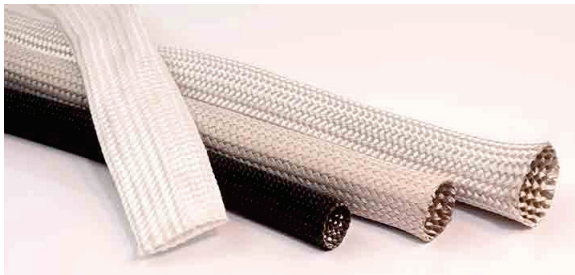
QUS-482

RoHS Compliant

HIGH STRENGTH AND HIGH TEMPERATURE RESISTANCE
EXCELLENT RESISTANCE TO NUCLEAR RADIATION
ENHANCED DIELECTRIC AND MECHANICAL PROPERTIES



Features/Applications
Produced from special S-2 Glass® fibers which provides enhanced dielectric and mechanical properties. Designed for use in thermal and mechanical protection applications requiring stability under extreme temperature and corrosive envrionments.

- Operating temperature: -70°C to +482°C
- Meets: MIL-Y-1140H, Class C, Form 1 (continuous filament yarns), NEMA TF-2
- Standard colors: Natural
- RoHS Compliant

Technical Data

Property	Typical Data
Physical	
Specific Gravity, g/cu. cm.	2.48 - 2.49
Elongation at Break, percent	5.3 - 5.7
Tensile Strength, psi @ 22°C	650,000 - 700,000
Water Absorbency @ 22°C, 65% R. H.	None
Chemical	
Resistance to Acids and Alkalies	Good resistance to most acids and alkalies
Effect of Bleaches and Solvents	Unaffected
Resistance to Mildew, Aging, and Sunlight	Excellent resistance to sunlight and aging. Not attacked by mildew
Electrical	
Dielectric Strength	Provides only space factor electrical insulation of approximately 1375V for standard wall. No dielectric guarantee
Volume Resistivity @ 22°C & 500V dc, ohm-cm	10^{16}
Dielectric Constant @ 22°C, 60Hz	5.0 - 5.4
Dissipation Factor @ 22°C, 1MHz	0.0020
Thermal	
Thermal Endurance	Up to 482°C indefinitely; up to 950°C for shorter periods
Cold Bend	-70°C
Flame Resistance	Passes NEMA TF-2, Section 6.3. Will not burn

Notes:
1. * See Part Number Guide for standard packaging codes.
2. Cross Reference Guide available.
3. Special sizes, packaging, colors and cut pieces are available upon request

Product Dimensions

Wire Size	Inside Diameter (max.)		Inside Diameter (min.)		Wall Thickness (min.)		Standard Packaging	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	Mini Spool *(MS) (Feet)	Standard Spool *(SS) (Feet)
24	0.027	0.69	0.020	0.51	0.006	0.15	500	1000
22	0.032	0.81	0.025	0.64	0.006	0.15	500	1000
20	0.039	0.99	0.032	0.81	0.006	0.15	500	1000
19	0.044	1.11	0.036	0.91	0.006	0.15	500	1000
18	0.049	1.24	0.040	1.02	0.006	0.15	500	1000
17	0.055	1.39	0.045	1.14	0.006	0.15	500	1000
16	0.061	1.55	0.051	1.30	0.006	0.15	500	1000
15	0.066	1.67	0.057	1.45	0.006	0.15	500	1000
14	0.072	1.82	0.064	1.63	0.006	0.15	500	1000
13	0.080	2.03	0.072	1.83	0.006	0.15	250	500
12	0.089	2.26	0.081	2.06	0.006	0.15	250	500
11	0.101	2.56	0.091	2.31	0.008	0.20	250	500
10	0.112	2.84	0.102	2.59	0.008	0.20	250	500
9	0.124	3.14	0.114	2.90	0.008	0.20	250	500
8	0.141	3.58	0.129	3.28	0.008	0.20	250	500
7	0.158	4.01	0.144	3.66	0.008	0.20	250	500
6	0.178	4.52	0.162	4.11	0.010	0.25	150	250
5	0.198	5.02	0.182	4.62	0.010	0.25	150	250
4	0.224	5.68	0.204	5.18	0.010	0.25	150	250
3	0.249	6.32	0.229	5.82	0.010	0.25	150	250
2	0.278	7.06	0.258	6.55	0.010	0.25	150	250
1	0.311	7.89	0.289	7.34	0.010	0.25	150	250
5/16	0.334	8.48	0.313	7.95	0.010	0.25	150	250
0	0.347	8.81	0.325	8.26	0.016	0.40	-	150
3/8	0.399	10.13	0.375	9.53	0.016	0.40	-	150
7/16	0.462	11.73	0.438	11.13	0.016	0.40	-	100
1/2	0.524	13.30	0.500	12.70	0.016	0.40	-	100
5/8	0.655	16.63	0.625	15.88	0.016	0.40	-	100
3/4	0.786	19.96	0.750	19.05	0.016	0.40	-	100
7/8	0.911	23.14	0.875	22.23	0.016	0.40	-	100
1IN	1.036	26.31	1.000	25.40	0.016	0.40	-	100