

Technical Data Sheet

(Single Product Format)

DOWNSTRONG

140 mm Tubing 725 psi 6-5/8 4Rd G/C D Collapse pipe body design 1800 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)	
140	725	5.512	140	6.405	162.7	5.484	139.3	7.5	11.2
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		6.149	156.2	7.129	181.1	10.762	273.4	6.7	3.0
THREAD DETAILS									
Nom. Size (mm)	Thread	Joint Short Code	Connection Type			FPI Connection Code			Ends
140	6-5/8	TC	6-5/8 4RD			6-5/8 4RD			TC
Nom. Size (mm)		Pitch (E1) (in.) (mm)		L4 (in.) (mm)		D4 (in.) (mm)		Pin Upset O.D. (in.) (mm)	
140		6.528	165.8	4.500	114.3	6.625	168.3	6.901	175.3
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 @ 65 °C (psi) (bar)	
140		725	50.0	943	65.0	725	50.0	1440	99.3
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)	
140		320	98			52,661	234.2	52,661	234.2
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)	
20,504	91.2	46%		40%		100%		52,661	234.2
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					799	psi		55	bar
Long term collapse pressure @ 65 °C					715	psi		49	bar
Density					0.07	lb/in3		1.94	g/cm3
Thermal Conductivity					2.4	Btu-in./(hr-ft2-F)		0.0035	W-cm/(cm2-C)
Thermal Expansion Coefficient (Linear)					0.000012	in./in./F		0.000022	cm/cm/°C
Flow Factor (Hazen Williams)					150	---		150	---