NORTHWIRE® INC

A LEMO Group Company

Northwire's Enhanced PTFE Reduces Wall Thickness by 40%

No Length Restriction

-200°C to 300°C

Fluoropolymers
600V, 26 AWG
19X0.0039 SPC (Conductor OD 0.019")
Insulation Thickness 0.014; OD 0.047"

Northwire PTFE
600V, 26 AWG
19x0.0039 SPC (Conductor OD 0.019")
Insulation Thickness 0.004; OD 0.027"

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Northwire offers an enhanced PTFE with an advanced way of processing the material. Unlike traditional, ram extruded PTFE, Northwire's solution is well-suited for high volume production, will not suffer from length restrictions, features the thinnest wall on the market, and could even offer a cost savings vs. the original processing technology.

- Clean room compatible
- Withstands steam, H_2O_2, and ETO sterilization
- Excellent resistance to hospital-grade chemicals and solvents
- High dielectric strength makes it possible to extrude a thin wall
- No shrink back during high temperature soldering
- Low cold flow of 2.5% with minimal deformation at sub-zero temperatures

Northwire's Enhanced PTFE Compared to Common Fluoropolymers

Attributes	FEP	ETFE	PFA	NWI's PTFE
High Temperature	200˚C	200˚C	260˚C	300˚C
Specific Gravity	2.14	1.75	2.14	2.16
Shore Hardness "D"	55	67	55	60
Dielectric Strength	2000 v/mil	1600 v/mil	2032 v/mil	2200 v/mil
Dielectric Constant	2.0-2.1	2.5-2.6	2.0-2.1	2.0-2.1
Melt Flow	6.8 g/10min	7 g/10min	14 g/10min	15 g/10min
Tensile Strength	3,770 psi	5,500 psi	3,600 psi	3,600 psi
Flex Modulus	90,000 psi	93,500 psi	85,000 psi	75,000 psi
Dynamic Coefficient of Friction	0.275	0.350	0.250	0.125
Dielectric Loss Factor at 10^6 Hz	$<9 \times 10^{-4}$	$<9 \times 10^{-4}$	$<5 \times 10^{-4}$	$0.7\text{-}1.1 \times 10^{-4}$