

Fluoropolymers

When Your Application Requires 100% Reliability.

100



NWI fluoropolymer cables offer these outstanding performance characteristics:

- Resistance to flame, acids, solvents, chemicals and more
- Miniaturization due to superior insulation characteristics
- High impact strength and abrasion resistance
- Customization, such as special colors, constructions, high speed data capability and special electrical properties
- High/low temperatures and abusive environments
- -200°C to 260°C options available

Cable options:

- FEP
- PFA
- ETFE
- ECTFE
- PVDF

Applications:

- Aerospace
- Military
- Medical
- Corrosive environment
- Waste water

Capabilities:

- Rapid prototyping
- No minimum quantities
- Guaranteed performance
- Fast delivery

Property	Test Method	FEP	PFA	ETFE	ECTFE
PHYSICAL					
Specific Gravity	ASTM D-792	2.14-2.17	2.15	1.70	1.68
Durometer Hardness (Shore "D")	ASTM D-2240	59	60	72	72
Tensile Strength psi Min.	ASTM D-412	2700-3100	4000	6000	7000
Elongation % Min.	ASTM D-412	250-300	300	150	260
Environmental Stress Cracking	–	Good	Excellent	Good	Good
Abrasion Resistance	–	Fair	Good	Excellent	Fair
Cut-Through Resistance	–	Fair	Fair	Excellent	Excellent
Water-Resistance	–	Excellent	Excellent	Excellent	Good
THERMAL					
Maximum Operating Temperature °C	–	200	260	150	150
Brittle Temperature, 50% Non-Failure, °C	ASTM D-476	-80	-200	-80	<-76
Flame Resistance, LOI	–	95	>95	30-32	52
ELECTRICAL					
★ Dielectric Constant @ 1 MHz	ASTM D-150	2.1	2.06	2.6	2.57
★ Dissipation Factor @ 1 MHz	ASTM D-150	0.0006	0.0001	0.007	0.013
Volume Resistivity ohm-cm	ASTM D-257	>2x10 ¹⁸	>10 ¹⁵	>10 ¹⁵	>10 ¹⁵
★ Dry Dielectric V/mil	ASTM D-149	1200	2000	1100-1300	500
★ Wet Dielectric V/mil	ASTM D-149	1000	–	1000	–

★ *Cost competitive custom options available*