



Sichuan Lingfree Polymer Materials Co.,Ltd.
Dongguan ling Free Hardware Plastics Product Co.,Ltd.

Leading service

Flying over dreams



Sichuan Lingfree Polymer Materials Co.,Ltd.

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COMPANY PROFILE

Dong guan ling free Hardware and Plastic Products Co., Ltd. was founded in 2008, specializing in the production of electronic insulation materials. The main products are more than 20 kinds of high-tech materials, such as heat shrinkable tube, fiberglass sleeve, PTFE tube, PTFE heat shrink tube. Our products are widely used in electronic appliances, electric power, metallurgy, petrochemical, automobile, marine, high-speed rail, coal mine, lighting, aerospace, new energy and other fields. Our products are exported to domestic and overseas markets. Since the establishment of the company, we always adhere to the "people-oriented, leading service, realistic innovation" business philosophy, professional introduction of the world's most advanced first-class insulation materials production. With the efforts of all the staff, we have won the trust and support of customers domestic and abroad in the continuous development. Our company has established a market-oriented product technology innovation mechanism, and have obtained the UL certification (UL NO. E352366 E520027), electrical insulation system certification, and fully comply with the requirements of the European Union (ROHS) directive, in line with the current latest environmental protection requirements, after more than ten years of precipitation, innovation and development, are applying for national high-tech enterprises, we have passed the ISO9001 international quality system certification and IATF 16949 certification in recognition of the organization's Quality Management System.

Ling free people always adhere to the service spirit of "considerate to customers, unity and mutual assistance, frugality, sharing weal and sorrow", with the essence of "flying the dream", taking a steady pace, fast and efficient to provide global customers with high quality, low price, safe and reliable products, and strive to become the best service provider for global customers. Highly welcome your inquiry and presence!
Thanks



Specification

	Performance	Test method	Performance index	Typical value
Physical characteristics	Tensile strength	GB/T 1040	≥ 10.7	14.8
	Elongation at break	GB/T 1040	≥ 200	460
	Tensile strength after heat treatment	UI224 158°C × 168hr	≥ 7.3	14.6
	Elongation at break after heat treatment	UI224 158°C × 168hr	≥ 100	480
	Thermal shrinkage rate	U 222 250°C × 7hr	Non-stable cracking	PASS
Electrical characteristics	Calculation resistance	U 222 50°C × 1hr	No breakdown	PASS
	Breakdown strength	Gb 403	≥ 15	17
	Withstand voltage	300V U 222 600V U 222	1500 V/ncr breakdown 2500 V/ncr breakdown	PASS
	Voltage resistivity	Gb 411	≥ 1 × 10 ¹⁴	1 × 10 ¹⁵
Thermal properties	Corrosion resistance	UI224 158°C × 168hr		PASS
	Capacitor safety	U 224 158°C × 168hr		PASS
	Flame retardancy	U 222	VV ₁ -1	PASS

Usage

UL Halogen-free environment-friendly flame-retardant heat shrinkable sleeve is made of high-quality polymer, which is scientifically proportioned and mechanically mixed into a polymer alloy. After the product is formed, it is irradiated, cross-linked and continuously expanded by an electronic accelerator. Its products have the advantages of softness, flame retardancy, fast shrinkage and stable performance. Widely used in wire connection, solder joint protection, wire end, harness, electronic device protection and insulation treatment; Surface protection of fitness equipment parts and steel structures; Anti-rust and anti-corrosion treatment of related products; Identification of wires and other products, etc.

Features ① Applicable range: -55°C~115°C ② Initial shrinkage temperature 110°C, ultra-thin type full shrinkage temperature 110°C, ordinary type The full shrinkage temperature is 170°C.

Dimension

Model(mm)	Dimension before shrinkage(mm)		Shrinkage size(mm)		Scope of application	Standard packagings (M/tray)
	Internal diameter(mm)	Average wall thickness	Internal diameter(mm)	Average wall thickness		
Φ0.5	0.7±0.2	0.13±0.05	0.30	0.22±0.05	0.3~0.5	400
Φ0.6	0.8±0.2	0.13±0.05	0.40	0.22±0.05	0.4~0.6	400
Φ0.8	1.0±0.2	0.13±0.05	0.50	0.22±0.05	0.6~0.8	400
Φ1.0	1.5±0.3	0.18±0.05	0.65	0.28±0.05	0.75~0.9	400
Φ1.5	2.0±0.3	0.18±0.05	0.85	0.32±0.05	0.95~1.4	400
Φ2.0	2.5±0.4	0.18±0.05	1.00	0.35±0.05	1.1~1.8	400
Φ2.5	3.0±0.4	0.20±0.05	1.25	0.38±0.05	1.35~2.3	400
Φ3.0	3.5±0.4	0.20±0.05	1.50	0.40±0.05	1.6~2.7	400
Φ3.5	4.0±0.4	0.20±0.05	1.75	0.42±0.05	1.85~3.2	200
Φ4.0	4.5±0.4	0.23±0.05	2.00	0.45±0.05	2.1~3.6	200
Φ4.5	5.0±0.4	0.23±0.05	2.25	0.50±0.08	2.35~4.0	200
Φ5.0	5.5±0.4	0.23±0.05	2.50	0.55±0.08	2.6~4.5	100
Φ6.0	6.5±0.4	0.28±0.05	3.00	0.55±0.08	3.1~5.4	100
Φ7.0	7.5±0.4	0.28±0.05	3.50	0.55±0.08	3.7~6.3	100
Φ8.0	8.5±0.5	0.28±0.05	4.00	0.60±0.08	4.2~7.2	100
Φ9.0	9.5±0.5	0.30±0.08	4.50	0.60±0.08	4.7~8.0	100
Φ10	10.8±0.5	0.30±0.08	5.00	0.60±0.08	5.2~9.0	100
Φ11	11.5±0.5	0.30±0.08	5.50	0.60±0.08	5.7~10	100
Φ12	12.5±0.5	0.30±0.08	6.00	0.60±0.08	6.2~11	100
Φ13	13.5±0.5	0.33±0.10	6.50	0.65±0.08	6.7~12	100
Φ14	14.5±0.5	0.35±0.10	7.00	0.65±0.08	7.3~13	100
Φ15	15.5±0.6	0.38±0.12	7.50	0.70±0.08	7.8~14	100
Φ16	16.5±0.6	0.38±0.12	8.00	0.70±0.08	8.3~15	100
Φ17	17.5±0.6	0.38±0.12	8.50	0.70±0.08	8.8~16	100
Φ18	19.0±0.7	0.40±0.15	9.00	0.80±0.15	9.3~17	100
Φ20	21.5±0.7	0.40±0.15	10.00	0.80±0.15	10.4~19	100
Φ22	23.5±0.7	0.42±0.15	11.00	0.80±0.15	11.4~21	100
Φ25	25.6±0.7	0.45±0.15	12.05	0.90±0.15	12.8~24	50
Φ28	29.0±0.7	0.45±0.15	14.00	0.90±0.15	14.4~29	50
Φ30	31.5±0.7	0.45±0.15	15.00	0.95±0.15	16~29	50
Φ35	36.5±0.7	0.50±0.15	17.50	1.00±0.15	18~34	50
Φ40	41.5±0.7	0.50±0.15	20.00	1.00±0.15	21~39	50
Φ50	51.5±0.7	0.50±0.15	25.00	1.00±0.15	26~49	50
...
Φ200	201.5±0.8	0.80±0.15	100.00	1.60±0.15	100~199	50



Specification

Item	Performance index	
Shrink Temperature (°C)	120-150	
Temperature Range	-125	
Radial Shrinking Ratio (%)	≥ 50	
Longitudinal Shrinking Ratio (%)	≥ 5	
Tensile Strength (Mpa)	≥ 10.4	
Ultimate Elongation (%)	≥ 200	
Aging in circulating-air oven	(158 ± 1.0) °C, 7 days	
After aging	Tensile strength(Mpa)	≥ 27.3
	Elongation at break(%)	≥ 100
Volume Resistivity (Q·cm)	10 ¹¹	
Dielectric Strength A (kV/mm)	≥ 15	
Flammability	V0	
Concentricity (%)	≥ 65	
Heat shock	4 hours at 250.0 ± 1.0 °C, No cracking	
Cold bend	1 hour at -20 ± 1.0 °C, No cracking	
Corrosion of the bare copper	(95 ± 5)%, (23%), (7) hours = 58 ± 1.3 °C, No cracking, No flake	

Characteristics

Material: polyolefin composite
 Operating temperature: -40~125 °C
 Shrinkage temperature: -70~+125 °C
 Shrinkage ratio: 2:1&3:1
 UL, RoHS, REACH
 UL No.: E352366
 Size range: ID16.0~60.0mm (2:1) (3:1) Special specifications can be customized
 Standard color: orange, other colors can be customized

Dimension

Size(mm)	As Supplied (mm)		After Recovery Size (mm)	
	Inside diameter (D)	Wall-thickness (t)	Inside diameter (D)	Wall-thickness (t)
LF Φ16 WT=0.70	16.5±0.6	0.70±0.20	≤8.0	1.4±0.40
LF Φ18 WT=0.50	19.0±0.7	0.50±0.20	≤9.0	1.0±0.25
LF Φ18 WT=0.60	19.0±0.7	0.60±0.20	≤9.0	1.2±0.30
LF Φ18 WT=0.70	19.0±0.7	0.70±0.20	≤9.0	1.4±0.40
LF Φ20 WT=0.60	21.0±0.7	0.60±0.20	≤10.0	1.2±0.30
LF Φ20 WT=0.70	21.0±0.7	0.70±0.20	≤10.0	1.4±0.40
LF Φ22 WT=0.60	23.0±0.7	0.60±0.20	≤11.0	1.2±0.30
LF Φ22 WT=0.65	23.0±0.7	0.65±0.20	≤11.0	1.3±0.35
LF Φ22 WT=0.70	23.0±0.7	0.70±0.20	≤11.0	1.4±0.40
LF Φ22 WT=0.80	23.0±0.7	0.80±0.30	≤11.0	1.6±0.45
LF Φ25 WT=0.45	26.0±0.7	0.45±0.15	≤12.5	0.9±0.25
LF Φ25 WT=0.60	26.0±0.7	0.60±0.20	≤12.5	1.2±0.30
LF Φ25 WT=0.70	26.0±0.7	0.70±0.20	≤12.5	1.4±0.40
LF Φ25 WT=0.80	26.0±0.7	0.80±0.25	≤12.5	1.6±0.45
LF Φ25 WT=1.10	26.0±0.7	1.10±0.30	≤12.5	2.2±0.60
LF Φ28 WT=0.60	29.0±0.7	0.60±0.20	≤14	1.2±0.30
LF Φ28 WT=0.70	29.0±0.7	0.70±0.20	≤14	1.4±0.40
LF Φ30 WT=0.45	31.5±0.7	0.45±0.15	≤15	0.9±0.25
LF Φ30 WT=0.70	31.5±0.7	0.70±0.20	≤15	1.4±0.40
LF Φ30 WT=1.0	31.5±0.7	1.00±0.30	≤15	2.0±0.50
LF Φ35 WT=0.60	36.5±0.7	0.60±0.20	≤17.5	1.2±0.30
LF Φ35 WT=0.70	36.5±0.7	0.70±0.20	≤17.5	1.4±0.40
LF Φ35 WT=0.85	36.5±0.7	0.85±0.30	≤17.5	1.7±0.45
LF Φ40 WT=0.50	41.5±0.7	0.50±0.15	≤20	1.0±0.25
LF Φ40 WT=0.70	41.5±0.7	0.70±0.20	≤20	1.4±0.40
LF Φ45 WT=0.50	41.5±0.7	0.50±0.15	≤22.5	1.0±0.25
LF Φ45 WT=0.70	41.5±0.7	0.70±0.20	≤22.5	1.4±0.40
LF Φ60 WT=0.55	62.5±0.7	0.55±0.15	≤30	1.1±0.30



UL Certification No:E352366

Use/Characteristics

The environment-friendly ultra-thin heat shrinkable sleeve has the characteristics of thin wall, insulation, low shrinkage temperature, fast shrinkage speed, and very soft, and is especially suitable for the protection of temperature sensitive components.

Dimension

Model(mm)	Dimension before shrinkage(mm)		Shrinkage size(mm)		Scope of application	Standard packaging N/Tray
	Internal diameter(mm)	Average wall thickness	Internal diameter(mm)	Average wall thickness		
Φ0.6	0.80±0.30	0.10±0.05	0.4	0.20±0.05	0.4~0.6	400
Φ0.8	1.09±0.30	0.10±0.05	0.5	0.20±0.05	0.5~0.8	400
Φ1.0	1.4±0.30	0.10±0.05	0.65	0.20±0.05	0.7~1.0	400
Φ1.5	1.9±0.30	0.10±0.05	0.85	0.20±0.05	0.9~1.4	400
Φ2.0	2.4±0.30	0.13±0.05	1.0	0.22±0.05	1.1~1.8	400
Φ2.5	2.8±0.40	0.13±0.05	1.3	0.25±0.05	1.4~2.3	400
Φ3.0	3.4±0.40	0.13±0.05	1.5	0.28±0.05	1.6~2.7	400
Φ3.5	3.9±0.40	0.13±0.05	1.8	0.28±0.05	1.9~3.2	400
Φ4.0	4.4±0.40	0.15±0.05	2.0	0.30±0.05	2.1~3.6	400
Φ5.0	5.5±0.40	0.15±0.05	2.5	0.32±0.05	2.6~4.5	200
Φ6.0	6.5±0.40	0.15±0.05	3.0	0.32±0.05	3.1~5.4	200
Φ7.0	7.5±0.40	0.15±0.05	3.5	0.32±0.05	3.7~6.3	200
Φ8.0	8.5±0.50	0.15±0.05	4.0	0.32±0.05	4.2~7.2	100
Φ9.0	9.5±0.50	0.16±0.05	4.5	0.35±0.05	4.7~8.0	100
Φ10	10.5±0.50	0.16±0.05	5.0	0.35±0.05	5.2~9.0	100
Φ11	11.5±0.50	0.18±0.05	5.5	0.40±0.05	5.7~10.0	100
Φ12	12.5±0.50	0.20±0.05	6.0	0.40±0.05	6.2~11.0	100
Φ13	13.5±0.50	0.20±0.05	6.5	0.40±0.05	6.7~12.0	100
Φ14	14.5±0.50	0.20±0.05	7.0	0.40±0.05	7.3~13.0	100
Φ15	15.5±0.50	0.22±0.05	7.5	0.40±0.05	7.8~14.8	100
Φ16	16.5±0.50	0.22±0.05	8.0	0.40±0.05	8.3~15.8	100

Double wall heat shrink cap



Identification heat shrinkable sleeve
 It depends on the customer's requirements, length, size and printing content

Dimension

Model (mm)	Dimension before shrinkage(mm)	Shrinkage size(mm)			Sealing length mm
	Internal diameter(mm)	Maximum inner diameter	Average internal wall thickness	Average adhesive layer thickness	
Φ3.2	≥3.2	≤1.00	0.90±0.15	0.35±0.10	10
Φ4.8	≥4.8	≤1.60	1.00±0.15	0.40±0.10	10
Φ6.4	≥6.4	≤2.20	1.25±0.15	0.45±0.12	10
Φ7.9	≥7.9	≤2.70	1.30±0.15	0.50±0.12	10
Φ9.5	≥9.5	≤3.20	1.40±0.15	0.50±0.12	10
Φ12.7	≥12.7	≤4.20	1.70±0.15	0.50±0.12	10
Φ15.0	≥15.0	≤5.20	1.80±0.15	0.55±0.15	10
Φ19.1	≥19.1	≤6.30	1.95±0.15	0.55±0.15	10
Φ25.4	≥25.4	≤8.50	2.05±0.20	0.55±0.15	10
Φ30.0	≥30.0	≤10.20	2.20±0.20	0.60±0.15	10
Φ39.0	≥39.0	≤13.50	2.50±0.20	0.60±0.15	10
Φ50.0	≥50.0	≤17.00	2.80±0.25	0.70±0.15	10
Φ64	≥64	≤21.00	3.00±0.25	0.70±0.15	10

Other sealing lengths and sizes are customized according to customer requirements



UL认证号:E352366

Specification

Elongation at break: New energy heat shrinkable sleeve Dimensions of finished products: With strap attached: Heat shrinkable sleeve: The outer layer of the sleeve is made of high-quality polyethylene and has the advantages of insulation, corrosion resistance and wear resistance, while the inner layer has the advantages of low melting point, waterproofing and mechanical strength. It is widely used in water-cooled break-proof wiring of electronic equipment, sealing of electric wire branches, anti-corrosion protection of metal pipelines, water-proofing of wire joints and similar applications.

Characteristics

(1) Scope of application: -45℃~125℃ (2) The initial shrinkage temperature is 70°C, and the minimum complete shrinkage temperature is 125°C. (3) Melting temperature of inner rubber layer: 70°C~100°C. (4) Shrinkage ratio: 2:1. (5) Axial shrinkage: 49%. (6) Sealing water-proof: 55kV. (7) Working environment: 100% humidity, salt water, oil, acid, alkali, etc. (8) It is convenient to use and can be shrunk by heating with an oven, a hot air gun, a standard color black (other colors can be provided according to customer requirements).

Performance Characteristics

Performance	Test method	Performance index
Tensile strength	ASTM D 2671	≥ 12
Elongation at break	ASTM D 2671	≥ 300
Tensile length after thermal aging	UI224 158°Cx168h	≥ 7.3
Elongation at break after thermal aging	UI224 158°Cx168h	≥ 200
Breakdown strength	IEC93	≥ 15
Volume resistivity	IEC93	≥ 1×10 ¹⁴

Adhesive characteristics

Performance	Test method	Performance index
Water absorption	ASTM-D570	< 0.2%
Softening point	ASTM-E8	95°C
Peel strength (PE)	ASTM-D1000	120N/25mm
Peel strength (AL)	ASTM-D1000	80N/25mm

Dimension table 1 (3:1)

Specification (mm)	Minimum before shrinkage	After free contraction (mm)			M/tray
	Internal diameter	Maximum inner diameter	Average total wall thickness	Average adhesive layer thickness	
Φ3.2	≥3.2	≤1.00	0.90±0.15	0.35±0.10	200
Φ4.8	≥4.8	≤1.60	1.00±0.15	0.40±0.10	100
Φ6.4	≥6.4	≤2.20	1.25±0.15	0.45±0.12	100
Φ7.9	≥7.9	≤2.70	1.30±0.15	0.50±0.12	100
Φ9.5	≥9.5	≤3.20	1.40±0.15	0.50±0.12	50
Φ12.7	≥12.7	≤4.20	1.70±0.15	0.50±0.12	50
Φ15.0	≥15.0	≤5.20	1.80±0.15	0.55±0.15	50
Φ19.1	≥19.1	≤6.30	1.95±0.15	0.55±0.15	50
Φ25.4	≥25.4	≤8.50	2.05±0.20	0.55±0.15	50
Φ30.0	≥30.0	≤10.20	2.20±0.20	0.60±0.15	50
Φ39.0	≥39	≤13.50	2.50±0.20	0.60±0.15	25
Φ50.0	≥50	≤17.00	2.80±0.25	0.70±0.15	25
Φ64	≥64	≤21.00	3.00±0.25	0.70±0.15	25

Dimension table 2 (4:1)

Specification (mm)	Minimum before shrinkage	After free contraction (mm)			M/tray
	Internal diameter	Maximum inner diameter	Average total wall thickness	Average adhesive layer thickness	
Φ4.0	4.0	1.0	1.0±0.15	0.4±0.15	200
Φ6.0	6.0	1.5	1.1±0.15	0.4±0.15	100
Φ8.0	8.0	2.0	1.5±0.15	0.5±0.15	100
Φ12.0	12.0	3.0	1.7±0.15	0.5±0.15	1.22
Φ16.0	16.0	4.0	2.0±0.15	0.6±0.15	1.22
Φ20.0	20.0	5.0	2.3±0.25	0.6±0.15	1.22
Φ24.0	24.0	6.0	2.6±0.25	0.6±0.15	1.22
Φ32.0	32.0	8.0	3.0±0.30	0.7±0.15	1.22
Φ52.0	52.0	13	3.3±0.30	0.7±0.15	1.22



Specification

The fluororubber heat shrinkable tube is made of fluororubber and polymer elastomer through radiation modification, which can be used under high temperature for a long time, and is resistant to diesel, aviation fuel and high temperature fluid. It can be used for the protection of military vehicles, high-speed rail motor cars, ship equipment or commercial cable terminals, separator joints, etc.

Usage

- Shrinkage ratio: 2:1
- Initial shrinkage temperature: ≥ +100°C
- Complete shrinkage temperature: ≥ +175°C
- Operating temperature: -55°C~+200°C
- Oil and solvent resistant, high flame retardancy, soft and elastic. Environmental protection standard: RoHS
- Standard color: black

Characteristics

Performance	Test method	Performance index
Tensile strength (Mpa)	ASTM D638	≥ 8.5
Elongation at break (%)	ASTM D638	≥ 250
Tensile length after thermal aging	250°C X168h	≥ 200
Working temperature (°C)	IEC 60216	-55~200
Flame retardancy	UI224-1	Adopt
Breakdown strength	IEC 60243	≥ 15
Volume resistivity	IEC 60093	≥ 10
Thermal shock	300°C X4h	No cracks, no dripping

Dimension

Inch	Metric	Finished inner diameter	Full reduced size (mm)		Tubular type	Standard package m/tray
			Internal diameter	Total wall thickness		
3/32	Φ2.4	≥2.4	≤1.2	0.70±0.2	Circular	200
1/8	Φ3.2	≥3.2	≤1.6	0.76±0.20	Circular	200
3/16	Φ4.8	≥4.8	≤2.4	0.89±0.20	Circular	100
1/4	Φ6.4	≥6.4	≤3.2	0.89±0.20	Circular	100
3/8	Φ9.5	≥9.5	≤4.8	0.89±0.20	Circular	50
1/2	Φ12.7	≥12.7	≤6.4	0.89±0.20	Circular	25
3/4	Φ19.0	≥19.0	≤9.5	1.07±0.30	Circular	25
1	Φ25.4	≥25.4	≤12.7	1.25±0.30	Circular	25
1-1/2	Φ38.1	≥38.1	≤19.0	1.40±0.30	Circular	25
2	Φ50.8	≥50.8	≤25.4	1.65±0.30	Circular	15



UL Certification No:E352366

Specification

Lingfree series PTFE casing is made of high quality polytetrafluoroethylene (PTFE is commonly known as Teflon, plastic king) resin, extruded and sintered. It has passed the US UL certification (Certification No. E352366), and its voltage grade is LF-1 (150V) LF-1 (300V) LF-S (600V). The product has the advantages of high temperature resistance, high pressure resistance, corrosion resistance, wear resistance, good self lubrication, etc. Widely used in machinery, electronic appliances, automotive, aerospace, chemical, communications and other fields.

Dimension

Model	Internal diameter(mm)	External diameter (mm)(s)	External diameter (mm)(l)	External diameter (mm)(l)	Standard packaging (M/tray)
30	0.30±0.10	0.80±0.10	0.70±0.10	0.60±0.10	305
28	0.38±0.10	0.88±0.10	0.78±0.10	0.68±0.10	305
26	0.46±0.10	0.96±0.10	0.86±0.10	0.76±0.10	305
24	0.56±0.10	1.16±0.10	1.06±0.10	0.86±0.10	305
23	0.66±0.10	1.26±0.10	1.16±0.10	0.96±0.10	305
22	0.71±0.10	1.31±0.10	1.21±0.10	1.01±0.10	305
21	0.81±0.10	1.41±0.10	1.31±0.10	1.11±0.10	305
20	0.86±0.10	1.66±0.10	1.46±0.10	1.16±0.10	305
19	0.96±0.20	1.76±0.20	1.56±0.20	1.26±0.20	305
18	1.07±0.20	1.87±0.20	1.67±0.20	1.37±0.20	305
17	1.19±0.20	1.99±0.20	1.79±0.20	1.49±0.20	305
16	1.34±0.20	2.14±0.20	1.94±0.20	1.64±0.20	305
15	1.50±0.20	2.30±0.20	2.10±0.20	1.80±0.20	305
14	1.68±0.20	2.48±0.20	2.28±0.20	2.08±0.20	305
13	1.93±0.20	2.73±0.20	2.53±0.20	2.33±0.20	305
12	2.16±0.25	2.96±0.25	2.76±0.25	2.56±0.25	153
11	2.41±0.25	3.21±0.25	3.01±0.25	2.81±0.25	153
10	2.69±0.25	3.49±0.25	3.29±0.25	3.09±0.25	153
9	3.00±0.25	4.00±0.25	3.80±0.25	3.40±0.25	100
8	3.38±0.25	4.38±0.25	4.18±0.25	3.78±0.25	100
7	3.76±0.25	4.76±0.25	4.56±0.25	4.16±0.25	100
6	4.22±0.25	5.22±0.25	5.02±0.25	4.80±0.25	100
5	4.72±0.25	5.72±0.25	5.52±0.25	5.32±0.25	50
4	5.28±0.30	6.28±0.30	6.08±0.30	5.88±0.25	1.0m/bar
3	5.94±0.30	6.94±0.30	6.74±0.30	6.54±0.25	1.0m/bar
2	6.68±0.30	7.68±0.30	7.48±0.30	7.28±0.25	1.0m/bar
1	7.46±0.30	8.46±0.30	8.26±0.30	8.06±0.25	1.0m/bar
0	8.38±0.30	9.38±0.30	9.18±0.30	8.98±0.25	1.0m/bar

Characteristics

Project	Performance parameter
Relative density	2.14~2.20
Tensile strength (Mpa)	≥25
Tensile visc strength (Mpa)	≥11
Elongation (%)	300
Arc resistor co	>300
Shore hardness(D)	58~63
Melting point(°C)	327
Continuous service temperature (°C)	60~260
Oxygen index(%)	>90
Water absorption(%)	<0.01
Linear expansion (x10 ⁻⁶ /°C)21~100°C	10
Breakdown strength(KV/mm)	≥45
Volume resistivity(Ω.cm)	1x10 ¹²

Usage

- ① High and low temperature resistance, continuous use temperature (-80°C~260°C);
- ② Corrosion resistance (resistance to strong acid, alkali, chemical reagent, oil);
- ③ High voltage resistance (26KV/mm). Standard color: transparent.



Usage

Semi hard, transparent, flame retardant, long-term use at 175 °C, wear-resistance.
Shrinkage ratio: 2:1
Operating temperature: -55 °C~175 °C/Withstand voltage level: 60kv
Operating temperature: -55 °C~175 °C/Withstand voltage level: 60kv
Environmental protection standard: RoHS compliant.
Environmental protection standard:RoHS compliant Color: transparent (normal)

Specification

The product is made of modified polyvinylidene fluoride (PVDF), which meets the requirements of SAE-AMS-DTL-23053/18 military standard. The special formula makes it transparent and flame retardant at the same time. It can be used for a long time at 175 °C, and is wear-resistance, cutting resistant, and resistant to most oils and chemicals. It is widely applied to the protection of welding points, terminals and connecting wires damaged by high temperature, industrial fuels, solvents and chemical reagents.

Characteristics

Test items	Test methods	Performance indicators
Shrinkage temperature	IEC216	-55°C至-175°C
Tensile strength	ASTM D 2671	≥34.5MPa
Elongation at break	ASTM D 2671	≥150%
Thermal aging elongation at break	250°C/168hrs.	≥100%
Thermal shock (min./hrs.)	300°C/1hr	No cracks
Low temperature brittleness	-55°C/1hr	No cracks
Flame retardancy	UL VW-1	Pass
Volume resistivity	IEC93	≥10 ¹³ Ω.cm
Breakdown strength	ASTMD2671	≥30KV/mm

Dimension

Specifications	Minimum inside diameter of supply size (mm.)	Size after retraction		Standard length	
		Maximum inner diameter	Wall thickness		
3/64	1.2	1.2	0.6	0.20	200m/tray
1/16	1.6	1.6	0.8	0.20	200m/tray
3/32	2.4	2.4	1.2	0.23	200m/tray
1/8	3.2	3.2	1.6	0.23	100m/tray
3/16	4.8	4.8	2.4	0.23	100m/tray
1/4	6.4	6.4	3.2	0.28	100m/tray
3/8	9.5	9.5	4.8	0.28	1.22m
1/2	12.7	12.7	6.4	0.32	1.22m
3/4	19.1	19.1	9.5	0.36	1.22m
1	25.4	25.4	12.7	0.41	1.22m

PTFE adhesive heat shrinkable tube



Usage

Military standard, semi hard, flame retardant, long-term use at 350 °C, resistant to almost all oils and chemicals

Characteristics

Shrinkage ratio: 1.7:1
Shrinkage temperature: 350 °C
Operating temperature: -65 °C~350 °C
Withstand voltage level: 60KV
Environmental protection standard: RoHS compliant
Environmental protection standard: RoHS
Compliant Color: transparent (normal)
Product specifications:2.0~10.0

Specification

It is made of polytetrafluoroethylene (PTFE Teflon "TEFLO") and meets the requirements of SAE-AMS-DTL-23053/18 military standard. It can be used at high temperature of 350 °C for a long time. It is resistant to almost all oils and chemicals. It is used in situations that require ultra-high temperature resistance and chemical resistance, as well as great requirements for electrical insulation and high flame resistance. It is widely used in automobile, military, aerospace and other fields.

Dimension

AWG	Finished inner diameter		Size after retraction		Standard length(m)
	Inner diameter	Outer diameter	Inner layer thickness	Outer layer thickness	
2.0	2.0±0.2	2.0±0.2	0.5±0.2	0.15±0.02	1.0/1.0m
3.0	3.0±0.2	3.0±0.2	0.5±0.2	0.15±0.02	1.0/1.0m
4.0	4.0±0.2	4.0±0.2	0.5±0.2	0.15±0.02	1.0/1.0m
5.0	5.0±0.2	5.0±0.2	0.5±0.2	0.15±0.02	1.0/1.0m
6.0	6.0±0.2	6.0±0.2	0.5±0.2	0.2±0.02	1.0/1.0m
7.0	7.0±0.2	7.0±0.2	0.5±0.2	0.2±0.02	1.0/1.0m
8.0	8.0±0.2	8.0±0.2	0.5±0.2	0.2±0.02	1.0/1.0m
9.0	9.0±0.2	9.0±0.2	0.5±0.2	0.2±0.02	1.0/1.0m
10.0	10.0±0.2	10.0±0.2	0.5±0.2	0.2±0.02	1.0/1.0m



Structure

Military standard, semi-rigid, flame retardant, 260 °C high temperature long-term use, resistant to most oils and chemicals

Characteristics

Shrinkage ratio: 1.7:1, 4:1 Shrinkage temperature: 350 °C
Working temperature: - 35°C ~ 260 °C
Withstand voltage grade: 600v
Environmental protection standard: RoHS compliant Color: transparent, (normal)
Product specification: 1.5/0.9/-11.94/8.56

Usage

It is made of polytetrafluoroethylene (PTFE Teflon TEFLON) and meets the requirements of SAE-AMS-DTL-23053/13 military standard. It can be used at 260°C for a long time. It is resistant to almost all oils and chemicals. It is used for fields that need to be resistant to ultra-high temperature and chemical reagents, and require greater electrical insulation and high flame retardancy. It is widely used in automobile, military, aerospace and other fields.

Specification

Test items	Test methods	Performance indicators
Tensile strength(Mpa)	ASTM D 2671	≥17.3Mpa
Elongation at break(%)	ASTM D 2671	≥200%
Proportion	ASTM D 732	2.30
Thermal shock(400 C/4hrs.)	ASTM D 2671	No crack, no drip
Low temperature brittleness (100c./4hrs.)	ASTM D 2671	No crack
Flame retardancy	ASTM D 2671	Autonomously
Volume resistivity	ASTM D 2671	≥10 ¹² Ω.cm
Breakdown strength	ASTM D 2671	≥34KV/mm
Copper corrosion	U1221	Pass
Resistance to solvent corrosion	SAF Alu.S DTI 23053/13	Excellent
Water absorption	ASTM D 570	≤0.1max.

Dimension 1 (1.7:1)

Finished inner diameter (mm)	Size after retraction (mm)			Standard length
	AVG internal diameter	Internal diameter	wall thickness	
20	1.52	0.97	0.30	1.22
18	1.93	1.17	0.30	1.22
16	2.36	1.45	0.30	1.22
14	3.05	1.82	0.30	1.22
12	3.81	2.26	0.30	1.22
10	4.85	2.80	0.30	1.22
8	6.10	3.55	0.38	1.22
6	7.67	4.40	0.38	1.22
4	9.40	5.45	0.38	1.22
2	10.92	6.90	0.38	1.22
0	11.94	8.56	0.38	1.22

Dimension 2 (4:1)

Specifications		Minimum inside diameter before shrinkage(mm)	After contraction	
Inch	(mm)		Maximum inner diameter	wall thickness
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	4.57	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

Note: the natural color is translucent, and other colors can be customized according to customer requirements



UL Certification No:E520027

Structure

It is made by immersing in silicon resin and coating the outer layer with a layer of silicon image glue. Because it contains two layers of silica gel and glass fiber, it has excellent insulation and cushioning resistance effects and good winding performance. Flame retardant, self-extinguishing, low water and dielectric NH4AH&H standards.

Temperature resistance: (-30 °C ~ 230 °C)
Withstand voltage: 1.2KV, 1.5KV, 2.5KV, 4.0KV and 7.0KV.

Usage

It is widely used for insulation protection under various high-temperature environments.

Dimension

Inner diameter	Inside diameter tolerance	1.5KV Wall thickness	2.5KV Wall thickness	4.0KV Wall thickness (Double layer casing inner fiber outer glue)	7.0KV Wall thickness (Inner glue and outer fiber)
0.8	+0.3 -0.1	0.20 ± 0.05	0.30 ± 0.05	0.40 ± 0.05	0.55 ± 0.10
1.0	+0.3 -0.1	0.20 ± 0.05	0.30 ± 0.05	0.40 ± 0.05	0.55 ± 0.10
1.5	+0.3 -0.1	0.20 ± 0.05	0.30 ± 0.05	0.40 ± 0.05	0.55 ± 0.10
2.0	+0.3 -0.1	0.20 ± 0.05	0.30 ± 0.05	0.40 ± 0.05	0.55 ± 0.10
2.5	+0.3 -0.1	0.20 ± 0.05	0.30 ± 0.05	0.40 ± 0.05	0.75 ± 0.10
3.0	+0.3 -0.1	0.25 ± 0.05	0.35 ± 0.10	0.40 ± 0.10	0.75 ± 0.10
3.5	+0.3 -0.1	0.25 ± 0.05	0.35 ± 0.10	0.45 ± 0.10	0.75 ± 0.10
4.0	+0.3 -0.1	0.25 ± 0.05	0.35 ± 0.10	0.45 ± 0.10	0.80 ± 0.10
4.5	+0.3 -0.1	0.25 ± 0.05	0.35 ± 0.10	0.45 ± 0.10	0.90 ± 0.10
5.0	+0.5 -0.1	0.30 ± 0.05	0.40 ± 0.10	0.45 ± 0.10	0.90 ± 0.10
5.5	+0.5 -0.1	0.30 ± 0.05	0.40 ± 0.10	0.50 ± 0.10	1.00 ± 0.10
6.0	+0.5 -0.1	0.30 ± 0.05	0.40 ± 0.10	0.50 ± 0.10	1.00 ± 0.10
7.0	+0.5 -0.1	0.30 ± 0.05	0.40 ± 0.10	0.50 ± 0.10	1.00 ± 0.10
8.0	+0.5 -0.1	0.40 ± 0.05	0.50 ± 0.10	0.60 ± 0.10	1.00 ± 0.15
9.0	+0.5 -0.1	0.40 ± 0.05	0.50 ± 0.10	0.60 ± 0.10	1.00 ± 0.15
10.0	+0.5 -0.1	0.40 ± 0.05	0.50 ± 0.10	0.60 ± 0.10	1.10 ± 0.15
11.0	+1.0 -0.1	0.45 ± 0.05	0.60 ± 0.10	0.70 ± 0.10	1.20 ± 0.15
12.0	+1.0 -0.1	0.45 ± 0.05	0.60 ± 0.10	0.70 ± 0.10	1.35 ± 0.15

Table 2 (Inside rubber outside fiber 7.0kv)

Specifications	Allowable tolerance of inner diameter	Double wall thickness
1.0	+0.20; -0.10	0.60 ± 0.10
2.0	+0.30; -0.20	0.70 ± 0.10
3.0	+0.40; -0.10	0.70 ± 0.10
4.0	+0.40; -0.10	0.75 ± 0.10
4.5	+0.40; -0.10	0.85 ± 0.10
5.0	+0.40; -0.10	0.90 ± 0.10
6.0	+0.40; -0.10	0.90 ± 0.10

High temperature-resistance special fiber glass sleeving



Characteristics

Performance parameters: quality: it is made by immersing in silicone resin and coating the outer layer with a layer of silicone image glue. Because it contains two layers of silica gel or glass fiber, it has excellent insulation and cushioning shock effects, and has good winding performance. Flame retardant, self-extinguishing UL VW-1 and electric NEMA/H standards, resistance: Temperature resistance: (-30°C~500°C)

Usage

It is widely used for insulation protection under various high temperature environments.

Dimension

Inner diameter	Inner diameter tolerance	Wall thickness
1.0	+0.3 -0.1	0.20±0.05
1.5	+0.3 -0.1	0.20±0.05
2.0	+0.3 -0.1	0.20±0.05
2.5	+0.3 -0.1	0.20±0.05
3.0	+0.3 -0.1	0.25±0.05
3.5	+0.3 0.1	0.25±0.05
4.0	+0.3 -0.1	0.25±0.05
4.5	+0.3 -0.1	0.25±0.05
5.0	+0.5 -0.1	0.30±0.05
5.5	+0.5 -0.1	0.30±0.05
6.0	+0.5 -0.1	0.30±0.05
7.0	+0.5 -0.1	0.30±0.05
8.0	+0.5 -0.1	0.40±0.05
9.0	+0.5 -0.1	0.40±0.05
10.0	+0.5 -0.1	0.40±0.05
11.0	+1.0 -0.1	0.45±0.05
12.0	+1.0 -0.1	0.45±0.05

Nonslip cross lined heat shrinkable tube



Specification

The antislip ribbed tube is made of radiation modified polymerized warp material. Its function is anti-skid cooperation, which is widely used in high-end fishing gear, sports equipment, fitness equipment, daily necessities, various hand tools, kitchen appliance handles.

Characteristics

- Thermal shrinkage rate: 2:1
- Initial shrinkage temperature: $\geq -60^{\circ}\text{C}$
- Full shrinkage temperature: $\geq +105^{\circ}\text{C}$. Use temperature: $55^{\circ}\text{C} \sim +110^{\circ}\text{C}$
- Soft, fast shrinkage, anti-skid and beautiful
- Environmental protection standard: RoHS standard color: black, red, yellow, green, blue and other colors.

Bus-bar shrinkable protection tube



Structure

The continuous flexible busbar heat shrinkable tube is made of environment-friendly thermoplastic elastomer polyolefin vertical heat shrinkable material which is cross-linked by high-energy electron beam homopolymer. It has excellent flame retardancy, insulation, thermal stability and excellent strength, and is soft, elastic and more convenient to use. The product limits its application to the environment, such as PBB, PBBD, PBBE and heavy metals. It does not produce toxic gas and harmful substances when burning. It is suitable for anti-corrosion and insulation protection of bus and electrical equipment, and has passed the certification of Wuhan High-tech Institute and Xi'an High-tech Institute. The products are widely used in electric power industry, communication, automobile, ship, aircraft manufacturing and other fields.

Characteristics

- ◆ Wind ratio: 2.5:1
- ◆ Initial shrinkage temperature: $\geq 180^{\circ}\text{C}$
- ◆ Complete shrinkage temperature: $\geq -120^{\circ}\text{C}$
- ◆ Working temperature: $-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$, anti-environmental fire safety, high elasticity, flame retardant and environmental friendly
- ◆ Certification: RoHS compliant
- ◆ Standard color: red (other colors can be customized)

Specification

Performance	Index	Test standard
Tensile strength(Mpa)	≥ 8	IEC60684
Elongation at break(%)	≥ 400	IEC60684
Tensile strength after aging(uPa)	≥ 6.1	150°C x 168h
Elongation after aging(%)	≥ 200	150°C x 168h
Thermal shock	No cracks, no viscous flow, no dripping	225°C x 1h
Flame retardant	Pass	IEC60684
Low temperature flexibility	No cracks	-40°C x 4h
Electrical strength(kv/mm)	≥ 20	IEC60684
Volume resistivity(Ω.cm)	$\geq 1 \times 10^{14}$	IEC60684
Electric resistance mark(2.5xv,60min)	No burn crack	IEC60684

Table 1:10KV

Specifications	Applicable busbar (Square/round)	Supply size(mm)		Full reduce size(mm)		Packing M/tray
		Inner diameter	Wall thickness	Inner diameter	Wall thickness	
10kV 15/6	15/12	15.0±0.8	1.20±0.30	≤6	2.5±0.20	25
10kV 20/8	20/15	20.0±0.8	1.20±0.30	≤8	2.5±0.20	25
10kV 25/10	25/18	25.0±0.8	1.20±0.30	≤10	2.5±0.20	25
10kV 30/12	32/20	30±0.8	1.20±0.30	≤12	2.5±0.20	25
10kV 40/16	40/30	40±1.0	1.20±0.30	≤16	2.80±0.30	25
10kV 50/20	50/35	≥50	1.20±0.30	≤20	2.80±0.30	25
10kV 60/24	60/45	≥60	1.20±0.30	≤24	2.80±0.30	25
10kV 65/26	65/45	≥65	1.20±0.30	≤26	2.80±0.30	25
10kV 70/28	70/50	≥70	1.20±0.30	≤28	2.80±0.30	25
10kV 75/30	75/50	≥75	1.20±0.30	≤30	2.80±0.30	25
10kV 80/32	80/55	≥80	1.20±0.30	≤32	2.80±0.30	25
10kV 85/34	80/65	≥85	1.20±0.30	≤34	2.80±0.30	25
10kV 100/40	100/75	≥100	1.20±0.30	≤40	2.80±0.30	25
10kV 120/48	120/85	≥120	1.20±0.30	≤48	2.80±0.30	25
10kV 150/60	150/105	≥150	1.20±0.30	≤60	2.80±0.30	25
10kV 180/72	180/120	≥180	1.20±0.30	≤72	2.80±0.30	25

Table 2:35KV

Voids	Applicable busbar width	Inner diameter	Wall thickness	Inner diameter	Wall thickness	Packing M/tray
35kv W/M/PG 30/15	30	30±1.0	1.9±0.5	15	4.0±0.3	15
35kv W/M/PG 35/18	30/40	35±1.0	1.9±0.5	18	4.0±0.3	15
35kv W/M/PG 40/20	40	40±1.0	1.9±0.5	20	4.0±0.3	15
35kv W/M/PG 50/25	50	50±2.0	1.9±0.5	25	4.0±0.3	15
35kv W/M/PG 60/30	60	60±2.0	1.9±0.5	30	4.0±0.3	15
35kv W/M/PG 65*/33	60/70	65±2.0	1.9±0.5	33	4.0±0.3	15
35kv W/M/PG 70/35	70	70±2.0	1.9±0.5	35	4.0±0.3	15
35kv W/M/PG 75/38*	70/80	75±2.0	1.9±0.5	38	4.0±0.3	15
35kv W/M/PG 80/40	80/100	80±3.0	1.9±0.5	40	4.0±0.3	15
35kv W/M/PG 100/50	100/120	100±4.0	1.9±0.5	50	4.0±0.3	15
35kv W/M/PG 120/60	150	120±4.0	1.9±0.5	60	4.0±0.3	15
35kv W/M/PG 150/75	180	150±4.0	1.9±0.5	75	4.0±0.3	15
35kv W/M/PG 180/90*	MAX.	185±5.0	1.9±0.5	90	4.0±0.3	15
35kv W/M/PG 210/105*	MAX.	210±5.0	1.9±0.5	105	4.0±0.3	15
35kv W/M/PG 230/115*	MAX.	230±5.0	1.9±0.5	115	4.0±0.3	15

Pvc tube



Usage

Good insulation performance. Oil and acid resistant protection. Mechanical hanging wire and lead application are generally used for insulation protection of electrical appliances, harnesses, transformers, motor leads, etc.

Characteristics

Material: 105 °C UL PVC Material
Working temperature: - 45 °C ~ 105 °C
Rated voltage: 300V ~ 600V
Flame retardant: UL 924VW 1

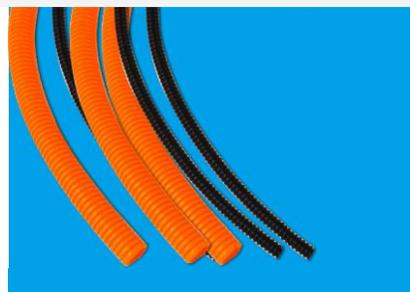
Specification

Test items	Index
Test resistivity	$\geq 10^{11} \Omega \cdot \text{cm}$
Tensile strength	$\geq 12.5 \text{Mpa}$
Elongation at break	$\geq 150\%$
Tensile strength after aging	$\geq 10 \text{Mpa}$
Elongation after aging	$\geq 120\%$
Cold bonding	No cracks

Dimension

Specifications	Inner diameter(mm)	Wall thickness W.T.mm (300V 105 °C)	Wall thickness W.T.mm (600V 105 °C)	Packing
NO.20	0.86 ± 0.10	0.35 ± 0.06	0.45 ± 0.06	500
NO.19	0.96 ± 0.10	0.35 ± 0.06	0.45 ± 0.06	500
NO.18	1.07 ± 0.15	0.35 ± 0.06	0.50 ± 0.08	500
NO.17	1.19 ± 0.15	0.35 ± 0.06	0.50 ± 0.08	500
NO.16	1.34 ± 0.15	0.35 ± 0.06	0.50 ± 0.08	500
NO.15	1.50 ± 0.15	0.35 ± 0.06	0.50 ± 0.08	500
NO.14	1.68 ± 0.15	0.35 ± 0.06	0.50 ± 0.08	500
NO.13	1.93 ± 0.20	0.35 ± 0.06	0.50 ± 0.08	500
NO.12	2.16 ± 0.20	0.35 ± 0.06	0.50 ± 0.08	500
NO.11	2.41 ± 0.20	0.35 ± 0.06	0.50 ± 0.08	500
NO.10	2.69 ± 0.20	0.35 ± 0.06	0.50 ± 0.08	500
NO.9	3.00 ± 0.25	0.40 ± 0.08	0.55 ± 0.08	500
NO.8	3.38 ± 0.25	0.40 ± 0.08	0.55 ± 0.08	500
NO.7	3.76 ± 0.25	0.40 ± 0.08	0.55 ± 0.08	500
NO.6	4.22 ± 0.30	0.40 ± 0.08	0.55 ± 0.08	500
NO.5	4.72 ± 0.30	0.45 ± 0.08	0.55 ± 0.08	500
NO.4	5.28 ± 0.30	0.45 ± 0.08	0.60 ± 0.08	500
NO.3	5.94 ± 0.30	0.45 ± 0.08	0.60 ± 0.08	300
NO.2	6.68 ± 0.30	0.45 ± 0.08	0.60 ± 0.08	300
NO.1	7.46 ± 0.35	0.45 ± 0.08	0.60 ± 0.08	200
NO.0	8.38 ± 0.35	0.45 ± 0.08	0.60 ± 0.08	200

Seal type corrugated pipe



Structure (PP material)

Material: polypropylene (PP)
Temperature range: - 20 °C ~ 100 °C
Color: black, gray, oil resistant, acid and alkali resistant. The protection grade IP68 wave tube is mainly used in mechanical equipment, automobile and other industries to protect wire harnesses, cables and wires. We can produce slit wave tube according to customer requirements.

Structure (PA6 material)

Material: nylon
Temperature range: - 40 °C ~ 115 °C Color: black, gray, without halogen, oil resistance, acid and alkali. The wave tube with protection grade of IP68
Mainly used: in mechanical equipment, automobile and other industries to protect wire harnesses, cables and wires. Open wave tube can be produced according to customer requirements.

Dimension (PA6)

Specification	inner diameter mm	outer diameter mm	berding radius mm±%
AD10.0	6.5	10.0	15
AD13.0	10.0	13.0	20
AD15.8	12.0	15.8	25
AD18.5	14.3	18.5	35
AD21.2	17.0	21.2	40
AD28.5	23.0	28.5	45
AD34.5	29.0	34.5	55
AD42.5	36.0	42.5	65
AD54.5	48.0	54.5	80

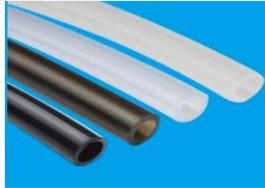
Dimension (PE)

Specification	Inner diameter mm	Outer diameter mm	Bending radius mm±%
AD7.0	4.5	7.0	10
AD10.0	6.5	10.0	15
AD13.0	10.0	13.0	20
AD15.8	12.0	15.8	25
AD18.5	14.3	18.5	35
AD21.2	17.0	21.2	40
AD28.5	23.0	28.5	45
AD34.5	29.0	34.5	55
AD42.5	36.0	42.5	65
AD54.5	48.0	54.5	80

Dimension (PP)

Item No	Size	I.D.(mm)	O.D.(mm)	Stat.r(mm)	Dyn.r(mm)	Meter/Roll Packing
PP	1/4 "	6.5	10.0	15	30	200
PP	5/16 "	10.0	13.0	20	40	100
PP	3/8 "	12.0	15.8	30	50	100
PP	1/2 "	16.0	21.2	40	70	100
PP	3/4 "	22.0	28.5	50	100	100
PP	1 "	28.0	34.5	60	120	100
PP	1-1/4 "	36.0	42.5	80	150	100
PP	2 "	46.5	54.5	100	180	100
PP	12	8.3	12	35	60	100
PP	12.5	9.4	12.5	35	60	100
PP	18.5	14.3	18.5	35	60	100
PP	25	20.0	25	45	80	50
PP	32	26.0	31	55	100	50

Silicone rubber tube



Structure
The silicone rubber tube is made of high-quality silicone rubbery special formula and advanced technology. The product has the advantages of excellent insulation performance, excellent mechanical properties, high-temperature resistance, and excellent chemical stability. It is widely used in the fields of electrical insulation, high-temperature resistance, and chemical stability. It is also used in the fields of medical treatment, electronic appliances, and telecommunications. The product has excellent performance in terms of high-temperature resistance, excellent mechanical properties, and excellent chemical stability. It is also used in the fields of medical treatment, electronic appliances, and telecommunications.

Characteristic
1. Good electrical properties: operating temperature: -50°C~200°C, 2. High temperature resistance: 200°C, 3. High pressure resistance: 25 MPa, 4. Excellent chemical stability: resistant to various acids, alkalis, and oils, 5. Excellent mechanical properties: high tensile strength, 6. Excellent aging resistance: long-term use without aging, 7. Excellent flame retardancy: self-extinguishing, 8. Excellent low temperature resistance: low temperature resistance, 9. Excellent ozone resistance: excellent ozone resistance.

1. Various specifications can be customized according to customer requirements.

Specification

Performance	Test method	performance index
Dielectric strength	GB/T 1108	≥18
Volume resistivity	GB/T 1410	≥1 × 10 ¹⁴
Tensile strength	GB/T 1040	≥3.5Mpa
Flammability at break	GB/T 1040	≥2IC
Flame retardancy	GB/T 2108	FV-1

Dimension

Specifications (mm)	Inside diameter tolerance (mm)	Finished product thickness and pressure resistance				Standard packaging
		2500V(mm)	4000V(mm)	6000V(mm)	7000V(mm)	
Φ0.8	0.8±0.10	0.5±0.10	1.0±0.15	1.5±0.20	2.0±0.25	200
Φ1.0	1.0±0.10	0.5±0.10	1.0±0.15	1.5±0.20	2.0±0.25	200
Φ1.5	1.5±0.10	0.5±0.10	1.0±0.15	1.5±0.20	2.0±0.25	200
Φ2.0	2.0±0.10	0.5±0.10	1.0±0.15	1.5±0.20	2.0±0.25	200
Φ2.5	2.5±0.10	0.5±0.10	1.0±0.15	1.5±0.20	2.0±0.25	200
Φ3.0	3.0±0.10	0.5±0.10	1.0±0.15	1.5±0.20	2.0±0.25	200
Φ3.5	3.5±0.10	0.5±0.10	1.0±0.15	1.5±0.20	2.0±0.25	200
Φ4.0	4.0±0.10	0.5±0.10	1.0±0.15	1.5±0.20	2.0±0.25	100
Φ4.5	4.5±0.10	0.5±0.10	1.0±0.15	1.5±0.20	2.0±0.25	100
Φ5.0	5.0±0.20	0.5±0.10	1.0±0.15	1.5±0.20	2.0±0.25	100
Φ5.5	5.5±0.20	0.5±0.10	1.0±0.15	1.5±0.20	2.0±0.25	100
Φ6.0	6.0±0.20	0.5±0.10	1.0±0.15	1.5±0.20	2.0±0.25	100
Φ6.5	6.5±0.20	0.5±0.10	1.0±0.15	1.5±0.20	2.0±0.25	100



Structure
Silicone rubber shrink sleeve has the characteristics of high temperature resistance (-50°C~200°C), excellent mechanical properties, high pressure resistance, and long-term use without aging. It is widely used in aerospace, instrumentation, textiles, and chemical industry, food and medical treatment, electronic appliances, post and telecommunications, petro-chemical industry, metallurgical electronics, railway transportation, electrical machinery, household appliances, high-rise buildings, lighting and other industries.

Specification

Proport on 25°C	Hardness JIS-A	Tensile strength (MPa) (kgf/cm ²)	Elongation (%)	Tear strength (kgf/cm)	Volume resistivity (Ω·cm)	Breakdown Voltage (kV) (KV)	Dielectric constant (ε)50Hz	Tangent of dielectric consumption angle (tan δ) 50Hz	Flammability UL-224	Operating temperature range (°C)	Shrinkage (diameter) (%)	Shrinkage temperature (°C)
1:2	70	6.9 (70)	400	24.5 (25)	2*10 ⁻² (2*10 ⁻⁴)	25	3.2	0.001	-	50~1200	About 50	Over 90

Dimension

Specification (mm)	Outer diameter of the roll (mm)	Preshrinking		After contraction		Packing
		Inner diameter	Thickness	Inner diameter	Thickness	
Φ1.5	1.1~1.4	1.7±0.2	0.5±0.1	0.8±0.1	1.0±0.2	25*1m/bar
Φ3.0	1.8~2.5	3.2±0.2	0.5±0.1	1.6±0.1	1.0±0.2	
Φ4.0	2.3~4.0	4.5±0.3	0.5±0.1	2.2±0.1	1.0±0.2	
Φ5.0	2.8~5.0	5.6±0.3	0.5±0.1	2.9±0.2	1.0±0.2	
Φ6.0	3.2~6.0	6.6±0.3	0.5±0.1	3.3±0.2	1.0±0.2	10*1m/bar
Φ8.0	4.5~7.0	8.6±0.4	0.5±0.1	4.3±0.2	1.0±0.2	
Φ12	6.0~10.0	12±1	0.75±0.1	6.0±0.2	1.5±0.2	
Φ17	9~15	17±1	0.75±0.1	9.0±0.3	1.5±0.2	
Φ20	12~21	23±1	1.0±0.1	12±0.4	2.0±0.3	5*1m/bar
Φ25	15~23	25±1	1.0±0.1	14±0.4	2.0±0.3	
Φ30	18~28	31±1	1.0±0.1	16±0.5	2.0±0.3	
Φ45	25~42	45±1	1.5±0.1	23±1	3.0±0.3	
Φ55	33~50	55±1	1.5±0.1	29±1	3.0±0.3	
Φ65	40~60	66±2	1.5±0.2	35±1	3.0±0.3	
Φ80	50~65	80±2	1.5±0.2	42±1	3.0±0.3	

Heat shrinkable braided sleeve tube



Characteristic

Excellent noise reduction, flexibility, wear resistance, and thermal insulation properties. Initial shrinkage temperature: 110° C. Recommended shrinkage temperature: 170° C ~ 200° C (5 minutes). Maximum storage temperature: 50° C (store in a cool, dry place).

Purpose

Primarily applied in profiled tubing products, it finds widespread applications across electronics, electrical appliances, automation equipment, automotive systems, as well as abrasion resistance, protection, and organization of cable harnesses.

Production Specifications	Finished Product Folded Diameter (mm)	As-supplied Internal (mm)	Recovered Internal Diameter (mm)
Φ6.0/3.0	12±3	≥6.0	≤3.0
Φ8.0/4.0	15±3	≥8.0	≤4.0
Φ10.0/5.0	19±3	≥10.0	≤5.0
Φ12.0/6.0	24±3	>12.0	<6.0
Φ16.0/8.0	29±3	>16.0	≤8.0
Φ20.0/10.0	36±3	≥20.0	≤10.0
Φ25.0/12.5	44±3	≥25.0	≤12.5
Φ30.0/15.0	53±4	≥30.0	≤15.0
Φ35.0/17.5	60±4	≥35.0	≤17.5
Φ40.0/20.0	68±4	>40.0	≤20.0
Φ50.0/25.0	85±5	≥50.0	≤25.0
Φ60.0/30.0	100±5	≥60.0	≤30.0
Φ70.0/35.0	116±5	≥70.0	≤35.0
Φ80.0/40.0	132±5	≥80.0	≤40.0
Φ90.0/45.0	145±5	≥90.0	≤45.0

Braided hose



Structure

The mesh expansion braided casing is made of PET polyester monofilament, nylon monofilament and other monofilament with strong wear-resistant and anti-corrosion properties. It has good bending, resilience, wear resistance, scalability and permeability, so it can be widely used in the sheath and protection of wire materials.

Characteristic

- Excellent softness, easy to bend, loose and tight, good scalability, elasticity and wear resistance
- Material: PET
- Operating temperature: -50 °C~150 °C
- Melting point: 250 ± 5 °C
- Environmental protection standard: RoHS
- Flame retardant grade: self-extinguishing
- Standard color: black

Specification

Material	Coincidence rate of polyester monofilament+polyester
Multifilament (%)	≥ 25 %
Working temperature	- 50 ~ 150 °C
Melting point	240 ± 10
Fire protection grade	Meets N5510, NFPA 130
Wear resistance class	1506722 Inac 7N times of scraping, s more than 5000 times
Certified	ROHS
Standard color	Black (special color which can be customized according to customer needs)
Cutting tool	Hot cutting

Dimension

Product specifications	Extensibility	Item number	Number of tubes	Wire diameter
151 (Φ4.0)	2.0mm-6.0mm	24T	1	0.20mm
152 (Φ5.0)	2.5mm-8.0mm	32T	1	0.20mm
153 (Φ6.0)	3.0mm-10.0mm	40T	1	0.20mm
154 (Φ8.0)	4.0mm-12.0mm	48T	1	0.20mm
155 (Φ12.0)	5.0mm-14.0mm	56T	1	0.20mm
156 (Φ15.0)	6.0mm-16.0mm	64T	1	0.20mm
157 (Φ18.0)	7.0mm-18.0mm	72T	1	0.20mm
311 (Φ3.0)	2.0mm-6.0mm	24T	3	0.20mm
312 (Φ5.0)	2.5mm-8.0mm	32T	3	0.20mm
313 (Φ8.0)	3.0mm-10.0mm	40T	3	0.20mm
314 (Φ12.0)	4.0mm-12.0mm	48T	3	0.20mm
315 (Φ15.0)	5.0mm-18.0mm	56T	3	0.20mm
316 (Φ18.0)	6.0mm-20.0mm	64T	3	0.20mm
317 (Φ20.0)	7.0mm-22.0mm	72T	3	0.20mm
357 (Φ25.0)	15mm-28mm	72T	3	0.20mm

self-winding braided hose



Dimension

Model	Inner diameter	Maximum diameter of quilt cover	Expand Width mm
WPET-SCG-005	5.0	6.0	28±2
WPET-SCG-008	8.0	9.0	40±2
WPET-SCG-010	10.0	11.0	50±5
WPET-SCG-013	13.0	14.0	60±5
WPET-SCG-016	16.0	17.0	80+5
WPET-SCG-019	19.0	20.0	105±5
WPET-SCG-025	25.0	27.0	125±8
WPET-SCG-029	29.0	31.0	145+8

cable tie



Structure

Material: It is made of nylon 66 recognized by UL, with fire rating of 94V-2, good acid resistance, corrosion resistance, insulation, aging resistance and strong bearing capacity.

Operating temperature: - 40 °C~85 °C

Color: standard color (white), and black anti ultraviolet, special colors are welcome to make to order.



Dimension

Serial No	Number	Length		Width MM	Maximum limiting diameter	Pull		Packing
		Lench	MM			LBS	KGS	
00101	LF-60A	2 3/8"	60	2.3	11	18	8	100PCS & 1000PCS
00102	LF-80A	3 3/16"	80	2.5	16	18	8	
00103	LF-100A	4"	100	2.5	22	18	8	
00104	LF-120A	4 3/4"	120	2.5	30	18	8	
00105	LF-150A	6"	150	2.5	35	18	8	
00106	LF-160A	6 1/2"	160	2.5	40	18	8	
00107	LF-180A	7"	180	2.5	45	18	8	
00108	LF-200A	8"	200	2.5	50	18	8	
00109	LF-120B	4 3/4"	120	3.5	30	40	18	
00110	LF-140B	5 1/2"	140	3.5	33	40	18	
00111	LF-150B	6"	150	3.5	35	40	18	
00112	LF-180B	7"	180	3.5	42	40	18	
00113	LF-200B	8"	200	3.5	50	40	18	
00114	LF-250B	10"	250	3.5	65	40	18	
00115	LF-280B	11"	280	3.5	70	40	18	
00116	LF-300B	11 5/8"	300	3.5	80	40	18	
00117	LF-370B	14 1/2"	370	3.5	102	40	18	
00118	LF-120C	4 3/4"	120	4.8	24	50	22	
00119	LF-180C	7"	180	4.8	42	50	22	
00120	LF-190C	7 1/2"	190	4.8	46	50	22	
00121	LF-200C	8"	200	4.8	50	50	22	
00122	LF-250C	10"	250	4.8	65	50	22	
00123	LF-280C	11"	280	4.8	70	50	22	
00124	LF-300C	11 5/8"	300	4.8	82	50	22	
00125	LF-350C	13 1/4"	350	4.8	90	50	22	
00126	LF-380C	15"	380	4.8	102	50	22	
00127	LF-400C	15 1/4"	400	4.8	105	50	22	
00128	LF-430C	17"	430	4.8	110	50	22	
00129	LF-450C	1 1/2"	450	4.8	130	50	22	
00130	LF-500C	19 1/4"	500	4.8	140	50	22	
00131	LF-150D	6"	150	7.6	33	120	55	
00132	LF-180D	7"	180	7.6	42	120	55	
00133	LF-200D	8"	200	7.6	50	120	55	
00134	LF-250D	10"	250	7.6	63	120	55	
00135	LF-300D	11 5/8"	300	7.6	82	120	55	
00136	LF-350D	14 3/8"	350	7.6	90	120	55	
00137	LF-370D	14"	370	7.6	102	120	55	