

STAR® Aromatic Amine Line Pipe (High Pressure - API 15HR DESIGN - Product Data)

Product Description

- Pressure - Up to 2500 psi (17,2 MPa)
- Resin System - Aromatic Amine Cured Epoxy
- Reinforcement - Premium Fiberglass
- Joining Systems - API 8rd Threaded
- Joint Length - 30 Feet (9,1 mts) Nominal
Random Lengths of 20 to 32 Feet (6,1 to 9,8 mts)
- Temperature - Up to 212° F (100° C) Maximum
- Sizes - 1 1/2 through 8 inches
- Fittings - A variety of filament wound API 5B threaded are available. API design systems require higher rated fittings, refer to the chart on page 26, STAR™ High Pressure Threaded Fittings. Temperature interpolation is not recommended for fittings.

High Pressure Design \geq 500 psi

- API 15HR Design
- Design Life - 20 years at full rating
- Design Temperature - 200° F (93.3° C) and 212° F⁽⁵⁾ (100° C)
- Wall Thickness - Minimum
- Hoop Stress - Lower Confidence Limit (LCL) of Long Term Hydrostatic Strength according to ASTM D2992-B
- 100% Factory Hydrotest - At 1.5 x the series rated pressure.

Flow Factors

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

Nominal Moduli

- Modulus of Elasticity
 - Hoop - 3.2×10^6 psi (22,8 GPa)
 - Axial - 1.8×10^6 psi (12,6 GPa)
- Poisson's Ratio (Minor) = 0.38

Physical Properties

- Density = 112 lbs/cu ft (1794 kgs/cu m)
- Specific Gravity = 1.8

Thermal Properties

- Coefficient of Thermal Conductivity
0.23 BTU/(ft•hr•°F) (0.4 W/(m•C°))
- Coefficient of Thermal Expansion
 0.88×10^{-5} in/in/°F ($1,58 \times 10^{-6}$ mm/mm/°C)

Benefits

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

Applications

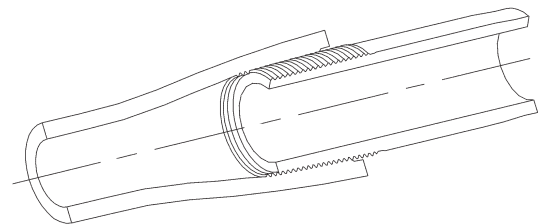
- Production Lines or Injection Lines
- Transfer Lines or Disposal Lines
- Oil, Gas, Saltwater, CO₂ and H₂S

Performance Ratings vs. Temperature

(ASTM D2992-B)	200° F (93.3° C)
11.4 Year Life, LTHS	19,494 (134,4)
20 Year Life, LTHS	18,401 (126,9)
20 Year Life, LCL (Lower Confidence Limit)	17,554 (121,0)

Joining System

Advanced Composite Thread (ACT)



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)
- 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).

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 **Fiber Glass Systems**

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

Series 500 - ACT (All Sizes)												
3	3 1/2	R0530	3.00 (76,2)	3.15 (80,0)	0.07 (1,9)	0.90 (1,3)	4.12 (104,6)	10 (3,1)				
4	4 1/2	R0539	3.91 (99,3)	4.11 (104,3)	0.10 (2,5)	1.46 (2,2)	5.16 (131,2)	12 (3,7)				
6	6 5/8	R0558	5.85 (148,6)	6.14 (156,0)	0.15 (3,7)	2.99 (4,5)	7.13 (181,2)	14 (4,3)				
8	8 5/8	R0575	7.50 (190,5)	7.87 (200,0)	0.19 (4,8)	5.13 (7,6)	9.23 (234,6)	16 (4,9)				

Series 750 - ACT (All Sizes)												
2 1/2	2 7/8	R0724	2.43 (61,7)	2.61 (66,4)	0.09 (2,3)	0.88 (1,3)	3.51 (89,2)	10 (3,1)				
3	3 1/2	R0730	3.00 (76,2)	3.23 (82,0)	0.11 (2,9)	1.35 (2,0)	4.23 (107,3)	11 (3,4)				
4	4 1/2	R0739	3.91 (99,3)	4.21 (106,8)	0.15 (3,8)	2.04 (3,0)	5.27 (133,9)	13 (4,0)				
5	5 1/2	R0747	4.74 (120,4)	5.10 (129,5)	0.18 (4,6)	2.86 (4,3)	6.12 (155,3)	14 (4,3)				
6	6 5/8	R0758	5.85 (148,6)	6.29 (159,8)	0.22 (5,6)	4.27 (6,4)	7.29 (185,2)	16 (4,9)				
8	8 5/8	R0775	7.50 (190,5)	8.07 (204,9)	0.28 (7,2)	6.77 (10,1)	9.40 (238,6)	17 (5,2)				

Series 1000 - ACT (All Sizes)												
2	2 3/8	R1020	2.00 (50,8)	2.20 (56,0)	0.10 (2,6)	0.74 (1,1)	3.02 (76,8)	10 (3,1)				
2 1/2	2 7/8	R1024	2.43 (61,7)	2.68 (68,0)	0.12 (3,2)	1.08 (1,6)	3.57 (90,7)	11 (3,4)				
3	3 1/2	R1030	3.00 (76,2)	3.31 (84,0)	0.15 (3,9)	1.59 (2,4)	4.28 (108,8)	12 (3,7)				
4	4 1/2	R1039	3.91 (99,3)	4.31 (109,5)	0.20 (5,1)	2.56 (3,8)	5.38 (136,7)	14 (4,3)				
5	5 1/2	R1047	4.74 (120,4)	5.22 (132,7)	0.24 (6,2)	3.93 (5,8)	6.28 (159,4)	15 (4,6)				
6	6 5/8	R1058	5.85 (148,6)	6.45 (163,8)	0.30 (7,6)	5.60 (8,3)	7.46 (189,4)	17 (5,2)				
8	8 5/8	R1075	7.50 (190,5)	8.27 (210,0)	0.38 (9,7)	9.07 (13,5)	9.66 (245,5)	19 (5,9)				

Series 1250 - ACT (All Sizes)												
2	2 3/8	R1220	2.00 (50,8)	2.26 (57,4)	0.13 (3,3)	0.90 (1,3)	3.08 (78,3)	10 (3,1)				
2 1/2	2 7/8	R1224	2.43 (61,7)	2.74 (69,7)	0.16 (4,0)	1.28 (1,9)	3.63 (92,1)	11 (3,4)				
3	3 1/2	R1230	3.00 (76,2)	3.39 (86,1)	0.19 (4,9)	1.88 (2,8)	4.36 (110,7)	12 (3,7)				
4	4 1/2	R1239	3.91 (99,3)	4.42 (112,2)	0.25 (6,4)	3.19 (4,7)	5.50 (139,6)	14 (4,3)				
5	5 1/2	R1247	4.74 (120,4)	5.35 (136,0)	0.31 (7,8)	4.68 (7,0)	6.39 (162,3)	16 (4,9)				
6	6 5/8	R1255	5.50 (139,7)	6.21 (157,8)	0.36 (9,0)	6.46 (9,6)	7.63 (193,7)	17 (5,2)				
8	8 5/8	R1275	7.50 (190,5)	8.47 (215,1)	0.49 (12,3)	11.47 (17,1)	9.94 (252,4)	20 (6,2)				

Series 1500 - ACT (All Sizes)												
1 1/2	1.90	R1515	1.50 (38,1)	1.74 (44,1)	0.12 (3,0)	0.62 (0,9)	2.58 (65,6)	9 (2,8)				
2	2 3/8	R1520	2.00 (50,8)	2.31 (58,8)	0.16 (4,0)	1.08 (1,6)	3.14 (79,8)	10 (3,1)				
2 1/2	2 7/8	R1524	2.43 (61,7)	2.81 (71,4)	0.19 (4,9)	1.48 (2,2)	3.71 (94,1)	12 (3,7)				
3	3 1/2	R1530	3.00 (76,2)	3.47 (88,2)	0.24 (6,0)	2.34 (3,5)	4.46 (113,2)	13 (4,0)				
4	4 1/2	R1539	3.91 (99,3)	4.52 (114,9)	0.31 (7,8)	3.93 (5,9)	5.61 (142,5)	15 (4,6)				
5	5 1/2	R1547	4.74 (120,4)	5.49 (139,3)	0.37 (9,5)	5.49 (8,2)	6.56 (166,5)	16 (4,9)				
6	6 5/8	R1555	5.50 (139,7)	6.36 (161,7)	0.43 (11,0)	7.65 (11,4)	7.85 (199,4)	18 (5,5)				
8	9 5/8	R1579	7.98 (202,7)	9.23 (234,6)	0.63 (15,9)	16.15 (24,0)	11.38 (289,0)	21 (6,5)				

Series 1750 - ACT (All Sizes)												
1 1/2	1.90	R1715	1.50 (38,1)	1.78 (45,2)	0.14 (3,5)	0.73 (1,1)	2.62 (66,6)	9 (2,8)				
2	2 3/8	R1720	2.00 (50,8)	2.37 (60,2)	0.19 (4,7)	1.26 (1,9)	3.20 (81,3)	11 (3,4)				
2 1/2	2 7/8	R1724	2.43 (61,7)	2.88 (73,2)	0.23 (5,7)	1.76 (2,6)	3.79 (96,2)	12 (3,7)				
3	3 1/2	R1730	3.00 (76,2)	3.56 (90,4)	0.28 (7,1)	2.70 (4,0)	4.59 (116,7)	13 (4,0)				
4	4 1/2	R1739	3.91 (99,3)	4.64 (117,8)	0.36 (9,2)	4.64 (6,9)	5.78 (146,8)	15 (4,6)				
6	6 5/8	R1755	5.50 (139,7)	6.52 (165,7)	0.51 (13,0)	8.92 (13,3)	8.08 (205,2)	18 (5,5)				

(Metric Conversions are in Parentheses)

SIZE		STAR [®] RATED PRESSURE ⁽⁴⁾		Ultimate ⁽²⁾ Pressure ASTM D-1599 psi (MPa)	Minimum Bending Radius Ft (m)	Maximum Deflection In/jt (cm/jt)	Collapse Rating psi (MPa)	Short Term Tensile Rating Lbs (kgs)	Threaded Adaptor Product Code
Nom. Size	API Thread Type	Static ⁽¹⁾ 200° F (65° C) psi (MPa)	Static ⁽¹⁾ 212° F (100° C) psi (MPa)						

Series 500 - ACT (All Sizes)																
3	3 1/2	500	(3,4)	400	(2,8)	1700	(11,7)	157	(48,0)	40	(101,6)	48	(0,3)	2200	(998)	35NT
4	4 1/2	500	(3,4)	400	(2,8)	1700	(11,7)	205	(62,6)	30	(76,2)	49	(0,3)	3700	(1678)	45NT
6	6 5/8	500	(3,4)	400	(2,8)	1700	(11,7)	307	(93,6)	21	(53,3)	49	(0,3)	8300	(3765)	65NV
8	8 5/8	500	(3,4)	400	(2,8)	1700	(11,7)	394	(120,0)	16	(40,6)	54	(0,4)	14100	(6396)	85NU

Series 750 - ACT (All Sizes)																
2 1/2	2 7/8	750	(5,2)	630	(4,3)	2700	(18,6)	132	(40,2)	46	(116,8)	203	(1,4)	2400	(1089)	27NT
3	3 1/2	750	(5,2)	630	(4,3)	2800	(19,3)	163	(49,7)	38	(96,5)	215	(1,5)	3700	(1678)	35NT
4	4 1/2	750	(5,2)	630	(4,3)	2500	(17,2)	211	(64,3)	30	(76,2)	164	(1,1)	5700	(2586)	45NT
	5 1/2	750	(5,2)	630	(4,3)	2400	(16,5)	255	(77,7)	24	(61,0)	142	(1,0)	8000	(3629)	55NR
6	6 5/8	750	(5,2)	630	(4,3)	2500	(17,2)	316	(96,3)	20	(50,8)	163	(1,1)	12700	(5761)	65NS
8	8 5/8	750	(5,2)	630	(4,3)	2400	(16,5)	404	(123,1)	16	(40,6)	140	(1,0)	19800	(8981)	85NT

Series 1000 - ACT (All Sizes)																
2	2 3/8	1000	(6,9)	850	(5,9)	3300	(22,8)	111	(33,8)	55	(139,7)	380	(2,6)	2000	(907)	23NS
2 1/2	2 7/8	1000	(6,9)	850	(5,9)	3400	(23,4)	135	(41,1)	45	(114,3)	394	(2,7)	3000	(1361)	27NT
3	3 1/2	1000	(6,9)	850	(5,9)	3300	(22,8)	166	(50,6)	38	(96,5)	372	(2,6)	4500	(2041)	35NT
4	4 1/2	1000	(6,9)	850	(5,9)	3300	(22,8)	217	(66,1)	29	(73,7)	384	(2,6)	7800	(3538)	45NS
5	5 1/2	1000	(6,9)	850	(5,9)	3400	(23,4)	263	(80,2)	23	(58,4)	405	(2,8)	11600	(5262)	55NQ
6	6 5/8	1000	(6,9)	850	(5,9)	3300	(22,8)	324	(98,8)	20	(50,8)	380	(2,6)	17300	(7847)	65NR
8	8 5/8	1000	(6,9)	850	(5,9)	3200	(22,1)	414	(126,2)	16	(40,6)	350	(2,4)	27600	(12519)	85NR

Series 1250 - ACT (All Sizes)																
2	2 3/8	1250	(8,6)	1050	(7,2)	4100	(28,3)	114	(34,7)	53	(134,6)	731	(5,0)	2600	(1179)	23NS
2 1/2	2 7/8	1250	(8,6)	1050	(7,2)	4000	(27,6)	138	(42,1)	44	(111,8)	676	(4,7)	3700	(1678)	27NT
3	3 1/2	1250	(8,6)	1050	(7,2)	3900	(26,9)	169	(51,5)	37	(94,0)	635	(4,4)	5500	(2495)	35NS
4	4 1/2	1250	(8,6)	1050	(7,2)	4200	(29,0)	222	(67,7)	28	(71,1)	739	(5,1)	9900	(4491)	45NR
5	5 1/2	1250	(8,6)	1050	(7,2)	4100	(28,3)	269	(82,0)	23	(58,4)	696	(4,8)	14200	(6441)	55NP
6	6 5/8	1250	(8,6)	1050	(7,2)	4100	(28,3)	312	(95,1)	21	(53,3)	724	(5,0)	19500	(8845)	65NV
8	8 5/8	1250	(8,6)	1050	(7,2)	4100	(28,3)	425	(129,5)	15	(38,1)	701	(4,8)	35800	(16239)	N/A

Series 1500 - ACT (All Sizes)																
1 1/2	1.90	1500	(10,3)	1250	(8,6)	4800	(33,1)	87	(26,5)	69	(175,3)	1173	(8,1)	1700	(771)	19NR
2	2 3/8	1500	(10,3)	1250	(8,6)	4900	(33,8)	116	(35,4)	52	(132,1)	1245	(8,6)	3200	(1452)	23NS
2 1/2	2 7/8	1500	(10,3)	1250	(8,6)	4800	(33,1)	141	(43,0)	43	(109,2)	1166	(8,0)	4600	(2087)	27NS
3	3 1/2	1500	(10,3)	1250	(8,6)	4900	(33,8)	175	(53,3)	36	(91,4)	1221	(8,4)	7100	(3221)	35NS
4	4 1/2	1500	(10,3)	1250	(8,6)	5000	(34,5)	228	(69,5)	27	(68,6)	1259	(8,7)	12200	(5534)	45NQ
5	5 1/2	1500	(10,3)	1250	(8,6)	4700	(32,4)	274	(83,5)	22	(55,9)	1098	(7,6)	17000	(7711)	N/A
6	6 5/8	1500	(10,3)	1250	(8,6)	5000	(34,5)	321	(97,8)	20	(50,8)	1276	(8,8)	24200	(10977)	N/A
8	9 5/8	1500	(10,3)	1250	(8,6)	4800	(33,1)	463	(141,1)	14	(35,6)	1164	(8,0)	49100	(22272)	N/A

Series 1750 - ACT (All Sizes)																
1 1/2	1.90	1750	(12,1)	1450	(10,0)	5700	(39,3)	90	(27,4)	67	(170,2)	1945	(13,4)	2100	(953)	19NR
2	2 3/8	1750	(12,1)	1450	(10,0)	5700	(39,3)	119	(36,3)	51	(129,5)	1951	(13,5)	3800	(1724)	23NQ
2 1/2	2 7/8	1750	(12,1)	1450	(10,0)	5700	(39,3)	145	(44,2)	42	(106,7)	1884	(13,0)	5500	(2495)	27NQ
3	3 1/2	1750	(12,1)	1450	(10,0)	5600	(38,6)	178	(54,3)	35	(88,9)	1800	(12,4)	8200	(3720)	35NR
4	4 1/2	1750	(12,1)	1450	(10,0)	5800	(40,0)	234	(71,3)	27	(68,6)	1971	(13,6)	14500	(6577)	45NP
6	6 5/8	1750	(12,1)	1450	(10,0)	5600	(38,6)	326	(99,4)	19	(48,3)	1778	(12,3)	27600	(12519)	N/A

(Metric Conversions are in Parentheses)

NA - Not Available (Repair Joint Required)

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

Series 2000 - ACT (All Sizes)												
1 1/2	1.90	R2015	1.50 (38,1)	1.82 (46,3)	0.16 (4,1)	0.84 (1,2)	2.66 (67,5)	10 (3,1)				
2	2 3/8	R2020	2.00 (50,8)	2.43 (61,7)	0.22 (5,5)	1.45 (2,2)	3.26 (82,9)	11 (3,4)				
2 1/2	2 7/8	R2024	2.43 (61,7)	2.95 (75,0)	0.26 (6,6)	2.15 (3,2)	3.92 (99,5)	12 (3,7)				
3	3 1/2	R2030	3.00 (76,2)	3.65 (92,6)	0.32 (8,2)	3.18 (4,7)	4.69 (119,1)	14 (4,3)				
4	4 1/2	R2037	3.75 (95,3)	4.56 (115,8)	0.40 (10,3)	5.02 (7,5)	5.97 (151,6)	15 (4,6)				

Series 2250 - ACT (All Sizes)												
1 1/2	1.90	R2215	1.50 (38,1)	1.87 (47,5)	0.18 (4,7)	0.98 (1,5)	2.72 (69,0)	10 (3,1)				
2	2 3/8	R2220	2.00 (50,8)	2.49 (63,3)	0.25 (6,2)	1.66 (2,5)	3.38 (85,9)	11 (3,4)				
2 1/2	2 7/8	R2222	2.23 (56,6)	2.78 (70,6)	0.27 (7,0)	2.13 (3,2)	4.00 (101,6)	12 (3,7)				
3	3 1/2	R2227	2.72 (69,1)	3.39 (86,1)	0.33 (8,5)	3.16 (4,7)	4.85 (123,1)	13 (4,0)				
4	4 1/2	R2237	3.75 (95,3)	4.67 (118,6)	0.46 (11,7)	5.77 (8,6)	6.15 (156,2)	16 (4,9)				

Series 2500 - ACT (All Sizes)												
1 1/2	1.90	R2515	1.50 (38,1)	1.92 (48,7)	0.21 (5,3)	1.01 (1,5)	2.82 (71,5)	10 (3,1)				
2	2 3/8	R2518	1.88 (47,8)	2.40 (61,0)	0.26 (6,6)	1.65 (2,5)	3.46 (87,9)	11 (3,4)				
2 1/2	2 7/8	R2522	2.23 (56,6)	2.85 (72,3)	0.31 (7,8)	2.38 (3,5)	4.13 (104,9)	12 (3,7)				
3	3 1/2	R2527	2.72 (69,1)	3.47 (88,2)	0.38 (9,6)	3.48 (5,2)	4.97 (126,3)	14 (4,3)				
4	4 1/2	R2533	3.35 (85,1)	4.28 (108,7)	0.46 (11,8)	5.58 (8,3)	6.30 (160,1)	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 ⁽⁹⁾	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)

Corresponding Numbered Notes:

- SERIES PRESSURE (API 15HR)** - Based on minimum wall thickness dimensions and API 15HR Edition 3, for a 20 year life expectancy. NOV Fiber Glass Systems Standard Design products are not API monogrammed.
- ULTIMATE PRESSURES** - The typical mode of failure for pressure is weep.
- API CONNECTIONS** - All products are produced integral joint unless indicated (TC) Threaded and Coupled. 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).
- CYCLIC PRESSURES** - 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.
- Pressure rating per ISO 14692-2 Annex D; partial factor A1 applied for temperatures in excess of 200° F (93.3° C).

SIZE		STAR [®] RATED PRESSURE ⁽⁴⁾				Ultimate ⁽²⁾ Pressure ASTM D-1599 psi (MPa)	Minimum Bending Radius Ft (m)	Maximum Deflection In/jt (cm/jt)	Collapse Rating psi (MPa)	Short Term Tensile Rating Lbs (kgs)	Threaded Adapter Product Code
Nom. Size	API Thread Type	Static ⁽¹⁾ 200° F (65.6° C) psi (MPa)	Static ⁽⁵⁾ 212° F (100° C) psi (MPa)								

Series 2000 - ACT (All Sizes)												
1 1/2	1.90	2000 (13,8)	1700 (11,7)	6500 (44,8)	92 (28,0)	66 (167,6)	2849 (19,6)	2500 (1134)	19NQ			
2	2 3/8	2000 (13,8)	1700 (11,7)	6500 (44,8)	122 (37,2)	50 (127,0)	2874 (19,8)	4400 (1996)	23NP			
2 1/2	2 7/8	2000 (13,8)	1700 (11,7)	6600 (45,5)	149 (45,4)	41 (104,1)	2975 (20,5)	6600 (2994)	N/A			
3	3 1/2	2000 (13,8)	1700 (11,7)	6500 (44,8)	183 (55,8)	34 (86,4)	2819 (19,4)	9900 (4491)	35NP			
4	4 1/2	2000 (13,8)	1700 (11,7)	6500 (44,8)	229 (69,8)	27 (68,6)	2832 (19,5)	15400 (6985)	45NQ			

Series 2250 - ACT (All Sizes)												
1 1/2	1.90	2250 (15,5)	1900 (13,1)	7500 (51,7)	95 (29,0)	64 (162,6)	4410 (30,4)	3000 (1361)	19NS			
2	2 3/8	2250 (15,5)	1900 (13,1)	7300 (50,3)	125 (38,1)	49 (124,5)	4041 (27,9)	5100 (2313)	N/A			
2 1/2	2 7/8	2250 (15,5)	1900 (13,1)	7400 (51,0)	140 (42,7)	43 (109,2)	4134 (28,5)	6400 (2903)	27NS			
3	3 1/2	2250 (15,5)	1900 (13,1)	7300 (50,3)	171 (52,1)	37 (94,0)	4091 (28,2)	9500 (4309)	35NS			
4	4 1/2	2250 (15,5)	1900 (13,1)	7300 (50,3)	235 (71,6)	27 (68,6)	4058 (28,0)	17900 (8119)	N/A			

Series 2500 - ACT (All Sizes)												
1 1/2	1.90	2500 (17,2)	2100 (14,5)	7900 (54,5)	96 (29,3)	63 (160,0)	5171 (35,7)	3200 (1452)	19NT			
2	2 3/8	2500 (17,2)	2100 (14,5)	7900 (54,5)	120 (36,6)	51 (129,5)	5134 (35,4)	5000 (2268)	23NQ			
2 1/2	2 7/8	2500 (17,2)	2100 (14,5)	8100 (55,8)	143 (43,6)	42 (106,7)	5447 (37,6)	7200 (3266)	27NQ			
3	3 1/2	2500 (17,2)	2100 (14,5)	7900 (54,5)	174 (53,0)	36 (91,4)	5179 (35,7)	10400 (4717)	35NS			
4	4 1/2	2500 (17,2)	2100 (14,5)	8300 (57,2)	216 (65,8)	29 (73,7)	5860 (40,4)	16700 (7575)	N/A			

(Metric Conversions are in Parentheses)

NA - Not Available (Repair Joint Required)

Pipe Capacity					
Size		Inside Diameter		Capacity	
Pipe	Thread	in	(mm)	Bbls/1,000 ft.	(m ³ /km)
1 1/2	1.90	1.50	(38,1)	2.20	(1,1)
2	2 3/8	1.88	(47,8)	3.40	(1,8)
2	2 3/8	2.00	(50,8)	3.90	(2,0)
2 1/2	2 7/8	2.23	(56,6)	4.80	(2,5)
2 1/2	2 7/8	2.43	(61,7)	5.70	(3,0)
3	3 1/2	2.72	(69,1)	7.20	(3,8)
3	3 1/2	3.00	(76,2)	8.70	(4,5)
4	4 1/2	3.35	(85,1)	10.90	(5,7)
4	4 1/2	3.75	(95,3)	13.70	(7,1)
4	4 1/2	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	5.85	(148,6)	33.20	(17,3)
8	8 5/8	7.50	(190,5)	54.60	(28,5)
8	9 5/8	7.98	(190,5)	61.80	(32,2)

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15HR-0004
15HR-0014

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