Heat-shrinkable Teflon tubing

· PTFE Products Series



Description

PTFE heat-shrinkable tubing is made of imported high-quality polytetrafluoroethylene (PTFE, commonly known as Teflon or Plastic King) resin through a special process. It offers high temperature resistance, high voltage resistance, corrosion resistance, abrasion resistance and good self-lubrication. It is widely used in machinery, electronics, automobiles, aerospace, chemical engineering, communication and more.

Product Features

- Resistant to high/low temperature, -80℃~260℃
- Corrosion resistant (strong acids, strong alkalis, chemical reagents, oil)
- Shrinkage temperature >300℃, shrinkage ratio 4:1, 1.7:1
- Standard color: transparent

Standard / Certification

VW-1

Physical Characteristics

item	Test Method	Value
Tensile strength (Mpa)	IEC811-1-1	19
Breakage elongation (%)	IEC811-1-1	200
Axial shrinkage rate (%)	ASTM-D2671	MAX ±15%
Tangent coefficient	ASTM-D882	MAX 750MPa
Specific gravity (g/cm^3)	ASTM-D792 A-1	2.1
Aging resistance (300℃×168h)	IEC811-1-2	No drop, no flowing, no crack
Low temperature adaptability	ASTM-D2671 Meth.c	No crack at -65℃
Combustibility		No flammability

Electrical Characteristics

item	Test Method	Value
Insulation force (kV/mm)	VDE0303 Part2	26
Volume resistance (Ω·cm)	VDE0303 Part3	10^{18}

Chemical Characteristics

item	Test Method	Value
Corrosion resistance	ASTM-D2671 Method A	No corrosion
Compatibility	ASTM-D2671 Method B	No corrosion
Chemical resistance		Very good
Water absorbability (%)	VDE0472	0.07

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Product Spec (4:1)

Spec (Inch)	Φ (mm)	Min Inner Before (mm)	Max Inner After (mm)	Wall Thickness (mm)
5/64	Φ2.0	2.0	0.64	0.25±0.04
3/32	Φ2.4	2.4	0.80	0.25±0.04
1/8	Φ3.2	3.2	0.95	0.25±0.04
3/16	Φ4.8	4.8	1.27	0.25±0.04
1/4	Φ6.4	6.4	1.60	0.25±0.05
3/8	Φ9.5	9.5	2.44	0.25±0.05
1/2	Φ12.7	12.7	3.66	0.25±0.06
5/8	Φ15.9	15.9	4.52	0.25±0.06
3/4	Φ19.1	19.1	5.70	0.25±0.06
1	Φ25.4	25.4	7.06	0.25±0.06
1 1/4	Φ31.8	31.8	8.82	0.25±0.06

Product Spec (2:1)

Spec (AWG)	Nominal (mm)	Min Inner Before (mm)	Max Inner After (mm)	Wall Thickness (mm)
30	0.86	≥0.86	≤0.38	0.25±0.04
28	0.97	≥0.97	≤0.46	0.25±0.04
26	1.17	≥1.17	≤0.56	0.25±0.04
24	1.27	≥1.27	≤0.64	0.25±0.04
22	1.55	≥1.55	≤0.80	0.25±0.04
20	1.95	≥1.95	≤0.97	0.30±0.05
18	2.35	≥2.35	≤1.17	0.30±0.05
16	2.95	≥2.95	≤1.45	0.35±0.05
14	3.65	≥3.65	≤1.82	0.35±0.05
12	4.55	≥4.55	≤2.26	0.35±0.05
10	5.65	≥5.65	≤2.80	0.38±0.05
8	7.05	≥7.05	≤3.55	0.40±0.06
6	8.75	≥8.75	≤4.40	0.40±0.06
4	10.95	≥10.95	≤5.45	0.40±0.06
2	13.75	≥13.75	≤6.90	0.40±0.06
0	17.15	≥17.15	≤8.56	0.40±0.06

Notes

- It can be cut to a fixed length as required.
- PTFE-(4X) PTFE heat-shrinkable sleeve(4:1)
- PTFE-(2X) PTFE heat-shrinkable sleeve(2:1)

Product Advantages

- **Extreme Temperature Range**
  Made of imported high-quality PTFE resin, with a continual operating range of -80℃ to 260℃ — excellent for demanding temperature environments.
- **Chemical & Corrosion Resistant**
  Resists strong acids, strong alkalis, chemical reagents and oils — maintains stable performance in corrosive environments.
- **Excellent Electrical Insulation**
  Insulation force of 26kV/mm and volume resistance of 10^{18} Ω·cm — superior electrical insulation for high-voltage safety.
- **High Shrinkage Ratio**
  Shrinkage ratios of 4:1 and 1.7:1 with shrink temperature >300℃ — conforms tightly to cables after heating.

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Product Advantages (continued)

- **Smooth Surface & Self-lubrication**
  Low friction coefficient with a smooth surface and good self-lubrication — easy threading and reduced wear.
- **Color Customization Available**
  Standard color: transparent; custom colors available upon request.
- **Flame-retardant**
  VW-1 flammability rating — flame-retardant and fire-safe.

Application Scenarios

- **Machinery**
  High-temperature insulation for cables and hoses inside machinery and mechanical parts.
- **Electronics & Electrical Equipment**
  Insulation for electronic components and internal leads — high temperature and voltage resistance ensure electrical safety.
- **Automotive**
  High-temperature protection for automotive wiring harnesses, motor leads and sensor cables.
- **Aerospace**
  Heat and corrosion resistant protection for aerospace cables.
- **Chemical Industry**
  Acid, alkali and corrosion resistant protection for chemical plant pipes and cables.
- **Communication**
  Insulation and protection for communication equipment cables with stable high-temperature performance.