

Technical Data Sheet

(Single Product Format)

DOWNSTRONG

150 mm Tubing 1000 psi 7 4Rd G/C D Collapse pipe body design 1510 psi

FIBREGLASS CASING AND TUBING

AROMATIC AMINE CURED EPOXY RESIN

DIMENSIONAL SPECIFICATIONS									
Nom. Size (mm)	Class (psi)	Nom. Pipe I.D. (in.) (mm)		Nom. Pipe O.D. (in.) (mm)		Drift Diameter (in.) (mm)		Nom. Pipe weight (lb/ft) (kg/m)	
150	1000	5.906	150	6.701	170.2	5.876	149.3	7.2	10.8
Ends		Nom. Box I.D. (TC) (in.) (mm)		Nom. Box O.D. (TC) (in.) (mm)		Nom. Box length (TC) (in.) (mm)		Nom. Box weight (lb) (kg)	
TC		6.399	162.5	7.750	196.9	14.762	375.0	14.1	6.4
THREAD DETAILS									
Nom. Size (mm)	Thread	Joint Short Code	Connection Type			FPI Connection Code			Ends
150	7	TC	7 4RD			7 4RD			TC
Nom. Size (mm)		Pitch (E1) (in.) (mm)		L4 (in.) (mm)		D4 (in.) (mm)		Pin Upset O.D. (in.) (mm)	
150		6.903	175.3	6.500	165.1	7.000	177.8	7.197	182.8
Tolerance on Nom. Box O.D. is +4/-0mm									
Thread lengths may exceed API L4.									
Rd = Round thread per inch, EUE = External-Upset Ends, Csg = Casing, IJ = Integral Joint, TC = Threaded & Coupled									
PIPE PERFORMANCE AND RATINGS -60 F (-50 °C) to +150 F (65 °C)									
Nom. Size (mm)		Design Pressure (psi) (bar)		Factory Hydrotest Pressure (psi) (bar)		Max. Field Test Pressure (psi) (bar)		Collapse Rating @ 55 °C (psi) (bar)	
150		1000	69.0	1300	89.7	1000	69.0	867	59.8
Factory and field test pressure may be reduced for certain casing applications and for some turndown box products.									
Nom. Size (mm)		Min. Bend Radius (ft) (m)				Axial Tensile Rating (uniaxial) (lbs) (kN)		Axial Tensile Rating (biaxial) (lbs) (kN)	
150		335	102			106,884	475.4	106,884	475.4
Standard de-rating factors for pressure: 225 F (125 °C), 0.5; 203 F (95 °C), 0.80									
JOINT PERFORMANCE AND RATINGS -60 F (-50 °C) to +150 F (65 °C)									
Load on Coupling face (lbs) (kN)		Tension efficiency (% of pipe body)		Internal pressure eff. (% of pipe body)		External pressure eff. (% of pipe body)		Axial Tensile Rating (lbs) (kN)	
38,671 172.0		79%		66%		100%		84,327 375.1	
MECHANICAL AND PHYSICAL PROPERTIES									
Pipe Body Properties									
Tensile Strength, Axial (biaxial loading)				28,624	psi			197.4	MPa
Tensile Strength, Axial (uniaxial loading)				28,624	psi			197.4	MPa
Axial Modulus				2.771	10^6 psi			19.108	GPa
Specific Gravity				1.95	---			1.95	---
Long term collapse pressure @ 25 °C				469	psi			32	bar
Long term collapse pressure @ 55 °C				433	psi			30	bar
Density				0.07	lb/in3			1.94	g/cm3
Thermal Conductivity				2.4	Btu-in./(hr-ft2-F)			0.35	W/m·K
Thermal Expansion Coefficient (Linear)				0.000012	in./in./F			0.000022	cm/cm/°C
Flow Factor (Hazen Williams)				150	---			150	---

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DIMENSIONAL SPECIFICATIONS									
Durchm. (mm)	Class (psi)	Innendurchmesser (in.) (mm)		Außedurchmesser (in.) (mm)		Drift Durchmesser (in.) (mm)		Rohrgewicht (lb/ft) (kg/m)	
150	1000	5.906	150	6.701	170.2	5.876	149.3	7.2	10.8
Rohrenden Kupplung (Box)		Innendurchmesser Box (in.) (mm)		AußendurchmesserBox (in.) (mm)		Länge Gewinde Box (in.) (mm)		Gewicht Box (lb) (kg)	
TC		6.399	162.5	7.750	196.9	14.762	375.0	14.1	6.4
THREAD DETAILS									
Nom. Größe (mm)	Gewinde	Kurzbe- zeichnung Code	Verbindungsart			FPI Code Verbindung			Rohr- enden Code
150	7	TC	7 4RD			7 4RD			TC
Nom. Größe (mm)		Pitch (E1) (in.) (mm)		L4 (in.) (mm)		D4 (in.) (mm)		Pin Upset O.D. (in.) (mm)	
150		6.903	175.3	6.500	165.1	7.000	177.8	7.197	182.8
Toleranz des Ø Außen Box +4/-0mm									
Die Gewindelänge kann API L4 überschreiten.									
Rd = Gew.-gänge pro Zoll, EUE = External-Upset Ends, Csg = Casing, IJ = Integral Joint, TC = Threaded & Coupled									
PIPE PERFORMANCE AND RATINGS -60 F (-50 °C) to +150 F (65 °C)									
Nom. Größe (mm)		Design Druck (psi) (bar)		Hydrotestdruck im Werk (psi) (bar)		Max. Prüfdruck Baustelle (psi) (bar)		Kollaps Rating @ 55 °C (psi) (bar)	
150		1000	69.0	1300	89.7	1000	69.0	867	59.8
Der Werks- und Baustellentestdruck kann für bestimmte Casings und für einige Turndown-Box-Produkte reduziert werden.									
Nom. Größe (mm)		Min. Biegeradius (ft) (m)				Axiale Zugfestigkeit Rating (uniaxial) (lbs) (kN)		Axiale Zugfestigkeit Rating (biaxial) (lbs) (kN)	
150		335	102			106,884	475.4	106,884	475.4
Standard-Abstufungsfaktoren für Druck: 225 F (125 °C), 0,5; 203 F (95 °C), 0,80									
JOINT PERFORMANCE AND RATINGS -60 F (-50 °C) to +150 F (65 °C)									
Last auf der Kupplungsfläche (lbs) (kN)		Wirkungsgrad der Spannung (% of pipe body)		Innendruck effektiv (% of pipe body)		Äußerer Druck effektiv (% of pipe body)		Axiale Zugfestigkeit (lbs) (kN)	
38,671	172.0	79%		66%		100%		84,327	375.1
MECHANICAL AND PHYSICAL PROPERTIES									
Eigenschaften des Rohrkörpers									
Zugfestigkeit, axial (biaxiale Belastung)				28,624	psi			197.4	MPa
Zugfestigkeit, axial (uniaxiale Belastung)				28,624	psi			197.4	MPa
Axialer Modulus				2.771	10 ⁶ psi			19.108	GPa
Spezifische Dichte				1.95	---			1.95	---
Langzeit-Kollapsdruck @ 25 °C				469	psi			32	bar
Langzeit-Kollapsdruck @ 55 °C				433	psi			30	bar
Dichte				0.07	lb/in3			1.94	g/cm3
Wärmeleitfähigkeit				2.4	Btu-in./(hr-ft2-F)			0.35	W/m-K
Wärmeausdehnungskoeffizient (linear)				0.000012	in./in./F			0.000022	cm/cm/°C
Durchflussfaktor (Hazen Williams)				150	---			150	---