

# STAR™ Anhydride Line Pipe (High Pressure - STANDARD DESIGN - Product Data)

## Product Description

- Pressure - Up to 3000 psi (20,7 MPa)
- Resin System - Anhydride Cured Epoxy
- Reinforcement - Premium Fiberglass
- Joining Systems - API 8rd Threaded and Mechanical O-Ring (SSS HP)
- Joint Length:  
30 Feet (9,1 mts) - API 8rd and 1½"-3" SSS HP  
37 Feet (11,2 mts) - 4"-6" SSS HP  
Random Lengths of 20 to 37 Feet (6,1 to 11,2 mts) depending on size
- Fittings - A variety of filament wound API 5B threaded and SSS fittings are available. Purchase all fittings by thread size and design pressure rating only.
- Temperature - Up to 150° F (65.6° C) Maximum
- Sizes - 1½ through 8 inches - API 8rd Thread  
1½ through 6 inches - SSS Thread

## High Pressure Design ≥ 500 psi

- Design Life - 20 years at full rating
- Design Temperature - 150° F (65.6° C)
- Wall Thickness - Nominal
- Hoop Stress - Average Long Term Hydrostatic Strength (LTHS), ASTM D2992-B
- 100% Factory Hydrotest - All products are tested at a minimum of 1.25 x the series rated pressure at 150° F (65.6° C)
- Non API Design

## Flow Factors

- Hazen Williams C=150
- Absolute Roughness = 0.00021 in. (0.00533 mm)

## Nominal Moduli

- Modulus of Elasticity  
Hoop - 3.5 x 10<sup>6</sup> psi (24,1 GPa)  
Axial - 1.5 x 10<sup>6</sup> psi (10,3 GPa)
- Poisson's Ratio (Minor) = 0.38

## Physical Properties

- Density = 121 lbs/cu ft (1938 kgs/cu m)
- Specific Gravity = 1.94

## Thermal Properties

- Coefficient of Thermal Conductivity  
0.23 BTU/(ft•hr•°F) (0.4 W/(m•C°))
- Coefficient of Thermal Expansion  
13.7 x 10<sup>-6</sup> in/in/°F (24,7 x 10<sup>-6</sup> mm/mm/°C)

## Benefits

- Corrosion Control
- Reduced Installation Costs
- Improved Flow Efficiency
- Reduced Paraffin & Scale Build-Up
- Reduced Maintenance Cost

## Applications

- Production Lines or Injection Lines
- Transfer Lines or Disposal Lines
- Oil, Gas, Saltwater, CO<sub>2</sub> and H<sub>2</sub>S

## Performance Ratings vs. Temperature

(ASTM D 2992-B) 150° F (65.6° C)

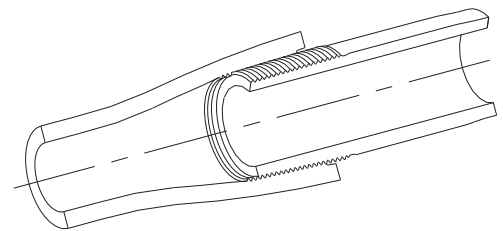
11.4 Year Life, LTHS 24,503 (169,0)

20 Year Life, LTHS 23,768 (163,9)

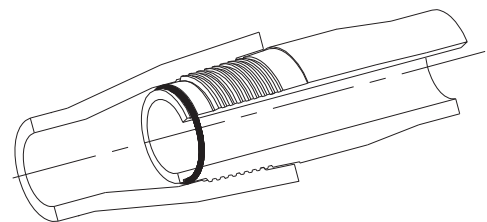
20 Year Life, LCL  
(Lower Confidence Limit) 22,297 (153,7)

## Joining System

Advanced Composite Thread (ACT) or Precision Ground Thread (PGT)



Star Super Seal HP (SSS HP)



- Refer to Page 6 for Joining System specifications

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

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**NOV** Fiber Glass Systems

SIZE			Product Code	PIPE DIMENSIONS (NOMINAL)								Maximum Support Span Ft (m)
API Nom. Thread Size	SSS Type	HP		Inside Diameter In (mm)	Outside Diameter In (mm)	Wall Thickness In (mm)	Pipe Weight Lbs/ft (kg/m)	API Thread Conn. Dia In (mm)	SSS HP Conn. Dia. In (mm)			

Series 500 - ACT (All Sizes), PGT (All Sizes) or SSS HP (4" and 6" Sizes)												
4	4 1/2	4	I0539	3.91 (99,3)	4.04 (102,5)	0.06 (1,6)	1.19 (1,8)	5.09 (129,2)	5.21 (132,3)	11 (3,4)		
5	5 1/2		I0547	4.74 (120,4)	4.89 (124,3)	0.08 (1,9)	1.52 (2,3)	5.88 (149,4)	---	12 (3,7)		
6	6 5/8	6	I0558	5.85 (148,6)	6.04 (153,4)	0.09 (2,4)	2.21 (3,3)	7.01 (178,0)	7.27 (184,7)	13 (4,0)		
8	8 5/8		I0575	7.50 (190,5)	7.74 (196,6)	0.12 (3,1)	3.63 (5,4)	9.06 (230,2)	---	15 (4,6)		

Series 800 - ACT (All Sizes), PGT (All Sizes) or SSS HP (3", 4" and 6" Sizes)												
3	3 1/2	3	I0830	3.00 (76,2)	3.16 (80,1)	0.08 (2,0)	0.91 (1,3)	4.09 (104,0)	4.27 (108,5)	10 (3,1)		
4	4 1/2	4	I0839	3.91 (99,3)	4.11 (104,5)	0.10 (2,6)	1.48 (2,2)	5.15 (130,7)	5.27 (133,9)	12 (3,7)		
5	5 1/2		I0847	4.74 (120,4)	4.99 (126,6)	0.12 (3,1)	2.21 (3,3)	6.00 (152,3)	---	13 (4,0)		
6	6 5/8	6	I0858	5.85 (148,6)	6.15 (156,3)	0.15 (3,9)	3.08 (4,6)	7.12 (181,0)	7.44 (189,0)	14 (4,3)		
8	8 5/8		I0875	7.50 (190,5)	7.89 (200,4)	0.19 (4,9)	4.82 (7,2)	9.29 (236,1)	---	16 (4,9)		

Series 1000 - ACT (All Sizes), PGT (All Sizes) or SSS HP (3", 4" and 6" Sizes)												
2 1/2	2 7/8		I1024	2.43 (61,7)	2.59 (65,7)	0.08 (2,0)	0.71 (1,1)	3.44 (87,3)	---	10 (3,1)		
3	3 1/2	3	I1030	3.00 (76,2)	3.20 (81,2)	0.10 (2,5)	1.14 (1,7)	4.15 (105,5)	4.33 (110,0)	11 (3,4)		
4	4 1/2	4	I1039	3.91 (99,3)	4.17 (105,8)	0.13 (3,2)	1.79 (2,7)	5.21 (132,2)	5.39 (136,9)	12 (3,7)		
5	5 1/2		I1047	4.74 (120,4)	5.05 (128,2)	0.15 (3,9)	2.60 (3,9)	6.11 (155,2)	---	14 (4,3)		
6	6 5/8	6	I1058	5.85 (148,6)	6.23 (158,3)	0.19 (4,8)	3.60 (5,3)	7.30 (185,4)	7.55 (191,8)	15 (4,6)		
8	8 5/8		I1075	7.50 (190,5)	7.99 (202,9)	0.24 (6,2)	6.00 (8,9)	9.47 (240,5)	---	17 (5,2)		

Series 1250 - ACT (All Sizes), PGT (All Sizes) or SSS HP (2", 3", 4" and 6" Sizes)												
2	2 3/8	2	I1220	2.00 (50,8)	2.16 (55,0)	0.08 (2,1)	0.59 (0,9)	2.94 (74,8)	3.07 (78,0)	9 (2,8)		
2 1/2	2 7/8		I1224	2.43 (61,7)	2.63 (66,8)	0.10 (2,5)	0.90 (1,3)	3.50 (88,8)	---	10 (3,1)		
3	3 1/2	3	I1230	3.00 (76,2)	3.25 (82,5)	0.12 (3,1)	1.38 (2,1)	4.21 (107,0)	4.45 (113,0)	12 (3,7)		
4	4 1/2	4	I1239	3.91 (99,3)	4.23 (107,5)	0.16 (4,1)	2.12 (3,2)	5.32 (135,2)	5.51 (140,0)	13 (4,0)		
5	5 1/2		I1247	4.74 (120,4)	5.13 (130,3)	0.19 (5,0)	3.00 (4,5)	6.23 (158,2)	---	14 (4,3)		
6	6 5/8	6	I1258	5.85 (148,6)	6.33 (160,8)	0.24 (6,1)	4.50 (6,7)	7.42 (188,4)	7.73 (196,3)	16 (4,9)		
8	8 5/8		I1275	7.50 (190,5)	8.12 (206,2)	0.31 (7,8)	7.25 (10,8)	9.70 (246,4)	---	18 (5,5)		

Series 1500 - ACT (All Sizes), PGT (2", 2 1/2", 3", and 4" Sizes) or SSS HP (2", 3", 4" and 6" Sizes)												
2	2 3/8	2	I1520	2.00 (50,8)	2.20 (55,9)	0.10 (2,5)	0.75 (1,1)	3.00 (76,3)	3.13 (79,5)	10 (3,1)		
2 1/2	2 7/8		I1524	2.43 (61,7)	2.67 (67,9)	0.12 (3,1)	1.10 (1,6)	3.56 (90,3)	---	11 (3,4)		
3	3 1/2	3	I1530	3.00 (76,2)	3.30 (83,8)	0.15 (3,8)	1.65 (2,5)	4.33 (110,1)	4.51 (114,6)	12 (3,7)		
4	4 1/2	4	I1539	3.91 (99,3)	4.30 (109,2)	0.19 (4,9)	2.48 (3,7)	5.50 (139,7)	5.62 (142,7)	13 (4,0)		
5	5 1/2		I1547	4.74 (120,4)	5.21 (132,4)	0.24 (6,0)	3.78 (5,6)	6.40 (162,6)	---	15 (4,6)		
6	6 5/8	6	I1558	5.85 (148,6)	6.43 (163,4)	0.29 (7,4)	5.47 (8,1)	7.59 (192,9)	7.91 (200,9)	17 (5,2)		
8	8 5/8		I1575	7.50 (190,5)	8.25 (209,5)	0.37 (9,5)	9.08 (13,5)	9.93 (252,3)	---	19 (5,9)		

Series 1750 - ACT (All Sizes), PGT (2", 2 1/2", 3" and 4" Sizes) or SSS HP (2", 3" and 4" Sizes)												
1 1/2	1.90		I1715	1.50 (38,1)	1.68 (42,6)	0.09 (2,2)	0.46 (0,7)	2.51 (63,9)	---	8 (2,5)		
2	2 3/8	2	I1720	2.00 (50,8)	2.23 (56,8)	0.12 (3,0)	0.77 (1,1)	3.07 (77,9)	3.20 (81,3)	10 (3,1)		
2 1/2	2 7/8		I1724	2.43 (61,7)	2.71 (69,0)	0.14 (3,6)	1.13 (1,7)	3.68 (93,4)	---	11 (3,4)		
3	3 1/2	3	I1730	3.00 (76,2)	3.35 (85,1)	0.18 (4,5)	1.69 (2,5)	4.45 (113,1)	4.67 (118,6)	12 (3,7)		
4	4 1/2	4	I1739	3.91 (99,3)	4.37 (111,0)	0.23 (5,8)	2.83 (4,2)	5.62 (142,8)	5.74 (145,8)	14 (4,3)		
5	5 1/2		I1747	4.74 (120,4)	5.30 (134,5)	0.28 (7,1)	4.21 (6,3)	6.52 (165,7)	---	15 (4,6)		
6	6 5/8		I1755	5.50 (139,7)	6.15 (156,1)	0.32 (8,2)	5.95 (8,8)	7.78 (197,5)	---	17 (5,2)		
8	8 5/8		I1775	7.50 (190,5)	8.38 (212,8)	0.44 (11,2)	10.41 (15,5)	10.17 (258,4)	---	19 (5,9)		

(Metric Conversions are in Parentheses)

SIZE			STAR <sup>™</sup> RATED PRESSURE <sup>(1)</sup>		Ultimate <sup>(2)</sup> Pressure	Minimum Bending Radius	Maximum Deflection	Collapse Rating	Short Term Tensile Rating	API 8rd Threaded Adapter Product Code	SSS HP Threaded Adapter Product Code
Nom. Size	Thread Type	SSS HP	150° F (65.6° C) psi (MPa)		ASTM D-1599 psi (MPa)	Ft (m)	In/jt (cm/jt)	psi (MPa)	Lbs (kgs)		

Series 500 - ACT (All Sizes), PGT (All Sizes) or SSS HP (4" and 6" Sizes)																
4	4 1/2	4	500	(3,4)	1400	(9,7)	204	(62,2)	26	(66,0)	27	(0,2)	3000	(1361)	45NT	4QNT
5	5 1/2		500	(3,4)	1100	(7,6)	245	(74,7)	21	(53,3)	15	(0,1)	3600	(1633)	55NR	
6	6 5/8	6	500	(3,4)	1200	(8,3)	304	(92,7)	17	(43,2)	19	(0,1)	6000	(2722)	65NV	6QNV
8	8 5/8		500	(3,4)	1200	(8,3)	389	(118,6)	13	(33,0)	18	(0,1)	9500	(4309)	85NU	

Series 800 - ACT (All Sizes), PGT (All Sizes) or SSS HP (3", 4" and 6" Sizes)																
3	3 1/2	3	800	(5,5)	1800	(12,4)	159	(48,5)	33	(83,8)	62	(0,4)	2400	(1089)	35NT	3QNT
4	4 1/2	4	800	(5,5)	1800	(12,4)	207	(63,1)	25	(63,5)	64	(0,4)	4100	(1860)	45NT	4QNT
5	5 1/2		800	(5,5)	1900	(13,1)	251	(76,5)	21	(53,3)	68	(0,5)	6100	(2767)	55NR	
6	6 5/8	6	800	(5,5)	1800	(12,4)	309	(94,2)	17	(43,2)	64	(0,4)	9100	(4128)	65NV	6QNR
8	8 5/8		800	(5,5)	1700	(11,7)	395	(120,4)	13	(33,0)	48	(0,3)	13500	(6124)	85NU	

Series 1000 - ACT (All Sizes), PGT (All Sizes) or SSS HP (3", 4" and 6" Sizes)																
2 1/2	2 7/8		1000	(6,9)	2200	(15,2)	130	(39,6)	40	(101,6)	114	(0,8)	1900	(862)	27NT	
3	3 1/2	3	1000	(6,9)	2400	(16,5)	162	(49,4)	32	(81,3)	146	(1,0)	3200	(1452)	35NT	3QNT
4	4 1/2	4	1000	(6,9)	2300	(15,9)	210	(64,0)	25	(63,5)	125	(0,9)	5200	(2359)	45NT	4QNT
5	5 1/2		1000	(6,9)	2200	(15,2)	254	(77,4)	21	(53,3)	117	(0,8)	7400	(3357)	55NR	
6	6 5/8	6	1000	(6,9)	2100	(14,5)	312	(95,1)	17	(43,2)	101	(0,7)	10700	(4854)	65NV	6QNR
8	8 5/8		1000	(6,9)	2100	(14,5)	401	(122,2)	13	(33,0)	101	(0,7)	17600	(7983)	85NT	

Series 1250 - ACT (All Sizes), PGT (All Sizes) or SSS HP (2", 3", 4" and 6" Sizes)																
2	2 3/8	2	1250	(8,6)	2700	(18,6)	109	(33,2)	48	(121,9)	212	(1,5)	1600	(726)	23NS	2QNS
2 1/2	2 7/8		1250	(8,6)	2900	(20,0)	133	(40,5)	39	(99,1)	265	(1,8)	2600	(1179)	27NT	
3	3 1/2	3	1250	(8,6)	3000	(20,7)	165	(50,3)	32	(81,3)	281	(1,9)	4100	(1860)	35NT	3QNT
4	4 1/2	4	1250	(8,6)	2700	(18,6)	213	(64,9)	24	(61,0)	214	(1,5)	6300	(2858)	45NT	4QNT
5	5 1/2		1250	(8,6)	2600	(17,9)	257	(78,3)	20	(50,8)	186	(1,3)	8800	(3992)	55NR	
6	6 5/8	6	1250	(8,6)	2700	(18,6)	318	(96,9)	16	(40,6)	212	(1,5)	14000	(6350)	65NS	N/A
8	8 5/8		1250	(8,6)	2600	(17,9)	406	(123,7)	13	(33,0)	183	(1,3)	21800	(9888)	N/A	

Series 1500 - ACT (All Sizes), PGT (2", 2 1/2", 3", and 4" Sizes) or SSS HP (2", 3", 4" and 6" Sizes)																
2	2 3/8	2	1500	(10,3)	3600	(24,8)	112	(34,1)	46	(116,8)	489	(3,4)	2200	(998)	23NS	2QNS
2 1/2	2 7/8		1500	(10,3)	3700	(25,5)	136	(41,5)	38	(96,5)	507	(3,5)	3300	(1497)	27NT	
3	3 1/2	3	1500	(10,3)	3600	(24,8)	168	(51,2)	31	(78,7)	479	(3,3)	5000	(2268)	35NT	3QNS
4	4 1/2	4	1500	(10,3)	3200	(22,1)	216	(65,8)	24	(61,0)	339	(2,3)	7400	(3357)	45NS	4QNS
5	5 1/2		1500	(10,3)	3300	(22,8)	263	(80,2)	20	(50,8)	388	(2,7)	11400	(5171)	55NQ	
6	6 5/8	6	1500	(10,3)	3300	(22,8)	324	(98,8)	16	(40,6)	383	(2,6)	17400	(7893)	N/A	N/A
8	8 5/8		1500	(10,3)	3300	(22,8)	415	(126,5)	13	(33,0)	371	(2,6)	28200	(12792)	N/A	

Series 1750 - ACT (All Sizes), PGT (2", 2 1/2", 3" and 4" Sizes) or SSS HP (2", 3" and 4" Sizes)																
1 1/2	1.90		1750	(12,1)	3600	(24,8)	84	(25,6)	61	(154,9)	493	(3,4)	1300	(590)	19NR	
2	2 3/8	2	1750	(12,1)	3600	(24,8)	112	(34,1)	46	(116,8)	497	(3,4)	2200	(998)	23NS	2QNS
2 1/2	2 7/8		1750	(12,1)	3700	(25,5)	136	(41,5)	38	(96,5)	515	(3,6)	3300	(1497)	27NT	
3	3 1/2	3	1750	(12,1)	3600	(24,8)	168	(51,2)	31	(78,7)	487	(3,4)	5000	(2268)	35NT	3QNS
4	4 1/2	4	1750	(12,1)	3700	(25,5)	219	(66,8)	24	(61,0)	503	(3,5)	8600	(3901)	45NS	4QNR
5	5 1/2		1750	(12,1)	3700	(25,5)	266	(81,1)	20	(50,8)	531	(3,7)	12900	(5851)	N/A	
6	6 5/8		1750	(12,1)	3900	(26,9)	310	(94,5)	17	(43,2)	599	(4,1)	18100	(8210)	N/A	
8	8 5/8		1750	(12,1)	3800	(26,2)	421	(128,3)	12	(30,5)	551	(3,8)	32700	(14833)	N/A	

(Metric Conversions are in Parentheses)

NA - Not Available (Repair Joint Required)

SIZE			Product Code	PIPE DIMENSIONS (NOMINAL)										Maximum Support Span Ft (m)
API Nom. Thread Size	SSS Type	HP		Inside Diameter In (mm)	Outside Diameter In (mm)	Wall Thickness In (mm)	Pipe Weight Lbs/ft (kg/m)	API Thread Conn. Dia In (mm)	SSS HP Conn. Dia. In (mm)					

Series 2000 - ACT (All Sizes), PGT (2", 2 1/2", 3" and 4" Sizes) or SSS HP (2", 3" and 4" Sizes)														
1 1/2	1.90		I2015	1.50 (38,1)	1.70 (43,3)	0.10 (2,6)	0.59 (0,9)	2.58 (65,4)	---	---	9 (2,8)			
2	2 3/8	2	I2020	2.00 (50,8)	2.27 (57,7)	0.14 (3,4)	0.94 (1,4)	3.13 (79,5)	3.32 (84,3)	10 (3,1)				
2 1/2	2 7/8		I2024	2.43 (61,7)	2.76 (70,1)	0.16 (4,2)	1.34 (2,0)	3.74 (94,9)	---	---	11 (3,4)			
3	3 1/2	3	I2030	3.00 (76,2)	3.41 (86,5)	0.20 (5,2)	1.95 (2,9)	4.52 (114,7)	4.75 (120,7)	12 (3,7)				
4	4 1/2	4	I2039	3.91 (99,3)	4.44 (112,8)	0.26 (6,7)	3.50 (5,2)	5.74 (145,9)	5.87 (149,1)	14 (4,3)				
5	5 1/2		I2047	4.74 (120,4)	5.38 (136,7)	0.32 (8,1)	5.03 (7,5)	6.70 (170,2)	---	---	16 (4,9)			
6	6 5/8		I2055	5.50 (139,7)	6.24 (158,6)	0.37 (9,5)	6.50 (9,7)	7.96 (202,1)	---	---	17 (5,2)			

Series 2250 - ACT (All Sizes), PGT (2 1/2" and 3" Sizes) or SSS HP (3" Sizes)														
1 1/2	1.90		I2215	1.50 (38,1)	1.73 (44,0)	0.12 (2,9)	0.60 (0,9)	2.64 (67,0)	---	---	9 (2,8)			
2 1/2	2 7/8		I2224	2.43 (61,7)	2.80 (71,2)	0.19 (4,7)	1.57 (2,3)	3.86 (98,0)	---	---	12 (3,7)			
3	3 1/2	3	I2230	3.00 (76,2)	3.46 (87,9)	0.23 (5,9)	2.24 (3,3)	4.64 (117,9)	4.87 (123,7)	13 (4,0)				
4	4 1/2		I2239	3.91 (99,3)	4.51 (114,6)	0.30 (7,6)	3.87 (5,8)	5.87 (149,0)	---	---	15 (4,6)			

Series 2500 - ACT (All Sizes), PGT (2", 2 1/2" and 3" Sizes) or SSS HP (2" and 3" Sizes)														
1 1/2	1.90		I2515	1.50 (38,1)	1.76 (44,7)	0.13 (3,3)	0.74 (1,1)	2.70 (68,6)	---	---	9 (2,8)			
2	2 3/8	2	I2520	2.00 (50,8)	2.34 (59,6)	0.17 (4,4)	1.15 (1,7)	3.32 (84,2)	3.45 (87,6)	11 (3,4)				
2 1/2	2 7/8		I2524	2.43 (61,7)	2.85 (72,4)	0.21 (5,3)	1.80 (2,7)	3.92 (99,7)	---	---	12 (3,7)			
3	3 1/2	3	I2530	3.00 (76,2)	3.52 (89,3)	0.26 (6,6)	2.53 (3,8)	4.77 (121,1)	5.00 (127,0)	13 (4,0)				
4	4 1/2		I2539	3.91 (99,3)	4.58 (116,4)	0.34 (8,6)	4.26 (6,3)	5.99 (152,2)	---	---	15 (4,6)			

Series 2750 - ACT (All Sizes)														
1 1/2	1.90		I2715	1.50 (38,1)	1.79 (45,4)	0.14 (3,7)	0.76 (1,1)	2.77 (70,2)	---	---	9 (2,8)			
3	3 1/2		I2730	3.00 (76,2)	3.57 (90,8)	0.29 (7,3)	2.84 (4,2)	4.89 (124,3)	---	---	13 (4,0)			
4	4 1/2		I2737	3.75 (95,3)	4.47 (113,5)	0.36 (9,1)	4.34 (6,5)	6.14 (155,9)	---	---	15 (4,6)			

Series 3000 - ACT (All Sizes) or PGT (2" and 2 1/2" Sizes)														
1 1/2	1.90		I3015	1.50 (38,1)	1.82 (46,1)	0.16 (4,0)	0.90 (1,3)	2.83 (71,9)	---	---	10 (3,1)			
2	2 3/8		I3020	2.00 (50,8)	2.42 (61,5)	0.21 (5,4)	1.36 (2,0)	3.45 (87,5)	---	---	11 (3,4)			
2 1/2	2 7/8		I3024	2.43 (61,7)	2.94 (74,8)	0.26 (6,5)	2.07 (3,1)	4.11 (104,5)	---	---	12 (3,7)			
3	3 1/2		I2930	3.00 (76,2)	3.61 (91,7)	0.31 (7,7)	3.13 (4,7)	4.96 (125,9)	---	---	14 (4,3)			
4	4 1/2		I3037	3.75 (95,3)	4.54 (115,4)	0.40 (10,1)	5.08 (7,6)	6.33 (160,7)	---	---	15 (4,6)			

(Metric Conversions are in Parentheses)

### Joining System Information (API 8rd Thread)

Pipe Size - Inches Joining System	1 1/2	2	2 1/2	3	4	5	6	8	8
Thread Size <sup>(9)</sup>	1.90" EUE 10rd	2 3/8" EUE 8rd	2 7/8" EUE 8rd	3 1/2" EUE 8rd	4 1/2" EUE 8rd	5 1/2" OD 8rd	6 5/8" OD 8rd	8 5/8" OD 8rd	9 5/8" OD 8rd
• Pin Upset O.D.	In (mm) 2.15 (54,6)	2.60 (66,0)	3.10 (78,7)	3.75 (95,3)	4.75 (120,7)	5.55 (141,0)	6.65 (168,9)	8.65 (219,7)	9.65 (245,1)
• Thread Length	In (mm) 2.36 (59,9)	2.94 (74,7)	3.25 (82,6)	3.50 (88,9)	3.88 (98,6)	4.75 (120,7)	4.25 (108,0)	4.85 (123,2)	5.13 (130,3)
• Make Up Length Loss	In (mm) 2.06 (52,4)	2.56 (65,1)	2.86 (73,0)	3.13 (79,4)	3.50 (88,9)	4.38 (111,1)	3.88 (98,4)	4.50 (114,3)	4.75 (120,7)

(Metric Conversions are in Parentheses)

SIZE			STAR <sup>™</sup> RATED PRESSURE <sup>(4)</sup>		Ultimate <sup>(2)</sup> Pressure	Minimum Bending Radius	Maximum Deflection	Collapse Rating	Short Term Tensile Rating	API 8rd Threaded Adapter Product Code	SSS HP Threaded Adapter Product Code
Nom. Size	API Thread Type	SSS HP	150° F (65.6° C) psi (MPa)	Static <sup>(1)</sup>	ASTM D-1599 psi (MPa)	Ft (m)	In/jt (cm/jt)	psi (MPa)	Lbs (kgs)		

Series 2000 - ACT (All Sizes), PGT (2", 2 1/2", 3" and 4" Sizes) or SSS HP (2", 3" and 4" Sizes)																
1 1/2	1.90		2000	(13,8)	4800	(33,1)	87	(26,5)	59	(149,9)	1122	(7,7)	1700	(771)	19NR	
2	2 3/8	2	2000	(13,8)	4500	(31,0)	115	(35,1)	45	(114,3)	945	(6,5)	2800	(1270)	23NS	2QNS
2 1/2	2 7/8		2000	(13,8)	4400	(30,3)	139	(42,4)	37	(94,0)	875	(6,0)	4100	(1860)	27NS	
3	3 1/2	3	2000	(13,8)	4200	(29,0)	171	(52,1)	30	(76,2)	764	(5,3)	5900	(2676)	35NS	3QNS
4	4 1/2	4	2000	(13,8)	4500	(31,0)	225	(68,6)	23	(58,4)	956	(6,6)	10900	(4944)	45NR	4QNR
5	5 1/2		2000	(13,8)	4400	(30,3)	272	(82,9)	19	(48,3)	901	(6,2)	15700	(7122)	N/A	
6	6 5/8		2000	(13,8)	4200	(29,0)	313	(95,4)	17	(43,2)	762	(5,3)	19900	(9027)	N/A	

Series 2250 - ACT (All Sizes), PGT (2 1/2" and 3" Sizes) or SSS HP (3" Sizes)																
1 1/2	1.90		2250	(15,5)	4800	(33,1)	87	(26,5)	59	(149,9)	1140	(7,9)	1700	(771)	19NR	
2 1/2	2 7/8		2250	(15,5)	5100	(35,2)	142	(43,3)	37	(94,0)	1364	(9,4)	4800	(2177)	27NQ	
3	3 1/2	3	2250	(15,5)	4800	(33,1)	174	(53,0)	30	(76,2)	1127	(7,8)	6900	(3130)	35NS	3QNR
4	4 1/2		2250	(15,5)	5000	(34,5)	228	(69,5)	23	(58,4)	1267	(8,7)	12200	(5534)	N/A	

Series 2500 - ACT (All Sizes), PGT (2", 2 1/2" and 3" Sizes) or SSS HP (2" and 3" Sizes)																
1 1/2	1.90		2500	(17,2)	5900	(40,7)	9	(2,8)	57	(144,8)	2140	(14,8)	2200	(998)	19NQ	
2	2 3/8	2	2500	(17,2)	5400	(37,2)	11	(3,4)	44	(111,8)	1618	(11,2)	3500	(1588)	23NQ	2QNP
2 1/2	2 7/8		2500	(17,2)	5800	(40,0)	12	(3,7)	36	(91,4)	2001	(13,8)	5600	(2540)	27NQ	
3	3 1/2	3	2500	(17,2)	5400	(37,2)	13	(4,0)	29	(73,7)	1587	(10,9)	7800	(3538)	35NR	3QNQ
4	4 1/2		2500	(17,2)	5400	(37,2)	15	(4,6)	23	(58,4)	1636	(11,3)	13500	(6124)	N/A	

Series 2750 - ACT (All Sizes)																
1 1/2	1.90		2750	(19,0)	6000	(41,4)	9	(2,8)	57	(144,8)	2174	(15,0)	2200	(998)	N/A	
3	3 1/2		2750	(19,0)	5900	(40,7)	13	(4,0)	29	(73,7)	2153	(14,8)	8800	(3992)	N/A	
4	4 1/2		2750	(19,0)	5700	(39,3)	15	(4,6)	23	(58,4)	1936	(13,3)	13300	(6033)	N/A	

Series 3000 - ACT (All Sizes) or PGT (2" and 2 1/2" Sizes)																
1 1/2	1.90		3000	(20,7)	7000	(48,3)	10	(3,1)	56	(142,2)	3615	(24,9)	2700	(1225)	N/A	
2	2 3/8		3000	(20,7)	6300	(43,4)	11	(3,4)	43	(109,2)	2547	(17,6)	4200	(1905)	N/A	
2 1/2	2 7/8		3000	(20,7)	6500	(44,8)	12	(3,7)	35	(88,9)	2846	(19,6)	6500	(2948)	N/A	
3	3 1/2		2900	(20,0)	6500	(44,8)	14	(4,3)	28	(71,1)	2816	(19,4)	9900	(4491)	N/A	
4	4 1/2		3000	(20,7)	6600	(45,5)	15	(4,6)	23	(58,4)	2990	(20,6)	15800	(7167)	N/A	

(Metric Conversions are in Parentheses)

NA - Not Available (Repair Joint Required)

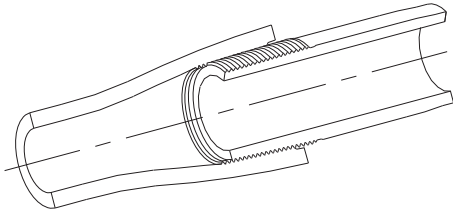
### Joining System Information (Mechanical O-Ring Thread)

Pipe Size - Inches Joining System	1 1/2 SSS HP	2 SSS HP	2 1/2 SSS HP	3 SSS HP	4 SSS HP	6 SSS HP
Thread Size <sup>(3)</sup>	Super Seal HP	Super Seal HP	Super Seal HP	Super Seal HP	Super Seal HP	Super Seal HP
• Pin Upset O.D.	In (mm)	N/A	2.72 (69,1)	N/A	3.93 (99,8)	4.85 (123,2)
• Thread Length	In (mm)	N/A	4.00 (101,6)	N/A	4.60 (116,8)	4.60 (116,8)
• Make Up Length Loss	In (mm)	N/A	3.75 (95,3)	N/A	4.35 (110,5)	4.35 (110,5)
O-Ring Dash No.	N/A	2-227	N/A	2-338	2-346	2-361

(Metric Conversions are in Parentheses)

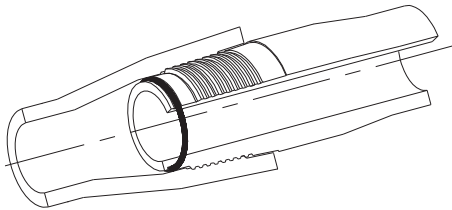
**Corresponding Numbered Notes:**

1. **SERIES PRESSURE** - The maximum operating pressure at design temperature.
2. **ULTIMATE PRESSURE** - The typical mode of failure for pressure is weep.
3. **API CONNECTIONS** - All products are produced integral joint unless indicated (TC) Threaded and Coupled. Any order may include up to 15% threaded and coupled pipe. All 1 1/2" EUE 10rd and 2 3/8" - 4 1/2" EUE 8rd API threads conform to API 5B Table 14, 14th Edition (L4 is minimum) and all 5 1/2" - 9 5/8" OD 8rd casing threads conform to API 5B Table 7, 14th Edition (L4 is minimum).
4. **CYCLIC PRESSURE** - Consult a NOV Fiber Glass Systems technical services personnel in applications where pressure fluctuations of more than 20 percent of the steady pressure rating are anticipated.



**API Threads**

- **Advanced Composite Thread (ACT)** - Molded threads using a graphite, ceramic and epoxy composite for high performance applications. (Patent No's 4,999,389 & 5,179,140)
- **Precision Ground Thread (PGT)** - Typical ground threads produced with numerical controlled grinding equipment.
- All 1 1/2" EUE 10rd and 2-3/8" - 4 1/2" EUE 8rd API threads conform to API 5B Table 14, 14th Edition (L4 is minimum) and all 5 1/2" - 9 5/8" OD 8rd casing threads conform to API 5B Table 7, 14th Edition (L4 is minimum).



**Star Super Seal HP (SSS HP)**

- Fast, Reliable Installation
- Proprietary Self Restrained Mechanical O-Ring Seal - 1 1/2"-6", 3 threads per inch
- Special 37.5 Ft. (4" and 6" only)
- All Weather Connection
- Standard O-Rings are Standard Nitrile for applications up to 150° F (65.6° C)
- Special O-Rings available for high concentrations of CO<sub>2</sub>, H<sub>2</sub>S and other special applications.

Pipe Capacity					
Pipe	Size		Inside Diameter		Capacity
	Thread	SSSHP	in	(mm)	Bbls/1,000 ft. (m <sup>3</sup> /km)
1 1/2	1.90		1.50	(38,1)	2.20 (1,1)
2	2 3/8	2	2.00	(50,8)	3.90 (2,0)
2 1/2	2 7/8		2.43	(61,7)	5.70 (3,0)
3	3 1/2	3	3.00	(76,2)	8.70 (4,5)
4	4 1/2		3.75	(95,3)	13.70 (7,1)
4	4 1/2	4	3.91	(99,3)	14.80 (7,7)
5	5 1/2		4.74	(120,4)	21.80 (11,4)
6	6 5/8		5.50	(139,7)	29.40 (15,3)
6	6 5/8	6	5.85	(148,6)	33.20 (17,3)
8	8 5/8		7.50	(190,5)	54.60 (28,5)

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