



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

- Gland is made from high strength Ductile Iron per ASTM A536, Grade 65-45-12 and is compatible with all Mechanical Joints conforming to ANSI/AWWA C111/A21.11.
- The Wedge Assembly is designed with a Break-Off Torque Control Head, ensuring proper installation.
- The Stargrip® offers a full 5° deflection through 12" size, 3° on 14"-24", 2° on 30"-36", 1° on 42"-48" and ½° on 54" & 60".
- 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 Wedges are heat treated to a minimum of 370 BHN.
- The Wedge Assembly is designed to fit specific pipe sizes.
- Stargrip® eliminates tie rods and thrust blocks.
- Standard gland color is Black.
- Stargrip® may also be used on minimum SCH 40 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
- Domestic - AIS Compliant

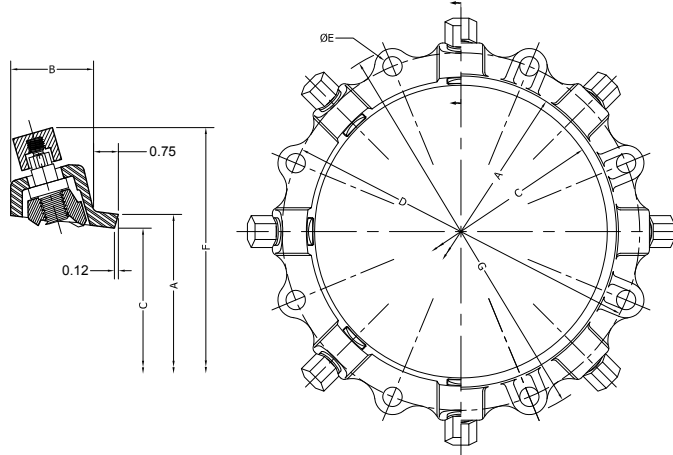
STAR® PIPE PRODUCTS



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	¾	9.85	8.78	8.13	2	4	6
4	350	5.92	2.40	4.90	7.50	⅞	11.06	9.62	9.12	2	4	8
6	350	8.02	2.40	7.00	9.50	⅞	13.06	11.72	11.12	3	6	12
8	350	10.17	2.51	9.15	11.75	⅞	15.25	13.84	13.37	4	6	17
10	350	12.22	2.51	11.20	14.00	⅞	17.25	15.88	15.62	6	8	24
12	350	14.32	2.51	13.30	16.25	⅞	19.50	17.98	17.88	8	8	34
14	350	16.40	2.91	15.44	18.75	⅞	21.25	20.12	20.90	10	10	49
16	350	18.50	2.91	17.54	21.00	⅞	23.34	22.22	23.00	12	12	56
18	250	20.60	2.91	19.64	23.25	⅞	26.40	24.90	25.25	12	12	59
20	250	22.70	2.67	21.74	25.50	⅞	28.56	27.00	27.50	14	14	75
24	250	26.90	3.50	25.94	30.00	⅞	33.86	32.34	31.54	16	16	139
30	250	33.29	3.49	32.17	36.88	1 ⅛	40.12	38.62	39.12	20	20	199
36	250	39.59	3.49	38.47	43.75	1 ⅛	46.42	44.92	46.00	24	24	232
42	250	45.79	5.15	44.75	50.62	1 ⅜	54.86	53.32	53.12	28	28	400
48	250	52.09	5.15	51.05	57.50	1 ⅜	61.16	59.62	60.00	32	32	488
54	250	58.87	5.00	57.90	63.20	1 ⅜	68.33	66.30	66.00	36	36	581
60	200	62.92	5.00	61.95	67.72	1 ⅜	72.38	70.35	70.52	36	36	636

*All dimensions in inches except where indicated.

Notes:

- Stargrip® Series 3000 restraints are designed for use on ductile iron pipe that meets all physical requirements of ANSI/AWWA C151/A21.51. The pipe must be fully annealed to assure primary carbides have been dissolved and pearlite has been converted to ferrite. Please contact Star Pipe Products for technical assistance.
- Star High Pressure gaskets are provided with 54" - 60" Stargrip®. They are required on these sizes for maximum pressure rating listed above.
- 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" - 60" require extra long 1 ¼" x 8 ½" T-bolts.