LOK PVP Restraint for IPS PVC pipe bell joint
- 4-8" PV-LOK PVPF Restraints for IPS PVC pressure fitting

## Flange Adapters



- 3-36" SIGMAFLANGE SFA flange adapter sleeve for PVC and DIP
- 2-48" ZIP FLANGE set screw style flange adapter

## Municipal Construction Castings



- Manhole Rings and Covers
- Curb and Meter Boxes
- Frames and Grates
- Storm Inlets
- Valve Boxes, Risers, and Extensions

## Products for the Ductile Iron Fabricator



- 3-64" High Hub Threaded Flanges
- 3-48" Tapped High Hub Threaded Flanges
- 3-36" Extra Heavy 250lb Drilled Threaded Flanges
- 3-48" Threaded MJ Bell Adapters
- 3-48" MJ x PE Bell adapter (2ft)
- 3-48" Anchor Flanges
- 3-16" Filler Flanges

## Extended Range Products



- FLANGE-PAK™ prepackaged flange accessory sets
- Polyethylene encasement for ductile iron pipe
- Copper tubing products
- Tracer wire & detectable/non-detectable marking tape
- Pipe joint lubricant & hydraulic cement
- Socket clamps and tie rod accessories
- BOXLOK Valve Box Alignment Device
- Cast Iron Companion Flanges

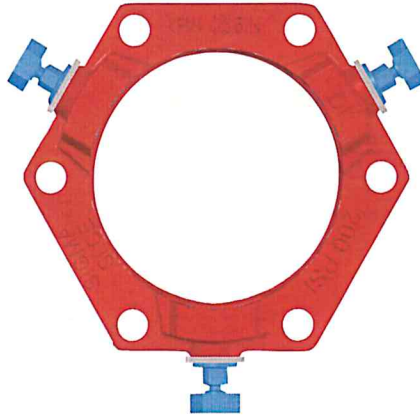
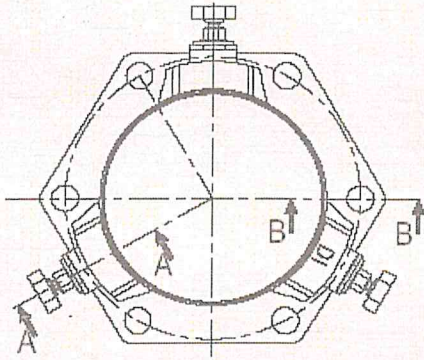
[www.sigmaco.com](http://www.sigmaco.com)

Terms and Conditions of Sales available at our website.

TRIM-TYTON and TYTON are registered trademarks of the United States Pipe and Foundry Company • PROTECTO 401 is a registered trademark of Induron, Inc.



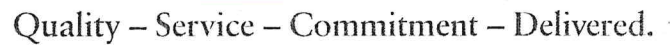
## ONE-LOK™ MODEL SLCE WEDGE RESTRAINT FOR PVC PIPE



### PRODUCT SPECIFICATIONS

- MATERIAL:**
- Gland body, wedge inserts and break-off top actuating bolts are manufactured of high strength ductile iron in accordance with ASTM A536, Grade 65-45-12.
- SIZE RANGE:**
- 3" through 36"
- DIMENSION:**
- Conform to ANSI/AWWA C111/A21.11 & ANSI/AWWA C153/A21.53 standards
- PRESSURE RATING:**
- Equal to the water working pressure rating of the pipe upon which it is installed with a minimum 2:1 factor of safety.
- COATING:**
- Red Alkyd paint
  - Electro-deposition "CORRSAFETM" available upon request. For further information, please refer to our CORRSAFE Product Information sheet at <http://www.sigmaco.com/pipe-restraint-product-coatings-linings/>
- APPROVALS:**
- Underwriters Laboratories' listed in sizes 4"-12" to ASTM F1674 (latest revision) and Factory Mutual approved in sizes 4"-12".
- DEFLECTION:**
- 5° on 3"-12", 2° on 14"-16", 1.5° on 18"-30" and 1° on 36"
- TRACEABILITY:**
- Gland body, wedge inserts and break-off top actuating bolts are individually cast with exact heat code information.
- INSTALLATION:**
- In accordance with manufacturer's recommendation and applicable AWWA standards.





Technical drawing of a circular part with a wavy outer edge and a smooth inner circle. The drawing includes dimensions for the outer edge, such as 66.750 [67.1450] for the top width, 66.34 [66.904] for the bottom width, and 62.15 [63.461] for the left width. It also specifies "36-Holes Equally Spaced" and "36 Holes Equally Spaced". A coordinate system with X and Y axes is shown.

## 54" & 60"



- Gland body, wedge inserts and break-off top actuating bolts are manufactured of high strength ductile iron in accordance with ASTM A536, Grade 65-45-12.

- 54" & 60" AWWA C905 PVC pressure pipes

- Conform to ANSI/AWWA C111/A21.11 & ANSI/AWWA C153/A21.53 standards

- Equal to the water working pressure rating of the pipe upon which it is installed with a minimum 2:1 factor of safety.

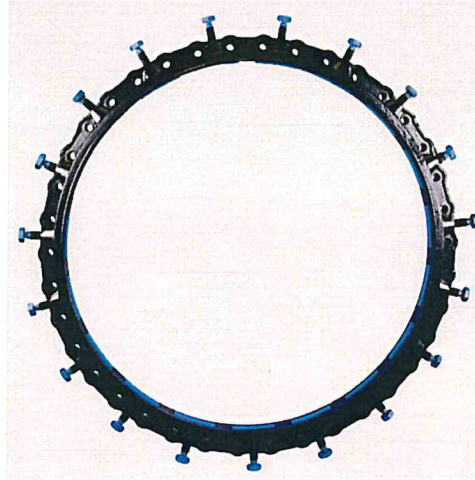
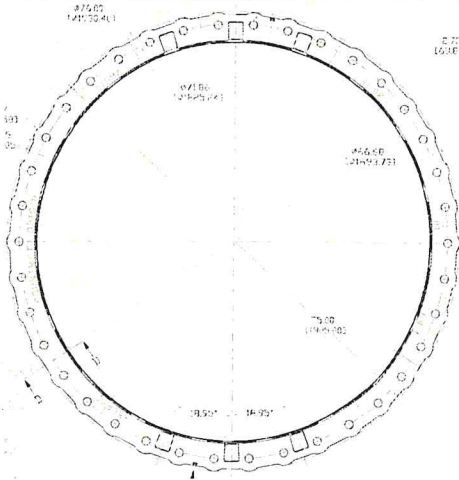
- Red Alkyd paint
- Electro-deposition "CORRSafe™" available upon request. For further information, please refer to our CORRSafe Product Information sheet at <http://www.sigmaco.com/pipe-restraint-product-coatings-linings/>

- $1^\circ$  on  $54''$  and  $60''$

- Gland body, wedge inserts and break-off top actuating bolts are individually cast with exact heat code information.

- In accordance with manufacturer's recommendation and applicable AWWA standards.

## ONE-LOK™ MODEL SLIDE WEDGE RESTRAINT FOR DUCTILE IRON PIPE



### PRODUCT SPECIFICATIONS

- MATERIAL:**
- Gland body, wedge inserts and break-off top actuating bolts are manufactured of high strength ductile iron in accordance with ASTM A536, Grade 65-45-12. Wedge inserts are heat-treated to a hardness of 370 BHN minimum.
- SIZE RANGE:**
- 3" through 64"
- DIMENSION:**
- Conform to ANSI/AWWA C111/A21.11 & ANSI/AWWA C153/A21.53 standards
- PRESSURE RATING:**
- Sizes 3"-16" carry a 350 psi WWP and sizes 18"- 64" carry a 250 psi WWP while providing a minimum 2:1 factor of safety.
- COATING:**
- Asphaltic black enamel
  - Electro-deposition "CORRSAFE™" available upon request. For further information, please refer to our CORRSAFE Product Information sheet at <http://www.sigmaco.com/pipe-restraint-product-coatings-linings/>
- APPROVALS:**
- Underwriters Laboratories' listed in sizes 3"-36" and Factory Mutual approved in sizes 3"-12".
- DEFLECTION:**
- 5° on 3"-12", 2° on 14"-16", 1.5° on 18"-30" and 1° on 36"- 64"
- TRACEABILITY:**
- Gland body, wedge inserts and break-off top actuating bolts are individually cast with exact heat code information.
- INSTALLATION:**
- In accordance with manufacturer's recommendation and applicable AWWA standards.



**TECHNICAL SPECIFICATION:** Oatey All Purpose Pipe Lubricant is used for assembling pipelines including cast iron, concrete, plastic and clay pipe. Pipe Lubricant is a mixed fatty acid soap dispersed in glycols and water solvents with a clay pigment filler. Pipe Lubricant can be applied from -10° F to 150° F. It will not deteriorate natural or synthetic rubber, plastic gaskets or cast iron pipe. Pipe Lubricant contains no petroleum oils or phosphates and will not support bacterial growth.



#### **COMMON APPLICATIONS**

Oatey All Purpose Pipe Lubricant is used for assembling gasketed pipelines including cast iron, concrete, plastic and clay pipe.

Consult Oatey Technical Department for applications not specifically referenced above.

#### **INGREDIENTS**

Blend of soap and non-toxic ingredients.

#### **APPROVALS AND LISTINGS**



NSF Listed to  
Standard 61

#### **PHYSICAL/CHEMICAL PROPERTIES**

Bulk Density	~ 9.3 lb/gal
Appearance	Soft Amber Paste
Shelf Life	1 year from manufacture date
Free Fatty Acid	1-3%
Total Alkalinity	100 mg KOH/g equivalent
pH	~ 9.5

#### **DIRECTIONS FOR USE**

All Purpose Pipe Lubricant is ready to use from the container. Do not dilute, thin or otherwise alter the product's consistency. Follow guidelines for lubrication and assembly provided by pipe, fitting and gasket manufacturers. Clean both the inside of the bell and the outside of the spigot. Completely lubricate the inside surface of the bell and the gasket. The lubricant can be brushed on, swabbed on, or wiped on by hand with a cloth glove. Be sure to get full lubricant coverage. Don't leave any dry areas. Do not apply lubricant into the ring groove.

#### **PRECAUTIONS**

Read all cautions and directions carefully before using this product. Avoid contact with eyes. Prolonged contact with skin could cause irritation. Wash with soap and water. If irritation persists, contact physician. Keep container closed when not in use. **DO NOT REUSE EMPTY CONTAINER. KEEP OUT OF REACH OF CHILDREN.**

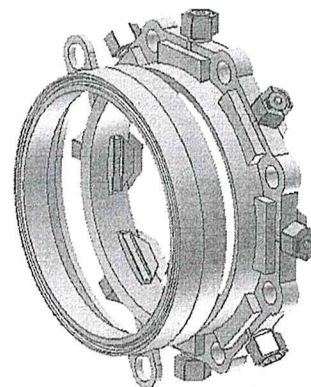
Refer to material safety data sheet for more information.  
For emergency first aid help, call 1-303-623-5716 COLLECT.

PRODUCT NUMBER	DESCRIPTION	PACK	CARTON WEIGHT
30599	16 oz. Pipe Lubricant	24	30 lbs.
30600	32 oz. Pipe Lubricant	12	25 lbs.
30601	Gallon Pipe Lubricant	4	34 lbs.
30602	3 ½ Gallon Pipe Lubricant	4	
30605	5 Gallon Pipe Lubricant	1	42 lbs.



### Series 2100, MEGAFLANGE® Restrained Flange Adapter

Pipe Size	Series #	Weight*	Price
3.0	210300	12.2	\$132.64
4.0	210400	21.3	\$169.80
6.0	210600	31.7	\$249.31
8.0	210800	38.8	\$394.02
10.0	211000	64.5	\$558.85
12.0	211200	74.3	\$716.47
14.0	211400	109.2	\$1,218.09
16.0	211600	110.8	\$1,791.30
18.0	211800	131.9	\$2,006.30
20.0	212000	155.6	\$2,214.11
24.0	212400	206.8	\$2,699.94
30.0	213000	335.3	\$3,512.20
36.0	213600	502.7	\$5,374.16
42.0	214200	759.0	\$14,981.17
48.0	214800	924.6	\$19,184.69



If Price is not listed then Price is P.O.A.

#### Features and Notations:

- Wedge Action flanging system for use on ductile iron pipe, steel, IPS PVC or C-900/C905 PVC pipe.
- Listed by Underwriter Laboratories - 3" - 12"
- All bolts, nuts and gaskets provided.
- For use on 3" thru 12" steel or IPS PVC pipe, use 2100T. (which include all bolts, nuts and transition gasket)
- MEGA-BOND® Restraint Coating System.

#### Notes:

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Effective Date: 08-11-2014

\* Weight is U.S.A. lbs.  
Contact EBAA Customer Service for special requests at 800.433.1716  
For complete technical and submittal information see the full product catalog

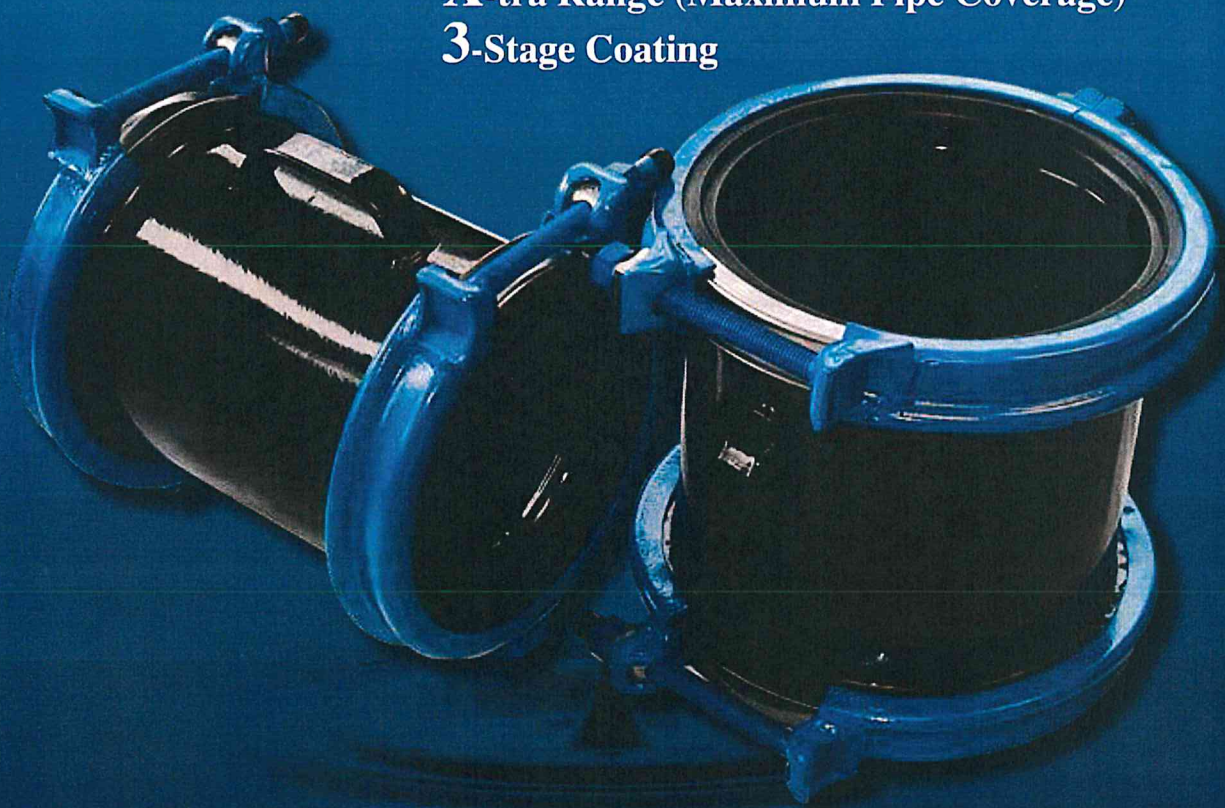




# *TX3<sup>®</sup>*

## *Extended Range Transition Coupling*

**T**-hree Classes of Pipe, Minimum  
**X**-tra Range (Maximum Pipe Coverage)  
**3**-Stage Coating



**Sizes 2"-12" Diameters**  
**Wide Range Designed to Fit All Pipe Transitions**  
**Fewer Sizes, Less Inventory = More with Less**



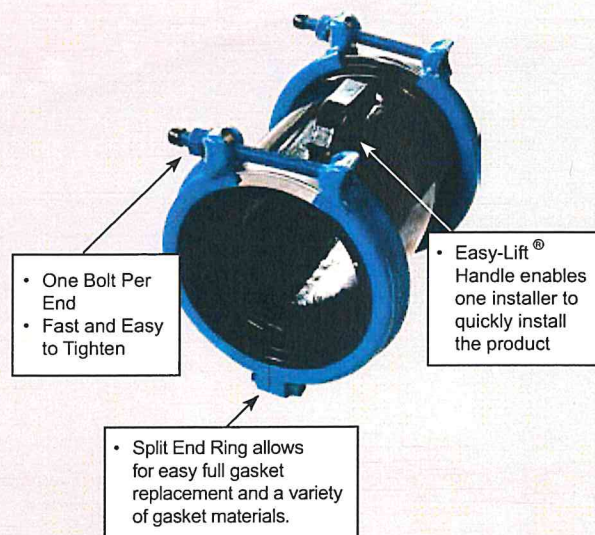
**Total Piping Solutions, Inc.**



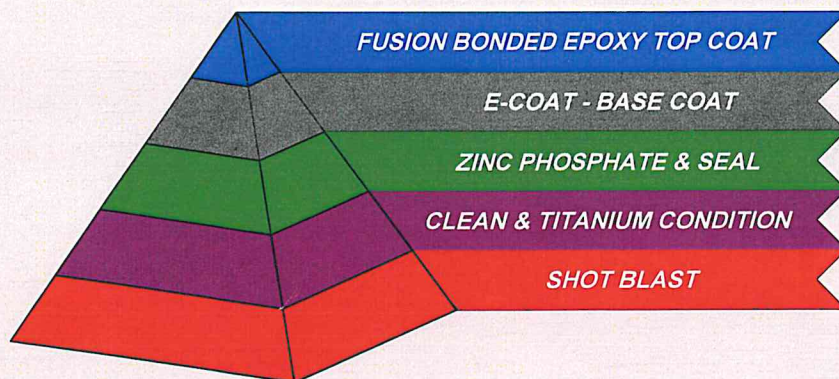
# TX3<sup>®</sup> *Extended Range Transition Coupling*

## Save on Installation Time, Labor, Inventory

- For Water, Waste Water, and Liquid Hydrocarbon Applications, above and below ground
- Fewer Sizes means less inventory
- Range Adjustable Gasket Joins Pipe with Diameter Differences of up to 1.30 inches
- Superior Pressure Assisted Sealing Capabilities with easy to remove and replaceable inner gasket layer
- Easy Fitting - two bolts total, one per end with standard 1-1/16" waterworks nut size on most sizes
- Integrated Easy Lift Handle allows the light weight body to be handled by one person
- High Deflection- up to 4 degrees per end
- Stab type installation (no disassembly required), Tighten from the Top and Eliminate Under-dig.
- Standard long body to allow for more pipe end gap
- Meets and Exceeds "AWWA C219 Standards"
- Up To 275 PSIG Working Pressure
- Always refer to the product label for actual pressure rating of the coupling
- ANSI/NSF 61 approved
- Tri-Clad Multi Layer Epoxy Coating for Superior Corrosion Resistance Meets AWWA C213



## **Tri-Clad<sup>®</sup> Coating by TPS = Extended Product Life**



- Exceeds ANSI/NSF 61
- 12-15 mil Fusion Bonded Epoxy Top Coat
- Meets ANSI/AWWA C213
- Meets NACE Specifications (National Association of Corrosion Engineers)



# TX3<sup>®</sup> Extended Range Transition Coupling

## Specifications

**Body and End Ring Materials:** Middle Ring - Carbon Steel (ASTM A53 Grade A or A795 Carbon Steel) and End Ring - ASTM A283 Grade D

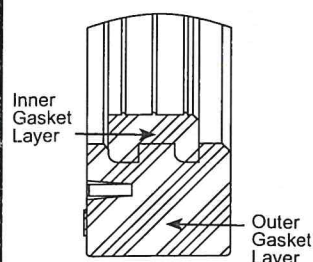
**Gasket Bridge-Plate Material:** ASTM A240 Type 304 Stainless Steel

**Coating:** Proprietary four stage NSF-61 Registered Fusion-bonded Epoxy Coating.

**Bolts, Nuts, Spacers, Washers:** (ASTM A193 Grade B, 18-8 Type 304) Stainless Steel with Fluoro-Carbon Coating on nuts, bolts, and washers provides positive anti-seize compound on all threads to prevent galling.

Nuts work with conventional water works standard 1-1/16" wrenches. (2, 3, 4" sizes use a 3/4" wrench).

**Gasketing System:** The Patent Pending dual layer adjustable and fully replaceable inner gasket system is compounded of high grade NBR (Nitrile) and is rated for potable water, wastewater, sewer line content and liquid hydrocarbons. The TX3 Coupling meets NSF-61 and NSF-372 standards for contact with drinking water.



**The 2-layered gasketing system provides a built-in wide range.**

1. Low range is provided by the inner layer
2. High range is provided by removal of inner layer
3. Each layer provides up to 4 degrees of deflection per end and working pressures to 275 psi



Use your thumb or other device to remove inner gasket layer.

KEY FEATURES	BENEFIT
Removable/Replaceable Inner Gasket Layer	Allows coupling to be sized to the pipe in the field
Light Weight Construction	Fast and Easy to handle and install
Integrated Easy-Lift <sup>®</sup> Handle	Allows installer to Easily Position the coupling during installation
Two Piece End Ring Design	End Ring can be disassembled for gasket replacement if needed
Stab - Fit Coupling Design	No disassembly required before installation
NSF-61-Compounded NBR Gasket	Good For Water, Sewerage, Hydrocarbon
Proprietary Tri-Clad <sup>®</sup> Multi-Layered Coating System	Thirteen Step Coating with three layers of protection
4° Deflection Per End	Easy connection even with misaligned pipe ends
Meet and Exceeds Applicable Sections of AWWA C219	Coupling complies with most widely recognized industry standard for the water and sewer industries
Premium Stainless Steel Fasteners and Armoring	Provides long life positive gasket seating during tightening and installation



# TX3<sup>®</sup> Extended Range Transition Coupling

Nominal Diameter	Overall Range	LOW RANGE Before Removal of the Inner Gasket Layer	Low Range Pipe Covered	HIGH RANGE After Removal of the Inner Gasket Layer	High Range Pipe Covered
2"	2.10 - 3.03"	2.10 - 2.60"	2"CTS, 2"IPS	2.56 - 3.03"	2.5"CTS, 2.5"IPS, 2.5"DR21
3"	3.10 - 4.20"	3.10 - 3.56"	3"CTS, 3"IPS	3.70 - 4.20"	3"PIT CAST, 3" AC/100,150,200, 4"CTS
4"	4.45 - 5.61"	4.45 - 5.06"	4"IPS, 4"DIP, 4"PIT CAST, 4" AC/100,150	4.94 - 5.61"	4"AC/200, 4" CLAY
6"	6.55 - 7.65"	6.55 - 7.05"	6"IPS, 6"DIP	7.04 - 7.65"	6"AC/100,150,200, 6"CLAY
8"	8.54 - 9.84"	8.54 - 9.15"	8"IPS, 8"DIP	9.15 - 9.84"	8"AC/100,150,200, 8"CLAY
10" Undersize	10.64 - 11.84"	10.64 - 11.18"	10"IPS, 10"DIP	11.18 - 11.84"	10"AC/100
10" Oversize	11.01 - 12.26"	11.01 - 11.63"	10"DIP, 10"AC/100/150	11.59 - 12.26"	10"AC/200, 10"CLAY
12" Undersize	12.62 - 13.66"	12.62 - 13.06"	12"IPS	13.10 - 13.66"	12"DIP, 12"PIT CAST
12" Oversize	13.14 - 14.45"	13.14 - 13.78"	12"DIP	13.74 - 14.45"	12"AC/100, 150, 200, 12" CLAY

**NOTE:** Use on Polyethylene is for below ground service only on DR 17 or thicker pipe wall.  
For Specific Information Regarding dimensions, special applications, and installation procedures, contact Total Piping Solutions, Inc.  
To Extend Product Life in Corrosive Environments, poly-wrapping or cathodic protection of the product is recommended.  
TX3<sup>®</sup> is a patent pending and Trademarked Product of Total Piping Solutions, Inc.



and TX3<sup>®</sup> are registered trademarks of Total Piping Solutions, Inc.

**Total Piping Solutions, Inc.**

1760 Haskell Road, Olean, New York 14760

TEL: 716-372-0160, FAX: 716-372-1767

E-Mail: [sales@tps.us](mailto:sales@tps.us)

VISIT OUR WEBSITE: [www.tps.us](http://www.tps.us)



**WARNING** This is a non-restraining product. If pipe pullout can occur, proper anchoring of the pipe joint is required. Failure to anchor the pipe could result in the escape of line content, and may cause property damage, serious injury or death.



**WARNING** This product is not intended for use on natural gas piping or any other type of gas piping. To do so could result in escaping gas that could ignite and cause property damage, serious injury or death.

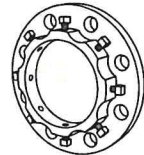


**WARNING** This product is intended for use on HDPE SDR-17 or greater wall thicknesses, and shall be used for buried service only. The TPS TX3 Coupling product line is not approved for above ground applications on HDPE.



# SUBMITTAL INFORMATION

## Adapter Flange (UFA200-C-x style)

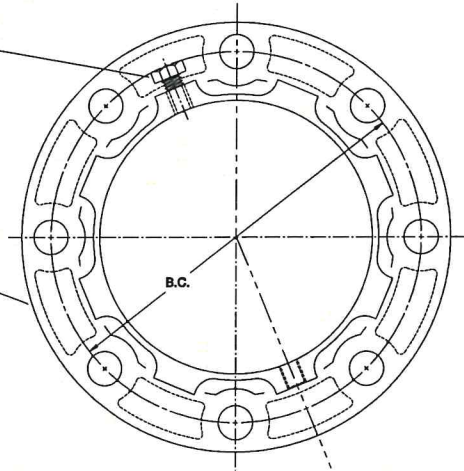


### UNI-FLANGE® SERIES 200 ADAPTER FLANGE FOR DUCTILE IRON PIPE

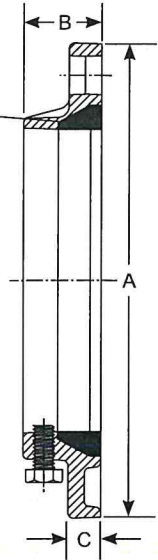
Set Screw - AISI 4140 Steel;  
Tensile 190,000 psi  
minimum. Heat treated to  
35-39 Rockwell C and zinc  
plated for corrosion resistance

Flange - Ductile Iron per  
ASTM A536, Grade 65-45-12.  
Drilling to AWWA Class D,  
ANSI B16.1 (125 lb. cast iron),  
or ANSI B16.5 (150 lb. steel)

Color Code: Red for ductile  
iron applications



Gasket - SBR (Buna-S)  
mechanical joint gasket



NOM. PIPE SIZE	DUCTILE IRON PIPE		APPROX. WT. LBS.	PRESSURE RATING PSI	SET SCREWS		FLANGE			NO. OF BOLT HOLES	BOLT CIRCLE DIA.	✓ SUBMITTED ITEM(S)
	OD	CATALOG No.			NUMBER	SIZE	OD A	THICKNESS B	THICKNESS C			
2"	2.50	UFA200-C-2	4.2	200	2	1/2"x1"	6"	1-13/16"	3/4"	4	4-3/4"	
3"	3.96	UFA200-C-3	6.0	200	4	1/2"x1"	7-1/2"	1-13/16"	3/4"	4	6"	
4"	4.80	UFA200-C-4	8.5	200	4	1/2"x1"	9"	1-13/16"	3/4"	8	7-1/2"	
6"	6.90	UFA200-C-6	10.7	200	8	1/2"x1"	11"	1-13/16"	3/4"	8	9-1/2"	
8"	9.05	UFA200-C-8	19.6	200	8	5/8"x1-1/4"	13-1/2"	2-1/4"	22/25"	8	11-3/4"	
10"	11.10	UFA200-C-10	25.3	175	12	5/8"x1-1/4"	16"	2-15/16"	1"	12	14-1/4"	
12"	13.20	UFA200-C-12	33.2	175	12	5/8"x1-1/4"	19"	2-15/16"	1"	12	17"	

### FEATURES

- Restraint is provided by a set screw locking device similar to that used in mechanical joint retainer glands
- The gasket is an SBR (Buna-S) mechanical joint gasket. Available with optional EPDM or NBR (Buna-N) gasket
- Designed for ease of on-site installation. Eliminates bolt hole alignment problems and allows for pipe deflection
- Series 200 adapter flanges are not recommended for use on PVC pipe. Use the Uni-Flange Series 900 flanges instead
- Optional uni-torque set screws are available for use with Series 200 adapter flanges for ductile iron pipe, class 52-56. To order, add -UT to the catalog number. Example: UFA200-C-6-UT
- Optional stainless steel set screws, type 410 per ASTM F593, are available for Series 200 adapter flanges. To order, add -SS to the catalog number. Example: UFA200-C-6-SS.

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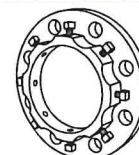
03/14/18

Submitted By:



# SUBMITTAL INFORMATION

## Adapter Flange (UFA200-C-x style)

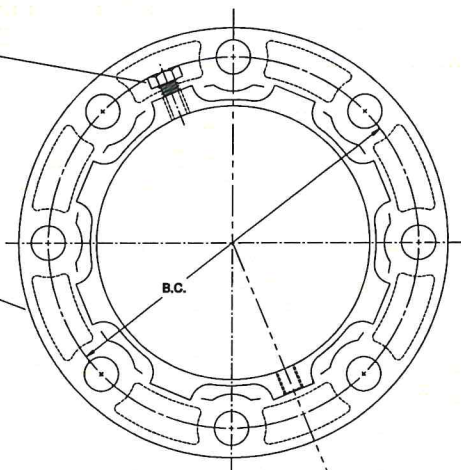


### UNI-FLANGE® SERIES 200 ADAPTER FLANGE FOR DUCTILE IRON PIPE

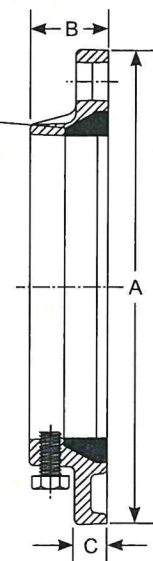
Set Screw - AISI 4140 Steel;  
Tensile 190,000 psi  
minimum. Heat treated to  
35-39 Rockwell C and zinc  
plated for corrosion resistance

Flange - Ductile Iron per  
ASTM A536, Grade 65-45-12.  
Drilling to AWWA Class D,  
ANSI B16.1 (125 lb. cast iron),  
or ANSI B16.5 (150 lb. steel)

Color Code: Red for ductile  
iron applications



Gasket - SBR (Buna-S)  
mechanical joint gasket



NOM. PIPE SIZE	DUCTILE IRON PIPE		APPROX. WT. LBS.	PRESSURE RATING PSI	SET SCREWS		FLANGE			No. OF BOLT HOLES	BOLT CIRCLE DIA.	✓ SUBMITTED ITEM(S)
	OD	CATALOG No.			NUMBER	SIZE	OD A	THICKNESS B	THICKNESS C			
2"	2.50	UFA200-C-2	4.2	200	2	1/2"x1"	6"	1-13/16"	3/4"	4	4-3/4"	
3"	3.96	UFA200-C-3	6.0	200	4	1/2"x1"	7-1/2"	1-13/16"	3/4"	4	6"	
4"	4.80	UFA200-C-4	8.5	200	4	1/2"x1"	9"	1-13/16"	3/4"	8	7-1/2"	
6"	6.90	UFA200-C-6	10.7	200	8	1/2"x1"	11"	1-13/16"	3/4"	8	9-1/2"	
8"	9.05	UFA200-C-8	19.6	200	8	5/8"x1-1/4"	13-1/2"	2-1/4"	22/25"	8	11-3/4"	
10"	11.10	UFA200-C-10	25.3	175	12	5/8"x1-1/4"	16"	2-15/16"	1"	12	14-1/4"	
12"	13.20	UFA200-C-12	33.2	175	12	5/8"x1-1/4"	19"	2-15/16"	1"	12	17"	

### FEATURES

- Restraint is provided by a set screw locking device similar to that used in mechanical joint retainer glands
- The gasket is an SBR (Buna-S) mechanical joint gasket. Available with optional EPDM or NBR (Buna-N) gasket
- Designed for ease of on-site installation. Eliminates bolt hole alignment problems and allows for pipe deflection
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- Optional stainless steel set screws, type 410 per ASTM F593, are available for Series 200 adapter flanges. To order, add -SS to the catalog number. Example: UFA200-C-6-SS.

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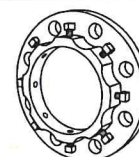
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03/14/18

Submitted By:

# SUBMITTAL INFORMATION

## Adapter Flange (UFA200-C-x style)

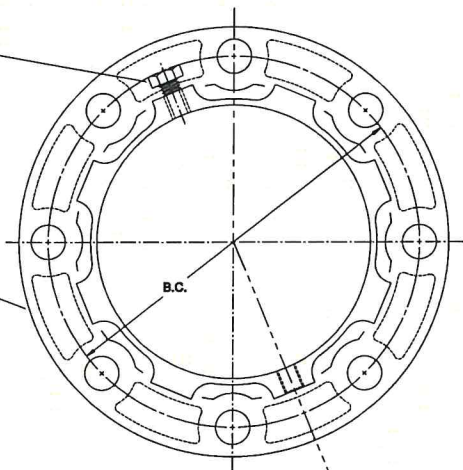


### UNI-FLANGE® SERIES 200 ADAPTER FLANGE FOR DUCTILE IRON PIPE

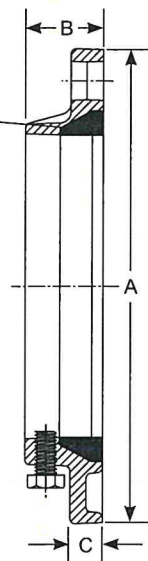
Set Screw - AISI 4140 Steel;  
Tensile 190,000 psi  
minimum. Heat treated to  
35-39 Rockwell C and zinc  
plated for corrosion resistance

Flange - Ductile Iron per  
ASTM A536, Grade 65-45-12.  
Drilling to AWWA Class D,  
ANSI B16.1 (125 lb. cast iron),  
or ANSI B16.5 (150 lb. steel)

Color Code: Red for ductile  
iron applications



Gasket - SBR (Buna-S)  
mechanical joint gasket



NOM. PIPE SIZE	DUCTILE IRON PIPE		APPROX. WT. LBS.	PRESSURE RATING PSI	SET SCREWS		FLANGE			NO. OF BOLT HOLES	BOLT CIRCLE DIA.	✓ SUBMITTED ITEM(S)
	OD	CATALOG NO.			NUMBER	SIZE	OD A	THICKNESS B	THICKNESS C			
2"	2.50	UFA200-C-2	4.2	200	2	1/2"x1"	6"	1-13/16"	3/4"	4	4-3/4"	
3"	3.96	UFA200-C-3	6.0	200	4	1/2"x1"	7-1/2"	1-13/16"	3/4"	4	6"	
4"	4.80	UFA200-C-4	8.5	200	4	1/2"x1"	9"	1-13/16"	3/4"	8	7-1/2"	
6"	6.90	UFA200-C-6	10.7	200	8	1/2"x1"	11"	1-13/16"	3/4"	8	9-1/2"	
8"	9.05	UFA200-C-8	19.6	200	8	5/8"x1-1/4"	13-1/2"	2-1/4"	22/25"	8	11-3/4"	
10"	11.10	UFA200-C-10	25.3	175	12	5/8"x1-1/4"	16"	2-15/16"	1"	12	14-1/4"	
12"	13.20	UFA200-C-12	33.2	175	12	5/8"x1-1/4"	19"	2-15/16"	1"	12	17"	

### FEATURES

- Restraint is provided by a set screw locking device similar to that used in mechanical joint retainer glands
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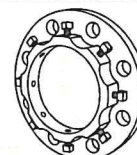
03/14/18

Submitted By:



# SUBMITTAL INFORMATION

## Adapter Flange (UFA200-C-x style)

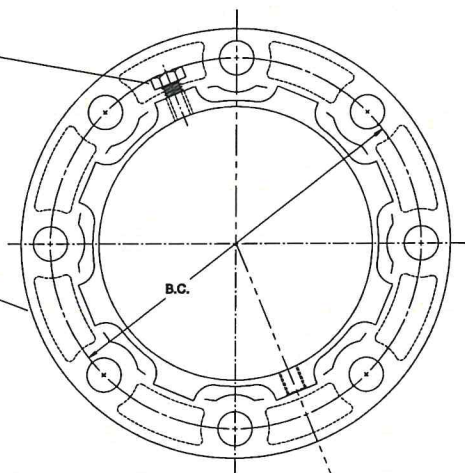


### UNI-FLANGE® SERIES 200 ADAPTER FLANGE FOR DUCTILE IRON PIPE

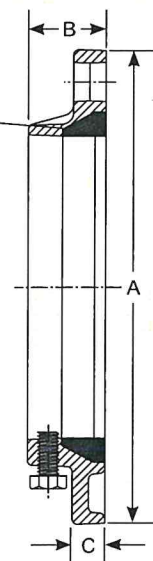
Set Screw - AISI 4140 Steel;  
Tensile 190,000 psi  
minimum. Heat treated to  
35-39 Rockwell C and zinc  
plated for corrosion resistance

Flange - Ductile Iron per  
ASTM A536, Grade 65-45-12.  
Drilling to AWWA Class D,  
ANSI B16.1 (125 lb. cast iron),  
or ANSI B16.5 (150 lb. steel)

Color Code: Red for ductile  
iron applications



Gasket - SBR (Buna-S)  
mechanical joint gasket



NOM. PIPE SIZE	DUCTILE IRON PIPE		APPROX. WT. LBS.	PRESSURE RATING PSI	SET SCREWS		FLANGE			NO. OF BOLT HOLES	BOLT CIRCLE DIA.	✓ SUBMITTED ITEM(S)
	OD	CATALOG No.			NUMBER	SIZE	OD A	THICKNESS B	THICKNESS C			
2"	2.50	UFA200-C-2	4.2	200	2	1/2"x1"	6"	1-13/16"	3/4"	4	4-3/4"	
3"	3.96	UFA200-C-3	6.0	200	4	1/2"x1"	7-1/2"	1-13/16"	3/4"	4	6"	
4"	4.80	UFA200-C-4	8.5	200	4	1/2"x1"	9"	1-13/16"	3/4"	8	7-1/2"	
6"	6.90	UFA200-C-6	10.7	200	8	1/2"x1"	11"	1-13/16"	3/4"	8	9-1/2"	
8"	9.05	UFA200-C-8	19.6	200	8	5/8"x1-1/4"	13-1/2"	2-1/4"	22/25"	8	11-3/4"	
10"	11.10	UFA200-C-10	25.3	175	12	5/8"x1-1/4"	16"	2-15/16"	1"	12	14-1/4"	
12"	13.20	UFA200-C-12	33.2	175	12	5/8"x1-1/4"	19"	2-15/16"	1"	12	17"	

### FEATURES

- Restraint is provided by a set screw locking device similar to that used in mechanical joint retainer glands
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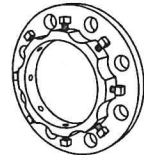
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# SUBMITTAL INFORMATION

## Adapter Flange (UFA200-C-x style)

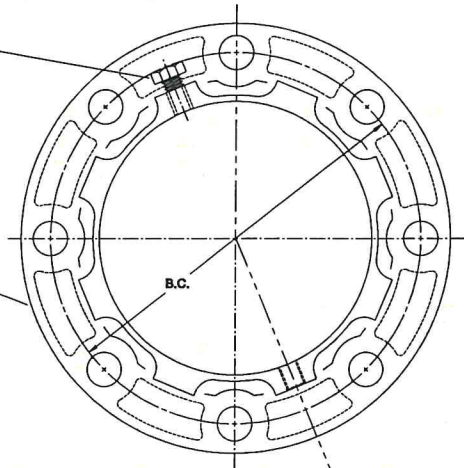


### UNI-FLANGE® SERIES 200 ADAPTER FLANGE FOR DUCTILE IRON PIPE

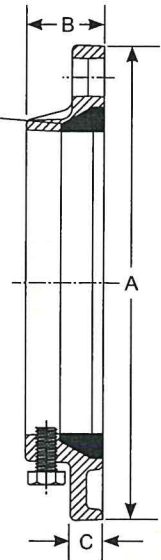
Set Screw - AISI 4140 Steel;  
Tensile 190,000 psi  
minimum. Heat treated to  
35-39 Rockwell C and zinc  
plated for corrosion resistance

Flange - Ductile Iron per  
ASTM A536, Grade 65-45-12.  
Drilling to AWWA Class D,  
ANSI B16.1 (125 lb. cast iron),  
or ANSI B16.5 (150 lb. steel)

Color Code: Red for ductile  
iron applications



Gasket - SBR (Buna-S)  
mechanical joint gasket



NOM. PIPE SIZE	DUCTILE IRON PIPE		APPROX. WT. LBS.	PRESSURE RATING PSI	SET SCREWS		FLANGE			NO. OF BOLT HOLES	BOLT CIRCLE DIA.	✓ SUBMITTED ITEM(S)
	OD	CATALOG No.			NUMBER	SIZE	OD A	THICKNESS B	THICKNESS C			
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4"	4.80	UFA200-C-4	8.5	200	4	1/2"x1"	9"	1-13/16"	3/4"	8	7-1/2"	
6"	6.90	UFA200-C-6	10.7	200	8	1/2"x1"	11"	1-13/16"	3/4"	8	9-1/2"	
8"	9.05	UFA200-C-8	19.6	200	8	5/8"x1-1/4"	13-1/2"	2-1/4"	22/25"	8	11-3/4"	
10"	11.10	UFA200-C-10	25.3	175	12	5/8"x1-1/4"	16"	2-15/16"	1"	12	14-1/4"	
12"	13.20	UFA200-C-12	33.2	175	12	5/8"x1-1/4"	19"	2-15/16"	1"	12	17"	

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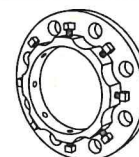
03/14/18

Submitted By:



# SUBMITTAL INFORMATION

## Adapter Flange (UFA200-C-x style)

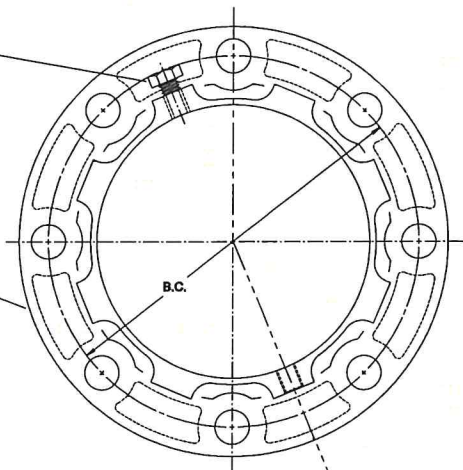


### UNI-FLANGE® SERIES 200 ADAPTER FLANGE FOR DUCTILE IRON PIPE

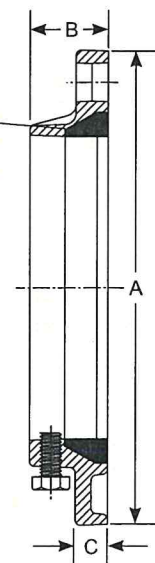
Set Screw - AISI 4140 Steel;  
Tensile 190,000 psi  
minimum. Heat treated to  
35-39 Rockwell C and zinc  
plated for corrosion resistance

Flange - Ductile Iron per  
ASTM A536, Grade 65-45-12.  
Drilling to AWWA Class D,  
ANSI B16.1 (125 lb. cast iron),  
or ANSI B16.5 (150 lb. steel)

Color Code: Red for ductile  
iron applications



Gasket - SBR (Buna-S)  
mechanical joint gasket



NOM. PIPE SIZE	DUCTILE IRON PIPE		APPROX. WT. LBS.	PRESSURE RATING PSI	SET SCREWS		FLANGE			NO. OF BOLT HOLES	BOLT CIRCLE DIA.	✓ SUBMITTED ITEM(S)
	OD	CATALOG NO.			NUMBER	SIZE	OD A	THICKNESS B	THICKNESS C			
2"	2.50	UFA200-C-2	4.2	200	2	1/2"x1"	6"	1-13/16"	3/4"	4	4-3/4"	
3"	3.96	UFA200-C-3	6.0	200	4	1/2"x1"	7-1/2"	1-13/16"	3/4"	4	6"	
4"	4.80	UFA200-C-4	8.5	200	4	1/2"x1"	9"	1-13/16"	3/4"	8	7-1/2"	
6"	6.90	UFA200-C-6	10.7	200	8	1/2"x1"	11"	1-13/16"	3/4"	8	9-1/2"	
8"	9.05	UFA200-C-8	19.6	200	8	5/8"x1-1/4"	13-1/2"	2-1/4"	22/25"	8	11-3/4"	
10"	11.10	UFA200-C-10	25.3	175	12	5/8"x1-1/4"	16"	2-15/16"	1"	12	14-1/4"	
12"	13.20	UFA200-C-12	33.2	175	12	5/8"x1-1/4"	19"	2-15/16"	1"	12	17"	

### FEATURES

- Restraint is provided by a set screw locking device similar to that used in mechanical joint retainer glands
- The gasket is an SBR (Buna-S) mechanical joint gasket. Available with optional EPDM or NBR (Buna-N) gasket
- Designed for ease of on-site installation. Eliminates bolt hole alignment problems and allows for pipe deflection
- Series 200 adapter flanges are not recommended for use on PVC pipe. Use the Uni-Flange Series 900 flanges instead
- Optional uni-torque set screws are available for use with Series 200 adapter flanges for ductile iron pipe, class 52-56. To order, add -UT to the catalog number. Example: UFA200-C-6-UT
- Optional stainless steel set screws, type 410 per ASTM F593, are available for Series 200 adapter flanges. To order, add -SS to the catalog number. Example: UFA200-C-6-SS.

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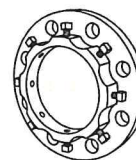
**The Ford Meter Box Company, Inc.**  
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Overseas Fax: 260-563-0167  
www.fordmeterbox.com

03/14/18

Submitted By:

# SUBMITTAL INFORMATION

## Adapter Flange (UFA400-C-x style)

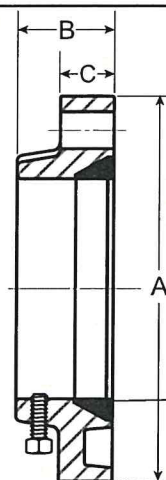
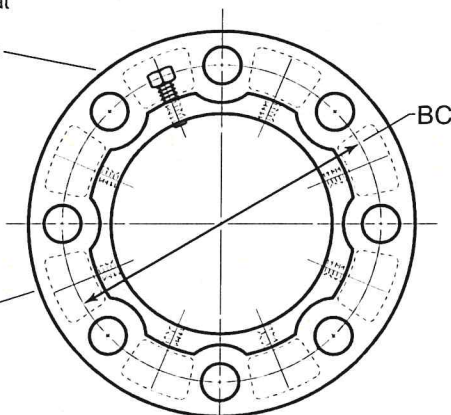


### UNI-FLANGE® SERIES 400 ADAPTER FLANGE FOR DUCTILE IRON PIPE

Set Screw - AISI 4140 Steel;  
Tensile 190,000 psi minimum. Heat  
treated to 35-39 Rockwell C, and  
zinc plated for corrosion resistance

Flange - Ductile Iron per ASTM  
A536, Grade 65-45-12. Drilling  
to AWWA Class D and E,  
ANSI B16.1 (125 lb. cast iron), or  
ANSI B16.5 (150 lb. steel)

Color Code: Red for ductile iron  
applications



Gasket - SBR (Buna-S)  
Mechanical Joint Gasket

NOM. PIPE SIZE	DUCTILE IRON PIPE		APPROX. WT. LBS.	PRESSURE RATING PSI	SET SCREWS		FLANGE			No. OF BOLT HOLES	BOLT CIRCLE DIA.	✓ SUBMITTED ITEM(S)
	OD	CATALOG No.			NUMBER	SIZE	OD A	APPROX. THICKNESS B	APPROX. THICKNESS C			
**2"	2.50	**Use UFA200-C-2										
3"	3.96	UFA400-C-3	8	250	4	1/2"x1"	7-1/2"	2-1/8"	1-7/64"	4	6"	
4"	4.80	UFA400-C-4	11	250	8	1/2"x1"	9"	2-1/8"	1-7/64"	8	7-1/2"	
6"	6.90	UFA400-C-6	14	250	8	5/8"x1-1/4"	11"	2-3/8"	1-7/64"	8	9-1/2"	
8"	9.05	UFA400-C-8	21	250	8	5/8"x1-1/4"	13-1/2"	2-3/8"	1-7/64"	8	11-3/4"	
10"	11.10	UFA400-C-10	38	250	12	5/8"x1-1/4"	16"	2-7/16"	1-3/16"	12	14-1/4"	
12"	13.20	UFA400-C-12	56	250	12	5/8"x1-1/4"	19"	2-1/2"	1-1/4"	12	17"	
14"	15.30	UFA400-C-14	70	150	12	5/8"x1-1/4"	21"	2-7/8"	1-3/8"	12	18-3/4"	
16"	17.40	UFA400-C-16	79	150	16	5/8"x1-1/4"	23-1/2"	2-13/16"	1-24/64"	16	21-1/4"	
18"	19.50	UFA400-C-18	90	150	16	3/4"x2"	25"	3-1/16"	1-9/16"	16	22-3/4"	
20"	21.60	UFA400-C-20	145	150	20	3/4"x2"	27-1/2"	3-3/16"	1-11/16"	20	25"	
24"	25.80	UFA400-C-24	175	150	20	3/4"x2"	32"	3-3/8"	1-7/8"	20	29-1/2"	
30"	32.00	UFA400-C-30	270	100	28	1"x2-1/4"	38-3/4"	4-1/8"	2-7/64"	28	36"	
36"	38.30	UFA400-C-36	400	100	32	1"x2-1/4"	46"	4-3/8"	2-3/8"	32	42-3/4"	
42"	44.50	UFA400-C-42	495	100	36	1"x2-1/4"	53"	4-5/8"	2-5/8"	36	49-1/2"	
48"	5.80	UFA400-C-48	660	100	44	1"x2-1/4"	59-1/2"	4-3/4"	2-3/4"	44	56"	

### FEATURES

- Restraint is provided by a set screw locking device similar to that used in mechanical joint retainer glands.
- The gasket is an SBR (Buna-S) mechanical joint gasket. Available in optional EPDM or NBR (Buna-N) gasket
- Designed for ease of on-site installation. Eliminates bolt hole alignment problems and allows for pipe deflection.
- Series 400 adapter flanges are not recommended for use on PVC pipe. Use the Uni-Flange® Series 900 flanges instead.
- Optional uni-torque set screws are available for use with 3"-16" Series 400 adapter flanges for ductile iron pipe, class 52-56. To order, add -UT to the catalog number. Example: UFA400-C-6-UT.
- Optional stainless steel set screws, type 410 per ASTM F593, are available for Series 400 adapter flanges. To order, add -SS to the catalog number. Example: UFA400-C-6-SS

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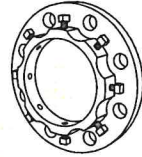
03/16/18

Submitted By:



# SUBMITTAL INFORMATION

## Adapter Flange (UFA400-C-x style)

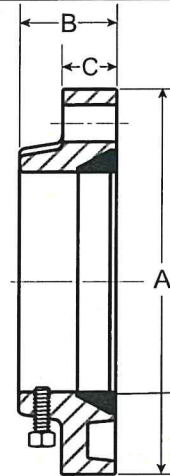
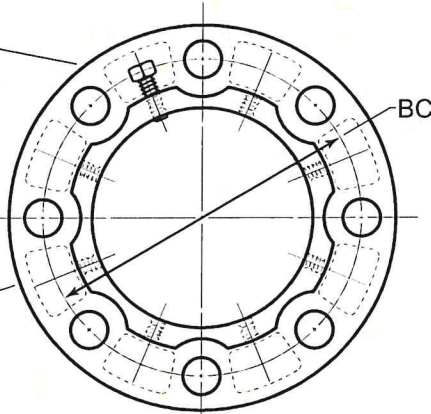


### UNI-FLANGE® SERIES 400 ADAPTER FLANGE FOR DUCTILE IRON PIPE

Set Screw - AISI 4140 Steel;  
Tensile 190,000 psi minimum. Heat  
treated to 35-39 Rockwell C, and  
zinc plated for corrosion resistance

Flange - Ductile Iron per ASTM  
A536, Grade 65-45-12. Drilling  
to AWWA Class D and E,  
ANSI B16.1 (125 lb. cast iron), or  
ANSI B16.5 (150 lb. steel)

Color Code: Red for ductile iron  
applications



Gasket - SBR (Buna-S)  
Mechanical Joint Gasket

NOM. PIPE SIZE	DUCTILE IRON PIPE		APPROX. WT. LBS.	PRESSURE RATING PSI	SET SCREWS		FLANGE			No. OF BOLT HOLES	BOLT CIRCLE DIA.	✓ SUBMITTED ITEM(S)
	OD	CATALOG No.			NUMBER	SIZE	OD A	APPROX. THICKNESS B	APPROX. THICKNESS C			
**2"	2.50	**Use UFA200-C-2										
3"	3.96	UFA400-C-3	8	250	4	1/2"x1"	7-1/2"	2-1/8"	1-7/64"	4	6"	
4"	4.80	UFA400-C-4	11	250	8	1/2"x1"	9"	2-1/8"	1-7/64"	8	7-1/2"	
6"	6.90	UFA400-C-6	14	250	8	5/8"x1-1/4"	11"	2-3/8"	1-7/64"	8	9-1/2"	
8"	9.05	UFA400-C-8	21	250	8	5/8"x1-1/4"	13-1/2"	2-3/8"	1-7/64"	8	11-3/4"	
10"	11.10	UFA400-C-10	38	250	12	5/8"x1-1/4"	16"	2-7/16"	1-3/16"	12	14-1/4"	
12"	13.20	UFA400-C-12	56	250	12	5/8"x1-1/4"	19"	2-1/2"	1-1/4"	12	17"	
14"	15.30	UFA400-C-14	70	150	12	5/8"x1-1/4"	21"	2-7/8"	1-3/8"	12	18-3/4"	
16"	17.40	UFA400-C-16	79	150	16	5/8"x1-1/4"	23-1/2"	2-13/16"	1-24/64"	16	21-1/4"	
18"	19.50	UFA400-C-18	90	150	16	3/4"x2"	25"	3-1/16"	1-9/16"	16	22-3/4"	
20"	21.60	UFA400-C-20	145	150	20	3/4"x2"	27-1/2"	3-3/16"	1-11/16"	20	25"	
24"	25.80	UFA400-C-24	175	150	20	3/4"x2"	32"	3-3/8"	1-7/8"	20	29-1/2"	
30"	32.00	UFA400-C-30	270	100	28	1"x2-1/4"	38-3/4"	4-1/8"	2-7/64"	28	36"	
36"	38.30	UFA400-C-36	400	100	32	1"x2-1/4"	46"	4-3/8"	2-3/8"	32	42-3/4"	
42"	44.50	UFA400-C-42	495	100	36	1"x2-1/4"	53"	4-5/8"	2-5/8"	36	49-1/2"	
48"	5.80	UFA400-C-48	660	100	44	1"x2-1/4"	59-1/2"	4-3/4"	2-3/4"	44	56"	

### FEATURES

- Restraint is provided by a set screw locking device similar to that used in mechanical joint retainer glands.
- The gasket is an SBR (Buna-S) mechanical joint gasket. Available in optional EPDM or NBR (Buna-N) gasket
- Designed for ease of on-site installation. Eliminates bolt hole alignment problems and allows for pipe deflection.
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- Optional stainless steel set screws, type 410 per ASTM F593, are available for Series 400 adapter flanges. To order, add -SS to the catalog number. Example: UFA400-C-6-SS

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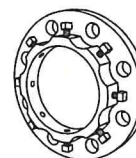
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03/16/18

Submitted By:

# SUBMITTAL INFORMATION

## Adapter Flange (UFA400-C-x style)

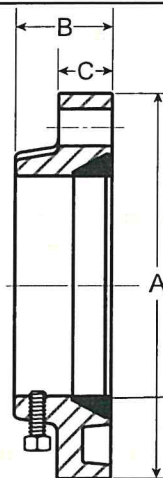
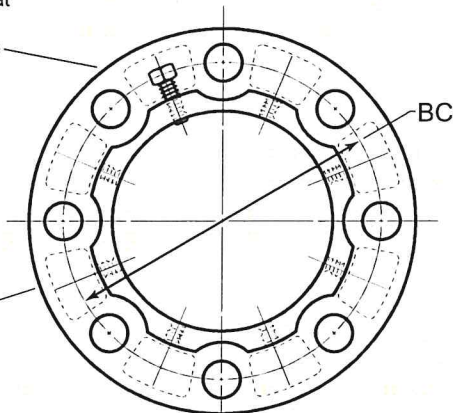


### UNI-FLANGE® SERIES 400 ADAPTER FLANGE FOR DUCTILE IRON PIPE

Set Screw - AISI 4140 Steel;  
Tensile 190,000 psi minimum. Heat  
treated to 35-39 Rockwell C, and  
zinc plated for corrosion resistance

Flange - Ductile Iron per ASTM  
A536, Grade 65-45-12. Drilling  
to AWWA Class D and E,  
ANSI B16.1 (125 lb. cast iron), or  
ANSI B16.5 (150 lb. steel)

Color Code: Red for ductile iron  
applications



Gasket - SBR (Buna-S)  
Mechanical Joint Gasket

NOM. PIPE SIZE	DUCTILE IRON PIPE		APPROX. WT. LBS.	PRESSURE RATING PSI	SET SCREWS		FLANGE			No. OF BOLT HOLES	BOLT CIRCLE DIA.	✓ SUBMITTED ITEM(S)
	OD	CATALOG NO.			NUMBER	SIZE	OD A	APPROX. THICKNESS B	APPROX. THICKNESS C			
**2"	2.50	**Use UFA200-C-2										
3"	3.96	UFA400-C-3	8	250	4	1/2"x1"	7-1/2"	2-1/8"	1-7/64"	4	6"	
4"	4.80	UFA400-C-4	11	250	8	1/2"x1"	9"	2-1/8"	1-7/64"	8	7-1/2"	
6"	6.90	UFA400-C-6	14	250	8	5/8"x1-1/4"	11"	2-3/8"	1-7/64"	8	9-1/2"	
8"	9.05	UFA400-C-8	21	250	8	5/8"x1-1/4"	13-1/2"	2-3/8"	1-7/64"	8	11-3/4"	
10"	11.10	UFA400-C-10	38	250	12	5/8"x1-1/4"	16"	2-7/16"	1-3/16"	12	14-1/4"	
12"	13.20	UFA400-C-12	56	250	12	5/8"x1-1/4"	19"	2-1/2"	1-1/4"	12	17"	
14"	15.30	UFA400-C-14	70	150	12	5/8"x1-1/4"	21"	2-7/8"	1-3/8"	12	18-3/4"	
16"	17.40	UFA400-C-16	79	150	16	5/8"x1-1/4"	23-1/2"	2-13/16"	1-24/64"	16	21-1/4"	
18"	19.50	UFA400-C-18	90	150	16	3/4"x2"	25"	3-1/16"	1-9/16"	16	22-3/4"	
20"	21.60	UFA400-C-20	145	150	20	3/4"x2"	27-1/2"	3-3/16"	1-11/16"	20	25"	
24"	25.80	UFA400-C-24	175	150	20	3/4"x2"	32"	3-3/8"	1-7/8"	20	29-1/2"	
30"	32.00	UFA400-C-30	270	100	28	1"x2-1/4"	38-3/4"	4-1/8"	2-7/64"	28	36"	
36"	38.30	UFA400-C-36	400	100	32	1"x2-1/4"	46"	4-3/8"	2-3/8"	32	42-3/4"	
42"	44.50	UFA400-C-42	495	100	36	1"x2-1/4"	53"	4-5/8"	2-5/8"	36	49-1/2"	
48"	5.80	UFA400-C-48	660	100	44	1"x2-1/4"	59-1/2"	4-3/4"	2-3/4"	44	56"	

### FEATURES

- Restraint is provided by a set screw locking device similar to that used in mechanical joint retainer glands.
- The gasket is an SBR (Buna-S) mechanical joint gasket. Available in optional EPDM or NBR (Buna-N) gasket
- Designed for ease of on-site installation. Eliminates bolt hole alignment problems and allows for pipe deflection.
- Series 400 adapter flanges are not recommended for use on PVC pipe. Use the Uni-Flange® Series 900 flanges instead.
- Optional uni-torque set screws are available for use with 3"-16" Series 400 adapter flanges for ductile iron pipe, class 52-56. To order, add -UT to the catalog number. Example: UFA400-C-6-UT.
- Optional stainless steel set screws, type 410 per ASTM F593, are available for Series 400 adapter flanges. To order, add -SS to the catalog number. Example: UFA400-C-6-SS

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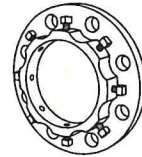
03/16/18

Submitted By:



# SUBMITTAL INFORMATION

## Adapter Flange (UFA400-C-x style)

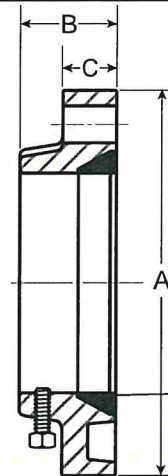
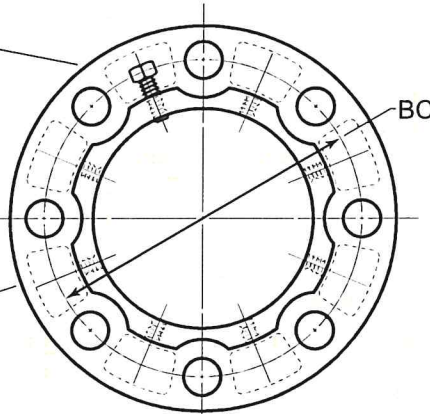


### UNI-FLANGE® SERIES 400 ADAPTER FLANGE FOR DUCTILE IRON PIPE

Set Screw - AISI 4140 Steel;  
Tensile 190,000 psi minimum. Heat  
treated to 35-39 Rockwell C, and  
zinc plated for corrosion resistance

Flange - Ductile Iron per ASTM  
A536, Grade 65-45-12. Drilling to  
AWWA Class D and E,  
ANSI B16.1 (125 lb. cast iron), or  
ANSI B16.5 (150 lb. steel)

Color Code: Red for ductile iron  
applications



Gasket - SBR (Buna-S)  
Mechanical Joint Gasket

NOM. PIPE SIZE	DUCTILE IRON PIPE		APPROX. WT. LBS.	PRESSURE RATING PSI	SET SCREWS		FLANGE			No. OF BOLT HOLES	BOLT CIRCLE DIA.	✓ SUBMITTED ITEM(S)
	OD	CATALOG No.			NUMBER	SIZE	OD A	APPROX. THICKNESS B	APPROX. THICKNESS C			
**2"	2.50	**Use UFA200-C-2										
3"	3.96	UFA400-C-3	8	250	4	1/2"x1"	7-1/2"	2-1/8"	1-7/64"	4	6"	
4"	4.80	UFA400-C-4	11	250	8	1/2"x1"	9"	2-1/8"	1-7/64"	8	7-1/2"	
6"	6.90	UFA400-C-6	14	250	8	5/8"x1-1/4"	11"	2-3/8"	1-7/64"	8	9-1/2"	
8"	9.05	UFA400-C-8	21	250	8	5/8"x1-1/4"	13-1/2"	2-3/8"	1-7/64"	8	11-3/4"	
10"	11.10	UFA400-C-10	38	250	12	5/8"x1-1/4"	16"	2-7/16"	1-3/16"	12	14-1/4"	
12"	13.20	UFA400-C-12	56	250	12	5/8"x1-1/4"	19"	2-1/2"	1-1/4"	12	17"	
14"	15.30	UFA400-C-14	70	150	12	5/8"x1-1/4"	21"	2-7/8"	1-3/8"	12	18-3/4"	
16"	17.40	UFA400-C-16	79	150	16	5/8"x1-1/4"	23-1/2"	2-13/16"	1-24/64"	16	21-1/4"	
18"	19.50	UFA400-C-18	90	150	16	3/4"x2"	25"	3-1/16"	1-9/16"	16	22-3/4"	
20"	21.60	UFA400-C-20	145	150	20	3/4"x2"	27-1/2"	3-3/16"	1-11/16"	20	25"	
24"	25.80	UFA400-C-24	175	150	20	3/4"x2"	32"	3-3/8"	1-7/8"	20	29-1/2"	
30"	32.00	UFA400-C-30	270	100	28	1"x2-1/4"	38-3/4"	4-1/8"	2-7/64"	28	36"	
36"	38.30	UFA400-C-36	400	100	32	1"x2-1/4"	46"	4-3/8"	2-3/8"	32	42-3/4"	
42"	44.50	UFA400-C-42	495	100	36	1"x2-1/4"	53"	4-5/8"	2-5/8"	36	49-1/2"	
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### FEATURES

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- The gasket is an SBR (Buna-S) mechanical joint gasket. Available in optional EPDM or NBR (Buna-N) gasket
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- Optional stainless steel set screws, type 410 per ASTM F593, are available for Series 400 adapter flanges. To order, add -SS to the catalog number. Example: UFA400-C-6-SS

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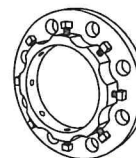
**The Ford Meter Box Company, Inc.**  
P.O. Box 443, Wabash, Indiana U.S.A. 46992-0443  
Phone: 260-563-3171 / Fax: 800-826-3487  
Overseas Fax: 260-563-0167  
www.fordmeterbox.com

03/16/18

Submitted By:

# SUBMITTAL INFORMATION

## Adapter Flange (UFA400-C-x style)

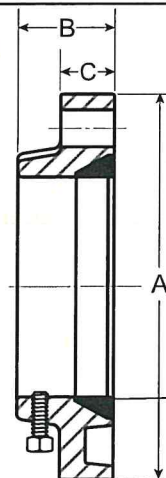
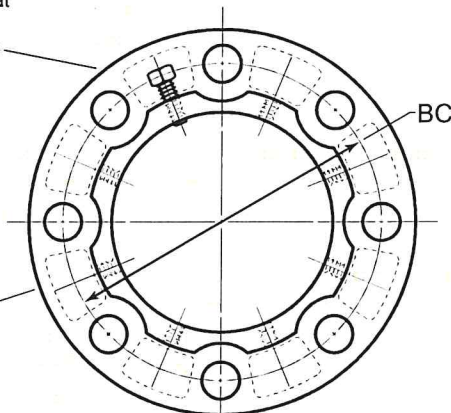


### UNI-FLANGE® SERIES 400 ADAPTER FLANGE FOR DUCTILE IRON PIPE

Set Screw - AISI 4140 Steel;  
Tensile 190,000 psi minimum. Heat  
treated to 35-39 Rockwell C, and  
zinc plated for corrosion resistance

Flange - Ductile Iron per ASTM  
A536, Grade 65-45-12. Drilling  
to AWWA Class D and E,  
ANSI B16.1 (125 lb. cast iron), or  
ANSI B16.5 (150 lb. steel)

Color Code: Red for ductile iron  
applications



Gasket - SBR (Buna-S)  
Mechanical Joint Gasket

NOM. PIPE SIZE	DUCTILE IRON PIPE		APPROX. WT. LBS.	PRESSURE RATING PSI	SET SCREWS		FLANGE			No. OF BOLT HOLES	BOLT CIRCLE DIA.	✓ SUBMITTED ITEM(S)
	OD	CATALOG No.			NUMBER	SIZE	OD A	APPROX. THICKNESS B	APPROX. THICKNESS C			
**2"	2.50					**Use UFA200-C-2						
3"	3.96	UFA400-C-3	8	250	4	1/2"x1"	7-1/2"	2-1/8"	1-7/64"	4	6"	
4"	4.80	UFA400-C-4	11	250	8	1/2"x1"	9"	2-1/8"	1-7/64"	8	7-1/2"	
6"	6.90	UFA400-C-6	14	250	8	5/8"x1-1/4"	11"	2-3/8"	1-7/64"	8	9-1/2"	
8"	9.05	UFA400-C-8	21	250	8	5/8"x1-1/4"	13-1/2"	2-3/8"	1-7/64"	8	11-3/4"	
10"	11.10	UFA400-C-10	38	250	12	5/8"x1-1/4"	16"	2-7/16"	1-3/16"	12	14-1/4"	
12"	13.20	UFA400-C-12	56	250	12	5/8"x1-1/4"	19"	2-1/2"	1-1/4"	12	17"	
14"	15.30	UFA400-C-14	70	150	12	5/8"x1-1/4"	21"	2-7/8"	1-3/8"	12	18-3/4"	
16"	17.40	UFA400-C-16	79	150	16	5/8"x1-1/4"	23-1/2"	2-13/16"	1-24/64"	16	21-1/4"	
18"	19.50	UFA400-C-18	90	150	16	3/4"x2"	25"	3-1/16"	1-9/16"	16	22-3/4"	
20"	21.60	UFA400-C-20	145	150	20	3/4"x2"	27-1/2"	3-3/16"	1-11/16"	20	25"	
24"	25.80	UFA400-C-24	175	150	20	3/4"x2"	32"	3-3/8"	1-7/8"	20	29-1/2"	
30"	32.00	UFA400-C-30	270	100	28	1"x2-1/4"	38-3/4"	4-1/8"	2-7/64"	28	36"	
36"	38.30	UFA400-C-36	400	100	32	1"x2-1/4"	46"	4-3/8"	2-3/8"	32	42-3/4"	
42"	44.50	UFA400-C-42	495	100	36	1"x2-1/4"	53"	4-5/8"	2-5/8"	36	49-1/2"	
48"	5.80	UFA400-C-48	660	100	44	1"x2-1/4"	59-1/2"	4-3/4"	2-3/4"	44	56"	

### FEATURES

- Restraint is provided by a set screw locking device similar to that used in mechanical joint retainer glands.
- The gasket is an SBR (Buna-S) mechanical joint gasket. Available in optional EPDM or NBR (Buna-N) gasket
- Designed for ease of on-site installation. Eliminates bolt hole alignment problems and allows for pipe deflection.
- Series 400 adapter flanges are not recommended for use on PVC pipe. Use the Uni-Flange® Series 900 flanges instead.
- Optional uni-torque set screws are available for use with 3"-16" Series 400 adapter flanges for ductile iron pipe, class 52-56. To order, add -UT to the catalog number. Example: UFA400-C-6-UT.
- Optional stainless steel set screws, type 410 per ASTM F593, are available for Series 400 adapter flanges. To order, add -SS to the catalog number. Example: UFA400-C-6-SS

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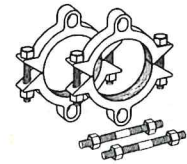
Submitted By:

03/16/18



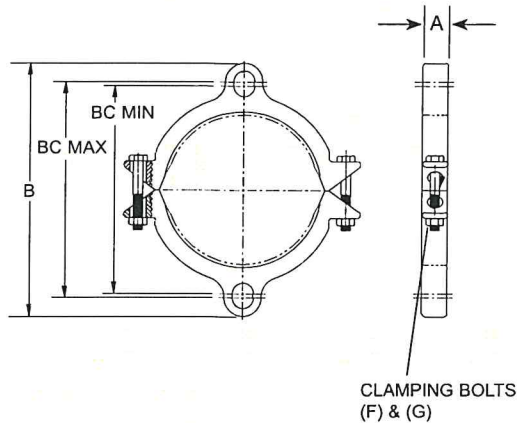
# SUBMITTAL INFORMATION

## Uni-Flange® Restraint - (UFR1390-C-x-RB-I style)

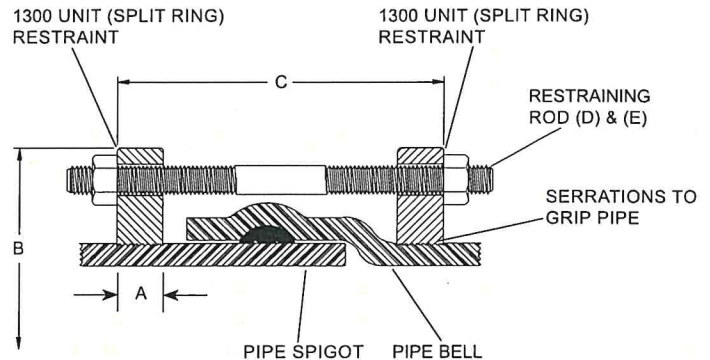


**SERIES 1390-C RESTRAINT DEVICE (WITH BLUE FLUOROCARBON-COATED ACCESSORIES)  
FOR C900 PVC AND DUCTILE IRON PIPE PIPE BELL JOINTS**

**1300 SPLIT RESTRAINT**



**1390 ASSEMBLY**



NOM PIPE SIZE	PVC PIPE WITH DI PIPE OD STYLE 1390-C		A	B APPROX	C MAX	RESTRAINING RODS		CLAMPING BOLTS		BC MIN	BC MAX	✓SUBMITTED ITEMS
	OD	CATALOG No.				No. D	SIZE E	No. F	SIZE G			
4"	4.80	UFR1390-C-4-RB-I	1-1/8"	9-1/8"	15"	2	3/4" x 17"	4	5/8" x 3-1/2"	7.12"	7.50"	
6"	6.90	UFR1390-C-6-RB-I	1-1/8"	11-1/8"	15"	2	3/4" x 17"	4	5/8" x 3-1/2"	9.14"	9.50"	
8"	9.05	UFR1390-C-8-RB-I	1-1/4"	14-5/8"	15"	2	3/4" x 17"	4	3/4" x 4"	11.36"	13.00"	
10"	11.10	UFR1390-C-10-RB-I	1-3/8"	16-5/8"	22"	4	3/4" x 24"	4	7/8" x 5"	13.19"	15.00"	
12"	13.20	UFR1390-C-12-RB-I	1-3/8"	19-1/4"	22"	4	3/4" x 24"	4	7/8" x 5"	16.13"	17.62"	

## FEATURES

- 4" - 12" sizes: Cast ductile iron per ASTM A536 grade 65-45-12
- 360° contact and support of the pipe wall
- Restraining rods are high strength, low alloy steel per ANSI / AWWA C111 / A21.11, with blue fluorocarbon-coating
- Clamping bolts and nuts are Grade 5 with blue fluorocarbon-coating
- Black e-coat epoxy-coated
- Rated at full-rated pressure of any class of PVC pipe, minimum 2:1 safety factor.
- Ductile iron pipe shall have the following pressure ratings: 4" through 8" = 250 psi  
10" and 12" = 200 psi

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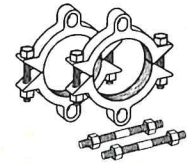


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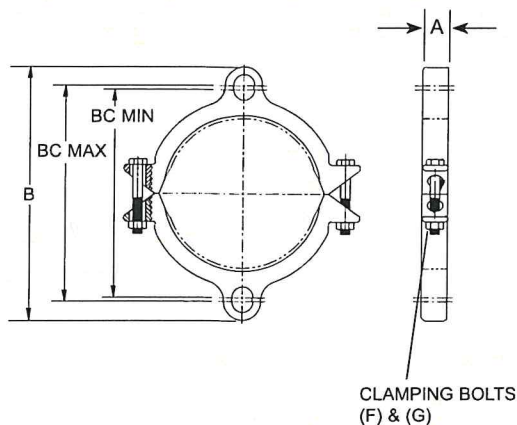
# SUBMITTAL INFORMATION

## Uni-Flange® Restraint - (UFR1390-C-x-RB-I style)

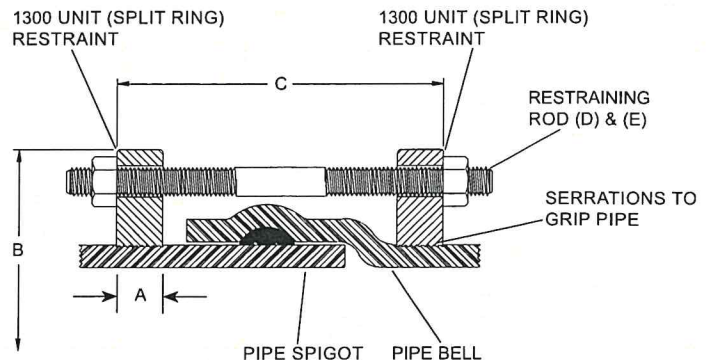


**SERIES 1390-C RESTRAINT DEVICE (WITH BLUE FLUOROCARBON-COATED ACCESSORIES)  
FOR C900 PVC AND DUCTILE IRON PIPE PIPE BELL JOINTS**

**1300 SPLIT RESTRAINT**



**1390 ASSEMBLY**



NOM PIPE SIZE	PVC PIPE WITH DI PIPE OD STYLE 1390-C		A	B APPROX	C MAX	RESTRAINING RODS		CLAMPING BOLTS		BC MIN	BC MAX	✓SUBMITTED ITEMS
	OD	CATALOG No.				No. D	SIZE E	No. F	SIZE G			
4"	4.80	UFR1390-C-4-RB-I	1-1/8"	9-1/8"	15"	2	3/4" x 17"	4	5/8" x 3-1/2"	7.12"	7.50"	
6"	6.90	UFR1390-C-6-RB-I	1-1/8"	11-1/8"	15"	2	3/4" x 17"	4	5/8" x 3-1/2"	9.14"	9.50"	
8"	9.05	UFR1390-C-8-RB-I	1-1/4"	14-5/8"	15"	2	3/4" x 17"	4	3/4" x 4"	11.36"	13.00"	
10"	11.10	UFR1390-C-10-RB-I	1-3/8"	16-5/8"	22"	4	3/4" x 24"	4	7/8" x 5"	13.19"	15.00"	
12"	13.20	UFR1390-C-12-RB-I	1-3/8"	19-1/4"	22"	4	3/4" x 24"	4	7/8" x 5"	16.13"	17.62"	

## FEATURES

- 4" - 12" sizes: Cast ductile iron per ASTM A536 grade 65-45-12
- 360° contact and support of the pipe wall
- Restraining rods are high strength, low alloy steel per ANSI / AWWA C111 / A21.11, with blue fluorocarbon-coating
- Clamping bolts and nuts are Grade 5 with blue fluorocarbon-coating
- Black e-coat epoxy-coated
- Rated at full-rated pressure of any class of PVC pipe, minimum 2:1 safety factor.
- Ductile iron pipe shall have the following pressure ratings: 4" through 8" = 250 psi  
10" and 12" = 200 psi

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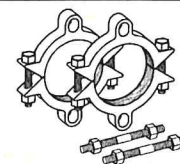
06/24/19

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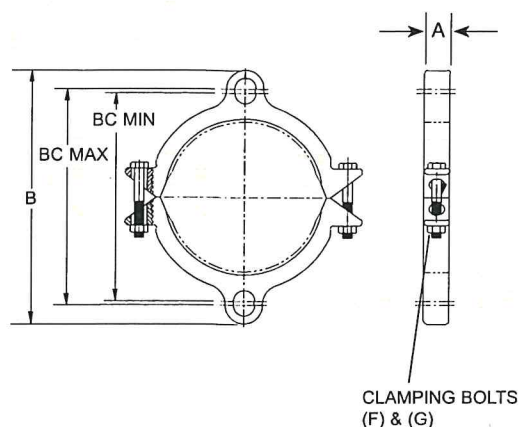
# SUBMITTAL INFORMATION

## Uni-Flange® Restraint - (UFR1390-C-x-RB-I style)

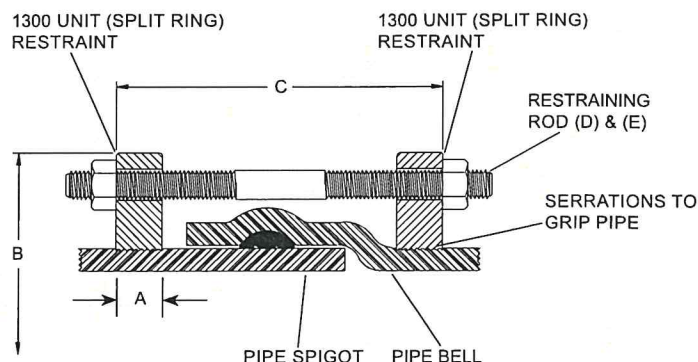


**SERIES 1390-C RESTRAINT DEVICE (WITH BLUE FLUOROCARBON-COATED ACCESSORIES)  
FOR C900 PVC AND DUCTILE IRON PIPE PIPE BELL JOINTS**

**1300 SPLIT RESTRAINT**



**1390 ASSEMBLY**



NOM PIPE SIZE	PVC PIPE WITH DI PIPE OD STYLE 1390-C		A	B APPROX	C MAX	RESTRAINING RODS		CLAMPING BOLTS		BC MIN	BC MAX	✓SUBMITTED ITEMS
	OD	CATALOG No.				No. D	SIZE E	No. F	SIZE G			
4"	4.80	UFR1390-C-4-RB-I	1-1/8"	9-1/8"	15"	2	3/4" x 17"	4	5/8" x 3-1/2"	7.12"	7.50"	
6"	6.90	UFR1390-C-6-RB-I	1-1/8"	11-1/8"	15"	2	3/4" x 17"	4	5/8" x 3-1/2"	9.14"	9.50"	
8"	9.05	UFR1390-C-8-RB-I	1-1/4"	14-5/8"	15"	2	3/4" x 17"	4	3/4" x 4"	11.36"	13.00"	
10"	11.10	UFR1390-C-10-RB-I	1-3/8"	16-5/8"	22"	4	3/4" x 24"	4	7/8" x 5"	13.19"	15.00"	
12"	13.20	UFR1390-C-12-RB-I	1-3/8"	19-1/4"	22"	4	3/4" x 24"	4	7/8" x 5"	16.13"	17.62"	

## FEATURES

- 4" - 12" sizes: Cast ductile iron per ASTM A536 grade 65-45-12
- 360° contact and support of the pipe wall
- Restraining rods are high strength, low alloy steel per ANSI / AWWA C111 / A21.11, with blue fluorocarbon-coating
- Clamping bolts and nuts are Grade 5 with blue fluorocarbon-coating
- Black e-coat epoxy-coated
- Rated at full-rated pressure of any class of PVC pipe, minimum 2:1 safety factor.
- Ductile iron pipe shall have the following pressure ratings: 4" through 8" = 250 psi  
10" and 12" = 200 psi

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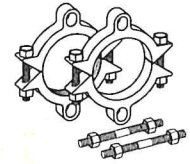


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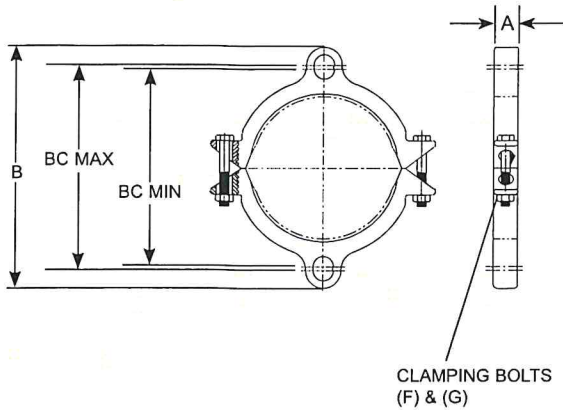
# SUBMITTAL INFORMATION

## Uni-Flange® Restraint - (UFR1355-C-x-RB-U style)

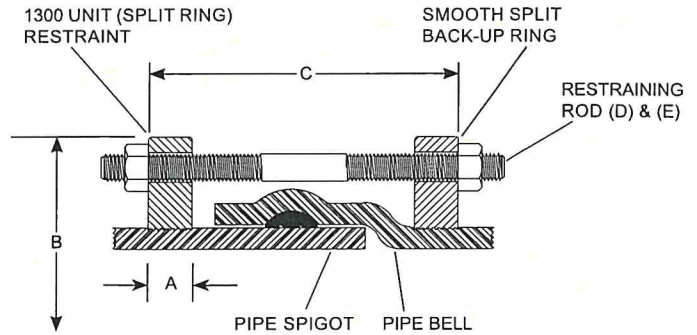


### 4"-12" SERIES 1355-C RESTRAINT DEVICE FOR C900 PVC PIPE BELL JOINTS WITH BLUE FLUOROCARBON-COATED ACCESSORIES

#### 1300 SPLIT RESTRAINT



#### 1355 ASSEMBLY



NOM PIPE SIZE	PVC PIPE WITH DI PIPE OD STYLE 1355-C		A	B APPROX	C MAX	RESTRAINING RODS		CLAMPING BOLTS		BC MIN	BC MAX	✓ SUBMITTED ITEMS
	OD	CATALOG No.				No. D	SIZE E	No. F	SIZE G			
4"	4.80	UFR1355-C-4-RB-U	1-1/8"	9-1/8"	12"	2	3/4" x 17"	4	5/8" x 3-1/2"	7.14"	7.50"	
6"	6.90	UFR1355-C-6-RB-U	1-1/8"	11-1/8"	13"	2	3/4" x 17"	4	5/8" x 3-1/2"	9.14"	9.50"	
8"	9.05	UFR1355-C-8-RB-U	1-1/4"	14-5/8"	15"	2	3/4" x 17"	4	3/4" x 4"	11.36"	12.98"	
10"	11.10	UFR1355-C-10-RB-U	1-3/8"	16-5/8"	16"	4	3/4" x 24"	4	7/8" x 5"	13.50"	15.00"	
12"	13.20	UFR1355-C-12-RB-U	1-3/8"	19-1/4"	18"	4	3/4" x 24"	4	7/8" x 5"	15.62"	17.62"	

### FEATURES

- 4" - 12" sizes: Cast ductile iron per ASTM A536, Grade 65-45-12
- 360° contact and support of the pipe wall
- Restraining rods are high strength, low alloy steel per ANSI / AWWA C111 / A21.11 with blue fluorocarbon coating
- Side clamping bolts and nuts - Grade 5 with blue fluorocarbon coating
- Rated at full-rated pressure of any class of PVC pipe, minimum 2:1 safety factor
- Rated for 150 psi on ductile iron pipe up to 10". Rated for 125 psi on 12" size
- Castings are manufactured in the United States of America

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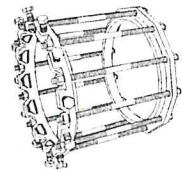
07/30/19

Submitted By:



# SUBMITTAL INFORMATION

## Uni-Flange Retainer (UFR1450-D-x-RB-I style)

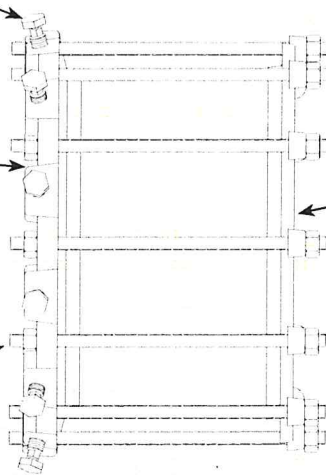


### WEDGE ACTION SERIES 1450-D RESTRAINT ASSEMBLY (WITH BLUE FLUOROCARBON-COATED ACCESSORIES) FOR DUCTILE IRON PUSH-ON CONNECTIONS

Auto-Tork Set Screw  
Ductile Iron per ASTM  
A536 Grade 65-45-12  
ANSI/AWWA C111/  
A21.11

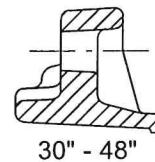
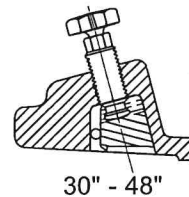
Series 1400  
Ductile Iron per ASTM  
A536 Grade 65-45-12  
ANSI/AWWA C111/  
A21.11

Tie Rod and Nuts  
High strength, low  
alloy steel per ANSI/  
AWWA C111/A21.11  
or high strength steel  
per ASTM A193, grade  
B7 (blue fluorocarbon-  
coated)



Back-Up Ring  
Ductile Iron per ASTM  
A536 Grade 65-45-12  
ANSI/AWWA C111/  
A21.11 or Carbon Steel  
per ASTM A36  
(Assembled on bell end)

#### 1400 PROFILE



NOM. PIPE SIZE	PIPE O.D.	Rods No.	ROD LENGTH	ROD DIA.	PRESSURE RATING (PSI)	**MAX BELL DIA.	APPROX. WT. (LBS.)	CATALOG NUMBER	✓ SUBMITTED ITEM(S)
3"	3.96	4	14"	5/8"	350	5.50"	12	UFR1450-D-3-RB-I	
4"	4.80	4	17"	3/4"	350	6.62"	20	UFR1450-D-4-RB-I	
6"	6.90	6	17"	3/4"	350	8.62"	29	UFR1450-D-6-RB-I	
8"	9.05	6	17"	3/4"	350	10.88"	35	UFR1450-D-8-RB-I	
10"	11.10	8	24"	3/4"	350	13.12"	56	UFR1450-D-10-RB-I	
12"	13.20	8	24"	3/4"	350	15.38"	62	UFR1450-D-12-RB-I	
14"	15.30	10	24"	3/4"	350	17.88"	90	UFR1450-D-14-RB-I	
16"	17.40	12	24"	3/4"	350	20.12"	113	UFR1450-D-16-RB-I	
18"	19.50	12	24"	3/4"	250	22.38"	132	UFR1450-D-18-RB-I	
20"	21.60	14	24"	3/4"	250	24.62"	160	UFR1450-D-20-RB-I	
24"	25.80	16	24"	3/4"	250	29.12"	181	UFR1450-D-24-RB-I	
30"	32.00	10	24"	1"	250	35.80"	341	* UFR1450-D-30-RB-I	
36"	38.30	12	24"	1"	250	42.60"	430	* UFR1450-D-36-RB-I	
42"	44.50	28	52"	1-1/4"	250	49.25"	1350	UFR1450-D-42-RB-I	
48"	50.80	32	52"	1-1/4"	250	56.125"	1570	UFR1450-D-48-RB-I	

\* Backup ring is painted steel for 30" and 36"

\*\* Connecting rods WILL NOT CLEAR a pipe bell with a maximum diameter larger than the listed measurement.

#### FEATURES

- Back-up ring: Ductile iron per ASTM A536 grade 65-45-12 or carbon steel per ASTM A36
- Wedge activating screw: Ductile iron per ASTM A536 grade 65-45-12
- Gland: Ductile iron per ASTM A536 grade 65-45-12
- Wedge: Ductile iron per ASTM A536 heat treated to hardness of 370 BHN minimum
- Restraining rods & nuts: High strength, low alloy steel per ANSI/AWWA C111/A21.11 or high strength steel per ASTM A193, grade B7, blue fluorocarbon coated
- Coating: E-coat epoxy
- New installations only

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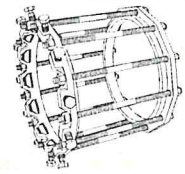
**The Ford Meter Box Company, Inc.**  
P.O. Box 443, Wabash, Indiana U.S.A. 46992-0443  
Phone: 260-563-3171 / Fax: 800-826-3487  
Overseas Fax: 260-563-0167  
www.fordmeterbox.com

01/30/18

Submitted By:

# SUBMITTAL INFORMATION

## Uni-Flange Retainer (UFR1450-D-x-RB-I style)



### WEDGE ACTION SERIES 1450-D RESTRAINT ASSEMBLY (WITH BLUE FLUOROCARBON-COATED ACCESSORIES) FOR DUCTILE IRON PUSH-ON CONNECTIONS

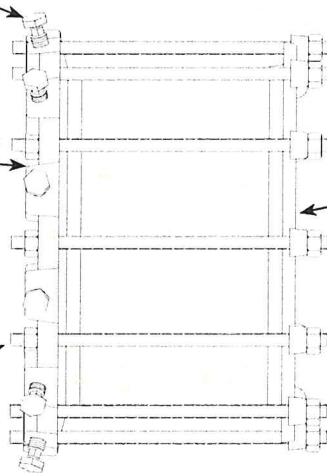
Auto-Tork Set Screw  
Ductile Iron per ASTM  
A536 Grade 65-45-12  
ANSI/AWWA C111/  
A21.11

#### Series 1400

Ductile Iron per ASTM  
A536 Grade 65-45-12  
ANSI/AWWA C111/  
A21.11

#### Tie Rod and Nuts

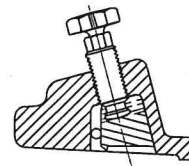
High strength, low  
alloy steel per ANSI/  
AWWA C111/A21.11  
or high strength steel  
per ASTM A193, grade  
B7 (blue fluorocarbon-  
coated)



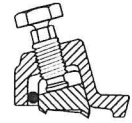
#### Back-Up Ring

Ductile Iron per ASTM  
A536 Grade 65-45-12  
ANSI/AWWA C111/  
A21.11 or Carbon Steel  
per ASTM A36  
(Assembled on bell end)

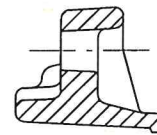
### 1400 PROFILE



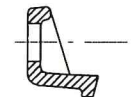
30" - 48"



3" - 24"



30" - 48"



3" - 24"

NOM. PIPE SIZE	PIPE O.D.	Rods No.	ROD LENGTH	ROD DIA.	PRESSURE RATING (PSI)	**MAX BELL DIA.	APPROX. WT. (LBS.)	CATALOG NUMBER	✓ SUBMITTED ITEM(S)
3"	3.96	4	14"	5/8"	350	5.50"	12	UFR1450-D-3-RB-I	
4"	4.80	4	17"	3/4"	350	6.62"	20	UFR1450-D-4-RB-I	
6"	6.90	6	17"	3/4"	350	8.62"	29	UFR1450-D-6-RB-I	
8"	9.05	6	17"	3/4"	350	10.88"	35	UFR1450-D-8-RB-I	
10"	11.10	8	24"	3/4"	350	13.12"	56	UFR1450-D-10-RB-I	
12"	13.20	8	24"	3/4"	350	15.38"	62	UFR1450-D-12-RB-I	
14"	15.30	10	24"	3/4"	350	17.88"	90	UFR1450-D-14-RB-I	
16"	17.40	12	24"	3/4"	350	20.12"	113	UFR1450-D-16-RB-I	
18"	19.50	12	24"	3/4"	250	22.38"	132	UFR1450-D-18-RB-I	
20"	21.60	14	24"	3/4"	250	24.62"	160	UFR1450-D-20-RB-I	
24"	25.80	16	24"	3/4"	250	29.12"	181	UFR1450-D-24-RB-I	
30"	32.00	10	24"	1"	250	35.80"	341	* UFR1450-D-30-RB-I	
36"	38.30	12	24"	1"	250	42.60"	430	* UFR1450-D-36-RB-I	
42"	44.50	28	52"	1-1/4"	250	49.25"	1350	UFR1450-D-42-RB-I	
48"	50.80	32	52"	1-1/4"	250	56.125"	1570	UFR1450-D-48-RB-I	

\* Backup ring is painted steel for 30" and 36"

\*\* Connecting rods WILL NOT CLEAR a pipe bell with a maximum diameter larger than the listed measurement.

### FEATURES

- Back-up ring: Ductile iron per ASTM A536 grade 65-45-12 or carbon steel per ASTM A36
- Wedge activating screw: Ductile iron per ASTM A536 grade 65-45-12
- Gland: Ductile iron per ASTM A536 grade 65-45-12
- Wedge: Ductile iron per ASTM A536 heat treated to hardness of 370 BHN minimum
- Restraining rods & nuts: High strength, low alloy steel per ANSI/AWWA C111/A21.11 or high strength steel per ASTM A193, grade B7, blue fluorocarbon coated
- Coating: E-coat epoxy
- New installations only

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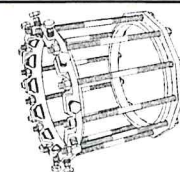
01/30/18

Submitted By:



# SUBMITTAL INFORMATION

## Uni-Flange Retainer (UFR1450-D-x-RB-I style)

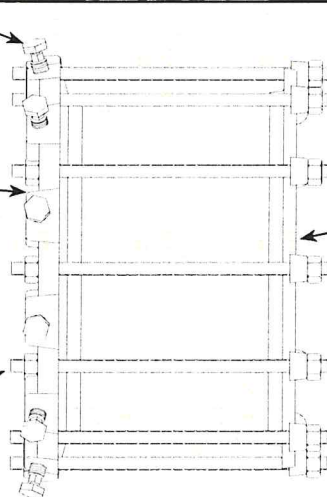


### WEDGE ACTION SERIES 1450-D RESTRAINT ASSEMBLY (WITH BLUE FLUOROCARBON-COATED ACCESSORIES) FOR DUCTILE IRON PUSH-ON CONNECTIONS

Auto-Tork Set Screw  
Ductile Iron per ASTM  
A536 Grade 65-45-12  
ANSI/AWWA C111/  
A21.11

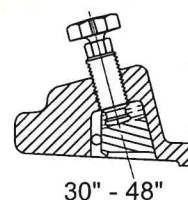
Series 1400  
Ductile Iron per ASTM  
A536 Grade 65-45-12  
ANSI/AWWA C111/  
A21.11

Tie Rod and Nuts  
High strength, low  
alloy steel per ANSI/  
AWWA C111/A21.11  
or high strength steel  
per ASTM A193, grade  
B7 (blue fluorocarbon-  
coated)



Back-Up Ring  
Ductile Iron per ASTM  
A536 Grade 65-45-12  
ANSI/AWWA C111/  
A21.11 or Carbon Steel  
per ASTM A36  
(Assembled on bell end)

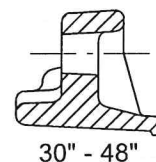
#### 1400 PROFILE



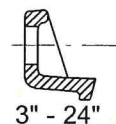
30" - 48"



3" - 24"



30" - 48"



3" - 24"

NOM. PIPE SIZE	PIPE O.D.	RODS No.	ROD LENGTH	ROD DIA.	PRESSURE RATING (PSI)	**MAX BELL DIA.	APPROX. WT. (LBS.)	CATALOG NUMBER	✓ SUBMITTED ITEM(S)
3"	3.96	4	14"	5/8"	350	5.50"	12	UFR1450-D-3-RB-I	
4"	4.80	4	17"	3/4"	350	6.62"	20	UFR1450-D-4-RB-I	
6"	6.90	6	17"	3/4"	350	8.62"	29	UFR1450-D-6-RB-I	
8"	9.05	6	17"	3/4"	350	10.88"	35	UFR1450-D-8-RB-I	
10"	11.10	8	24"	3/4"	350	13.12"	56	UFR1450-D-10-RB-I	
12"	13.20	8	24"	3/4"	350	15.38"	62	UFR1450-D-12-RB-I	
14"	15.30	10	24"	3/4"	350	17.88"	90	UFR1450-D-14-RB-I	
16"	17.40	12	24"	3/4"	350	20.12"	113	UFR1450-D-16-RB-I	
18"	19.50	12	24"	3/4"	250	22.38"	132	UFR1450-D-18-RB-I	
20"	21.60	14	24"	3/4"	250	24.62"	160	UFR1450-D-20-RB-I	
24"	25.80	16	24"	3/4"	250	29.12"	181	UFR1450-D-24-RB-I	
30"	32.00	10	24"	1"	250	35.80"	341	* UFR1450-D-30-RB-I	
36"	38.30	12	24"	1"	250	42.60"	430	* UFR1450-D-36-RB-I	
42"	44.50	28	52"	1-1/4"	250	49.25"	1350	UFR1450-D-42-RB-I	
48"	50.80	32	52"	1-1/4"	250	56.125"	1570	UFR1450-D-48-RB-I	

\* Backup ring is painted steel for 30" and 36"

\*\* Connecting rods WILL NOT CLEAR a pipe bell with a maximum diameter larger than the listed measurement.

#### FEATURES

- Back-up ring: Ductile iron per ASTM A536 grade 65-45-12 or carbon steel per ASTM A36
- Wedge activating screw: Ductile iron per ASTM A536 grade 65-45-12
- Gland: Ductile iron per ASTM A536 grade 65-45-12
- Wedge: Ductile iron per ASTM A536 heat treated to hardness of 370 BHN minimum
- Restraining rods & nuts: High strength, low alloy steel per ANSI/AWWA C111/A21.11 or high strength steel per ASTM A193, grade B7, blue fluorocarbon coated
- Coating: E-coat epoxy
- New installations only

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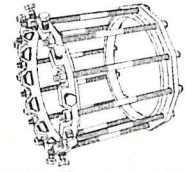
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01/30/18

Submitted By:

# SUBMITTAL INFORMATION

## Uni-Flange Retainer (UFR1450-D-x-RB-I style)

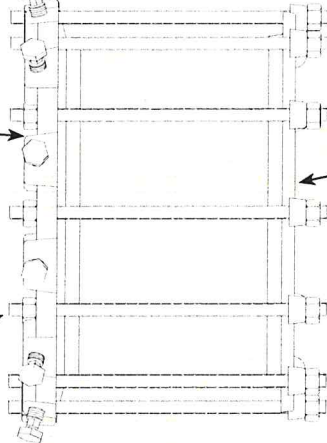


### WEDGE ACTION SERIES 1450-D RESTRAINT ASSEMBLY (WITH BLUE FLUOROCARBON-COATED ACCESSORIES) FOR DUCTILE IRON PUSH-ON CONNECTIONS

**Auto-Tork Set Screw**  
Ductile Iron per ASTM  
A536 Grade 65-45-12  
ANSI/AWWA C111/  
A21.11

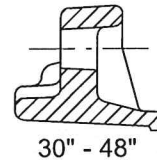
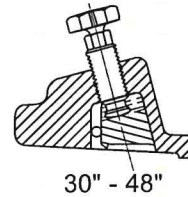
**Series 1400**  
Ductile Iron per ASTM  
A536 Grade 65-45-12  
ANSI/AWWA C111/  
A21.11

**Tie Rod and Nuts**  
High strength, low  
alloy steel per ANSI/  
AWWA C111/A21.11  
or high strength steel  
per ASTM A193, grade  
B7 (blue fluorocarbon-  
coated)



**Back-Up Ring**  
Ductile Iron per ASTM  
A536 Grade 65-45-12  
ANSI/AWWA C111/  
A21.11 or Carbon Steel  
per ASTM A36  
(Assembled on bell end)

#### 1400 PROFILE



NOM. PIPE SIZE	PIPE O.D.	RODS No.	ROD LENGTH	ROD DIA.	PRESSURE RATING (PSI)	**MAX BELL DIA.	APPROX. WT. (LBS.)	CATALOG NUMBER	✓ SUBMITTED ITEM(S)
3"	3.96	4	14"	5/8"	350	5.50"	12	UFR1450-D-3-RB-I	
4"	4.80	4	17"	3/4"	350	6.62"	20	UFR1450-D-4-RB-I	
6"	6.90	6	17"	3/4"	350	8.62"	29	UFR1450-D-6-RB-I	
8"	9.05	6	17"	3/4"	350	10.88"	35	UFR1450-D-8-RB-I	
10"	11.10	8	24"	3/4"	350	13.12"	56	UFR1450-D-10-RB-I	
12"	13.20	8	24"	3/4"	350	15.38"	62	UFR1450-D-12-RB-I	
14"	15.30	10	24"	3/4"	350	17.88"	90	UFR1450-D-14-RB-I	
16"	17.40	12	24"	3/4"	350	20.12"	113	UFR1450-D-16-RB-I	
18"	19.50	12	24"	3/4"	250	22.38"	132	UFR1450-D-18-RB-I	
20"	21.60	14	24"	3/4"	250	24.62"	160	UFR1450-D-20-RB-I	
24"	25.80	16	24"	3/4"	250	29.12"	181	UFR1450-D-24-RB-I	
30"	32.00	10	24"	1"	250	35.80"	341	* UFR1450-D-30-RB-I	
36"	38.30	12	24"	1"	250	42.60"	430	* UFR1450-D-36-RB-I	
42"	44.50	28	52"	1-1/4"	250	49.25"	1350	UFR1450-D-42-RB-I	
48"	50.80	32	52"	1-1/4"	250	56.125"	1570	UFR1450-D-48-RB-I	

\* Backup ring is painted steel for 30" and 36"

\*\* Connecting rods WILL NOT CLEAR a pipe bell with a maximum diameter larger than the listed measurement.

#### FEATURES

- Back-up ring: Ductile iron per ASTM A536 grade 65-45-12 or carbon steel per ASTM A36
- Wedge activating screw: Ductile iron per ASTM A536 grade 65-45-12
- Gland: Ductile iron per ASTM A536 grade 65-45-12
- Wedge: Ductile iron per ASTM A536 heat treated to hardness of 370 BHN minimum
- Restraining rods & nuts: High strength, low alloy steel per ANSI/AWWA C111/A21.11 or high strength steel per ASTM A193, grade B7, blue fluorocarbon coated
- Coating: E-coat epoxy
- New installations only

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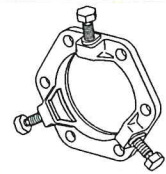
01/30/18

Submitted By:



# SUBMITTAL INFORMATION

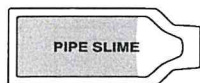
## Uni-Flange® Restraint - (UFR1400-DAP-x-RB-I style)



### WEDGE ACTION SERIES 1400-D RESTRAINT GLAND FOR DUCTILE IRON PIPE WITH BLUE FLUOROCARBON-COATED ACCESSORIES

Gland body is of high strength ductile iron per ASTM A536, Grade 65-45-12. Compatible with all mechanical joints conforming to ANSI/AWWA C111/A21.11.

Ductile iron wedge actuating screw, with the Auto-Tork break-away head design, ensures proper torque during installation.



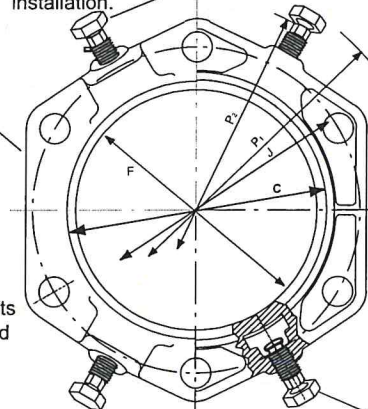
Pipe Lube



High strength low alloy T-bolts and nuts AWWA C111 blue fluorocarbon coated

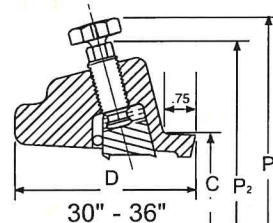


Mechanical joint gasket AWWA C111

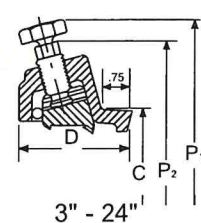


Front

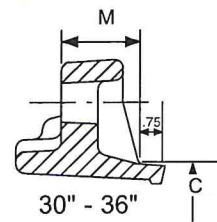
Back



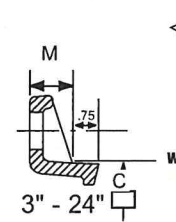
30" - 36"



3" - 24"



30" - 36"



3" - 24"

Wedges are ductile iron and heat treated to a hardness of 370 BHN minimum.



NOM. PIPE SIZE	O.D.	CATALOG NUMBER	PRESSURE RATING (PSI)	NO. OF WEDGES	APPROX. WEIGHT (LBS.)	P1*	P2**	C	D	F	M	J	✓ SUBMITTED ITEM(S)
3	3.96	UFR1400-DAP-3-RB-I	350	2	8.6	11.04	9.06	4.84	2.65	4.06	0.68	6.19	
4	4.80	UFR1400-DAP-4-RB-I	350	2	11.7	11.9	10.0	5.92	2.65	4.90	0.88	7.50	
6	6.90	UFR1400-DAP-6-RB-I	350	3	17.6	14.0	12.1	8.02	2.65	7.00	0.88	9.50	
8	9.05	UFR1400-DAP-8-RB-I	350	4	21.7	16.2	14.3	10.17	2.65	9.15	1.10	11.75	
10	11.10	UFR1400-DAP-10-RB-I	350	6	31.9	18.2	16.3	12.22	2.75	11.20	1.10	14.00	
12	13.20	UFR1400-DAP-12-RB-I	350	8	41.5	20.3	18.4	14.32	2.75	13.30	1.10	16.25	
14	15.30	UFR1400-DAP-14-RB-I	350	10	57.0	22.9	20.9	16.40	3.00	15.50	1.50	18.75	
16	17.40	UFR1400-DAP-16-RB-I	350	12	64.0	25.0	23.0	18.50	3.00	17.60	1.56	21.00	
18	19.50	UFR1400-DAP-18-RB-I	250	12	81.0	28.1	25.8	20.60	3.05	19.70	1.65	23.25	
20	21.60	UFR1400-DAP-20-RB-I	250	14	90.0	30.2	27.9	22.70	3.10	21.82	1.70	25.50	
24	25.80	UFR1400-DAP-24-RB-I	250	16	107.0	34.4	32.1	26.90	3.20	26.04	1.85	30.00	
30	32.00	UFR1400-DAP-30-RB-I	250	20	264.0	40.6	38.6	33.29	4.30	32.29	2.25	36.88	
36	38.30	UFR1400-DAP-36-RB-I	250	24	318.0	46.9	44.9	39.59	4.50	38.62	2.25	43.75	

\* Maximum O.D. of gland on pipe before break-away heads have been removed (as received).

\*\* Maximum O.D. of gland on pipe after wedges have been activated and break-away heads have been removed.

### FEATURES

- Eliminates the need of costly and time consuming concrete thrust blocks and corrosion susceptible steel tie rods
- "Auto-Tork" wedge actuating screws assure proper installation
- Wedges are contoured to fit the pipe
- Set of high strength, low alloy T-Bolts and nuts (AWWA C111) with blue fluorocarbon coating
- Mechanical joint gasket (AWWA C111) 3"-24" sizes, Uni-Seal gasket 30" and 36" sizes
- Gland, screws and wedges are black e-coated
- Imported ductile iron castings
- Assembled, inspected and packaged in the U.S.A.
- FM Approved (4"-12") and UL Listed (4"- 48")

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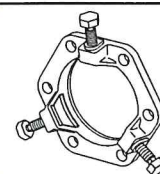
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06/27/18

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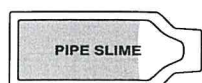
## Uni-Flange® Restraint - (UFR1400-DAP-x-RB-I style)



### WEDGE ACTION SERIES 1400-D RESTRAINT GLAND FOR DUCTILE IRON PIPE WITH BLUE FLUOROCARBON-COATED ACCESSORIES

Gland body is of high strength ductile iron per ASTM A536, Grade 65-45-12. Compatible with all mechanical joints conforming to ANSI/AWWA C111/A21.11.

Ductile iron wedge actuating screw, with the Auto-Tork break-away head design, ensures proper torque during installation.



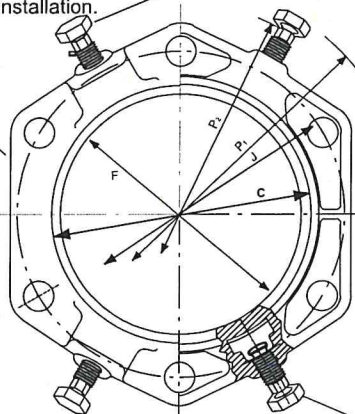
Pipe Lube



High strength low alloy T-bolts and nuts AWWA C111 blue fluorocarbon coated

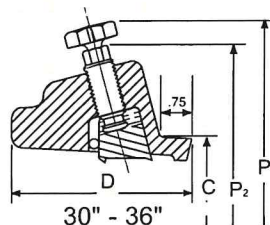


Mechanical joint gasket AWWA C111

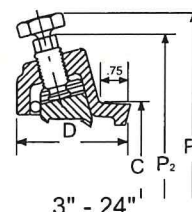


Front

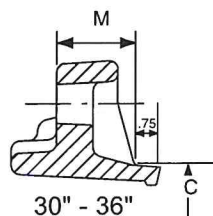
Back



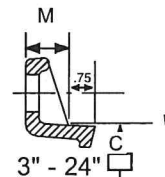
30" - 36"



3" - 24"



30" - 36"



3" - 24"

Wedges are ductile iron and heat treated to a hardness of 370 BHN minimum.



NOM. PIPE SIZE	O.D.	CATALOG NUMBER	PRESSURE RATING (PSI)	No. OF WEDGES	APPROX. WEIGHT (LBS.)	P1*	P2**	C	D	F	M	J	✓ SUBMITTED ITEM(S)
3	3.96	UFR1400-DAP-3-RB-I	350	2	8.6	11.04	9.06	4.84	2.65	4.06	0.68	6.19	
4	4.80	UFR1400-DAP-4-RB-I	350	2	11.7	11.9	10.0	5.92	2.65	4.90	0.88	7.50	
6	6.90	UFR1400-DAP-6-RB-I	350	3	17.6	14.0	12.1	8.02	2.65	7.00	0.88	9.50	
8	9.05	UFR1400-DAP-8-RB-I	350	4	21.7	16.2	14.3	10.17	2.65	9.15	1.10	11.75	
10	11.10	UFR1400-DAP-10-RB-I	350	6	31.9	18.2	16.3	12.22	2.75	11.20	1.10	14.00	
12	13.20	UFR1400-DAP-12-RB-I	350	8	41.5	20.3	18.4	14.32	2.75	13.30	1.10	16.25	
14	15.30	UFR1400-DAP-14-RB-I	350	10	57.0	22.9	20.9	16.40	3.00	15.50	1.50	18.75	
16	17.40	UFR1400-DAP-16-RB-I	350	12	64.0	25.0	23.0	18.50	3.00	17.60	1.56	21.00	
18	19.50	UFR1400-DAP-18-RB-I	250	12	81.0	28.1	25.8	20.60	3.05	19.70	1.65	23.25	
20	21.60	UFR1400-DAP-20-RB-I	250	14	90.0	30.2	27.9	22.70	3.10	21.82	1.70	25.50	
24	25.80	UFR1400-DAP-24-RB-I	250	16	107.0	34.4	32.1	26.90	3.20	26.04	1.85	30.00	
30	32.00	UFR1400-DAP-30-RB-I	250	20	264.0	40.6	38.6	33.29	4.30	32.29	2.25	36.88	
36	38.30	UFR1400-DAP-36-RB-I	250	24	318.0	46.9	44.9	39.59	4.50	38.62	2.25	43.75	

\* Maximum O.D. of gland on pipe before break-away heads have been removed (as received).

\*\* Maximum O.D. of gland on pipe after wedges have been activated and break-away heads have been removed.

### FEATURES

- Eliminates the need of costly and time consuming concrete thrust blocks and corrosion susceptible steel tie rods
- "Auto-Tork" wedge actuating screws assure proper installation
- Wedges are contoured to fit the pipe
- Set of high strength, low alloy T-Bolts and nuts (AWWA C111) with blue fluorocarbon coating
- Mechanical joint gasket (AWWA C111) 3"-24" sizes, Uni-Seal gasket 30" and 36" sizes
- Gland, screws and wedges are black e-coated
- Imported ductile iron castings
- Assembled, inspected and packaged in the U.S.A.
- FM Approved (4"-12") and UL Listed (4"- 48")

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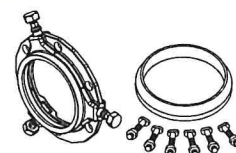
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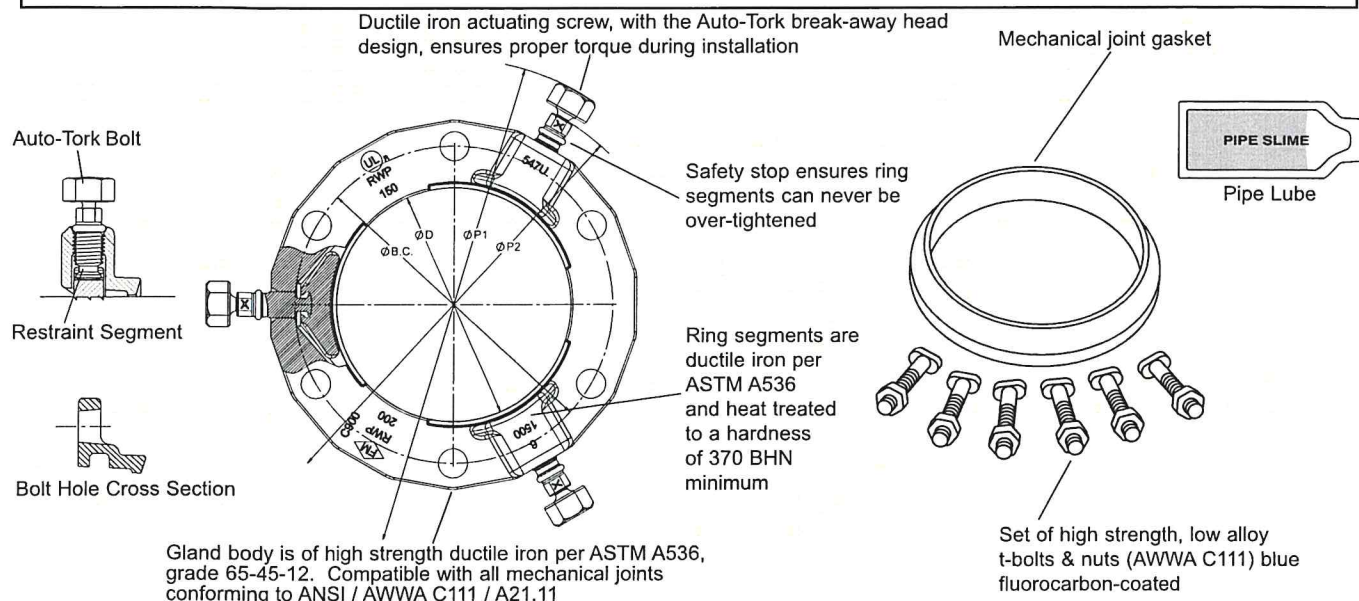


# SUBMITTAL INFORMATION

## Mechanical Joint Restraint (UFR1500-CAP-x-RB-I style)



### 4" - 12" SERIES UFR1500 MECHANICAL JOINT RESTRAINT FOR C900, C909 PVC OR HDPE PACKAGED WITH FLUOROCARBON-COATED ACCESSORIES



NOM PIPE SIZE	PIPE O.D.	CATALOG NUMBER	No. OF SEGMENTS	APPROX. WEIGHT (LBS)	P1*	P2**	BC	D	PRESSURE RATING				✓SUBMITTED ITEM(S)
						C900 C909			C900			C909	
									DR-14	DR-18	DR-25	PC-235	
4"	4.80	UFR1500-CAP-4-RB-I	2	12.5	13.00"	9.40"	7.50"	4.90"	305	235	165	235	
6"	6.90	UFR1500-CAP-6-RB-I	3	18.0	15.13"	11.60"	9.50"	7.00"	305	235	165	235	
8"	9.05	UFR1500-CAP-8-RB-I	4	23.0	17.25"	13.75"	11.75"	9.15"	305	235	165	235	
10"	11.10	UFR1500-CAP-10-RB-I	8	33.0	19.38"	16.00"	14.00"	11.20"	305	235	165	235	
12"	13.20	UFR1500-CAP-12-RB-I	8	38.0	21.50"	18.05"	16.25"	13.30"	305	235	165	235	

\*Maximum O.D. of gland on pipe before Auto-Tork heads are removed (as shipped)

\*\*Maximum O.D. of gland on pipe after Auto-Tork heads are removed

**Note:** Ford recommends the use of a properly sized insert stiffener when using UFR1500 on HDPE

## FEATURES

- Fits C900, C909 and HDPE
- Full circle contact and support of the pipe wall.
- "Auto-Tork" actuating screws with heads specially designed to twist off at the correct installation torque, leaving a hex head in case future system maintenance or removal is required
- Set of high strength, low alloy t-bolts and nuts with blue fluorocarbon-coating (AWWA C111)
- Mechanical joint gasket (AWWA C111)
- Series 1500 eliminates the need to pour expensive and time consuming concrete thrust blocks
- Restraining segments are mechanically retained in pockets
- Gland, screws and segments are black epoxy coated using the e-coat process
- Gland colored red for identification purposes

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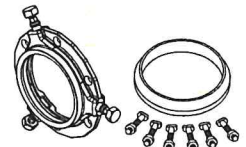


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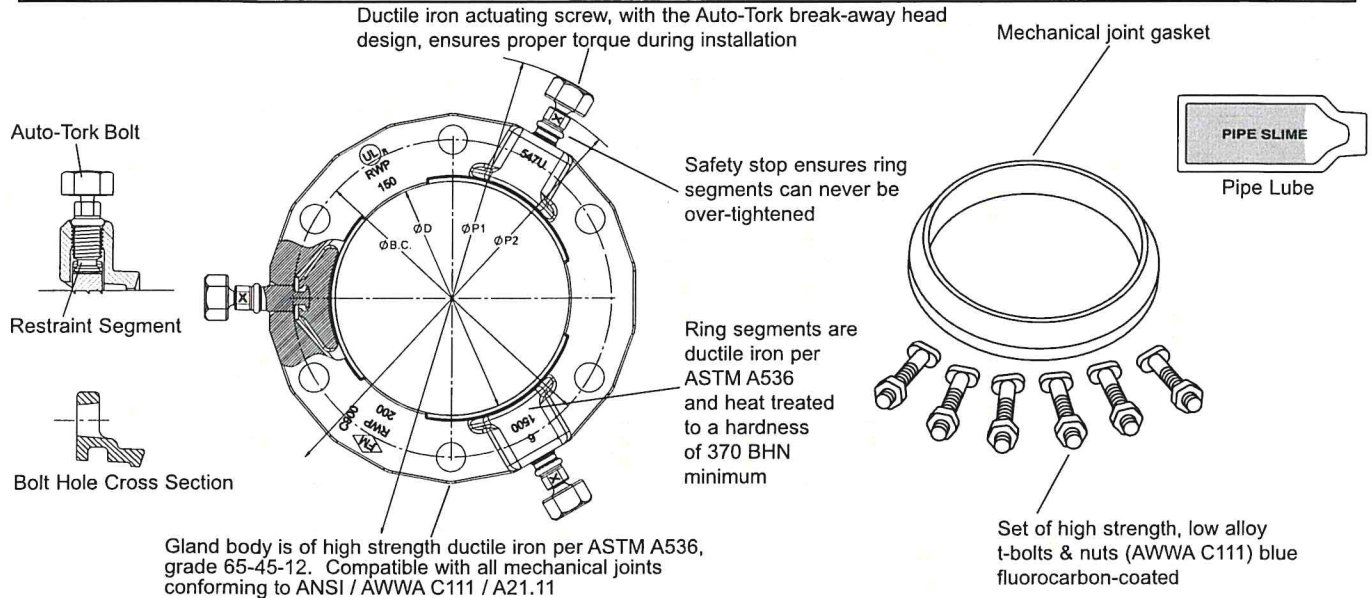
Submitted By:

# SUBMITTAL INFORMATION

## Mechanical Joint Restraint (UFR1500-CAP-x-RB-I style)



### 4" - 12" SERIES UFR1500 MECHANICAL JOINT RESTRAINT FOR C900, C909 PVC OR HDPE PACKAGED WITH FLUOROCARBON-COATED ACCESSORIES



NOM PIPE SIZE	PIPE O.D.	CATALOG NUMBER	No. OF SEGMENTS	APPROX. WEIGHT (LBS)	P1*	P2**	BC	D	PRESSURE RATING				✓SUBMITTED ITEM(S)
						C900 C909			C900			C909	
									DR-14	DR-18	DR-25	PC-235	
4"	4.80	UFR1500-CAP-4-RB-I	2	12.5	13.00"	9.40"	7.50"	4.90"	305	235	165	235	
6"	6.90	UFR1500-CAP-6-RB-I	3	18.0	15.13"	11.60"	9.50"	7.00"	305	235	165	235	
8"	9.05	UFR1500-CAP-8-RB-I	4	23.0	17.25"	13.75"	11.75"	9.15"	305	235	165	235	
10"	11.10	UFR1500-CAP-10-RB-I	8	33.0	19.38"	16.00"	14.00"	11.20"	305	235	165	235	
12"	13.20	UFR1500-CAP-12-RB-I	8	38.0	21.50"	18.05"	16.25"	13.30"	305	235	165	235	

\*Maximum O.D. of gland on pipe before Auto-Tork heads are removed (as shipped)

\*\*Maximum O.D. of gland on pipe after Auto-Tork heads are removed

**Note:** Ford recommends the use of a properly sized insert stiffener when using UFR1500 on HDPE

### FEATURES

- Fits C900, C909 and HDPE
- Full circle contact and support of the pipe wall.
- "Auto-Tork" actuating screws with heads specially designed to twist off at the correct installation torque, leaving a hex head in case future system maintenance or removal is required
- Set of high strength, low alloy t-bolts and nuts with blue fluorocarbon-coating (AWWA C111)
- Mechanical joint gasket (AWWA C111)
- Series 1500 eliminates the need to pour expensive and time consuming concrete thrust blocks
- Restraining segments are mechanically retained in pockets
- Gland, screws and segments are black epoxy coated using the e-coat process
- Gland colored red for identification purposes

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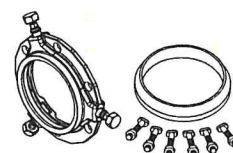
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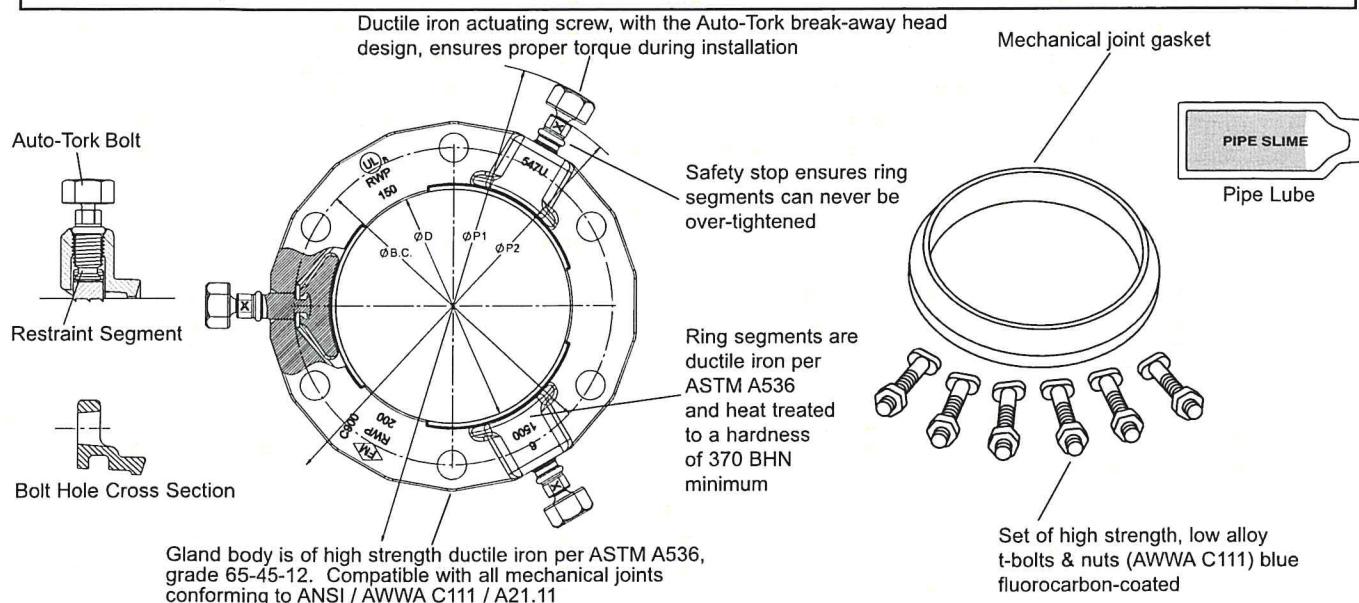


# SUBMITTAL INFORMATION

## Mechanical Joint Restraint (UFR1500-CAP-x-RB-I style)



### 4" - 12" SERIES UFR1500 MECHANICAL JOINT RESTRAINT FOR C900, C909 PVC OR HDPE PACKAGED WITH FLUOROCARBON-COATED ACCESSORIES



NOM PIPE SIZE	PIPE O.D.	CATALOG NUMBER	No. OF SEGMENTS	APPROX. WEIGHT (LBS)	P1*	P2**	BC	D	PRESSURE RATING				✓SUBMITTED ITEM(S)
						C900 C909			C900			C909	
									DR-14	DR-18	DR-25	PC-235	
4"	4.80	UFR1500-CAP-4-RB-I	2	12.5	13.00"	9.40"	7.50"	4.90"	305	235	165	235	
6"	6.90	UFR1500-CAP-6-RB-I	3	18.0	15.13"	11.60"	9.50"	7.00"	305	235	165	235	
8"	9.05	UFR1500-CAP-8-RB-I	4	23.0	17.25"	13.75"	11.75"	9.15"	305	235	165	235	
10"	11.10	UFR1500-CAP-10-RB-I	8	33.0	19.38"	16.00"	14.00"	11.20"	305	235	165	235	
12"	13.20	UFR1500-CAP-12-RB-I	8	38.0	21.50"	18.05"	16.25"	13.30"	305	235	165	235	

\*Maximum O.D. of gland on pipe before Auto-Tork heads are removed (as shipped)

\*\*Maximum O.D. of gland on pipe after Auto-Tork heads are removed

Note: Ford recommends the use of a properly sized insert stiffener when using UFR1500 on HDPE

## FEATURES

- Fits C900, C909 and HDPE
- Full circle contact and support of the pipe wall.
- "Auto-Tork" actuating screws with heads specially designed to twist off at the correct installation torque, leaving a hex head in case future system maintenance or removal is required
- Set of high strength, low alloy t-bolts and nuts with blue fluorocarbon-coating (AWWA C111)
- Mechanical joint gasket (AWWA C111)
- Series 1500 eliminates the need to pour expensive and time consuming concrete thrust blocks
- Restraining segments are mechanically retained in pockets
- Gland, screws and segments are black epoxy coated using the e-coat process
- Gland colored red for identification purposes

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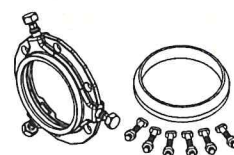


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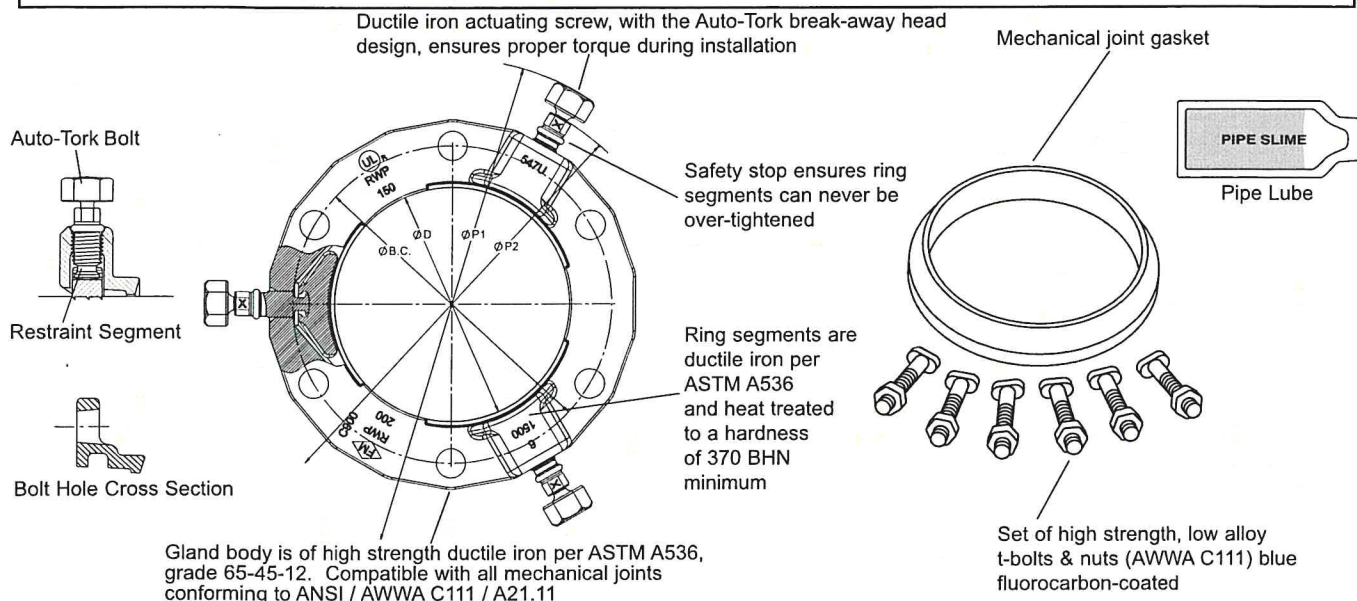
Submitted By:

# SUBMITTAL INFORMATION

## Mechanical Joint Restraint (UFR1500-CAP-x-RB-I style)



### 4" - 12" SERIES UFR1500 MECHANICAL JOINT RESTRAINT FOR C900, C909 PVC OR HDPE PACKAGED WITH FLUOROCARBON-COATED ACCESSORIES



NOM PIPE SIZE	PIPE O.D.	CATALOG NUMBER	No. OF SEGMENTS	APPROX. WEIGHT (LBS)	P1*	P2**	BC	D	PRESSURE RATING				✓SUBMITTED ITEM(S)
						C900 C909			C900			C909	
									DR-14	DR-18	DR-25	PC-235	
4"	4.80	UFR1500-CAP-4-RB-I	2	12.5	13.00"	9.40"	7.50"	4.90"	305	235	165	235	
6"	6.90	UFR1500-CAP-6-RB-I	3	18.0	15.13"	11.60"	9.50"	7.00"	305	235	165	235	
8"	9.05	UFR1500-CAP-8-RB-I	4	23.0	17.25"	13.75"	11.75"	9.15"	305	235	165	235	
10"	11.10	UFR1500-CAP-10-RB-I	8	33.0	19.38"	16.00"	14.00"	11.20"	305	235	165	235	
12"	13.20	UFR1500-CAP-12-RB-I	8	38.0	21.50"	18.05"	16.25"	13.30"	305	235	165	235	

\*Maximum O.D. of gland on pipe before Auto-Tork heads are removed (as shipped)

\*\*Maximum O.D. of gland on pipe after Auto-Tork heads are removed

**Note:** Ford recommends the use of a properly sized insert stiffener when using UFR1500 on HDPE

### FEATURES

- Fits C900, C909 and HDPE
- Full circle contact and support of the pipe wall.
- "Auto-Tork" actuating screws with heads specially designed to twist off at the correct installation torque, leaving a hex head in case future system maintenance or removal is required
- Set of high strength, low alloy t-bolts and nuts with blue fluorocarbon-coating (AWWA C111)
- Mechanical joint gasket (AWWA C111)
- Series 1500 eliminates the need to pour expensive and time consuming concrete thrust blocks
- Restraining segments are mechanically retained in pockets
- Gland, screws and segments are black epoxy coated using the e-coat process
- Gland colored red for identification purposes

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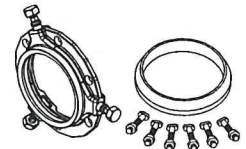
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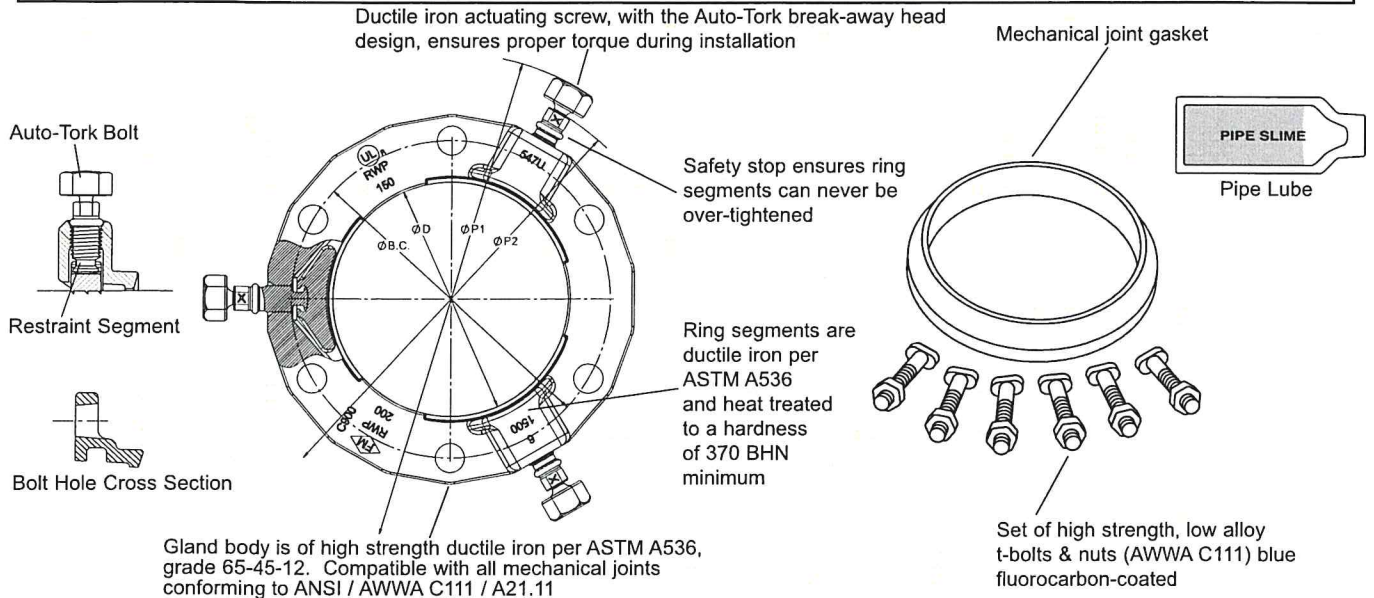


# SUBMITTAL INFORMATION

## Mechanical Joint Restraint (UFR1500-CAP-x-RB-I style)



### 4" - 12" SERIES UFR1500 MECHANICAL JOINT RESTRAINT FOR C900, C909 PVC OR HDPE PACKAGED WITH FLUOROCARBON-COATED ACCESSORIES



NOM PIPE SIZE	PIPE O.D.	CATALOG NUMBER	No. OF SEGMENTS	APPROX. WEIGHT (LBS)	P1*	P2**	BC	D	PRESSURE RATING				✓SUBMITTED ITEM(S)
						C900 C909			C900			C909	
									DR-14	DR-18	DR-25	PC-235	
4"	4.80	UFR1500-CAP-4-RB-I	2	12.5	13.00"	9.40"	7.50"	4.90"	305	235	165	235	
6"	6.90	UFR1500-CAP-6-RB-I	3	18.0	15.13"	11.60"	9.50"	7.00"	305	235	165	235	
8"	9.05	UFR1500-CAP-8-RB-I	4	23.0	17.25"	13.75"	11.75"	9.15"	305	235	165	235	
10"	11.10	UFR1500-CAP-10-RB-I	8	33.0	19.38"	16.00"	14.00"	11.20"	305	235	165	235	
12"	13.20	UFR1500-CAP-12-RB-I	8	38.0	21.50"	18.05"	16.25"	13.30"	305	235	165	235	

\*Maximum O.D. of gland on pipe before Auto-Tork heads are removed (as shipped)

\*\*Maximum O.D. of gland on pipe after Auto-Tork heads are removed

**Note:** Ford recommends the use of a properly sized insert stiffener when using UFR1500 on HDPE

### FEATURES

- Fits C900, C909 and HDPE
- Full circle contact and support of the pipe wall.
- "Auto-Tork" actuating screws with heads specially designed to twist off at the correct installation torque, leaving a hex head in case future system maintenance or removal is required
- Set of high strength, low alloy t-bolts and nuts with blue fluorocarbon-coating (AWWA C111)
- Mechanical joint gasket (AWWA C111)
- Series 1500 eliminates the need to pour expensive and time consuming concrete thrust blocks
- Restraining segments are mechanically retained in pockets
- Gland, screws and segments are black epoxy coated using the e-coat process
- Gland colored red for identification purposes

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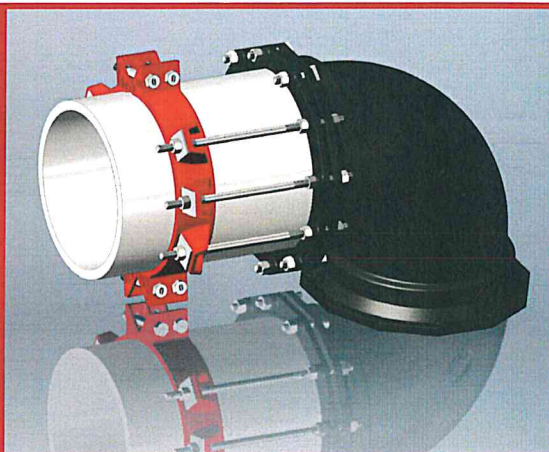
06/27/18

Submitted By:

PTPDF JOINT RESTRAINT FOR PVC PIPE TO DI FITTINGS

## The EZ GRIP®

Pipe-To-Fitting Joint Restraint is a proven design, offering an efficient, reliable, and inexpensive method of restraining mechanical joint and push-on pipe fittings (4"-12")\*\* by utilizing a series of rigid machined gripping serrations that grabs, holds, and secures the PVC pipe to the fitting



## ADVANTAGES, BENEFITS, FEATURES

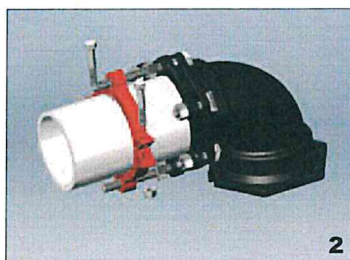
- The PTPDF Joint Restraint eliminates the need of timely thrust blocks.
- The PTPDF Joint Restraint performs optimally with AWWA C900 (PVC), C905 (PVC), C906 (HDPE), C909 (PVC), or ASTM D2241 IPS PVC Pipe.
- Composed of high strength Ductile Iron in compliance with the ASTM A536 Standard, Grade 65-45-12
- T-Bolts, Rods, and Hex nuts are manufactured from high-strength low-alloy (HSLA) steel as per ANSI/AWWA C111/A21.11.
- Machined to exact tolerances with a minimum safety factor of 2:1 \*\*
- Easily maintains a working water pressure equal to that of the PVC pipe on which it is installed
- The PTPDF Joint Restraint is designed and manufactured to be disassembled, reinstalled, and reusable.
- The PTPDF Joint Restraint can be installed on new or existing water systems.
- The PTPDF Joint Restraint allows full joint deflection and maintains the seal while under pressure, and while subjected to ground movements.
- The internal serrations offer 360° circumferential contact with the pipe wall and increase the grip as the hydrostatic pressure increases while concurrently offering support of the pipe wall.
- With the split castings, the PTPDF Joint Restraint can conveniently be installed in or outside the trench.
- The PTPDF Joint Restraint for Ductile Iron Fittings is provided with a coating that is compatible with most field applied coatings. The standard color of the PTPDF Joint Restraint is red.
- Offered in sizes from 4" up to 42"

Available:  Import

\*\*Harness pressure rating is reduced if not all connecting bolts/rods are used.



#### Installation Procedure: 4"-12"



Some ductile iron fittings will not allow the longer T-Head Bolts to be installed in the "crotch" of the fitting. Under these conditions simply orient the restrainer so that the longer bolts can be used.

**1** Insert the spigot end of the pipe into the mechanical joint (MJ) bell. Next, insert one of the T-bolts through one of the bolt holes and mark a line approximately 1 inch from the far end of the bolt. For Push-On fittings, insert one of the long threaded rod through the top tab of the fitting and mark a line approximately 1 inch from the far end of the rod.

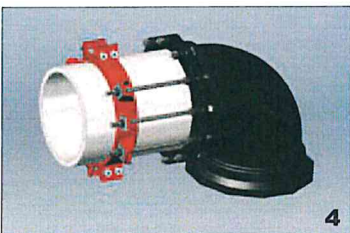
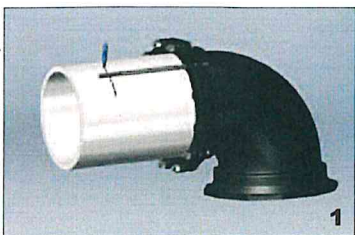
**2** Assemble the MJ joint using the gasket, gland, and T-bolts to AWWA standards omitting the T-bolts corresponding to the ears on the restrainer. Assemble the restrainer on the pipe (as shown) so that the marked line on the pipe is even with the far side of the restrainer. Next, align the restraint holes by using one of the provided long T-bolts. Then, tighten restrainer clamping bolts to the recommended torque (see table below). For Push-on joint fittings, assemble the joint as per the manufacturers instructions. Assemble the restrainer on the pipe as described above. Align the restrainer so that the restraint holes line up with the tabs on the push-on joint fitting.

**3** Insert one of the long T-bolts and assemble one nut each between the gland and the restrainer (as shown). Repeat the same procedure for the remaining long T-bolts. T-bolts should be tightened as per AWWA standards. For Push-on joint fittings, insert the threaded rod through the restrainer ring and into the tab on the fitting. Thread one nut onto the fitting side of the assembly. Thread a nut onto the threaded rod against the far side of the restrainer. Repeat the same procedure for the remaining threaded rods.

**4** Snug tighten the remaining nuts behind the restrainer ears against the flat surface in a way that spigot end is secured into the MJ bell.

**NOTE:** Do not over-tighten the restrainer nuts, hand tight the nuts plus about one turn with a wrench.

#### Installation Procedure: 14"-42"



**1** Insert the spigot end of the pipe into the mechanical joint (MJ) bell. Next, insert one of the long threaded rods through one of the open bolt holes and mark a line approximately 2 inches from the far end of the rod (towards the mechanical joint).

**2** Assemble the MJ joint using the gasket, gland, and T-bolts to AWWA standards omitting the long threaded rods corresponding to the ears on the restrainer. Assemble the restrainer on the pipe (as shown) so that the marked line on the pipe is even with the far side of the restrainer and the flat side of the ears is facing away from the fitting. Next, align the restraint holes by using one of the provided restraining rods. Then, tighten restrainer clamping bolts to the recommended torque (see table below).

**3** Assemble one nut behind the fitting bell, one nut against the gland. Repeat the same procedure for the remaining long threaded rods and tighten as per AWWA standards (this completes the MJ gasket assembly).

**4** Assemble one nut with washer on the flat side of each restrainer ear (as shown) and tighten until snug.

**NOTE:** Do not over-tighten the restrainer nuts, hand tight the nuts plus about one turn with a wrench.

T-BOLT TORQUE (AS PER AWWA C600)		
PIPE SIZE (IN)	BOLT SIZE (IN)	RANGE OF TORQUE (FT/LBS)
4-24	3/4	75-90
30-36	1	100-120
42	1 1/4	120-150

RECOMMENDED TORQUE (CLAMPING BOLTS)	
PIPE SIZE (IN)	RANGE OF TORQUE (FT/LBS)
4-12	90-110
14-16	150-200
18	175-225
20	200-250
24-36	225-275
42	300-350



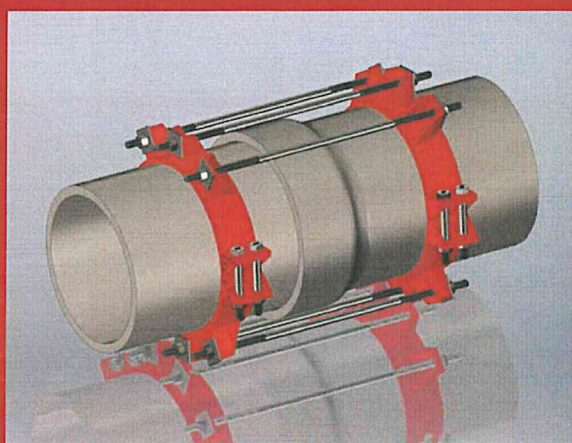
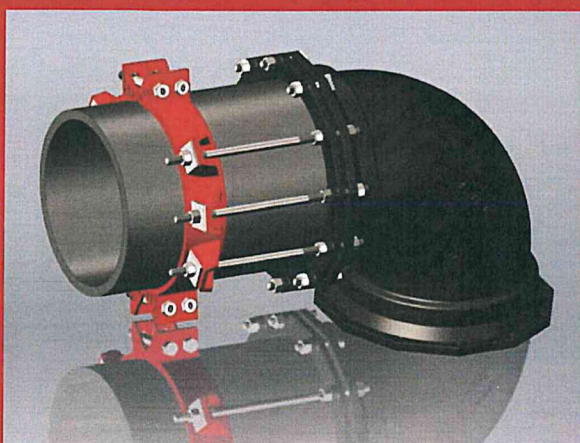


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Quality Manufacturers Since 1960

**EZ GRIP™**  
**PTP SERIES**

#### PIPE TO PIPE JOINT RESTRAINT FOR DI PIPE AND FITTINGS

DI Pipe-To-Pipe and DI Pipe-To-Fitting Joint Restraint is a proven design, offering an efficient, reliable, and inexpensive method of restraining mechanical joints and push-on joints by utilizing a series of rigid machined gripping serrations that grab, hold, and secure the pipe to the pipe / fitting.



#### ADVANTAGES, BENEFITS, FEATURES

- These Joint Restraints eliminate the need of timely thrust blocks.
- Performs optimally with AWWA C151 pipe, and AWWA C110 or AWWA C153 Fittings
- Composed of high strength Ductile Iron in compliance with the ASTM A536 Standard, Grade 65-45-12
- T-Bolts, Rods, and Hex nuts are manufactured from high-strength low-alloy (HSLA) steel as per ANSI/AWWA C111/A21.11.
- Machined to exact tolerances with a minimum safety factor of 2:1
- Designed and manufactured to be disassembled, reinstalled, and reusable
- Can be installed on new or existing water systems
- Maintains the seal while under pressure, and while subjected to ground movements
- The internal serrations offer 360° circumferential contact with the pipe wall and increase the grip as the hydrostatic pressure increases whilst offering support of the pipe wall.
- Can conveniently be installed in or outside the trench.
- Provided with a coating that is compatible with most field applied coatings. The standard color is red.
- Offered in sizes from 4" up to 16"

Available:  Import

**Toll Free 877-921-6111**

**[www.sipindustries.com](http://www.sipindustries.com)**



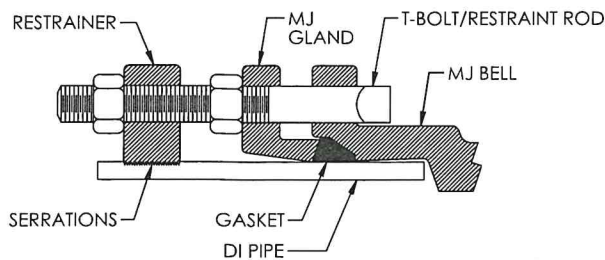


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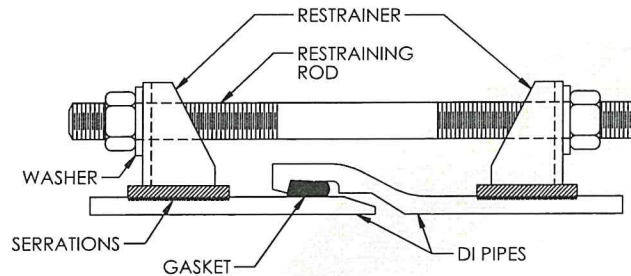
**EZ GRIP™**  
**PTP SERIES**

## PIPE TO PIPE JOINT RESTRAINT FOR DI PIPE AND FITTINGS

### Technical Data



SERIES: PTPDF-DI



SERIES: PTPDI

T-BOLT TORQUE (AS PER AWWA C600)		
PIPE SIZE (IN)	BOLT SIZE (IN)	RANGE OF TORQUE (FT/LBS)
4-16	3/4	75-90

RECOMMENDED TORQUE (CLAMPING BOLTS)		
PIPE SIZE (IN)	RANGE OF TORQUE (FT/LBS)	PRESSURE RATING (PSI) MAX
4-8	110-120	250
10-12	110-120	150
14-16	200-210	100

### SAMPLE SPECIFICATIONS

The PTPVC-DI and PTPDF-DI joint restraining mechanisms shall be designed and manufactured as two identical halves providing for a pipe joint and performing as a joint restraint. The PTPVC-DI and PTPDF-DI joint restraints shall be compatible with AWWA C151 DI Pipe and AWWA C110 and C153 Fittings and restraint shall contain a series of rigid integrally machined serrations that grip the outside wall of the DI Pipe. The PTPVC-DI and PTPDF-DI joint restraints shall have a 2:1 safety factor over the pressure rating.

There shall be no additional tools required for installation other than the tools required to install standard sizes of hex nuts from 5/8" - 7/8". All hex heads, bolts and rods shall be designed to tighten clockwise. All hex heads, bolts and rods shall be manufactured to allow for disassembly and re-installation of the restraint.

The gland halves shall be manufactured of high strength ductile iron in accordance with the ASTM A536 Standard, Grade 65-45-12. Bolts, rods, and hex nuts shall be manufactured from high-strength low-alloy (HSLA) steel as per ANSI/AWWA C111/A21.11.

The restraining gland shall comply with all applicable dimensions of ANSI/AWWA C151/A21.51, ANSI/AWWA C110/A21.10, and ANSI/AWWA C153/A21.53 and shall be compatible with all DI pipe and DI fittings of the standards.

The restraint devices for Ductile Iron Pipe to Ductile Iron Pipe / Fitting shall be SIP Industries series PTPVC-DI, PTPDF-DI, or equal.

Available: Import

#### SIP Corporate

8876 Guft Frwy Suite 500  
Fontana, CA 92335

#### SIP West

8333 Almeria Avenue  
Fontana, CA 92335

#### SIP Central

2900 Patio Drive  
Houston, TX 77017

#### SIP East

600 Rayloc Drive  
Atlanta, GA 30336





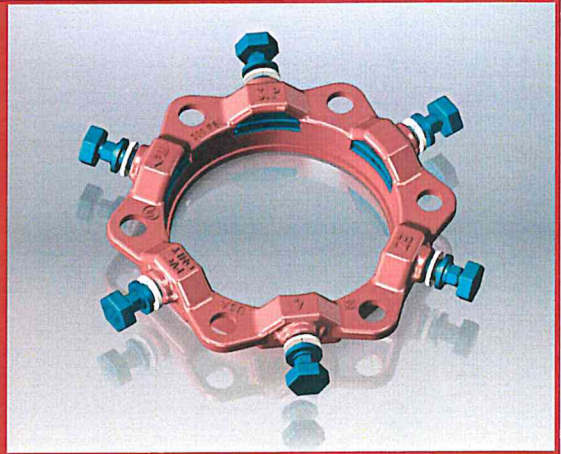
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**EZ GRIP®**

JOINT RESTRAINT FOR PVC PIPE

## The EZ GRIP®

Joint Restraint is a proven design, offering an efficient, reliable, and inexpensive method of restraining PVC Pipe with Mechanical Joint Pipe or appurtenances, by integrating a series of gripping wedges into a Mechanical Joint follower gland.



### ADVANTAGES, BENEFITS, FEATURES

- The EZ GRIP® Joint Restraint eliminates clamps, tie rods, cables, and thrust blocks.
- The EZ GRIP® Joint Restraint performs optimally with all mechanical joint sockets of the ANSI/AWWA C111/A21.11, C110/A21.10, and C153/121.53 Standards and may be used with 4" - 12" AWWA C900 (PVC), C905 (PVC), C906 (HDPE)\*, C909 (PVC) or 3"-12" ASTM D2241 IPS PVC Pipe.
- The EZ GRIP® Joint Restraint will allow joint deflection, and maintain the seal and restraint while under pressure, and while subjected to ground movements
- The EZ GRIP® Joint Restraint shall have a pressure rating equal to that of the PVC pipe and shall have a minimum safety factor of at least 2 to 1.
- The contoured wedges provide greater circumferential contact with the pipe wall and increase the grip as the hydrostatic pressure increases.
- The hex head of the actuating screw is the same size as a standard T-bolt nut (1 1/4"), and requires no tool other than the tool required to install a standard Mechanical Joint T-Bolt and Nut.
- The hex head of the torque control screw is designed to shear at a preset limit, assuring proper installation and to prevent damage to the PVC pipe.
- When the actuating screw is rotated in the correct direction (clockwise) the torque control head breaks off, exposing a 5/8" hex head, indicating proper deployment of the wedge.
- After removing the 1-1/4" torque control hex head, a 5/8" hex head remains for multiple disassembly and re-installation, if necessary.
- EZ GRIP® Joint Restraints offers 5° deflection up to sizes 12", 3° on 14"-24", 2° on 30"-36"
- The gland, wedges, and screws are manufactured from high strength Ductile Iron in compliance with the ASTM A536 Standard, Grade 65-45-12.
- The EZ GRIP® Joint Restraint is designed to perform optimally for potable and recycled water, and for wastewater applications.
- The EZ GRIP® Joint Restraint for PVC Pipe is provided with a coating that is compatible with most field applied coatings
- The standard color for the EZ GRIP® for PVC Pipe is red.
- Approved by Factory Mutual (FM) for sizes 4"-12" at 250psi for AWWA C900 Class 305 DR-14 pipe and at 200psi on AWWA C900 Class 235 DR-18 pipe. Listed with Underwriters Laboratories (UL) for sizes 4"-12" at 235psi on AWWA C900 Class 235 DR-18 pipe. Tested and approved for ASTM F1674 standard by UL.



Available: Made in USA (4"-12") Import

\* AWWA C906 HDPE Pressure Pipes up to 12" by using internal pipe stiffeners. Contact SIP for further assistance.

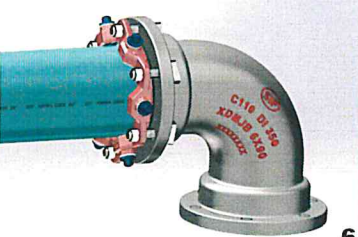
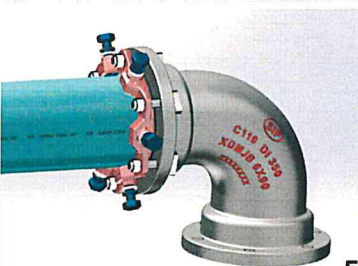
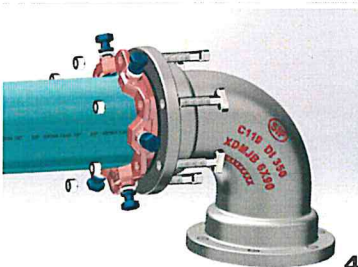
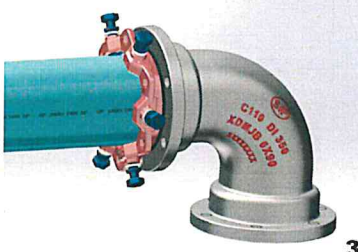
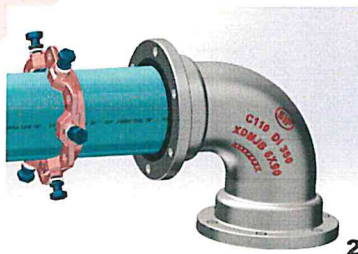
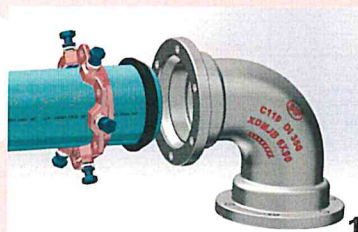
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### Installation Procedure

Installation Procedure for restraining mechanical joint appurtenances on PVC pipe



**1** Establish the type and diameter of the PVC pipe. If the PVC pipe is AWWA C900, C905, or C909 then the spacer/washers on the actuating screws should remain. If the PVC pipe is IPS (Steel OD) then the spacer/washers should be removed and a Transition Gasket is required for proper sealing.

**2** Clean the socket and the plain end. Lubrication and additional cleaning should be provided by brushing both the gasket and the plain end with soapy water or an approved pipe lubrication meeting the requirement of ANSI/AWWA C111/A21.11, just prior to slipping the gasket onto the plain end for joint assembly. Place the gland on the plain end with lip extension toward the plain end, followed by the gasket.

NOTE: In cold weather it is preferable to warm the gasket to facilitate assembly of the joint.

**3** Insert the pipe into the socket and press the gasket firmly and evenly into the gasket recess. Keep the joint straight during assembly.

**4** Push the gland toward the socket and center it around the pipe with the gland lip against the gasket. Insert bolts and hand tighten nuts. Make deflection after joint assembly but before tightening bolts.

**5** Tighten the bolts to the normal range of torque as per AWWA C600 (see table below), while at all times maintaining approximately the same distance between the gland and the face of the flange at all points around the socket. This can be accomplished by partially tightening the bottom bolt first, then top bolt, next the bolts at either side, finally the remaining bolts. Repeat the process until all bolts are within the appropriate range of torque. The use of a torque-indicating wrench will facilitate this procedure. Over-tightening T-Head Bolts can damage the PVC pipe. Do not over-tighten the T-Head Bolts

**6** Tighten the torque control hex heads clockwise until all the wedges are in firm contact with the pipe wall.

Tighten a torque control hex head ½ turn, and then continue tightening each torque control hex head 180° opposite the previously tightened hex head until all torque control hex heads have been twisted off.

If it is necessary to disassemble, a 5/8" hex head is provided on the wedge screws.

For re-installation, first confirm that all wedges are in their sockets, and then follow the installation instructions, using a torque indicating wrench to tighten the 5/8" hex head to 70 ft-lbs for sizes 3"-12", 80 ft-lbs for sizes 14"-24" and to 90 ft-lbs for sizes 30"-36".

#### BREAK-AWAY HEX NUT TORQUE RANGES

SIZE (IN)	RANGE OF TORQUE (FT-LBS)
3 - 12	55 - 75
14 - 24	65 - 85
30 - 36	75 - 95

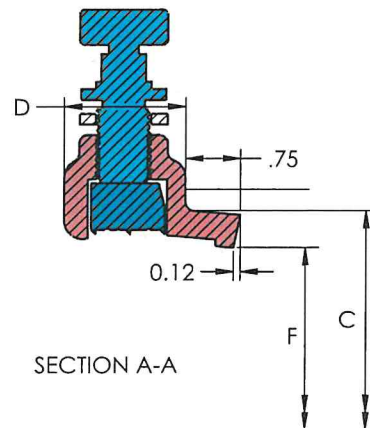
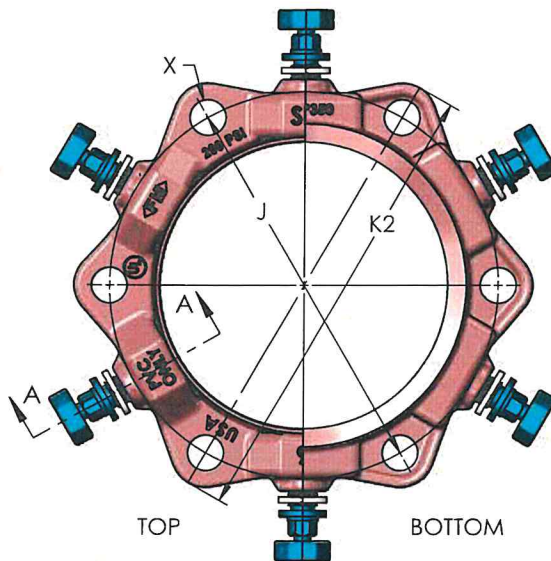
#### RECOMMENDED TORQUE (T-HEAD BOLTS & NUTS)\*

PIPE SIZE (IN)	BOLT SIZE (IN)	RANGE OF TORQUE (FT-LBS)
3	5/8	45 - 60
4 - 24	3/4	75 - 90
30 - 36	1	100 - 120

\*Requirement of AWWA C600



## Technical Data



### EZ-GRIP PVC RESTRAINTS SPECIFICATIONS

NOMINAL PIPE SIZE	SERIES NUMBER	C	D	F	X	J	K2	BOLT QTY	WEDGE QTY	APPROX. WEIGHT (LBS)
3	EZPVCP03	4.84	1.60	4.06	3/4	6.19	7.96	4	4	7.50
4	EZPVCP04 (D or I)	5.92	1.76	4.90	7/8	7.50	9.16	4	4	7.75
6	EZPVCP06 (D or I)	8.02	1.75	7.00	7/8	9.50	11.12	6	6	11.40
8	EZPVCP08 (D or I)	10.17	2.26	9.15	7/8	11.75	13.75	6	6	16.49
10	EZPVCP10 (D or I)	12.22	2.32	11.20	7/8	14.00	15.91	8	8	22.10
12	EZPVCP12 (D or I)	14.32	2.39	13.30	7/8	16.25	18.23	8	8	29.63
14	EZPVCP14	16.40	2.29	15.44	7/8	18.75	20.75	10	10	48.70
16	EZPVCP16	18.50	2.38	17.54	7/8	21.00	23.13	12	12	57.25
18	EZPVCP18	20.60	2.39	19.64	7/8	23.25	25.25	12	12	61.45
20	EZPVCP20	22.70	2.41	21.74	7/8	25.50	27.50	14	14	75.68
24	EZPVCP24	26.90	2.50	25.94	7/8	30.00	32.13	16	16	92.92
30	EZPVCP30	33.29	3.45	32.17	1 1/8	36.88	39.57	20	20	172.40
36	EZPVCP36	39.59	3.70	38.47	1 1/8	43.75	46.34	24	24	218.88

All dimensions are in inches, unless otherwise noted

(D) Made in USA

(I) Import

### STANDARDIZED PRESSURE RATINGS

ANSI/AWWA C900 CI OD		ANSI/AWWA C905 CI OD		ASTM D2241 IPS OD	
DR 14	305 PSI	DR 18	235 PSI	SDR 17	250 PSI
DR 18	235 PSI	DR 21	200 PSI	SDR 21	200 PSI
DR 25	165 PSI	DR 25	165 PSI	SDR 26	160 PSI
		DR 32.5	125 PSI		





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## JOINT RESTRAINT FOR PVC PIPE

### SAMPLE SPECIFICATIONS

The mechanical joint restraining mechanism and the follower gland shall be designed and manufactured as one integral device providing for a joint seal and performing as a joint restraint. The mechanical joint restraint shall be compatible with AWWA C900, C905, C906, C909 and ASTM D2241 PVC Pipe and shall be achieved by a series of individually activated, contoured wedges gripping the outside wall of the PVC Pipe. The mechanical joint restraint shall have the same pressure rating as the pipe with a 2:1 safety factor. The grip of the wedges shall increase as the hydrostatic pressure increases.

There shall be no additional tool required for installation other than the tool required to install a standard Mechanical Joint T-Bolt and 1-1/4" Nut. The hex head of the actuating screw shall be designed to break off at a preset torque, and only by tightening clockwise. After the removal of the 1-1/4" torque control hex head, a 5/8" hex head on the actuating screw shall remain, to allow for the disassembly and re-installation of the gland and restraint, if necessary.

The gland, screws, and wedges shall be manufactured of high strength ductile iron in accordance with the ASTM A536 Standard, Grade 65-45-12.

The restraining gland shall comply with all applicable dimensions of ANSI/AWWA C111/A21.11, C110/A21.10 and C153/121.53 and shall be compatible with all mechanical joint sockets of those standards, unless stated otherwise.

The EZ GRIP® mechanical joint restraint mechanism for PVC pipe shall be approved by Factory Mutual for sizes 4"-12" and listed by Underwriters Laboratories for sizes 4"-12". The restraint device for PVC Pipe shall be SIP Industries series EZP or equal.

Available: Made in USA (4"-12") Import



### AWWA DI Fittings & Accessories

- C153 Compact MJ Fittings and Acc. 2" - 64"
- C110 Full Body MJ Fittings 2" - 64"
- C153 Push-On Fittings 4" - 24"
- C110 Flange Fittings 2" - 64"
- Stainless Steel & Blue T-Bolts
- Ductile Iron Retainer Glands
- Made in India, China & Mexico
- Bare, Cement, Zinc, FBE & Other Linings

### Joint Restraint System

- EZD Joint Restraint for DI Pipe 3" - 48"
- EZP Joint Restraint for PVC Pipe 3" - 36"
- EZDPTP Joint Restraint for Push-On Joints DI Pipe 3" - 48"
- EZPVCTP Joint Restraint for Push-On Joints PVC Pipe 14" - 36"
- EZFA Restrained Flange Adapter for DI and PVC Pipe 3" - 12"
- PTP Pipe to Pipe Restraint 4" - 42"
- PTPDF Pipe to MJ Fittings Restraint 4" - 42"
- PTPFC Pipe to PVC Fittings Restraint 4" - 12"
- MJxMJ Adapter for Connecting MJ Bells 3" - 12"
- Made in China & USA
- EZ Shield or Shop Coating

### Municipal Construction Castings

- Manhole Rings and Cover
- Frames and Grates
- Valve Boxes and Service Boxes
- Water Meter Covers and Boxes
- Trench Grates and Tree Grates
- Made in India & USA

### Fabrication Products for DI Pipe

- High Hub Flanges Class 150 and 250. 3" - 64"
- Threaded Bell Flanges 3" - 48"
- Anchor Flanges 3" - 60"
- Filler Flanges 4" - 30"

### Other Products and Services

- All Thread Rod
- Pipe Lube and Hydraulic Cement
- Socket Clamps and Lugs
- Flange Packs
- OEM Castings



**SIP CORPORATE** 8876 Gulf Freeway, Suite 500, Houston, TX 77017

**SIP CENTRAL** 2900 Patio Drive, Houston, TX 77017

**SIP EAST** 600 Rayloc Drive, Atlanta, GA 30336

**SIP WEST** 8333 Almeria Avenue, Fontana, CA 92335

Phone: 877-921-6111 or 713-923-6111 | Fax: 713-923-6114 | [www.sipindustries.com](http://www.sipindustries.com) | [sales@sipindustries.com](mailto:sales@sipindustries.com)





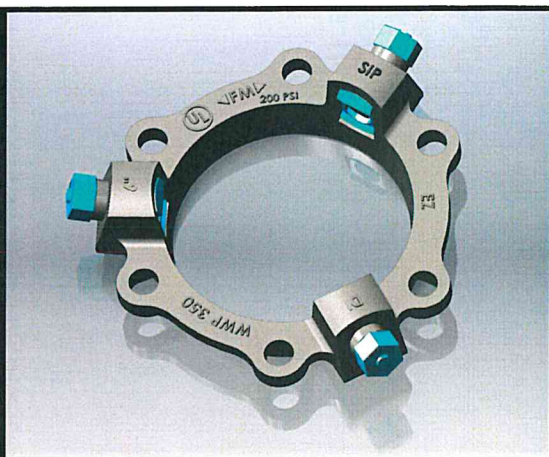
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**EZ GRIP®**

JOINT RESTRAINT FOR DUCTILE IRON PIPE

## The EZ GRIP®

Joint Restraint is a proven design, offering an efficient, reliable, and inexpensive method of restraining Ductile Iron Pipe with Mechanical Joint Pipe or appurtenances, by integrating a series of gripping wedges into a Mechanical Joint follower gland.



## ADVANTAGES, BENEFITS, FEATURES

- The EZ GRIP® Joint Restraint eliminates clamps, tie rods, cables, and thrust blocks.
- The EZ GRIP® Joint Restraint performs optimally on any Ductile Iron Pipe conforming to the ANSI/AWWA C151/A21.51 Standard and is compatible with all mechanical joint sockets of the ANSI/AWWA C111/A21.11, C110/A21.10, and C153/121.53 Standards.
- The EZ GRIP® may also be used on steel pipe sizes 3" to 12" with the use of a transition gasket. For applications on steel sizes 14" and larger, please contact our Engineering Services.
- The EZ GRIP® Joint Restraint is rated at 350 PSI working water pressure (WWP) for nominal diameters of 3"-16" and 250 PSI WWP for nominal diameters 18" and greater, and has a minimum safety factor of at least 2 to 1 for all diameters.
- The grip on the pipe increases as the hydrostatic pressure increases.
- The hex head of the actuating screw is the same size as a standard T-bolt nut (1 1/4"), and requires no tool other than the tool required to install a standard Mechanical Joint T-Bolt and Nut.
- The hex head of the torque control screw is designed to shear at a preset limit, assuring proper installation and to prevent damage to the pipe or lining.
- When the actuating screw is rotated in the correct direction (clockwise) the torque control head breaks off, exposing a 5/8" hex head, indicating proper deployment of the wedge.
- After removing the 1-1/4" torque control hex head, a 5/8" hex head remains for multiple disassembly and re-installation, if necessary.
- EZ GRIP® Joint Restraints offers 5° deflection up to sizes 12", 3° on 14"-24", 2° on 30"-36" & 1° on 42"-48".
- The gland, wedges, and screws are manufactured from high strength Ductile Iron in compliance with the ASTM A536 Standard, Grade 65-45-12.
- The wedges are heat treated to a minimum hardness of 370 BHN.
- The EZ GRIP® Joint Restraint is designed to perform optimally for potable and recycled water, and for wastewater applications.
- The EZ GRIP® Joint Restraint for Ductile Iron Pipe is provided with a coating that is compatible with most field applied coatings
- The standard color for the EZ GRIP® for DI Pipe is black.
- Approved by Factory Mutual (FM) for sizes 3"-12". Listed with Underwriters Laboratories (UL) for sizes 3"-24".
- **IMPORTANT NOTE:** Not for use on Spigot End of M.J. x P.E. Fittings or on P.E. x P.E. Fittings



Available: Made in USA (4"-12") Import

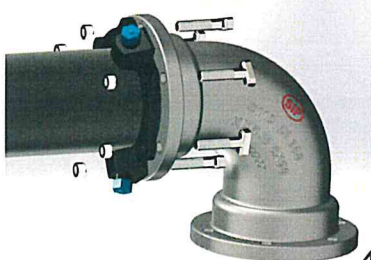
**Toll Free 877- 921-6111**

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#### Installation Procedure

Installation Procedure for restraining mechanical joint appurtenances on ductile iron pipe conforming to ANSI/AWWA C151/A21.51.



BREAK-AWAY HEX NUT TORQUE RANGES

SIZE (IN)	RANGE OF TORQUE (FT-LBS)
3 - 24	80 - 90
30 - 48	115 - 135

RECOMMENDED TORQUE (T-HEAD BOLTS & NUTS)\*

PIPE SIZE (IN)	BOLT SIZE (IN)	RANGE OF TORQUE (FT-LBS)
3	5/8	45 - 60
4 - 24	3/4	75 - 90
30 - 36	1	100 - 120
42 - 48	1 1/4	120 - 150

\* Requirement of AWWA C600

**1** Clean the socket and the plain end. Lubrication and additional cleaning should be provided by brushing both the gasket and the plain end with soapy water or an approved pipe lubrication meeting the requirement of ANSI/AWWA C111/A21.11, just prior to slipping the gasket onto the plain end for joint assembly. Place the gland on the plain end with lip extension toward the plain end, followed by the gasket.\*  
NOTE: In cold weather, it is preferable to warm the gasket to facilitate assembly of the joint.

**2** Insert the pipe into the socket and press the gasket firmly and evenly into the gasket recess. Keep the joint straight during assembly.

**3** Push the gland toward the socket and center it around the pipe with the gland lip against the gasket.

**4** Insert bolts and hand tighten nuts. Make deflection after joint assembly but before tightening bolts.

**5** Tighten the bolts to the normal range of torque as per AWWA C600 (see table below), while at all times maintaining approximately the same distance between the gland and the face of the flange at all points around the socket. This can be accomplished by partially tightening the bottom bolt first, then top bolt, next the bolts at either side, finally the remaining bolts. Repeat the process until all bolts are within the appropriate range of torque. In large sizes (30-48 inch), five or more repetitions may be required. The use of a torque-indicating wrench will facilitate this procedure.

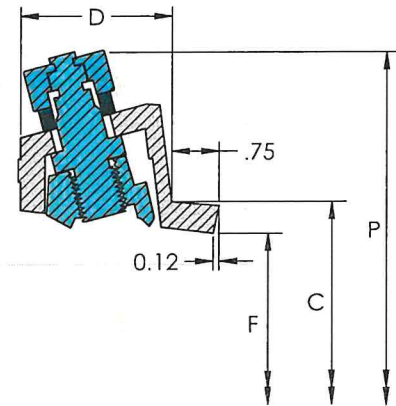
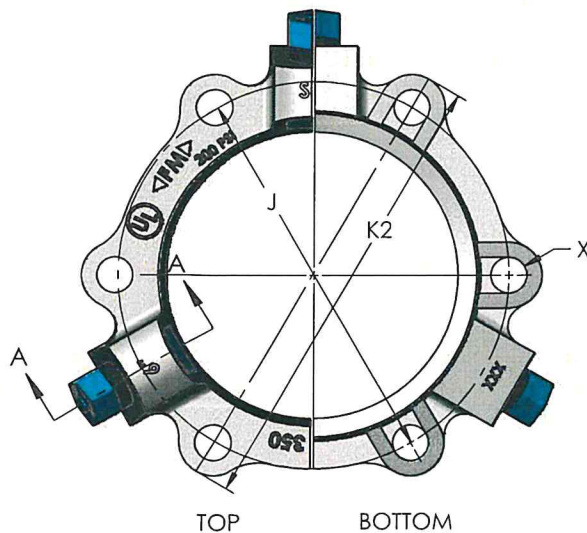
**6** Tighten the torque control hex heads clockwise until all the wedges are in firm contact with the pipe wall. Continue tightening torque control hex heads in an alternating manner until all torque control hex heads have been twisted off.

If it is necessary to disassemble, a 5/8" hex head is provided on the wedge screws.

For re-installation, first confirm that all wedges are in their sockets, and then follow the installation instructions, using a torque indicating wrench to tighten the 5/8" hex head to 90 ft-lbs for sizes 3"-24", and to 135 ft-lbs for sizes 30"-48".

\* If installing on steel pipe 3"-12", a Transition gasket is necessary for proper joint sealing.

**Technical Data**



SECTION A-A

**EZ-GRIP DI RESTRAINTS SPECIFICATIONS**

NOMINAL PIPE SIZE	SERIES NUMBER	C	D	F	J	X	P	K2	BOLT QTY	WEDGE QTY	APPROX. WEIGHT (LBS)
3	EZDP03	4.84	2.43	4.06	6.19	3/4	10.00	7.69	4	2	6.38
4	EZDP04 (D or I)	5.92	2.46	4.90	7.50	7/8	11.00	9.12	4	2	7.88
6	EZDP06 (D or I)	8.02	2.46	7.00	9.50	7/8	13.14	11.12	6	3	11.57
8	EZDP08 (D or I)	10.17	2.46	9.15	11.75	7/8	15.30	13.39	6	4	15.91
10	EZDP10 (D or I)	12.22	2.46	11.20	14.00	7/8	17.30	15.62	8	6	22.34
12	EZDP12 (D or I)	14.32	2.46	13.30	16.25	7/8	19.45	17.89	8	8	29.82
14	EZDP14	16.40	2.98	15.44	18.75	7/8	21.45	20.80	10	10	49.90
16	EZDP16	18.50	2.84	17.54	21.00	7/8	24.20	22.50	12	12	58.02
18	EZDP18	20.60	2.95	19.64	23.25	7/8	26.00	25.25	12	12	68.52
20	EZDP20	22.70	2.91	21.74	25.50	7/8	28.20	27.50	14	14	75.94
24	EZDP24	26.90	3.20	25.94	30.00	7/8	33.50	31.87	16	16	126.18
30	EZDP30	33.29	3.50	32.17	36.88	1 1/8	39.80	39.12	20	20	196.60
36	EZDP36	39.59	3.50	38.47	43.75	1 1/8	46.10	46.00	24	24	243.52
42	EZDP42	45.79	5.18	44.67	50.62	1 3/8	54.50	53.12	28	28	441.96
48	EZDP48	52.09	5.18	50.97	57.50	1 3/8	60.80	60.00	32	32	522.24

All dimensions are in inches, unless otherwise noted

(D) Made in USA

(I) Import





**SIP Industries**  
Quality Manufacturers Since 1960

**EZ GRIP®**

## JOINT RESTRAINT FOR DUCTILE IRON PIPE

### SAMPLE SPECIFICATIONS

The mechanical joint restraining mechanism and the follower gland shall be designed and manufactured as one integral device providing for a joint seal and performing as a joint restraint. This shall be achieved by a series of individually activated wedges gripping the outside wall of the Ductile Iron Pipe. The grip of the wedges shall increase as the hydrostatic pressure increases.

There shall be no additional tool required for installation other than the tool required to install a standard Mechanical Joint T-Bolt and 1-1/4" Nut. The hex head of the actuating screw shall be designed to break off at a preset torque. After the removal of the 1-1/4" torque control hex head, a 5/8" hex head on the actuating screw shall remain, to allow for the disassembly and re-installation of the gland and restraint, if necessary.

The gland, screws, and wedges shall be manufactured of high strength ductile iron in accordance with the ASTM A536 Standard, Grade 65-45-12. The wedges shall be heat treated to a minimum hardness of 370 BHN.

The mechanical joint restraint mechanism shall be rated at 350 PSI working water pressure for nominal diameters of 3"-16" and 250 PSI WWP for nominal diameters 18" and greater with a 2:1 safety factor. The restraint device shall perform optimally on any Ductile Iron Pipe conforming to the ANSI/AWWA C151/A21.51 Standard and the gland shall comply with all applicable dimensions of, and be compatible with, all mechanical joint sockets of ANSI/AWWA C111/A21.11, C110/A21.10, and C153/121.53 Standards.

The EZ GRIP® mechanical joint restraint mechanism for ductile iron pipe shall be approved by Factory Mutual for sizes 3"-12" and listed by Underwriters Laboratories for sizes 3"-24". The restraint device for Ductile Iron Pipe shall be SIP Industries series EZD or equal.

Available: Made in USA (4"-12") Import



### AWWA DI Fittings & Accessories

- C153 Compact MJ Fittings and Acc. 2" - 64"
- C110 Full Body MJ Fittings 2" - 64"
- C153 Push-On Fittings 4" - 24"
- C110 Flange Fittings 2" - 64"
- Stainless Steel & Blue T-Bolts
- Ductile Iron Retainer Glands
- Made in India, China & Mexico
- Bare, Cement, Zinc, FBE & Other Linings

### Joint Restraint System

- EZD Joint Restraint for DI Pipe 3" - 48"
- EZP Joint Restraint for PVC Pipe 3" - 36"
- EZDPTP Joint Restraint for Push-On Joints DI Pipe 3" - 48"
- EZPVCTP Joint Restraint for Push-On Joints PVC Pipe 14" - 36"
- EZFA Restrained Flange Adapter for DI and PVC Pipe 3" - 12"
- PTP Pipe to Pipe Restraint 4" - 42"
- PTPDF Pipe to MJ Fittings Restraint 4" - 42"
- PTPFC Pipe to PVC Fittings Restraint 4" - 12"
- MJxMJ Adapter for Connecting MJ Bells 3" - 12"
- Made in China & USA
- EZ Shield or Shop Coating

### Municipal Construction Castings

- Manhole Rings and Cover
- Frames and Grates
- Valve Boxes and Service Boxes
- Water Meter Covers and Boxes
- Trench Grates and Tree Grates
- Made in India & USA

### Fabrication Products for DI Pipe

- High Hub Flanges Class 150 and 250. 3" - 64"
- Threaded Bell Flanges 3" - 48"
- Anchor Flanges 3" - 60"
- Filler Flanges 4" - 30"

### Other Products and Services

- All Thread Rod
- Pipe Lube and Hydraulic Cement
- Socket Clamps and Lugs
- Flange Packs
- OEM Castings



**SIP CORPORATE** 8876 Gulf Freeway, Suite 500, Houston, TX 77017

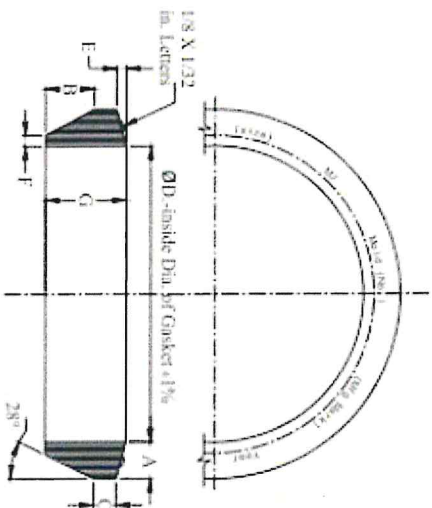
**SIP CENTRAL** 2900 Patio Drive, Houston, TX 77017

**SIP EAST** 600 Rayloc Drive, Atlanta, GA 30336

**SIP WEST** 8333 Almeria Avenue, Fontana, CA 92335

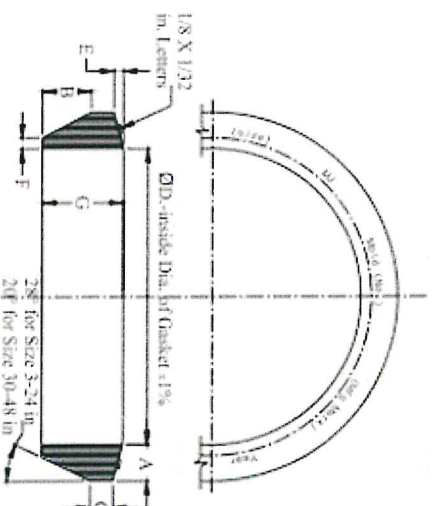
Phone: 877-921-6111 or 713-923-6111 | Fax: 713-923-6114 | [www.sipindustries.com](http://www.sipindustries.com) | [sales@sipindustries.com](mailto:sales@sipindustries.com)

## MECHANICAL JOINT GASKET



Size	Pipe O.D.	A	B	C	ØD. ± 1%	E	F	G
2	2.50	0.48	0.62	0.31	2.48	0.12	0.15	1.05
3	3.96	0.48	0.62	0.31	3.86	0.12	0.15	1.05
4	4.80	0.60	0.75	0.31	4.68	0.16	0.22	1.22
6	6.90	0.60	0.75	0.31	6.73	0.16	0.22	1.22
8	9.05	0.60	0.75	0.31	8.85	0.16	0.22	1.22
10	11.10	0.60	0.75	0.31	10.87	0.16	0.22	1.22
12	13.20	0.60	0.75	0.31	12.95	0.16	0.22	1.22
14	15.30	0.60	0.75	0.31	14.99	0.16	0.22	1.22
16	17.40	0.60	0.75	0.31	17.07	0.16	0.22	1.22
18	19.50	0.60	0.75	0.31	19.13	0.16	0.22	1.22
20	21.60	0.60	0.75	0.31	21.20	0.16	0.22	1.22
24	25.80	0.60	0.75	0.31	25.34	0.16	0.22	1.22
30	32.00	0.73	1.00	0.38	31.47	0.16	0.37	1.54
36	38.30	0.73	1.00	0.38	37.67	0.16	0.37	1.54
42	44.50	0.73	1.00	0.38	43.78	0.16	0.37	1.54
48	50.80	0.73	1.00	0.38	49.98	0.16	0.37	1.54

## TRANSITION MECHANICAL JOINT GASKET



Size	Pipe O.D.	A	B	C	ØD. ± 1%	E	F	G
2	2.375	0.56	0.66	0.31	2.32	0.12	0.21	1.10
3	3.500	0.72	0.64	0.34	3.43	0.12	0.38	1.10
4	4.500	0.76	0.73	0.33	4.43	0.20	0.37	1.26
6	6.625	0.75	0.73	0.32	6.53	0.20	0.36	1.25
8	8.625	0.82	0.73	0.34	8.50	0.20	0.43	1.27
10	10.750	0.79	0.75	0.41	10.59	0.20	0.39	1.26
12	12.750	0.84	0.75	0.33	12.56	0.20	0.44	1.28



Weight : All are in lbs.

Dimensions : All are in Inch





# SIP Industries

Quality Manufacturers Since 1960

## EZ GRIP®

### Submittal Information

#### 3" - 12" RESTRAINT FLANGED ADAPTER COUPLING FOR PVC & DI PIPES

Project Name

Project Location

Engineer

Prime or Sub Contractor(s)

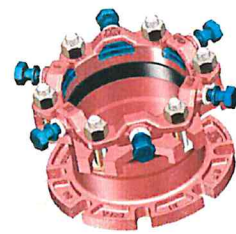
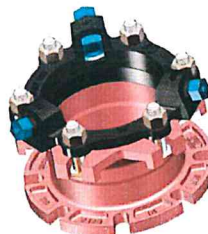
Referenced Specification(s) & Section(s)

Distributor Name & Location

#### General Specifications

- Material** : Main Flange Adapter body and Restraint Gland are Ductile Iron per ASTM A536, Grade 65-45-12
- Pressure** : **Pressure Rating equal to that of the Ductile Iron pipe and shall have a minimum safety factor of at least 2 to 1**  
Pressure Rating equal to that of the PVC pipe rating, with a minimum 2:1 safety factor
- Dimensions** : In accordance to ANSI/AWWA C110/A21.10, C111/A21.15 and C153/ A21.53. Flange ends shall be in accordance to meet ANSI Class 125/150 & ANSI/ AWWA C115/A21.15 drill pattern  
Compatible with 4" - 12" AWWA C900 (PVC), C905 (PVC), C906 (HDPE)\*, C909 (PVCO) or 4"-12" ASTM D2241 IPS PVC Pipe \*
- \* AWWA C906 HDPE Pressure Pipes up to 12" by using internal pipe stiffeners.  
Contact SIP for further assistance
- Installation** : There are no additional tools required for installation other than a Standard Torque Wrench to install standard sizes of T-Head bolts & nuts and hex nuts from 5/8"-1 1/4"
- Deflection** : Restraint allows the full joint deflection dictated by pipe manufacturer's recommendation, and maintains the seal while under pressure, and while subjected to ground movements. Allows for a secure connection and full 5" deflection per AWWA C600 for misaligned joints
- Approvals** : Factory Mutual (FM) for sizes 4"-12" at 200psi for AWWA C151 Ductile Iron pipe. Listed with Underwriters Laboratories (UL) for sizes 4"-12" at 350psi on AWWA C151 Ductile iron pipe.  
Factory Mutual (FM) for sizes 4"-12" at 200psi for AWWA C900 pipe. Listed with Underwriters Laboratories (UL) for sizes 4"-12" at 235psi on AWWA C900 Class 235 DR-18 pipe

**NOTE: Supporting documentation for the above 'General Specifications' and the following 'Optional Specifications' are available upon request to review, in addition to Installation Instructions and any requested material samples**



## 3"- 12" RESTRAINT FLANGED ADAPTER COUPLING FOR PVC & DI PIPES

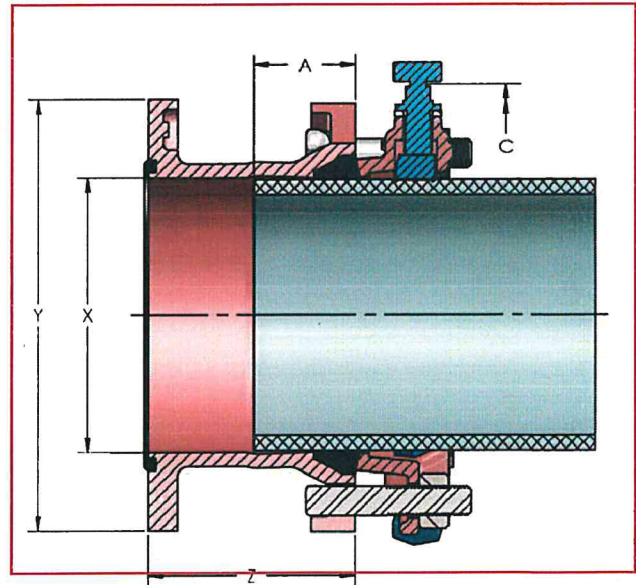
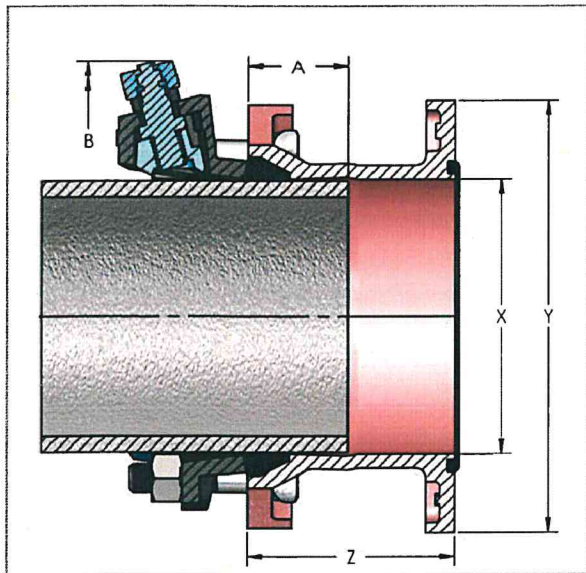
### Optional Specifications

- Coating**
- ☐ Bituminous
  - ☐ Fusion-Bonded Epoxy (FBE) powder coated oxide red color in accordance with the ANSI/AWWA C116/A21.16
  - ☐ Zinc per ISO 8179-1 or ISO 8179-2
  - ☐ Other - Specify \_\_\_\_\_
- Bolts & Nuts**
- ☐ High strength, low alloy ASTM A242 steel manufactured in accordance with AWWA/ANSI C111/A21.11 Standard
  - ☐ Same as above, Bonded with a Fluoropolymer corrosion resistant coating
  - ☐ Type 304 Stainless Steel ☐ Type 316 Stainless Steel
  - ☐ Other - Specify \_\_\_\_\_
- Gaskets** Dimensions conform to the specifications in ANSI/AWWA C111/A21.11 and are available in the following material compositions
- ☐ Standard SBR (Buna-S) ☐ NBR (Buna-N) ☐ EPDM ☐ CR - Nitrile ☐ FKM - Fluoroelastomer

### Technical Data

### EZ GRIP® RESTRAINED FLANGE ADAPTERS FOR DUCTILE IRON PIPE

Select Size	NOMINAL PIPE SIZE	SERIES NUMBER	X	Y	Z	A	B	PRESSURE RATING (PSI - MAX.)	APPROX. WEIGHT (LBS)
<input type="checkbox"/>	3	EZFADP03	4.06	7.50	3.88	2.50	10.00	350	16.38
<input type="checkbox"/>	4	EZFADP04	4.90	9.00	4.35	2.50	11.00	350	21.88
<input type="checkbox"/>	6	EZFADP06	7.00	11.00	5.25	2.50	13.14	350	33.07
<input type="checkbox"/>	8	EZFADP08	9.15	13.50	5.25	2.50	15.30	350	45.16
<input type="checkbox"/>	10	EZFADP10	11.20	16.00	5.63	2.50	17.30	350	63.14
<input type="checkbox"/>	12	EZFADP12	13.30	19.00	5.69	2.50	19.45	350	85.45



### Technical Data

### EZ GRIP® RESTRAINED FLANGE ADAPTERS FOR PVC PIPE

	NOMINAL PIPE SIZE	SERIES NUMBER	C900/C909 PVC PIPES OD	IPS PVC PIPES OD	X	Y	Z	A	B	APPROX. WEIGHT (LBS)
<input type="checkbox"/>	3	EZFAPVCP03	N/A	3.50	4.06	7.50	3.88	2.5	9.02	17.50
<input type="checkbox"/>	4	EZFAPVCP04	4.80	4.50	4.90	9.00	4.35	2.5	9.84	21.75
<input type="checkbox"/>	6	EZFAPVCP06	6.90	6.63	7.00	11.00	5.25	2.5	11.94	32.90
<input type="checkbox"/>	8	EZFAPVCP08	9.05	8.63	9.15	13.50	5.25	2.5	14.39	45.74
<input type="checkbox"/>	10	EZFAPVCP10	11.10	10.75	11.20	16.00	5.63	2.5	16.44	62.90
<input type="checkbox"/>	12	EZFAPVCP12	13.20	12.75	13.30	19.00	5.69	2.5	18.58	85.26

All dimensions are in inches unless noted otherwise noted



## SUBMITTAL

(Current revisions for the noted Standards apply)

Tyler Union Waterworks provides that our \*Mechanical and Push-On joint gaskets and dimensions conform to the specifications in ANSI/AWWA C111/A21.11 (current revision). Markings include size, mold number, gasket manufacturer's mark, country where molded, and product identification letters. No markings are placed on sealing surfaces per the AWWA C111 standard.

\*Note: Push-On and Mechanical Joint transition gasket design standards and markings are not addressed by ANSI/AWWA C111/A21.11 (current revision). Transition gaskets provided by Tyler Union follow the material testing standards and specifications established for ANSI/AWWA C111/A21.11 gaskets.

Gasket material is vulcanized styrene butadiene rubber (SBR). Purchaser may request special application elastomers (EPDM, Nitrile, Neoprene & FKM) which will be identified on all documentation and corresponding gaskets. Gaskets are free of foreign materials, porous areas, or other defects that make them unfit for the intended use.

Tyler Union gaskets are manufactured under quality control standards and procedures that are maintained by the gasket supplier. Appropriate documentation is maintained by the manufacturer and available for review upon request. Properties and test methods for SBR, EPDM, Nitrile, Neoprene and FKM gaskets are as provided.

Property	ASTM Test Method	Required Value
Hardness, Shore "A"	D2240-86	75 (+-5)
Minimum Tensile	D412-87	1500 psi (10MPa)
Minimum Elongation	D412-87	150 %
Minimum Aging	D572-88	60 %
Maximum Compression Set	D395-89, Method B	20 %
Resistance to surface Ozone cracking	D1149-86	No cracking

Tyler Union's approved suppliers maintain a quality assurance program that is reviewed and updated on an ongoing basis to ensure product quality. Tyler Union's gasket suppliers submit gaskets for testing and provide materials for testing to Underwriters Laboratories, Inc. Tyler Union's gasket providers are recognized under the component program (UL 194/ UL 157) of Underwriters Laboratories, Inc.. Tyler Union UL approved gaskets meet NSF-61, NSF-372 and Annex G.

Tyler Union provides that our Mechanical and Push-On joint gaskets for potable or wastewater projects will perform as designed when selected per the chart provided and installed per AWWA C600-10.

SBR (Styrene Butadiene rubber)(Buna-S) <u>Not Recommended for Hydrocarbon Service</u>	20°F to 180°F	Suitable for Water, Wastewater, most moderate chemicals, wet or dry organic acids, alcohols, ketones, and aldehydes
EPDM (Ethylene Propylene) <u>Not Recommended for Hydrocarbon Service</u>	-10°F to 250°F	Ideal for water, wastewater, ozone, & strong oxidizing chemicals May be used on steam and air within its temperature range
CR (Neoprene)	-10°F to 200°F	Recommended for moderate chemicals and acids, oil fats, greases, many solvents and air with hydrocarbons. Will not support combustion
NBR (Nitrile)(Buna-N)(Hycar)	-40°F to 250°F	Ideally suited for gasoline, petroleum products, hydrocarbons, water, mineral and vegetable oils
*FKM(Fluoroelastomer) *Check with Customer Service for availability	10°F to 425°F	Ideally suited for hydrocarbons, acids, vegetable oils & petroleum

Gasket Types Offered:

(1)Mechanical Joint std.(2) Push-On Joint std.(3)Mechanical Joint DUO  
(4)Mechanical & Push-on Joint Transition(5)Push-on Restraining  
(6)Mechanical Joint Armor Tip Conductivity(7)Compact tapping Sleeve

**Unless other wise requested by the purchaser upon order placement, all gaskets provided will be of our standard SBR material.**

# TUFGRIP™

## Series 1000 - For Ductile Iron Pipe

*"A Proven Third Generation Mechanical Joint Restraint"*

MJ TUFGrip™ TLD



Torque Nut



Tyler Union's TUF Grip restraints represent the culmination of 20 years of engineering and testing. As a 3rd generation restraint, TUF Grip is the best available technology in the Waterworks market for use in restraining Ductile Iron Pipe.



Designed by Harold Kennedy & Associates, Inc.

### "BETTER BY DESIGN"

#### SPECIFICATIONS:

- Designed and proven to restrain plain end ductile iron pipe conforming to ANSI/AWWA C151/A21.51 in diameters 3" thru 48"
- Proven for use on heavy wall \*\*Schedule 40 or greater steel pipe in sizes 3"- 12" and on all sizes 3" to 16" when pipe O.D. and wall thickness conforms to C151 \*\*Note: IPS diameter steel pipe requires the use of an MJ Transition gasket
- Restraint design conforms with applicable requirements of ANSI/AWWA C111, ANSI/AWWA C153, and ANSI/AWWA C110
- Restraint engineered for securing plain end pipe to mechanical joint fittings conforming to ANSI/AWWA C110, C111, and C153
- Restraints rated for working water pressure of 350 psi and transitory surges of 100psi for 3" thru 16" and 250 psi for 18" thru 48"
- Cast of ASTM A536 compliant 65-45-12 ductile iron complete with a cast on date code and country of origin for traceability
- Restraints and all components are designed and proven for a 2:1 safety factor based on the pipe pressure rating
- Restraint deflection rating when installed on nominal diameter pipe is 3"- 3" - 5°, 4"-12" - 5°, 14"-16" - 2°, and 18"-48" - 1.5°
- Standard coating for Non-Domestic restraint is 4-6 mil of \*Alkyd resin baking enamel -**\*Note: Epoxy coatings available upon request**
- Gripping wedges are heat treated to a minimum 420 Brinell Hardness
- Gripping wedge, wedge collar bolt, and twist off torque limiting nut shall be e-coated
- FM approved for 4" thru 12" applications and UL listed and approved for 3" thru 24" applications
- Not recommended for use on plain end fittings
- Color coded black for pipe type(ductile/\*cast iron/\*\*steel) - **\*Note: Refer to the following pages for cast iron and steel pipe applications**

#### FEATURES & ADVANTAGES:

- Torque limiting nut on gripping wedge assembly twists off within a designed torque range eliminating the need for specialized tools
- Gripping wedge assembly pivots providing stronger engagement of pipe wall at lower torque requirement (45-60 ft.-lbs.)
- Proven restraint technology utilizing fewer gripping wedges in frequently applied diameters, reducing trench time and project cost
- Restraint's heavy duty construction and design eliminates the need for costly thrust blocks and tie rods
- Suitable for Potable and Wastewater applications

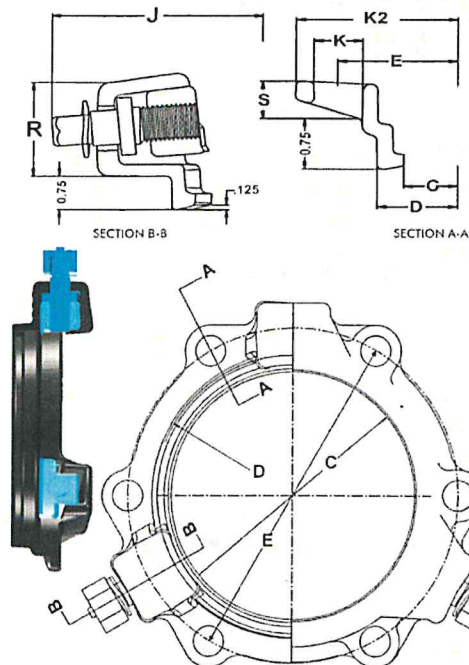
ISO 9001-2008 Registered		Listed with Underwriters Laboratory		Factory Mutual Approved
Product Source/Type	Name of Project	Name of Contractor	Project Engineer	Spec. Section and/or Project No.

#### \*Tyler Union Waterworks Contact Information\*

**Tyler:** 11910 CR 492 • Tyler, Texas 75706 • (800) 527-8478  
**Anniston:** 1501 W 17<sup>th</sup> St. • Anniston, AL 36201 • (800) 226-7601  
**Corona:** 1001 El Camino Ave. • Corona, CA 92879 • (866) 527-8471



## Series 1000-Ductile Pipe Restraint



TUFGRIP™ MJ Restraint Dimensions

Size (inches)	C	D	E	K2	J	K	R	S
3	4.08	4.88	6.19	7.67	9.82	3/4	2.20	0.86
4	4.93	5.92	7.50	8.98	10.67	7/8	2.20	0.73
6	7.03	8.02	9.50	10.98	12.77	7/8	2.24	0.82
8	9.18	10.17	11.75	13.23	14.92	7/8	2.28	0.82
10	11.23	12.22	14.00	15.70	16.97	7/8	2.37	0.93
12	13.33	14.32	16.25	17.95	19.07	7/8	2.40	0.93
14	15.44	16.40	18.75	20.43	21.18	7/8	2.57	0.91
16	17.54	18.50	21.00	22.88	23.28	7/8	2.57	1.05
18	19.64	20.60	23.25	25.43	25.38	7/8	2.57	1.05
20	21.74	22.70	25.50	27.50	27.48	7/8	2.66	1.15
24	25.94	26.90	30.00	32.00	31.68	7/8	2.72	1.35
30	32.18	33.30	36.88	39.42	39.78	1-1/8	3.86	1.53
36	38.48	39.60	43.75	46.29	46.08	1-1/8	3.86	1.53
42	44.68	45.80	50.62	53.62	53.08	1-3/8	4.56	2.05
48	50.98	52.10	57.50	60.50	59.28	1-3/8	4.56	2.05

SERIES 1000 TLD-DUCTILE TUFGRIP™ - APPLICATION CHART

Size (Inches)	Part No. - Gland Only Domestic / Non-Domestic	Wedge Qty.	T-Head Bolt Qty.	Bolt Size	Gland Weight(lbs.)	Weight (w/Acc.)	Pressure Rating	Pipe O.D.
3	CALL / 113805	2	4	5/8" x 3"	6.5	10.5	350	3.96
4	515944 / 113812	2	4	3/4" x 3.5"	7.1	11.8	350	4.80
6	515968 / 113829	3	6	3/4" x 4"	11.2	18.8	350	6.90
8	515975 / 113836	3	6	3/4" x 4"	13.1	20.3	350	9.05
10	515982 / 113843	6	8	3/4" x 4"	26.0	32.5	350	11.10
12	515999 / 113850	8	8	3/4" x 4"	31.5	40.4	350	13.20
14	516231 / 113867	10	10	3/4" x 4.5"	43.3	53.6	350	15.30
16	516255 / 113874	12	12	3/4" x 4.5"	54.1	66.3	350	17.40
18	516279 / 113898	12	12	3/4" x 4.5"	59.8	72.2	250	19.50
20	516293 / 113904	14	14	3/4" x 4.5"	69.8	83.8	250	21.60
24	516316 / 113911	16	16	3/4" x 5"	90.4	106.9	250	25.80
30	CALL / 461289	20	20	1" x 7.5"	248	290	250	32.00
36	CALL / 461333	24	24	1" x 7.5"	277	327	250	38.30
42	CALL / 461319	28	28	1-1/4" x 8.5"	448	512	250	44.50
48	CALL / 461326	32	32	1-1/4" x 8.5"	519	597	250	50.80

ISO 9001-2008 Registered

Listed with Underwriters Laboratory

Factory Mutual Approved

**STOP-LOOK :**

- Extra length T-Head bolts are provided with 30 thru 48 inch restraints to facilitate mechanical joint assembly
- For UL/FM Approvals, 3-12 inch were tested at 5° of deflection and 14-24 inch were tested at 3° of deflection; all test were to 700 psi
- The Series 1000 TUF Grip is specified for use on ductile iron pipe but can be used on some sizes of cast grey iron or pit cast pipe if the pipe is not severely corroded, is in sound condition, and has an outside diameter compatible with the as provided dimensions
- TUF Grip 30 to 48 inch provided with TRU-Lock™ mechanical joint gasket to ensure pressure ratings and safety factors are met
- Installation and hydrostatic testing shall be in accordance with AWWA C600 and AWWA C651
- Some vertical applications where piping is partially buried may require additional restraint – Contact Tyler Union Waterworks
- **Caution:** Pressure testing of piping systems restrained or un-restrained with insufficient backfill or bracing is not recommended

\*Tyler Union Waterworks Contact Information\*

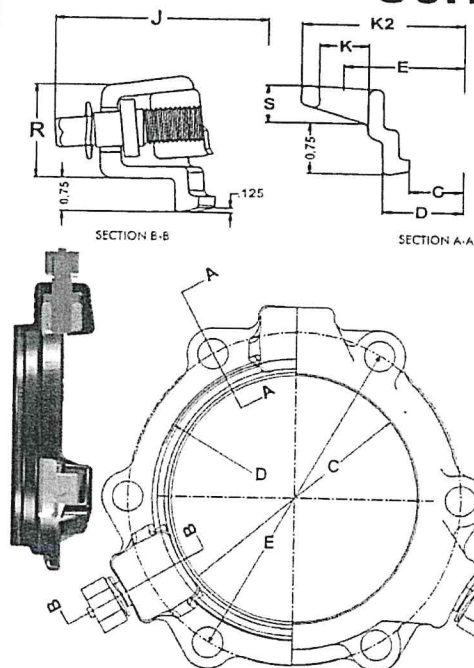
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**Corona:** 1001 El Camino Ave. • Corona, CA 92879 • (866) 527-8471



## Series 1000-Ductile Pipe Restraint



TUFGrip™ MJ Restraint Dimensions

Size (Inches)	C	D	E	K2	J	K	R	S
3	4.08	4.88	6.19	7.67	9.82	3/4	2.20	0.86
4	4.93	5.92	7.50	8.98	10.67	7/8	2.20	0.73
6	7.03	8.02	9.50	10.98	12.77	7/8	2.24	0.82
8	9.18	10.17	11.75	13.23	14.92	7/8	2.28	0.82
10	11.23	12.22	14.00	15.70	16.97	7/8	2.37	0.93
12	13.33	14.32	16.25	17.95	19.07	7/8	2.40	0.93
14	15.44	16.40	18.75	20.43	21.18	7/8	2.57	0.91
16	17.54	18.50	21.00	22.88	23.28	7/8	2.57	1.05
18	19.64	20.60	23.25	25.43	25.38	7/8	2.57	1.05
20	21.74	22.70	25.50	27.50	27.48	7/8	2.66	1.15
24	25.94	26.90	30.00	32.00	31.68	7/8	2.72	1.35
30	32.18	33.30	36.88	39.42	39.78	1-1/8	3.86	1.53
36	38.48	39.60	43.75	46.29	46.08	1-1/8	3.86	1.53
42	44.68	45.80	50.62	53.62	53.08	1-3/8	4.56	2.05
48	50.98	52.10	57.50	60.50	59.28	1-3/8	4.56	2.05

SERIES 1000 TLD-DUCTILE TUF Grip™ - APPLICATION CHART

Size (Inches)	Part No. - Gland Only Domestic / Non-Domestic	Wedge Qty.	T-Head Bolt Qty.	Bolt Size	Gland Weight(lbs.)	Weight (w/Acc.)	Pressure Rating	Pipe O.D.
3	CALL / 113805	2	4	5/8" x 3"	6.5	10.5	350	3.96
4	515944 / 113812	2	4	3/4" x 3.5"	7.1	11.8	350	4.80
6	515968 / 113829	3	6	3/4" x 4"	11.2	18.8	350	6.90
8	515975 / 113836	3	6	3/4" x 4"	13.1	20.3	350	9.05
10	515982 / 113843	6	8	3/4" x 4"	26.0	32.5	350	11.10
12	515999 / 113850	8	8	3/4" x 4"	31.5	40.4	350	13.20
14	516231 / 113867	10	10	3/4" x 4.5"	43.3	53.6	350	15.30
16	516255 / 113874	12	12	3/4" x 4.5"	54.1	66.3	350	17.40
18	516279 / 113898	12	12	3/4" x 4.5"	59.8	72.2	250	19.50
20	516293 / 113904	14	14	3/4" x 4.5"	69.8	83.8	250	21.60
24	516316 / 113911	16	16	3/4" x 5"	90.4	106.9	250	25.80
30	CALL / 461289	20	20	1" x 7.5"	248	290	250	32.00
36	CALL / 461333	24	24	1" x 7.5"	277	327	250	38.30
42	CALL / 461319	28	28	1-1/4" x 8.5"	448	512	250	44.50
48	CALL / 461326	32	32	1-1/4" x 8.5"	519	597	250	50.80

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**STOP-LOOK :**

- Extra length T-Head bolts are provided with 30 thru 48 inch restraints to facilitate mechanical joint assembly
- For UL/FM Approvals, 3-12 inch were tested at 5° of deflection and 14-24 inch were tested at 3° of deflection; all test were to 700 psi
- The Series 1000 TUF Grip is specified for use on ductile iron pipe but can be used on some sizes of cast grey iron or pit cast pipe if the pipe is not severely corroded, is in sound condition, and has an outside diameter compatible with the as provided dimensions
- TUF Grip 30 to 48 inch provided with TRU-Lock™ mechanical joint gasket to ensure pressure ratings and safety factors are met
- Installation and hydrostatic testing shall be in accordance with AWWA C600 and AWWA C651
- Some vertical applications where piping is partially buried may require additional restraint – Contact Tyler Union Waterworks
- **Caution:** Pressure testing of piping systems restrained or un-restrained with insufficient backfill or bracing is not recommended

*\*Tyler Union Waterworks Contact Information\**

**Tyler:** 11910 CR 492 • Tyler, Texas 75706 • (800) 527-8478

**Anniston:** 1501 W 17<sup>th</sup> St. • Anniston, AL 36201 • (800) 226-7601

**Corona:** 1001 El Camino Ave. • Corona, CA 92879 • (866) 527-8471



# NON-DOMESTIC - TLD TUF Grip™

## Assembly Steps – Series 1000 – For Ductile Iron Pipe

Steps : 1 and 2



Step : 3

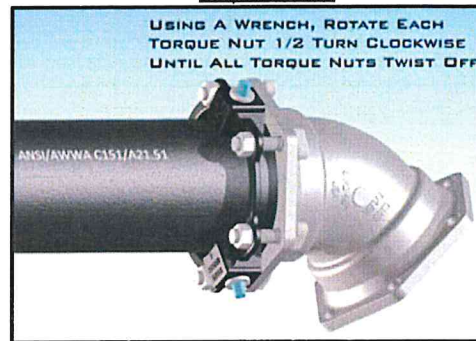


1. Insure the beveled pipe end to be joined and mechanical joint socket are clean and free of debris. Slide the BLACK TUF Grip onto the pipe to be restrained. The TUF Grip compression lip extension must be toward the beveled end of the pipe to be restrained.
2. Evenly lubricate the beveled pipe end, pipe wall exterior, and inside surface of the MJ gasket with a lubricant that meets the requirements of AWWA C111. Now place the \*\*MJ gasket over the plain beveled end of the pipe with the narrow edge of the tapered gasket toward the beveled end of the pipe to be restrained. **\*\*NOTE** : For Steel pipe with IPS diameter in sizes 3"-12", use of a MJ Transition gasket is required.
3. Fully insert the pipe end into the MJ socket pipe landing. Keeping the pipe straight, slide/push the MJ gasket firmly and evenly into the socket recess. Joint must be kept straight during assembly.

Steps : 4 and 5



Steps : 6 and 7



4. Push the TUF Grip compression lip extension evenly against the thick side of the gasket and insert T-Head bolts with the T-Head against the back side of the MJ fitting bolt flange. Use only T-Head bolts and nuts that meet AWWA C111 requirements. Evenly hand-tighten the nuts on the T-Head bolts making sure the gland is centered around the pipe and within the MJ socket. If joint deflection is needed, only deflect the pipe in the joint after hand tightening of all nuts is completed. \*Joint deflection is 3° max for 3", 5° max for 4"-12", 2° max for 14"-16", and 1.5° max for 18"-48".  
**\*NOTE** : Maximum deflection values provided apply with nominal pipe, fitting, and restraint diameters.
5. Using a wrench, tighten the nuts on the T-Head bolts a few turns at a time in an alternating or star pattern maintaining equal spacing or distance between the TUF Grip bolt flange and face of the MJ socket bolt flange as the MJ gasket is compressed. The T-Head bolt and nut torque requirement is 3"- 45-60 ft.-lbs., 4"- 24"-75-90 ft.-lbs., 30"- 36"- 100-120 ft.-lbs., and 42"- 48"- 120-150 ft.-lbs.. **DO NOT OVER-TORQUE!**
6. Hand-tighten the torque limiting nut attached to each TUF Grip wedge assembly in a clockwise direction with an alternating or star pattern until all gripping wedges are in contact with the pipe wall. Rotational direction of torque limiting nut is indicated by recessed arrow on the face of the nut. With a wrench (box, socket, or pneumatic), continue to tighten each torque nut ½ turn in an alternating or star pattern around the restraint until all torque limiting nuts twist off. **NEVER** turn a torque limiting nut more than ½ turn without turning the remaining torque nuts an equal amount!
7. When all torque limiting nuts twist off, the assembly of the mechanical joint is complete.

\*Tyler Union Waterworks Contact Information\*

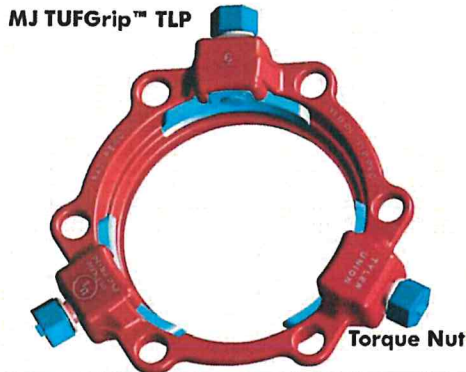
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**Anniston:** 1501 W 17<sup>th</sup> St. • Anniston, AL 36201 • (800) 226-7601  
**Corona:** 1001 El Camino Ave. • Corona, CA 92879 • (866) 527-8471

[www.tylerunion.com](http://www.tylerunion.com)



# TUFGRIP™

**Series 2000 for PVC & PVCO Pipe**  
"A Proven Third Generation Mechanical Joint Restraint"



Tyler Union's TUF Grip restraints represent the culmination of 20 years of engineering and testing. As a 3rd generation restraint, TUF Grip is the best available technology in the Waterworks market for use in restraining PVC pipe.



Designed by Harold Kennedy & Associates, Inc.

**"BETTER BY DESIGN"**

## SPECIFICATIONS:

- Proven to restrain plain end PVC pipe in diameters 3" thru 36", PVCO pipe in diameters 4" thru 12", and HDPE Pipe 4" thru 16"
- Restraint design conforms to applicable requirements of ANSI/AWWA C111, ANSI/AWWA C153, and ANSI/AWWA C110
- Restraint engineered for securing plain end pipe to mechanical joint fittings conforming to ANSI/AWWA C110, C111, and C153
- Rated for working water pressure of 305 psi for 3"-12", 235 psi for 14"-24", 150 psi for 30", and 125 psi for 36" (details on next page)
- Cast of ASTM compliant 65-45-12 ductile iron complete with cast on date code and country of origin for traceability
- Restraint and all components are designed and proven for a 2:1 safety factor based on the PVC, PVCO, and HDPE pipe pressure rating Note: Refer to the following pages for pressure rating
- Deflection rating when installed on pipe with nominal diameter shall be 3° for 3" thru 12", 2° for 14" thru 16", and 1.5° for 18" thru 36"
- Standard coating for Non-Domestic restraint is 4-6 mil of Alkyd resin baking enamel
- Gripping wedge, wedge collar bolt and twist off torque limiting nut shall be e-coated
- FM approved for 4" thru 12" applications and UL listed and approved for 3" thru 12" applications
- Color coded red for pipe type (C900 PVC/C905 PVC/ \*C909 PVCO/D2241 PVC) - \*Note: Refer to next page for C909 pipe applications

## FEATURES & ADVANTAGES:

- Torque limiting nut on gripping wedge assembly twists off within a designed torque range eliminating the need for specialized tools
- Gripping wedge assembly pivots providing stronger engagement of pipe wall at lower torque requirement (45-60 ft.-lbs.)
- Proven restraint technology utilizing fewer gripping wedges in frequently applied diameters, reducing trench time and project cost
- There is no washer or spacer to remove when installing restraints on 3" to 12" ASTM D2241 PVC pipe with IPS outside diameter
- Restraint's heavy duty construction and design eliminates the need for costly thrust blocks and tie rods
- Suitable for Potable and Wastewater applications
- Approved for use on multiple classes of pipe - Additional pressure ratings and associated pipe classes provided on the following pages

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Factory Mutual Approved

Product Source/Type	Name of Project	Name of Contractor	Project Engineer	Spec. Section and/or Project No.

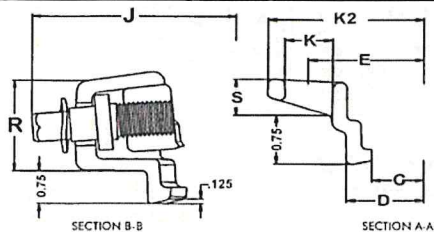
### \*Tyler Union Waterworks Contact Information\*

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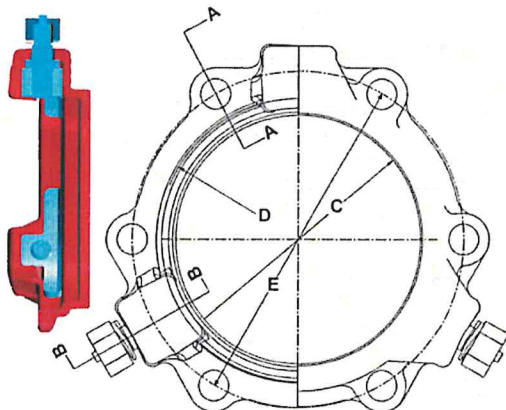
**Corona:** 1001 El Camino Ave. • Corona, CA 92879 • (866) 527-8471





**TUFGrip™ MJ Restraint Dimensions**

Size (Inches)	C	D	E	K2	J	K	R	S
3	4.08	4.88	6.19	7.67	9.82	3/4	2.20	0.86
4	4.93	5.92	7.50	8.98	10.67	7/8	2.20	0.73
6	7.03	8.02	9.50	10.98	12.77	7/8	2.24	0.82
8	9.18	10.17	11.75	13.23	14.92	7/8	2.28	0.82
10	11.23	12.22	14.00	15.70	16.97	7/8	2.37	0.93
12	13.33	14.32	16.25	17.95	19.07	7/8	2.40	0.93
14	15.44	16.40	18.75	20.43	21.18	7/8	2.57	0.91
16	17.54	18.50	21.00	22.88	23.28	7/8	2.57	1.05
18	19.64	20.60	23.25	25.43	25.38	7/8	2.57	1.05
20	21.74	22.70	25.50	27.50	27.48	7/8	2.66	1.15
24	25.94	26.90	30.00	32.00	31.68	7/8	2.72	1.35
30	32.18	33.30	36.88	39.42	39.78	1-1/8	3.86	1.53
36	38.48	39.60	43.75	46.29	46.08	1-1/8	3.86	1.53



**SERIES 2000 TLP-PVC TUF Grip™ - APPLICATION CHART**

Size (Inches)	Part No. - Gland Only Domestic / Non-Domestic	Wedge Qty.	T-Head Bolt Qty.	Bolt Size	Gland Weight(lbs.)	Weight (w/Acc.)	*Pressure Rating	Pipe O.D. (Inches)
3	CALL / 113928	2	4	5/8" x 3"	7.0	11.0	*305 / DR14	3.50
4	516002 / 113935	2	4	3/4" x 3.5"	8.3	12.2	*305 / DR14	4.50-4.80
6	516019 / 113942	3	6	3/4" x 4"	12.4	18.3	*305 / DR14	6.63-6.90
8	516026 / 113959	3	6	3/4" x 4"	14.9	20.8	*305 / DR14	8.63-9.12
10	516033 / 113973	6	8	3/4" x 4"	25.7	33.4	*305 / DR14	10.75-11.10
12	516040 / 113980	8	8	3/4" x 4"	34.1	42.0	*305 / DR14	12.75-13.20
14	516248 / 113997	10	10	3/4" x 4.5"	45.1	55.4	*235 / DR18	15.30
16	516262 / 114000	12	12	3/4" x 4.5"	56.2	68.4	*235 / DR18	17.40
18	516286 / 114017	12	12	3/4" x 4.5"	62.4	74.8	*235 / DR25	19.50
20	516309 / 114024	14	14	3/4" x 4.5"	72.9	86.9	*235 / DR25	21.60
24	516323 / 114031	16	16	3/4" x 5"	93.2	109.8	*235 / DR25	25.80
30	CALL / 461302	20	20	1" x 7.5"	251	293	*150 / DR25	32.00
36	CALL / 461357	24	24	1" x 7.5"	281	331	*125 / DR25	38.30

\*Note: The pressure ratings are rated working water pressures for the restraint. See page 3 for additional ratings.

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Factory Mutual Approved

**STOP-LOOK :**

- Extra length T-Head bolts are provided with 30" - 36" restraints to facilitate mechanical joint assembly per AWWA C600
- For UL/FM Approvals, 3" - 12" were tested to 755 psi, 14" - 16" were tested to 755 psi and 18" - 24" inch were tested to 535 psi
- TUF Grip 30-36 inch provided with TRU-Lock™ mechanical joint gasket to ensure pressure rating and safety factors are met
- Mechanical joint T-head bolt torques for C909 applications are as provided; \*55-65 ft.-lbs for 4" to 8" and \*65 to 75 ft.-lbs. for 10" to 12" assembly. You must specify restraints are for C909 PVCO pipe upon order placement. Call for availability
- Installation and hydrostatic testing shall be in accordance with AWWA C600 and AWWA C651
- TUF Grip 4" to 24" restraints shall meet the requirements of ASTM F1674, current revision
- **Caution:** Pressure testing of piping systems restrained or un-restrained with insufficient backfill or bracing is not recommended

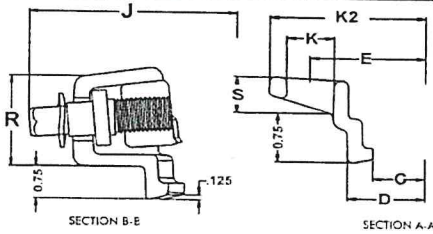
\*Tyler Union Waterworks Contact Information\*

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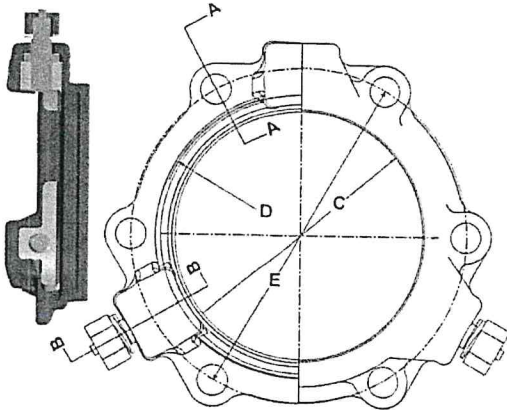
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**TUFGrip™ MJ Restraint Dimensions**

Size (Inches)	C	D	E	K2	J	K	R	S
3	4.08	4.88	6.19	7.67	9.82	3/4	2.20	0.86
4	4.93	5.92	7.50	8.98	10.67	7/8	2.20	0.73
6	7.03	8.02	9.50	10.98	12.77	7/8	2.24	0.82
8	9.18	10.17	11.75	13.23	14.92	7/8	2.28	0.82
10	11.23	12.22	14.00	15.70	16.97	7/8	2.37	0.93
12	13.33	14.32	16.25	17.95	19.07	7/8	2.40	0.93
14	15.44	16.40	18.75	20.43	21.18	7/8	2.57	0.91
16	17.54	18.50	21.00	22.88	23.28	7/8	2.57	1.05
18	19.64	20.60	23.25	25.43	25.38	7/8	2.57	1.05
20	21.74	22.70	25.50	27.50	27.48	7/8	2.66	1.15
24	25.94	26.90	30.00	32.00	31.68	7/8	2.72	1.35
30	32.18	33.30	36.88	39.42	39.78	1-1/8	3.86	1.53
36	38.48	39.60	43.75	46.29	46.08	1-1/8	3.86	1.53



**SERIES 2000 TLP-PVC TUF Grip™ - APPLICATION CHART**

Size (Inches)	Part No. - Gland Only Domestic / Non-Domestic	Wedge Qty.	T-Head Bolt Qty.	Bolt Size	Gland Weight(lbs.)	Weight (w/Acc.)	*Pressure Rating	Pipe O.D. (Inches)
3	CALL / 113928	2	4	5/8" x 3"	7.0	11.0	*305 / DR14	3.50
4	516002 / 113935	2	4	3/4" x 3.5"	8.3	12.2	*305 / DR14	4.50-4.80
6	516019 / 113942	3	6	3/4" x 4"	12.4	18.3	*305 / DR14	6.63-6.90
8	516026 / 113959	3	6	3/4" x 4"	14.9	20.8	*305 / DR14	8.63-9.12
10	516033 / 113973	6	8	3/4" x 4"	25.7	33.4	*305 / DR14	10.75-11.10
12	516040 / 113980	8	8	3/4" x 4"	34.1	42.0	*305 / DR14	12.75-13.20
14	516248 / 113997	10	10	3/4" x 4.5"	45.1	55.4	*235 / DR18	15.30
16	516262 / 114000	12	12	3/4" x 4.5"	56.2	68.4	*235 / DR18	17.40
18	516286 / 114017	12	12	3/4" x 4.5"	62.4	74.8	*235 / DR25	19.50
20	516309 / 114024	14	14	3/4" x 4.5"	72.9	86.9	*235 / DR25	21.60
24	516323 / 114031	16	16	3/4" x 5"	93.2	109.8	*235 / DR25	25.80
30	CALL / 461302	20	20	1" x 7.5"	251	293	*150 / DR25	32.00
36	CALL / 461357	24	24	1" x 7.5"	281	331	*125 / DR25	38.30

\*Note: The pressure ratings are rated working water pressures for the restraint. See page 3 for additional ratings.

ISO 9001-2008 Registered

Listed with Underwriters Laboratory

Factory Mutual Approved

**STOP-LOOK :**

- Extra length T-Head bolts are provided with 30"- 36" restraints to facilitate mechanical joint assembly per AWWA C600
- For UL/FM Approvals, 3"- 12" were tested to 755 psi, 14"-16" were tested to 755 psi and 18"- 24" inch were tested to 535 psi
- TUF Grip 30-36 inch provided with TRU-Lock™ mechanical joint gasket to ensure pressure rating and safety factors are met
- Mechanical joint T-head bolt torques for C909 applications are as provided; \*55-65 ft.-lbs for 4" to 8" and \*65 to 75 ft.-lbs. for 10" to 12" assembly. You must specify restraints are for C909 PVCO pipe upon order placement. Call for availability
- Installation and hydrostatic testing shall be in accordance with AWWA C600 and AWWA C651
- TUF Grip 4" to 24" restraints shall meet the requirements of ASTM F1674, current revision
- **Caution:** Pressure testing of piping systems restrained or un-restrained with insufficient backfill or bracing is not recommended

\*Tyler Union Waterworks Contact Information\*

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<b>**ADDITIONAL SERIES 2000 TLP-TUF GRIP™ RESTRAINT RATINGS</b>														
	AWWA C900			AWWA C905			ASTM D2241			HDPE* AWWA C906				
SIZE (Inches)	DR14	DR18	DR25	DR18	DR25	DR32.5	SDR17	SDR21	SDR26	DR7.3	DR9	DR11	DR13.5	DR17
3	-	-	-	-	-	-	250	200	160	254	200	160	128	100
4	305	235	165	-	-	-	250	200	160	254	200	160	128	100
6	305	235	165	-	-	-	250	200	160	254	200	160	128	100
8	305	235	165	-	-	-	250	200	160	254	200	160	128	100
10	305	235	165	-	-	-	250	200	160	254	200	160	128	100
12	305	235	165	-	-	-	250	200	-	254	200	160	128	100
14	-	-	-	235	165	125	-	-	-	254	200	160	128	100
16	-	-	-	235	165	125	-	-	-	254	200	160	128	100
18	-	-	-	200	165	-	-	-	-	-	-	-	-	-
20	-	-	-	200	165	-	-	-	-	-	-	-	-	-
24	-	-	-	165	165	125	-	-	-	-	-	-	-	-
30	-	-	-	-	165	125	-	-	-	-	-	-	-	-
36	-	-	-	-	125	125	-	-	-	-	-	-	-	-

**\*\*Note:** Pressure Ratings for Ordinary Water Works Restraint Application with Transitory Surges Only  
**\*\*Note:** AWWA C909 PVCO Restraint Pressure Rating is per the Pressure Rating Listed on the Pipe  
**\* Note:** HDPE application require a separate stiffener ring. 4-16 for DI OD Pipe and 4-12 for IPS Pipe  
 Assembly steps for (3"-12" ASTM D2241 IPS PVC), (4"-12" AWWA C909 PVCO), and (4"-36" AWWAC900/C905 PVC)



1. Insure the beveled pipe end to be joined and mechanical joint socket are clean and free of debris. Slide the RED TUF Grip onto the beveled end of the pipe to be restrained. The TUF Grip compression lip extension must be toward the beveled end of the pipe being restrained.
2. Evenly lubricate the beveled pipe end, exterior pipe wall, and inside surface of the gasket with a lubricant that meets the requirements of AWWA C111. Now place the **\*\*MJ** gasket over the plain beveled end of the pipe with the narrow edge of the tapered gasket toward the pipe end. **\*\*NOTE:** Use MJ transition gasket with IPS diameter pipe.
3. Fully insert the beveled pipe end into the MJ socket pipe landing. Keeping the pipe straight in the MJ socket, slide/push the MJ gasket firmly and evenly into the MJ socket recess. Joint must be kept straight during assembly.
4. Push the TUF Grip compression lip extension evenly against the thick side of the MJ gasket and insert all T-Head bolts with nuts. Use only T-Head bolts and nuts that meet AWWA C111 requirements. With the TUF Grip restraint lip extension against the MJ gasket, evenly hand-tighten the nuts on the T-Head bolts making sure the restraint body is centered on the pipe and within in the MJ socket. If joint deflection is needed, deflect the pipe only after hand tightening of all nuts is completed. Joint deflection is 3° max for 3", 5° max for 4"-12", 2° max for 14"-16", 1.5° max for 18"-36". **NOTE:** Maximum deflection values provided apply with nominal pipe, fitting, and restraint diameters.
5. Using a wrench, tighten the T-Head bolts and nuts a few turns at a time in an alternating or star pattern. Maintain equal spacing or distance between the TUF Grip bolt flange and the MJ socket bolt flange as the MJ gasket is compressed. Repeat the process in an alternating pattern for all T-Head bolts and nuts. The T-Head bolt and nut torque requirement for restraints is 3"- 45-60 ft.-lbs., 4"- 24"-75-90 ft.-lbs., and 30"- 36"- 100-120 ft.-lbs.  
**NOTE:** The C909 PVCO T-Head bolt and nut torque is 55-65 ft.-lbs. for 4"-8" and 65-75 ft.-lbs. for 10"-12" restraints.  
**DO NOT OVER-TORQUE T-HEAD BOLTS and NUTS WHEN ASSEMBLING PVC and PVCO PIPE!**
6. **\*\*Hand-tighten** the torque limiting nuts attached to the TUF Grip wedge assemblies in a clockwise direction with an alternating or star pattern until all gripping wedges are in contact with the pipe wall. Rotational direction of torque nut is indicated by recessed arrow on the face of the nut. With a wrench (box, socket, or pneumatic), continue to tighten each torque nut ½ turn in an alternating or star pattern around the restraint until all torque limiting nuts twist off. **NEVER** turn a torque limiting nut more than ½ turn without turning the remaining torque nuts an equal amount! **\*\*NOTE:** For IPS and PVCO applications, ensure step 5 is completed before engaging wedges. Failure to comply will result in excessive pipe wall deflection and torque nuts will not twist off as designed.
7. When all torque limiting nuts twist off, the mechanical joint and restraint assembly are complete.

**\*Tyler Union Waterworks Contact Information\***

**Tyler:** 11910 CR 492 • Tyler, Texas 75706 • (800) 527-8478  
**Anniston:** 1501 W 17<sup>th</sup> St. • Anniston, AL 36201 • (800) 226-7601  
**Corona:** 1001 El Camino Ave. • Corona, CA 92879 • (866) 527-8471  
[www.tylerunion.com](http://www.tylerunion.com)

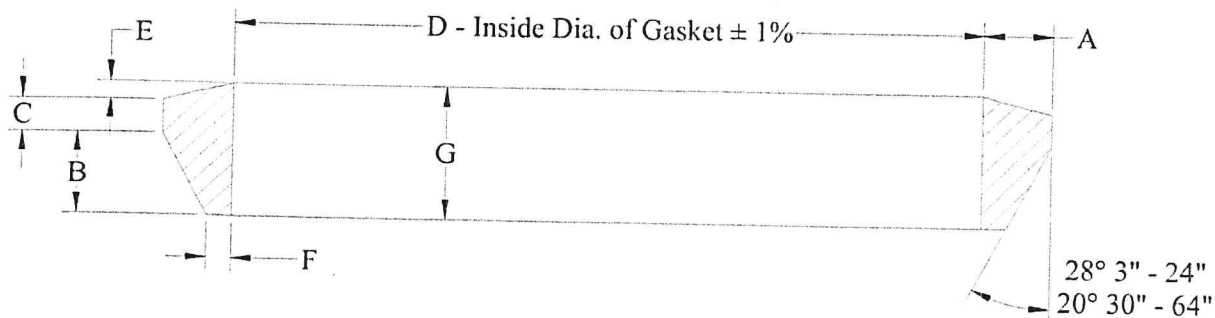
### Mechanical Joint Gaskets

ANSI/AWWA C111/A21.11-12

\*MJ Tru-Lock Gaskets 30-48 inch

Pipe Size	Pipe OD	A ±0.01"	B	C	D ±1%	E ±0.01%	F ±0.01"	G ±0.02"
**2	2.50	0.48	0.62	0.31	2.48	0.12	0.15	1.05
3	3.96	0.48	0.62	0.31	3.86	0.12	0.15	1.05
4	4.80	0.62	0.75	0.31	4.68	0.16	0.22	1.22
6	6.90	0.62	0.75	0.31	6.73	0.16	0.22	1.22
8	9.05	0.62	0.75	0.31	8.85	0.16	0.22	1.22
10	11.10	0.62	0.75	0.31	10.87	0.16	0.22	1.22
12	13.20	0.62	0.75	0.31	12.95	0.16	0.22	1.22
14	15.30	0.62	0.75	0.31	14.99	0.16	0.22	1.22
16	17.40	0.62	0.75	0.31	17.07	0.16	0.22	1.22
18	19.50	0.62	0.75	0.31	19.13	0.16	0.22	1.22
20	21.60	0.62	0.75	0.31	21.20	0.16	0.22	1.22
24	25.80	0.62	0.75	0.31	25.34	0.16	0.22	1.22
30	32.00	0.73	1.00/*50	.38/*50	31.47	0.16	.37/*55	1.54/*1.16
36	38.30	0.73	1.00/*50	.38/*50	37.67	0.16	.37/*55	1.54/*1.16
42	44.50	0.73	1.00/*50	.38/*50	43.78	0.16	.37/*55	1.54/*1.16
48	50.80	0.73	1.00/*50	.38/*50	49.98	0.16	.37/*55	1.54/*1.16

\*\* Not included in AWWA C111. Manufacture's Standard does not meet AWWA C111



**\*\* Mechanical Joint Transition Gasket Dimensions in Inches**

Pipe Size	A ± 0.01"	B	C	D ±1%	E	F ± 0.01"	G ± 0.02"
2	0.57	0.62	0.31	2.28	0.16	0.24	1.08
3	0.70	0.62	0.31	3.45	0.16	0.37	1.11
4	0.77	0.75	0.31	4.43	0.16	0.37	1.26
6	0.76	0.75	0.31	6.53	0.16	0.36	1.25
8	0.82	0.75	0.31	8.50	0.16	0.42	1.27
10	0.79	0.75	0.31	10.59	0.16	0.39	1.26
12	0.84	0.75	0.31	12.56	0.16	0.44	1.28

\*\* Not included in AWWA C111. Manufacture's Standard does not meet AWWA C111

**Anniston:** 1501 W 17<sup>th</sup> St. • Anniston, AL 36201 • (800) 226-7601  
**Corona:** 1001 El Camino Ave. • Corona, CA 92879 • (866) 527-8471  
**Tyler:** 11910 CR 492 • Tyler, Texas 75706 • (800) 527-8478  
**Dallas:** 1201 Ave. S. Suite100 • Grande Prairie, TX 75050

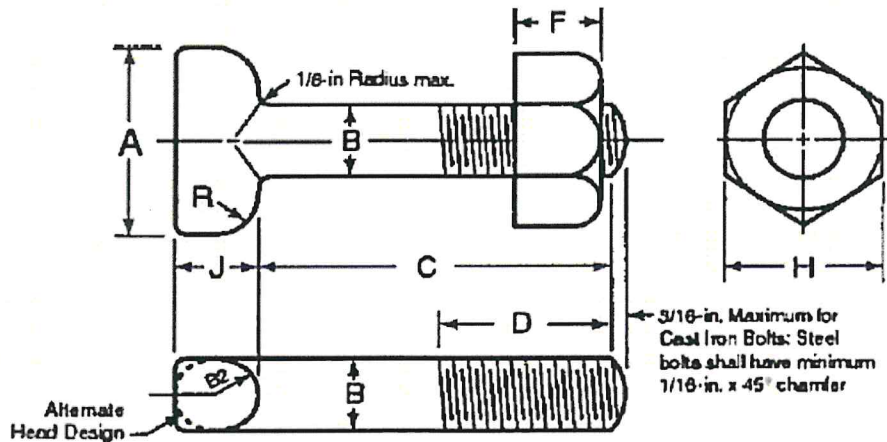
**Elmer:** 701 Kenyon Ave. Elmer, New Jersey 03318  
**New Lenox:** 2200 West Haven • New Lenox, IL 60451  
**Portland:** 15670 N. Lombard St. • Portland, OR 97203  
**Oxford:** 1800 Greenbrier Dear Road • Anniston, AL 36207



## SUBMITTAL: C111 T-BOLTS AND NUTS FOR MECHANICAL JOINT

(Current revisions for all noted Standards apply)

<b>SIZES:</b>	5/8 X 3 through 1-1/4 X 8.5
<b>STANDARDS:</b>	ANSI/AWWA C111/A21.11
<b>Material:</b>	ASTM A242 High Strength Low Alloy Steel. Also available in ANSI 304 or 316 AISI Stainless Steel.
<b>COATING:</b>	Standard bolts and nuts are not coated. Stainless Steel bolt and coated Green or Red. Fluoropolymer coating is available on request. Fluoropolymer is Flurokote #1 (Blue for Low Alloy Steel).
<b>FASTENERS:</b>	High strength low alloy weathering steel per ANSI/AWWA C111/A21.11 and ASTM A242.



T-HEAD LOW ALLOY WEATHERING AND AISI STAINLESS STEEL FASTENER DIMENSION IN INCHES									
Size Inches	A ±0.05	B +0.03 / - 0.074	C +0.25 / - 0.06	F	H	J +0.15 / 0.03	R Max	D*	Threads Per Inch E**
5/8x3	1.5	0.625	3.00	0.625	1.062	0.625	0.312	2.00	11
3/4x3.5	1.75	0.750	3.50	0.750	1.250	0.750	0.375	2.50	10
3/4x4	1.75	0.750	4.00	0.750	1.250	0.750	0.375	3.00	10
3/4x4.5	1.75	0.750	4.50	0.750	1.250	0.750	0.375	3.00	10
3/4x5	1.75	0.750	5.00	0.750	1.250	0.750	0.375	3.00	10
1x6	1.75	1.000	6.00	1.000	1.625	1.000	0.500	3.00	8
1x7.5	2.25	1.000	7.50	1.000	1.625	1.000	0.625	4.50	8
1- 1/4x6.5	2.50	1.250	6.50	1.250	2.000	1.250	0.750	3.50	7
1- 1/4x8.5	2.50	1.250	8.50	1.250	2.000	1.250	0.750	4.00	7

- NOTES:**
1. Dimension B is unthreaded shank.
  2. Draft, when required to be 6 degree maximum, may be deducted from bolt head dimensions, and radius (B/2) may be changed to suit draft.
  3. Gates, if required, may protrude a maximum of 1/8" above the top of bolt thread.
  4. Chamfer is optional if threads are rolled.
  5. If threads are rolled, the body diameter may be reduced to the approximate pitch diameter of the thread.
  6. \* Tolerance +3/-0 thread.
  7. \*\* Number of threads per inch – course-thread series (ANSI/ASME B1.1), Class 2A, external fit UNC2A and Class 2B, UNC2B (ANSI/ASME B1.2).

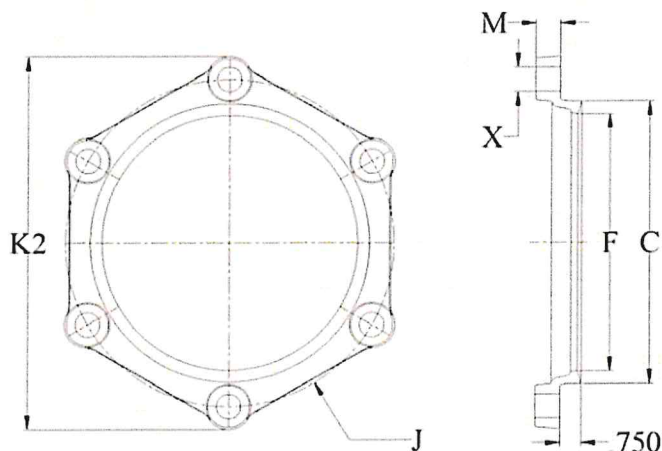
☐ DOMESTIC

☐ NON-DOMESTIC

## SUBMITTAL: C153 MECHANICAL JOINT GLANDS

(Current revisions for the noted Standards apply)

<b>SIZES:</b>	2" - 64" (2" not included in ANSI/AWWA C153 standard)
<b>STANDARDS:</b>	ANSI/AWWA C153/A21.53, NFPA13/24, 3"-12" UL and 3"-12" FM listed & approved (File - Tyler Union)
<b>MATERIAL:</b>	Cast of ASTM A536 qualified ductile iron. Date code is cast on and required for traceability.
<b>DEFLECTION:</b>	Joint deflection 5° max for 2"– 12" and 3° max for 14"– 48". Reduces by 50% at nominal pipe & fitting diameters
<b>NSF-61 &amp; NSF372:</b>	Meets all requirements including Annex G, Tyler Union's Underwriters Laboratory listing MH16439.
<b>ASPHALT COATING:</b>	Per ANSI/AWWA C104/A21.4 and ANSI/AWWA C153/A21.53.
<b>EPOXY COATING:</b>	Fusion bonded epoxy per ANSI/AWWA C116/A21.16. Additional coatings available upon request.
<b>BARE FITTINGS:</b>	Available upon request.
<b>FASTNERS:</b>	High strength low alloy weathering steel per ANSI/AWWA C111/A21.11 and ASTM A242
<b>INSTALLATION:</b>	Install per AWWA C600/C651 using pipe conforming to ANSI/AWWA C151/A21.51 or AWWA C900/905.



NOMINAL JOINT DIMENSIONS IN INCHES

Size Inches	DI Pipe Dia.	C Dia. GLAND	F Dia.	J Dia. GLAND	K <sup>2</sup> Dia. GLAND	M GLAND	X	Size	Qty.
3	3.96	4.84	4.06	6.19	7.69	0.62	3/4	5/8x3	4
4	4.80	5.92	4.90	7.50	9.12	0.75	7/8	3/4x3-1/2	4
6	6.90	8.02	7.00	9.50	11.12	0.88	7/8	3/4x3-1/2	6
8	9.05	10.17	9.15	11.75	13.37	1.00	7/8	3/4x4	6
10	11.10	12.22	11.20	14.00	15.62	1.00	7/8	3/4x4	8
12	13.20	14.32	13.30	16.25	17.88	1.00	7/8	3/4x4	8
14	15.30	16.40	15.44	18.75	20.25	1.25	7/8	3/4x4-1/2	10
16	17.40	18.50	17.54	21.00	22.50	1.31	7/8	3/4x4-1/2	12
18	19.50	20.60	19.64	23.25	24.75	1.38	7/8	3/4x4-1/2	12
20	21.60	22.70	21.74	25.50	27.00	1.44	7/8	3/4x4-1/2	14
24	25.80	26.90	25.94	30.00	31.50	1.56	7/8	3/4x5	16
30	32.00	33.29	32.17	36.88	39.12	2.00	1-1/8	1x6	20
36	38.30	39.59	38.47	43.75	46.00	2.00	1-1/8	1x6	24
42	44.50	45.79	44.67	50.62	53.12	2.00	1-3/8	1-1/4x6-1/2	28
48	50.80	52.09	50.97	57.50	60.00	2.00	1-3/8	1-1/4x6-1/2	32
54	Available on Request								
60	Available on Request								
64	Available on Request								

### Tyler Union Waterworks – Call Center Information

**Anniston:** (800) 226-7601

**Corona:** (866) 527-8471

**Tyler:** (800) 527-8478



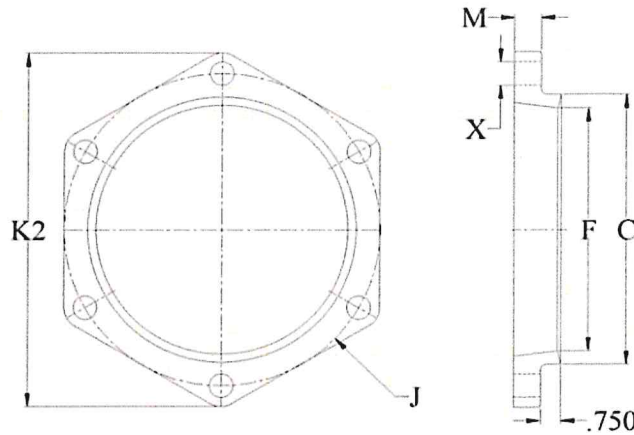
☐ DOMESTIC

☐ NON-DOMESTIC

## SUBMITTAL: C110 MECHANICAL JOINT GLANDS

(Current revisions for the noted Standards apply)

<b>SIZES:</b>	2" - 48"
<b>STANDARDS:</b>	ANSI/AWWA C110/A21.10, NFPA 13/24, 3" - 12" UL listed and approved (File - Tyler Union)
<b>MATERIAL:</b>	Cast of ASTM A536 qualified ductile iron. Date code is cast on and required for traceability.
<b>DEFLECTION:</b>	Joint deflection 5° max for 2"– 12" and 3° max for 14"– 48". Reduces by 50% at nominal pipe & fitting diameters
<b>NSF-61 &amp; NSF372:</b>	Meets all requirements including Annex G, Tyler Union's Underwriters Laboratory listing MH16439.
<b>ASPHALT COATING:</b>	Per ANSI/AWWA C104/A21.4 and ANSI/AWWA C110/A21.10.
<b>EPOXY COATING:</b>	Fusion bonded epoxy per ANSI/AWWA C116/A21.16. Additional coatings available upon request.
<b>BARE FITTINGS:</b>	Available upon request.
<b>FASTNERS:</b>	High strength low alloy weathering steel per ANSI/AWWA C111/A21.11 and ASTM A242
<b>INSTALLATION:</b>	Install per AWWA C600/C651 using pipe conforming to ANSI/AWWA C151/A21.51 or AWWA C900/905.



**NOMINAL JOINT DIMENSIONS IN INCHES**

Size Inches	DI Pipe Dia.	C Dia. GLAND	F Dia.	J Dia. GLAND	K <sup>2</sup> Dia. GLAND	M GLAND	X	Size	Qty. BOLTS
2	2.51	3.39	2.61	4.75	6.25	0.62	3/4	5/8x3	2
3	3.96	4.84	4.06	6.19	7.69	0.62	3/4	5/8x3	4
4	4.80	5.92	4.90	7.50	9.12	0.75	7/8	3/4x3-1/2	4
6	6.90	8.02	7.00	9.50	11.12	0.88	7/8	3/4x3-1/2	6
8	9.05	10.17	9.15	11.75	13.37	1.00	7/8	3/4x4	6
10	11.10	12.22	11.20	14.00	15.62	1.00	7/8	3/4x4	8
12	13.20	14.32	13.30	16.25	17.88	1.00	7/8	3/4x4	8
14	15.30	16.40	15.44	18.75	20.25	1.25	7/8	3/4x4-1/2	10
16	17.40	18.50	17.54	21.00	22.50	1.31	7/8	3/4x4-1/2	12
18	19.50	20.60	19.64	23.25	24.75	1.38	7/8	3/4x4-1/2	12
20	21.60	22.70	21.74	25.50	27.00	1.44	7/8	3/4x4-1/2	14
24	25.80	26.90	25.94	30.00	31.50	1.56	7/8	3/4x5	16
30	32.00	33.29	32.17	36.88	39.12	2.00	1-1/8	1x6	20
36	38.30	39.59	38.47	43.75	46.00	2.00	1-1/8	1x6	24
42	44.50	45.79	44.67	50.62	53.12	2.00	1-3/8	1-1/4x6-1/2	28
48	50.80	52.09	50.97	57.50	60.00	2.00	1-3/8	1-1/4x6-1/2	32

**Tyler Union Waterworks – Call Center Information**

**Anniston:** (800) 226-7601

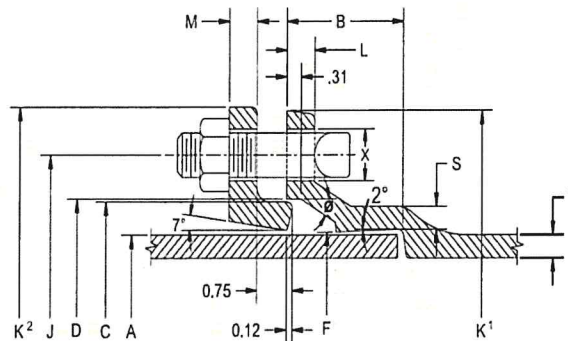
**Corona:** (866) 527-8471

**Tyler:** (800) 527-8478

## SUBMITTAL: C153 MECHANICAL JOINT PRODUCT

(Current revisions for the noted Standards apply)

- SIZES:** 2" - 64" (2" not included in ANSI/AWWA C153 standard)
- STANDARDS:** ANSI/AWWA C153/A21.53, NFPA13/24, 3"-16" UL and 3"-10" FM listed & approved (File - Tyler Union)
- MATERIAL:** Cast of ASTM A536 qualified ductile iron. Date code is cast on and required for traceability.
- PRESSURE RATING:** \*Flanged fittings rated at 250 psi. Mechanical joints 2" - 24" rated at 350 psi and 30" - 48" at 250 psi.  
\*Note: With rubber annular ring flange gasket, 2" - 24" Flanged fittings can be rated at 350 psi.  
Note: Wyes over 12" are not pressure rated. Contact Tyler Union for rating in your application.
- DEFLECTION:** Joint deflection 5° max for 2" - 12" and 3° max for 14" - 48". Reduces by 50% at nominal pipe & fitting diameters
- NSF-61 & NSF372:** Meets all requirements including Annex G, Tyler Union's Underwriters Laboratory listing MH16439.
- ASPHALT COATING:** Per ANSI/AWWA C104/A21.4 and ANSI/AWWA C153/A21.53.
- CEMENT LINING:** Per ANSI/AWWA C104/A21.4, with double cement lining available upon request.
- EPOXY COATING:** Fusion bonded epoxy per ANSI/AWWA C116/A21.16. Additional coatings available upon request.
- BARE FITTINGS:** Available upon request.
- FASTNERS:** High strength low alloy weathering steel per ANSI/AWWA C111/A21.11 and ASTM A242
- INSTALLATION:** Install per AWWA C600/C651 using pipe conforming to ANSI/AWWA C151/A21.51 or AWWA C900/905.



NOMINAL JOINT DIMENSIONS IN INCHES

BOLTS

Size Inches	A Dia. DI Pipe	B Hub Depth	C Dia. GLAND	D Dia.	F Dia.	J Dia. GLAND	K' Dia.	K² Dia. GLAND	L	M GLAND	S	T	X	Size	Qty.
2	2.51	2.50	3.50	3.60	2.61	4.75	6.19	6.89	0.58	0.62	0.36	0.30	3/4	5/8x3	2
3	3.96	2.50	4.84	4.94	4.06	6.19	7.62	7.69	0.58	0.62	0.39	0.33	3/4	5/8x3	4
4	4.80	2.50	5.92	6.02	4.90	7.50	9.06	9.12	0.60	0.75	0.39	0.34	7/8	3/4x3-1/2	4
6	6.90	2.50	8.02	8.12	7.00	9.50	11.06	11.12	0.63	0.88	0.43	0.36	7/8	3/4x3-1/2	6
8	9.05	2.50	10.17	10.27	9.15	11.75	13.31	13.37	0.66	1.00	0.45	0.38	7/8	3/4x4	6
10	11.10	2.50	12.22	12.34	11.20	14.00	15.62	15.62	0.70	1.00	0.47	0.40	7/8	3/4x4	8
12	13.20	2.50	14.32	14.44	13.30	16.25	17.88	17.88	0.73	1.00	0.49	0.42	7/8	3/4x4	8
14	15.30	3.50	16.40	16.54	15.44	18.75	20.31	20.25	0.79	1.25	0.55	0.47	7/8	3/4x4-1/2	10
16	17.40	3.50	18.50	18.64	17.54	21.00	22.56	22.50	0.85	1.31	0.58	0.50	7/8	3/4x4-1/2	12
18	19.50	3.50	20.60	20.74	19.64	23.25	24.83	24.75	1.00	1.38	0.68	0.54	7/8	3/4x4-1/2	12
20	21.60	3.50	22.70	22.84	21.74	25.50	27.08	27.00	1.02	1.44	0.69	0.57	7/8	3/4x4-1/2	14
24	25.80	3.50	26.90	27.04	25.94	30.00	31.58	31.50	1.02	1.56	0.75	0.61	7/8	3/4x5	16
30	32.00	4.50	33.29	33.46	32.17	36.88	39.12	39.12	1.31	2.00	0.82	0.66	1-1/8	1x6	20
36	38.30	4.50	39.59	39.76	38.47	43.75	46.00	46.00	1.45	2.00	1.00	0.74	1-1/8	1x6	24
42	44.50	4.50	45.79	45.96	44.67	50.62	53.12	53.12	1.45	2.00	1.25	0.82	1-3/8	1-1/4x6-1/2	28
48	50.80	4.50	52.09	52.26	50.97	57.50	60.00	60.00	1.45	2.00	1.35	0.90	1-3/8	1-1/4x6-1/2	32
54	Available on Request														
60	Available on Request														
64	Available on Request														



# MACRO HP EXTENDED RANGE COUPLING

## 2 – 12 INCH

### SUBMITTAL INFORMATION



### USE

Provides an Extended Range Coupling for multi-purpose use from steel pipe up through class 200 asbestos cement pipe. Each end requires only one bolt to compress the gasket around the pipe. The MACRO can accommodate up to 10 degrees of deflection.

### STANDARD

The MACRO coupling is in accordance with the requirements of AWWA Standard C219.

### MATERIALS

#### CASTINGS

All cast components (end rings, center ring, and bolt cams) are ductile iron, meeting or exceeding the requirements of ASTM A 536, grade 65-45-12.

#### END RINGS

4 – 12 inch End Rings are segmented and joined with an integrated hinge. 2 and 3 inch use a type 316 stainless steel pin. The gap is spanned by the armor.

#### CENTER RING

Cast with integral handle for ease of assembly.

#### ARMOR

Heavy gauge 304 stainless steel.

#### GASKETS

Made from virgin Ethylene Propylene Diene Monomer Rubber (EPDM) compounded for water and sewer service in accordance with ASTM D2000, NSF 61 Certified. NBR - NSF 61 gaskets available upon request.

#### BOLTS AND NUTS

Type 304 stainless steel. 2 and 3 inch are 1/2-13 UNC, 4 – 12 inch are 5/8-11 UNC. All are carriage head bolts with heavy hex nuts. Fasteners provided with anti-galling protection. 316 stainless available on request.

#### COATINGS

Center Ring is Romacote fusion bonded epoxy, NSF 61 Certified. Center Ring can be coated to AWWA C213 upon request. End Rings are E-Coated epoxy.

### PRESSURE

When properly installed on a pipe that is within the outside diameter range of the Romac MACRO HP coupling, the 2 – 8 inch can be used at working pressures up to 305 psi and the 10" and 12" up to 260 psi. The LR (Low-Range) Macro can be use up to 200 psi working pressure 4"-12". The Macro can be tested up to 1.5 times working pressure.

### SIZES & RANGES

See Catalog.

*This information is based on the best data available at the date printed above. Please check with Romac for any updates or changes.*



www.romac.com  
21919 20th Avenue SE • Suite 100 • Bothell, WA 98021  
Phone (425) 951-6200 • 1-800-426-9341 • Fax (425) 951-6201



**CENTRALBIDDING**  
FROM CENTRAL AUCTION HOUSE

**5000129070 - ONE (1) YEAR CONTRACT FOR A SUPPLY OF COUPLINGS,  
RESTRAINING DEVICES AND RELATED GASKETS FOR THE  
JEFFERSON PARISH DEPARTMENT OF PUBLIC WORKS, WATER, AND  
SEWERAGE AND ALL JEFFERSON PARISH AGENCIES AND  
MUNICIPALITIES**

Jefferson Parish Government

Project documents obtained from [www.CentralBidding.com](http://www.CentralBidding.com)

18-Dec-2019 03:32:29 PM





# JEFFERSON PARISH

Department of Purchasing

**Michael S. Yenni**  
Parish President

**Renny Simno**  
Director

December 18, 2019

## JEFFERSON PARISH ADVERTISED BID:

**Re: BID # 50-00129070 – One (1) year contract for a Supply of Couplings, Restraining Devices & Related Gaskets for the Jefferson Parish Department of Public Works, Water & Sewerage and all Jefferson Parish Agencies & Municipalities**

**Bid Opening Date: 1/16/2020**

To whom it may concern:

Please accept this letter as notification of the above referenced bid.

As per specifications on file in the:  
Jefferson Parish Purchasing Department  
200 Derbigny Street, Suite 4400  
Gretna, LA 70053  
(504)364-2678

### AVAILABLE FOR VIEWING AND ELECTRONIC SUBMISSION AT:

<http://www.jeffparishbids.net>

For more information on this bid, please contact the buyer:

**Melissa Ovalle, Buyer II**  
**504-364-2687**  
[Movalle@jeffparish.net](mailto:Movalle@jeffparish.net)

Or you may visit the Purchasing Department's webpage at [www.jeffparish.net](http://www.jeffparish.net).



# JEFFERSON PARISH

Department of Purchasing

**Michael S. Yenni**  
Parish President

**Renny Simno**  
Director

**June 2019**

## CHANGES TO JEFFERSON PARISH BIDDING PROCEDURES

The Jefferson Parish Purchasing Department would like to make vendors aware of the following changes:

**DEDUCTIBLES:** The Parish Attorney with concurrence of the Director of Risk Management have waived the deductible section of the Terms and Conditions for all Invitations to Bid, until further notice.

**PROTESTS:** Only those vendors that submit bids in response to a solicitation may protest any element of the procurement, in writing to the Director of the Purchasing Department. Written protest must be received within 48 hours of the release of the bid tabulation by the Purchasing Department. After consultation, the Parish Attorney's Office will then respond to protests in writing.  
(For more information, please see Chapter 2, Article VII, Division 2, Sec. 2-914.1 of the Jefferson Parish Code of Ordinances.)

Please contact the Jefferson Parish Purchasing Department at 504-364-2678 if you have any questions or need assistance.



## **Couplings and Restraints Contract**

### **Specifications for Bid 50-00129070**

#### **Items Included In This Contract:**

1. Steel Body Transitional Couplings (Non-Restrained) (Item No. 0550-0650 and 1190)
2. Ductile Iron Body Transitional Couplings (Non-Restrained) (Item No. 1140-1180)
3. Flange Coupling Adapter (Non-Restrained) (Item No. 0310-0390)
4. Flange Coupling Adapter (Restrained) (Item No. 0400-0540)
5. EBAA Series 1000 E-Z Flange (Item No. 0010-0110)
6. EBAA Series 1100DEC Megalug Mechanical Joint Restraint (Item No. 0660-0800)
7. EBAA Series 1500 Split Restraint Harness For C-900 Pipe Bells And Spigot (4"-12") (Item No. 0120-0150)
8. EBAA Series 1600 Split Restraint Harness For C-900 Pipe Bells And Spigot (4"-12") (Item No. 0160-0180)
9. EBAA Series 1700 Megalug Restraint Harness For Ductile Iron Bells (Item No. 0190-0300)
10. EBAA Series 2000PEC Mechanical Joint Restraint (Item No. 0810-0930)
11. Transition Gaskets (Asbestos Cement To Cast Iron) (Item No. 0940-0970)
12. Mechanical Joint Gaskets (For Ductile Iron Pipe) (Item No. 0980-1120)
13. Pipe Lubricant (Item No. 1130)
14. TX3 Extended Range Transition Coupling (Item No. 1200-1280)

#### **Contract Terms:**

This is a one year contract for supply of couplings, restraining devices, and the related gaskets for the Department of Water and Sewer, and all Jefferson Parish agencies and municipalities.

#### **Warranty:**

Products shall be warranted that they are manufactured in accordance with the applicable material specifications and are free from defects in workmanship and materials for one year after delivery. Any defective items sold under this contract shall be replaced at no cost to the purchaser.

#### **General Specifications:**

This specification is prepared for a one (1) year contract for a supply of couplings, restraining devices and related gaskets for the Parish of Jefferson, Department of Water and Sewerage, East and West Banks.

The quantities shown on the proposal guide are approximate quantities to be acquired by Jefferson Parish over a one (1) year period. Actual usage will be on an "as needed" basis.

Bid price shall include all freight and delivery costs to Jefferson Parish warehouse locations on the East and West Banks of Jefferson Parish.

The successful bidder shall not substitute any items on this bid throughout the one (1) year period without the written consent of the Jefferson Parish Engineering Dept.

**All technical literature must be submitted with the bid. Failure to honor such request will result in the bid being considered non-responsive and rejected.**

**Technical Specifications:**

1. **Steel Body Transition Couplings 2"-24" (Non-Restrained):**

Coupling shall accommodate pipe offset up to 7/16", pipe deflection up to 8 degrees, and pipe gaps up to 7.5.

Coupling shall join pipes with difference diameters up to 1.30" (2.10" in the 16" size).

Coupling shall be of the long pattern design and meet or exceed AWWA C-219 and be NSF 61 approved.

Couplings shall have a working pressure of 260 PSI with a maximum test pressure of 390 PSI with a 1.5:1 safety factor.

- **Material:**

Transition couplings shall have a lightweight middle ring that is properly flanged with confined steel followers. Transition coupling shall have an epoxy coating of 10-12 mils in thickness.

- **Follower Track (Spanners):**

Follower track (spanners) shall be type 304 stainless steel with two (2) type 304 stainless steel carriage-type, compression bolts and nuts with corresponding stainless steel retainers (one at each end) located on the top of the coupling. Nuts shall be coated to prevent galling.

- **Gaskets:**

Gaskets shall be wide range, multi-layered EDPM peel-off hydraulically pressure assisted, superior dual seal gaskets (seals mechanically and hydraulically) for permanently sealed joints.

- **Assembly:**

Coupling shall be totally assembled as in integral unit having stab-on feature, with bolts staved to prevent disassembly and required no disassembly during installation.

Coupling shall be "Hymax" or approved equal.



**2. Ductile Iron Body Transition Couplings 4"-12" (Non-Restrained):**

Coupling shall accommodate pipe deflection up to 8 degrees (4 degrees on each end).

Coupling shall have an extended range up to 1.25".

Coupling coating shall be center ring fusion bonded epoxy in accordance with AWWA C213 and NSF 61 certified. End rings shall be e-coated epoxy.

Couplings shall have a working pressure of 260 PSI.

- **Material:**

Transition coupling components (end rings, center ring, and bolt guides) shall be ductile iron, meeting or exceeding the requirements of ASTM A536, Grade 65-45-12.

- **Follower Track (Spanners):**

Follower track (spanners) shall be type 304 stainless steel with two (2) type 304 stainless steel carriage-type, compression bolts and nuts with corresponding stainless steel retainers (one at each end) located on the top of the coupling. Nuts shall be coated to prevent galling.

- **Gaskets:**

Gaskets shall be formed from virgin nitrile butadiene rubber (NBR) compounded for water and sewer service in accordance with ASTM D2000.

- **Assembly:**

Coupling shall be totally assembled as in integral. End rings shall be segmented and joined with an integrated hinge.

Coupling shall be Macro™ by Romac or an approved equal.

**3. Flanged Coupling Adapters (Non-Restrained):**

Adapter shall meet or exceed AWWA c-219 and be NSF 61 approved, but shall have one compression end with one nut and bolt, and one flanged end which complies with AWWA C-207-94 or ANSI B16-5.

Please note that the 2" flanged coupling adapter shall be available in 2" oval meter flanged size.

Flanged coupling adapter shall be "Hymax Flanged Adapter" or an approved equal.

**Note to Vendor:**

The coating system for all restraining devices shall be mega bond by EBAA Iron, Inc. or an approved (factory applied, fusion bonded epoxy) equal.

4. **Flange Coupling Adapters (Restrained) (Ductile/Cast Iron Pipe, 3"-60"; Steel Pipe, 3"-12"):**

Pipe Material	DR Rating	Sizes Available
IPS OD PVC Pipe	All SDR's	3"-12"
C-900	14	4"-12"
C-900	18	4"-20"
C-900	25	4"-24"
C-900	32.5	14"-24"

For PVC pipe, the flange adapter shall have a pressure rating equal to the pipe.

For ductile iron pipe, the flange adapter shall have a safety factor of 2:1 minimum.

The flange adapter shall be UL listed 3"-12" for above and below ground use on schedule 40 steel pipes, and below-ground on all classes of listed ductile iron pipe.

The flange adapter shall be FM approved for use on C-900 Class 150 (DR-18) and class 200 (DR-14 PVC pipe, 4"-12", and on all classes of listed ductile iron pipe, and for above ground flanged pipe systems (treatment plants, pumping stations, or underground).

- **Restrained Gland And Gasket Ring:**

The flange adapter restrained gland and gasket ring shall be made of grade 60-42-12 ductile iron, which exceeds the minimum requirements of ASTM A-536-84, and shall have flange bolts circles that are compatible with ANSI/AWWA C-115/1-21.15. The flange adapter gasket ring shall be fusion-bonded epoxy coated inside and out.

- **Flange Adapter Restraint Ring:**

The flange adapter restraint ring shall consist of a plurality of individual actuated gripping wedges to maximize restraint capability. Torque-limiting actuated screws shall be used to ensure proper initial set of the gripping wedges.

- **Assembly:**

The flange adapter shall be capable of deflecting during assembly, or permit lengths of pipe to be field cut to allow a minimum of 0.6" of gap through 2.0" of gap (depending on pipe diameter) between the end of the pipe and the mating flange without affecting the integrity of the seal.

- **Nuts and Bolts:**

The flange adapters shall be furnished with type Xylan or Teflon coated machined bolts and nuts.

Flange adapter shall be EBAA Series 2100 "Megaflange" adapter, or an approved equal.



5. **EBAA Series 1000 E-Z Flange:**

The flange adapter shall be used in lieu of threaded or welded flanges on plain end ductile iron and steel pipe.

These flanges shall be cast from 60-42-10 ductile iron per ASTM A536 and shall have bolt circles and bolt holes to meet ANSI/AWWA C100/A21.10.

These flanges shall contain set screws made from ductile iron which have a Rockwell hardness of C40-45 converted from Brinnell.

Flange adapters shall be as manufactured by EBAA Iron, Inc. or an approved equal.

6. **Series 110DEC Megalug Mechanical Joint Restraint:**

The wedges shall be ductile iron heat treated to a minimum hardness of 370 BHN. Dimensions of the gland shall be such that it can replace the standardized mechanical joint gland, and can be used with the standardized mechanical joint bell conforming to ANSI/AWWA C111/a21.11 and ANSI/AWWA C153/A.21.53 of the latest revision.

The mechanical joint restraint shall be available in the 3" through 48" sizes. They shall have a rated working pressure of 350 PSI in sizes 16" and smaller and 250 PSI in sizes 18" through 48" with 2 to 1 minimum safety factor. The devices shall be listed by Underwriter's Laboratories up through 24" size and approved by factory mutual up through 12" size.

All restraints shall be packaged. The package is to include the gland, EBAA-seal improved mechanical joint gasket and adequate lubricate for gasket lubrication, necessary quantity, size and length of t-bolts and nuts made from a low-alloy steel conforming to AWWA C-111 and be blue flora polymer coated equal to xylon coating.

The EBAA-seal gasket shall deflect 30% during assembly of the mechanical joint, improving sealing capabilities and shall meet in design and material, ANSI/AWWA C110/A21.10, C111/A21.11 or C153/A21.53, section 11-6.4 or latest revision.

The restraint shall be the series 110DEC Megalug restraint produced by EBAA Iron, Inc. or approved equal.

- **Mechanical Joint Restraint For Ductile Iron Pipe:**

Mechanical joint restraint for ductile iron pipe shall be incorporated into the design of the follower gland. The restraining mechanism shall consist of a plurality of individual actuated wedges that increase their resistance to pullout as internal pressure or external forces increase; the device shall be capable of full mechanism joint deflection during assembly and the flexibility of the joint shall be maintained after burial. The joint restraint ring and its wedging components shall be made of grade 60-42-12 ductile iron, which exceeds minimum requirements of ASTM A536-84.

- **Flange Adapter Restraint Ring:**  
The flange adapter restraint ring shall consist of a plurality of individual actuated gripping wedges to maximize restraint capability. Torque-limiting actuated screws shall be used to ensure proper initial set of the gripping wedges.
  - **Assembly:**  
The flange adapter shall be capable of deflecting during assembly, or permit lengths of pipe to be field cut to allow a minimum of 0.6" of gap through 2.0" of gap (depending on pipe diameter) between the end of the pipe and the mating flange without affecting the integrity of the seal.
  - **Nuts and Bolts:**  
The flange adapters shall be furnished with type Xylan or Teflon coated machined bolts and nuts.
7. **Series 1500 Split Restraint Harness For C-900 Pipe Bells and Spigot (4"-12"):**  
All rings and components shall be made of grade 60-42-12 ductile iron, which exceeds minimum requirements of ASTM A536. A split ring shall be utilized behind the pipe bell. A split serrated ring shall be utilized to grip the pipe.
- **Tie Bolts:**  
A sufficient quantity, size and length of tie bolts which shall be made from a low-alloy steel conforming to AWWA C111. Tie bolts shall be used to connect the bell ring and gripping ring.
  - **Side Bolts:**  
The side bolts shall be grade 5 machine bolts and be blue flora polymer coated equal to xylon coating.
  - **Harness Restraint Device:**  
The harness restraint device shall have a minimum working pressure rating of 150 psi, and be tested with a minimum of 4 to 1 safety factor. All sizes shall be FM approved for class 150 (DR 18) PVC pipe. All sizes rated to 200 PSI class 200 (DR 14) PVC pipe shall have a 3 to 1 safety factor, and shall be EBAA Series 1500 or an approved equal.
8. **Series 1600 Split Restraint Harness For C-900 Pipe Bells And Spigot (4"-12"):**  
All rings and components shall be made of grade 60-42-12 ductile iron, which exceeds minimum requirements of ASTM A536. A split ring shall be utilized behind the pipe bell. A split serrated ring shall be utilized to grip the pipe.
- **Tie Bolts:**  
A sufficient quantity, size and length of tie bolts which shall be made from a low-alloy steel conforming to AWWA C111. Tie bolts shall be used to connect the bell ring and gripping ring.



- **Side Bolts:**  
The side bolts shall be grade 5 machine bolts and be blue flora polymer coated equal to xylon coating.
- **Harness Restraint Device:**  
The harness restraint device shall have a minimum working pressure rating of 150 PSI, and be tested with a minimum of 4 to 1 safety factor. All sizes shall be FM approved for class 150 (DR 18) PVC pipe. All sizes rated to 200 PSI class 200 (DR 14) PVC pipe shall have a 3 to 1 safety factor, and shall be EBAA series 1600 or an approved equal.

9. **Series 1700 Megalug Restraint Harness for Ductile Iron Bells:**

Ductile iron pipe bell restraint shall consist of a wedge action restraint ring on the spigot and joined to a ductile iron pipe follower gland behind the bell. The restraint ring shall have individually-actuated wedges that increase their resistance to pull out as pressure or external forces increases.

- **Restraint Ring and Wedging Components:**  
The restraint ring and its wedging components shall be made of ductile iron grade 60-42-12, which exceeds minimum requirements of ASTM A536.
- **Wedges:**  
The wedges shall be heat-treated to a minimum hardness of 370 BHN. Torque limiting twist off nuts shall be used to ensure proper actuation of the restraining wedges.
- **Follower Gland:**  
The follower gland shall be made of the same grade ductile iron as previously mentioned. The connecting tie rods that join the two rings shall be of low alloy steel, which conforms to ANSI/AWWA C111/A21.11.
- **Assembly:**  
The assembly shall have a rated pressure with a minimum 2:1 safety factor for 350 PSI in sizes 16" and below, and 250 psi in sizes 18" through 36".
- **Harness:**  
Harness shall be series 1700 Megalug restraint harness manufacture by EBAA Iron, or an approved equal.
- **Nuts and Bolts:**  
The flange adapters shall be furnished with type Xylan or Teflon coated machined bolts and nuts.

**10. Series 2000 PEC Mechanical Joint Restraint:**

The mechanical joint restraint shall be available in 3" through 36" sizes. The restraining joint gland shall have a pressure rating and safety factor equal to that of the pipe on which it is used.

Mechanical joint restraint for PVC pipe shall be incorporated into the design of the follower gland. The restraint mechanism shall consist of a plurality of individually-actuated gripping wedges that increases their resistance to pullout as internal pressure or external forces increase. This evenly distributes the thrust forces around the circumference of the pipe, and is for use on all sizes of IPS diameter PVC pipe in 3" through 12" sizes, and all sizes of AWWA C-900 and C-905 pipe (4" through 36"). The device shall be capable of full mechanical joint deflection during assembly and flexibility of the joint shall be maintained after burial. The joint restraint ring and its wedging components shall be made of grade 60-42-12 ductile iron, which exceeds minimum requirements of ASTM A536.

Dimensions of the gland shall be such that it replaces the standardized mechanical joint gland and can be used with the standardized mechanical joint bell conforming to ANSI/AWWA C111/A21.11 and ANSI/AWWA C153/A21.53 of latest revision. Torque limiting twist off nuts shall be used to insure proper actuating of restraining wedges.

- **Restraining Gland:**

The restraining glands shall have been tested to ASTM F1674, and all sizes shall be rated at the full pressure capacity of the pipe. The mechanical joint restraint shall be listed by Underwriter's Laboratories, and approved by factory mutual (4"-12").

- **Packaging:**

All restraints shall be packaged. The package is to include gland, EBAA-seal(tm) improved mechanical joint gasket with adequate lubricant for gasket, necessary quantity, size and length of t-bolts and nuts made from a low-alloy steel conforming to AWWA C111 and be blue flora polymer coated equal to xylon coating.

- **EBAA-Seal™ Gasket:**

The EBAA-Seal™ gasket shall deflect 30% during assembly of the mechanical joint improving sealing capabilities and shall meet in design and material the ANSI/AWWA C110/A21.10, C111/A21.11, or C153/A21.53, section 11-6.4 or latest revision.

The restraint shall be the series 2000 PEC Megalug restraint produced by EBAA Iron, Inc. or approved equal.



**11. Transition Gaskets (Asbestos Cement to Cast Iron):**

Transition gaskets shall go from asbestos cement (ac) size down to cast iron size to be used on potable water and sewer lines, made from virgin SBR rubber material for use in salty and acidic soils with a temperature range of -65 degrees to 180 degrees Fahrenheit. Transition gaskets shall conform to the latest revision of ASTM D2000 3 BA715 to work with class 100, 150, and 200 machined "AC" pipe and ductile iron pipe Class 53.

Transition gaskets shall be manufactured by Romac Industries or an approved equal.

**12. Mechanical Joint Gaskets (For Ductile Iron Pipe):**

Mechanical joint gaskets for ductile iron pipe shall be used on potable water and sewer lines. Virgin SBR rubber material for the use in salty and acidic soils with a temperature range of -40 degrees to 150 degrees Fahrenheit, meet or exceed ASTM D2000 3 BA715, and to fit ANSI/AWWA A21.11/C111 and ANSI/AWWA A21.53/C153 latest revision standard, 250 PSI working pressure.

**13. Pipe Lubricant:**

Pipe lubricant shall be used for potable and waste water applications. Pipe lubricant shall be non-toxic, odorless, tasteless, and not be able to support bacterial growth. Lubricant shall come in one quart containers and be used to assemble "push-on" pipe and fittings.

**14. TX3 Extended Range Transition Coupling 2"-12" Diameters:**

Coupling shall accommodate pipe deflection up to 4 degrees per end.

Coupling shall have an extended range up to 1.3".

Coupling coating shall be in accordance with AWWA C213

Couplings shall have a working pressure up to 275 PSIG.

- **Material:** Transition couplings shall have a lightweight middle ring – Carbon Steel (ASTM A53 Grade A or A795 Carbon Steel) and End Ring- ASTM A283 Grade D. Transition coupling shall have an epoxy top coating of 12-15 mils in thickness.
- **Follower Track (Spanners):** Follower track (spanners) shall be ASTM A193 Grade, 18-8 type 304 stainless. Nuts, bolts, and washers shall be coated to prevent galling.
- **Gaskets:** Gaskets shall be wide range, dual-layer adjustable and formed from virgin nitrile butadiene rubber (NBR) compounded for water and sewer service in accordance with ASTM A240 type 304 stainless Steel.
- **Assembly:** Coupling shall be totally assembled as in integral unit having stab-on feature, no disassembly required. Tighten from the Top and eliminate Under-dig.

Coupling shall meet and exceed applicable section of AWWA C219.

DATE: 12/18/2019  
BID NO.: 50-00129070

INVITATION TO BID  
THIS IS NOT AN ORDER

Page: 1

**JEFFERSON PARISH**

PURCHASING DEPARTMENT  
P.O. BOX 9  
GRETNA, LA. 70054-0009  
504-364-2678

BUYER: MOVALLE@jeffparish.net

*CIMSCO INC*

BIDS WILL BE RECEIVED IN THE WEST BANK PURCHASING DEPT, SUITE 4400, JEFFERSON PARISH GENERAL GOVERNMENT BUILDING, 200 DERBIGNY STREET, GRETNA, LA 70053 UNTIL 2:00 PM, 1/16/2020 AND PUBLICLY OPENED THEREAFTER.

For convenience, bidders may also submit bids in the East Bank Purchasing Department, Suite 404, Jefferson Parish Joseph S. Yenni Building, 1221 Elmwood Park Blvd., Jefferson LA 70123. However, if submitting bids on the day of bid opening, bidders must submit at the West Bank location only. All bids will be publicly opened at the West Bank location.

At no charge, bidders may also submit via Jefferson Parish's electronic procurement page by visiting [www.jeffparishbids.net](http://www.jeffparishbids.net) to register for this free site. Additional instructions are included in the text box highlighting electronic procurement.

**LATE BIDS WILL NOT BE ACCEPTED**

Unless submitting via online (see Page 3), each bid must be submitted in a sealed envelope bearing on the outside; the name of the Bidder, his address, and the name of the project for which the bid is submitted and the bid number.

**NOTE: ONLY BIDS WRITTEN IN INK OR TYPEWRITTEN, AND PROPERLY SIGNED BY A MEMBER OF THE FIRM OR AUTHORIZED REPRESENTATIVE, WILL BE ACCEPTED. PENCIL AND/OR PHOTOSTATIC FIGURES OR SIGNATURES SHALL RESULT IN BID REJECTION.**

**INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS**

**THE FOLLOWING INSTRUCTIONS APPLY TO ALL BIDS**

All bids submitted are subject to these instructions and general conditions and any special conditions and specifications contained herein, all of which are made part of this bid proposal reference. By submitting a bid, vendor agrees to comply with all provisions of Louisiana Law as well be in compliance with the Jefferson Parish Code of Ordinances, Louisiana Code of Ethics, applicable Jefferson Parish ethical standards and Jefferson Parish Resolution No. 113646 and/or Resolution No. 113647.

Jefferson Parish adheres to the Louisiana Code of Governmental Ethics, contained in Louisiana Revised Statutes Annotated, R.S. 42:1101, et seq. Vendor/Proposer by this submission, warrants that there are no "conflicts of interest" related to this procurement that would violate applicable Louisiana Law. Violation of the Louisiana Code of Governmental Ethics may result in rescission of contract, permit or licenses, and the imposition of fines and/or penalties, without contractual liability to the public in accordance with applicable law.

All vendors submitting bids should register as a Jefferson Parish vendor if not already yet registered. Registration forms may be downloaded from <http://purchasing.jeffparish.net> and by clicking on Vendor Information. Current W-9 forms with respective Tax Identification numbers and vendor applications may be submitted at any time; however, if your company is not registered and/or a current W-9 form is not on file, vendor registration is mandatory. Further, a current W-9 form and respective Tax Identification number must be supplied upon contract execution, should you be awarded a contract and/or issued purchase order. Failure to do so may result in delay of payment.

All quotations shall be based on F.O.B. Agency warehouse or job site, anywhere within the Parish as designated by the Purchasing Department. This provision does not apply to public works projects

JEFFERSON PARISH requires all products to be new (current) and all work must be performed according to standard practices for the project. Unless otherwise specified, no aftermarket parts will be accepted. Unless otherwise specified, all workmanship and materials must have at least one (1) year guaranty, in writing, from the date of delivery and/or acceptance of the project. Any deviations or alterations from the specifications must be indicated and/or supporting documentation supplied with bid submission.

Bidders should submit all questions in writing via email to the buyer's email address as indicated above, no later than Five (5) working days prior to the bid opening. Bid numbers should be mentioned in all requests. If submitting online, vendors may send questions via the E-Procurement site no later than Five (5) working days prior to the bid opening.

If this bid requires a pre-bid conference (see Additional Requirements section), bidders are advised that such conference will be held to allow bidders the opportunity to identify any discrepancies in the bid specifications and seek further clarification regarding instructions. The Purchasing Department will issue a written response to bidders' questions in the form of an Addendum. Please note that all official communication will be expressed in the form of an addendum.

**Visit our website at [HTTP://PURCHASING.JEFFPARISH.NET](http://PURCHASING.JEFFPARISH.NET)**



DATE: 12/18/2019  
BID NO.: 50-00129070

**CIMSCO, INC.  
1840 L & A ROAD  
METAIRIE, LA 70001**

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All formal Addenda require written acknowledgement on the bid form by the bidder. Failure to acknowledge an Addendum on the bid form shall cause the bid to be rejected. JEFFERSON PARISH reserves the right to award bid to next lowest responsive and responsible bidder in this event.

JEFFERSON PARISH will accept one price for each item unless otherwise indicated. Two or more prices for one item will result in bid rejection. Bidders are required to complete, sign and return the bid form and/or complete and return the associated line item pricing forms as indicated. Vendors must not alter the bid forms. Doing so will cause the bid to be rejected.

A corporate resolution or written evidence of the individual signing the bid having such authority must be submitted with the bid. Failure to comply will cause bid to be rejected. For corporate entities, such written evidence may be a printout of the Louisiana Secretary of State's website listing the signatory as an officer. Such printout shall be included with the bid submission. Bids submitted by Owners or Sole Proprietorships must include certification that he or she owns the entity for which the bid is signed. This documentation must be submitted with the bid. Failure to do so will result in bid rejection.

NOTE: A sample corporate resolution can be downloaded from our website <http://purchasing.jeffparish.net> or you may provide your own document. A sample certification of sole proprietorship can also be downloaded from our website <http://purchasing.jeffparish.net> or you may provide your own document.

**INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS**

**A. AWARD OF CONTRACT:** JEFFERSON PARISH reserves the right to award contracts or place orders on a lump sum or individual item basis, or such combination, as shall in its judgment be in the best interest of JEFFERSON PARISH. Every contract or order shall be awarded to the LOWEST RESPONSIVE and RESPONSIBLE BIDDER, taking into consideration the CONFORMITY WITH THE SPECIFICATIONS and the DELIVERY AND/OR COMPLETION DATE. SPLIT AWARDS MADE TO SEVERAL VENDORS WILL ONLY BE GRANTED TO THOSE DEEMED RESPONSIVE AND RESPONSIBLE.

All bid prices shall remain valid for 45 days. Jefferson Parish and the lowest responsive and responsible bidder(s) by mutual written consent may mutually agree to extend the deadline for award by one (1) or more extensions of thirty (30) calendar days.

**PROTESTS:** Only those vendors that submit bids in response to this solicitation may protest any element of the procurement, in writing to the Director of the Purchasing Department. Written protest must be received within 48 hours of the release of the bid tabulation by the Purchasing Department. After consultation, the Parish Attorney's Office will then respond to protests in writing. (For more information, please see Chapter 2, Article VII, Division 2, Sec. 2-914.1 of the Jefferson Parish Code of Ordinances.)

**PREFERENCE:** Unless federal funding is directly spent by Jefferson Parish for this purchase, preference is hereby given to materials, supplies, and provisions produced, manufactured or grown in Louisiana, quality being equal to articles offered by competitors outside the state. "LSA - R.S. 38:2251-2261"

**B. USE OF BRAND NAMES AND STOCK NUMBERS:** Where brand names and stock numbers are specified, it is for the purpose of establishing certain minimum standards of quality. Bids may be submitted for products of equal quality, provided brand names and stock numbers are specified. Complete product data may be required prior to award.

**C. CANCELLATION OF CONTRACT:** JEFFERSON PARISH reserves the right to cancel all or any part if not shipped promptly. No charges will be allowed for parking or cartage unless specified in quotation. The order must not be filled at a higher price than quoted. JEFFERSON PARISH reserves the right to cancel any contract at anytime and for any reason by issuing a THIRTY (30) day written notice to the contractor.

For good cause and as consideration for executing a contract with Jefferson Parish, vendor conveys, sells, assigns and transfers to Jefferson Parish or its assigns all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of Louisiana, relating to the particular good or services purchased or acquired by Jefferson Parish.

**D. PRICES:** Jefferson Parish is exempt from paying sales tax under LSA-R.S. 47:301 (8)(c). All prices for purchases by Jefferson Parish of supplies and materials shall be quoted in the unit of measure specified and unless otherwise specified, shall be exclusive of state and Parish taxes. The price quoted for work shall be stated in figures. In the event there is a difference in unit prices and totals, the unit price shall prevail.

Quantities listed are for bidding purposes only. Actual requirements may be more or less than quantities listed.

Bidders are not to exclude from participation in, deny the benefits of, or subject to discrimination under any program or activity, any person in the United States on the grounds of race, color, national origin, or sex; nor discriminate on the basis of age under the Age Discrimination Act of 1975, or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, or on the basis of religion, except that any exemption from such prohibition against discrimination on the basis of religion as provided in the Civil Rights Act of 1964, or Title VI and VII of the Act of April 11, 1968, shall also apply. This assurance includes compliance with the administrative requirements of the Revenue Sharing final handicapped discrimination provisions contained in Section 51.55 (c), (d), (e), and (k)(5) of the Regulations. New construction or renovation projects must comply with Section 504 of the 1973 Rehabilitation Act, as amended, in accordance with the American National Standard Institute's specifications (ANSI A17.1-1961).

Jefferson Parish and its partners as the recipients of federal funds are fully committed to awarding a contract(s) to firm(s) that will provide high quality services and that are dedicated to diversity and to containing costs. Thus, Jefferson Parish strongly encourages the involvement of minority and/or woman-owned business enterprises (DBE's, including MBE's, WBE's and SBE's) to stimulate participation in procurement and assistance programs.



**CIMSCO, INC.  
1840 L & A ROAD  
METAIRIE, LA 70001**

DATE: 12/18/2019

BID NO.: 50-00129070

**INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS**

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The purpose and intention of this invitation to bid is to afford all suppliers an equal opportunity to bid on all construction, maintenance, repair, operating supplies and/or equipment listed in this bid proposal. JEFFERSON PARISH WILL ACCEPT ONE BID ONLY FROM EACH VENDOR. Items bid must meet specifications.

Advertised bids will be tabulated and a copy of the tabulation will be forwarded to each responding bidder.

**IN ACCORDANCE WITH STATE REGULATIONS JEFFERSON PARISH OFFERS ELECTRONIC PROCUREMENT  
TO ALL VENDORS**

This electronic procurement system allows vendors the convenience of reviewing and submitting bids online. This is a secure site and authorized personnel have limited read access only. Bidders are encouraged to submit electronically using this free service; while the website accepts various file types, one single PDF file containing all appropriate and required bid documents is preferred. Bidders submitting uploaded images of bid responses are solely responsible for clarity. If uploaded images/documents are not legible, then bidder's submission will be rejected. Please note all requirements contained in this bid package for electronic bid submission.

Please visit our E-Procurement Page at [www.jeffparishbids.net](http://www.jeffparishbids.net) to register and view Jefferson Parish solicitations. For more information, please visit the Purchasing Department page at <http://purchasing.jeffparish.net>.

The general specifications for construction projects and the purchase of materials, services and/or supplies are those adopted by the JEFFERSON PARISH Council by Resolution No. 113646 or 113647 dated 12/09/09. The general conditions adopted by this resolution shall be considered as much a part of this document as if they were written wholly herein. A copy may be obtained from the Office of the Parish Clerk, Suite 6700, Jefferson Parish General Government Building, 200 Derbigny Street, Gretna, LA 70053. You may also obtain a copy by visiting the Purchasing Department webpage at <http://purchasing.jeffparish.net> and clicking on Online Forms.

**ADDITIONAL REQUIREMENTS FOR THIS BID**

PLEASE MATCH THE NUMBERS PRINTED IN THIS BOX WITH THE  
CORRESPONDING INSTRUCTIONS BELOW.

**10,12,13,15**

1. All bidders must attend the MANDATORY pre-bid conference and will be required to sign in and out as evidence of attendance. In accordance with LSA R.S. 38:2212(I), all prospective bidders shall be present at the beginning of the MANDATORY pre-bid conference and shall remain in attendance for the duration of the conference. Any prospective bidder who fails to attend the conference or remain for the duration shall be prohibited from submitting a bid for the project.
2. Attendance to this pre-bid conference is optional. However, failure to attend the pre-bid conference shall not relieve the bidder of responsibility for information discussed at the conference. Furthermore, failure to attend the pre-bid conference and inspection does not relieve the successful bidder from the necessity of furnishing materials or performing any work that may be required to complete the work in accordance with the specification with no additional cost to the owner.
3. Contractor must hold current applicable JEFFERSON PARISH licenses with the Department of Inspection and Code Enforcement. Contractor shall obtain any and all permits required by the JEFFERSON PARISH Department of Inspection and Code Enforcement. The contractor shall be responsible for the payment of these permits. All permits must be obtained prior to the start of the project. Contractor must also hold any and all applicable Federal and State licenses. Contractor shall be responsible for the payment of these permits and shall obtain them prior to the start of the project.
4. A LA State Contractor's License will be required in accordance with LSA R.S. 37-2150 et. seq. and such license number will be shown on the outside of the bid envelope. Failure to comply will cause the bid to be rejected. Additionally if submitting the bid electronically, then the license number must be entered in the appropriate field in the Electronic Procurement system. Failure to comply will cause the bid to be rejected.
5. It is the bidder's responsibility to visit the job site and evaluate the job before submitting a bid.
6. Job site must be clean and free of all litter and debris daily and upon completion of the contract. Passageways must be kept clean and free of material, equipment, and debris at all times. Flammable material must be removed from the job site daily because storage will not be permitted on the premises. Precautions must be exercised at all times to safeguard the welfare of JEFFERSON PARISH and the general public.



**CIMSCO, INC.**  
**1840 L & A ROAD**  
**METAIRIE, LA 70001**

DATE: 12/18/2019

BID NO.: 50-00129070

Page: 4

**INSTRUCTIONS FOR BIDDERS AND GENERAL CONDITIONS**

7. **PUBLIC WORKS BIDS:** All awards for public works in excess of \$5,000.00 will be reduced to a formal contract which shall be recorded at the contractor's expense with the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. A price list of recordation costs may be obtained from the Clerk of Court and Ex-Officio Recorder of Mortgages for the Parish of Jefferson. All awards in excess of \$25,000.00 will require both a performance and a payment bond. Unless otherwise stated in the bid specifications, the performance bond requirements shall be 100% of the contract price. Unless otherwise state in the bid specifications, the payment bond requirements shall be 100% of the contract price. Both bonds shall be supplied at the signing of the contract.
8. **NON-PUBLIC WORKS BIDS:** A performance bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The performance bond shall be supplied at the signing of the contract.
9. **NON-PUBLIC WORKS BIDS:** A payment bond will be required for this bid. The amount of the bond will be 100% of the contract price unless otherwise indicated in the specifications. The payment bond shall be supplied at the signing of the contract.
10. All bidders must comply with the requirements stated in the attached "Standard Insurance Requirements" sheet attached to this bid solicitation. Prior to contract executions/purchase order issuance, the successful bidder will be required to provide final insurance certificates which shall name Jefferson Parish as an additional insured in accordance with the instructions in the aforementioned "Standard Insurance Requirements" sheet.
11. A bid bond will be required with bid submission in the amount of 5% of the total bid, unless otherwise stated in the bid specifications. Acceptable forms shall be limited to cashier's check, certified check, or surety bid bond. All sureties must be in original format (no copies) If submitting a bid online, vendors must submit an electronic bid bond through the respective online clearinghouse bond management system(s) as indicated in the electronic bid solicitation on Central Auction House. No scanned paper copies of any bid bond will be accepted as part of the electronic bid submission.
12. This is a requirements contract to be provided on an as needed basis. JEFFERSON PARISH makes no representations on warranties with regard to minimum guaranteed quantities unless otherwise stated in the bid specifications.
13. Freight charges should be included in total cost when quoting. If not quoted FOB DELIVERED, freight must be quoted as a separate item. Bid may be rejected if not quoted FOB DELIVERED or if freight charges are not indicated on bid form.
14. **PUBLIC WORKS BIDS - Completed, Signed and Properly Notarized Affidavits Required;** This applies to all solicitations for construction, alteration or demolition of public buildings or projects, in conformity with the provisions contained in LSA-RS 38:2212.9, LSA-RS 38:2212.10, LSA-RS 38:2224, and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Conviction Affidavit, Non-Collusion Affidavit, Campaign Contribution Affidavit, Debt Disclosures Affidavit and E-Verify Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
15. **NON PUBLIC WORK BIDS - Completed, Signed and Properly Notarized Affidavits Required** in conformity with the provisions contained in LSA – RS 38:2224 and Sec 2-923.1 of the Jefferson Parish Code of Ordinances. For bidding purposes, all bidders must submit with bid submission COMPLETED, SIGNED and PROPERLY NOTARIZED Affidavits, including: Non-Collusion Affidavit, Debt Disclosures Affidavit and Campaign Contribution Affidavit. For the convenience of vendors, all affidavits have been combined into one form entitled NON PUBLIC WORKS BID AFFIDAVIT. This affidavit must be submitted in its original format, and without material alteration, in order to be compliant and for the bid to be considered responsive. A scanned copy of the completed, signed and properly notarized affidavit may be submitted with the bid, however, the successful bidder must submit the original affidavit in its original format and without material alteration upon contract execution. Failure to comply will result in the bid submission being rejected as non-responsive. The Parish reserves the right to award bid to the next lowest responsive and responsible bidder in this event.
16. The ensuing contract for this bid solicitation may be eligible for FEMA reimbursement and/or Federal funding/reimbursement. As such, the referenced appendix will be applicable accordingly and shall be considered a part of the bid documents. All applicable certifications must be duly completed, signed and submitted with bid submission. Failure to submit applicable certifications with bid submission will result in bid rejection.
17. For this project, the Contractor shall not pay any state or local sales or use taxes on materials and equipment which are affixed and made part of the immovable property of the project or which permanently incorporated in the project (hereinafter referred to as "applicable materials and equipment"). All purchases of applicable materials or equipment shall be made by the contractor on behalf of and as the agent of Jefferson Parish (Owner), a political subdivision of the State of Louisiana. No state and local sales and use taxes are owned on applicable materials and equipment under the provisions of Act 1029 of the 1991 Regular Session – Louisiana Revised Statute 47:301(8)(c). Owner will furnish contractor a certificate form which certifies that Owner is not required to pay such state or local sales and use taxes, and contractor shall furnish a copy of such certificate to all vendors or suppliers of the applicable materials and equipment

It shall be the duty of every parish officer, employee, department, agency, special district, board, and commission: and the duty of every contractor, subcontractor, and licensee of the parish, and the duty of every applicant for certification of eligibility for a parish contract or program, to cooperate with the Inspector General in any investigation, audit, inspection, performance review, or hearing pursuant to Jefferson Parish Code of Ordinances Section 2-155.10(19). By submitting a bid, vendor acknowledges this and will abide by all provisions of the referenced Jefferson Parish Code of Ordinances.

See Page 1 for Conflicts of Interest Statement

CIMSCO, INC.  
1840 L & A ROAD  
METAIRIE, LA 70001



**Bid Number 50-00129070**

**ONE (1) YEAR CONTRACT FOR A SUPPLY OF COUPLINGS, RESTRAINING  
DEVICES AND RELATED GASKETS FOR THE JEFFERSON PARISH  
DEPARTMENT OF PUBLIC WORKS, WATER, AND SEWERAGE AND ALL  
JEFFERSON PARISH AGENCIES AND MUNICIPALITIES**

**BID DUE: January 16, 2020 at 2:00 PM**

**ATTENTION VENDORS!!!**

**Please review all pages and respond accordingly, complying with all provisions  
in the technical specifications and Jefferson Parish Instructions for Bidders and  
General Terms and Conditions. All bids must be received in the Purchasing  
Department by the bid due date and time.**

**Jefferson Parish Purchasing Department  
200 Derbigny Street  
General Government Building, Suite 4400  
Gretna, LA 70053  
Buyer Name: Melissa Ovalle  
Buyer Email: [movalle@jeffparish.net](mailto:movalle@jeffparish.net)  
Buyer Phone: (504) 364-2687**