“Lift-Off” Pipe Supports
Type: LOR and LORAN (for cryogenic services only)
Material specification

General Information	Procedure	Typical Values
Part Number		3923
Standard Color		Yellow
Minimum Service Temperature ˚**F** (˚C)		**-265** (-165)
Mechanical Properties		
Flexural Strength at 75°F (24°C) in **Psi** *(Mpa)*	ASTM D 790	***29,000** *(200)*
Compressive Strength, Perpendicular to lamination		
@75˚F / 24˚C in **Psi** *(Mpa)*	ASTM D 695	**45,000** (310)
@-62˚F / -80˚C in **Psi** *(Mpa)*	ASTM D 695	**68,000** (470)
@-265˚F / -165 in **Psi** *(Mpa)*	ASTM D 695	**43,000** (296)
Compressive Modulus at 75°F (24°C) in **Psix10^6** *(Mpa)*	ASTM D 695	**1.8** (12,411)
IZOD Impact Strength in **Ft.Lb./In.** *(J/cm)*	ASTM D 256	**8.9** *(4.7)*
Barcol Hardness, **Minimum**	ASTM D 2583	**45**
Water Absorption in **% by weight**	ASTM D 570	**<0.2%**
Density, **lbs/ft.^{3}** (g/cm^3)	-	**119.9** (1.92)
Thickness Tolerance **Std. NEMA** or If sanded, in **Inches** (mm)		**NEMA** or **+/-0.004** (1mm)
Electrical Properties		
Electrical Strength, Perpendicular S/T in Air, Vpm (kV/mm)	ASTM D 149	**50 (2)**
Flame-Resistance Properties		
UL Subject 94	UL 94	**HB**
Thermal Properties		
Coefficient of Thermal Expansion (perpendicular) **K^{-1}**	ASTM D 696	**22.1 x 10^{-6}**
Coefficient of Thermal Expansion (parallel) **K^{-1}**	ASTM D 696	**116 x 10^{-6}**
Thermal Conductivity in **BTU*In/Hr.*Ft^2*^{O}F** (W/m*K)	ASTM C 177	**1.22** (0.18)
Glass Transition Onset Temperature $T_{G,}$ in **^{o}F** (^{o}C), DSC test	ASTM E 1356	**320^{o}F** (160^{o}C)

* - Values are an average of typical L.W. and C.W. values.
-The above values are measured averages and not guaranteed.