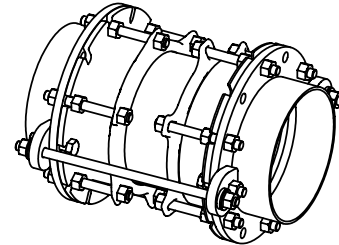
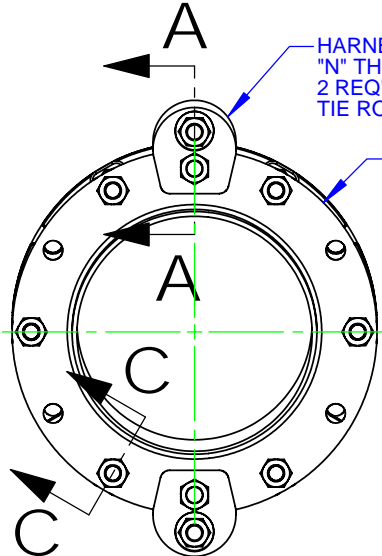


NOM SIZE	DIMENSIONS					BOLTS		TIE RODS				SPOOL		HARNESS LUG THK	OFFSET		APPROX WEIGHT
	FLANGE OD	FCA FLANGE THK	C - LENGTH			QTY	SIZE	SIZE	LENGTH	175 PSI (CLS D) QTY	275 PSI (CLS E) QTY	OD	THK		AT MIN. LENGTH	AT MAX. LENGTH	
	A	B	NOM.	MIN.	MAX.	D	E	F	G	H	I	J	K	N	P	LBS	
3	7.50	0.60	16.50	15.50	17.50	4	5/8 - 11	5/8	23.38	2	2	3.50	0.22	0.50	0.25	0.32	49
4	9.00	0.60	16.50	15.50	17.50	8	5/8 - 11	5/8	23.75	2	2	4.50	0.24	0.50	0.26	0.33	58
6	11.00	0.63	16.63	15.63	17.63	8	3/4 - 10	5/8	24.88	2	2	6.63	0.28	0.75	0.25	0.32	92
8	13.50	0.63	16.63	15.63	17.63	8	3/4 - 10	5/8	25.25	2	3	8.63	0.32	0.75	0.26	0.33	122
10	16.00	1.24	19.25	18.25	20.25	12	5/8 - 11 X 7/8 - 9	3/4	28.75	2	3	10.75	0.37	1.00	0.32	0.39	204
12	19.00	1.25	19.50	18.50	20.50	12	7/8 - 9	7/8	29.63	2	4	12.75	0.38	1.00	0.33	0.40	268

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	OFFSET WAS: 10" 0.70 MIN, 0.77 MAX & 12" 0.71 MIN, 0.78 MAX	3/10/2004	INST III



TIE ROD, "F" UNC X "G" LENGTH, "H" REQ'D, ASTM A193 GR. B7 (ALLOY), B8 (304 SS) OR B8M (316 SS)

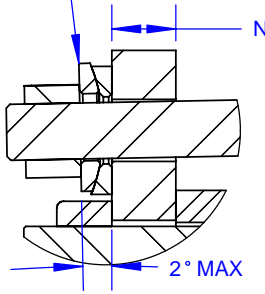


HARNESS LUG, "N" THK 2 REQ'D PER TIE ROD

ØA

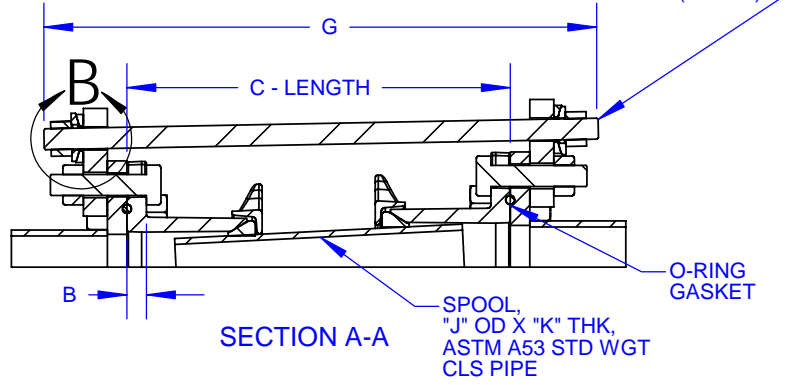
SPHERICAL WASHER SET, ALLOWS FOR DEFLECTION, 2 REQ'D PER ROD.

N



DETAIL B

2° MAX

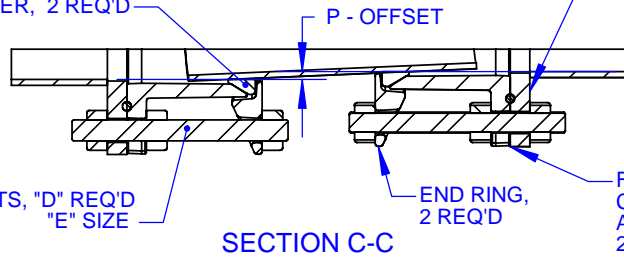


SECTION A-A

SPOOL, "J" OD X "K" THK, ASTM A53 STD WGT CLS PIPE

GASKET: SUITABLE FOR WATER & SEWER SERVICE, 180°F max, 75 DUROMETER, 2 REQ'D

BOLT CIRCLE COMPATIBLE WITH CLASS 125 & 150 DRILLINGS



SECTION C-C

BOLTS, "D" REQ'D "E" SIZE

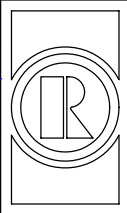
END RING, 2 REQ'D

FLANGED COUPLING ADAPTER 2 REQ'D

NOTES:

- NSF 61 CERTIFIED COATING: FUSION BONDED EPOXY IS STANDARD. OTHER COATINGS AVAILABLE UPON REQUEST.
- FASTENERS: HSLA PER ASTM A588 IS STANDARD. STAINLESS STEEL TYPE 304 OR 316 PER ASTM A193 AVAILABLE UPON REQUEST.
- PRESSURE RATED UP TO FLANGES PROVIDED; 3" -12" AWWA CLS D 175 PSIG WORKING, 263 PSIG TEST; 3" -12" AWWA CLS E 275 PSIG WORKING, 412 PSIG TEST.
- ACCOMODATES DEFLECTION AND/OR OFFSET IN A SYSTEM PROVIDING A SOLID CONNECTION AFTER INSTALLATION,
- WHEN INSTALLING, POSITION THE FLANGED COUPLING END IN THE REQUIRED LOCATION & THEN FOLLOW BOLTING INSTRUCTIONS.
- NOT INTENDED TO PROVIDE LATERAL MOVEMENT IN PIPELINE.

THIS DRAWING CONTAINS CONFIDENTIAL PROPRIETARY INFORMATION AND IS THE PROPERTY OF ROMAC IND., INC. IT'S TO BE USED ONLY FOR THE PURPOSE FOR WHICH IT'S SUBMITTED AND SHALL NOT HAVE ITS INFORMATION DISCLOSED OR REPRODUCED IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT PRIOR WRITTEN PERMISSION OF ROMAC IND., INC.

UNLESS OTHERWISE SPECIFIED	SIGNATURES	DATE		ROMAC IND. INC., SEATTLE, WA	
	DRWN NIELS THOGERSEN 2/26/2004			TITLE EQUIPMENT CONNECTION FITTING, ECF400 3" - 12" 175 PSI (CLS D) & 275 PSI (CLS E)	
DIMENSIONS ARE IN INCHES TOLERANCES ARE ON: 2 PL DECIMALS +/- .05 3 PL DECIMALS +/- ANGLES +/- FRACTIONS +/-	CHECKED		SIZE	DWG. NO.	REV. NO.
			A	B2340-A	1
		SCALE	SHEET 1 OF 1		
		NTS			