

BOULDEN B-1050



B-1050 is a proprietary thermoplastic blend with run dry capability, abrasive resistance, and a temperature limit of 275°F (135°C). It is Boulden’s general-purpose composite and is used in a wide variety of vertical and horizontal pump applications. It has a radial coefficient of thermal expansion lower than the metal parts used in pumps, which simplifies installation and improves component reliability.

B-1050 Typical Properties

Property	Unit of Measure	Test Method	Typical Values
Color			Grey
Specific Gravity		ASTM D-792	1.71
Hardness	Shore D	ASTM D-2240	75
Mechanical (x-y direction)			
Flexural Strength	ksi (MPa)	ASTM D-790	10.3 (71)
Flexural Modulus	ksi (MPa)	ASTM D-790	1,030 (7,102)
Tensile Strength	ksi (MPa)	ASTM D-3039	5.86 (40.4)
Tensile Modulus	ksi (MPa)	ASTM D-3039	1,260 (8,687)
Shear Strength	ksi (MPa)	ASTM D732-17	5.42 (37.4)
Compressive Strength (x-y direction)	ksi (MPa)	ASTM D-695	10.3 (71)
Compressive Strength (z direction)	ksi (MPa)	ASTM D-695	13.0 (89.6)
Compressive Modulus (x-y direction)	ksi (MPa)	ASTM D-695	1,345 (9,273)
Compressive Modulus (z direction)	ksi (MPa)	ASTM D-695	244 (1,682)
Coefficient of Friction		ASTM D1894-14	0.170*
Thermal			
Coefficient of Thermal Expansion (x-y)	10 ⁻⁶ in/in/° F (10 ⁻⁶ m/m/° C)	CTM	5.1 (9.2)
Coefficient of Thermal Expansion (z)	10 ⁻⁶ in/in/° F (10 ⁻⁶ m/m/° C)	CTM	37.3 (67.1)
Maximum Service Temperature	° F (° C)	UL 746B	275 (135)

*Against a #8 mirror finish stainless steel substrate

NA Headquarters
 Conshohocken, PA, USA
 1.610.825.1515

Gulf Coast Bearing & Seal
 Houston, TX, USA
 1.832.399.4227

Gulf Coast Sales Office
 Houston, TX, USA
 1.281.348.0888

Boulden International
 Ellange, Luxembourg
 +352.26.39.33.99