

Applications

- Production Lines
- Injection Lines
- Disposal Lines
- Transfer Lines
- Oil, Gas, Saltwater
- CO₂ and H₂S

Product Description

- **Sizes** - 1½ through 8 inches
- **Pressure** - Up to 3,000 psi (20.7 MPa)
- **Temperature** - Up to 150°F (65.6°C) Max.
- **Resin System** - Anhydride Cured Epoxy
- **Reinforcement** - Premium Fiberglass
- **Joining Systems** - API 8rd Threaded
- **Joint Length** - 33 Feet (10 mts) Nominal
Random Lengths of 20 to 33 Feet (6.1 to 10 mts)
- **Fittings** - A variety of filament wound threaded fittings are available. Purchase all fittings by thread size and design pressure rating only.

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 Hydro Test** - All sizes 1.25 times the Series pressure rating

Benefits

- Corrosion Control
- Reduced Installation Costs
- Improved Flow Efficiency
- Reduced Paraffin & Scale Build-Up
- Reduced Maintenance Cost
- Constant ID throughout Pressure Class

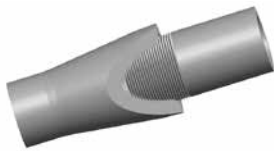
Joining System

- **ACT** - Molded threads using a graphite, ceramic and epoxy composite for high performance applications.
- **PGT** - Typical ground threads produced with numerical controlled grinding equipment.
- All 1½" EUE 10rd and 2 ¾" - 4 ½" EUE 8rd API threads conform to API 5B Table 14, 14 Edition (L4 is minimum) and all 5 ½" - 9 ⅝" OD 8rd casing threads conform to API 5B Table 7, 14 Edition (L4 is minimum).

View of Joint Illustrations



ACT



PGT

Series 500⁽¹⁾

500 psi (3.4 MPa)

Pipe Size	Thread Size*	Product Code	Nominal Pipe Dimensions								Connection Diameter		Minimum Bending Radius		Short-Term Tensile Rating		Mfg. Loc.**
			Inside Diameter		Outside Diameter		Wall Thickness		Pipe Weight								
			in	mm	in	mm	in	mm	lbs/ft	kg/m	in	mm	ft	m	lbs	kgs	
4	4 ½ (A,P)	I0537	3.75	95.3	3.87	98.3	0.06	1.5	1.30	1.9	5.10	129.4	196	59.7	3,000	1,361	B
4	4 ½ (A)	I0539	3.91	99.3	4.04	102.5	0.06	1.6	1.26	1.9	5.09	129.2	204	62.2	3,000	1,361	Q, W
5	5 ½ (A)	I0547	4.74	120.4	4.89	124.3	0.08	1.9	1.52	2.3	5.88	149.4	245	74.7	3,600	1,633	W
6	6 ⅝ (A,P)	I0555	5.50	139.7	5.68	144.2	0.09	2.2	2.08	3.1	6.97	177.0	284	86.6	4,400	1,996	B
6	6 ⅝ (A,P)	I0558	5.85	148.6	6.04	153.4	0.09	2.4	2.37	3.5	7.02	178.2	304	92.7	6,100	2,767	Q, W
8	8 ⅝ (A,P)	I0575	7.50	190.5	7.74	196.6	0.12	3.1	3.80	5.7	9.07	230.3	389	118.6	9,600	4,354	B, Q, W

Series 800⁽¹⁾

800 psi (5.5 MPa)

Pipe Size	Thread Size*	Product Code	Nominal Pipe Dimensions								Connection Diameter		Minimum Bending Radius		Short-Term Tensile Rating		Mfg. Loc.**
			Inside Diameter		Outside Diameter		Wall Thickness		Pipe Weight								
			in	mm	in	mm	in	mm	lbs/ft	kg/m	in	mm	ft	m	lbs	kgs	
3	3 ½ (A,P)	I0830	3.00	76.2	3.16	80.1	0.08	2.0	0.97	1.4	4.09	104.0	159	48.5	2,400	1,089	B, Q, W
4	4 ½ (P)	I0837	3.75	95.3	3.94	100.2	0.10	2.5	1.59	2.4	5.16	131.0	199	60.7	4,000	1,814	B
4	4 ½ (A,P)	I0839	3.91	99.3	4.11	104.5	0.10	2.6	1.56	2.3	5.15	130.7	207	63.1	4,100	1,860	Q, W
5	5 ½ (A)	I0847	4.74	120.4	4.99	126.6	0.12	3.1	2.21	3.3	6.00	152.3	251	76.5	6,100	2,767	W
6	6 ⅝ (P)	I0855	5.50	139.7	5.79	146.9	0.14	3.6	2.96	4.4	7.15	181.6	290	88.4	7,500	3,402	B
6	6 ⅝ (A,P)	I0858	5.85	148.6	6.15	156.3	0.15	3.9	3.25	4.8	7.13	181.2	310	94.5	9,200	4,173	Q, W
8	8 ⅝ (A,P)	I0875	7.50	190.5	7.89	200.4	0.19	4.9	5.22	7.8	9.28	235.7	397	121.0	15,200	6,895	B, Q, W

Series 1000⁽¹⁾

1000 psi (6.9 MPa)

Pipe Size	Thread Size*	Product Code	Nominal Pipe Dimensions								Connection Diameter		Minimum Bending Radius		Short-Term Tensile Rating		Mfg. Loc.**
			Inside Diameter		Outside Diameter		Wall Thickness		Pipe Weight								
			in	mm	in	mm	in	mm	lbs/ft	kg/m	in	mm	ft	m	lbs	kgs	
2 ½	2 ⅞ (A,P)	I1023	2.38	60.3	2.53	64.3	0.08	2.0	0.76	1.1	3.44	87.4	127	38.7	1,900	862	W
2 ½	2 ⅞ (A)	I1024	2.43	61.7	2.59	65.7	0.08	2.0	0.69	1.0	3.43	87.1	130	39.6	1,900	862	Q
3	3 ½ (A,P)	I1030	3.00	76.2	3.20	81.2	0.10	2.5	1.22	1.8	4.17	105.8	162	49.4	3,300	1,497	B, Q, W
4	4 ½ (P)	I1037	3.75	95.3	3.99	101.5	0.12	3.1	1.89	2.8	5.22	132.5	202	61.6	5,100	2,313	B
4	4 ½ (A,P)	I1039	3.91	99.3	4.17	105.8	0.13	3.2	1.86	2.8	5.25	133.3	210	64.0	5,200	2,359	Q, W
5	5 ½ (A)	I1047	4.74	120.4	5.05	128.3	0.15	3.9	2.60	3.9	6.11	155.2	254	77.4	7,400	3,357	W
6	6 ⅝ (P)	I1055	5.50	139.7	5.86	148.8	0.18	4.6	3.83	5.7	7.27	184.7	296	90.2	10,600	4,808	B
6	6 ⅝ (A,P)	I1058	5.85	148.6	6.23	158.3	0.19	4.8	3.74	5.6	7.28	185.0	314	95.7	10,900	4,944	Q, W
8	8 ⅝ (A,P)	I1075	7.50	190.5	7.99	202.9	0.24	6.2	6.18	9.2	9.47	240.6	401	122.2	18,300	8,301	B, Q, W

NOTE: Additional pressure classes are available on request.**(1) Series Rating** - All ratings are maximum operating limits. Exceeding these limits will void the warranty on all NOV Fiber Glass Systems pipe.* **(A) ACT** - Advanced Composite Thread; **(P) PGT** - Percision Ground Thread. Consult FGS Sales Representative for thread type availability from manufacturing location.****Manufacturing Location** - W = Wichita Q = Qingdao B = Brazil

Series 1250⁽¹⁾

1250 psi (8.6 MPa)

Pipe Size	Thread Size*	Product Code	Nominal Pipe Dimensions								Connection Diameter		Minimum Bending Radius		Short-Term Tensile Rating		Mfg. Loc.**
			Inside Diameter		Outside Diameter		Wall Thickness		Pipe Weight								
			in	mm	in	mm	in	mm	lbs/ft	kg/m	in	mm	ft	m	lbs	kgs	
2	2 3/8 (A,P)	I1220	2.00	50.8	2.16	55.0	0.08	2.1	0.65	1.0	2.96	75.1	109	33.2	1,700	771	B, Q, W
2 1/2	2 7/8 (A,P)	I1223	2.38	60.3	2.57	65.3	0.10	2.5	0.95	1.4	3.50	88.9	130	39.6	2,600	1,179	W
2 1/2	2 7/8 (A)	I1224	2.43	61.7	2.63	66.8	0.10	2.5	0.87	1.3	3.48	88.5	133	40.5	2,500	1,134	Q
3	3 1/2 (A,P)	I1230	3.00	76.2	3.25	82.5	0.12	3.1	1.47	2.2	4.25	108.0	165	50.3	4,200	1,905	B, Q, W
4	4 1/2 (P)	I1237	3.75	95.3	4.06	103.1	0.15	3.9	2.22	3.3	5.34	135.6	205	62.5	6,200	2,812	B
4	4 1/2 (A,P)	I1239	3.91	99.3	4.23	107.5	0.16	4.1	2.20	3.3	5.36	136.1	213	64.9	6,300	2,858	Q, W
5	5 1/2 (A)	I1247	4.74	120.4	5.13	130.3	0.19	5.0	3.00	4.5	6.23	158.2	257	78.3	8,800	3,992	W
6	6 5/8 (P)	I1255	5.50	139.7	5.95	151.2	0.23	5.7	4.36	6.5	7.46	189.4	299	91.1	12,300	5,579	B
6	6 5/8 (A,P)	I1258	5.85	148.6	6.33	160.8	0.24	6.1	4.69	7.0	7.45	189.1	319	97.2	14,200	6,441	Q, W
8	8 5/8 (A,P)	I1275	7.50	190.5	8.12	206.2	0.31	7.8	7.51	11.2	9.71	246.5	408	124.4	23,000	10,433	B, Q, W

Series 1500⁽¹⁾

1500 psi (10.3 MPa)

Pipe Size	Thread Size*	Product Code	Nominal Pipe Dimensions								Connection Diameter		Minimum Bending Radius		Short-Term Tensile Rating		Mfg. Loc.**
			Inside Diameter		Outside Diameter		Wall Thickness		Pipe Weight								
			in	mm	in	mm	in	mm	lbs/ft	kg/m	in	mm	ft	m	lbs	kgs	
1 1/2	1.90 (A)	I1515	1.50	38.1	1.65	41.9	0.07	1.9	0.43	0.6	2.44	61.9	83	25.3	1,200	544	Q
2	2 3/8 (A,P)	I1520	2.00	50.8	2.20	55.9	0.10	2.5	0.82	1.2	3.02	76.7	112	34.1	2,300	1,043	B, Q, W
2 1/2	2 7/8 (A,P)	I1523	2.38	60.3	2.61	66.3	0.12	3.0	0.99	1.5	3.58	90.8	131	39.9	2,700	1,225	W
2 1/2	2 7/8 (A)	I1524	2.43	61.7	2.67	67.9	0.12	3.1	1.07	1.6	3.59	91.2	135	41.1	3,200	1,451	Q
3	3 1/2 (A,P)	I1530	3.00	76.2	3.30	83.8	0.15	3.8	1.65	2.5	4.33	110.1	168	51.2	5,000	2,268	B, Q, W
4	4 1/2 (P)	I1537	3.75	95.3	4.12	104.7	0.19	4.7	2.55	3.8	5.46	138.7	208	63.4	7,300	3,311	B
4	4 1/2 (A,P)	I1539	3.91	99.3	4.30	109.2	0.19	4.9	2.65	3.9	5.50	139.7	218	66.4	8,100	3,674	Q, W
5	5 1/2 (A)	I1547	4.74	120.4	5.21	132.4	0.24	6.0	3.78	5.6	6.40	162.7	263	80.2	11,500	5,216	W
6	6 5/8 (P)	I1555	5.50	139.7	6.05	153.6	0.27	7.0	5.32	7.9	7.64	194.1	305	93.0	15,600	7,076	B
6	6 5/8 (A)	I1558	5.85	148.6	6.43	163.4	0.29	7.4	5.55	8.3	8.00	203.1	323	98.5	16,600	7,530	Q, W
8	8 5/8 (A,P)	I1575	7.50	190.5	8.25	209.5	0.37	9.5	8.76	13.0	9.93	252.3	414	126.2	27,100	12,292	B, Q, W

Series 1750⁽¹⁾

1750 psi (12.1 MPa)

Pipe Size	Thread Size*	Product Code	Nominal Pipe Dimensions								Connection Diameter		Minimum Bending Radius		Short-Term Tensile Rating		Mfg. Loc.**
			Inside Diameter		Outside Diameter		Wall Thickness		Pipe Weight								
			in	mm	in	mm	in	mm	lbs/ft	kg/m	in	mm	ft	m	lbs	kgs	
1 1/2	1.90 (A)	I1715	1.50	38.1	1.68	42.6	0.09	2.2	0.55	0.8	2.51	63.9	86	26.2	1,600	726	W, Q
2	2 3/8 (A,P)	I1720	2.00	50.8	2.23	56.8	0.12	3.0	0.89	1.3	3.09	78.6	114	34.7	2,700	1,225	B, Q, W
2 1/2	2 7/8 (A,P)	I1723	2.38	60.3	2.65	67.4	0.14	3.5	1.18	1.8	3.68	93.5	133	40.5	3,300	1,497	W
2 1/2	2 7/8 (A)	I1724	2.43	61.7	2.71	69.0	0.14	3.6	1.26	1.9	3.65	92.6	138	42.1	3,800	1,724	Q
3	3 1/2 (A,P)	I1730	3.00	76.2	3.35	85.1	0.18	4.5	1.82	2.7	4.45	113.1	169	51.5	5,500	2,495	B, Q, W
4	4 1/2 (P)	I1737	3.75	95.3	4.19	106.4	0.22	5.6	2.90	4.3	5.58	141.8	211	64.3	8,500	3,856	B
4	4 1/2 (A,P)	I1739	3.91	99.3	4.37	111.0	0.23	5.8	2.98	4.4	5.63	142.9	220	67.1	9,200	4,173	Q, W
5	5 1/2 (A)	I1747	4.74	120.4	5.30	134.5	0.28	7.1	4.21	6.3	6.52	165.7	266	81.1	12,900	5,851	W
6	6 5/8 (A,P)	I1755	5.50	139.7	6.15	156.1	0.32	8.2	5.84	8.7	7.81	198.5	308	93.9	17,300	7,847	B, Q, W
8	8 5/8 (A,P)	I1775	7.50	190.5	8.38	212.8	0.44	11.2	10.52	15.7	10.71	272.0	421	128.3	32,900	14,923	B, W

NOTE: Additional pressure classes are available on request.

(1) Series Rating - All ratings are maximum operating limits. Exceeding these limits will void the warranty on all NOV Fiber Glass Systems pipe.

*** (A) ACT** - Advanced Composite Thread; **(P) PGT** - Precision Ground Thread. Consult FGS Sales Representative for thread type availability from manufacturing location.

****Manufacturing Location** - W = Wichita Q = Qingdao B = Brazil

Series 2000⁽¹⁾

2000 psi (13.8 MPa)

Pipe Size	Thread Size*	Product Code	Nominal Pipe Dimensions								Connection Diameter		Minimum Bending Radius		Short-Term Tensile Rating		Mfg. Loc.**
			Inside Diameter		Outside Diameter		Wall Thickness		Pipe Weight								
			in	mm	in	mm	in	mm	lbs/ft	kg/m	in	mm	ft	m	lbs	kgs	
1 ½	1.90 (A)	I2015	1.50	38.1	1.70	43.3	0.10	2.6	0.59	0.9	2.58	65.4	87	26.5	1,700	771	Q, W
2	2 ¾ (A,P)	I2020	2.00	50.8	2.27	57.7	0.14	3.4	1.02	1.5	3.15	80.0	115	35.1	3,000	1,361	B, Q, W
2 ½	2 ⅞ (A,P)	I2023	2.38	60.3	2.70	68.5	0.16	4.1	1.38	2.1	3.74	95.1	136	41.5	4,000	1,814	W
2 ½	2 ⅞ (A)	I2024	2.43	61.7	2.76	70.1	0.16	4.2	1.28	1.9	3.76	95.4	138	42.1	3,800	1,724	B, Q
3	3 ½ (A,P)	I2030	3.00	76.2	3.41	86.5	0.20	5.2	2.07	3.1	4.53	115.2	172	52.4	6,400	2,903	B, Q, W
4	4 ½ (P)	I2037	3.75	95.3	4.26	108.1	0.25	6.4	3.26	4.8	5.71	144.9	214	65.2	9,600	4,354	B
4	4 ½ (A,P)	I2039	3.91	99.3	4.44	112.8	0.26	6.7	3.57	5.3	5.74	145.9	225	68.6	10,900	4,944	Q, W
5	5 ½ (A)	I2047	4.74	120.4	5.38	136.7	0.32	8.1	5.27	7.8	7.11	180.6	272	82.9	15,700	7,121	W
6	6 ⅝ (A,P)	I2055	5.50	139.7	6.24	158.6	0.37	9.5	7.22	10.7	8.51	216.1	315	96.0	20,800	9,435	B, Q, W

Series 2250⁽¹⁾

2250 psi (15.5 MPa)

Pipe Size	Thread Size*	Product Code	Nominal Pipe Dimensions								Connection Diameter		Minimum Bending Radius		Short-Term Tensile Rating		Mfg. Loc.**
			Inside Diameter		Outside Diameter		Wall Thickness		Pipe Weight								
			in	mm	in	mm	in	mm	lbs/ft	kg/m	in	mm	ft	m	lbs	kgs	
1 ½	1.90 (A)	I2215	1.50	38.1	1.73	44.0	0.12	2.9	0.68	1.0	2.64	67.0	89	27.1	2,000	907	Q, W
2	2 ¾ (A)	I2220	2.00	50.8	2.31	58.6	0.15	3.9	1.06	1.6	3.20	81.4	117	35.7	3,200	1,451	Q
2 ½	2 ⅞ (A,P)	I2223	2.38	60.3	2.74	69.6	0.18	4.6	1.45	2.2	3.83	97.3	137	41.8	4,200	1,905	W
2 ½	2 ⅞ (A)	I2224	2.43	61.7	2.80	71.2	0.19	4.7	1.47	2.2	3.81	96.7	141	43.0	4,500	2,041	Q
3	3 ½ (A,P)	I2230	3.00	76.2	3.46	87.9	0.23	5.9	2.35	3.5	4.66	118.4	175	53.3	7,200	3,266	B, Q, W
4	4 ½ (P)	I2237	3.75	95.3	4.33	109.9	0.29	7.3	3.65	5.4	5.89	149.7	218	66.4	10,900	4,944	B
4	4 ½ (A)	I2239	3.91	99.3	4.51	114.6	0.30	7.6	3.87	5.8	5.90	149.8	228	69.5	12,200	5,534	Q, W

Series 2500⁽¹⁾

2500 psi (17.2 MPa)

Pipe Size	Thread Size*	Product Code	Nominal Pipe Dimensions								Connection Diameter		Minimum Bending Radius		Short-Term Tensile Rating		Mfg. Loc.**
			Inside Diameter		Outside Diameter		Wall Thickness		Pipe Weight								
			in	mm	in	mm	in	mm	lbs/ft	kg/m	in	mm	ft	m	lbs	kgs	
1 ½	1.90 (A)	I2515	1.50	38.1	1.76	44.7	0.13	3.3	0.74	1.1	2.70	68.6	90	27.4	2,200	998	Q, W
2	2 ¾ (A,P)	I2520	2.00	50.8	2.34	59.6	0.17	4.4	1.23	1.8	3.32	84.2	119	36.3	3,800	1,724	B, Q, W
2 ½	2 ⅞ (A,P)	I2523	2.38	60.3	2.78	70.7	0.20	5.2	1.63	2.4	3.93	99.8	140	42.7	4,800	2,177	W
2 ½	2 ⅞ (A)	I2524	2.43	61.7	2.85	72.4	0.21	5.3	1.68	2.5	3.92	99.5	143	43.6	5,200	2,359	Q
3	3 ½ (A,P)	I2530	3.00	76.2	3.52	89.3	0.26	6.6	2.78	4.1	5.16	131.0	178	54.3	8,000	3,629	B, Q, W
4	4 ½ (P)	I2537	3.75	95.3	4.40	111.7	0.32	8.2	4.03	6.0	6.02	152.9	221	67.4	12,100	5,488	B
4	4 ½ (A)	I2539	3.91	99.3	4.58	116.4	0.34	8.6	4.50	6.7	6.52	165.7	231	70.4	13,500	6,123	Q, W

NOTE: Additional pressure classes are available on request.**(1) Series Rating** - All ratings are maximum operating limits. Exceeding these limits will void the warranty on all NOV Fiber Glass Systems pipe.*** (A) ACT** - Advanced Composite Thread; **(P) PGT** - Percision Ground Thread. Consult FGS Sales Representative for thread type availability from manufacturing location.****Manufacturing Location** - W = Wichita Q = Qingdao B = Brazil

Series 2750⁽¹⁾

2750 psi (18.9 MPa)

Pipe Size	Thread Size*	Product Code	Nominal Pipe Dimensions								Connection Diameter		Minimum Bending Radius		Short-Term Tensile Rating		Mfg. Loc.**
			Inside Diameter		Outside Diameter		Wall Thickness		Pipe Weight								
			in	mm	in	mm	in	mm	lbs/ft	kg/m	in	mm	ft	m	lbs	kgs	
1 ½	1.90 (A)	I2715	1.50	38.1	1.79	45.4	0.14	3.7	0.82	1.2	2.77	70.2	92	28.0	2,500	1,134	Q, W
2	2 ¾ (A)	I2720	2.00	50.8	2.38	60.5	0.19	4.9	1.24	1.8	3.37	85.5	119	36.3	3,800	1,724	Q
2 ½	2 ¾ (A)	I2724	2.43	61.7	2.90	73.6	0.23	5.9	1.89	2.8	4.02	102.2	146	44.5	5,900	2,676	Q
3	3 ½ (A)	I2730	3.00	76.2	3.57	90.8	0.29	7.3	2.84	4.2	4.89	124.3	180	54.9	8,900	4,037	Q, W
4	4 ½ (A,P)	I2737	3.75	95.3	4.47	113.5	0.36	9.1	4.56	6.8	6.18	157.0	226	68.9	14,200	6,441	B, Q, W

Series 3000⁽¹⁾

3000 psi (20.7 MPa)

Pipe Size	Thread Size*	Product Code	Nominal Pipe Dimensions								Connection Diameter		Minimum Bending Radius		Short-Term Tensile Rating		Mfg. Loc.**
			Inside Diameter		Outside Diameter		Wall Thickness		Pipe Weight								
			in	mm	in	mm	in	mm	lbs/ft	kg/m	in	mm	ft	m	lbs	kgs	
1 ½	1.90 (A)	I3015	1.50	38.1	1.82	46.1	0.16	4.0	0.96	1.4	3.13	79.6	93	28.3	2,700	1,225	Q, W
2	2 ¾ (A,P)	I3020	2.00	50.8	2.42	61.5	0.21	5.4	1.53	2.3	3.81	96.8	122	37.2	4,400	1,996	B, Q, W
2 ½	2 ¾ (A,P)	I3023	2.38	60.3	2.88	73.1	0.25	6.4	2.13	3.2	4.58	116.2	145	44.2	6,000	2,722	W
2 ½	2 ¾ (A)	I3024	2.43	61.7	2.94	74.8	0.26	6.5	2.22	3.3	4.57	116.0	149	45.4	6,600	2,994	Q
3***	3 ½ (A)	I2930	3.00	76.2	3.61	91.7	0.31	7.7	3.30	4.9	5.45	138.5	183	55.8	9900	4,491	W, Q
4	4 ½ (A,P)	I3037	3.75	95.3	4.54	115.4	0.40	10.1	5.35	8.0	6.99	177.7	230	70.1	15,800	7,167	B, Q, W

***3" rated to 2900 psi

NOTE: Additional pressure classes are available on request.

(1) Series Rating - All ratings are maximum operating limits. Exceeding these limits will void the warranty on all NOV Fiber Glass Systems pipe.

* **(A) ACT** - Advanced Composite Thread; **(P) PGT** - Percision Ground Thread. Consult FGS Sales Representative for thread type availability from manufacturing location.

****Manufacturing Location** - W = Wichita Q = Qingdao B = Brazil

Typical SLT* Properties

Axial Modulus	psi	1.87 x 10 ⁶
	GPa	12.9
Hoop Modulus	psi	3.58 x 10 ⁶
	GPa	24.7
Shear Modulus	psi	1.6 x 10 ⁶
	GPa	11
Poisson's Ratio		
V _{ah}		0.36
V _{ha}		0.69
Coefficient of Thermal Expansion		
Axial	in/in/°F	11.0 x 10 ⁻⁶
	mm/mm/°C	19.8 x 10 ⁻⁶
Hoop	in/in/°F	6.2 x 10 ⁻⁶
	mm/mm/°C	11.2 x 10 ⁻⁶
Thermal Conductivity	BTU/ft·hr·°F	0.23
	W/m·°C	0.4
Specific Gravity		2
Absolute Roughness	in	0.00021
	mm	0.00533
Hazen-Williams Coefficient		150

* Ambient standard laboratory testing

Performance Ratings vs. Temperature

ASTM D 2992-B		Anhydride
150°F (65.6°C) 20 Year Life, LTHS (Long Term Hydrostatic Stress)	psi	23,768
	MPa	163.9
150°F (65.6°C) 20 Year Life, LCL (Lower Confidence Limit)	psi	21,400
	MPa	147.5

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15HR-0004

API Q1 and ISO 9001 Registered

Joining System Information

Pipe Size	Thread Type	Pin Upset O.D.		Thread Length		Make Up Length Loss	
		in	mm	in	mm	in	mm
1 ½	1.90" EUE 10rd	2.15	54.6	2.36	59.9	2.06	52.4
2	2 ¾" EUE 8rd	2.60	66.0	2.94	74.7	2.56	65.1
2 ½	2 7/8" EUE 8rd	3.10	78.7	3.25	82.6	2.86	73.0
3	3 ½" EUE 8rd	3.75	95.3	3.50	88.9	3.13	79.4
4	4 ½" EUE 8rd	4.75	120.7	3.88	98.6	3.50	88.9
5	5 ½" OD 8rd	5.55	141.0	4.75	120.7	4.38	111.1
6	6 5/8" OD 8rd	6.65	168.9	4.25	108.0	3.88	98.4
8	8 5/8" OD 8rd	8.65	219.7	4.85	123.2	4.50	114.3
8	9 5/8" OD 8rd	9.65	245.1	5.13	130.3	4.75	120.7

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 ½" EUE 10rd and 2 ¾" - 4 ½" EUE 8rd API threads conform to API 5B Table 14, 14 Edition (L4 is minimum) and all 5 ½" - 9 ½" OD 8rd casing threads conform to API 5B Table 7, 14 Edition (L4 is minimum).

Pipe Capacity

Pipe Size	Inside Diameter		Capacity	
	in	mm	bbts/1,000 ft	(m3/km)
1 ½	1.50	38.1	2.20	1.1
2	2.00	50.8	3.90	2.0
2 ½	2.38	60.5	5.50	2.9
2 ½	2.43	61.7	5.70	3.0
3	3.00	76.2	8.70	4.5
4	3.75	95.3	13.70	7.1
4	3.91	99.3	14.80	7.7
5	4.74	120.4	21.80	11.4
6	5.50	139.7	29.40	15.3
6	5.85	148.6	33.20	17.3
8	7.50	190.5	54.60	28.5