

Material and Tubing Specifications

Specifications for PLEXCO™ 2600 Instube® Pneumatic Control Tubing

Property	Test Method	Typical Value
Flame Retardant Compound		
Melt Index	ASTM D 1238	0.6 ± 0.1 g/10 min
Density	ASTM D 792	1.1 ± 0.005 g/cm ³
Tensile Strength – ultimate (20 in./min)	ASTM D 638	> 2000 psi (> 1.8 MPa)
Tensile Elongation – ultimate (20 in./min.)	ASTM D 638	> 800%
Flexural Modulus	ASTM D 747	45,000 psi (3,103)
Shore A Hardness	ASTM D 1700	97 ± 3
Shore D Hardness	ASTM D 1700	45 ± 3
Water Absorption	ASTM D 570	5% maximum
Polyethylene Classification	ASTM D 3350	PE 11 or PE 12
Stress-Crack Resistance	ASTM D 1693	> 200 hours non -failure
Brittleness Temperature	ASTM D 745	< -104.8°F (< -76°C)
Pneumatic Instrument Control Tubing		
Burst Pressure	ASTM D 1599	5/32" – > 500 psi (> 3.4 MPa) 1/4" – > 500 psi (> 3.4 MPa) 3/8" – > 500 psi (> 3.4 MPa) 1/2" – > 350 psi (> 3.4 MPa)
Minimum Bend Radius	–	5/32" – 0.50 in. (13 mm) 1/4" – 0.75 in. (19 mm) 3/8" – 1.50 in. (38 mm) 1/2" – 1.88 in. (48 mm)
Maximum Allowable Pulling Load During Installation	–	5/32" – 15 lb. (66 N) 1/4" – 33 lb. (147 N) 3/8" – 76 lb. (338 N) 1/2" – 106 lb. (472 N) 5/32" Twintube – 30 lb. (133 N) 1/4" Twintube – 65 lb. (289 N)
Flammability	UL 94 UL 910	V-2 UL Classified (NFPA 90A)
Flame Propagation	UL 1820	< 5 ft (< 1.5 m)
Smoke Density – Peak Optical Density	UL 1820	< 0.5
Smoke Density – Average Optical Density	UL 1820	< 0.15

NOTICE – This table provides typical physical property information for polyethylene compounds used to manufacture PLEXCO® 2600 Instube® tubing products. It is intended for comparing compounds and tubing. It is not a product specification, and it does not establish minimum or maximum values or manufacturing tolerances for compounds or tubing. The typical property values for compound were determined using compression -molded plaques prepared from compound. Values obtained from tests of specimens taken from tubing can vary from these typical values. Performance Pipe has made every reasonable effort to ensure the accuracy of this information, but this table may not provide all necessary information, particularly with respect to special or unusual applications. This information may be changed from time to time without notice. Contact Performance Pipe to determine if you have the most recent edition.