



# Stargrip® series 3000

Mechanical Joint Wedge Action Restraint  
for Ductile Iron Pipe



Stargrip® series 3000 for Ductile Iron Pipe

### SUBMITTAL INFORMATION

PROJECT NAME:

ENGINEER:

CONTRACTOR:

SPEC. SECTION:



### FEATURES & ADVANTAGES

- The Wedge Assembly is designed with a Break-Off Torque Control Nut that will only break off in one direction, ensuring proper installation.
- The Stargrip® offers a full 5° deflection through 12" size, 3° on 14"-24", 2° on 30"-36" and 1° on 42"-48".
- Minimum safety factor of 2:1
- Stargrip® sizes 3"-36" are listed with Underwriters Laboratories Inc. and sizes 3"-12" are approved by Factory Mutual Research.
- The Wedge Assembly is designed to fit specific pipe sizes and is field repairable.
- No special tools are required for installation of the Stargrip®.
- Stargrip® eliminates tie rods and thrust blocks.
- Stargrip® may also be used on steel pipe\* up to 12" (\*transition gasket required on 12" and under). For 14" and larger steel applications, contact Star Pipe.

### MATERIAL SPECIFICATIONS:

- Gland: Ductile Iron per ASTM A536, Grade 65-45-12
- Wedges: Ductile Iron per ASTM A536, Grade 65-45-12 heat treated to a minimum of 370 BHN
  - ◆ Wedge Finish: Thermally cured fluoropolymer epoxy coating

#### GLAND FINISH OPTIONS (Please check one):

- Standard: alkyd enamel coating
- Optional: Starbond™ TGIC polyester powder coating applied by an electrostatic spray process
- Optional: Other (specify) \_\_\_\_\_

#### HARDWARE OPTIONS (Please check one):

- Standard: T-bolts are high strength low alloy steel manufactured in accordance with ANSI/AWWA C111/A21.11-00
- Optional: T-bolts and nuts alloy SS 304 per ASTM F593
- Optional: T-bolts and nuts alloy SS 316 per ASTM F593
- Optional: T-bolts and nuts Fluoropolymer Star-Blue coated high strength low alloy steel manufactured in accordance with ANSI/AWWA C111/A21.11-00

#### COUNTRY OF ORIGIN OPTION (Please check one):

- Import
- 100% Domestic<sup>1</sup>
- Domestic gland with import components<sup>1</sup>

<sup>1</sup>Please see [Domestic Restraint Options Available](#) on our website.)

REV.17.02



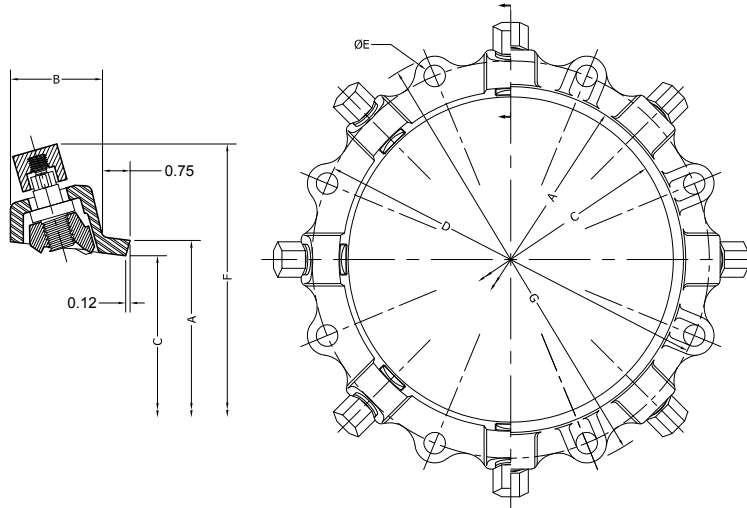
STAR® PIPE PRODUCTS



**Stargrip® series 3000**

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TECHNICAL INFORMATION



STAR® PIPE PRODUCTS

Please check sizes:

STARGRIP® 3000 SPECIFICATIONS*												
NOM. SIZE	MAX PRESSURE RATING (PSI)	A	B	C	D	E	F	F W/NUTS TWISTED OFF	G	NO. OF WEDGES	NO. OF T-BOLTS	APPROX WT. (LBS)
3	350	4.84	2.40	4.06	6.19	3/4	9.85	8.78	8.13	2	4	6
4	350	5.92	2.40	4.90	7.50	7/8	11.06	9.62	9.12	2	4	8
6	350	8.02	2.40	7.00	9.50	7/8	13.06	11.72	11.12	3	6	12
8	350	10.17	2.51	9.15	11.75	7/8	15.25	13.84	13.37	4	6	17
10	350	12.22	2.51	11.20	14.00	7/8	17.25	15.88	15.62	6	8	24
12	350	14.32	2.51	13.30	16.25	7/8	19.50	17.98	17.88	8	8	34
14	350	16.40	2.91	15.44	18.75	7/8	21.25	20.12	20.90	10	10	49
16	350	18.50	2.91	17.54	21.00	7/8	23.34	22.22	23.00	12	12	56
18	250	20.60	2.91	19.64	23.25	7/8	26.40	24.90	25.25	12	12	59
20	250	22.70	2.67	21.74	25.50	7/8	28.56	27.00	27.50	14	14	75
24	250	26.90	3.50	25.94	30.00	7/8	33.86	32.34	31.54	16	16	139
30	250	33.29	3.49	32.17	36.88	1-1/8	40.12	38.62	39.12	20	20	199
36	250	39.59	3.49	38.47	43.75	1-1/8	46.42	44.92	46.00	24	24	232
42	250	45.79	5.15	44.75	50.62	1-3/8	54.86	53.32	53.12	28	28	400
48	250	52.09	5.15	51.05	57.50	1-3/8	61.16	59.62	60.00	32	32	488

\*All dimensions in inches except where indicated.

**Notes:**

- Stargrips® must be adequately wrapped or protected if they are covered by concrete to ensure that concrete does not enter the wedge pocket.
- For applications exceeding the maximum pressure ratings listed, please contact Star Pipe Products for recommendations (see Tandem Stargrip®).
- For applications with vertical offsets please contact Star Pipe Products for technical assistance.
- For applications on existing pipe, the pipe needs to be structurally sound and the surface needs to be relatively free of any corrosive by-products in order for the wedges to function properly. Please contact Star Pipe Products for technical assistance.
- Sizes 42" & 48" require extra long 1 1/4" x 8 1/2" T-bolts.