

# Boulden B-Series

## B-835



B-835 is a proprietary blend of PEEK reinforced with carbon fibers intended for clean services in temperatures up to 275 F (135 C). B-835 has a uniquely low coefficient of thermal expansion--close to the same as the metal parts used in most pump services. This simplifies design considerations and improves the reliability of the parts.

### B-835 Typical Properties

Property	Unit of Measure	Test Method	Typical Values
Color			Black
Specific Gravity		ASTM D-792	1.43
Hardness	Shore D	ASTM D-2240	85.9
<b>Mechanical (x-y direction)</b>			
Flexural Strength	ksi (MPa)	ASTM D-790	25.8 (178)
Flexural Modulus	ksi (MPa)	ASTM D-790	1,990 (13,720)
Tensile Strength	ksi (MPa)	ASTM D-3039	16.6 (114)
Tensile Modulus	ksi (MPa)	ASTM D-3039	1,830 (12,617)
Compressive Strength (x-y direction)	ksi (MPa)	ASTM D-695	26.8 (185)
Compressive Strength (z direction)	ksi (MPa)	ASTM D-695	22.6 (156)
Compressive Modulus (x-y direction)	ksi (MPa)	ASTM D-695	2,160 (14,893)
Compressive Modulus (z direction)	ksi (MPa)	ASTM D-695	826 (5695)
<b>Thermal</b>			
Coefficient of Thermal Expansion (x-y)	$10^{-6}$ in/in/°F ( $10^{-6}$ m/m/°C)	ASTM D-831	8.7 (15.7)
Coefficient of Thermal Expansion (z)	$10^{-6}$ in/in/°F ( $10^{-6}$ m/m/°C)	ASTM D-831	30.8 (55.4)
Maximum Service Temperature	°F (°C)	UL 746B	275 (135)

Boulden Company  
 1013 Conshohocken Road, STE 308  
 Conshohocken, PA 19428  
 610-825-1515 (Office)  
 610-825-5544 (fax)  
 610-420-4132 (c-Brian Boulden)  
 sales@bouldencompany.com

[www.bouldencompany.com](http://www.bouldencompany.com)

Boulden Company  
 1525 Lakeville Drive, STE 201  
 Kingwood, TX 77339  
 281-348-0888 (Office)  
 281-844-3278 (c-Ken Holmes)  
 713-724-0995 (c-Jim Bradshaw)  
 281-723-1624 (c-Jerry Morton)  
 504-606-9517 (c-Will Lawrence)

sales@bouldencompany.com