



Heat-shrinkable Tube



JDDTECH[®]

Creating a global top brand of protective sleeve

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2017.05-V1.0

COMPANY PROFILE

Shenzhen Jdd Tech New Material Co., Ltd. specializes in system protection sleeve and solution provider since 2004. JDD TECH was listed on the New Third Board Market (the stock code:837635). Headquarter is located in Shenzhen. Our 4 factories basted in Shenzhen, Dongguan, Kunshan and Wuhan. The 6 service centers are located in China and USA. JDD TECH has been certified by ISO9001:2008 and ISO16949:2009 Quality Management System and ISO14001:2004 Environmental Management System.

Our products are widely used in multiple applications, such as automotive, railway, heavy industrial machinery, new energy, communication, electric and consumer electronics. Most products are compliant with UL, RoHS, REACH and MSHA standard.

We always focus on communication, service

and quality. The strict and professional QC team with the advanced testing equipment can provide the quality guarantee, the skilled R&D team are able to design and develop the products according to customer requirement and the market demand. The OEM and ODM service providing customer diversified choice. One-stop service and creating value for customers is our mission.

Our service concept is meeting the customers' core needs, satisfying the customers is the foundation and constant pursuit. If you are looking for long term strategic partner, JDD TECH can be your good choice!



COMPANY PROFILE

QUALIFICATIONS & HONORS

Factory



Min zhu factory



Kun shan factory



Wuhan factory



Dongguan factory

Workshop



Laboratory



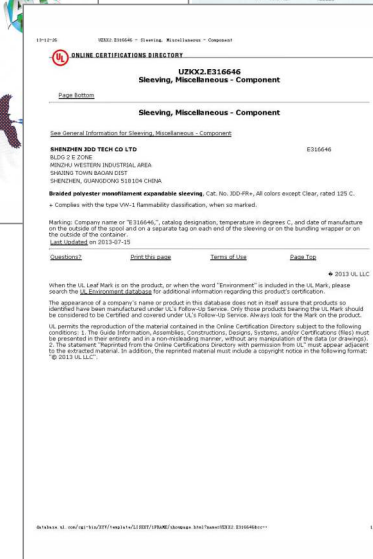
ISO/TS 16949:2009



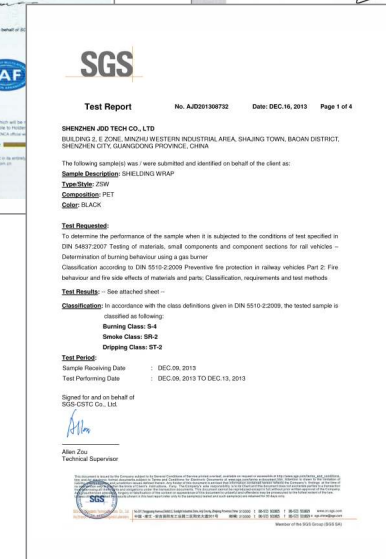
ISO 14001:2004



ISO 9001:2008



UL



DIN 5510

MAIN CUSTOMERS

CONTENTS



Audi



HONDA



TOYOTA



中国中车
CRRC

SIEMENS

CATERPILLAR®

Canon

FOXCONN®



HUAWEI



ABB

Single wall heat-shrinkable tube

P.01	MRSG	2:1 Normal wall heat-shrinkable tube
P.03	MCBG	2:1 Thin wall heat-shrinkable tube
P.05	MRSG-105	Non flame retardant heat-shrinkable tube
P.07	MRSG-135	135°C heat-shrinkable tube (2:1 & 3:1)
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P.11	HSMT2	Heat-shrinkable printable continuous marker tube
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Heat-shrinkable tube for automotive

P.20	MRSG-DR	Diesel-resistance heat-shrinkable tube
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P.42		Heat gun
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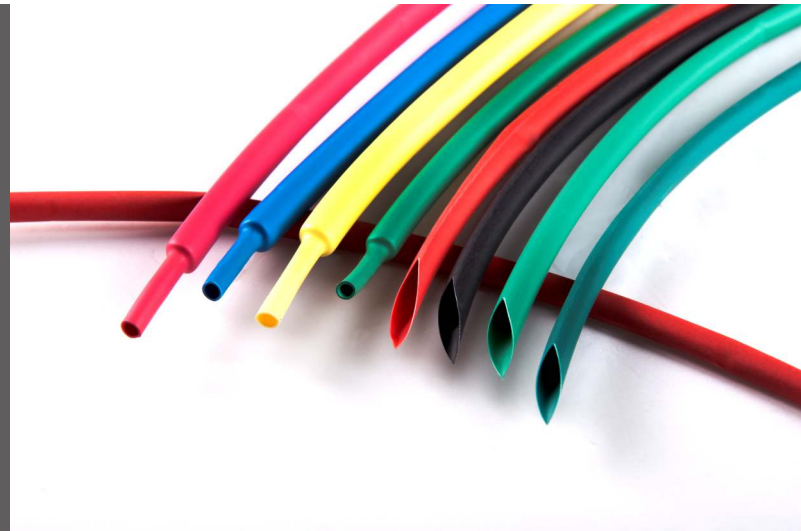
2:1 Normal wall heat-shrinkable tube

Features:

- Shrink ratio: 2:1
- Working temperature: -55°C~+125°C
- Shrink temperature: Start at 70°C, minimum fully shrink at 110°C
- Longitudinal shrinkage: ≤5%
- Halogen free
- Flame retardant, low smoke
- Excellent insulation, protection and identification
- UL, CSA, RoHS, REACH

Application:

It offers an economic and efficient solution for the connection insulation and protection of cable splices and terminals in the electronics, automotive, railway and marine field.



1. Technical Data

Specifics	Test Method	Typical Performance
Tensile strength (MPa)	ASTM D2671	≥10.4 MPa
Elongation (%)	ASTM D2671	≥200%
Tensile strength after heat aging	UL224 158°C X168 hrs	≥7.3 MPa
Elongation after aging (%)	UL224 158°C X168 hrs	≥100%
Heat shock	UL224 250°C X4 hrs	No dripping
		No cracking
Dielectric strength	IEC60243	≥15kV/mm
Volume resistivity	IEC 60093	≥1×10 ¹⁴ Ω·cm
Corrosion action	UL224 158°C X168 hrs	Pass
Copper compatibility	UL224 158°C X168 hrs	Pass

Remark:
 1. Standard color: black, white, red, blue, yellow, green, other colors on request.
 2. Special size, packaging and cutting pieces are available on requests.

2. Dimensions

Part No.	Size		As Supplied (mm)	After Recovery (mm)		Standard Packing
	Inch	mm	I.D.	I.D. Max.	W.T. Nom.	m/spool
MRSG-0.8		0.8	1.1±0.2	0.5	0.30±0.10	200
MRSG-1.0	3/64	1.0	1.5±0.2	0.65	0.36±0.10	200
MRSG-1.5	1/16	1.5	2.0±0.3	0.85	0.36±0.10	200
MRSG-2.0	3/32	2.0	2.5±0.3	1.0	0.40±0.10	200
MRSG-2.5		2.5	3.0±0.3	1.25	0.40±0.10	200
MRSG-3.0	1/8	3.0	3.5±0.4	1.5	0.40±0.10	200
MRSG-3.5		3.5	4.0±0.4	1.75	0.44±0.10	200
MRSG-4.0		4.0	4.5±0.4	2.0	0.50±0.10	200
MRSG-4.5	3/16	4.5	5.0±0.4	2.25	0.50±0.10	200
MRSG-5.0		5.0	5.5±0.4	2.5	0.55±0.10	100
MRSG-6.0	1/4	6.0	6.5±0.4	3.0	0.55±0.10	100
MRSG-7.0		7.0	7.5±0.5	3.5	0.55±0.10	100
MRSG-8.0	5/16	8.0	8.5±0.5	4.0	0.60±0.10	100
MRSG-9.0	3/8	9.0	9.5±0.5	4.5	0.60±0.10	100
MRSG-10		10	10.5±0.5	5.0	0.60±0.10	100
MRSG-11		11	11.5±0.5	5.5	0.60±0.10	100
MRSG-12		12	12.5±0.5	6.0	0.60±0.10	100
MRSG-13	1/2	13	13.5±0.5	6.5	0.65±0.10	100
MRSG-14		14	14.5±0.5	7.0	0.65±0.10	100
MRSG-15		15	15.5±0.5	7.5	0.70±0.10	100
MRSG-16	5/8	16	16.5±0.5	8.0	0.70±0.10	100
MRSG-17		17	17.5±0.5	8.5	0.70±0.10	100
MRSG-18		18	19.0±0.5	9.0	0.75±0.10	100
MRSG-20	3/4	20	21.0±0.5	10	0.75±0.15	100
MRSG-22		22	23.0±0.5	11	0.80±0.15	100
MRSG-25	1	25	26.0±0.5	12.5	0.90±0.15	50
MRSG-28		28	29.0±0.5	14	0.90±0.15	50
MRSG-30		30	31.5±1.0	15	0.95±0.15	50
MRSG-35	1-1/4	35	36.5±1.0	17.5	1.0±0.15	50
MRSG-40	1-1/2	40	41.5±1.0	20	1.0±0.15	50
MRSG-45		45	46.5±1.0	22.5	1.0±0.15	25
MRSG-50	2	50	≥50	25	1.0±0.15	25
MRSG-60		60	≥60	31	1.3±0.15	25
MRSG-70		70	≥70	36	1.3±0.15	25
MRSG-80	3	80	≥80	41	1.46±0.20	25
MRSG-90		90	≥90	46	1.46±0.20	25
MRSG-100	4	100	≥100	51	1.46±0.20	25
MRSG-120	5	120	≥120	61	1.56±0.20	25
MRSG-150	6	150	≥150	76	1.56±0.20	25
MRSG-180	7	180	≥180	91	1.56±0.20	25

2:1 Thin wall heat-shrinkable tube

Features:

- Shrink ratio: 2:1
- Working temperature: -55°C~+125°C
- Shrink temperature: Start at 60°C, minimum fully shrink at 100°C
- Longitudinal shrinkage: ≤5%
- Ultra thin wall, very flexible
- Low shrink temperature & rapid shrinking
- UL, CSA, RoHS, REACH

Application:

It is widely used in the fields of electrics, communication, automobile for connection insulation and rust-proof of metal parts where the ultra thin wall thickness is required.



1. Technical Data

Specifics	Test Method	Typical Performance
Tensile strength (MPa)	ASTM D2671	≥10.4 MPa
Elongation (%)	ASTM D2671	≥200%
Tensile strength after heataging	UL 224 158°CX168 hrs	≥7.3 MPa
Elongation after aging (%)	UL 224 158°CX168 hrs	≥100%
Heat shock	UL 224 250°CX4 hrs	No dripping
		No cracking
Dielectrics trength	IEC60243	≥15kV/mm
Volume resistivity	IEC60093	≥1×10 ¹⁴ Ω·cm
Corrosion action	UL224 158°CX 168 hrs	Pass
Copper compatibility	UL224 158°CX 168 hrs	Pass

Remark:

1. Standard color: black, white, red, blue, yellow, green, other colors on request.
2. Special size, packaging and cutting pieces are available on requests.

2. Dimensions

Part No.	Size		As Supplied (mm) I.D.	After Recovery (mm)		Standard Packing m/spool
	Inch	mm		I.D. Max.	W.T. Nom.	
MCBG-1.0	1/16	1.0	1.5±0.3	0.65	0.20±0.10	200
MCBG-1.5		1.5	1.9±0.3	0.85	0.20±0.10	200
MCBG-2.0	3/32	2.0	2.4±0.3	1.0	0.22±0.10	200
MCBG-2.5		2.5	2.9±0.4	1.3	0.25±0.10	200
MCBG-3.0	1/8	3.0	3.4±0.4	1.5	0.28±0.10	200
MCBG-3.5		3.5	3.9±0.4	1.8	0.28±0.10	200
MCBG-4.0		4.0	4.4±0.4	2.0	0.30±0.10	200
MCBG-4.5	3/16	4.5	4.9±0.4	2.3	0.30±0.10	200
MCBG-5.0		5.0	5.5±0.4	2.5	0.32±0.10	100
MCBG-6.0	1/4	6.0	6.5±0.4	3.0	0.32±0.10	100
MCBG-7.0		7.0	7.5±0.4	3.5	0.32±0.10	100
MCBG-8.0	5/16	8.0	8.5±0.5	4.0	0.32±0.10	100
MCBG-9.0		9.0	9.5±0.5	4.5	0.35±0.10	100
MCBG-10	3/8	10	10.5±0.5	5.0	0.35±0.10	100
MCBG-11		11	11.5±0.5	5.5	0.40±0.10	100
MCBG-12		12	12.5±0.5	6.0	0.40±0.10	100
MCBG-13	1/2	13	13.5±0.5	6.5	0.40±0.10	100
MCBG-14		14	14.5±0.5	7.0	0.40±0.10	100
MCBG-15		15	15.5±0.5	7.5	0.40±0.10	100
MCBG-16	5/8	16	16.5±0.5	8.0	0.40±0.10	100
MCBG-17		17	17.5±0.5	8.5	0.40±0.10	100
MCBG-18		18	18.5±0.5	9.0	0.42±0.10	100
MCBG-20	3/4	20	20.5±0.5	10	0.45±0.10	100
MCBG-22		22	22.5±0.5	11	0.45±0.10	100
MCBG-25	1	25	25.5±0.5	12.5	0.45±0.10	50

Non flame retardant heat-shrinkable tube

Features:

- Shrink ratio: 2:1
- Working temperature: -55°C~+105°C
- Shrink temperature: Start at 70°C, minimum fully shrink at 100°C
- Excellently physical, chemical and electrical properties
- Flexible, halogen free alternative to PVC
- RoHS compliant

Application:

The glossy surface with bright colors, low temperature and rapid shrinkage, it is widely used for covering automotive antenna, appliance and other consumer goods.



1. Technical Data

Specifics	Test Method	Typical Performance
Tensile Strength	ASTM D2671	10.4MPa
Elongation (%)	ASTM D2671	200%
Tensile strength after heat aging	UL 224 158°C X168 hrs	≥7.3
Dielectric Strength	IEC60243	≥15kv/mm
Volume Resistivity	IEC60093	≥1×10 ¹⁴ Ω·cm

Remark:

1. Standard color: black, clear.
2. Special packaging and cutting pieces are available on requests.

2. Dimensions

Part No.	Size		As Supplied(mm) I.D. Min	After Recovery(mm)		Standard Packing m/spool
	Inch	mm		I.D. Max	W.T. Nom.	
MRS-105-1.0	1/16	1.0	1.5±0.2	0.9	0.36±0.10	200
MRS-105-1.5		1.5	2.0±0.2	1.0	0.36±0.10	200
MRS-105-2.0	3/32	2.0	2.5±0.2	1.3	0.45±0.10	200
MRS-105-2.5		2.5	3.0±0.2	1.5	0.45±0.10	200
MRS-105-3.0	1/8	3.0	3.5±0.2	1.8	0.45±0.10	200
MRS-105-3.5		3.5	4.0±0.2	2.0	0.45±0.10	200
MRS-105-4.0		4.0	4.5±0.2	2.3	0.45±0.10	200
MRS-105-4.5	3/16	4.5	5.0±0.2	2.5	0.45±0.10	100
MRS-105-5.0		5.0	5.5±0.2	3.0	0.56±0.10	100
MRS-105-6.0	1/4	6.0	6.5±0.2	3.5	0.56±0.10	100
MRS-105-7.0		7.0	7.5±0.3	4.0	0.56±0.10	100
MRS-105-8.0	5/16	8.0	8.5±0.3	4.5	0.56±0.10	100
MRS-105-9.0		9.0	9.5±0.3	5.0	0.56±0.10	100
MRS-105-10	3/8	10	10.5±0.3	5.5	0.56±0.10	100
MRS-105-11		11	11.5±0.3	6.0	0.56±0.10	100
MRS-105-12		12	12.5±0.3	6.5	0.56±0.10	100
MRS-105-13	1/2	13	13.5±0.3	7.0	0.70±0.10	100
MRS-105-14		14	14.5±0.3	7.5	0.70±0.10	100
MRS-105-15		15	15.5±0.4	8.0	0.70±0.10	100
MRS-105-16	5/8	16	16.5±0.4	8.5	0.70±0.10	100
MRS-105-17		17	17.5±0.4	9.0	0.70±0.10	100
MRS-105-18		18	19±0.5	10.0	0.70±0.10	100
MRS-105-20	3/4	20	22±0.5	11.0	0.80±0.15	100
MRS-105-22		22	24±0.5	12.5	0.80±0.15	50
MRS-105-25	1	25	26±0.5	14.0	0.90±0.15	50
MRS-105-28		28	29±0.5	15.0	0.90±0.15	50
MRS-105-30		30	31.5±1.0	17.5	1.0±0.15	50
MRS-105-35	1-1/4	35	36.5±1.0	20.0	1.0±0.15	50
MRS-105-40	1-1/2	40	41.5±1.0	22.5	1.0±0.15	50
MRS-105-45		45	46±1.0	25.0	1.0±0.15	50

135°C heat-shrinkable tube (2:1 & 3:1)

Features:

- Shrink ratio: 2:1 & 3:1
- Working temperature: -55°C~+135°C
- Shrink temperature: Start at 90°C, minimum fully shrink at 110°C
- Flexible, flame retardant
- Excellent insulation, protection and identification
- Resistant to common fluids and solvents
- Meet SAE-AMS-DTL, RoHS compliant

Application:

It is used for insulation and strain relief of wire terminations and electrical connections. It is also suitable for light-duty harnessing, jacketing and identification of wires, cables, electrical and electronic components.



1. Technical Data

Specifies	Test Method	Typical Performance
Tensile Strength	ASTM D2671	10.4MPa
Elongation (%)	ASTM D2671	200%
Tensile strength after heat aging	UL 224 175°C X168 hrs	≥7.3 MPa
Elongation after aging (%)	UL 224 175°C X168 hrs	≥100%
Heat shock	UL 224 250°C X4 hrs	No dripping No cracking
Dielectric Strength	ASTM D149	≥15kv/mm
Volume Resistivity	IEC 60093	≥1×10 ¹⁴ Ω·cm
Corrosion	ASTM D2671	Pass

Remark:
1. Standard color: black.
2. Special packaging, colors and cutting pieces are available on requests.

2. Dimensions MRS G-135G2(2:1)

Part No.	Size		As Supplied (mm)		After Recovery (mm)		Standard Packing m/spool
	Inch	mm	I.D. Min	I.D. Max.	W.T. Nom.		
MRS G-135G2-1.0	1/16	1.0	1.5±0.20	0.65	0.36±0.10	200	
MRS G-135G2-2.0	3/32	2.0	2.5±0.20	1	0.45±0.10	200	
MRS G-135G2-3.0	1/8	3.0	3.5±0.20	1.5	0.45±0.10	200	
MRS G-135G2-4.5	3/16	4.5	5.0±0.20	2.3	0.45±0.10	100	
MRS G-135G2-6.0	1/4	6.0	6.5±0.20	3	0.56±0.10	100	
MRS G-135G2-9.0	3/8	9.0	9.5±0.30	4.5	0.56±0.10	100	
MRS G-135G2-12	1/2	12	12.7±0.30	6.4	0.56±0.10	50	
MRS G-135G2-16	5/8	16	16.5±0.40	8	0.70±0.10	50	
MRS G-135G2-18	3/4	18	19.1±0.50	9.5	0.70±0.10	50	
MRS G-135G2-25	1	25	26±0.50	12.5	0.90±0.15	50	
MRS G-135G2-40	1-1/2	40	41.5±1.0	20	1.10±0.15	50	
MRS G-135G2-50	2	50	50.8	25	1.14±0.12	25	
MRS G-135G2-80	3	80	80	40	1.27±0.12	25	
MRS G-135G2-100	4	100	101.6	50	1.40±0.20	25	

3. Dimensions MRS G-135G3 (3:1)

Part No.	Size		As supplied (mm)		After Recovery (mm)		Standard Packing m/spool
	Inch	mm	I.D. Min	I.D. Max.	W.T. Nom.		
MRS G-135G3-1.5	1/16	1.5	1.5	0.5	0.45±0.10	200	
MRS G-135G3-3	1/8	3.0	3	1	0.55±0.10	200	
MRS G-135G3-4.5	3/16	4.5	4.5	1	0.6±0.10	100	
MRS G-135G3-6	1/4	6.0	6	2	0.65±0.10	100	
MRS G-135G3-9	3/8	9.0	9	3	0.75±0.15	50	
MRS G-135G3-12	1/2	12	12	4	0.75±0.15	50	
MRS G-135G3-15	5/8	15	15	5	0.80±0.15	50	
MRS G-135G3-18	3/4	18	18	6	0.85±0.15	50	
MRS G-135G3-24	1	24	24	8	1.0±0.20	25	
MRS G-135G3-30	1-1/4	30	30	10	1.15±0.20	25	
MRS G-135G3-39	1-1/2	39	39	13	1.5±0.20	25	
MRS G-135G3-50	2	50	50	16	2.5±0.20	25	
MRS G-135G3-60		60	60	20	2.6±0.20	25	
MRS G-135G3-70		70	70	23	2.6±0.20	25	
MRS G-135G3-80	3	80	80	26	2.6±0.20	25	
MRS G-135G3-90		90	90	30	2.6±0.20	25	
MRS G-135G3-100	4	100	100	33	2.6±0.20	25	

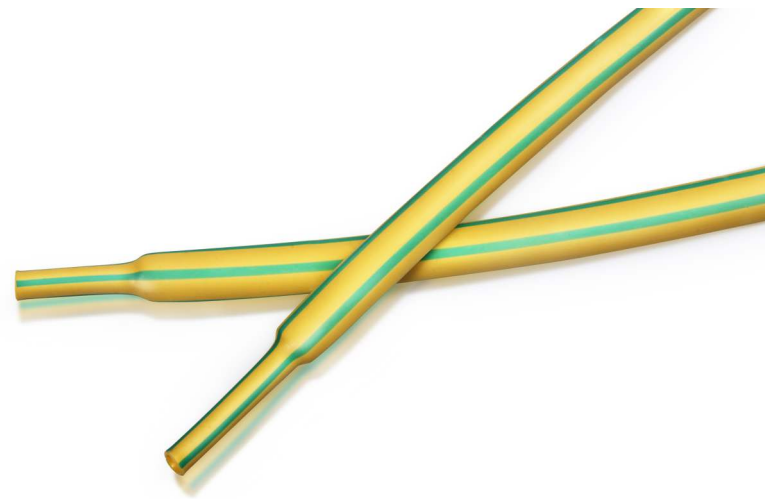
Yellow & Green heat-shrinkable tube

Features:

- Shrink ratio: 2:1 & 3:1
- Working temperature: -55°C~+125°C
- Shrink temperature: Start at 70°C, minimum fully shrink at 110°C
- Flame retardant, low smoke
- Special dual colors for instant identification
- RoHS, REACH compliant

Application:

The unique yellow & green striped color used for identifying earth cables, which applying to wire marking, color coding, electrical insulation of wire harness assemblies.



1. Technical Data

Specifics	Test Method	Typical Performance
Tensile strength (MPa)	ASTM D2671	≥10.4MPa
Elongation (%)	ASTM D2671	≥200%
Tensile strength after aging	UL224 158°C×168hr	≥7.3MPa
Elongation after aging (%)	UL224 158°C×168hr	≥100%
Heat shock	UL224 250°C×4hr	No dripping No cracking
Dielectric strength(kv/mm)	IEC 60243	≥15kV/mm
Volume resistivity(Ω cm)	IEC 60093	≥1×10 ¹⁴ Ω.cm
Corrosion action	UL 224 158°C X 168 hrs	Pass
Copper compatibility	UL 224 158°C X 168 hrs	Pass

2. Dimensions MRS-G-YG3 (3:1)

Part No.	Size		As supplied Internal Diameter (mm)	After Recovery(mm)		Standard Package (m/spool)
	Inch	Metric (mm)		Max Internal diameter (mm)	Wall thickness (mm)	
MRS-G-YG3-3.2	1/8	3.2	3.2	1.0	0.55±0.15	200
MRS-G-YG3-4.8	3/16	4.8	4.8	1.5	0.60±0.15	100
MRS-G-YG3-6.4	1/4	6.4	6.4	2.0	0.65±0.15	100
MRS-G-YG3-9.5	3/8	9.5	9.5	3.0	0.75±0.15	50
MRS-G-YG3-12.7	1/2	12.7	12.7	4.0	0.75±0.20	50
MRS-G-YG3-19.1	3/4	19.1	19.1	6.0	0.85±0.20	50
MRS-G-YG3-25.4	1	25.4	25.4	8.0	1.00±0.20	50
MRS-G-YG3-39.0	1-1/2	39.0	39.0	13.0	1.40±0.20	50

Remark:
 1. Standard color: yellow & green.
 2. Special packaging and cutting pieces are available on requests.

3. Dimensions MRS-G-YG2 (2:1)

Part No.	Size		As supplied(mm)		After Recovery (mm)		Standard Packing m/spool
	Inch	mm	I. D.	W.T.	I.D.	W.T.	
MRS-G-YG2-1.0	1/16	Φ1.0	1.5±0.3	0.15±0.08	≤0.70	0.28±0.10	200
MRS-G-YG2-1.5		Φ1.5	2.0±0.3	0.18±0.08	≤0.85	0.30±0.10	200
MRS-G-YG2-2.0	3/32	Φ2.0	2.5±0.3	0.18±0.08	≤1.00	0.35±0.10	200
MRS-G-YG2-2.5		Φ2.5	3.0±0.3	0.18±0.08	≤1.30	0.36±0.10	200
MRS-G-YG2-3.0	1/8	Φ3.0	3.5±0.4	0.18±0.08	≤1.50	0.38±0.10	200
MRS-G-YG2-3.5		Φ3.5	4.0±0.4	0.22±0.08	≤1.80	0.40±0.10	200
MRS-G-YG2-4.0		Φ4.0	4.5±0.4	0.25±0.08	≤2.00	0.45±0.10	200
MRS-G-YG2-4.5	3/16	Φ4.5	5.0±0.4	0.25±0.08	≤2.30	0.45±0.10	100
MRS-G-YG2-5.0		Φ5.0	5.5±0.4	0.25±0.08	≤2.50	0.45±0.10	100
MRS-G-YG2-6.0	1/4	Φ6.0	6.5±0.4	0.28±0.08	≤3.00	0.50±0.10	100
MRS-G-YG2-7.0		Φ7.0	7.5±0.4	0.28±0.08	≤3.50	0.50±0.10	100
MRS-G-YG2-8.0	5/16	Φ8.0	8.5±0.5	0.28±0.10	≤4.00	0.55±0.10	100
MRS-G-YG2-9.0		Φ9.0	9.5±0.5	0.30±0.10	≤4.50	0.55±0.10	100
MRS-G-YG2-10	3/8	Φ10	10.5±0.5	0.30±0.10	≤5.00	0.55±0.10	100
MRS-G-YG2-11		Φ11	11.5±0.5	0.30±0.10	≤5.50	0.60±0.10	100
MRS-G-YG2-12		Φ12	12.5±0.5	0.30±0.10	≤6.00	0.60±0.10	100
MRS-G-YG2-13	1/2	Φ13	13.5±0.5	0.35±0.12	≤6.50	0.60±0.10	100
MRS-G-YG2-14		Φ14	14.5±0.5	0.35±0.12	≤7.00	0.65±0.10	100
MRS-G-YG2-15		Φ15	15.5±0.6	0.40±0.12	≤7.50	0.70±0.10	100
MRS-G-YG2-16	5/8	Φ16	17.0±0.6	0.40±0.12	≤8.00	0.70±0.10	100
MRS-G-YG2-17		Φ17	17.5±0.6	0.40±0.12	≤8.50	0.70±0.10	100
MRS-G-YG2-18		Φ18	19.0±0.7	0.40±0.15	≤9.00	0.70±0.15	100
MRS-G-YG2-20	3/4	Φ20	22.0±0.7	0.40±0.15	≤10.00	0.75±0.15	100
MRS-G-YG2-22		Φ22	24.0±0.7	0.40±0.15	≤11.00	0.80±0.15	100
MRS-G-YG2-25	1	Φ25	26.0±0.7	0.55±0.15	≤12.50	0.90±0.15	50
MRS-G-YG2-28		Φ28	29.0±0.7	0.55±0.15	≤14.00	0.90±0.15	50
MRS-G-YG2-30		Φ30	31.5±0.7	0.55±0.15	≤15.00	0.95±0.15	50
MRS-G-YG2-35	1-1/4	Φ35	36.5±0.7	0.55±0.15	≤17.50	0.95±0.15	50
MRS-G-YG2-40	1-1/2	Φ40	41.5±0.7	0.55±0.15	≤20.00	1.00±0.20	50
MRS-G-YG2-45		Φ45	46.0±0.7	0.55±0.15	≤22.50	1.00±0.20	25
MRS-G-YG2-50	2	Φ50	51.0±0.7	0.55±0.15	≤25.00	1.00±0.20	25
MRS-G-YG2-60		Φ60	≥60	0.60±0.15	≤30.00	1.10±0.20	25
MRS-G-YG2-70		Φ70	≥70	0.65±0.15	≤35.00	1.20±0.20	25
MRS-G-YG2-80	3	Φ80	≥80	0.70±0.15	≤40.00	1.30±0.20	25
MRS-G-YG2-90		Φ90	≥90	0.75±0.15	≤45.00	1.50±0.20	25
MRS-G-YG2-100	4	Φ100	≥100	0.80±0.20	≤50.00	1.65±0.20	25
MRS-G-YG2-120		Φ120	≥120	0.85±0.20	≤60.00	1.70±0.20	25
MRS-G-YG2-150		Φ150	≥150	0.90±0.20	≤75.00	1.70±0.20	25
MRS-G-YG2-180		Φ180	≥180	0.95±0.30	≤90.00	1.75±0.20	25

Heat-shrinkable printable continuous marker tube

Features:

- Shrink ratio : 2:1 & 3:1
- Working temperature : -55°C~+125°C
- Flame retardant, halogen free, low smoke emission
- Computer printable, permanent identification
- Meets UL224 125°C 600V

Application:

This tubing can be custom printed with words and symbols on both sides by thermal transfer equipment and all markings are permanent after printing. It is used to identify and mark wire, cable, tools, hoses and equipment in subway, public transportation, aerospace and shipbuilding industries.

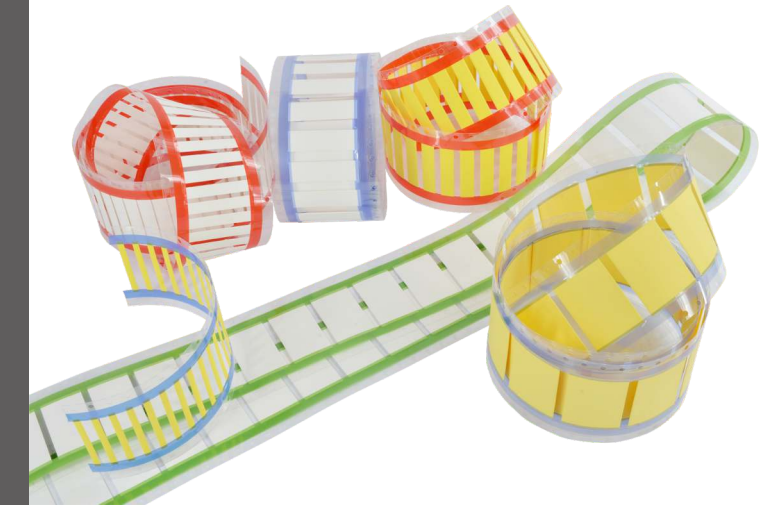


Features:

- Shrink ratio : 2:1 & 3:1
- Working temperature : -55°C~+125°C
- Flame retardant, halogen free, low smoke emission
- Computer printable, permanent identification
- Meets NF F 16101, DIN5510 and ASTM D 2671 part B
- RoHS, Halogen free

Application:

This tubing can be custom printed with words and symbols on both sides by thermal transfer equipment and all markings are permanent after printing. It is used to identify and mark wire, cable, tools, hoses and equipment in subway, public transportation, aerospace and shipbuilding industries.



1. Technical Data

Specifics	Test Method	Typical Performance
Tensile strength (MPa)	ASTM D2671	≥10.4 MPa
Ultimate elongation (%)	ASTM D2671	≥400%
Longitudinal change	UL 224	≤5%
Eccentricity	ASTM D 2671	≤30%
Heat aging tensile strength	UL 224 158 °C X168 hrs	>7.3 MPa
Ultimate elongation	UL 224 158 °C X168 hrs	>200%
Flammability	ASTM D 2671 38.2 Procedure B	Self extinguish in 60 sec.
Voltage withstand	UL224 / AC 2500V, 1min.	No breakdown
Volume resistivity	ASTM D 2671	≥1×10 ¹⁴ Ω·cm
Corrosion stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion

2. Dimensions

Part No.	As Supplied (Min.)		After Recovery I.D. Max.(mm)	Flat Width (mm)	Double W.T. before recovery (mm)	Application Scope (mm)	Packing (m/reel)
	Inch	mm					
HSMT2-2.4	3/32	2.4	1.2	3.8±0.2	0.4±0.04	1.27~1.90	100
HSMT2-3.2	1/8	3.2	1.6	5.1±0.3	0.4±0.06	1.75~2.66	100
HSMT2-4.8	1/5	4.8	2.4	7.7±0.3	0.4±0.06	2.54~4.06	100
HSMT2-6.4	1/4	6.4	3.2	10.2±0.3	0.4±0.06	3.81~5.46	100
HSMT2-9.5	3/8	9.5	4.8	15.2±0.3	0.4±0.06	5.59~8.12	100
HSMT2-12.7	1/2	12.7	6.4	20.3±0.4	0.4±0.06	6.99~10.79	100
HSMT2-19.1	3/4	19.1	9.5	30.5±0.4	0.4±0.06	10.16~16.25	50
HSMT2-25.4	1	25.4	12.7	40.6±0.5	0.4±0.06	14.30~21.59	50
HSMT2-38.1	1 1/2	38.1	19.1	61.0±0.5	0.4±0.06	21.00~35.0	50

Remark:
 1. Standard color: yellow, white, other colors on request.
 2. The wall thickness : 0.26~0.30mm.
 3. Special size, packaging and cutting pieces are available on requests.
 4. 3:1 shrink ratio on request.

1. Dimensions

Part No.	As Supplied (Min.)		After Recovery I.D. Max.(mm)	Flat Width (mm)	Double W.T. before recovery (mm)	HSIS2(2:1)	
	Inch	mm				Length	Packing pcs/coil
HSIS2-2.4	3/32	2.79±0.20	≤1.18	5.0±0.3	0.48±0.10	13mm	2500
HSIS2-3.2	1/8	3.64±0.23	≤1.59	6.3±0.4	0.48±0.10		2000
HSIS2-4.8	1/5	5.26±0.25	≤2.36	8.9±0.4	0.49±0.10	19mm	2000
HSIS2-6.4	1/4	6.92±0.28	≤3.18	11.5±0.4	0.50±0.10		1500
HSIS2-9.5	3/8	10.2±0.32	≤4.75	16.7±0.5	0.51±0.11	25mm	1000
HSIS2-12.7	1/2	13.5±0.36	≤6.35	21.8±0.6	0.52±0.11		500
HSIS2-19.1	3/4	20.1±0.40	≤9.53	32.2±0.6	0.53±0.11	38mm	500
HSIS2-25.4	1	26.7±0.45	≤12.7	42.5±0.7	0.55±0.12		500
HSIS2-38.1	1 1/2	39.8±0.51	≤19.1	63.2±0.8	0.57±0.12	50mm	250
HSIS2-51	2	53.0±0.56	≤25.4	83.9±0.9	0.58±0.13		250

Part No.	As Supplied (Min.)		After Recovery I.D. Max.(mm)	Flat Width (mm)	Double W.T. before recovery (mm)	HSIS3(3:1)	
	Inch	mm				Length	Packing pcs/coil
HSIS3-2.4	3/32	2.79±0.20	≤0.79	5.0±0.3	0.47±0.10	13mm	2500
HSIS3-3.2	1/8	3.64±0.23	≤1.06	6.3±0.4	0.48±0.10		2000
HSIS3-4.8	1/5	5.26±0.25	≤1.59	8.9±0.4	0.49±0.10	19mm	2000
HSIS3-6.4	1/4	6.92±0.28	≤2.36	11.5±0.4	0.50±0.10		1500
HSIS3-9.5	3/8	10.2±0.32	≤3.18	16.7±0.5	0.52±0.11	25mm	1000
HSIS3-12.7	1/2	13.5±0.36	≤4.75	21.8±0.6	0.53±0.11		500
HSIS3-19.1	3/4	20.1±0.40	≤6.35	32.2±0.6	0.55±0.11	38mm	500
HSIS3-25.4	1	26.7±0.45	≤8.47	42.5±0.7	0.56±0.12		500
HSIS3-38.1	1 1/2	39.8±0.51	≤12.9	63.2±0.8	0.57±0.12	50mm	250
HSIS3-51	2	53.0±0.56	≤17.2	83.9±0.9	0.57±0.10		250

Remark:
 1. Standard color: yellow, white, other colors on request.
 2. Tear-off seam can be customized on request.

Dual wall adhesive heat-shrinkable tube

Features:

- Shrink ratio: 3:1 & 4:1
- Working temperature: -45°C~+125°C
- Shrink temperature: Start at 70°C, minimum fully shrink at 125°C
- Out jacket flame retardant, inner adhesive self-extinguished
- Super sealing against water, moisture or other contaminants
- High shrink ratio for installation without moving connectors

Application:

It offers super water-tight seal and protection for a wide assortment of electronic wiring components including wire splices, wire and cable bundles, and harness breakout in automotive, truck, and marine cable and other industrial fields.



1. Technical Data

Specifics	Test Method	Typical Performance
Tensile strength	ASTM D2671	≥10.4 MPa
Elongation (%)	ASTM D2671	≥300%
Tensile strength after heat aging	UL 224 158°CX168 hrs	≥7.3 MPa
Elongation after aging (%)	UL 224 158°CX168 hrs	≥100%
Heat shock	UL 224 250°CX4 hrs	No dripping No cracking
Dielectric strength	IEC 60243	≥15kV/mm
Volume resistivity	IEC 60093	≥1×10 ¹⁴ Ω·cm

2. Technical Data

Specifics	Test Method	Typical Performance
Tensile strength	ASTM D2671	≥10.4 MPa
Elongation (%)	ASTM D2671	≥300%
Tensile strength after heat aging	UL 224 158°CX168 hrs	≥7.3 MPa
Elongation after aging (%)	UL 224 158°CX168 hrs	≥100%
Heat shock	UL 224 250°CX4 hrs	No dripping No cracking
Dielectric strength	IEC 60243	≥15kV/mm
Volume resistivity	IEC 60093	≥1×10 ¹⁴ Ω·cm

Remark:
1. Standard color: black.
2. Special sizes, colors and packages are available on requests.

3. Dimensions MSBG3(3:1)

Part No.	Size		As Supplied(mm) I.D. Min.	After Recovery(mm) I.D. Max.		Standard Packing
	Inch	mm		I.D. Min.	I.D. Max.	
MSBG3-3.2	1/8	3.2	3.2	1	1	200 m/spool
MSBG3-4.8	3/16	4.8	4.8	1.6	1.1	100 m/spool
MSBG3-6.4	1/4	6.4	6.4	2	1.2	100 m/spool
MSBG3-7.9	5/16	7.9	7.9	2.7	1.4	100 m/spool
MSBG3-9.5	3/8	9.5	9.5	3.2	1.4	50 m/spool
MSBG3-12.7	1/2	12.7	12.7	4.2	1.7	1.22m/pcs
MSBG3-15.0	5/8	15.0	15.0	5.0	1.8	1.22m/pcs
MSBG3-19.1	3/4	19.1	19.1	5	1.8	1.22m/pcs
MSBG3-25.4	1	25.4	25.4	6.3	2	1.22m/pcs
MSBG3-30.0	1-1/4	30	30	10.2	2.2	1.22m/pcs
MSBG3-39.0	1-1/2	39	39	13.5	2.4	1.22m/pcs
MSBG3-50.8	2	50	50	17	2.7	1.22m/pcs
MSBG3-64.0	2-1/2	64	64	21	3	1.22m/pcs
MSBG3-75.0	3	75	75	25	3.2	1.22m/pcs
MSBG3-90.0	3-1/2	90	90	30	3.3	1.22m/pcs
MSBG3-100.0	4	100	100	34	3.5	1.22m/pcs
MSBG3-125.0	5	125	125	42	3.5	1.22m/pcs

4. Dimensions MSBG4(4:1)

Part No.	As Supplied I.D.(mm)	After Recovery (mm)			Standard Packing m/spool
		I.D.	W.T.	Adhesive thickness	
MSBG4-4.0	4.0	1.0	1.0	0.4	200m/spool
MSBG4-6.0	6.0	1.5	1.1	0.4	100 m/spool
MSBG4-8.0	8.0	2.0	1.5	0.5	50 m/spool
MSBG4-12.0	12.0	3.0	1.7	0.5	1.22m/pcs
MSBG4-16.0	16.0	4.0	2.0	0.5	1.22m/pcs
MSBG4-20.0	20.0	5.0	2.3	0.6	1.22m/pcs
MSBG4-24.0	24.0	6.0	2.5	0.6	1.22m/pcs
MSBG4-32.0	32.0	8.0	2.8	0.7	1.22m/pcs
MSBG4-52.0	52.0	13.0	3.0	0.7	1.22m/pcs

Medium wall heat-shrinkable tube

Features:

- Shrink ratio: 3:1
- Working temperature: -45°C~+125°C
- Shrink temperature: Start at 70°C, minimum fully shrink at 125°C
- High abrasion and corrosion resistance
- Excellent electrical insulation
- UV resistance and water proof
- ZBG series without adhesive, ZBGJ series with adhesive

Application:

It is suitable for protecting a variety of low voltage electrical and mechanical application, where the greater insulation, UV resistance and moisture proof are required, eg: communication cable, auto and marine cables.



1. Technical Data

Specifics	Test Method	Standard
Tensile Strength	ASTM D2671	≥12 MPa
Elongation	ASTM D2671	≥300%
Density	ASTM D792	1.2 g/cm ³
Longitudinal change	UL 224	≤8%
Elongation after aging	UL224 158°C 168hrs	≥100%
Heat shock	UL224 225°C 4hrs	No cracking
Dielectric strength	IEC 60243	≥15 kV/mm
Volume resistivity	IEC 60093	≥1×10 ¹⁴ Ω·cm
Water absorption	ASTM-D570	≤0.5%

2. Hot Melting Adhesive Specifics

Specifics	Test Method	Standard
Water absorption	ASTM D570	≤0.5%
Softening point	ASTM E28	95±5°C
Peel strength(PE)	ASTM D1000	≥120N/25mm
Peel strength(AL)	ASTM D1000	≥80N/25mm

Remark:
1.Standard color: black.
2.Cutting pieces are available on requests.

3. Dimensions ZBG(without adhesive)

Part No.	Size mm	As Supplied(mm)		After Recovery (mm)		Standard Packing (m/pcs)
		I.D.	I.D.	I.D.	W.T.	
ZBG-6	6.0/2.0	≥6.0	≤2.0	1.80±0.25	1.22	
ZBG-10.2	10.2/3.0	≥10.2	≤3.0	1.75±0.25	1.22	
ZBG-16	16.0/5.0	≥16.0	≤5.0	1.90±0.25	1.22	
ZBG-19.1	19.1/5.6	≥19.1	≤5.6	2.45±0.25	1.22	
ZBG-25	25.0/8.0	≥25.0	≤8.0	2.45±0.25	1.22	
ZBG-28	28.0/9.0	≥28.0	≤9.0	2.60±0.25	1.22	
ZBG-35	35.0/10.2	≥35.0	≤10.2	2.70±0.25	1.22	
ZBG-38.1	38.1/12.0	≥38.1	≤12.0	2.70±0.25	1.22	
ZBG-43.2	43.2/12.7	≥43.2	≤12.7	2.70±0.25	1.22	
ZBG-55	55.0/16.0	≥55.0	≤16.0	2.80±0.30	1.22	
ZBG-63	63.0/19.0	≥63.0	≤19.0	3.00±0.30	1.22	
ZBG-75	75.0/22.0	≥75.0	≤22.0	3.00±0.30	1.22	
ZBG-85	85.0/25.0	≥85.0	≤25.0	3.30±0.30	1.22	
ZBG-95	95.0/29.0	≥95.0	≤29.0	3.70±0.35	1.22	
ZBG-115	115.0/34.0	≥115.0	≤34.0	3.70±0.35	1.22	
ZBG-140	140.0/42.0	≥140.0	≤42.0	3.70±0.35	1.22	

4. Dimensions ZBGJ(with adhesive)

Part No.	Size mm	As Supplied(mm)		After Recovery (mm)			Standard Packing (m/pc)
		I.D.	I.D.	Out layer W.T.	Adhesive Layer W.T.	Total W.T.	
ZBGJ-10.2	10.2/3.0	≥10.2	≤3.0	1.4±0.20	0.35±0.10	1.75±0.25	1.22
ZBGJ-16	16/5.0	≥16	≤5.0	1.5±0.20	0.40±0.10	1.90±0.25	1.22
ZBGJ-19.1	19.1/5.6	≥19.1	≤5.6	2.0±0.20	0.45±0.10	2.45±0.25	1.22
ZBGJ-25	25/8	≥25	≤8	2.0±0.20	0.45±0.10	2.45±0.25	1.22
ZBGJ-28*	28/6	≥28	≤6	2.5±0.20	0.65±0.10	3.10±0.30	1.22
ZBGJ-28	28/9	≥28	≤9	2.0±0.20	0.50±0.10	2.60±0.25	1.22
ZBGJ-35	35/10.2	≥35	≤10.2	2.2±0.20	0.50±0.10	2.70±0.25	1.22
ZBGJ-38.1	38.1/12	≥38.1	≤12	2.2±0.20	0.50±0.10	2.70±0.25	1.22
ZBGJ-43.2	43.2/12.7	≥43.2	≤12.7	2.2±0.20	0.50±0.10	2.70±0.25	1.22
ZBGJ-55	55/16	≥52.1	≤16	2.3±0.25	0.50±0.15	2.80±0.30	1.22
ZBGJ-63	63/19	≥63	≤19	2.5±0.25	0.50±0.15	3.00±0.30	1.22
ZBGJ-75	75/22	≥75	≤22	2.6±0.25	0.50±0.15	3.00±0.30	1.22
ZBGJ-85	85/25	≥85	≤25	2.8±0.30	0.50±0.15	3.30±0.30	1.22
ZBGJ-95	95/29	≥95	≤29	3.1±0.30	0.60±0.20	3.70±0.35	1.22
ZBGJ-115	115/34	≥115	≤34	3.1±0.30	0.60±0.20	3.70±0.35	1.22
ZBGJ-140	140/42	≥140	≤42	3.1±0.30	0.60±0.20	3.70±0.35	1.22

Heavy wall heat-shrinkable tube

Features:

- Shrink ratio: 3:1
- Working temperature: -45°C~+125°C
- Shrink temperature: Start at 70°C, minimum fully shrink at 125°C
- Optional adhesive liner for complete environmental protection and insulation
- High abrasion and impact resistance
- HBG series without adhesive, HBGJ series with adhesive

Application:

It provides maximum reliability of insulation and mechanical protection for cable joints and terminations in high voltage cables, as well as the pipe anti-corrosion, moisture proof and abrasion resistance.



1. Technical Data

Specifics	Test Method	Standard
Tensile Strength	ASTM D2671	≥12 MPa
Elongation	ASTM D2671	≥300%
Density	ASTM D792	1.2 g/cm ³
Longitudinal change	UL 224	≤8%
Elongation after aging	UL224 158°C168hrs	≥100%
Dielectric strength	IEC 60243	≥15 kV/mm
Volume resistivity	IEC 60093	≥1×10 ¹⁴ Ωcm

2. Hot Melting Adhesive Specifics

Specifics	Test Method	Standard
Water absorption	ASTM D570	≤0.5%
Softening point	ASTM E28	95±5 °C
Peel strength(PE)	ASTM D1000	≥120N/25mm
Peel strength(AL)	ASTM D1000	≥80N/25mm

Remark:
1. Standard color: black.
2. Cutting pieces are available on requests.

3. Dimensions HBG(without adhesive)

Part No.	As Supplied(mm)	After Recovery (mm)		Standard Packing (m/pcs)
	I.D.	I.D.	W.T.	
HBG-9/3	≥9.0	≤3.0	2.30±0.25	1.22
HBG-13/4	≥13.0	≤4.0	2.75±0.25	1.22
HBG-20/6	≥20.0	≤6.0	2.90±0.25	1.22
HBG-28/9	≥28.0	≤9.0	2.90±0.25	1.22
HBG-33/10.2	≥33.0	≤10.2	3.60±0.25	1.22
HBG-38.1/12	≥38.1	≤12.0	4.00±0.30	1.22
HBG-43.2/12.7	≥43.2	≤12.7	5.00±0.35	1.22
HBG-55/16	≥55.0	≤16.0	5.00±0.35	1.22
HBG-75/22	≥75.0	≤22.0	5.00±0.35	1.22
HBG-85/25	≥85.0	≤25.0	5.00±0.35	1.22
HBG-105/30	≥105	≤30.0	5.10±0.35	1.22
HBG-120/39	≥120	≤39.0	5.10±0.35	1.22
HBG-140/42	≥140	≤42.0	5.10±0.35	1.22

4. Dimensions HBGJ(with adhesive)

Part No.	As Supplied(mm)	After Recovery (mm)			Standard Packing (m/pcs)	
		I.D.	Out layer W.T.	Adhesive Layer W.T.		
HBGJ-9/3	≥9.0	≤3.0	2.0±0.20	0.35±0.10	2.30±0.25	1.22
HBGJ-13/4	≥13.0	≤4.0	2.4±0.20	0.35±0.10	2.75±0.25	1.22
HBGJ-20/6	≥20.0	≤6.0	2.5±0.20	0.40±0.10	2.90±0.25	1.22
HBGJ-28/9	≥28.0	≤9.0	2.5±0.20	0.40±0.10	2.90±0.25	1.22
HBGJ-33/10.2	≥33.0	≤10.2	3.2±0.20	0.40±0.10	3.60±0.25	1.22
HBGJ-38.1/12	≥38.1	≤12.0	3.4±0.25	0.60±0.15	4.00±0.30	1.22
HBGJ-43.2/12.7	≥43.2	≤12.7	3.8±0.30	0.70±0.20	5.00±0.35	1.22
HBGJ-55/16	≥55.0	≤16.0	4.0±0.30	0.70±0.20	5.00±0.35	1.22
HBGJ-75/22	≥75.0	≤22.0	4.3±0.30	0.70±0.20	5.00±0.35	1.22
HBGJ-85/25	≥85.0	≤25.0	4.3±0.30	0.70±0.20	5.00±0.35	1.22
HBGJ-105/30	≥105	≤30.0	4.3±0.30	0.80±0.25	5.10±0.35	1.22
HBGJ-120/39	≥120	≤39.0	4.3±0.30	0.80±0.25	5.10±0.35	1.22
HBGJ-140/42	≥140	≤42.0	4.3±0.30	0.80±0.25	5.10±0.35	1.22

Dual wall adhesive semi-rigid tube(3:1 & 4:1)

Features:

- Shrink ratio: 4:1
- Working temperature: -45°C~+125°C
- Shrink temperature: Start at 70°C, minimum fully shrink at 125°C
- Longitudinal shrinkage: ≤8%
- Seal and water proof
- High shrink ratio
- Excellent insulation and abrasion resistance

Application:

It is specially designed to insulate, seal and protect wire splice, terminations and components in automotive industrial.



Features:

- Shrink ratio: 2:1
- Working temperature: -55°C~+150°C
- Shrink temperature: Start at 100°C, minimum fully shrink at 175°C
- Resistance to oil, diesel, hydraulic fluids and chemical
- Flame retardant, reliable abrasion Specifics
- Meet RoHS, AMS-DTL-23053/16

Application:

The special properties of abrasion, high temperature and fluid resistance provide the excellent protecting for cables, wiring harnesses in military and railway vehicles.



1. Technical Data

Specifics	Test Method	Typical Performance
Tensile strength	ASTM D2671	≥12 MPa
Elongation (%)	ASTM D2671	≥300%
Tensile strength after heat aging	UL 224 158°CX168hrs	≥7.3 MPa
Elongation after aging(%)	UL 224 158°CX168hrs	≥100%
Dielectric strength	IEC60243	≥15kV/mm
Volume resistivity	IEC 60093	≥1×10 ¹⁴ Ω · cm
Hot melt adhesive Specifics		Test Result
Water Absorption	ASTM D570	≤0.5%
Softening Point	ASTM E 28	96°C
Strength of peering (PE)	ASTM D1000	≥120N/25mm
Strength of peering (AL)	ASTM D1000	≥80N/25mm

2. Dimensions

Part No.	Size		As Supplied(mm)		After Recovery (mm)			Standard Packing m/spool
	inch	mm	I.D.		I.D.	W.T.	Adhesive thickness	
MSBG4-GR-6	1/4	6	6		1.27	1.30±0.15	0.56±0.15	100
MSBG4-GR-8	5/16	8	8		1.65	1.65±0.15	0.76±0.15	100
MSBG4-GR-12	1/2	12	12		2.41	2.00±0.15	1.02±0.15	1.22m/pcs
MSBG4-GR-18	3/4	18	18		4.45	2.50±0.15	1.37±0.15	1.22m/pcs

Remark:
1.Standard color: black.
2.Special size and cutting pieces are available on requests.

1. Technical Data

Item	Test Method	Typical data
Tensile strength (Mpa)	ASTM D2671	≥12Mpa
Elongation (%)	ASTM D2671	≥400%
Heat ageing tensile strength aged (Mpa)	ISO 188(166°C/168h)	≥8Mpa
Heat ageing elongation aged (Mpa)	ISO 188(166°C/168h)	≥220%
Fluid resistance strength (Mpa)	ISO 37 24hrs.(diesel 70°C,hydraulic 70°C, lubricant 100°C)	≥10Mpa
Fluid resistance elongation (%)	ISO 37 24hrs.(diesel 70°C,hydraulic 70°C, lubricant 100°C)	≥300%
Shrink ratio in axial direction (%)	ASTM D2671	±8%
Heat shock	4hrs/215°C	No crack and dripping
Flammability	UL224,VW-1	pass
Dielectric strength(KV/mm)	IEC60243	≥15KV/mm

2. Dimensions

Part No.	Size		As Supplied (mm)		After Recovery (mm)		Standard Packing m/spool
	Inch	mm	I.D. Min.	I.D. Max.	W.T. Nom.		
MRSB-DR-3.2	1/8	3.2	3.2		1.6	0.76±0.15	200
MRSB-DR-4.8	3/16	4.8	4.8		2.4	0.84±0.15	100
MRSB-DR-6.4	1/4	6.4	6.4		3.2	0.89±0.15	100
MRSB-DR-9.5	3/8	9.5	9.5		4.8	1.02±0.20	50
MRSB-DR-12.7	1/2	12.7	12.7		6.4	1.22±0.20	30
MRSB-DR-19.1	3/4	19	19		9.5	1.45±0.28	30
MRSB-DR-25.4	1	25.4	25.4		12.7	1.78±0.28	30
MRSB-DR-38.1	1-1/2	38	38		19.0	2.41±0.41	15
MRSB-DR-50.8	2	51	51		25.4	2.79±0.41	15
MRSB-DR-76.0	3	76	76		38.0	3.18±0.50	15

Remark:
1.Standard color: black.
2.Special packaging, colors and cutting pieces are available on requests.

Brake/Fuel line protection tube

Features:

- Shrink ratio: 1.5:1
- Working temperature: -45°C~+105°C
- Shrink temperature: Start at 70°C, minimum fully shrink at 110°C
- Longitudinal shrinkage: ≤8%
- Excellent oil and corrosion resistance
- High abrasion resistance
- Very flexible, low shrinkage temperature

Application:

It is ideal solution for the strain relief and mechanical protection of the brake/fuel line, hydraulic line which is subject to bending or clamping operations during manufacturing, installation or operation.



Features:

- Material: Polyolefin
- Working temperature: -55°C~+125°C
- Shrink ratio: 2:1
- Color: Black
- Approval: RoHS, Halogen Free
- Special air groove in the inner wall
- Special design provide very smooth shrinkage without creasing
- Air-tight seal when the rubber hose was bent

Application:

It is ideal mechanical protection of automotive water hose and other rubber hoses.



1. Technical Data

Specifics	Test method	Values
Tensile strength	ASTM D2671	≥12 MPa
Breakdown elongation	ASTM D2671	≥350%
Tensile strength	ASTM D2671	≥12 MPa
Breakdown elongation	ASTM D2671	≥300%
Outer layer density	ASTM D792	1.0
Water absorption	ASTM D570	≤0.4%
Heat shock (200°C/4hrs)	ASTM D2671	No dripping No cracking
Low temperature flexibility	ASTM D2671	-40°C/4hrs ,no cracking
Horizontal impact resistance(-35°C)	ASTM D746	No damage
Drop impact resistance(-35°C)	ASTM D746	No damage
Stress cracking resistance	ASTM D1693 part 5.3.6	No damage
Volume resistivity	ASTM D2671	≥10 ¹⁴ Ω • cm
Dielectric strength	ASTM D2671	≥15kV/mm

2. Dimensions

Part No.	As Supplied(mm)		After Recovered (mm)			Standard Packing m/spool
	I.D.		I.D. max.	W.T.	Adhesive W.T.	
MA3-5.5/3.3	5.5		3.3	1.0	0.2	200
MA3-6.5/4.7	6.5		4.7	1.0	0.2	200
MA3-8.5/6.0	8.5		6.0	1.0	0.2	100
MA3-11.0/7.0	11.0		7.0	1.0	0.2	100
MA3-15.0/9.5	15.0		9.5	1.0	0.2	100

Remark:
1. Standard color: yellow & green
2. Special packaging and cutting pieces are available on requests.

1. Technical Data

Physical	Tensile strength	ASTM D2671	≥14Mpa
	Breakdown elongation	ASTM D2671	≥450%
	Tensile strength	ASTM D2671	≥12MPa
	Breakdown elongation	ASTM D2671	≥350
Aging	Density	ASTM D792	1.1
	Water absorption	ASTM D570	≤0.3%
	Heat shock(200/4hrs)	ASTM D2671	No drop,no cracking
	Low temperature flexibility	ASTM D2671	50°C/4hrs,nocracking
	Hardness (Shore D)	ASTM D2671	30-40 HD
Electrical	Volume resistivity	ASTM D2671	10 ¹³ Ω.cm
	Dielectric strength	ASTM D2671	20KV/mm

2. Dimensions

Part No.	As supplied I.D. (D)	After Shrunk		Packing (m/spool)
		I.D. Max.(I)	W.T. (T)	
MA2-20/9	20	9	0.9	100
MA2-25/12	25	12	0.9	50
MA2-30/15	30	15	1	50
MA2-35/17	35	17	1.1	50
MA2-40/20	40	20	1.2	50
MA2-50/25	50	25	1.2	25
MA2-60/28	60	28	1.2	25
MA2-39/13*	39	13	1.5	50

Remark:
1. Special packing, sizes, colors and cutting in to different length can be supplied upon requests.
2. JDDMA2 39/13*, shrink ratio is 3:1

Heat-shrinkable tube for air-conditioning pipe

Features:

- Excellent corrosion resistance
- Eliminates noise and vibration
- Adheres to aluminum pipe when bent
- Halogen free

Application:

It is widely used for protecting A/C pipes in the automotive industry.



1. Technical Data

Material	PE
Color	Black
Operating temperature	-55°C~135°C
Shrink temperature	125°C
Shrink ratio	≥ 2:1
Approval	RoHS

2. Dimensions

Part No.	As supplied		After recovered		Packing (m/spool)
	I.D. (D)		I.D.(I)	W.T.	
MA4-12/6	12		6	0.8	50
MA4-19/6	19		6	0.8	50
MA4-19.0/7.8	19		7.8	0.8	50
MA4-19.0/9.5	19		9.5	0.8	50
MA4-21.0/7.8	21		7.8	0.8	50
MA4-22.0/7.5	22		7.5	1.0	50
MA4-22.0/12.7	22		12.7	0.7	50
MA4-25.4/9.5	25.4		9.5	0.7	50
MA4-26.0/7.8	26		7.8	1.0	50
MA4-27.0/12.7	27		12.7	0.7	50
MA4-32.0/16.0	32		16	0.9	50
MA4-38.1/19.0	38.1		19	1.0	50
MA4-40.0/14.0	40		14	0.9	50

Remark:
1.Special packing, sizes, colors and cutting in to different length can be supplied upon requests.
2.All the numerical data are the average or typical values, not including the customized sizes.

Heat-shrinkable textile sleeve

Features:

- Special woven construction
- Easily cover on the hoses with irregular shapes
- Suitable for used in rough environments
- Excellent abrasion resistance and noise reduction

Application:

It is widely used to protect the automotive rubber hoses, aircondition pipes, wire harnesses for anti abrasion, noisy reduction and fuel resistance.



1. Technical Data

Material	Polyolefin and polyester
Working temperature	-40°C~+125°C
Shrink temperature	110°C~185°C
Flammability	FMVSS302
Color	black
Shrink ratio	2:1
Approval	RoHS, Halogen Free
Tool	Heat gun, oven

2. Dimensions

Part No.	As supplied		After recovery (d)	Packing (m/spool)
	(D)			
HSS6400-010	10		5.0	100
HSS6400-020	20		10.0	100
HSS6400-025	25		12.5	100
HSS6400-030	30		15.0	100
HSS6400-034	34		17.0	100
HSS6400-040	40		20.0	50
HSS6400-050	50		25.0	50
HSS6400-060	60		30.0	50
HSS6400-070	70		35.0	50
HSS6400-080	80		40.0	50

Remark:
1.Special packing, sizes, colors and cutting in to different length can be supplied upon requests.
2.All the numerical data are the average or typical values, not including the customized sizes.

Halogen free heat-shrinkable bus bar tube (6~24kV)

Features:

- Shrink ratio: 2.5:1
- Working temperature: -40℃~+105℃
- Shrink temperature: 125℃
- Bus bar insulation and protection
- Halogen free, RoHS compliant
- Voltage class: 6~24kV

Application:

It is suitable for insulation and protection of bus bar against accidental flashover up to 24 kV, meanwhile it is ideal for using in switchgears cabinets where space is limited and air spacing between busbars need to be kept at minimum.



1. Product Selection Reference

Bus bar size (mm)	Single layer bus bar	Two layers bus bar
20×3, 25×3	Φ25/10	Φ30/12
30×3, 30×4	Φ30/12	Φ40/16
30×10, 40×4	Φ40/16	Φ50/20
40×10, 50×5, 50×6	Φ50/20	Φ65/25 (Φ75/30)
50×8, 50×10, 60×6, 60×8	Φ65/25 (Φ75/30)	Φ75/30 (Φ85/35)
60×10, 80×6, 80×8, 80×10	Φ75/30 (Φ85/35)	Φ100/40 (Φ120/50)
100×8, 100×10, 100×12	Φ100/40 (Φ120/50)	Φ120/50
100×15, 120×10, 120×12, 120×15	Φ120/50	Φ150/60
150×12, 150×15	Φ150/60	Φ175/75

2. Dimensions

Part No.	As supplied(mm)	After recovery (mm)	After recovery W.T. nom. (mm)	Packing(m/spool)
BBT10-25/10	25	10	2.5	25
BBT10-30/12	30	12	2.65	20
BBT10-40/16	40	16	2.65	20
BBT10-50/20	50	20	2.65	20
BBT10-65/25	65	25	2.85	20
BBT10-75/30	75	30	2.85	20
BBT10-85/35	85	35	2.85	20
BBT10-100/40	100	40	2.85	20
BBT10-120/50	120	50	2.85	20
BBT10-150/60	150	60	2.90	20
BBT10-175/75	175	75	2.90	20

3. Technical Data

	Specifics	Test method	Values
Physical	Tensile strength	ASTM D2671	≥14 MPa
	Breakdown elongation	ASTM D2671	≥500%
Aging (136℃/168hrs)	Tensile strength	ASTM D2671	≥12 MPa
	Breakdown elongation	ASTM D2671	≥400%
Long term aging(120/3000hrs)	Breakdown elongation	IEC 60684-2	≥175%
Resistance to selected fluids(23℃/168hrs)	Tensile strength	IEC 60684-2	≥8MPa
	Breakdown elongation	IEC 60684-2	≥250%
Electrical	Volume resistivity	ASTM D2671	≥10 ¹² Ωcm
	Tracking and erosion resistance	ASTM D2303	After 1h at 2.5kV or 1h at 2.75kV no tracking
	Dielectric strength (in insulation oil)	ASTM D2671	≥16 kV/mm
	Color fastness to light	IEC 60684-3	Compare between exposed and unexposed parts the color does not change
Chemical	Copper corrosion (158℃/168hrs)	IEC 60684-3	Pass
	Density	ASTM D2671	0.95~1.05
Others	Thermal endurance	IEC 216	105 ℃
	Water absorption (23℃/336hrs)	ASTM D570	≤ 0.2%
	Low temperature flexibility (-40℃/4hrs)	ASTM D2671	No cracking
Others	Heat shock (200 ℃/4hrs)	ASTM D2671	No drop, No flow, No cracking
	Holding air test	more than 3 bendings on bus bar	After shrink, no air gap between H.S.T. and bus bar
	Cutting test (110℃/168hrs)	Raychem method	5mm length cutting along longitudinal, no cracking
	Halogen free	IEC 61249-2-21	Cl:900ppm (max.) Br: 900ppm(max.) Total (Cl+ Br):1500ppm max.

Remark:

1. Standard color: red, other colors on request.
2. The flame retardant version (same size) are available on request, the part No. will be BBT10FR-**/**.

36kV Halogen free heat-shrinkable bus bar tube

Features:

- Shrink ratio: 2.5:1
- Working temperature: -40°C~+105°C
- Shrink temperature: 125°C
- Bus bar insulation and protection
- Halogen free, RoHS compliant
- Voltage class: 36kV

Application:

It is suitable for insulation and protection of bus bar against accidental flashover up to 36 kV, meanwhile it is ideal for using in switchgears cabinets where space is limited and air spacing between busbars need to be kept at minimum.



1. Product Selection Reference

Bus bar size (mm)	Single layer bus bar	Two layers bus bar
20×3, 25×3	Φ25/10	Φ30/12
30×3, 30×4	Φ30/12	Φ40/16
30×10, 40×4	Φ40/16	Φ50/20
40×10, 50×5, 50×6	Φ50/20	Φ65/25 (Φ75/30)
50×8, 50×10, 60×6, 60×8	Φ65/25 (Φ75/30)	Φ75/30 (Φ85/35)
60×10, 80×6, 80×8, 80×10	Φ75/30 (Φ85/35)	Φ100/40 (Φ120/50)
100×8, 100×10, 100×12	Φ100/40 (Φ120/50)	Φ120/50
100×15, 120×10, 120×12, 120×15	Φ120/50	Φ150/60
150×12, 150×15	Φ150/60	Φ175/75

2. Dimensions

Part No.	As supplied I.D.(mm)	After recovery I.D.(mm)	After recovery W.T. nom. (mm)	Packing (m/spool)
BBT36-25/10	25	10	3.5	15
BBT36-30/12	30	12	3.6	15
BBT36-40/16	40	16	3.6	15
BBT36-50/20	50	20	3.6	15
BBT36-65/25	65	25	3.6	15
BBT36-75/30	75	30	3.7	15
BBT36-85/35	85	35	3.7	15
BBT36-100/40	100	40	3.7	15
BBT36-120/50	120	50	3.8	15
BBT36-150/60	150	60	3.8	15
BBT36-175/75	175	75	3.8	15

3. Technical Data

Specifics	Test method	Values
Physical	Tensile strength	ASTM D2671 ≥14 MPa
	Breakdown elongation	ASTM D2671 ≥500%
Aging (136°C/168hrs)	Tensile strength	ASTM D2671 ≥12 MPa
	Breakdown elongation	ASTM D2671 ≥400%
Long term aging(120/3000hrs)	Breakdown elongation	IEC 60684-2 ≥175%
Resistance to selected fluids(23°C/168hrs)	Tensile strength	IEC 60684-2 ≥8MPa
	Breakdown elongation	IEC 60684-2 ≥250%
Electrical	Volume resistivity	ASTM D2671 ≥10 ¹² Ωcm
	Tracking and erosion resistance	ASTM D2303 After 1h at 2.5kV or 1h at 2.75kV no tracking
	Dielectric strength (in insulation oil)	ASTM D2671 ≥16 kV/mm
	Color fastness to light	IEC 60684-3 Compare between exposed and unexposed parts the color does not change
Chemical	Copper corrosion (158°C/168hrs)	IEC 60684-3 Pass
	Density	ASTM D2671 0.95~1.05
Others	Thermal endurance	IEC 216 105 °C
	Water absorption (23°C/336hrs)	ASTM D570 ≤ 0.2%
	Low temperature flexibility (-40°C/4hrs)	ASTM D2671 No cracking
Others	Heat shock (200 °C/4hrs)	ASTM D2671 No drop, No flow, No cracking
	Holding air test	more than 3 bendings on bus bar After shrink, no air gap between H.S.T. and bus bar
	Cutting test (110°C/168hrs)	Raychem method 5mm length cutting along longitudinal, no cracking
Halogen free	IEC 61249-2-21 Cl:900ppm (max.) Br: 900ppm(max.) Total (Cl + Br):1500ppm max.	

Remark:

1. Standard color: red, other colors on request.
2. The flame retardant version (same size) are available on request, the part No. will be BBT36FR-**/**.

Heat-shrinkable butt splice

Features:

- Shrink ratio: 3:1
- Working temperature: -45°C~+125°C
- Min. shrink temperature: 80°C
- Min. fully recovery temperature: 130°C
- Polyamide hot-melt adhesive provides excellent waterproof property
- Good conductivity property
- Excellent stretch and mechanical damage resistance

Application:

Heat shrinkable butt splice protects splices from humidity and corrosion. Providing strain relief and against vibration in rugged environments. It is cost effective, easy installation and reliable performance.



Features:

- Shrink ratio: 2:1
- Working temperature: -55°C~+105°C
- Min. shrink temperature: 60°C
- Solder min. fully melt : 115°C
- Excellent waterproof and conductivity property
- Easy to manage soldering process
- Transparent sleeve provides precise inspection

Application:

It is the easiest way to get one step soldered, sealed and insulated butt connection. The special colored hot-melt glue on both ends of heat shrinkable tube, it is very convenience to identify and use the exact wire dimensions.



1. Technical Data

Test Item	Characteristics	Test condition
Unaged	Tensile strength	Min. 16MPa
	Elongation	Min.200%
Aged	Tensile strength	Min. 11.5MPa
	Elongation	Min. 100%
Voltage withstand and breakdown Voltage(Unaged)	Withstand 2.5kV for 1 minute and breakdown	room temp.
Voltage withstand and breakdown Voltage(Unaged)	Withstand 2.5kV for 1 minute and breakdown at least half of unaged breakdown voltage	150°C/7 days
Copper corrosion	No corrosion of bare copper	150°C/7 days
Copper stability	No sign of degradation min. elongation 100%	150°C/7 days
Cold bend	No crack	-40°C/4 hrs
Maximum secant modulus (2%)	250MPa	-
Volume resistivity	Min. 10 ¹⁴ Ω • cm	-
Heat shock	No crack	200°C/4 hrs

2. Dimensions

Part Number	Wire range		Copper tube(mm)			Heat shrink tube			Color	Package(pcs/bag)
	AWG	mm ²	O.D.	I.D.	L2	O.D.	I.D.	L1		
HSBS-1	22-18	0.5-1.0	3.8	1.7	15	5.8	4.7	36.0	Red	1000
HSBS-2	16-14	1.5-2.5	4.8	2.4	15	6.9	5.7	36.0	Blue	1000
HSBS-3	12-10	4.0-6.0	5.7	3.6	15	8.0	6.7	42.0	Yellow	500

1. Technical Data

Shrink temperature	>115 °C
Dielectric strength	1kV
Protection type	IP 67

2. Dimensions

Part Number	Tube Dimensions(mm)		Wire Dimensions(mm)			Cable Size A.W.G.(mm ²)	Standard color
	I.D.(min.)	L(max.)	B(min.)	B and C(max.)	C(min.)		
SS - L01	1.7	26	1.0	1.7	0.76	26 -24(0.25 -0.34)	White
SS - L02	2.7	40	1.4	2.7	1.2	22 -18(0.5 -1.0)	Red
SS - L03	4.5	40	2.3	4.5	2.0	16 -14(1.5 -2.5)	Blue
SS - L04	6.0	40	3.7	6.0	3.4	12 -10(4.0 -6.0)	Yellow
SS - L11	11.5	40	5.8	11.5	5.5	10 -6(6.0 -14.0)	Blue
SS - L13	13.0	42	6.8	13.0	6.5	8 -4(8.0 -22.0)	Blue

125°C Solder sleeve wire splice

Features:

- Shrink ratio: 2:1
- Working temperature: -55°C~+125°C
- Min. shrink temperature: 60°C
- Solder min. fully melt : 138°C
- Meet RoHS
- Excellent waterproof and conductivity property
- Easy control soldering process
- Transparent sleeve provides precise inspection

Application:

It is the easiest way to get one step soldered, sealed and insulated butt connection. The special colored hot-melt glue on both ends of heat shrinkable tube, it is very convenience to identify and use the exact wire dimensions.



Features:

- Shrink ratio: 2:1
- Working temperature: -55°C~+125°C
- Min. shrink temperature: 80°C
- Min. fully recovery temperature : 160°C
- Excellent flame retardant
- Abrasion and chemical corrosion resistance
- Transparent sleeve provides precise inspection

Application:

One piece design, it is used for shield to ground termination. High-performance PE transparent sleeve provides insulation, inspection, strain relief and water proof. Preinstalled ground lead and pre-fluxed solder perform provides a perfectly soldered, strain-relieved and environmentally protected terminal.



1. Technical Data

Dielectric voltage withstand	RT-1404	2.0kV
Voltage rating	RT-1404	600V
Voltage drop	RT-1404	≤2.0mV
Copper corrosion	ASTM D 2671	Non-corrosive

2. Dimensions

Part Number	Tube Dimensions(mm)		Wire Dimensions(mm)		Cable Size		Standard color
	I.D.(min.)	L(max.)	B(min.)	B and C(max.)	C(min.)	A.W.G.(mm ²)	
SS-R01	1.7	26	1.0	1.7	0.76	26-24(0.25-0.34)	White
SS-R02	2.7	40	1.4	2.7	1.2	22-18(0.5-1.0)	Red
SS-R03	4.5	40	2.3	4.5	2.0	16-14(1.5-2.5)	Blue
SS-R04	6.0	40	3.7	6.0	3.4	12-10(4.0-6.0)	Yellow

1. Technical Data

Voltage drop	≥ 2.5mV
Tensile strength	exceeds strength of ground lead
Dielectric voltage withstand	≥ 2.0kV
Isolation resistivity	100,000m·Ω

2. Dimensions

Part No.	Product Dimensions				Cable Dimensions				
	A±0.07	Ø B min.	Ø C min.	H min.	Ø E max.	Ø F min.	Ø G min.	Ø D max.	J±0.5
SS-S-11	16.5 (0.650)	1.90 (0.075)	2.65 (0.105)	8.25 (0.325)	2.65 (0.105)	0.90 (0.035)	0.50 (0.020)	1.90 (0.075)	7.5 (0.295)
SS-S-12	16.5 (0.650)	2.65 (0.105)	3.68 (0.145)	8.25 (0.325)	3.68 (0.145)	1.4 (0.055)	0.75 (0.030)	2.65 (0.105)	7.5 (0.295)
SS-S-13	16.5 (0.650)	4.3 (0.170)	5.08 (0.200)	8.25 (0.325)	5.08 (0.200)	2.15 (0.085)	1.25 (0.050)	4.3 (0.170)	7.5 (0.295)
SS-S-14	19.1 (0.750)	5.95 (0.235)	6.45 (0.255)	8.25 (0.325)	6.45 (0.255)	3.3 (0.130)	1.8 (0.070)	5.95 (0.235)	7.5 (0.295)
SS-S-15	19.1 (0.750)	7.00 (0.275)	7.6 (0.300)	8.25 (0.325)	7.6 (0.300)	4.3 (0.170)	2.5 (0.100)	7.00 (0.275)	7.5 (0.295)

Fiber optic fusion splice sleeve

Features:

- Working temperature: -45°C~+100°C
- Shrink temperature: start at 80°C, min. fully recovery at 100°C
- Moisture resistant and environmental protection
- Clear sleeve make it easy to detect splice before shrinkage
- Easily to use and avoid any damages to the optical fiber during installation

Application:

Consist of a rod of stainless steel, heat fusion tube and cross-linked polyolefin. It can rebuild the coating of fiber, providing mechanical strength at the fusion joint area and keeping optical transmission properties.



Features:

- Shrink ratio: 2:1
- Working temperature: -55°C~+105°C
- Shrink temperature: Start at 70°C, minimum fully shrink at 110°C
- Durable abrasion, sweat absorption
- Lightweight, flexible, anti-skid
- Avoiding electric shock
- RoHS compliant

Application:

It is widely applied to tennis rackets, badminton rackets, fishing rods, baseball bats, hockey sticks, industrial hand tools, athletic equipment and various handles. It is able to increase friction on smooth surfaces to minimize slipping.

Skid-proof heat-shrinkable tube



1. Technical Data

Specifics	Test Method	Typical Value
Tensile strength	ASTM D 2671	18 MPa
Ultimate elongation	ASTM D 2671	700%
Density	ISO R1183 D	0.94 g/cm ²
Dielectric strength	IEC 243	20kV/mm
Dielectric constant	IEC 243	2.5 max.
Longitudinal change	ASTM D 2671	± 5%

2. Dimensions

Part No.	I.D. after recovery (mm)	Length (mm)	Fusion tube(D)		Steel rod(d)		Packing (pcs/bag)
			I.D.(mm)	Length(mm)	O.D.(mm)	Length(mm)	
Larger sleeves							
FOS-61L	3.0±0.1	61	1.5	61	1.5	56	100
FOS-45L	3.0±0.1	45	1.5	45	1.5	41	100
FOS-23L	3.0±0.1	23	1.5	23	1.5	18	100
Standard sleeves							
FOS-61M	2.6±0.1	61	1.2	61	1.2	56	100
FOS-45M	2.6±0.1	45	1.2	45	1.2	41	100
FOS-40M	2.6±0.1	40	1.2	40	1.2	36	100
FOS-30M	2.6±0.1	30	1.2	30	1.2	26	100
FOS-25M	2.6±0.1	25	1.2	25	1.2	21	100
Mini sleeves							
FOS-60S	2.5±0.1	60	0.5	60	1.0	56	100
FOS-40S	2.5±0.1	40	0.5	40	1.0	36	100
FOS-40TS	1.8±0.1	40	0.5	40	0.7	40	100
Micro sleeve							
FOS-40XS	1.4±0.1	40	0.5	40	0.5	39.5	100
FOS-25XS	1.4±0.1	25	0.5	25	0.5	24.5	100
FOS-18XS	1.4±0.1	18	0.5	18	0.5	17.5	100
FOS-15XS	1.4±0.1	15	0.5	15	0.5	14.5	100
FOS-10XS	1.4±0.1	10	0.5	10	0.5	9.5	100

1. Technical Data

Specifics	Test Method	Standard Required
Tensile Strength (Mpa)	ASTM D412	10.4 Mpa
Longitudinal Elongation (%)	ASTM D412	≤8
Elongation (%)	ISO 1210	200%

2. Dimensions

Part No.	As supplied		After recovery		Standard Package (m/pcs)
	I.D.	Wall thickness	I.D.	Wall thickness	
MFHG-015	15	0.45±0.15	8.0	0.85±0.15	1
MFHG-020	20	0.50±0.15	11.0	0.90±0.15	1
MFHG-022	22	0.50±0.15	12.5	0.90±0.15	1
MFHG-025	25	0.50±0.15	14.5	1.00±0.15	1
MFHG-028	28	0.50±0.15	15.5	1.00±0.15	1
MFHG-030	30	0.60±0.15	17.5	1.20±0.15	1
MFHG-035	35	0.60±0.15	20.0	1.20±0.15	1
MFHG-040	40	0.60±0.15	23.0	1.20±0.15	1
MFHG-045	45	0.65±0.15	25.0	1.25±0.15	1
MFHG-050	50	0.65±0.15	28.0	1.25±0.15	1

Remark:
 1. Standard color: black, red, yellow, blue and green.
 2. Special packaging and cutting pieces are available on requests.

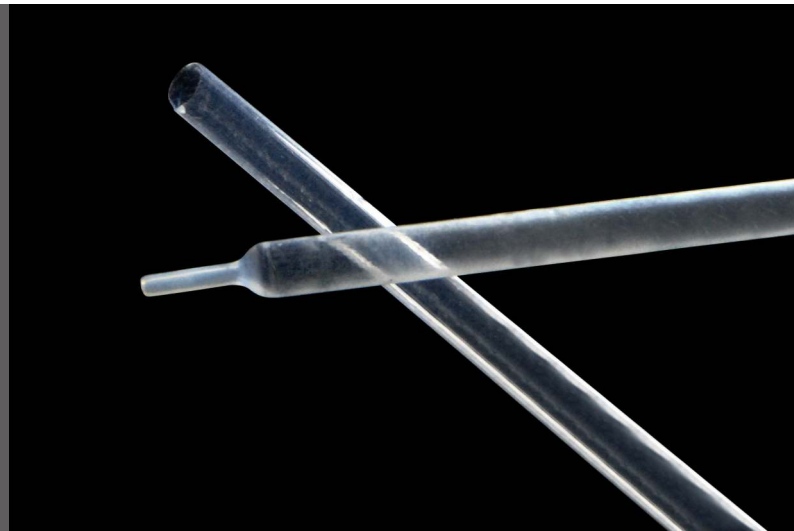
Kynar heat-shrinkable tube

Features:

- Shrink ratio: 2:1
- Working temperature: -55°C~+175°C
- Minimum fully shrink at 200°C
- High temperature & abrasion resistance
- Excellent chemical and solvent resistance
- Transparent color for visual installation

Application:

It is suitable for applications requiring high temperature performance, abrasion and cut-through resistance, protection from most industrial solvents, fuels and chemicals.



Features:

- Shrink ratio: 2:1
- Working temperature: -55°C~+200°C
- Minimum fully shrink at 220°C
- Excellent flame retardant
- Oil resistance and chemical resistance
- Flexibility at high and low temperatures without cracking
- Meet AMS-DTL-23053/13

Application:

It is especially fit for applications requiring high resistance to corrosive fluids, fuels, lubricants, acids and solvents to prevent wire harnesses, cables and appliances in high-temperature environments.

Viton heat-shrinkable tube



1. Technical Data

Item	Test Method	Specifications
Specific Gravity	ASTM D792	1.78 g/cm ³
Tensile strength	ASTM D2671	≥25 MPa
Elongation at break	ASTM D2671	≥150%
Elongation After Aging	250 °C, 168h	≥100%
Heat Shock	300 °C, 4h	No Cracking
Cold Bend	-55 °C, 4h	No Cracking
Volume Resistivity	IEC 60093	≥10 ¹³ Ω · cm
Flammability Rating	UL-224	VW-1

2. Dimensions

Part No.	Size		As supplied(mm)		After recovery(mm)		Standard Package
	inch	mm	I.D.	I.D.	W.T.	m/spool	
MRSG-PVDF-1.2	3/64	1.2	1.2	0.6	0.25±0.05	200	
MRSG-PVDF-1.6	1/16	1.6	1.6	0.8	0.25±0.05	200	
MRSG-PVDF-2.4	3/32	2.4	2.4	1.2	0.25±0.05	200	
MRSG-PVDF-3.2	1/8	3.2	3.2	1.6	0.25±0.05	100	
MRSG-PVDF-4.8	3/16	4.8	4.8	2.4	0.25±0.05	100	
MRSG-PVDF-6.4	1/4	6.4	6.4	3.2	0.30±0.05	100	
MRSG-PVDF-9.5	3/8	9.5	9.5	4.8	0.30±0.05	50	
MRSG-PVDF-12.7	1/2	12.7	12.7	6.4	0.30±0.05	50	
MRSG-PVDF-19.1	3/4	19.1	19.1	9.5	0.42±0.05	50	
MRSG-PVDF-25.4	1	25.4	25.4	12.7	0.50±0.05	50	
MRSG-PVDF-38.1	1-1/2	38.1	38.1	19.1	0.50±0.05	50	

Remark:

1. Standard color: black, clear.
2. Special size, colors, packaging and cutting pieces are available on requests.
3. 150°C PVDF heat shrinkable tube are available on requests.
4. 150°C & 175°C medical-grade are available on requests.

1. Technical Data

Specifics	Test Method	Standard
Tensile strength(Mpa)	ASTMD 638	≥8.5 Mpa
Breaking elongation	ASTMD 638	≥250 %
Operation temperature range	IEC 60216	-55 °C ~ 200 °C
Heat aging/Breaking elongation	168hrs/250 °C	≥200%
Heat shock	4hrs/330 °C	No cracking
Disruptive strength	ASTMD 2671	≥7.9kv/mm
Volume resistivity	IEC 60093	1X10 ⁹ Ωcm

2. Dimensions

Part No.	Size		AS Supplied(mm)		AfterRecovery (mm)		Standard package
	Inch	mm	I.D.Min.	I.D. Max.	W.T. Nom.	m/spool	
MRSG-VT200-3.2	1/8	3.2	3.2	1.6	0.76±0.20	50	
MRSG-VT200-4.8	3/16	4.8	4.8	2.4	0.89±0.20	50	
MRSG-VT200-6.4	1/4	6.4	6.4	3.2	0.89±0.20	50	
MRSG-VT200-9.5	3/8	9.5	9.5	4.8	0.89±0.20	50	
MRSG-VT200-12.7	1/2	12.7	12.7	6.4	0.89±0.20	50	
MRSG-VT200-19.1	3/4	19.1	19.1	9.5	1.07±0.30	30	
MRSG-VT200-25.4	1	25.4	25.4	12.7	1.25±0.30	30	
MRSG-VT200-38.1	1-1/2	38.1	38.1	19.0	1.40±0.30	15	
MRSG-VT200-50.8	2	50.8	50.8	25.4	1.65±0.30	15	

Remark:

1. Standard color: black.
2. Special sizes and cutting pieces are available on requests.

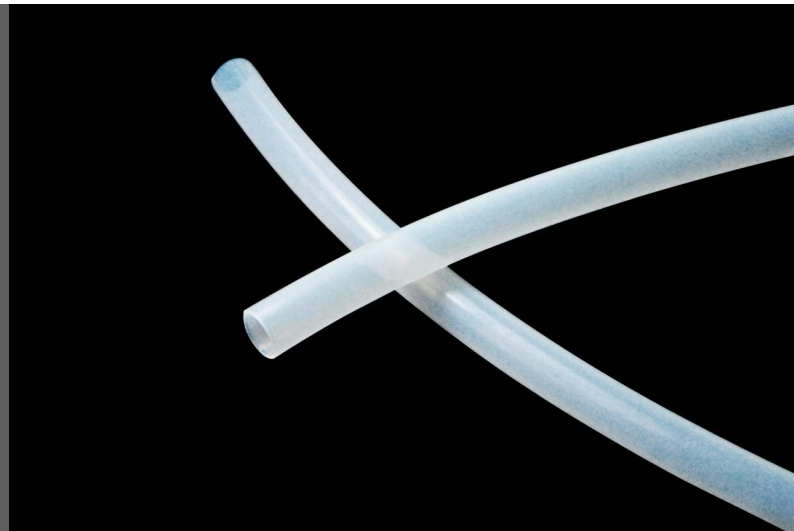
PTFE tube

Features:

- Working temperature: -60°C~+260°C
- High temperature & abrasion resistance
- Excellent chemical and solvent resistance
- Transparent color for visual installation
- Approval: UL, RoHS

Application:

PTFE tube has excellent corrosion and abrasion resistance, high temperature and electric insulation, it providing reliable protection for transformers, medical equipments, vehicles, heat exchanger, pharmaceutical process and applications in different corrosive conditions.



1. Technical Data

Item	Test Method	Specifications
Tensile strength	ASTM D2671	≥18 MPa
Elongation at break	ASTM D2671	≥300%
Dielectric strength	IEC 60243	≥26kV/mm
Volume resistivity	IEC 60093	≥10 ¹⁴ Ω·cm
Flammability rating	UL 224	VW-1
Water absorption	ASTM D 570	0.1 max

Remark:
 1. Standard color: clear.
 2. Special sizes, colors, packaging and cutting pieces are available on requests.

2. Dimensions

Part No.	AWG	Size I.D.(mm)	S style O.D.(mm)	T style O.D.(mm)	L style O.D.(mm)	Standard Packing m/spool
MTFL-030	30	0.30	0.80	0.70	0.60	305
MTFL-028	28	0.38	0.80	0.78	0.68	305
MTFL-026	26	0.46	0.96	0.86	0.76	305
MTFL-024	24	0.56	1.16	1.06	0.86	305
MTFL-023	23	0.66	1.26	1.16	0.96	305
MTFL-022	22	0.71	1.31	1.21	1.01	305
MTFL-021	21	0.81	1.41	1.31	1.11	305
MTFL-020	20	0.86	1.66	1.46	1.16	305
MTFL-019	19	0.96	1.76	1.56	1.26	305
MTFL-018	18	1.07	1.87	1.67	1.37	305
MTFL-017	17	1.19	1.99	1.79	1.49	305
MTFL-016	16	1.34	2.14	1.94	1.64	305
MTFL-015	15	1.50	2.30	2.10	1.80	153
MTFL-014	14	1.68	2.48	2.28	2.08	153
MTFL-013	13	1.93	2.73	2.53	2.33	153
MTFL-012	12	2.16	2.96	2.76	2.56	153
MTFL-011	11	2.41	3.21	3.01	2.81	153
MTFL-010	10	2.69	3.49	3.29	3.09	153
MTFL-009	9	3.00	4.00	3.80	3.40	100
MTFL-008	8	3.38	4.38	4.18	3.78	100
MTFL-007	7	3.76	4.76	4.56	4.16	100
MTFL-006	6	4.22	5.55	5.02	4.80	100
MTFL-005	5	4.72	5.72	5.52	5.32	50
MTFL-004	4	5.28	6.28	6.08	5.88	1
MTFL-003	3	5.94	6.94	6.74	6.54	1
MTFL-002	2	6.68	7.68	7.48	7.28	1
MTFL-001	1	7.46	8.46	8.26	8.06	1

PTFE heat-shrinkable tube

Features:

- Shrink ratio: 1.7:1
- Working temperature: -65°C~+260°C
- Minimum fully shrink at 350°C
- Highly flame retardant
- Oil and chemical resistance
- Excellent insulation, abrasion resistance
- Meet SAE-AMS-DTL-23053/12

Application:

It provides insulation and mechanical protection in severe chemical and high temperature environments to prevent contamination, corrosion and abrasion resistance.



Features:

- Working temperature: -60°C~+200°C
- Excellent chemical and solvent resistance
- Flexible and elastic
- Approval: RoHS / UL / FDA

Application:

It can be not only widely used for liquid and air transmission in medical and food industrial, but also for insulation protection in household appliance, industrial appliance etc.



Silicone rubber tube

1. Technical Data

Specifics	Test Method	Standard
Tensile strength	ASTM D 2671	≥ 17.3 MPa
Breaking elongation	ASTM D 2671	≥ 200 %
Specific gravity	ASTM D 792	2.3g/cm ³
Heat shock	4hrs 400°C	No cracking or dropping
Cold bend	4hrs -65°C	No cracking
Dielectric strength	ASTM D 2671	≥ 34kV/mm
Volume resistivity	ASTM D 2671	1X10 ¹⁸ Ω·cm

2. Dimensions

Part No.	Size		As Supplied	After Recovery		Standard Packing m/spool
	AWG	mm	I.D. Min.	I.D. Max.	W.T. Nom.	
MTLS-1.0	26	1.1	1.1±0.20	≤ 0.60	0.25±0.05	200
MTLS-1.5	20	1.5	1.5±0.20	≤ 1.00	0.30±0.08	200
MTLS-2.0	18	2.0	2.0±0.20	≤ 1.25	0.30±0.08	200
MTLS-2.5	16	2.3	2.3±0.20	≤ 1.60	0.30±0.08	100
MTLS-3.0	14	3.0	3.0±0.20	≤ 1.85	0.30±0.08	100
MTLS-3.5	12	3.8	3.8±0.20	≤ 2.3	0.30±0.08	100
MTLS-4.5	10	4.8	4.8±0.30	≤ 2.85	0.30±0.08	100
MTLS-6.0	8	6.1	6.1±0.30	≤ 3.6	0.38±0.08	1.22m/pcs
MTLS-7.6	6	7.6	7.6±0.30	≤ 4.5	0.38±0.08	1.22m/pcs
MTLS-9.0	4	9.4	9.4±0.30	≤ 5.7	0.38±0.08	1.22m/pcs
MTLS-11.0	2	10.9	10.9±0.30	≤ 7.1	0.38±0.08	1.22m/pcs
MTLS-12.0	0	11.9	12.0±0.30	≤ 8.8	0.38±0.08	1.22m/pcs

Remark:
1. Standard color: clear.
2. Special sizes are available on requests.
3. 4:1 shrink ratio are available on requests.

1. Technical Data

Specifics	Test Method	Typical Performance
Density	ASTM D792	1.10±0.05 g/cm ³
Shore hardness	ASTM D2240	65±5 Shore-A
Tensile strength	ASTM D2671	≥ 3.5 MPa
Elongation at break	ASTM D2671	≥ 210 %
Tearing strength	ASTM D624	≥ 22 kN/m
Breakdown strength	IEC 60243	≥ 18 kV/mm
Volume resistivity	IEC 60093	≥ 1×10 ¹⁴ Ω·cm

2. Dimensions

Part No.	I.D.(mm)	Wall Thickness (mm)				Standard Packing (m)
		2.5 kV	4.0 kV	6.0 kV	7.0 kV	
MGJG-0.8	0.8	0.5	1	1.5	2	200
MGJG-1.0	1	0.5	1	1.5	2	200
MGJG-1.5	1.5	0.5	1	1.5	2	200
MGJG-2.0	2	0.5	1	1.5	2	200
MGJG-2.5	2.5	0.5	1	1.5	2	200
MGJG-3.0	3	0.5	1	1.5	2	200
MGJG-3.5	3.5	0.5	1	1.5	2	200
MGJG-4.0	4	0.5	1	1.5	2	200
MGJG-4.5	4.5	0.5	1	1.5	2	200
MGJG-5.0	5	0.5	1	1.5	2	50
MGJG-5.5	5.5	0.5	1	1.5	2	50
MGJG-6.0	6	-	1	1.5	2	50
MGJG-7.0	7	-	1	1.5	2	50
MGJG-8.0	8	-	1	1.5	2	50
MGJG-9.0	9	-	1	1.5	2	25
MGJG-10	10	-	1	1.5	2	50
MGJG-12	12	-	1	1.5	2	25
MGJG-14	14	-	-	1.5	2	50
MGJG-15	15	-	-	1.5	2	25
MGJG-20	20	-	-	-	2	10

Remark:
1. Standard color: clear, white.
2. Special sizes, colors, packaging and cutting pieces are available on requests.

Silicone rubber heat-shrinkable tube

Features:

- Shrink ratio: 1.7:1
- Working temperature: -50°C~+200°C
- Minimum fully shrink at 220°C
- Oil resistance and chemical resistance
- Flexibility at high and low temperatures without cracking

Application:

It is generally used for cables in medical equipments, home appliances, aerospace, military, automobile manufacturing, electronic components, transformers, motors where extreme physical strength and high temperature are required.



1. Dimensions

Part No.	As supplied (mm)		After Recovery (mm)		Standard Packing m/spool
	I.D.	W.T.	I.D.	W.T.	
MGJS-001	1	0.80±0.15	≤0.6	1.10±0.15	200
MGJS-002	2	0.80±0.15	≤1.2	1.10±0.15	200
MGJS-003	3	0.80±0.15	≤1.8	1.10±0.15	200
MGJS-004	4	0.80±0.15	≤2.5	1.10±0.15	200
MGJS-005	5	0.80±0.15	≤3.0	1.10±0.15	100
MGJS-006	6	0.80±0.15	≤3.8	1.10±0.15	100
MGJS-007	7	0.80±0.15	≤4.0	1.10±0.15	100
MGJS-008	8	0.80±0.15	≤4.8	1.10±0.15	100
MGJS-009	9	0.80±0.15	≤5.0	1.10±0.15	100
MGJS-010	10	1.50±0.15	≤6.5	2.50±0.15	50
MGJS-012	12	1.50±0.15	≤7.0	2.50±0.15	50
MGJS-015	15	1.50±0.15	≤9.0	2.50±0.15	50
MGJS-020	20	1.50±0.15	≤13	2.50±0.15	25
MGJS-025	25	1.50±0.15	≤15	2.50±0.15	25
MGJS-030	30	1.50±0.15	≤18	2.50±0.15	25
MGJS-035	35	1.50±0.15	≤20	2.50±0.15	25
MGJS-040	40	1.50±0.15	≤25	2.50±0.15	25

Remark:

1. Standard color: black, grey.
2. Special colors, packaging and cutting pieces are available on requests.

Heat gun

1. Digital display hot gun 1



Datasheet

Part No.	CS-860
Power/voltage	1600W/220V-240V
Temperature	100°C-590°C digital control temperature
Air volume	166L/M. 330L/Min. 500L/Min
weight	840g
Carton size	40.5x28.5x54.5cm
Q.C	10pcs
G.W/N.W	12.5kg/9.0kg

Function

Cool/hot air, first step, second step, electronic control air volume, adjustable temperature, constant temperature, digital display and control temperature.

2. Digital display hot gun 2



Datasheet

Part No.	CSH-822B
Power/voltage	1600W/220V-240V
Temperature	100°C-590°C digital control temperature
Air volume	250L/Min. 500L/Min
weight	840g
Carton size	40.5x28.5x54.5cm
Q.C	10pcs
G.W/N.W	11kg/8kg

Function

Cool/hot air, adjustable temperature, constant temperature, digital display and control temperature.

3. Standard hot gun



Datasheet

Part No.	CS-822
Power/voltage	1600W/220V-240V
Temperature	100°C-590°C electronic steplessly adjust temperature
Air volume	250L/Min. 500L/Min
Function	Cool/hot air adjustable temperature
weight	840g
Carton size	40.5x28.5x54.5cm
Q.C	10pcs
G.W/N.W	11kg/8kg

