# Amphenol® Industrial



# **Amphe-HST**

Heat Shrinkable Tubing Catalog

### **Amphenol**

#### **▶** | Company Introduction



### Amphenol Industrial Sidney, New York Facility

Manufacturing connectors since 1932, we take pride that the Amphenol Industrial Products Group is the undisputed leader in interconnect systems for harsh environment applications. Such applications require a high degree of engineering sophistication and precision manufacturing capability. Innovations like our RADSOK® contact technology can provide roughly 50% more current through the same size pin. Connectors utilizing this RADSOK® technology will outperform similar products in the market hands down.

The Amphenol Industrial Products Group (AIPG), a division of the Amphenol Corporation, is the leading manufacturer of cylindrical connectors in the world. Amphenol Industrial's product lines consist of rectangular, standard miniature, fiber optic, EMI/EMP filter, and a variety of special application connectors.

The Sidney, NY facility, nestled at the foothills of the Catskill Mountains, is over 307,000 square feet. This complex houses over 1000+ employees, incorporating state-of-the-art manufacturing technologies. The facility is both ISO9001 certified and qualified to MIL-STD-790 requirements.



### Amphenol Technology Zhuhai, China Facility

Established in 2007, Amphenol Technology (Zhuhai) Co., Ltd. is a key facility for Amphenol Industrial Products Group, which serves a number of industrial markets, included but not limited to Factory Automation, Transportation, Heavy Equipment, Alternative Energy, Oil & Gas, Server/Data Comm and Power Distribution.

Amphenol Technology (Zhuhai) Co., Ltd. covers an area of 28,470 m² and is equipped with CNCs, plating, injection molding and assembly workshops. This plant specializes in the design and manufacturing of industrial connectors featuring high power, high density inserts, medium to high voltage electrical properties, and harsh environment applications.

With industry leading engineering, design and manufacturing expertise, Amphenol Technology (Zhuhai) Co., Ltd. has earned more than 10 utility patents on its innovative interconnects. Many of the products produced have been certified by independent standards including UL, IEC/TUV, ATEX, IECEx and MA. The facility is also certified to ISO 9001, ISO 14001 and TS 16949.

#### ► | Amphe-HST

As a world technology leader in the manufacture and design of interconnects and cable assemblies, Amphenol Industrial Operations realizes there is a need for quality heat shrinkable materials.

Our Amphe-HST (HST - Heat Shrink Technologies) is a heat shrink tubing series that is ideal, but not limited to, the markets of energy, rail mass transit, heavy equipment, hybrid/electrical vehicles, server/data center power, mining and other major industries. Made from a cross-linked polyolefin material, most of our shrinkable products have been tested and comply with UL/CSA, IEC, ASTM, MIL, ISO specifications. Amphe-HST provides effective insulation and protection to your functional parts, components and systems at an affordable cost.

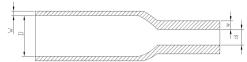
Along with our heat shrink tubing AlO can also provide molded parts, marker sleeves and application equipment such as heat guns, conveyor ovens and more.



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- Crosslinked polyolefin
- Flame retardant
- General purpose
- Flexible
- Wide range of colors

- Operating temp.: -55℃ to +125℃
- Min. shrink temp.: 70°C
- Min. full recovery temp.: 100°C
- Shrink ratio: 2:1
- RoHS compliant
- Voltage: 600V

#### Approvals:

■ UL 125°C VW-1 600V File No: E204071

CSA File No.1934614

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	>14 MPa
Ultimate elongation	ASTM D 2671	>400%
Longitudinal shrinkage	UL 224	±5%
Capatricity	A OTM D 2674	<35% (size < 50mm)
Eccentricity	ASTM D 2671	<45% (size≥ 50mm)
Heat aging Tensile strength Ultimate elongation	158℃, 168 hrs.	>12 MPa >350%
Flammability	VW-1	Pass
Voltage withstand	ASTM D 2671 (AC 2500V, 1 min.)	No breakdown
Volume resistance	ASTM D 2671	$>10^{14}\Omega$ .cm
Copper stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion
Cold bend test	UL224(-30℃, 1hr.)	No cracking

	Specification	As supplie	d (mm)	After reco	vered(mm)		Standard length		Black 00	Other Colors
Item No		Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description	Color Code
NO	mm	inside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron)	CUSTOMER	Description	P/N end with (XX)
1	1.0/0.5	1.0		0.5	0.32	0	200	HST A-2(Z) 1.0/0.5 (00)	A-2(Z) 1.0MM H/S TUBE 2:1 BK	
2	1.5/0.75	1.5		0.8	0.36	0	200	HST A-2(Z) 1.5/0.75 (00)	A-2(Z) 1.5MM H/S TUBE 2:1 BK	
3	2.0/1.0	2.0		1.0	0.40	0	200	HST A-2(Z) 2.0/1.0 (00)	A-2(Z) 2.0MM H/S TUBE 2:1 BK	
4	2.5/1.25	2.5		1.3	0.42	0	200	HST A-2(Z) 2.5/1.25 (00)	A-2(Z) 2.5MM H/S TUBE 2:1 BK	
5	3.0/1.5	3.0		1.5	0.42	0	200	HST A-2(Z) 3.0/1.5 (00)	A-2(Z) 3.0MM H/S TUBE 2:1 BK	
6	3.5/1.75	3.5		1.8	0.44	0	200	HST A-2(Z) 3.5/1.75 (00)	A-2(Z) 3.5MM H/S TUBE 2:1 BK	
7	4.0/2.0	4.0		2.0	0.44	0	200	HST A-2(Z) 4.0/2.0 (00)	A-2(Z) 4.0MM H/S TUBE 2:1 BK	
8	4.8/2.4	4.8		2.4	0.52	0	100	HST A-2(Z) 4.8/2.4 (00)	A-2(Z) 4.8MM H/S TUBE 2:1 BK	
9	5.0/2.5	5.0	30	2.5	0.54	0	100	HST A-2(Z) 5.0/2.5 (00)	A-2(Z) 5.0MM H/S TUBE 2:1 BK	
10	6.0/3.0	6.0		3.0	0.54	0	100	HST A-2(Z) 6.0/3.0 (00)	A-2(Z) 6.0MM H/S TUBE 2:1 BK	
11	7.0/3.5	7.0		3.5	0.54	0/-	100	HST A-2(Z) 7.0/3.5 (00)	A-2(Z) 7.0MM H/S TUBE 2:1 BK	
12	8.0/4.0	8.0		4.0	0.54	0/-	100	HST A-2(Z) 8.0/4.0 (00)	A-2(Z) 8.0MM H/S TUBE 2:1 BK	
13	9.0/4.5	9.0		4.5	0.54	0/-	100	HST A-2(Z) 9.0/4.5 (00)	A-2(Z) 9.0MM H/S TUBE 2:1 BK	
14	10.0/5.0	10		4.8	0.54	-	100	HST A-2(Z) 10.0/5.0 (00)	A-2(Z) 10.0MM H/S TUBE 2:1 BK	
15	11.0/5.5	11		5.5	0.55	-	100	HST A-2(Z) 11.0/5.5 (00)	A-2(Z) 11.0MM H/S TUBE 2:1 BK	Yellow 04 (04)
16	12.0/6.0	12		6.0	0.55	-	50	HST A-2(Z) 12.0/6.0 (00)	A-2(Z) 12.0MM H/S TUBE 2:1 BK	Blue 06 (06)
17	13.0/6.5	13		6.4	0.62	-	50	HST A-2(Z) 13.0/6.5 (00)	A-2(Z) 13.0MM H/S TUBE 2:1 BK	Grey 08 (08)
18	14.0/7.0	14		7.0	0.67	-	50	HST A-2(Z) 14.0/7.0 (00)	A-2(Z) 14.0MM H/S TUBE 2:1 BK	Red 02 (02)
19	15.0/7.5	15		7.5	0.67	-	50	HST A-2(Z) 15.0/7.5 (00)	A-2(Z) 15.0MM H/S TUBE 2:1 BK	White 09 (09)
20	16.0/8.0	16		8.0	0.67	-	50	HST A-2(Z) 16.0/8.0 (00)	A-2(Z) 16.0MM H/S TUBE 2:1 BK	Green 05 (05)
21	18.0/9.0	18		9.0	0.75	-	50	HST A-2(Z) 18.0/9.0 (00)	A-2(Z) 18.0MM H/S TUBE 2:1 BK	Brown 01 (01)
22	20/10	20		10.0	0.75	-	50	HST A-2(Z) 20.0/10.0 (00)	A-2(Z) 20.0MM H/S TUBE 2:1 BK	Purple 07 (07)
23	22/11	22		11.0	0.75	-	50	HST A-2(Z) 22.0/11.0 (00)	A-2(Z) 22.0MM H/S TUBE 2:1 BK	
24	25/12.5	25		12.5	0.86	-	50	HST A-2(Z) 25.0/12.5 (00)	A-2(Z) 25.0MM H/S TUBE 2:1 BK	
25	28/14	28		14.0	0.86	-	50	HST A-2(Z) 28.0/14.0 (00)	A-2(Z) 28.0MM H/S TUBE 2:1 BK	
26	30/15	30		15.0	0.86	-	50	HST A-2(Z) 30.0/15.0 (00)	A-2(Z) 30.0MM H/S TUBE 2:1 BK	
27	32/16	32		16.0	0.86	-	50	HST A-2(Z) 32.0/16.0 (00)	A-2(Z) 32.0MM H/S TUBE 2:1 BK	
28	35/17.5	35		17.5	0.86	-	50	HST A-2(Z) 35.0/17.5 (00)	A-2(Z) 35.0MM H/S TUBE 2:1 BK	
29	40/20	40		20.0	0.96	-	50	HST A-2(Z) 40.0/20.0 (00)	A-2(Z) 40.0MM H/S TUBE 2:1 BK	
30	50/25	50		25.0	0.96	-	50	HST A-2(Z) 50.0/25.0 (00)	A-2(Z) 50.0MM H/S TUBE 2:1 BK	
31	60/30	60		30.0	0.96	-	30	HST A-2(Z) 60.0/30.0 (00)	A-2(Z) 60.0MM H/S TUBE 2:1 BK	
32	70/35	70		35.0	1.17	-	30	HST A-2(Z) 70.0/35.0 (00)	A-2(Z) 70.0MM H/S TUBE 2:1 BK	
33	80/40	80	40	40.0	1.17	-	30	HST A-2(Z) 80.0/40.0 (00)	A-2(Z) 80.0MM H/S TUBE 2:1 BK	
34	100/50	100		50.0	1.30	-	30	HST A-2(Z) 100.0/50.0 (00)	A-2(Z) 100.0MM H/S TUBE 2:1 BK	1
35	125/62.5	125		62.5	1.30	-	15	HST A-2(Z) 125.0/62.5 (00)	A-2(Z) 125.0MM H/S TUBE 2:1 BK	
36	150/75	150		75.0	1.30	-	15	HST A-2(Z) 150.0/75.0 (00)	A-2(Z) 150.0MM H/S TUBE 2:1 BK	

Widely used in communications, electronics, automotive etc.

#### **Ordering information:**

#### Standard colors:

Black, Yellow, Red, Blue

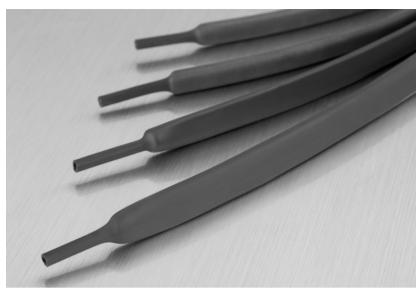
#### Special colors:

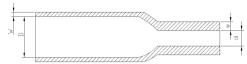
Brown, Grey, White, Green

#### Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.











- Crosslinked polyolefin
- Flame retardant
- Ideal for color coding
- High flexibility
- Good electrical insulation
- Color variations

- Operating temp.: -55°C to +125°C
- Min. shrink temp.: 70°C
- Min. full recovery temp.: 100°C
- Shrink ratio: 3:1
- RoHS compliant
- Meets: UL224
- Voltage: 600V

#### Approvals:

■ UL 125°C VW-1 600V File No: E204071

CSA File No.1934614

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	>14 MPa
Ultimate elongation	ASTM D 2671	>400%
Longitudinal shrinkage	UL 224	0~-10%
Canadainin.	A CTM D 2C74	<35% (size ≤24mm)
Eccentricity	ASTM D 2671	<45% (size ≥39mm)
Heat aging Tensile strength Ultimate elongation	158℃, 168 hrs.	>12 MPa >350%
Flammability	VW-1	Pass
Voltage withstand	ASTM D 2671 (AC 2500V, 1 min.)	No breakdown
Volume resistance	ASTM D 2671	>10 <sup>14</sup> Ω .cm
Copper stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion

	Specification	As supplied	d (mm)	After reco	vered(mm)		Standard length	Black 00		Other Colors
Item		To at deadle on the	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description	Color Code
No	mm	Inside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron)	CUSTOMER	Description	P/N end with (XX)
1	1.5/0.5	1.5		0.5	0.45	0	200	HST A-2(3X) 1.5/0.5 (00)	A-2(3X) 1.5MM H/S TUBE 3:1 BK	
2	2.4/0.8	2.4		0.8	0.48	0	200	HST A-2(3X) 2.4/0.8 (00)	A-2(3X) 2.4MM H/S TUBE 3:1 BK	
3	3.0/1.0	3.0		1.0	0.50	0	200	HST A-2(3X) 3.0/1.0 (00)	A-2(3X) 3.0MM H/S TUBE 3:1 BK	
4	4.5/1.5	4.5	35	1.5	0.60	0	200	HST A-2(3X) 4.5/1.5 (00)	A-2(3X) 4.5MM H/S TUBE 3:1 BK	
5	6.0/2.0	6.0		2.0	0.65	0	100	HST A-2(3X) 6.0/2.0 (00)	A-2(3X) 6.0MM H/S TUBE 3:1 BK	Yellow 04 (04)
6	9.0/3.0	9.0		3.0	0.75	-	100	HST A-2(3X) 9.0/3.0 (00)	A-2(3X) 9.0MM H/S TUBE 3:1 BK	Blue 06 (06)
7	12/4.0	12.0		4.0	0.80	-	50	HST A-2(3X) 12.0/4.0 (00)	A-2(3X) 12.0MM H/S TUBE 3:1 BK	Red 02 (02)
8	18/6.0	18.0		6.0	0.90	-	50	HST A-2(3X) 19.1/6.0 (00)	A-2(3X) 19.1MM H/S TUBE 3:1 BK	
9	24/8.0	24.0		8.0	1.00	-	50	HST A-2(3X) 24.0/8.0 (00)	A-2(3X) 24.0MM H/S TUBE 3:1 BK	
10	39/13	39.0		13.0	1.20	-	50	HST A-2(3X) 39.0/13.0 (00)	A-2(3X) 39.0MM H/S TUBE 3:1 BK	
11	50/17	50.0	40	17.0	1.29	-	50	HST A-2(3X) 50.0/17.0 (00)	A-2(3X) 50.0MM H/S TUBE 3:1 BK	

Widely used for electrical insulation and protection of in-line components, disconnected terminals, and splices with high insulation and excellent resilience. Bundle wires for flexible light-duty harnesses. Provides color-coding for wires, cables, terminals and components.

#### **Ordering information:**

Standard co	olors:
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Black

#### Special colors:

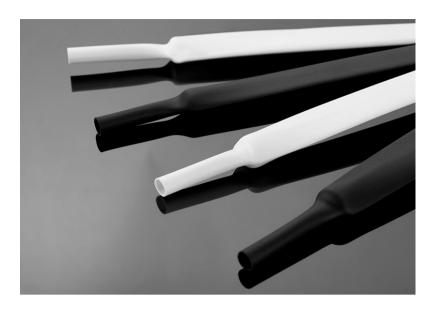
Yellow, Red, Blue

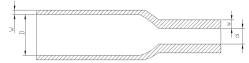
#### Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.

# A-2(HF) Flexible, Flame Retardant, High Performance Tubing











#### Features:

- Crosslinked polyolefin
- Flame retardant
- Halogen free
- RoHS compliant
- Low smoke emission

- 125 °C VW-1 600V
- Operating temp.: -55°C to +125°C
- Min. shrink temp.: 70°C
- Min. full recovery temp.: 100°C
- Shrink ratio: 2:1 ■ Voltage: 600V

#### Approvals:

■ UL 125°C VW-1 600V, File No: E204071

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	>12 MPa
Ultimate elongation	ASTM D 2671	>400%
Longitudinal shrinkage	UL 224	-6 ~ 4%
Eccentricity	ASTM D 2671	<30%
Heat aging Tensile strength Ultimate elongation	158℃, 168 hrs.	>11 MPa >200%
Flammability	VW-1	Pass
Voltage withstand	ASTM D 2671(AC 2500V, 1 min.)	No breakdown
Volume resistance	ASTM D 2671	>10 <sup>14</sup> Ω .cm
Copper stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion

	Specification	As supplie	d (mm)	After reco	vered(mm)		Standard length		Black 00
Item No	mm	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description
NO	mm	Inside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron)	CUSTOMER	Description
1	3.0/1.5	1/8		1.5	0.44	0	200	HST A-2(HF) 3.0/1.5 (00)	A-2(HF) 3.0MM H/S TUBE 2:1 BK
2	4.0/2.0	/		2.0	0.44	0	200	HST A-2(HF) 4.0/2.0 (00)	A-2(HF) 4.0MM H/S TUBE 2:1 BK
3	5.0/2.5	/		2.5	0.56	0	100	HST A-2(HF) 5.0/2.5 (00)	A-2(HF) 5.0MM H/S TUBE 2:1 BK
4	6.0/3.0	1/4		3.0	0.56	0	100	HST A-2(HF) 6.0/3.0 (00)	A-2(HF) 6.0MM H/S TUBE 2:1 BK
5	7.0/3.5	/	30	3.5	0.56	0	100	HST A-2(HF) 7.0/3.5 (00)	A-2(HF) 7.0MM H/S TUBE 2:1 BK
6	8.0/4.0	/		4.0	0.56	-	100	HST A-2(HF) 8.0/4.0 (00)	A-2(HF) 8.0MM H/S TUBE 2:1 BK
7	9.0/4.5	/		4.5	0.56	-	100	HST A-2(HF) 9.0/4.5 (00)	A-2(HF) 9.0MM H/S TUBE 2:1 BK
8	10/5.0	3/8		4.8	0.56	-	100	HST A-2(HF) 10.0/5.0 (00)	A-2(HF) 10.0MM H/S TUBE 2:1 BK
9	12/6.0	/		6.0	0.56	-	50	HST A-2(HF) 12.0/6.0 (00)	A-2(HF) 12.0MM H/S TUBE 2:1 BK
10	13/6.5	1/2		6.5	0.69	-	50	HST A-2(HF) 13.0/6.5 (00)	A-2(HF) 13.0MM H/S TUBE 2:1 BK
11	15/7.5	/		7.5	0.69	-	50	HST A-2(HF) 15.0/7.5 (00)	A-2(HF) 15.0MM H/S TUBE 2:1 BK
12	18/9.0	/		9.0	0.76	-	50	HST A-2(HF) 18.0/9.0 (00)	A-2(HF) 18.0MM H/S TUBE 2:1 BK
13	20/10	3/4		10.0	0.76	-	50	HST A-2(HF) 20.0/10.0 (00)	A-2(HF) 20.0MM H/S TUBE 2:1 BK
14	25/12.5	1		12.5	0.86	-	50	HST A-2(HF) 25.0/12.5 (00)	A-2(HF) 25.0MM H/S TUBE 2:1 BK
15	30/15	/		15.0	0.86	-	50	HST A-2(HF) 30.0/15.0 (00)	A-2(HF) 30.0MM H/S TUBE 2:1 BK
16	40/20	1 1/2		20.0	0.96	-	50	HST A-2(HF) 40.0/20.0 (00)	A-2(HF) 40.0MM H/S TUBE 2:1 BK
17	50/25	2		25.0	0.97	-	50	HST A-2(HF) 50.8/25.0 (00)	A-2(HF) 50.0MM H/S TUBE 2:1 BK
18	60/30	/		30.0	0.97	-	30	HST A-2(HF) 60.0/30.0 (00)	A-2(HF) 60.0MM H/S TUBE 2:1 BK
19	80/40	3		40.0	1.17	-	30	HST A-2(HF) 80.0/40.0 (00)	A-2(HF) 80.0MM H/S TUBE 2:1 BK
20	100/50	4	40	50.0	1.30	-	30	HST A-2(HF) 100.0/50.0 (00)	A-2(HF) 100.0MM H/S TUBE 2:1 BK
21	125/62.5	5		62.5	1.30	-	15	HST A-2(HF) 125.0/62.5 (00)	A-2(HF) 125.0MM H/S TUBE 2:1 BK
22	150/75	6		75.0	1.30	-	15	HST A-2(HF) 150.0/75.0 (00)	A-2(HF) 150.0MM H/S TUBE 2:1 BK

It is widely used in electron, communication and automobile industry.

#### Ordering information:

#### Standard colors:

Black, White

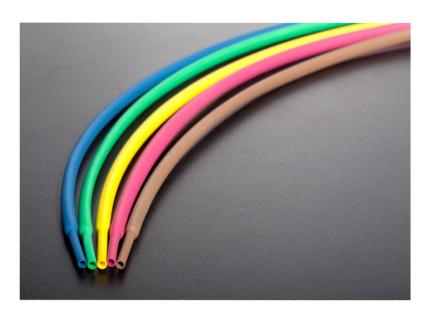
#### Special colors:

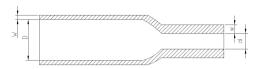
N/A

#### Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.











- Crosslinked polyolefin
- Highly Flame retardant
- Ideal for color coding
- Flexible
- Wide range of colors
- Resistant to common fluids & solvents
- Operating temp.: -55°C to +135°C
- Min. shrink temp.: 70°C
- Min. full recovery temp.: 100°C
- Shrink ratio: 2:1
- RoHS compliant
- Meets: SAE-AMS-DTL-23053/5 Class 1 & 3
- Voltage: 600V

#### Approvals:

■ UL 125°C VW-1 600V, File No: E204071

CSA File No.1934614

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	>14 MPa
Ultimate elongation	ASTM D 2671	>500%
Longitudinal shrinkage	UL 224	-6~4%
F 1:3	AOTM D 0074	<30% (≤50.8mm)
Eccentricity	ASTM D 2671	<40% (>50.8mm)
Heat aging Tensile strength Ultimate elongation	175℃, 168 hrs.	>11 MPa >350%
Flammability	VW-1	Pass
Voltage withstand	ASTM D 2671(AC 2500V,1 min.)	No breakdown
Dielectric strength	IEC60243	>20 kV/mm
Volume resistance	ASTM D 2671	>10 <sup>14</sup> Ω .cm
Copper stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion
Cold bend test	UL224(-30℃, 1hr.)	No cracking

	Specifi	cation	As supplie	d (mm)	After reco	vered(mm)		Standard length		Black 00	Other Colors
Item No	mm	Inch	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description	Color Code
INO	"""	IIICII	Inside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron/	CUSTOMER	Description	P/N end with (XX)
1	1.2/0.6	3/64	1.2		0.6	0.40	0	200	HST A-2F 1.2/0.6 (00)	A-2F 1.2MM H/S TUBE 2:1 BK	
2	1.6/0.8	1/16	1.6		0.8	0.42	0	200	HST A-2F 1.6/0.8 (00)	A-2F 1.6MM H/S TUBE 2:1 BK	
3	2.4/1.2	3/32	2.4		1.2	0.48	0	200	HST A-2F 2.4/1.2 (00)	A-2F 2.4MM H/S TUBE 2:1 BK	1
4	3.2/1.6	1/8	3.2		1.6	0.48	0	200	HST A-2F 3.2/1.6 (00)	A-2F 3.2MM H/S TUBE 2:1 BK	
5	4.8/2.4	3/16	4.8	]	2.4	0.48	0	200	HST A-2F 4.8/2.4 (00)	A-2F 4.8MM H/S TUBE 2:1 BK	Yellow 04 (04)
6	6.4/3.2	1/4	6.4	30	3.2	0.56	0	100	HST A-2F 6.4/3.2 (00)	A-2F 6.4MM H/S TUBE 2:1 BK	Blue 06 (06)
7	9.5/4.8	3/8	9.5	1	4.8	0.62	0/-	100	HST A-2F 9.5/4.8 (00)	A-2F 9.5MM H/S TUBE 2:1 BK	Grey 08 (08)
8	12.7/6.4	1/2	12.7		6.4	0.62	-	50	HST A-2F 12.7/6.4 (00)	A-2F 12.7MM H/S TUBE 2:1 BK	Red 02 (02)
9	15.9/8.0	5/8	15.9		8.0	0.68	-	50	HST A-2F 15.9/8.0 (00)	A-2F 15.9MM H/S TUBE 2:1 BK	White 09 (09)
10	19.1/9.5	3/4	19.1	]	9.5	0.68	-	50	HST A-2F 19.1/9.5 (00)	A-2F 19.1MM H/S TUBE 2:1 BK	Green 05 (05)
11	25.4/12.7	1	25.4		12.7	0.89	-	50	HST A-2F 25.4/12.7 (00)	A-2F 25.4MM H/S TUBE 2:1 BK	Brown 01 (01)
12	31.8/15.9	1 1/4	31.8	]	15.9	1.00	-	50	HST A-2F 31.8/15.9 (00)	A-2F 31.8MM H/S TUBE 2:1 BK	Clear X (X)
13	38.1/19.1	1 1/2	38.1	]	19.1	1.00	-	50	HST A-2F 38.1/19.1 (00)	A-2F 38.1MM H/S TUBE 2:1 BK	1
14	50.8/25.4	2	50.8		25.4	1.10	-	50	HST A-2F 50.8/25.4 (00)	A-2F 50.8MM H/S TUBE 2:1 BK	1
15	76.2/38.1	3	76.2	1 40	38.1	1.20	-	50	HST A-2F 76.2/38.1 (00)	A-2F 76.2MM H/S TUBE 2:1 BK	1
16	102.0/50.8	4	102	40	50.8	1.35	-	50	HST A-2F 102.0/50.8 (00)	A-2F 102.0MM H/S TUBE 2:1 BK	1
17	125.0/62.5	5	125	1	62.5	1.40	-	50	HST A-2F 125.0/62.5 (00)	A-2F 125.0MM H/S TUBE 2:1 BK	1

Widely used in both commercial and military applications for electrical insulation and protection of in-line components, disconnected terminals, and splices with high insulation and excellent resilience. Bundle wires for flexible light-duty harnesses. Provides color-coding for wires, cables, terminals and components.

#### **Ordering information:**

Standard colors:

Black, Yellow, Red, Blue

Special colors:

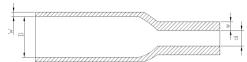
Brown, Grey, White, Green, Clear

Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.











- Crosslinked polyolefin
- Highly Flame retardant
- Flexible
- Excellent electrical properties
- Resistant to common fluids and chemicals
- Ideal for odd shapes

- Operating temp.: -55 ℃ to +135 ℃
- Min. shrink temp.: 70°C
- Min. full recovery temp.: 100°C
- Shrink ratio: 3:1
- RoHS compliant
- Meets: SAE-AMS-DTL-23053/5 Class 1 & 3
- Voltage: 600V

#### Approvals:

■ UL 125°C VW-1 600V, File No: E204071

CSA File No.1934614

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	>14 MPa
Ultimate elongation	ASTM D 2671	>500%
Longitudinal shrinkage	UL 224	0~-10%
Eccentricity	ASTM D 2671	<40%
Heat aging Tensile strength Ultimate elongation	175℃, 168 hrs.	>11 MPa >350%
Flammability	VVV-1	Pass
Voltage withstand	ASTM D 2671(AC 2500V,1 min.)	No breakdown
Dielectric strength	IEC60243	>20 kV/mm
Volume resistance	ASTM D 2671	$>10^{14}\Omega$ .cm
Copper stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion

	Specification	As supplie	d (mm)	After reco	vered(mm)		Standard length	Blac	:k 00	Other Colors
Item No	mm	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description	Color Code
140	111111	mside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron)	CUSTOMER	Description	P/N end with (XX)
1	3.0/1.0	3.0		1.0	0.55	0	200	HST A-2F(3X) 3.0/1.0 (00)	A-2F(3X) 3.0MM H/S TUBE 3:1 BK	
2	4.5/1.5	4.5		1.5	0.60	0	100	HST A-2F(3X) 4.5/1.5 (00)	A-2F(3X) 4.5MM H/S TUBE 3:1 BK	
3	6.0/2.0	6.0		2.0	0.65	0	100	HST A-2F(3X) 6.0/2.0 (00)	A-2F(3X) 6.0MM H/S TUBE 3:1 BK	
4	9.0/3.0	9.0		3.0	0.75	0	100	HST A-2F(3X) 9.0/3.0 (00)	A-2F(3X) 9.0MM H/S TUBE 3:1 BK	Yellow 04 (04)
5	12/4.0	12.0	30	4.0	0.80	-	50	HST A-2F(3X) 12.0/4.0 (00)	A-2F(3X) 12.0MM H/S TUBE 3:1 BK	Blue 06 (06)
6	15/5	15.0		5.0	0.85	-	50	HST A-2F(3X) 15.0/5.0 (00)	A-2F(3X) 15.0MM H/S TUBE 3:1 BK	Red 02 (02)
7	18/6	18.0		6.0	0.90	-	50	HST A-2F(3X) 18.0/6.0 (00)	A-2F(3X) 18.0MM H/S TUBE 3:1 BK	
8	24/8	24.0		8.0	1.00	-	50	HST A-2F(3X) 24.0/8.0 (00)	A-2F(3X) 24.0MM H/S TUBE 3:1 BK	
9	39/13	39.0		13.0	1.25	-	50	HST A-2F(3X) 39.0/13.0 (00)	A-2F(3X) 39.0MM H/S TUBE 3:1 BK	

Manufactured to have outstanding physical, chemical and electrical properties. Commonly used for electrical insulation, bundling to prevent corrosion, and provide mechanical protection. Has a 3:1 shrink ratio which makes this tubing suitable for irregular and awkward shape applications.

#### Ordering information:

Standard colors:

Black

Special colors:

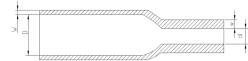
Yellow, Red, Blue

#### Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.











- Crosslinked polyolefin
- Highly flame retardant
- Highly flexible
- Resistant to common fluids and chemicals
- Ideal for odd & irregular shapes
- UV resistant for black

- Operating temp.: -55℃ to +135℃
- Min. shrink temp.: 70°C
- Min. full recovery temp.: 100°C
- High shrink ratio: 4:1
- RoHS compliant
- Meets: SAE-AMS-DTL-23053/5 Class 1 & 3
- Voltage: 600V

#### Approvals:

■ UL 125°C VW-1 600V, File No: E204071

CSA File No.1934614

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	>14 MPa
Ultimate elongation	ASTM D 2671	>500%
Longitudinal shrinkage	UL 224	0~-11%
Eccentricity	ASTM D 2671	<35%
Heat aging Tensile strength Ultimate elongation	175℃, 168 hrs.	>11 MPa >350%
Flammability	VW-1	Pass
Voltage withstand	ASTM D 2671(AC 2500V, 1 min.)	No breakdown
Dielectric strength	IEC60243	>20 kV/mm
Volume resistance	ASTM D 2671	>10 <sup>14</sup> Ω .cm
Copper stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion

	Specific	ation	As supplie	d (mm)	After reco	vered(mm)		Standard length	Black 00		
Item	mm	Inch	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description	
No	111111	IIICII	Inside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron)	CUSTOMER	Description	
1	19.1/4.6	3/4	19.1		4.5	1.65	-	50	HST A-2F(4X) 19.1/4.6 (00)	A-2F(4X) 19.1MM H/S TUBE 4:1 BK	
2	25.4/7.0	1.0	25.4		7.0	1.65	-	50	HST A-2F(4X) 25.4/7.0 (00)	A-2F(4X) 25.4MM H/S TUBE 4:1 BK	
3	32/8.0	1 1/4	32.0		8.0	1.80	-	50	HST A-2F(4X) 32.0/8.0 (00)	A-2F(4X) 32.0MM H/S TUBE 4:1 BK	
4	38.1/9.5	1 1/2	38.1		9.5	1.80	-	50	HST A-2F(4X) 38.1/9.5 (00)	A-2F(4X) 38.1MM H/S TUBE 4:1 BK	
5	50.8/14.0	2.0	50.8	30.0	14.0	1.80	0	50	HST A-2F(4X) 50.8/14.0 (00)	A-2F(4X) 50.8MM H/S TUBE 4:1 BK	
6	76.2/20.6	3.0	76.2		20.6	1.80	0	50	HST A-2F(4X) 76.2/20.6 (00)	A-2F(4X) 76.2MM H/S TUBE 4:1 BK	
7	102/26.7	4.0	102.0		26.7	1.90	0	1.2	HST A-2F(4X) 102.0/26.7 (00)	A-2F(4X) 102.0MM H/S TUBE 4:1 BK	
8	115/36.8	4 1/2	115.0		36.8	1.90	0	1.2	HST A-2F(4X) 115.0/36.8 (00)	A-2F(4X) 115.0MM H/S TUBE 4:1 BK	

Widely used as insulation or for repair on harnesses, cables and connectors in important markets such as military, aerospace, and fine electronic instruments.

#### Ordering information:

#### Standard colors:

Black

#### Special colors:

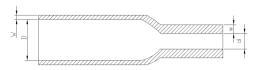
Special colors are available on request. Please contact our sales department for further information

#### Packaging:

Standard packaging is 1.2m.

# A-2F(YG) Flexible, Flame Retardant, High Performance Tubing











#### Features:

- Crosslinked polyolefin
- Highly flame retardant
- Outstanding physical, chemical properties
- **Excellent electrical properties**
- Meets: UL 224 ■ Voltage: 600V

- Operating temp.: -55°C to +135°C
- Min. shrink temp.: 70°C
- Min. full recovery temp.: 100°C
- Shrink ratio: 2:1
- RoHS compliant
- Meets: SAE-AMS-DTL-23053/5 Class 1 & 3

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	>14 MPa
Ultimate elongation	ASTM D 2671	>500%
Longitudinal shrinkage	UL 224	0~-11%
Facentricity	A CTM D 2674	<35% (<50mm)
Eccentricity	ASTM D 2671	<45% (≥50mm)
Heat aging Tensile strength Ultimate elongation	175℃, 168 hrs.	>11 MPa >350%
Flammability	VW-1	Pass
Voltage withstand	ASTM D 2671(AC 2500V, 1 min.)	No breakdown
Dielectric strength	IEC60243	>20 kV/mm
Volume resistance	ASTM D 2671	>10 <sup>14</sup> Ω .cm
Copper stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion

	Specification	As supplie	d (mm)	After reco	vered(mm)		Standard length		Yellow/Green 45				
Item No	mm	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description				
140		moral diameter	(max)(%)	(max)(d)	(min)(w)		(1101010)	CUSTOMER	Description				
1	2.4/1.2	2.4		1.2	0.42	0	200	HST A-2F(YG) 2.4/1.2 (45)	A-2F(Y/G) 2.4MM H/S TUBE 2:1 Y/G				
2	3.2/1.6	3.2			1.6	0.42	0	200	HST A-2F(YG) 3.2/1.6 (45)	A-2F(Y/G) 3.2MM H/S TUBE 2:1 Y/G			
3	4.8/2.4	4.8		2.4	0.52	0	100	HST A-2F(YG) 4.8/2.4 (45)	A-2F(Y/G) 4.8MM H/S TUBE 2:1 Y/G				
4	6.4/3.2	6.4		3.2	0.54	0	100	HST A-2F(YG) 6.4/3.2 (45)	A-2F(Y/G) 6.4MM H/S TUBE 2:1 Y/G				
5	8.0/4.0	8.0	]	4.0	0.54	-	100	HST A-2F(YG) 8.0/4.0 (45)	A-2F(Y/G) 8.0MM H/S TUBE 2:1 Y/G				
6	9.5/4.8	9.5	30	4.8	0.54	-	100	HST A-2F(YG) 9.5/4.8 (45)	A-2F(Y/G) 9.5MM H/S TUBE 2:1 Y/G				
7	12.7/6.4	12.7		6.4	0.62	-	50	HST A-2F(YG) 12.7/6.4 (45)	A-2F(Y/G) 12.7MM H/S TUBE 2:1 Y/G				
8	16.0/8.0	16.0		8.0	0.67	-	50	HST A-2F(YG) 16.0/8.0 (45)	A-2F(Y/G) 16.0MM H/S TUBE 2:1 Y/G				
9	18/9.0	18.0						9.0	0.76	-	50	HST A-2F(YG) 18.0/9.0 (45)	A-2F(Y/G) 18.0MM H/S TUBE 2:1 Y/G
10	19.1/9.5	19.1	]	9.5	0.76	-	50	HST A-2F(YG) 19.1/9.5 (45)	A-2F(Y/G) 19.1MM H/S TUBE 2:1 Y/G				
11	25.4/12.7	25.4		12.7	0.86	-	50	HST A-2F(YG) 25.4/12.7 (45)	A-2F(Y/G) 25.4MM H/S TUBE 2:1 Y/G				
12	31.8/15.9	31.8		15.9	0.86	-	50	HST A-2F(YG) 31.80/15.9 (45)	A-2F(Y/G) 31.8MM H/S TUBE 2:1 Y/G				
13	38.1/19.1	38.1		19.1	0.97	-	30	HST A-2F(YG) 38.1/19.1 (45)	A-2F(Y/G) 38.1MM H/S TUBE 2:1 Y/G				
14	50.8/25.4	50.8		25.4	0.97	-	30	HST A-2F(YG) 50.8/25.4 (45)	A-2F(Y/G) 50.8MM H/S TUBE 2:1 Y/G				
15	76.2/38.1	76.2	40	38.1	1.17	-	30	HST A-2F(YG) 76.2/38.1 (45)	A-2F(Y/G) 76.2MM H/S TUBE 2:1 Y/G				
16	101.6/50.8	101.6		50.8	1.30	-	30	HST A-2F(YG) 101.6/50.8 (45)	A-2F(Y/G) 101.6MM H/S TUBE 2:1 Y/G				

Manufactured to have outstanding physical, chemical and electrical properties this tubing is easy to install and allows for quick identification of ground conductors.

#### **Ordering information:**

#### Standard colors:

Yellow&Green

#### Special colors:

N/A

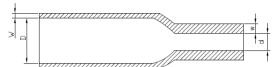
#### Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.

## A-2F(YG)(3X) Flexible, Flame Retardant, High Performance Tubing











#### Features:

- Crosslinked polyolefin
- Highly flame retardant
- Outstanding physical, chemical properties
- **Excellent electrical properties**
- Meets: UL 224

- Operating temp.: -55℃ to +135℃
- Min. shrink temp.: 70°C
- Min. full recovery temp.: 100°C
- Shrink ratio: 3:1
- RoHS compliant
- Meets: SAE-AMS-DTL-23053/5 Class 1 & 3
- Voltage: 600V

Property	Test Method	Typical Data		
Tensile strength	ASTM D 2671	>14 MPa		
Ultimate elongation	ASTM D 2671	>500%		
Longitudinal shrinkage	UL 224	0~-11%		
Cooptrigity	ASTM D 2671	<35% (<50mm)		
Eccentricity	AST W D 2071	<45% (≥50mm)		
Heat aging Tensile strength Ultimate elongation	175°C, 168 hrs.	>11 MPa >350%		
Flammability	VW-1	Pass		
Voltage withstand	ASTM D 2671(AC 2500V, 1 min.)	No breakdown		
Dielectric strength	IEC60243	>20 kV/mm		
Volume resistance	ASTM D 2671	>10 <sup>14</sup> Ω .cm		
Copper stability	UL 224	Pass		
Copper corrosion	UL 224	No corrosion		

	Specifica	ation	As supplied (mm)		After recovered(mm)			Standard length	Yel	low/Green 45
Item No	mm	Inch	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description
INO	111111	Inch	Inside diameter	(max)(%)	(max)(d) (min)(w)		(meters/ron/	CUSTOMER	Description	
1	2.4/0.8	3/32	2.4		0.8	0.51	0	200	HST A-2F(3X)YG 2.4/0.8 (45)	A-2F(Y/G) 2.4MM H/S TUBE 3:1 Y/G
2	3.2/1.0	1/8	3.2		1.0	0.55	0	200	HST A-2F(3X)YG 3.2/1.0 (45)	A-2F(Y/G) 3.2MM H/S TUBE 3:1 Y/G
3	4.8/1.5	3/16	4.8		1.5	0.60	0	100	HST A-2F(3X)YG 4.8/1.5 (45)	A-2F(Y/G) 4.8MM H/S TUBE 3:1 Y/G
4	6.4/2.0	1/4	6.4	20	2.0	0.65	0	100	HST A-2F(3X)YG 6.4/2.0 (45)	A-2F(Y/G) 6.4MM H/S TUBE 3:1 Y/G
5	9.5/3.0	3/8	9.5	30	3.0	0.75	-	100	HST A-2F(3X)YG 9.5/3.0 (45)	A-2F(Y/G) 9.5MM H/S TUBE 3:1 Y/G
6	12.7/4.0	1/2	12.7		4.0	0.80	-	50	HST A-2F(3X)YG 12.7/4.0 (45)	A-2F(Y/G) 12.7MM H/S TUBE 3:1 Y/G
7	19.1/6.0	3/4	19.1		6.0	0.90	-	50	HST A-2F(3X)YG 19.1/6.0 (45)	A-2F(Y/G) 19.1MM H/S TUBE 3:1 Y/G
8	25.4/8.0	1	25.4	35	8.0	1.00	-	50	HST A-2F(3X)YG 25.4/8.0 (45)	A-2F(Y/G) 25.4MM H/S TUBE 3:1 Y/G
9	39.1/13.0	1 1/2	39.1		13.0	1.20	-	50	HST A-2F(3X)YG 39.0/13.0 (45)	A-2F(Y/G) 39.0MM H/S TUBE 3:1 Y/G

Manufactured to have outstanding physical, chemical and electrical properties this tubing is easy to install and allows for quick identification of ground conductors.

#### Ordering information:

#### Standard colors:

Yellow&Green

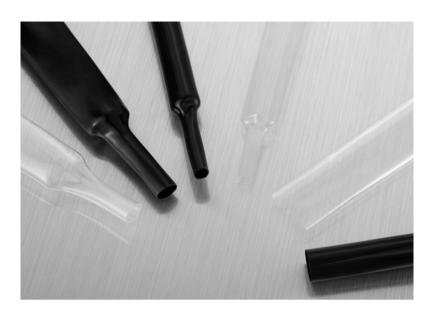
#### Special colors:

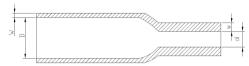
N/A

#### Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.







- Crosslinked polyolefin
- Commercial grade
- Excellent electrical and physical properties
- Bright shiny black
- Clear is 100% transparent

- Operating temp.: -55°C to +105°C
- Min. shrink temp.: 70°C
- Min. full recovery temp.: 95°C
- Shrink ratio: 2:1RoHS compliantVoltage: 600V

Property	Test Method	Typical Data		
Tensile strength	ASTM D 2671	>12 MPa		
Ultimate elongation	ASTM D 2671	>400%		
Longitudinal shrinkage	UL 224	0~-8%		
Canantui aitu	ACTM D 2074	<30% (the size < 50mm)		
Eccentricity	ASTM D 2671	<40% (the size ≥ 50mm)		
Heat aging Tensile strength Ultimate elongation	136℃, 168 hrs.	>11 MPa >200%		
Flammability	-	Flammable		
Voltage withstand	ASTM D 2671 (AC 2500V, 1 min.)	No breakdown		
Volume resistance	ASTM D 2671	> $10^{14}\Omega$ .cm		
Copper stability	UL 224	Pass		
Copper corrosion	UL 224	No corrosion		

	Specification	As supplie	d (mm)	After reco	vered(mm)		Standard length		Black 00	Other Colors
Item No	mm	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description	Color Code
140	"""	mside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron/	CUSTOMER	Description	P/N end with (XX)
1	1.0/0.5	1.0		0.5	0.32	0	200	HST A-1 1.0/0.5 (00)	A-1 1.0MM H/S TUBE 2:1 BK	
2	1.5/0.75	1.5		0.75	0.32	0	200	HST A-1 1.5/0.75 (00)	A-1 1.5MM H/S TUBE 2:1 BK	
3	2.0/1.0	2.0		1.0	0.40	0	200	HST A-1 2.0/1.0 (00)	A-1 2.0MM H/S TUBE 2:1 BK	
4	2.5/1.25	2.5		1.25	0.44	0	200	HST A-1 2.5/1.25 (00)	A-1 2.5MM H/S TUBE 2:1 BK	
5	3.0/1.5	3.0		1.5	0.44	0	200	HST A-1 3.0/1.5 (00)	A-1 3.0MM H/S TUBE 2:1 BK	
6	3.5/1.75	3.5		1.75	0.44	0	200	HST A-1 3.5/1.75 (00)	A-1 3.5MM H/S TUBE 2:1 BK	
7	4.0/2.0	4.0		2.0	0.44	0	200	HST A-1 4.0/2.0 (00)	A-1 4.0MM H/S TUBE 2:1 BK	
8	5.0/2.5	5.0		2.5	0.56	0	100	HST A-1 5.0/2.5 (00)	A-1 5.0MM H/S TUBE 2:1 BK	
9	6.0/3.0	6.0	30	3.0	0.56	0	100	HST A-1 6.0/3.0 (00)	A-1 6.0MM H/S TUBE 2:1 BK	
10	7.0/3.5	7.0		3.5	0.56	0	100	HST A-1 7.0/3.5 (00)	A-1 7.0MM H/S TUBE 2:1 BK	
11	8.0/4.0	8.0		4.0	0.56	-	100	HST A-1 8.0/4.0 (00)	A-1 8.0MM H/S TUBE 2:1 BK	
12	9.0/4.5	9.0		4.5	0.56	-	100	HST A-1 9.0/4.5 (00)	A-1 9.0MM H/S TUBE 2:1 BK	
13	10.0/5.0	10.0		5.0	0.56	-	100	HST A-1 10.0/5.0 (00)	A-1 10.0MM H/S TUBE 2:1 BK	
14	11.0/5.5	11.0		5.5	0.56	-	100	HST A-1 11.0/5.5 (00)	A-1 11.0MM H/S TUBE 2:1 BK	
15	12.0/6.0	12.0		6.0	0.56	-	100	HST A-1 12.0/6.0 (00)	A-1 12.0MM H/S TUBE 2:1 BK	Clear X (X)
16	13.0/6.5	13.0		6.5	0.56	-	50	HST A-1 13.0/6.5 (00)	A-1 13.0MM H/S TUBE 2:1 BK	
17	14.0/7.0	14.0		7.0	0.69	-	50	HST A-1 14.0/7.0 (00)	A-1 14.0MM H/S TUBE 2:1 BK	
18	15.0/7.5	15.0		7.5	0.69	-	50	HST A-1 15.0/7.5 (00)	A-1 15.0MM H/S TUBE 2:1 BK	
19	16.0/8.0	16.0		8.0	0.69	-	50	HST A-1 16.0/8.0 (00)	A-1 16.0MM H/S TUBE 2:1 BK	
20	18.0/9.0	18.0		9.0	0.76	-	50	HST A-1 18.0/9.0 (00)	A-1 18.0MM H/S TUBE 2:1 BK	
21	20.0/10.0	20.0		10.0	0.76	-	50	HST A-1 20.0/10.0 (00)	A-1 20.0MM H/S TUBE 2:1 BK	
22	22.0/11.0	22.0		11.0	0.76	-	50	HST A-1 22.0/11.0 (00)	A-1 22.0MM H/S TUBE 2:1 BK	
23	28.0/14.0	28.0		14.0	0.86	-	50	HST A-1 25.0/12.5 (00)	A-1 25.0MM H/S TUBE 2:1 BK	
24	30.0/15.0	30.0		15.0	0.86	-	50	HST A-1 28.0/14.0 (00)	A-1 28.0MM H/S TUBE 2:1 BK	
25	32.0/16.0	32.0		16.0	0.86	-	50	HST A-1 30.0/15.0 (00)	A-1 30.0MM H/S TUBE 2:1 BK	
26	35.0/17.5	35.0		17.5	0.86	-	50	HST A-1 35.0/17.5 (00)	A-1 35.0MM H/S TUBE 2:1 BK	
27	40.0/20.0	40.0		20.0	0.97	-	50	HST A-1 40.0/20.0 (00)	A-1 40.0MM H/S TUBE 2:1 BK	
28	50.0/25.0	50.0		25.0	0.97	-	50	HST A-1 50.0/25.0 (00)	A-1 50.0MM H/S TUBE 2:1 BK	
29	60.0/30.0	60.0		30.0	0.97	-	30	HST A-1 60.0/30.0 (00)	A-1 60.0MM H/S TUBE 2:1 BK	]
30	70.0/35.0	70.0		35.0	1.17	-	30	HST A-1 70.0/35.0 (00)	A-1 70.0MM H/S TUBE 2:1 BK	1
31	80.0/40.0	80.0	40	40.0	1.17	-	30	HST A-1 80.0/40.0 (00)	A-1 80.0MM H/S TUBE 2:1 BK	
32	100.0/50.0	100.0	]	50.0	1.3	-	30	HST A-1 100.0/50.0 (00)	A-1 100.0MM H/S TUBE 2:1 BK	

Commercial grade heat shrink tubing for general applications where flame-retardant properties are not needed, but electrical insulation and mechanical performance are paramount.

#### Ordering information:

Standard colors:

Clear,Black

Special colors:

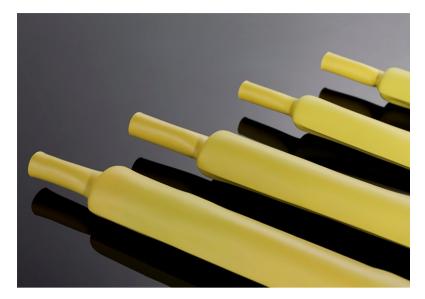
N/A

Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.

### ABG Flexible, Flame Retardant, High Performance Tubing







#### **Features:**

- Crosslinked polyolefin
- Industry specific design
- Excellent shrinking properties
- Outstanding physical properties

- Operating temp.: -55°C to +125°C
- Min. shrink temp.: 80°C
- Min. full recovery temp.: 110°C
- RoHS compliant

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	>12 MPa
Ultimate elongation	ASTM D 2671	>500%
Longitudinal shrinkage	UL 224	+2~-8%
Eccentricity	ASTM D 2671	<35%
Heat aging Tensile strength Ultimate elongation	158℃, 168 hrs.	>11 MPa >200%
Voltage withstand	ASTM D 2671 (AC 2500V, 1 min.)	No breakdown
Volume resistance	ASTM D 2671	>10 <sup>14</sup> Ω .cm
Copper stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion
Printability	Hot stamp/Ink jet/Offset printing	Very good

	Specification	As supplie	d (mm)	After recovered(mm)			Standard length		Yellow 04
Item No	mm	Inside diameter	Ecentricity	Inside diameter	Wall thickness Tube Shape	(meters/roll)	Amphenol P/N	Description	
NO	111111	Inside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron/	CUSTOMER	Description
1	12.7/6.4	12.7		6.4	0.62	-	100	HST ABG 12.7/6.4 (04)	ABG 12.7MM H/S TUBE 2:1 YE
2	23.0/9.5	23.0		9.5	0.65	-	100	HST ABG 23.0/9.5 (04)	ABG 23.0MM H/S TUBE 2:1 YE
3	27.5/12.7	27.5		12.7	0.70	-	100	HST ABG 27.5/12.7 (04)	ABG 27.5MM H/S TUBE 2:1 YE
4	29.0/12.7	29.0		12.7	0.70	-	50	HST ABG 29.0/12.7 (04)	ABG 29.0MM H/S TUBE 2:1 YE
5	31.8/15.0	31.8	30	15.0	0.80	-	50	HST ABG 31.8/15.0 (04)	ABG 31.8MM H/S TUBE 2:1 YE
6	33.5/16.0	33.5	30	16.0	0.80	-	50	HST ABG 33.5/16.0 (04)	ABG 33.5MM H/S TUBE 2:1 YE
7	40.5/19.0	40.5		19.0	0.80	-	50	HST ABG 40.5/19.0 (04)	ABG 40.5MM H/S TUBE 2:1 YE
8	50.8/25.4	50.8		25.4	0.80	-	50	HST ABG 50.8/25.4 (04)	ABG 50.8MM H/S TUBE 2:1 YE
9	65.0/32.5	65.0		32.5	1.20	-	50	HST ABG 65.0/32.5 (04)	ABG 65.0MM H/S TUBE 2:1 YE
10	76.0/38.1	76.0		38.1	1.20	-	50	HST ABG 76.0/38.1 (04)	ABG 76.0MM H/S TUBE 2:1 YE

Suitable for the application of protecting flexible gas pipes.

#### **Ordering information:**

Standard colors:

Lemon Yellow

Special colors:

N/A

Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.













- Crosslinked adhesive lined polyolefin
- Flame retardant
- Co-extrusion technology
- Excellent sealing and insulation properties
- Bonds perfectly to various wire jackets
- UV resistant for black

- Operating temp.: -55°C to +125°C
- Min. shrink temp.: 80°C
- Min. full recovery temp.: 110°C
- Shrink ratio: 3:1
- RoHS compliant
- Meets: SAE-AMS-DTL-23053/4
- Voltage: 600V

#### Approvals:

■ UL125°C VW-1 600V, File No: E204071

CSA File No.1934614

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	>12 MPa
Ultimate elongation	ASTM D 2671	>400%
Longitudinal shrinkage	UL 224	0 ~ -10%
Eccentricity	ASTM D 2671	<40%
Heat aging Tensile strength Ultimate elongation	158℃, 168 hrs.	>11 MPa >350%
Flammability	VW-1	Pass
Voltage withstand	ASTM D 2671(AC 2500V, 1 min.)	No breakdown
Volume resistance	ASTM D 2671	$>10^{14}\Omega$ .cm
Copper stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion
Property of adhesive		
Ring-ball soft point	ASTM E28	105±5℃

	Specification	As supplie	d (mm)	After recov	vered(mm)		Standard length		Black 00	Other Colors
Item	No mm Inside diameter Ecentricity Insid	Tanisha dinamakan	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description	Color Code
INO		(max)(d)	(min)(w)		(meters/ron)	CUSTOMER	Description	P/N end with (XX)		
1	3.0/1.0	3.0		1.0	0.95	0	200	HST A-5(3X) 3.0/1.0 (00)	A-5(3X) 3.0MM H/S TUBE WITH ADHESIVE 3:1 BK	
2	4.8/1.5	4.8		1.5	1.10	0	100	HST A-5(3X) 4.8/1.5 (00)	A-5(3X) 4.8MM H/S TUBE WITH ADHESIVE 3:1 BK	
3	6.0/2.0	6.0		2.0	1.20	0	100	HST A-5(3X) 6.0/2.0 (00)	A-5(3X) 6.0MM H/S TUBE WITH ADHESIVE 3:1 BK	
4	9.0/3.0	9.0		3.0	1.30	0	50	HST A-5(3X) 9.0/3.0 (00)	A-5(3X) 9.0MM H/S TUBE WITH ADHESIVE 3:1 BK	V. II. 04 (04)
5	12.0/4.0	12.0		4.0	1.60	0	25	HST A-5(3X) 12.0/4.0 (00)	A-5(3X) 12.0MM H/S TUBE WITH ADHESIVE 3:1 BK	Yellow 04 (04) Blue 06 (06)
6	15.0/5.0	15.0	35	5.0	1.60	0	25	HST A-5(3X) 15.0/5.0 (00)	A-5(3X) 15.0MM H/S TUBE WITH ADHESIVE 3:1 BK	Red 02 (02)
7	19.0/6.0	19.0		6.0	2.00	0	25	HST A-5(3X) 19.0/6.0 (00)	A-5(3X) 19.0MM H/S TUBE WITH ADHESIVE 3:1 BK	
8	24.0/8.0	24.0		8.0	2.40	0	25	HST A-5(3X) 24.0/8.0 (00)	A-5(3X) 24.0MM H/S TUBE WITH ADHESIVE 3:1 BK	
9	30.0/10.0	30.0		10.0	2.40	0	25	HST A-5(3X) 30.0/10.0 (00)	A-5(3X) 30.0MM H/S TUBE WITH ADHESIVE 3:1 BK	
10	40.0/13.0	40.0		13.0	2.40	0	25	HST A-5(3X) 40.0/13.0 (00)	A-5(3X) 40.0MM H/S TUBE WITH ADHESIVE 3:1 BK	
11	50.0/19.0	50.0		19.0	2.40	0	25	HST A-5(3X) 50.0/19.0 (00)	A-5(3X) 50.0MM H/S TUBE WITH ADHESIVE 3:1 BK	

Designed to provide excellent properties of both insulation and sealing. Widely used to protect auto wires, shipping cables, bundled wires, and metal tubes against water and moisture.

#### Ordering information:

Standard colors:

Black

Special colors:

Yellow, Blue, Red

Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.











- Crosslinked adhesive lined polyolefin
- Flame retardant
- Co-extrusion technology
- Excellent sealing and insulation properties
- Bonds perfectly to various wire jackets
- UV resistant for black

- Operating temp.: -55°C to +125°C
- Min. shrink temp.: 80°C
- Min. full recovery temp.: 110°C
- Shrink ratio: 4:1
- RoHS compliant
- Meets: SAE-AMS-DTL-23053/4
- Voltage: 600V

#### Approvals:

■ UL125°C VW-1 600V, File No: E204071

CSA File No.1934614

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	>12 MPa
Ultimate elongation	ASTM D 2671	>400%
Longitudinal shrinkage	UL 224	0~-10%
Eccentricity	ASTM D 2671	<40%
Heat aging Tensile strength Ultimate elongation	158℃, 168 hrs.	>11 MPa >350%
Flammability	VW-1	Pass
Voltage withstand	ASTM D 2671(AC 2500V, 1 min.)	No breakdown
Volume resistance	ASTM D 2671	>10 <sup>14</sup> Ω .cm
Copper stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion
Property of adhesive		
Ring-ball soft point	ASTM E28	105±5℃

	Specific	ation	As supplie	d (mm)	After reco	after recovered(mm)		Standard length		Black 00	Other Colors
Item No	mm	Inch	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description	Color Code
INO	111111	IIICII	Inside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron)	CUSTOMER	Description	P/N end with (XX)
1	4.0/1.0	3/16	4.0		1.0	1.15	0	200	HST A-5(4X) 4.0/1.0 (00)	A-5(4X) 4.0MM H/S TUBE WITH ADHESIVE 4:1 BK	
2	6.0/1.5	1/4	6.0		1.5	1.35	0	100	HST A-5(4X) 6.0/1.5 (00)	A-5(4X) 6.0MM H/S TUBE WITH ADHESIVE 4:1 BK	
3	8.0/2.0	5/16	8.0		2	1.65	0	100	HST A-5(4X) 8.0/2.0 (00)	A-5(4X) 8.0MM H/S TUBE WITH ADHESIVE 4:1 BK	
4	12.0/3.0	1/2	12.0		3	2.00	0	25	HST A-5(4X) 12.0/3.0 (00)	A-5(4X) 12.0MM H/S TUBE WITH ADHESIVE 4:1 BK	Yellow 04 (04)
5	16.0/4.0	5/8	16.0	40	4.0	2.00	0	25	HST A-5(4X) 16.0/4.0 (00)	A-5(4X) 16.0MM H/S TUBE WITH ADHESIVE 4:1 BK	Blue 06 (06)
6	19.0/4.45	3/4	19.0		4.45	2.30	0	25	HST A-5(4X) 19.0/4.45 (00)	A-5(4X) 19.0MM H/S TUBE WITH ADHESIVE 4:1 BK	Red 02 (02)
7	24.0/6.0	1	24.0		6.0	2.50	0	25	HST A-5(4X) 24.0/6.0 (00)	A-5(4X) 24.0MM H/S TUBE WITH ADHESIVE 4:1 BK	
8	32.0/8.0	1 1/4	32.0		8.0	2.80	0	25	HST A-5(4X) 32.0/8.0 (00)	A-5(4X) 32.0MM H/S TUBE WITH ADHESIVE 4:1 BK	
9	52.0/13.0	2	52.0		13.0	2.90	0	25	HST A-5(4X) 52.0/13.0 (00)	A-5(4X) 52.0MM H/S TUBE WITH ADHESIVE 4:1 BK	

Designed to provide excellent properties of both insulation and sealing. Widely used to protect auto wires, shipping cables, bundled wires, and metal tubes against water and moisture.

#### Ordering information:

Standard colors:

Black

Special colors:

Yellow, Red, Blue

Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.











- Crosslinked adhesive lined polyolefin
- Co-extrusion technology
- Excellent electrical and mechanical
- Excellent sealing and insulation properties
- UV resistance
- Highly flame retardant

■ Min. shrink temp.: 70°C

Operating temp.: -55℃ to +125℃

- Min. full recovery temp.: 110°C
- Shrink ratio: 3:1
- RoHS compliant
- Meets: SAE-AMS-DTL-23053/4
- Voltage: 600V

#### Approvals:

■ UL 125°C VW-1 600V, File No: E204071

CSA File No.1934614

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	>12 MPa
Ultimate elongation	ASTM D 2671	>400%
Longitudinal shrinkage	UL 224	0~-10%
Eccentricity	ASTM D 2671	<40%
Heat aging Tensile strength Ultimate elongation	158℃/168 hrs.	>11 MPa >350%
Flammability	VW-1	Pass
Voltage withstand	ASTM D 2671/AC 2500V/1 min.	No breakdown
Volume resistance	ASTM D 2671	$>10^{14}\Omega$ .cm
Copper stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion
Property of adhesive		
Ring-ball soft point	ASTM E28	105±5℃

	Specifica	tion	As supplied	d (mm)	After reco	vered(mm)		Standard length		Black 00	Other Colors
Item No		Inch	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description	Color Code
INO	mm	Inch	Inside diameter	(max)(%)	(max)(d)	(min)(w)		(ineters/roll)	CUSTOMER	Description	P/N end with (XX)
1	3.0/1.0	1/8	3.0		1.0	1.00	0	200	HST A-5(3X)-F 3.0/1.0 (00)	A-5(3X)-F 3.0MM H/S TUBE WITH ADHESIVE 3:1 BK	
2	4.8/1.5	3/16	4.8		1.5	1.00	0	100	HST A-5(3X)-F 4.8/1.5 (00)	A-5(3X)-F 4.8MM H/S TUBE WITH ADHESIVE 3:1 BK	
3	6.0/2.0	1/4	6.0	35	2.0	1.00	0	100	HST A-5(3X)-F 6.0/2.0 (00)	A-5(3X)-F 6.0MM H/S TUBE WITH ADHESIVE 3:1 BK	1
4	9.0/3.0	3/8	9.0		3.0	1.35	0	50	HST A-5(3X)-F 9.0/3.0 (00)	A-5(3X)-F 9.0MM H/S TUBE WITH ADHESIVE 3:1 BK	Yellow 04 (04)
5	12.0/4.0	1/2	12.0		4.0	1.65	0	25	HST A-5(3X)-F 12.0/4.0 (00)	A-5(3X)-F 12.0MM H/S TUBE WITH ADHESIVE 3:1 BK	Blue 06 (06) Red 02 (02)
6	19.0/6.0	3/4	19.0		6.0	2.10	0	25	HST A-5(3X)-F 19.0/6.0 (00)	A-5(3X)-F 19.0MM H/S TUBE WITH ADHESIVE 3:1 BK	Red 02 (02)
7	24.0/8.0	1	24.0	40	8.0	2.35	0	25	HST A-5(3X)-F 24.0/8.0 (00)	A-5(3X)-F 24.0MM H/S TUBE WITH ADHESIVE 3:1 BK	1
8	40.0/13.0	1 1/2	40.0		13.0	2.40	0	25	HST A-5(3X)-F 40.0/13.0 (00)	A-5(3X)-F 40.0MM H/S TUBE WITH ADHESIVE 3:1 BK	1

Designed to provide both insulation and sealing for protected articles. Typical applications are environmental sealing of electrical components, such as wire splices and harnesses in the automotive and communications industries.

#### **Ordering information:**

#### Standard colors:

Black

#### Special colors:

Yellow, Red, Blue

#### Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.











- Crosslinked adhesive lined polyolefin
- Co-extrusion technology
- Excellent electrical and mechanical
- Excellent sealing and insulation properties
- Highly flame retardant
- UV resistance

- Operating temp.: -55℃ to +125℃
- Min. shrink temp.: 70°C
- Min. full recovery temp.: 110°C
- Shrink ratio: 4:1
- RoHS compliant
- Meets: SAE-AMS-DTL-23053/4
- Voltage: 600V

#### Approvals:

■ UL 125°C VW-1 600V, File No: E204071

CSA File No.1934614

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	>12 MPa
Ultimate elongation	ASTM D 2671	>400%
Longitudinal shrinkage	UL 224	0 ~ -10%
Eccentricity	ASTM D 2671	<40%
Heat aging Tensile strength Ultimate elongation	158℃/168 hrs.	>11 MPa >350%
Flammability	VVV-1	Pass
Voltage withstand	ASTM D 2671/AC 2500V/1 min.	No breakdown
Volume resistance	ASTM D 2671	>10 <sup>14</sup> Ω .cm
Copper stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion
Property of adhesive		
Ring-ball soft point	ASTM E28	105±5℃

	Specificat	tion	As supplie	d (mm)	After reco	vered(mm)		Standard length		Black 00	Other Colors
Item No	mm	Inch	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description	Color Code
NO	mm	inch	Insidediameter	(max)(%)	(max)(d)	(min)(w)	CUSTOMER	Description	P/N end with (XX)		
1	4.0/1.0	3/16	4.0		1.0	1.10	0	200	HST A-5(4X)-F 4.0/1.0 (00)	A-5(4X)-F 4.0MM H/S TUBE WITH ADHESIVE 4:1 BK	
2	6.0/1.5	1/4	6.0		1.5	1.10	0	100	HST A-5(4X)-F 6.0/1.5 (00)	A-5(4X)-F 6.0MM H/S TUBE WITH ADHESIVE 4:1 BK	
3	8.0/2.0	5/16	8.0		2.0	1.10	0	100	HST A-5(4X)-F 8.0/2.0 (00)	A-5(4X)-F 8.0MM H/S TUBE WITH ADHESIVE 4:1 BK	
4	12.0/3.0	1/2	12.0		3.0	1.40	0	25	HST A-5(4X)-F 12.0/3.0 (00)	A-5(4X)-F 12.0MM H/S TUBE WITH ADHESIVE 4:1 BK	Yellow 04 (04)
5	16.0/4.0	5/8	16.0	40	4.0	1.65	0	25	HST A-5(4X)-F 16.0/4.0 (00)	A-5(4X)-F 16.0MM H/S TUBE WITH ADHESIVE 4:1 BK	Blue 06 (06)
6	19/4.45	/	19.0		4.45	2.00	0	25	HST A-5(4X)-F 19.0/4.45 (00)	A-5(4X)-F 19.0MM H/S TUBE WITH ADHESIVE 4:1 BK	Red 02 (02)
7	24.0/6.0	1	24.0		6.0	2.15	0	25	HST A-5(4X)-F 24.0/6.0 (00)	A-5(4X)-F 24.0MM H/S TUBE WITH ADHESIVE 4:1 BK	
8	32.0/8.0	1 1/4	32.0		8.0	2.40	0	25	HST A-5(4X)-F 32.0/8.0 (00)	A-5(4X)-F 32.0MM H/S TUBE WITH ADHESIVE 4:1 BK	
9	52.0/13.0	2	52.0		13.0	2.40	0	25	HST A-5(4X)-F 52.0/13.0 (00)	A-5(4X)-F 52.0MM H/S TUBE WITH ADHESIVE 4:1 BK	

Designed to provide both insulation and sealing for protected articles. Typical applications are environmental sealing of electrical components, such as wire splices and harnesses in the automotive and communications industries.

#### **Ordering information:**

Standard colors:

Black

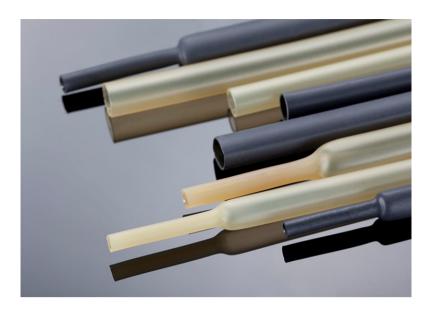
Special colors:

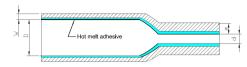
Yellow, Red, Blue

Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.







- Crosslinked adhesive lined polyolefin
- Semi-rigid
- High shrink ratio
- High performance adhesive
- Designed for wire harnesses/splices
- Excellent mechanical properties

- Operating temp.: -55°C to +125°C
- Min. shrink temp.: 110°C
- Min. full recovery temp.: 135℃
- Shrink ratio: 4:1
- RoHS compliant
- Voltage: 600V

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	>12 MPa
Ultimate elongation	ASTM D 2671	>400%
Longitudinal shrinkage	UL 224	1~-11%
Eccentricity	ASTM D 2671	<40%
Heat aging Tensile strength Ultimate elongation	158℃, 168 hrs.	>11 MPa >300%
Flammability	ASTM D 2671	Self-extinguish in 30 sec.
Volume resistance	ASTM D 2671	>10 <sup>14</sup> Ω .cm
Dielectric strength	IEC60243	>20kV/mm
Copper stability	UL 224	Pass
Copper corrosion	UL 224	No corrosion
Property of adhesive		
soft point	ASTM E28	135±5℃

	Specification	As supplie	d (mm)	After reco	vered(mm)		Standard length		Black 00	Other Colors							
Item No	mm	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	Tube Shape	Tube Shape	Tube Shape	Tube Shape	Tube Shape	Tube Shape	Tube Shape	Tube Shape (meters/roll)	Amphenol P/N	Description	Color Code
NO	mm	Inside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron)	CUSTOMER	Description	P/N end with (XX)							
1	6.0/1.27	6.0		1.27	1.30	0	1.22	HST ABK 6.0/1.27 (00)	ABK 6.0MM H/S TUBE WITH ADHESIVE 4:1 BK								
2	8.0/1.65	8.0	35	1.65	1.52	0	1.22	HST ABK 8.0/1.65 (00)	ABK 8.0MM H/S TUBE WITH ADHESIVE 4:1 BK	Clear X (X)							
3	12.0/2.41	12.0	33	2.41	1.90	0	1.22	HST ABK 12.0/2.41 (00)	ABK 12.0MM H/S TUBE WITH ADHESIVE 4:1 BK	Clear X (X)							
4	18.0/4.45	18.0		4.45	2.41	0	1.22	HST ABK 18.0/4.45 (00)	ABK 18.0MM H/S TUBE WITH ADHESIVE 4:1 BK								

Specially designed to protect splices and joints of wire harnesses, and other components against environmental damage.

#### Ordering information:

#### Standard colors:

Black,Clear

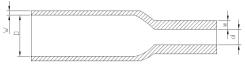
#### Special colors:

N/A

#### Packaging:

Standard packaging is 1.2m.







- Crosslinked adhesive lined polyolefin
- Co-extrusion technology
- Excellent sealing and insulation properties
- Industry specific design
- Special

- Operating temp.: -55°C to +105°C
- Min. shrink temp.: 100°C
- Min. full recovery temp.: 120°C
- RoHS compliant
- Voltage: 600V

Property	Test Method	Typical Data	
Property of jacket			
Tensile strength	ASTM D 2671	>12 MPa	
Ultimate elongation	ASTM D 2671	>300%	
Longitudinal shrinkage	UL 224	-2~-8%	
Eccentricity	ASTM D 2671	<35%	
Heat aging Tensile strength Ultimate elongation	136℃/168 hrs.	>12 MPa >300%	
Flammability	_	Flammable	
Deformation resistance	_	≥50%	
Fluid resistance	AMS-DTL-23053	Pass	

	Specification	As supplie	d (mm)	After reco	vered(mm)		Standard length		Black 00
Item No	mm	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description
INO		inside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron)	CUSTOMER	Description
1	6.0/4.5	6.0		4.5	1.15	0	200	HST A-5(2000) 6.0/4.5 (00)	A-5(2000) 6MM H/S TUBE WITH ADHESIVE 2:1 BK
2	8.0/6.0	8.0		6.0	1.25	0	100	HST A-5(2000) 8.0/6.0 (00)	A-5(2000) 8MM H/S TUBE WITH ADHESIVE 2:1 BK
3	10.0/7.0	10.0	30	7.0	1.25	0	100	HST A-5(2000) 10.0/7.0 (00)	A-5(2000) 10MM H/S TUBE WITH ADHESIVE 2:1 BK
4	13.0/7.8	13.0		7.8	1.45	0	100	HST A-5(2000) 13.0/7.8 (00)	A-5(2000) 13MM H/S TUBE WITH ADHESIVE 2:1 BK
5	15.0/9.5	15.0		9.5	1.45	0	100	HST A-5(2000) 15.0/9.5 (00)	A-5(2000) 15MM H/S TUBE WITH ADHESIVE 2:1 BK

Manufactured with a dual wall frame that can effectively protect pipes against any kind of damage caused by vibration, friction, and corrosion, thus improving the reliability of said pipes.

#### **Ordering information:**

Standard colors:

Black

Special colors:

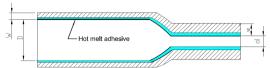
N/A

Packaging:

Standard packaging on spools.

Special: 1m; 1.2m pieces are available on request.









- Crosslinked fluoropolymer
- Flexibility
- Flame retardant
- Superior physical and mechanical properties
- Excellent chemical and solvent resistance
- Excellent abrasion resistance

- Operating temp.: -55 ℃ to +150 ℃
- Min. full recovery temp.: 150°C
- RoHS compliant
- Meets: SAE-AMS-DTL-23053/18
- Voltage: 600V

#### Approvals:

■ UL VW-1, File No: E249362

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	>20 MPa
Ultimate elongation	ASTM D 2671	≥150%
Ultimate elongation after aging	180℃, 168 hrs.	≥100%
Heat shock	UL 224 (250°C, 4 hrs)	No cracks, flowing or dripping
Cold bend	UL 224 (-55℃, 4 hrs)	No cracking
Flammability	UL224 (VW-1)	Pass
Volume resistance	ASTM D 2671	≥10 <sup>14</sup> Ω .cm
Copper corrosion	UL 224 (180°C, 168 hrs.)	No corrosion
Copper stability	UL 224 (180℃, 168 hrs.)	No sign of degradation

	Specific	ation	As supplie	d (mm)	After reco	vered(mm)		Standard length		Black 00	Other Colors
Item No	mm	Inch	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description	Color Code
INO	mm	inch	Inside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron)	CUSTOMER	Description	P/N end with (XX)
1	1.2/0.6	3/64	1.2		0.6	0.28	0	200	HST A-150K 1.2/0.6 (00)	A-150K 1.2MM H/S TUBE 2:1 BK	
2	1.6/0.8	1/16	1.6		0.8	0.28	0	200	HST A-150K 1.6/0.8 (00)	A-150K 1.6MM H/S TUBE 2:1 BK	
3	2.4/1.2	3/32	2.4		1.2	0.28	0	200	HST A-150K 2.4/1.2 (00)	A-150K 2.4MM H/S TUBE 2:1 BK	
4	3.2/1.6	1/8	3.2		1.6	0.28	0	200	HST A-150K 3.2/1.6 (00)	A-150K 3.2MM H/S TUBE 2:1 BK	
5	4.8/2.4	3/16	4.8	40	2.4	0.28	0	100	HST A-150K 4.8/2.4 (00)	A-150K 4.8MM H/S TUBE 2:1 BK	
6	6.4/3.2	1/4	6.4		3.2	0.28	0	1.22	HST A-150K 6.4/3.2 (00)	A-150K 6.4MM H/S TUBE 2:1 BK	Clear X (X)
7	8.0/4.0	5/16	8.0		4.0	0.33	-	1.22	HST A-150K 8.0/4.0 (00)	A-150K 8.0MM H/S TUBE 2:1 BK	
8	9.5/4.8	3/8	9.5		4.8	0.33	-	1.22	HST A-150K 9.5/4.8 (00)	A-150K 9.5MM H/S TUBE 2:1 BK	1
9	12.7/6.4	1/2	12.7	1	6.4	0.33	-	1.22	HST A-150K 12.7/6.4 (00)	A-150K 12.7MM H/S TUBE 2:1 BK	1
10	19.1/9.5	3/4	19.1		9.5	0.45	-	1.22	HST A-150K 19.1/9.5 (00)	A-150K 19.1MM H/S TUBE 2:1 BK	

Reliably protects solder joints, terminals and connections against most industrial fuels, solvents and chemicals.

# Ordering information:

Standard colors:

Black, Clear

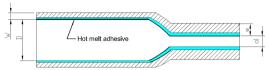
Special colors:

N/A

Packaging:

Standard packaging on spools and/or 1.22m.









- Crosslinked PVDF (polyvinylidene fluorid)
- Superior mechanical and abrasion resistance
- Flame retardant
- High temperature resistance
- Excellent chemical and solvent resistance
- Semi-rigid

- Operating temp.: -55°C to +175°C
- Min. full recovery temp.: 175°C
- RoHS compliant
- Meets: SAE-AMS-DTL-23053/18
- Voltage: 600V

#### Approvals:

■ UL VW-1, File No: 249362

Property	Test Method	Typical Data		
Tensile strength	ASTM D 2671	≥34.5 MPa		
Ultimate elongation	ASTM D 2671	≥150%		
Ultimate elongation after aging	250℃, 168 hrs.	≥100%		
Heat shock	UL224 (300℃, 1 hrs)	No cracks, flowing or dripping		
Cold bend	UL224 ( -55℃, 4 hrs)	No cracking		
Flammability	UL224 (VW-1)	Pass		
Volume resistance	ASTM D 2671	≥10 <sup>13</sup> Ω .cm		
Dielectric strength	IEC60243	≥30 kV/mm		

	Specific	ation	As supplie	d (mm)	After reco	vered(mm)		Standard length		Black 00	Other Colors
Item No		Inch	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description	Color Code
NO	mm	inch	Inside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron)	CUSTOMER	Description	P/N end with (XX)
1	1.2/0.6	3/64	1.2		0.6	0.20	0	200	HST A-175K 1.2/0.6 (00)	A-175K 1.2MM H/S TUBE 2:1 BK	
2	1.6/0.8	1/16	1.6		0.8	0.20	0	200	HST A-175K 1.6/0.8 (00)	A-175K 1.6MM H/S TUBE 2:1 BK	]
3	2.4/1.2	3/32	2.4		1.2	0.23	0	200	HST A-175K 2.4/1.2 (00)	A-175K 2.4MM H/S TUBE 2:1 BK	1
4	3.2/1.6	1/8	3.2		1.6	0.23	0	200	HST A-175K 3.2/1.6 (00)	A-175K 3.2MM H/S TUBE 2:1 BK	]
5	4.8/2.4	3/16	4.8	40	2.4	0.23	0	100	HST A-175K 4.8/2.4 (00)	A-175K 4.8MM H/S TUBE 2:1 BK	Clear X (X)
6	6.4/3.2	1/4	6.4		3.2	0.23	0	1.22	HST A-175K 6.4/3.2 (00)	A-175K 6.4MM H/S TUBE 2:1 BK	
7	9.5/4.8	3/8	9.5		4.8	0.28	-	1.22	HST A-175K 9.5/4.8 (00)	A-175K 9.5MM H/S TUBE 2:1 BK	]
8	12.7/6.4	1/2	12.7		6.4	0.28	-	1.22	HST A-175K 12.7/6.4 (00)	A-175K 12.7MM H/S TUBE 2:1 BK	]
9	19.1/9.5	3/4	19.1		9.5	0.36	-	1.22	HST A-175K 19.1/9.5 (00)	A-175K 19.1MM H/S TUBE 2:1 BK	

A-175K is a semi-rigid, flame retardant heat-shrinkable Polyvinylidene Fluoride (PVDF) tube for applications requiring high temperature performance, outstanding abrasion and cut through resistance, or superior chemical and solvent resistant properties.

## Ordering information:

Standard colors:

Black, Clear

Special colors:

N/A

Packaging:

Standard packaging on spools and/or 1.22m.





- Crosslinked modified elastomeric polyolefin
- Superior abrasion resistance
- Highly flame retardant
- High temperature resistance

- Excellent fluid resistance and flexibility
- Operating temp.: -65°C to +150°C
- Min. full recovery temp.: 175°C
- Meets: SAE-AMS-DTL-23053/16
- Voltage: 600V

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥13 MPa
Ultimate elongation	ASTM D 2671	≥250%
Ultimate elongation after aging	150℃, 168 hrs.	≥200%
Heat shock	200℃, 4 hrs	No cracks, flowing or dripping
Secant modulus	UL224	≤50 MPa
Flammability	ASTM D 2671	Self-extinguish in 15 sec.
Volume resistance	ASTM D 2671	≥10 <sup>9</sup> Ω .cm
Fluid resistance Tensile strength Ultimate elongation	ASTM D 2671 (24hrs., Diesel $70^{\circ}$ C, hydraulic fluid $70^{\circ}$ C, lubricating oil $100^{\circ}$ C)	≥10 MPa ≥200%

	Specific	ation	As supplie	d (mm)	After reco	vered(mm)		Standard length		Black 00	
Item No	mm	Inch	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description	
140	111111	IIICII	Inside diameter	(max)(%)	(max)(d)	(min)(w)		(meters/ron)	CUSTOMER	Description	
1	3.2/1.6	1/8	3.2		1.6	0.73	0	100	HST ADR 3.2/1.6 (00)	ADR 3.2MM H/S TUBE 2:1 BK	
2	4.8/2.4	3/16	4.8		2.4	0.80	0	50	HST ADR 4.8/2.4 (00)	ADR 4.8MM H/S TUBE 2:1 BK	
3	6.4/3/2	1/4	6.4	35	3.2	0.85	0	50	HST ADR 6.4/3.2 (00)	ADR 6.4MM H/S TUBE 2:1 BK	
4	9.5/4.8	3/8	9.5	33	4.8	0.97	0	50	HST ADR 9.5/4.8 (00)	ADR 9.5MM H/S TUBE 2:1 BK	
5	12.7/6.4	1/2	12.7		6.4	1.16	-	50	HST ADR 12.7/6.4 (00)	ADR 12.7MM H/S TUBE 2:1 BK	
6	19.1/9.5	3/4	19.1		9.5	1.37	-	50	HST ADR 19.1/9.5 (00)	ADR 19.1MM H/S TUBE 2:1 BK	

Using a specially formulated polyolefin material the ADR can wisthstand high temperatures, is fluid resistant, long term heat resistant, and offers effective protection to cable terminations, splices, and joints used in military vehicles.

# Ordering information:

Standard colors:

Black

Special colors:

N/A

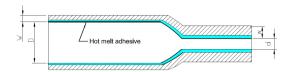
Packaging:

Standard packaging on spools.

Special: 1m, 1.22m pieces are available on request.

# A-200E Fluoroelastomeric Tubing







#### Features:

- Crosslinked fluoroelastomer
- Superior abrasion resistance
- High temperature resistance
- Excellent resistance to aggressive chemicals and solvents
- Available with various wall thickness
- Operating temp.: -55°C to +200°C
- Min. full recovery temp.: 175°C
- Meets: SAE-AMS-DTL-23053/13
- Voltage: 600V

## Approvals:

Property	Test Method	Typical Data
Operating Temperature	IEC 216	-55°C~+200°C
Tensile strength	ASTM D 2671	≥8.5MPa
Ultimate elongation	ASTM D 2671	≥250%
Ultimate elongation after heat aging	ASTM D 2671	≥200%
Heat shock(300°C/4hrs.)	ASTM D 2671	No crack, no drip
Low temperature flexibility(-55°C/4hrs.)	ASTM D 2671	No crack
Flammability	ASTM D 2671	Self-extinguishing in 15 sec.
Volume resistance	IEC60093	≥10 <sup>14</sup> Ω.cm
Dielectric strength	IEC60243	≥7.9MPa
Copper Corrosion	UL 224	Pass

	Specific	ation	As supplie	d (mm)	After reco	vered(mm)		Standard length		Black 00
Item No		Inch	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description
INO	mm	inch	Inside diameter	(max)(%)	(max)(d)	(min)(w)		(ineters/roll)	CUSTOMER	Description
1	3.2/1.6	1/8	3.2		1.6	0.76	0	100	HST A-200E 3.2/1.6 (00)	A-200E 3.2MM H/S TUBE 2:1 BK
2	4.8/2.4	3/16	4.8		2.4	0.90	0	50	HST A-200E 4.8/2.4 (00)	A-200E 4.8MM H/S TUBE 2:1 BK
3	6.4/3.2	1/4	6.4	35	3.2	0.90	0	50	HST A-200E 6.4/3.2 (00)	A-200E 6.4MM H/S TUBE 2:1 BK
4	9.5/4.8	3/8	9.5		4.8	0.93	-	50	HST A-200E 9.5/4.8 (00)	A-200E 9.5MM H/S TUBE 2:1 BK
5	12.7/6.4	1/2	12.7		6.4	1.10	-	50	HST A-200E 12.7/6.4 (00)	A-200E 12.7MM H/S TUBE 2:1 BK
6	19.1/9.5	3/4	19.1	40	9.5	1.38	-	30	HST A-200E 19.1/9.5 (00)	A-200E 19.1MM H/S TUBE 2:1 BK

Made from modified fluoroelastomer (Viton), with superior impact, abrasion and cut through resistance, the A-200E is suitable for many applications requiring high resistance to corrosive fluids, fuels, lubricants, acids and solvents at elevated temperatures.

## Ordering information:

Standard colors:

Black

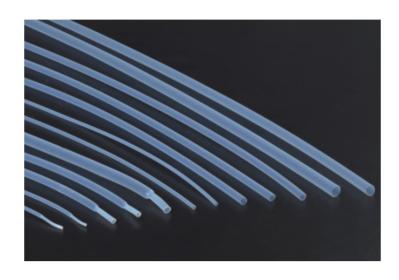
Special colors:

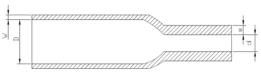
N/A

Packaging:

Standard packaging on spools.

Special: 1m, 1.22m pieces are available on request.







- Modified polytetrafluoroethylene
- Superior chemical and physical properties
- Very low friction coefficient
- Excellent electrical properties

- Operating temp.: -65℃ to +200℃
- Min. full recovery temp.: 350°C
- Shrink ratio: 1.5:1
- Meets: SAE-AMS-DTL-23053/12
- Voltage: 600V

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥17.3 MPa
Ultimate elongation	ASTM D 2671	≥200%
Density	ASTM D 792	2.3 g/cm <sup>3</sup>
Low temperature flexibility	ASTM D 2671(-65℃, 4 hrs.)	No cracking
Flammability	ASTM D 2671	Self extinguish
Volume resistance	ASTM D 2671	≥10 <sup>18</sup> Ω .cm
Dielectric strength	IEC60243	≥34 kV/mm
Copper corrosion	UL 224	Pass
Fluid resistance	SAE-AMS-DTL-23053	Excellent
Water absorption	ASTM D 570	≤0.1

	Specification	As supplie	d (mm)	After reco	vered(mm)		Standard length		Clear X
Item No	mm	Inside diameter	Ecentricity	Inside diameter	Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description
INO	111111	Inside diameter	(max)(%)	(max)(d)	(min)(w)		(metersyron)	CUSTOMER	Description
1	AWG 30T	0.86		0.34	0.21	0	1.22	HST ATFE 0.86/0.34 (X)	ATFE 0.86MM TEFLON TUBE
2	AWG 28T	0.97		0.42	0.21	0	1.22	HST ATFE 0.97/0.42 (X)	ATFE 0.97MM TEFLON TUBE
3	AWG 26T	1.17		0.52	0.21	0	1.22	HST ATFE 1.17/0.52 (X)	ATFE 1.17MM TEFLON TUBE
4	AWG 24T	1.27		0.6	0.23	0	1.22	HST ATFE 1.27/0.60 (X)	ATFE 1.27MM TEFLON TUBE
5	AWG 22T	1.40		0.76	0.23	0	1.22	HST ATFE 1.40/0.76 (X)	ATFE 1.40MM TEFLON TUBE
6	AWG 20T	1.52		0.93	0.28	0	1.22	HST ATFE 1.52/0.93 (X)	ATFE 1.52MM TEFLON TUBE
7	AWG 18T	1.93		1.08	0.28	0	1.22	HST ATFE 1.93/1.08 (X)	ATFE 1.93MM TEFLON TUBE
8	AWG 16T	2.36		1.38	0.28	0	1.22	HST ATFE 2.36/1.38 (X)	ATFE 2.36MM TEFLON TUBE
9	AWG 14T	3.05		1.67	0.28	0	1.22	HST ATFE 3.05/1.67 (X)	ATFE 3.05MM TEFLON TUBE
10	AWG 12T	3.90	/	2.07	0.28	0	1.22	HST ATFE 3.90/2.07 (X)	ATFE 3.90MM TEFLON TUBE
11	AWG 10T	4.90		2.57	0.28	0	1.22	HST ATFE 4.90/2.57 (X)	ATFE 4.90MM TEFLON TUBE
12	AWG 8T	6.10		3.27	0.37	0	1.22	HST ATFE 6.10/3.27 (X)	ATFE 6.10MM TEFLON TUBE
13	AWG 6T	7.70		4.17	0.37	0	1.22	HST ATFE 7.70/4.17 (X)	ATFE 7.70MM TEFLON TUBE
14	AWG 4T	9.40		5.17	0.37	0	1.22	HST ATFE 9.40/5.17 (X)	ATFE 9.40MM TEFLON TUBE
15	AWG 2T	11.00		6.67	0.37	0	1.22	HST ATFE 11.0/6.67 (X)	ATFE 11.0MM TEFLON TUBE
16	AWG 0T	11.95		8.17	0.37	0	1.22	HST ATFE 11.95/8.17 (X)	ATFE 11.95MM TEFLON TUBE

Specially designed for applications in the automotive, military and aerospace markets. ATFE provides excellent temperature stability, chemical resistance, extreme electrical insulation, and is highly flame retardant.

# Ordering information:

Standard colors:

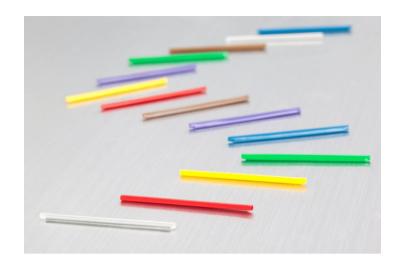
Clear

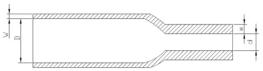
Special colors:

N/A

Packaging:

Standard packaging is 1m, 1.22m pieces.





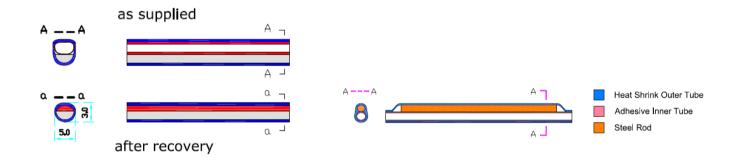


- Crosslinked polyolefin
- Low shrink temperature
- Pre-installed stainless steel or ceramic rod
- Accommodates single or ribbon fibers

- Operating temp.: -45°C to +100°C
- Wide range of sizes
- Min. full recovery temp.: 120°C

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥18 MPa
Ultimate elongation	ASTM D 2671	≥700%
Longitudinal change	ASTM D 2671	0±5%
Density	ASTM D 792	0.94g/cm <sup>3</sup>
Dielectric strength	IEC60243	≥20 kV/mm
Dielectric constant	IEC 250	≤2.5

			Specifi	cations				Clear X			
Item	Length	Fus	hion Tube	Stee	l Rod	Sleeve Diameter	Packing	Amphenol P/N	Description		
No	mm	I.D. (mm)	Length (mm)	O.D. (mm)	Length (mm)	mm	pcs/bag	CUSTOMER	Description		
1	61	1.4	61	1.5	55	2.8	100	AFSP-61	AFSP-61 OPTICAL FIBER TUBE TR		
2	45	1.4	45	1.5	40	2.8	100	AFSP-45	AFSP-45 OPTICAL FIBER TUBE TR		
3	61	1.4	61	1.0	57	2.2	100	AFSP-3A-X (61T)	AFSP-61T OPTICAL FIBER TUBE TR		
4	45	1.4	45	1.0	41	2.2	100	AFSP-4A-X45(45T)	AFSP-45T OPTICAL FIBER TUBE TR		
5	40	1.4	40	1.0	36	2.2	100	AFSP-3A-X40(40T)	AFSP-40T OPTICAL FIBER TUBE TR		
6	35	1.4	35	1.0	31	2.2	100	AFSP-3A-X35(35T)	AFSP-35T OPTICAL FIBER TUBE TR		
7	30	1.4	30	1.0	27	2.2	100	AFSP-30T	AFSP-30T OPTICAL FIBER TUBE TR		
8	25	1.4	25	1.0	21	2.2	100	AFSP-25T	AFSP-25T OPTICAL FIBER TUBE TR		
9	40	0.35	40	0.5	40	1.15	100	AFSP-40M	AFSP-40M OPTICAL FIBER TUBE TR		
10	25	0.35	25	0.5	25	1.15	100	AFSP-25M	AFSP-25M OPTICAL FIBER TUBE TR		
11	18	0.35	18	0.5	18	1.15	100	AFSP-18M	AFSP-18M OPTICAL FIBER TUBE TR		
12	15	0.35	15	0.5	15	1.15	100	AFSP-15M	AFSP-15M OPTICAL FIBER TUBE TR		
13	10	0.35	10	0.5	10	1.15	100	AFSP-10M	AFSP-10M OPTICAL FIBER TUBE TR		



Consists of crosslinked polyolefin, hot fusion tubing, and a stainless steel reinforcement rod that ensures the optical transmission properties of fiber optics are protected and enhances the protection of fiber optic splices.

# Ordering information:

#### Standard colors:

Clear

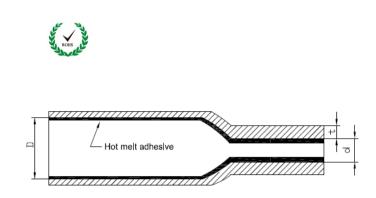
#### Special colors:

Special colors are available on request. Please contact our sales department for further information.

#### Packaging:

Standard packaging: Bagged





- Medium wall tubing coated adhesive
- Co-extrusion technology
- Good sealing & shrinking properties
- UV resistant

- Excellent mechanical performance
- Operating temp:: -55°C to +110°C
- Min. full recovery temp.: 120°C

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	≥14 MPa
Ultimate elongation	ASTM D 2671	≥400%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671(150℃, 168 hrs.)	≥12 MPa ≥300%
Density	ASTM D 792	1.05g/cm <sup>3</sup>
Longitudinal shrinkage	UL 224	0~-11%
Dielectric strength	IEC 60243	≥18 kV/mm
Volume resistance	IEC 93	≥10 <sup>13</sup> Ω.cm
Copper stability	ASTM D 2671	Pass
Water absorption	ISO 62	<0.15%
Property of adhesive		
Water absorption	ISO 62	<0.2%
Softening point	ASTM E28	105±5℃
Peel strength (PE)	DIN 30672	4 N/cm
Resistance to fungus and decay	ISO 846	Pass

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00
Item		D Inside diameter	d	t Wall thickness	Tube Shape	, , , , III	Amphenol P/N	
No	mm	(Min)	Inside diameter (Max)	(Min)		(meters/roll)	CUSTOMER	Description
1	8.0/2.0	8	2	1.7	0	1.22	HST ARTM 8.0/2.0 (00)	ARTM 8.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
2	12.0/3.0	12	3	1.8	0	1.22	HST ARTM 12.0/3.0 (00)	ARTM 12.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
3	16.0/5.0	16	5	1.8	0	1.22	HST ARTM 16.0/5.0 (00)	ARTM 16.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
4	22.0/6.0	22	6	2.0	0	1.22	HST ARTM 22.0/6.0 (00)	ARTM 22.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
5	33.0/8.0	33	8	2.3	0	1.22	HST ARTM 33.0/8.0 (00)	ARTM 33.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
6	40.0/12.0	40	12	2.3	0	1.22	HST ARTM 40.0/12.0 (00)	ARTM 40.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
7	55.0/16.0	55	16	2.3	0	1.22	HST ARTM 55.0/16.0 (00)	ARTM 55.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
8	65.0/19.0	65	19	2.5	0	1.22	HST ARTM 65.0/19.0 (00)	ARTM 65.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
9	75.0/22.0	75	22	2.7	0	1.22	HST ARTM 75.0/22.0 (00)	ARTM 75.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
10	85.0/25.0	85	25	2.8	0	1.22	HST ARTM 85.0/25.0 (00)	ARTM 85.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
11	95.0/25.0	95	25	2.8	0	1.22	HST ARTM 95.0/25.0 (00)	ARTM 95.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
12	115.0/34.0	115	34	3.4	0	1.22	HST ARTM 115.0/34.0 (00)	ARTM 115.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
13	140.0/42.0	140	42	3.4	0	1.22	HST ARTM 140.0/42.0 (00)	ARTM 140.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
14	160.0/50.0	160	50	3.4	0	1.22	HST ARTM 160.0/50.0 (00)	ARTM 160.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK

Designed to seal and protect electrical splices, cable terminations, and joints where electrical insulation and water ingress protection are required. Has a 3:1 shrink ratio which allows the tubing to fit over irregular shaped and large connectors.

## **Ordering information:**

Standard colors:

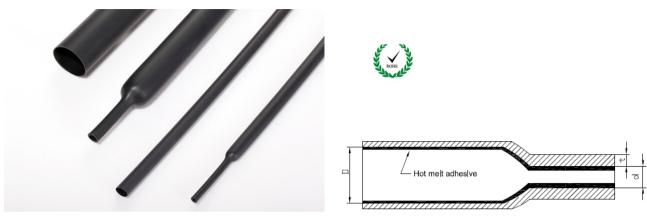
Black

Special colors:

N/A

Packaging:

Standard packaging of 1m, 1.2m, 1.5m pieces are available on request.



- Medium wall tubing with adhesive
- Flame retardant
- Good sealing & electrical properties
- Excellent mechanical performance

- UV and weather resistant
- Operating temp.: -55℃ to +110℃
- Min. full recovery temp.: 120°C
- Voltage: /

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	≥14 MPa
Ultimate elongation	ASTM D 2671	≥400%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671(150℃, 168 hrs.)	≥12 MPa ≥300%
Density	ASTM D 792	1.25g/cm <sup>3</sup>
Longitudinal shrinkage	UL 224	0~-12%
Dielectric strength	IEC60243	≥18 kV/mm
Volume resistance	IEC 93	≥10 <sup>13</sup> Ω.cm
Flammability	<del>_</del>	Self extinguish in 60 sec.
Property of adhesive		
Water absorption	ISO 62	<0.2%
Softening point	ASTM E28	85±5℃
Peel strength (PE)	DIN 30672	4 N/cm
Resistance to fungus and decay	ISO 846	Pass

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00
Item		D Inside diameter	d Inside diameter	t Wall thickness	Tube Shape	, , , , III	Amphenol P/N	2
No	mm	(Min)	(Max)	(Min)		(meters/roll)	CUSTOMER	Description
1	22/6	22	6	2.4	0	1.22	HST AFRA2 22.0/6.0 (00)	AFRA2 22.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
2	28/6	28	6	2.5	0	1.22	HST AFRA2 28.0/6.0 (00)	AFRA2 28.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
3	33/8	33	8	2.5	0	1.22	HST AFRA2 33.0/8.0 (00)	AFRA2 33.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
4	40/12	40	12	2.5	0	1.22	HST AFRA2 40.0/12.0 (00)	AFRA2 40.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
5	55/16	55	16	2.7	0	1.22	HST AFRA2 55.0/16.0 (00)	AFRA2 55.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
6	65/19	65	19	2.8	0	1.22	HST AFRA2 65.0/19.0 (00)	AFRA2 65.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
7	75/22	75	22	3.0	0	1.22	HST AFRA2 75.0/22.0 (00)	AFRA2 75.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
8	95/25	95	25	3.0	0	1.22	HST AFRA2 95.0/25.0 (00)	AFRA2 95.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
9	115/34	115	34	3.2	0	1.22	HST AFRA2 115.0/34.0 (00)	AFRA2 115.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
10	140/42	140	42	3.3	0	1.22	HST AFRA2 140.0/42.0 (00)	AFRA2 140.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
11	160/50	160	50	3.3	0	1.22	HST AFRA2 160.0/50.0 (00)	AFRA2 160.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
12	180/58	180	58	3.3	0	1.22	HST AFRA2 180.0/58.0 (00)	AFRA2 180.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
13	200/65	200	65	3.3	0	1.22	HST AFRA2 200.0/65.0 (00)	AFRA2 200.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK

Suitable for protecting electrical splices, cable terminations, and joints where flame retardation, electrical insulation and water ingress protection are required.

## **Ordering information:**

Standard colors:

Black

Special colors:

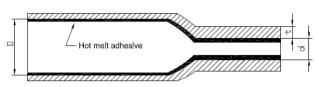
N/A

Packaging:

Standard packaging of 1m, 1.2m, 1.5m pieces are available on request.







- Heavy wall tubing with adhesive
- Flame retardant
- Good sealing & electrical properties
- Excellent mechanical performance

- UV and weather resistant
- Operating temp.: -55°C to +110°C
- Min. full recovery temp : 120°C
- Voltage: /

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	≥14 MPa
Ultimate elongation	ASTM D 2671	≥400%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671(150℃, 168 hrs.)	≥12 MPa ≥300%
Density	ASTM D 792	1.25g/cm <sup>3</sup>
Longitudinal shrinkage	UL 224	0 ~ -10%
Dielectric strength	IEC 60243	≥18 kV/mm
Volume resistance	IEC 93	≥10 <sup>13</sup> Ω.cm
Flammability	_	Self extinguish in 60 sec.
Property of adhesive		
Water absorption	ISO 62	<0.2%
Softening point	ASTM E28	85±5℃
Peel strength (PE)	DIN 30672	4 N/cm
Resistance to fungus and decay	ISO 846	Pass

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00
Item		D	d	t	Tube Shape		Amphenol P/N	
No	mm	Inside diameter (Min)	Inside diameter (Max)	Wall thickness (Min)		(meters/roll)	CUSTOMER	Description
1	22/6	22	6	2.7	0	1.22	HST AFRA3 22.0/6.0 (00)	AFRA3 22.0MM FR HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
2	28/6	28	6	2.9	0	1.22	HST AFRA3 28.0/6.0 (00)	AFRA3 28.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
3	33/8	33	8	3.2	0	1.22	HST AFRA3 33.0/8.0 (00)	AFRA3 33.0MM FR HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
4	40/12	40	12	4.0	0	1.22	HST AFRA3 40.0/12.0 (00)	AFRA3 40.0MM FR HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
5	55/16	55	16	4.0	0	1.22	HST AFRA3 55.0/16.0 (00)	AFRA3 55.0MM FR HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
6	65/19	65	19	4.0	0	1.22	HST AFRA3 65.0/19.0 (00)	AFRA3 65.0MM FR HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
7	75/22	75	22	4.0	0	1.22	HST AFRA3 75.0/22.0 (00)	AFRA3 75.0MM FR HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
8	95/25	95	25	4.2	0	1.22	HST AFRA3 95.0/25.0 (00)	AFRA3 95.0MM FR HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
9	115/34	115	34	4.2	0	1.22	HST AFRA3 115.0/34.0 (00)	AFRA3 115.0MM FR HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
10	130/36	130	36	4.2	0	1.22	HST AFRA3 130.0/36.0 (00)	AFRA3 140.0MM FR MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK

Suitable for protecting electrical splices, cable terminations, and joints where flame retardation, electrical insulation and water ingress protection are required.

# **Ordering information:**

Standard colors:

Black

Special colors:

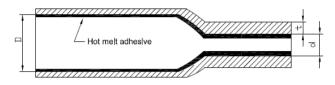
N/A

Packaging:

Standard packaging of 1m, 1.2m, 1.5m pieces are available on request.







- Heavy wall tubing coated adhesive
- Co-extrusion technology
- Good sealing & shrinking properties
- UV resistant

- Excellent mechanical performance
- Operating temp.: -55°C to +110°C
- Min. full recovery temp.: 120°C
- Voltage: /

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	≥14 MPa
Ultimate elongation	ASTM D 2671	≥400%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671(150℃, 168 hrs.)	≥12 MPa ≥300%
Density	ASTM D 792	1.05g/cm <sup>3</sup>
Longitudinal shrinkage	UL 224	0 ~ -10%
Dielectric strength	IEC60243	≥18 kV/mm
Volume resistance	IEC 93	≥10 <sup>13</sup> Ω.cm
Copper stability	ASTM D 2671	Pass
Water absorption	ISO 62	<0.15%
Property of adhesive		
Water absorption	ISO 62	<0.2%
Softening point	ASTM E28	105±5℃
Peel strength (PE)	DIN 30672	4 N/cm
Resistance to fungus and decay	ISO 846	Pass

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00
Item		D Inside diameter	d Inside diameter	t Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Description
No	mm	(Min)	(Max)	(Min)		(meters/ron)	CUSTOMER	Description
1	9/3	9.0	3.0	1.9	0	1.22	HST ARTH 9.0/3.0 (00)	ARTH 9.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
2	15/4	15.0	4.0	2.3	0	1.22	HST ARTH 15.0/4.0 (00)	ARTH 15.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
3	24/6	24.0	6.0	2.6	0	1.22	HST ARTH 24.0/6.0 (00)	ARTH 24.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
4	33/8	33.0	8.0	3.2	0	1.22	HST ARTH 33.0/8.0 (00)	ARTH 33.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
5	43/12	43.0	12.0	4.0	0	1.22	HST ARTH 43.0/12.0 (00)	ARTH 43.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
6	55/16	55.0	16.0	4.0	0	1.22	HST ARTH 56.0/16.0 (00)	ARTH 55.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
7	75/22	75.0	22.0	4.0	0	1.22	HST ARTH 75.0/22.0 (00)	ARTH 75.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
8	85/25	85.0	25.0	4.0	0	1.22	HST ARTH 85.0/25.0 (00)	ARTH 85.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
9	95/25	95.0	25.0	4.0	0	1.22	HST ARTH 95.0/25.0 (00)	ARTH 95.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
10	105/25	105.0	25.0	4.0	0	1.22	HST ARTH 105.0/25.0 (00)	ARTH 105.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
11	115/34	115.0	34.0	4.0	0	1.22	HST ARTH 115.0/34.0 (00)	ARTH 115.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
12	130/36	130.0	36.0	4.0	0	1.22	HST ARTH 130.0/36.0 (00)	ARTH 130.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK

Designed to seal and protect electrical splices, cable terminations, and joints where electrical insulation and water ingress protection are required. Has a 3:1 shrink ratio which allows the tubing to fit over irregular shaped and large connectors.

## Ordering information:

Standard colors:

Black

Special colors:

N/A

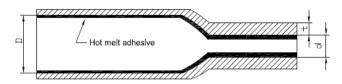
Packaging:

Standard packaging on spools.

Special: 1m, 1.2m, 1.5m pieces are available on request.







- Crosslinked polyolefin tubing with adhesive
- Extra high shrink ratio
- Extra thick wall
- Perfect sealing property
- Superior abrasion and impact resistance
- UV and weather resistant
- Operating temp.: -55°C to +110°C
- Min. full recovery temp.: 120°C
- Shrink ratio: 6:1
- Voltage: /

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	≥14 MPa
Ultimate elongation	ASTM D 2671	≥400%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671(150℃, 168 hrs.)	≥12 MPa ≥300%
Density	ASTM D 792	1.05g/cm <sup>3</sup>
Longitudinal shrinkage	UL 224	0~-12%
Dielectric strength	IEC 60243	≥18 kV/mm
Volume resistance	IEC 93	≥10 <sup>13</sup> Ω.cm
Copper stability	ASTM D 2671	Pass
Water absorption	ISO 62	<0.15%
Property of adhesive		
Water absorption	ISO 62	<0.2%
Softening point	ASTM E28	85±5℃
Peel strength (PE)	DIN 30672	4 N/cm
Resistance to fungus and decay	ISO 846	Pass

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00
Item		D	d	t	Tube Shape		Amphenol P/N	
No	mm	Inside diameter (Min)	Inside diameter (Max)	Wall thickness (Min)		(meters/roll)	CUSTOMER	Description
1	19.0/3.2	19.0	3.2	3.2	0	1.22	HST ARA-6X 19.0/3.2 (00)	ARA-6X 19.0MM HEAVY WALL TUBE WITH ADHESIVE 6:1 BK
2	33.0/5.5	33.0	5.5	3.4	0	1.22	HST ARA-6X 33.0/5.5 (00)	ARA-6X 33.0MM HEAVY WALL TUBE WITH ADHESIVE 6:1 BK
3	44.4/7.4	44.4	7.4	3.6	0	1.22	HST ARA-6X 44.4/7.4 (00)	ARA-6X 44.4MM HEAVY WALL TUBE WITH ADHESIVE 6:1 BK
4	50.8/8.3	50.8	8.3	4.7	0	1.22	HST ARA-6X 50.0/8.3 (00)	ARA-6X 50.0MM HEAVY WALL TUBE WITH ADHESIVE 6:1 BK
5	69.8/11.7	69.8	11.7	4.7	0	1.22	HST ARA-6X 69.8/11.7 (00)	ARA-6X 68.8MM HEAVY WALL TUBE WITH ADHESIVE 6:1 BK
6	88.9/17.1	88.9	17.1	4.7	0	1.22	HST ARA-6X 88.9/17.1 (00)	ARA-6X 88.0MM HEAVY WALL TUBE WITH ADHESIVE 6:1 BK
7	119.4/22.9	119.4	22.9	4.7	0	1.22	HST ARA-6X 119.4/22.9 (00)	ARA-6X 118.0MM HEAVY WALL TUBE WITH ADHESIVE 6:1 BK
8	235.0/40.0	235.0	40.0	4.7	0	1.22	HST ARA-6X 233.0/44.0 (00)	ARA-6X 233.0MM HEAVY WALL TUBE WITH ADHESIVE 6:1 BK

Ideal for applications with extremely different diameter cable joints and components. Using a high shrink ratio provides a close fit to a wide variety of irregular profile joints and figures.

## **Ordering information:**

Standard colors:

Black

Special colors:

N/A

Packaging:

Standard packaging of 1m, 1.2m, 1.5m pieces are available on request.







- Medium wall crosslinked polyolefin tubing
- Black sealant mastic coating
- Excellent corrosion protection properties
- Excellent bonding to metal and wood

- UV resistant
- Operating temp.: -35℃ to +110℃
- Min. full recovery temp.: 120°C
- Voltage: /

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	≥14 MPa
Ultimate elongation	ASTM D 2671	≥400%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671(150℃, 168 hrs.)	≥12 MPa ≥300%
Density	ASTM D 792	1.05g/cm <sup>3</sup>
Longitudinal shrinkage	UL 224	0~-12%
Dielectric strength	IEC60243	≥18 kV/mm
Volume resistance	IEC 93	≥10 <sup>13</sup> Ω.cm
Flammability	_	Self extinguish in 60 sec.
Property of adhesive		
Water absorption	ISO 62	<0.2%
Softening point	ASTM E28	85±5℃
Peel strength (PE)	DIN 30672	4 N/cm
Resistance to fungus and decay	ISO 846	Pass
Resistance to fungus and decay	ISO 846	Pass

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00
Item		D Inside diameter	d Inside diameter	t Wall thickness	Tube Shape	(	Amphenol P/N	D
No	mm	(Min)	(Max)	(Min)		(meters/roll)	CUSTOMER	Description
1	33/8	33	8	2.6	0	1.22	HST ARS 33.0/8.0 (00)	ARS 33.0MM MEDIUM WALL TUBE WITH SEALANT BK
2	40/12	40	12	2.6	0	1.22	HST ARS 40.0/12.0 (00)	ARS 40.0MM MEDIUM WALL TUBE WITH SEALANT BK
3	55/16	55	16	2.7	0	1.22	HST ARS 55.0/16.0 (00)	ARS 55.0MM MEDIUM WALL TUBE WITH SEALANT BK
4	75/22	75	22	3.0	0	1.22	HST ARS 75.0/22.0 (00)	ARS 65.0MM MEDIUM WALL TUBE WITH SEALANT BK
5	95/25	95	25	3.3	0	1.22	HST ARS 95.0/25.0 (00)	ARS 95.0MM MEDIUM WALL TUBE WITH SEALANT BK
6	115/34	115	34	3.3	0	1.22	HST ARS 115.0/34.0 (00)	ARS 115.0MM MEDIUM WALL TUBE WITH SEALANT BK
7	140/42	140	42	3.3	0	1.22	HST ARS 140.0/42.0 (00)	ARS 140.0MM MEDIUM WALL TUBE WITH SEALANT BK
8	160/50	160	50	3.3	0	1.22	HST ARS 160.0/50.0 (00)	ARS 160.0MM MEDIUM WALL TUBE WITH SEALANT BK
9	180/58	180	58	3.3	0	1.22	HST ARS 180.0/58.0 (00)	ARS 180.0MM MEDIUM WALL TUBE WITH SEALANT BK
10	200/65	200	65	3.3	0	1.22	HST ARS 200.0/65.0 (00)	ARS 205.0MM MEDIUM WALL TUBE WITH SEALANT BK
11	235/65	235	65	3.7	0	1.22	HST ARS 235.0/65.0 (00)	ARS 235.0MM MEDIUM WALL TUBE WITH SEALANT BK
12	265/75	265	75	3.8	0	1.22	HST ARS 265.0/75.0 (00)	ARS 265.0MM MEDIUM WALL TUBE WITH SEALANT BK
13	300/85	300	85	3.8	0	1.22	HST ARS 300.0/85.0 (00)	ARS 300.0MM MEDIUM WALL TUBE WITH SEALANT BK
14	350/100	350	100	4.3	0	1.22	HST ARS 350.0/100.0 (00)	ARS 350.0MM MEDIUM WALL TUBE WITH SEALANT BK

ARS is a mastic lined heat shrinkable tube, designed specially for protecting metal pipe joints, soil nails, and other connectors requiring environmental sealing.

## **Ordering information:**

Standard colors:

Black

Special colors:

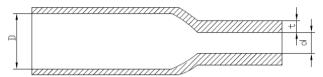
N/A

Packaging:

Standard packaging of 1m, 1.2m, 1.5m pieces are available on request.







- Anti-tracking tubing
- Heavy wall
- Semi flexible
- Excellent electrical properties

- UV and weather resistant
- Excellent creeping resistance
- Up to 36kV
- Min. full recovery temp.: 110°C
- Voltage Rating: Up to 36kV

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥11 MPa
Ultimate elongation	ASTM D 2671	≥350%
Longitudinal shrinkage	UL 224	0 ~ -10%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671/120℃, 168 hrs.	>10 MPa >250%
Dielectric strength	IEC 60243	≥15kV/mm
Tracking resistance	ASTM D 2303/3.75kV, 1hr.	Pass
Dielectric constant	IEC 250	≤3.0
Volume resistance	ASTM D 2671	≥10 <sup>13</sup> Ω.cm
Flammability (Oxygen Index)	ISO 4589	≥25
Copper corrosion	ASTM D 2671	No corrosion
Cold bend	ASTM D 2671/-40℃, 4hrs.	No cracking
Water absorption	ISO 62	<0.15%
Water absorption	ISO 62	<0.15%

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Red 02
Item		D Inside diameter	d	t Wall thickness	Tube Shape	, , , III	Amphenol P/N	
No	mm	(Min)	Inside diameter (Max)	(Min)		(meters/roll)	CUSTOMER	Description
1	19/6	19	6	2.5	-	30	HST AAT 19.0/6.0 (02)	AAT 19MM ANTI TRACKING INSULATION TUBE RED
2	30/10	30	10	2.9	-	30	HST AAT 30.0/10.0 (02)	AAT 30MM ANTI TRACKING INSULATION TUBE RED
3	35/12	35	12	2.9	-	30	HST AAT 35.0/12.0 (02)	AAT 35MM ANTI TRACKING INSULATION TUBE RED
4	40/16	40	16	2.9	-	30	HST AAT 40.0/16.0 (02)	AAT 40MM ANTI TRACKING INSULATION TUBE RED
5	45/18	45	18	2.9	-	30	HST AAT 45.0/18.0 (02)	AAT 45MM ANTI TRACKING INSULATION TUBE RED
6	54/24	54	24	2.9	-	30	HST AAT 54.0/24.0 (02)	AAT 54MM ANTI TRACKING INSULATION TUBE RED
7	60/29	60	29	2.9	-	30	HST AAT 60.0/29.0 (02)	AAT 60MM ANTI TRACKING INSULATION TUBE RED
8	76/38	76	38	3.0	-	30	HST AAT 76.0/38.0 (02)	AAT 76MM ANTI TRACKING INSULATION TUBE RED
9	100/49	100	49	3.0	-	30	HST AAT 100.0/49.0 (02)	AAT 100MM ANTI TRACKING INSULATION TUBE RED

Used to provide insulation protection for cable terminals, load-break switches, power circuit breakers, etc.

# Ordering information:

Standard colors:

Red

Special colors:

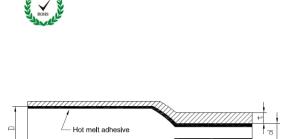
N/A

Packaging:

Standard packaging on spools and/or piece.

Special: 1m, 1.2m, 1.5m pieces are available on request.





- Anti-tracking tubing
- Heavy wall
- Semi flexible
- Excellent electrical properties

- UV and weather resistant
- Excellent creeping resistance
- Up to 36kV
- Min. full recovery temp.: 110°C
- Voltage Rating: Up to 36kV

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	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Red 02
Item		D D	d	t	Tube Shape	, , , III	Amphenol P/N	
No	mm	Inside diameter (Min)	Inside diameter (Max)	Wall thickness (Min)		(meters/roll)	CUSTOMER	Description
1	35/12	35	12	2.9	0	1.22	HST AATA 35.0/12.0 (02)	AATA 35MM ANTI TRACKING INSULATION TUBE RED
2	40/12	40	12	2.9	0	1.22	HST AATA 40.0/12.0 (02)	AATA 40MM ANTI TRACKING INSULATION TUBE RED
3	43/14	43	14	2.9	0	1.22	HST AATA 43.0/14.0 (02)	AATA 43MM ANTI TRACKING INSULATION TUBE RED
4	49/16	49	16	2.9	0	1.22	HST AATA 49.0/16.0 (02)	AATA 49MM ANTI TRACKING INSULATION TUBE RED
5	55/18	55	18	2.9	0	1.22	HST AATA 55.0/18.0 (02)	AATA 55MM ANTI TRACKING INSULATION TUBE RED
6	65/21	65	21	3.2	0	1.22	HST AATA 65.0/21.0 (02)	AATA 65MM ANTI TRACKING INSULATION TUBE RED
7	75/25	75	25	3.4	0	1.22	HST AATA 75.0/25.0 (02)	AATA 75MM ANTI TRACKING INSULATION TUBE RED
8	130/50	130	50	3.9	0	1.22	HST AATA 130.0/50.0 (02)	AATA 130MM ANTI TRACKING INSULATION TUBE RED

Used to provide insulation protection for cable terminals, load-break switches, power circuit breakers, etc.

# Ordering information:

Standard colors:

Red

Special colors:

N/A

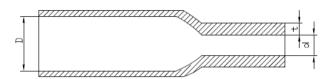
Packaging:

Standard packaging on spools and/or piece.

Special: 1m, 1.2m, 1.5m pieces are available on request.







- Medium/Heavy wall flexible busbar tubing
- Modified polyolefin
- Tracking resistance
- Excellent electrical properties
- Good shrinking performance

- UV and weather resistant
- Halogen free
- Up to 36kV
- Min. full recovery temp.: 120°C

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥12 MPa
Ultimate elongation	ASTM D 2671	≥500%
Longitudinal shrinkage	ASTM D 2671	0~-12%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671/120℃, 168 hrs.	>10 MPa >200%
Dielectric strength	IEC 60243	≥19kV/mm
Dielectric constant	IEC 250	≤3.5
Volume resistance	ASTM D 2671	≥10 <sup>14</sup> Ω.cm
Flammability (Oxygen Index)	ISO 4589	≥25
Copper corrosion	ASTM D 2671	No corrosion
Cold bend	ASTM D 2671/-40℃, 4hrs.	No cracking
Water absorption	ISO 62	<0.5%

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Red 02
Item		D Inside diameter	d Inside diameter	t Wall thickness	Tube Shape	(meters/roll)	Amphenol P/N	Di-ti
No	mm	(Min)	(Max)	(Min)		(meters/ron)	CUSTOMER	Description
1	15/6	15	6	2.0	-	30	HST ABTM 15.0/6.0 (02)	ABTM 15MM MEDIUM BUSBAR INSULATION TUBE RED
2	30/12	30	12	2.0	-	30	HST ABTM 30.0/12.0 (02)	ABTM 30MM MEDIUM BUSBAR INSULATION TUBE RED
3	40/16	40	16	2.3	-	30	HST ABTM 40.0/16.0 (02)	ABTM 40MM MEDIUM BUSBAR INSULATION TUBE RED
4	50/20	50	20	2.5	-	30	HST ABTM 50.0/20.0 (02)	ABTM 50MM MEDIUM BUSBAR INSULATION TUBE RED
5	65/25	65	25	2.5	-	15	HST ABTM 65.0/25.0 (02)	ABTM 65MM MEDIUM BUSBAR INSULATION TUBE RED
6	75/30	75	30	2.6	-	15	HST ABTM 75.0/30.0 (02)	ABTM 75MM MEDIUM BUSBAR INSULATION TUBE RED
7	100/40	100	40	2.8	-	15	HST ABTM 100.0/40.0 (02)	ABTM 100MM MEDIUM BUSBAR INSULATION TUBE RED
8	120/50	120	50	2.8	-	15	HST ABTM 120.0/50.0 (02)	ABTM 120MM MEDIUM BUSBAR INSULATION TUBE RED
9	150/60	150	60	3.3	0	1.22	HST ABTM 150.0/60.0 (02)	ABTM 150MM MEDIUM BUSBAR INSULATION TUBE RED
10	180/60	180	60	3.3	0	1.22	HST ABTM 180.0/60.0 (02)	ABTM 180MM MEDIUM BUSBAR INSULATION TUBE RED
11	205/75	205	75	3.8	0	1.22	HST ABTM 205.0/75.0 (02)	ABTM 205MM MEDIUM BUSBAR INSULATION TUBE RED
12	235/75	235	75	3.8	0	1.22	HST ABTM 235.0/75.0 (02)	ABTM 235MM MEDIUM BUSBAR INSULATION TUBE RED

ABTM provides high resistance to tracking and arcing and enhances the insulation properties of a busbar in a switch and substation. Suitable for applications in insulating medium voltage busbars up to 36kV.

# Ordering information:

Standard colors:

Brown Red

Special colors:

N/A

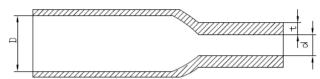
Packaging:

Standard packaging on spools.

Special: 1m pieces are available on request.







- Medium/Heavy wall flexible busbar tubing
- Modified polyolefin
- Tracking resistance
- Excellent electrical properties
- Good shrinking performance

- UV and weather resistant
- Halogen free
- Up to 36kV
- Min. full recovery temp:: 120°C
- Voltage Rating:Up to 36kV

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥12 MPa
Ultimate elongation	ASTM D 2671	≥500%
Longitudinal shrinkage	ASTM D 2671	0~-12%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671/120℃, 168 hrs.	>10 MPa >200%
Dielectric strength	IEC 60243	≥19kV/mm
Dielectric constant	IEC 250	≤3.5
Volume resistance	ASTM D 2671	≥10 <sup>14</sup> Ω.cm
Flammability (Oxygen Index)	ISO 4589	≥25
Copper corrosion	ASTM D 2671	No corrosion
Cold bend	ASTM D 2671/-40℃, 4hrs.	No cracking
Water absorption	ISO 62	<0.5%
		-

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length	Red 02	
Item		D	d	t	Tube Shape		Amphenol P/N	
No	mm	Inside diameter (Min)	Inside diameter (Max)	Wall thickness (Min)	· ·	(meters/roll)	CUSTOMER	Description
1	25/10	25	10	3.9	0	1.22	HST ABTH 25.0/10.0 (02)	ABTH 25MM HEAVY BUSBAR INSULATION TUBE RED
2	40/16	40	16	4.0	0	1.22	HST ABTH 40.0/16.0 (02)	ABTH 40MM HEAVY BUSBAR INSULATION TUBE RED
3	65/16	65	16	4.0	0	1.22	HST ABTH 65.0/16.0 (02)	ABTH 65MM HEAVY BUSBAR INSULATION TUBE RED
4	75/25	75	25	4.0	0	1.22	HST ABTH 75.0/25.0 (02)	ABTH 75MM HEAVY BUSBAR INSULATION TUBE RED
5	95/30	95	30	4.0	0	1.22	HST ABTH 95.0/30.0 (02)	ABTH 95MM HEAVY BUSBAR INSULATION TUBE RED
6	120/40	120	40	4.1	0	1.22	HST ABTH 120.0/40.0 (02)	ABTH 120MM HEAVY BUSBAR INSULATION TUBE RED
7	180/58	180	58	4.1	0	1.22	HST ABTH 180.0/58.0 (02)	ABTH 180MM HEAVY BUSBAR INSULATION TUBE RED

ABTH provides high resistance to tracking and arcing and enhances the insulation properties of a busbar in a switch and substation. Suitable for applications in insulating medium voltage busbars up to 36kV.

#### **Ordering information:**

Standard colors:

Brown Red

Special colors:

N/A

Packaging:

Standard packaging on spools.

Special: 1m pieces are available on request.





- Busbar Insulation tape
- Crosslinked polyolefin
- Good tracking resistance
- Excellent electrical insulation

- UV and weather resistant
- Operating temp.: -55°C to +105°C
- Up to 36kV
- Min. full recovery temp.: 100°CVoltage Rating: Up to 36kV

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥11.5 MPa
Ultimate elongation	ASTM D 2671	≥550%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671/120℃, 168 hrs.	>10 MPa >450%
Dielectric strength	IEC 60243	≥20kV/mm
Dielectric constant	IEC 250	≤3.5
Volume resistance	ASTM D 2671	≥10 <sup>13</sup> Ω.cm
Flammability	ASTM D 2671	Self-extinguish in 60 sec.
Copper corrosion	ASTM D 2671	No corrosion
Water absorption	ISO 62	<0.5%

	Specifications						Red 02		
Item	Size		Chana	As supplied (mm)	After recovered (mm)	Packing	Amphenol P/N	Description	
No	mm	inch Shape		D* (Min.)	w*(Min.)	M/Reel	CUSTOMER	Description	
1	ABIT-1	/	-	25	1.1	5m or 10m	HST ABIT-1 (02)	ABIT 25MM BUSBAR INSULATION TAPE RED	
2	ABIT-2	/	-	50	1.1	5m or 10m	HST ABIT-2 (02)	ABIT 50MM BUSBAR INSULATION TAPE RED	
3	ABIT-4	/	-	100	1.1	5m or 10m	HST ABIT-4 (02)	ABIT 100MM BUSBAR INSULATION TAPE RED	

Widely used to protect irregular shaped busbars or connectors where tube products cannot be applied.

# Ordering information:

Standard colors:

Red

Special colors:

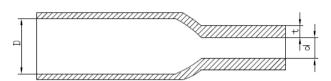
N/A

Packaging:

Standard packaging: Boxed







- Crosslinked polyolefin
- Excellent electrical & mechanical properties
- UV and weather resistant
- Up to 36kV

- Min. shrink temp.: 100°C
- Operating temp.: -45°C to +105°C
- Min. full recovery temp.: 120°C

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥12 MPa
Ultimate elongation	ASTM D 2671	≥300%
Ultimate elongation after aging	ASTM D 2671/150°C, 168 hrs.	≥200%
Volume resistance	GB/T	$<10^4\Omega$ .cm
Water absorption	ISO 62	<0.5%
Longitudinal shrinkage	UL 224	0±5%

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00	
Item		D	d	t	Tube Shape		Amphenol P/N		
No	mm	Inside diameter (Min)	Inside diameter (Max)	Wall thickness (Min)		(meters/roll)	CUSTOMER	Description	
1	33/8	33	8	2.4	0	1.22	HST ASCT 33.0/8.0 (00)	ASCT 33MM SEMI-CONDUCTIVE TUBE BK	
2	40/12	40	12	2.5	0	1.22	HST ASCT 40.0/12.0 (00)	ASCT 40MM SEMI-CONDUCTIVE TUBE BK	
3	55/16	55	16	2.8	0	1.22	HST ASCT 55.0/16.0 (00)	ASCT 55MM SEMI-CONDUCTIVE TUBE BK	
4	75/22	75	22	3.0	0	1.22	HST ASCT 75.0/22.0 (00)	ASCT 75MM SEMI-CONDUCTIVE TUBE BK	
5	95/25	95	25	3.1	0	1.22	HST ASCT 95.0/25.0 (00)	ASCT 95MM SEMI-CONDUCTIVE TUBE BK	
6	120/34	120	34	3.2	0	1.22	HST ASCT 120.0/34.0 (00)	ASCT 120MM SEMI-CONDUCTIVE TUBE BK	

Specially developed chemical formulation provides an effective insulation screen on high voltage cable connectors.

# **Ordering information:**

Standard colors:

Black

Special colors:

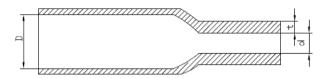
N/A

Packaging:

Standard packaging on spools.







- Modified polyolefin
- Stress control tubing
- Flexible, excellent shrinking properties
- Up to 24kV
- Min. shrink temp.: 100°C
- Min. full recovery temp.: 130°C

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥10 MPa
Ultimate elongation	ASTM D 2671	≥300%
Longitudinal shrinkage	UL 224	0 ~ -10%
Heat shock	ASTM D 2671/ 200℃, 30mins.	No splitting, cracking, dropping, flowing
Dielectric constant	IEC 250	15 ~ 35
Loss factor(50Hz)	IEC 250	≤1.0 (1000V)
Volume resistance	IEC 93	≥10 <sup>11</sup> Ω .cm
Water absorption	ISO 62	<1.0%
VVater absorption	ISO 62	<1.0%

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00
Item		D	d	t	Tube Shape	4 . 4 10	Amphenol P/N	
No	mm	Inside diameter (Min)	Inside diameter (Max)	Wall thickness (Min)		(meters/roll)	CUSTOMER	Description
1	30/12	30	12	2.2	0	1.22	HST ASC-100 30.0/12.0 (00)	AHSC-100 30MM ELECTRIC STRESS RELIEF TUBE BK
2	35/15	35	15	2.3	0	1.22	HST ASC-100 35.0/15.0 (00)	AHSC-100 35MM ELECTRIC STRESS RELIEF TUBE BK
3	40/16	40	16	2.4	0	1.22	HST ASC-100 40.0/16.0 (00)	AHSC-100 40MM ELECTRIC STRESS RELIEF TUBE BK
4	47/18	47	18	2.4	0	1.22	HST ASC-100 47.0/18.0 (00)	AHSC-100 47MM ELECTRIC STRESS RELIEF TUBE BK
5	55/21	55	21	2.4	0	1.22	HST ASC-100 55.0/21.0 (00)	AHSC-100 55MM ELECTRIC STRESS RELIEF TUBE BK
6	65/25	65	25	2.4	0	1.22	HST ASC-100 65.0/25.0 (00)	AHSC-100 65MM ELECTRIC STRESS RELIEF TUBE BK
7	75/30	75	30	2.4	0	1.22	HST ASC-100 75.0/30.0 (00)	AHSC-100 75MM ELECTRIC STRESS RELIEF TUBE BK

The specially designed chemical formulation of the ASC-100 is carefully controlled during the manufacturing process as to effectively release the high electrical stress present at the insulation screen in the termination and joints of power cables from 11 kV to 24kV.

# Ordering information:

Standard colors:

Black

Special colors:

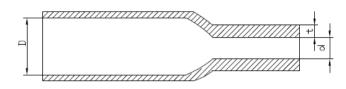
N/A

Packaging:

Special: 1m; 1.2m pieces are available on request







- Modified polyolefin
- Stress control tubing
- Excellent electrical & shrinking properties
- Up to 36kV
- Min. shrink temp.: 100°C
- Min. full recovery temp.: 130°C

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥10 MPa
Ultimate elongation	ASTM D 2671	≥300%
Longitudinal shrinkage	UL 224	0 ~ -10%
Heat shock	ASTM D 2671/ 200℃, 30mins.	No splitting, cracking, dropping, flowing
Dielectric constant	IEC 250	35 ~ 55
Loss factor(50Hz)	IEC 250	≤1.0 (1000V)
Volume resistance	IEC 93	≥10 <sup>9</sup> Ω .cm
Water absorption	ISO 62	<1.0%

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00
Item		D	d	t	Tube Shape		Amphenol P/N	
No	mm	Inside diameter	Inside diameter	Wall thickness		(meters/roll)	<u> </u>	Description
	111111	(Min)	(Max)	(Min)			CUSTOMER	·
1	35/15	35	15	2.3	0	1.22	HST ASC-360 35.0/15.0 (00)	ASC-360 35MM ELECTRIC STRESS RELIEF TUBE BK
2	47/18	47	18	2.4	0	1.22	HST ASC-360 47.0/18.0 (00)	ASC-360 47MM ELECTRIC STRESS RELIEF TUBE BK
3	55/21	55	21	2.4	0	1.22	HST ASC-360 55.0/21.0 (00)	ASC-360 55MM ELECTRIC STRESS RELIEF TUBE BK
4	65/25	65	25	2.4	0	1.22	HST ASC-360 65.0/25.0 (00)	ASC-360 65MM ELECTRIC STRESS RELIEF TUBE BK
5	75/30	75	30	2.4	0	1.22	HST ASC-360 75.0/30.0 (00)	ASC-360 75MM ELECTRIC STRESS RELIEF TUBE BK

The specially designed chemical formulation of the ASC-360 is carefully controlled during the manufacturing process as to effectively release the high electrical stress present at the insulation screen in the termination and joints of power cables up to 36kV.

# Ordering information:

Standard colors:

Black

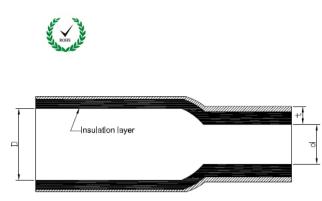
Special colors:

N/A

Packaging:

Standard packaging is 1m, 1.2m, 1.5m.





- Semi-conductive/insulating dual wall tubing
- Crosslinked polyolefin
- Co-extrusion technology
- Excellent electrical properties

- Extra heavy wall of insulation layer
- Up to 36kV
- Min. shrink temp.: 100°C
- Min. full recovery temp.: 130°C

Property	Test Method	Typical Data	
Inner layer			
Tensile strength	ASTM D 2671	≥12 MPa	
Ultimate elongation	ASTM D 2671	≥300%	
Density	ASTM D 792	1.15g/cm <sup>3</sup>	
Volume resistance	IEC 93	≥10 <sup>14</sup> Ω .cm	
Dielectric strength	IEC 60243	≥20kV/mm	
Water absorption	ISO 62	<0.5%	
External layer			
Tensile strength	ASTM D 2671	≥14 MPa	
Ultimate elongation	ASTM D 2671	≥300%	
Density	ASTM D 792	1.15g/cm <sup>3</sup>	
Volume resistance	IEC 93	$<$ 10 $^4\Omega$ .cm	
Water absorption	ISO 62	<0.5%	

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00
Item		D	d	t	Tube Shape	4 . 4 10	Amphenol P/N	
No	mm	Inside diameter (Min)	Inside diameter (Max)	Wall thickness (Min)		(meters/roll)	CUSTOMER	Description
1	36/12	36.0	12.0	5.4	0	1.22	HST ADWT 36.0/12.0 (00)	ADWT 36MM DOUBLE INSULATION TUBE BK
2	45/15	45.0	15.0	5.4	0	1.22	HST ADWT 45.0/15.0 (00)	ADWT 45MM DOUBLE INSULATION TUBE BK
3	55/18	55.0	18.0	5.4	0	1.22	HST ADWT 55.0/18.0 (00)	ADWT 55MM DOUBLE INSULATION TUBE BK
4	62/18	62.0	18.0	5.9	0	1.22	HST ADWT 62.0/18.0 (00)	ADWT 62MM DOUBLE INSULATION TUBE BK
5	65/22	65.0	22.0	6.0	0	1.22	HST ADWT 66.0/22.0 (00)	ADWT 65MM DOUBLE INSULATION TUBE BK
6	73/26	73.0	26.0	6.0	0	1.22	HST ADWT 73.0/26.0 (00)	ADWT 73MM DOUBLE INSULATION TUBE BK
7	85/30	85.0	30.0	6.0	0	1.22	HST ADWT 85.0/30.0 (00)	ADWT 85MM DOUBLE INSULATION TUBE BK
8	100/38	100.0	38.0	6.0	0	1.22	HST ADWT 100.0/38.0 (00)	ADWT 100MM DOUBLE INSULATION TUBE BK

This tubing is manufactured with a semi-conductive/insulating dual wall and is suitable for applications with power cable joints up to 36kV.

# **Ordering information:**

Standard colors:

Black

Special colors:

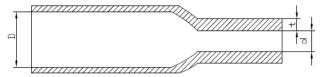
N/A

Packaging:

Standard packaging is 1m, 1.2m.







- Insulating tubing
- Crosslinked polyolefin
- Heavy wall
- Excellent insulating properties
- UV and weather resistant

- Up to 36kV
- Operating temp.: -40°C to +110°C
- Min. shrink temp.: 90°C
- Min. full recovery temp.: 110°C

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥12 MPa
Ultimate elongation	ASTM D 2671	≥300%
Density	ASTM D 792	1.0 g/cm <sup>3</sup>
Longitudinal shrinkage	UL 224	0 ~ -10%
Dielectric strength	IEC 60243	≥20kV/mm
Volume resistance	IEC 93	≥10 <sup>14</sup> Ω .cm
Dielectric constant	IEC 250	≤3.0
Water absorption	ISO 62	<0.5%

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Red 02
Item		D	d	t	Tube Shape	4 . 4 10	Amphenol P/N	
No	mm	Inside diameter (Min)	Inside diameter (Max)	Wall thickness (Min)		(meters/roll)	CUSTOMER	Description
1	35/12	35.00	12.00	3.20	0	1.22	HST AGT 35.0/12.0 (02)	AGT 35MM HIGH INSULATION TUBE RED
2	45/14	45.00	14.00	3.50	0	1.22	HST AGT 45.0/14.0 (02)	AGT 40MM HIGH INSULATION TUBE RED
3	55/18	55.00	18.00	3.90	0	1.22	HST AGT 55.0/18.0 (02)	AGT 55MM HIGH INSULATION TUBE RED
4	62/18	62.00	18.00	3.90	0	1.22	HST AGT 62.0/18.0 (02)	AGT 62MM HIGH INSULATION TUBE RED
5	66/20	66.00	20.00	4.40	0	1.22	HST AGT 66.0/20.0 (02)	AGT 66MM HIGH INSULATION TUBE RED
6	75/25	75.00	25.00	5.00	0	1.22	HST AGT 75.0/25.0 (02)	AGT 75MM HIGH INSULATION TUBE RED
7	85/25	85.00	25.00	5.00	0	1.22	HST AGT 85.0/25.0 (02)	AGT 85MM HIGH INSULATION TUBE RED
8	95/30	95.00	30.00	5.00	0	1.22	HST AGT 95.0/30.0 (02)	AGT 95MM HIGH INSULATION TUBE RED
9	100/38	100.00	38.00	5.00	0	1.22	HST AGT 105.0/40.0 (02)	AGT 105MM HIGH INSULATION TUBE RED
10	120/45	120.00	45.00	5.00	0	1.22	HST AGT 120.0/45.0 (02)	AGT 120MM HIGH INSULATION TUBE RED

AGT is made from radiation crosslinked polyolefin and designed to seal and protect power cable joints from 11 kV to 36kV.

# Ordering information:

Standard colors:

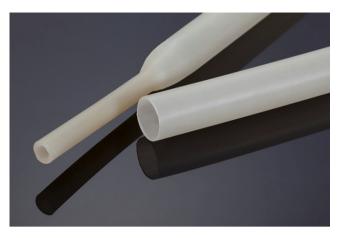
Red

Special colors:

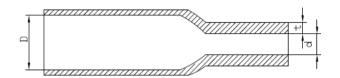
N/A

Packaging:

Standard packaging of 1m, 1.2m, 1.5m pieces are available on request.







- Designed for paper insulated cables
- Crosslinked polyolefin
- Oil resistant
- UV and weather resistant

- Up to 36kV
- Operating temp.: -40°C to +110°C
- Min. shrink temp.: 110°C
- Min. full recovery temp.: 130°C

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥13 MPa
Ultimate elongation	ASTM D 2671	≥400%
Longitudinal shrinkage	UL 224	0~-10%
Dielectric strength	IEC 60243	≥20kV/mm
Volume resistance	IEC 93	≥10 <sup>14</sup> Ω .cm
Water absorption	ISO 62	<0.5%
Oil resistance	Transform oil/24 hrs.	Weight increase <10%

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Clear X
Item		D	d	t	Tube Shape	4 . 4 10	Amphenol P/N	
No	mm	Inside diameter (Min)	Inside diameter (Max)	Wall thickness (Min)		(meters/roll)	CUSTOMER	Description
1	19/6	19	6	2.0	-	30	HST AOT 19.0/6.0 (X)	AOT 19MM OIL-RESISTANT TUBE CLEAR
2	25/10	25	10	2.0	-	30	HST AOT 25.0/10.0 (X)	AOT 25MM OIL-RESISTANT TUBE CLEAR
3	30/12	30	12	2.0	-	30	HST AOT 30.0/12.0 (X)	AOT 30MM OIL-RESISTANT TUBE CLEAR
4	35/14	35	14	2.5	-	30	HST AOT 35.0/14.0 (X)	AOT 35MM OIL-RESISTANT TUBE CLEAR
5	40/16	40	16	2.5	-	30	HST AOT 40.0/16.0 (X)	AOT 40MM OIL-RESISTANT TUBE CLEAR
6	50/20	50	20	2.5	-	15	HST AOT 50.0/20.0 (X)	AOT 50MM OIL-RESISTANT TUBE CLEAR
7	65/25	65	25	2.9	-	15	HST AOT 65.0/25.0 (X)	AOT 65MM OIL-RESISTANT TUBE CLEAR
8	85/35	85	35	2.9	-	15	HST AOT 85.0/35.0 (X)	AOT 85MM OIL-RESISTANT TUBE CLEAR

AOT is manufactured with radiation crosslinked oil resistant polyolefin, and suitable for applications in power cable terminations and joints up to 36kV.

### **Ordering information:**

Standard colors:

Clear

Special colors:

N/A

Packaging:

Standard packaging on spools.

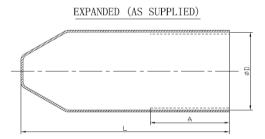
Special: 1m, 1.2m, 1.5m pieces are available on request.

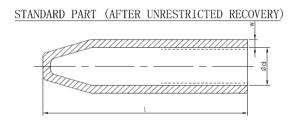




- HSEC: insulation cable end cap
- Crosslinked polyolefin
- Excellent sealing properties
- UV and weather resistant

- Available with or without adhesive
- Operating temp.: -55℃ to +110℃
- Min. full recovery temp.: 120°C





Test Method	Typical Data
ASTM D 2671	≥11 MPa
ASTM D 2671	≥400%
ASTM D 792	1.05g/cm <sup>3</sup>
ASTM D 2671/150℃, 168hrs.	≥300%
IEC 60243	≥15kV/mm
IEC 93	≥10 <sup>14</sup> Ω .cm
	ASTM D 2671  ASTM D 2671  ASTM D 792  ASTM D 2671/150°C, 168hrs.  IEC 60243

			Specifi	cations				Black 00
Size		As supplied (n	nm)	A	After recovered (mm)		Amphenol P/N	Description
mm	L*(±10%)	D*(Min)	A*(±10%)	d*(Min)	l*(±10%)	w*(±10%)	CUSTOMER	Description
ASEC105 12/4	38	12	15	4	40	2.6	HST ASEC 105 12/4 (00)	ASEC CABLE END CUP WITH ADHESIVE 105 BK
ASEC110 14/5	47	14	18	5	42	2.2	HST ASEC 110 14/5 (00)	ASEC CABLE END CUP WITH ADHESIVE 110 BK
ASEC115 20/6	65	20	25	6	55	2.8	HST ASEC 115 20/6 (00)	ASEC CABLE END CUP WITH ADHESIVE 115 BK
ASEC120 25/8.5	75	25	30	8.5	65	2.8	HST ASEC 120 25/8.5 (00)	ASEC CABLE END CUP WITH ADHESIVE 120 BK
ASEC130 35/16	92	35	35	16	83	3.3	HST ASEC 130 35/16 (00)	ASEC CABLE END CUP WITH ADHESIVE 130 BK
ASEC135 40/15	95	40	40	15	75	3.3	HST ASEC 135 40/15 (00)	ASEC CABLE END CUP WITH ADHESIVE 135 BK
ASEC140 55/26	114	55	50	26	105	3.5	HST ASEC 140 55/26 (00)	ASEC CABLE END CUP WITH ADHESIVE 140 BK
ASEC150 75/36	132	75	55	36	115	4	HST ASEC 150 75/36 (00)	ASEC CABLE END CUP WITH ADHESIVE 150 BK
ASEC160 100/52	153	100	70	52	130	4	HST ASEC 160 100/52 (00)	ASEC CABLE END CUP WITH ADHESIVE 160 BK
ASEC170 120/60	155	120	70	60	150	4.2	HST ASEC 170 120/60 (00)	ASEC CABLE END CUP WITH ADHESIVE 170 BK
ASEC180 145/60	160	145	70	60	150	4.2	HST ASEC 180 145/60 (00)	ASEC CABLE END CUP WITH ADHESIVE 180 BK
ASEC190 160/82	160	160	70	82	135	4.5	HST ASEC 190 160/82 (00)	ASEC CABLE END CUP WITH ADHESIVE 190 BK
ASEC200 200/90	170	200	70	90	145	4.5	HST ASEC 200 200/90 (00)	ASEC CABLE END CUP WITH ADHESIVE 200 BK
ASEC110L 14/5	66	14	30	5	55	2.2	HST ASEC 110L 14/5 (00)	ASEC CABLE END CUP WITH ADHESIVE 110L BK
ASEC130L 40/15	110	42	40	15	95	3.3	HST ASEC 130L 40/15 (00)	ASEC CABLE END CUP WITH ADHESIVE 130L BK
ASEC140L 55/23	150	55	70	24	137	3.8	HST ASEC 140L 55/23 (00)	ASEC CABLE END CUP WITH ADHESIVE 140L BK
ASEC145L 62/23	150	62	70	24	132	3.8	HST ASEC 145L 62/23 (00)	ASEC CABLE END CUP WITH ADHESIVE 145L BK
ASEC150L 75/32	170	75	70	32	140	4	HST ASEC 150L 75/32 (00)	ASEC CABLE END CUP WITH ADHESIVE 150L BK
ASEC150XL 75/36	165	75	70	36	165	4.2	HST ASEC 150XL 75/36 (00)	ASEC CABLE END CUP WITH ADHESIVE 150XL BK
ASEC160L 105/45	162	105	65	45	135	4	HST ASEC 160L 105/45 (00)	ASEC CABLE END CUP WITH ADHESIVE 160L BK

ASEC is recommended for applications both in open air and underground power distribution cables with PVC, lead or XLPE sheaths.

# Ordering information:

Standard colors:

Black

Special colors:

N/A

Packaging:



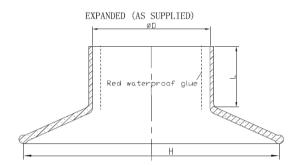


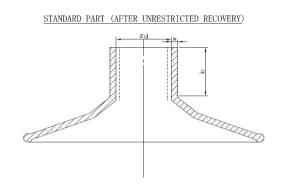
- Crosslinked polyolefin
- Red mastic applied to collars
- UV and weather resistant

- Anti-tracking
- Min. full recovery temp.: 110°C

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥13 MPa
Ultimate elongation	ASTM D 2671	≥400%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671/120℃, 168 hrs.	≥10.4 MPa ≥350 %
Dielectric strength	IEC 60243	≥15kV/mm
Tracking resistance	ASTM D 2303 /3.75kV, 1 hr.	Pass
Dielectric constant	IEC 250	≤3.0
Volume resistance	IEC 93	≥10 <sup>14</sup> Ω .cm
Flammability (Oxygen Index )	ISO 4589	≥25
Copper corrosion	ASTM D 2671	No corrosion
Cold bend	ASTM D 2671/-40℃, 4 hrs.	No cracking

			Specifi	cations			Red 02		
Size		As supplied (m	nm)	,	After recovered (mm)		Amphenol P/N	D	
mm	L*(±10%)	D*(Min)	H*(Nom)	d*(Min)	b*(±10%)	w*(±10%)	CUSTOMER	Description	
AAS110 35/12	20	35	95	12	18	3.0	HST AAS110 35/12 (02)	AAS ANTI-TRACKING RAIN SHEDS 110 RED	
AAS120 48/20	28	48	120	20	20	3.3	HST AAS120 48/20 (02)	aas anti-tracking rain sheds 120 red	
AAS130 60/25	30	60	120	25	25	3.3	HST AAS130 60/25 (02)	AAS ANTI-TRACKING RAIN SHEDS 130 RED	
AAS140 60/30	35	60	140	30	30	3.5	HST AAS140 60/30 (02)	AAS ANTI-TRACKING RAIN SHEDS 140 RED	
AAS150 75/30	35	75	140	30	30	3.5	HST AAS150 75/30 (02)	aas anti-tracking rain sheds 150 red	
AAS160 100/35	35	100	140	35	30	3.5	HST AAS160 100/35 (02)	aas anti-tracking rain sheds 160 red	





Used to provide insulation protection for outdoor cable terminations.

# Ordering information:

Standard colors:

Red

Special colors:

N/A

Packaging:





- Crosslinked polyolefin
- With red mastic/hot melt adhesive
- UV and weather resistant

- Anti-tracking
- Min. full recovery temp.: 110°C

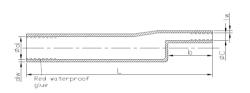
Test Method	Typical Data
ASTM D 2671	≥8 MPa
ASTM D 2671	≥300%
ASTM D 2671/120℃, 168 hrs.	≥7 MPa ≥200 %
IEC 60243	≥20kV/mm
ASTM D 2303 /3.75kV, 1 hr.	Pass
IEC 93	≥10 <sup>13</sup> Ω .cm
ISO 62	≤1.0%
	ASTM D 2671  ASTM D 2671  ASTM D 2671/120℃, 168 hrs.  IEC 60243  ASTM D 2303 /3.75kV, 1 hr.  IEC 93

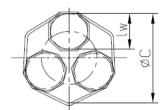
				Specifi	cations		Red 02					
Size		As supplie	ed (mm)			,	After reco	vered (mm)			Amphenol P/N	Description
mm	H*(±10%)	F*(±10%)	D*(Min)	S*(Min)	d*(Min)	c*(Min)	L*(±10%)	b*(±10%)	dw*(±10%)	lw*(±10%)	CUSTOMER	Description
AMB320 60/24-26/7	190	38	60	26	24	7	180	40	3.0	2.6	HST AMB320 60/24-26/7 (02)	AMB MEDIUM VOLTAGE 3 CORES CABLE BREAKOUT 60 RED
AMB330 80/38-34/14	215	50	80	34	38	14	210	60	4.0	3.6	HST AMB330 80/38-34/14 (02)	AMB MEDIUM VOLTAGE 3 CORES CABLE BREAKOUT 80 RED
AMB340 110/50-46/18	220	55	110	46	50	18	230	55	3.8	3.5	HST AMB340 110/50-46/18 (02)	AMB MEDIUM VOLTAGE 3 CORES CABLE BREAKOUT 110 RED
AMB350 125/55-57/20	230	58	125	57	55	20	240	65	3.7	3.2	HST AMB350 125/55-57/20 (02)	AMB MEDIUM VOLTAGE 3 CORES CABLE BREAKOUT 125 RED
AMB360 140/70-64/26	250	58	140	64	70	26	270	65	4.0	3.8	HST AMB360 140/70-64/26 (02)	AMB MEDIUM VOLTAGE 3 CORES CABLE BREAKOUT 140 RED

#### EXPANDED (AS SUPPLIED)



#### STANDARD PART (AFTER UNRESTRICTED RECOVERY)





### **Applications:**

Used to safely protect cable ends up to 36kV against flashover, or surges induced during in-service life in switch gear and transformer boxes.

# **Ordering information:**

Standard colors:

Red

Special colors:

N/A

Packaging:



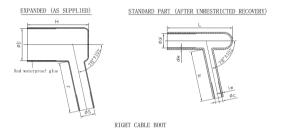


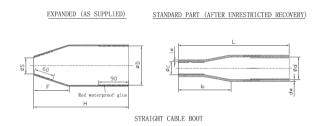
- Crosslinked polyolefin
- With anti-track red mastic
- UV and weather resistant

- Anti-tracking
- Min. full recovery temp.: 110°C

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥12 MPa
Ultimate elongation	ASTM D 2671	≥300%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671/120℃, 168 hrs.	≥8.5 MPa ≥200 %
Dielectric strength	IEC 60243	≥15kV/mm
Volume resistance	IEC 93	≥10 <sup>13</sup> Ω .cm
Tracking resistance	ASTM D 2303/3.75kV, 1hr.	Pass
Water absorption	ISO 62	≤1.0%
Flammability (oxygen index)	ISO 4589	≥25
Copper corrosion	ASTM D 2671/120℃,168 hrs.	No corrosion
Cold bend	ASTM D 2671/-40℃,4 hrs.	No cracking

				Specifi	cations						Red 02			
Size		As suppl	ied (mm)			After recovered (mm)				Shap	Amphenol P/N Description			
mm	H*(±10%)	F*(±10%)	D*(Min)	S*(Min)	d*(Min)	c*(Min)	L*(±10%)	b*(±10%)	dw*(±10%)	lw*(±10%)	Snap	CUSTOMER	Description	
AMR110 80/36-35/18	150	125	80	35	36	18	160	125	3.5	3.5		HST AMR110 (80/36-35/18) (02)	AMR MEDIUM VOLTAGE RIGHT CABLE BOOT 110 RED	
AMR120 80/36-50/18	150	125	80	50	36	18	160	125	3.5	3.5		HST AMR120 (80/36-50/18) (02)	AMR MEDIUM VOLTAGE RIGHT CABLE BOOT 120 RED	
AMR130 80/36-50/27	150	140	80	50	36	27	145	135	3.6	3.3	RIGHT CABLE BOOT	HST AMR130 (80/36-50/27) (02)	AMR MEDIUM VOLTAGE RIGHT CABLE BOOT 130 RED	
AMR140 95/38-70/28	155	150	95	70	38	28	155	130	3.8	3.8		HST AMR140 (95/38-70/28) (02)	AMR MEDIUM VOLTAGE RIGHT CABLE BOOT 140 RED	
AMR150 145/72-68/34	190	155	145	68	72	34	195	165	3.8	3.8		HST AMR150 (145/72-68/34) (02)	AMR MEDIUM VOLTAGE RIGHT CABLE BOOT 150 RED	
AMR160 80/35-34/20	190	70	80	34	35	20	200	80	3.0	3.0		HST AMR160 (80/35-34/20) (02)	HST AMR160 (80/35-34/20) (02)	
AMR170 80/35-58/20	195	70	80	58	35	20	200	80	3.0	3.0	STRAIGHT CABLE BOOT	HST AMR170 (80/35-58/20) (02)	HST AMR170 (80/35-58/20) (02)	
AMR180 140/65-90/33	295	165	140	90	65	33	320	170	3.8	3.8		HST AMR180 (140/65-90/33) (02)	HST AMR180 (140/65-90/33) (02)	





Used to safely protect cable ends up to 36kV against flashover, or surges induced during in-service life in switch gear and transformer boxes.

# Ordering information:

Standard colors:

Red

Special colors:

N/A

Packaging:



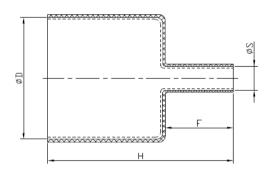


- Crosslinked polyolefin
- Superior environmental protection
- Fast recovery
- UV and weather resistant

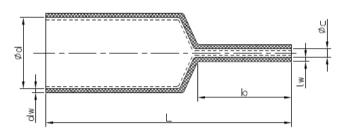
- Adhesive lined
- Operating temperature: -55°C to +110°C
- Min. full recovery temp.: 110°C

Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥13 MPa
Ultimate elongation	ASTM D 2671	≥300%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671/120°C, 168 hrs.	≥10 MPa ≥250 %
Dielectric strength	IEC 60243	≥15kV/mm
Volume resistance	IEC 93	≥10 <sup>13</sup> Ω .cm
Water absorption	ISO 62	≤1.0%

				Specifi	cations							Black 00
Size		As suppli	ied (mm)			After r	ecovered	(mm)			Amphenol P/N	Description.
mm	H*(±10%)	F*(±10%)	D*(Min)	S*(Min)	d*(Min)	c*(Min)	L*(±10%)	b*(±10%)	dw*(±10%)	lw*(±10%)	CUSTOMER	Description
ACFT110 85/42-15/5	115	40	85	15	42	5	125	45	2.5	2.8	HST ACFT 110 (85/42-15/5) (00)	ACFT LOW VOLTAGE SINGLE CORE CABLE BREAKOUT 110 BK
ACFT120 60/30-45/10	125	55	60	45	30	10	130	55	2.5	4.5	HST ACFT 120 (60/30-45/10) (00)	ACFT LOW VOLTAGE SINGLE CORE CABLE BREAKOUT 120 BK
ACFT130 100/52-20/8	150	55	100	20	50	8	170	65	3.0	3.0	HST ACFT 130(100/52-20/8) (00)	ACFT LOW VOLTAGE SINGLE CORE CABLE BREAKOUT 130 BK
ACFT130L 100/52-20/8	175	55	100	20	52	8	190	65	3.0	3.0	HST ACFT 130L (100/52-20/8) (00)	ACFT LOW VOLTAGE SINGLE CORE CABLE BREAKOUT 130L BK
ACFT135 150/92-14/5	130	55	150	14	92	5	150	55	3.5	3.5	HST ACFT 135 (150/92-14/5) (00)	ACFT LOW VOLTAGE SINGLE CORE CABLE BREAKOUT 135 BK
ACFT140 160/92-60/20	125	35	160	60	92	20	145	55	3.2	3.0	HST ACFT 140 (160/92-60/20) (00)	ACFT LOW VOLTAGE SINGLE CORE CABLE BREAKOUT 140 BK
ACFT150 160/92-100/45	125	35	160	100	92	45	145	55	3.5	3.2	HST ACFT 150(160/92-100/45) (00)	ACFT LOW VOLTAGE SINGLE CORE CABLE BREAKOUT 150 BK



#### STANDARD PART (AFTER UNRESTRICTED RECOVERY)



### **Applications:**

This specially designed structure can be used for sealing vacant cable ducts and pipe protection.

# **Ordering information:**

Standard colors:

Black

Special colors:

N/A

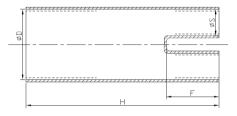
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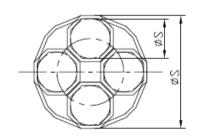


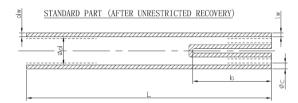


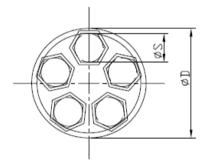
- Crosslinked polyolefin
- Excellent sealing properties
- Available for 2 to 5 cores cables
- UV and weather resistant

- Adhesive lined
- Operating temperature: -55°C to +110°C
- Min. shrinking temp.: 110°C
- Min. full recovery temp.: 130°C









Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥13 MPa
Ultimate elongation	ASTM D 2671	≥300%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671/120℃, 168 hrs.	≥10 MPa ≥250 %
Dielectric strength	IEC 60243	≥15kV/mm
Volume resistance	IEC 93	≥10 <sup>13</sup> Ω .cm
Water absorption	ISO 62	≤1.0%

				Specifi	cations						E	Black 00
Size		As suppli	ed (mm)			Д	fter recov	rered (mm)			Amphenol P/N	
mm	H*(±10%)	F*(±10%)	D*(Min)	S*(Min)	d*(Min)	c*(Min)	L*(±10%)	b*(±10%)	dw*(±10%)	lw*(±10%)	CUSTOMER	Description
								2	Cores			
ALB205 22/8	55	16	22	11	8	3.5	60	18	2.2	1.8	HST ALB205 22/8 (00)	ALB 2 CORES CABLE BREAKOUT 22MM BK
ALB210 30/12	83	22	30	14	12	4.5	84	21	2.3	2.2	HST ALB210 30/12 (00)	ALB 2 CORES CABLE BREAKOUT 30MM BK
ALB215 40/16	100	30	40	15	16	5	110	30	2.2	2.2	HST ALB215 40/16 (00)	ALB 2 CORES CABLE BREAKOUT 40MM BK
ALB220 60/23	98	21	60	25	16	7.5	105	25	2.4	2.4	HST ALB220 60/23 (00)	ALB 2 CORES CABLE BREAKOUT 60MM BK
ALB220L 60/23	140	42	60	25	23	7.5	145	45	2.4	2.4	HST ALB220L 60/23 (00)	ALB 2 CORES CABLE BREAKOUT 60LMM BK
ALB230 90/60	165	45	90	30	60	8	170	48	3	3	HST ALB230 90/60 (00)	ALB 2 CORES CABLE BREAKOUT 90MM BK
ALB240 150/90	145	65	150	19	90	6	155	70	3.6	3.3	HST ALB240 150/90 (00)	ALB 2 CORES CABLE BREAKOUT 150MM BK
								3	Cores			
ALB310 38/16	100	35	38	15	16	5	100	32	2.2	1.8	HST ALB310 38/16 (00)	ALB 3 CORES CABLE BREAKOUT 38MM BK
ALB310L 40/16	120	35	40	15	16	5	120	32	2.2	1.8	HST ALB310L 40/16 (00)	ALB 3 CORES CABLE BREAKOUT 40MM BK
ALB320 60/25	170	40	60	26	25	7.5	170	40	3.2	2.8	HST ALB320 60/25 (00)	ALB 3 CORES CABLE BREAKOUT 60MM BK
ALB330 80/36	190	50	80	34	38	14	195	52	3.5	3.2	HST ALB330 80/36 (00)	ALB 3 CORES CABLE BREAKOUT 80MM BK
ALB330L 80/38	215	50	80	34	38	14	210	60	3.5	3.2	HST ALB330L 80/38(00)	ALB 3 CORES CABLE BREAKOUT 80MM BK
ALB340 110/50	220	55	110	46	50	46	230	60	3.7	3.3	HST ALB340 110/50(00)	ALB 3 CORES CABLE BREAKOUT 110MM BK
ALB350 125/57	230	58	125	57	57	20	240	65	3.7	3.3	HST ALB350 125/57(00)	ALB 3 CORES CABLE BREAKOUT 125MM BK
ALB360 140/70	250	58	140	62	70	24	270	68	3.9	3.6	HST ALB360 140/70(00)	ALB 3 CORES CABLE BREAKOUT 140MM BK
ALB370 170/77	250	55	170	76	77	28	270	68	3.9	3.6	HST ALB370 170/77(00)	ALB 3 CORES CABLE BREAKOUT 170MM BK
								4	Cores			
ALB410 40/15-12/4	95	23	40	12	15	4.5	100	24	2.2	2.0	HST ALB410 40/15-12/4 (00)	ALB 4 CORES CABLE BREAKOUT 40MM BK
ALB420 55/21-20/6	145	35	55	20	21	6.0	150	42	2.9	2.7	HST ALB420 55/21-20/6 (00)	ALB 4 CORES CABLE BREAKOUT 55MM BK
ALB425 65/26-25/7	170	45	65	25	26	7.5	180	50	3.3	3.1	HST ALB425 65/26-25/7 (00)	ALB 4 CORES CABLE BREAKOUT 65MM BK
ALB430 75/26-28/7	170	45	75	28	26	7.5	180	50	3.3	3.1	HST ALB430 75/26-28/7 (00)	ALB 4 CORES CABLE BREAKOUT 75MM BK
ALB440 82/37-30/10	170	45	82	30	37	11.0	180	45	3.3	2.8	HST ALB440 82/37-30/10 (00)	ALB 4 CORES CABLE BREAKOUT 82MM BK
ALB445 90/37-32/10	170	45	90	32	37	11.0	180	45	3.3	2.8	HST ALB445 90/37-32/10 (00)	ALB 4 CORES CABLE BREAKOUT 90MM BK
ALB450 100/45-38/12	180	55	100	38	47	12	190	55	3.9	3.3	HST ALB450 100/45-38/12 (00)	ALB 4 CORES CABLE BREAKOUT 100MM BK
ALB460 125/52-52/14	215	50	125	52	52	14	240	68	4.0	4.2	HST ALB460 125/52-52/14 (00)	ALB 4 CORES CABLE BREAKOUT 125MM BK
ALB470 160/70-64/20	240	50	160	64	70	20	270	68	3.8	3.7	HST ALB470 160/70-64/20 (00)	ALB 4 CORES CABLE BREAKOUT 160MM BK
								5	Cores			
ALB510 40/19-13/4	90	20	40	13	19	4.5	85	20	2.7	2.2	HST ALB510 40/19-13/4 (00)	ALB 5 CORES CABLE BREAKOUT 40MM BK
ALB520 55/24-18/5	145	36	55	18	24	5	150	40	3	2.5	HST ALB520 55/24-18/5 (00)	ALB 5 CORES CABLE BREAKOUT 55MM BK
ALB530 80/33-26/8	160	46	80	26	33	8	170	50	3.2	3	HST ALB530 80/33-26/8 (00)	ALB 5 CORES CABLE BREAKOUT 80MM BK
ALB540 100/42-35/10	185	52	100	35	42	10	195	55	3.5	3.2	HST ALB540 100/42-35/10 (00)	ALB 5 CORES CABLE BREAKOUT 100MM BK

ALB provides electrical insulation, UV resistance and ingress protection. Widely used in the electric power industry to provide insulation and sealing over the crutch of multi-core cables.

# Ordering information:

Standard colors:

Black

Special colors:

N/A

Packaging:



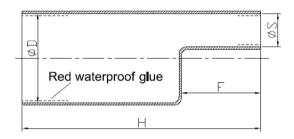


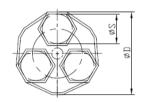
- Crosslinked polyolefin
- Conductive
- Anti-tracking red mastic applied
- UV and weather resistant

- Operating temperature: -55°C to +105°C
- Min. shrinking temp.: 110°C
- Min. full recovery temp.: 130°C

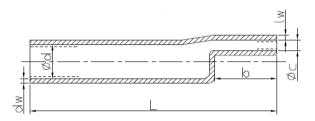
Property	Test Method	Typical Data
Tensile strength	ASTM D 2671	≥12 MPa
Ultimate elongation	ASTM D 2671	≥250%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671/120℃, 168 hrs.	≥10 MPa ≥200 %
Volume resistance	GB/T	≤10 <sup>4</sup> Ω .cm
Water absorption	ISO 62	≤1.0%

				Specifi	cations							Black 00
Size		As supplie	d (mm)			,	After reco	vered(mm)			Amphenol P/N	Description
mm	H*(±10%)	F*(±10%)	D*(Min)	S*(Min)	d*(Min)	c*(Min)	L*(±10%)	b*(±10%)	dw*(±10%)	lw*(±10%)	CUSTOMER	Description
ACB320 60/24-26/7	175	40	60	26	24	7.5	170	40	2.8	2.8	HST ACB320 60/24-26/7 (00)	ACB 3 CORES CONDUCTIVE CABLE BREAKOUT 60MM BK
ACB330 80/36-34/14	200	50	80	34	38	14	215	52	3.5	3.2	HST ACB330 80/36-34/14 (00)	ACB 3 CORES CONDUCTIVE CABLE BREAKOUT 80MM BK
ACB340 110/50-46/18	210	55	110	46	50	18	230	60	3.5	3.3	HST ACB340 110/50-46/18 (00)	ACB 3 CORES CONDUCTIVE CABLE BREAKOUT 110MM BK
ACB350 125/57-55/20	220	58	125	55	57	20	240	65	3.5	3.3	HST ACB350 125/57-55/20 (00)	ACB 3 CORES CONDUCTIVE CABLE BREAKOUT 125MM BK
ACB360 140/70-64/24	250	58	140	62	70	24	270	68	3.5	3.6	HST ACB360 140/70-64/24 (00)	ACB 3 CORES CONDUCTIVE CABLE BREAKOUT 140MM BK





STANDARD PART (AFTER UNRESTRICTED RECOVERY)



### **Applications:**

ACB is an electrically semi-conductive cable breakout that provides effective conductive screening and sealing protection to cable terminations. The breakout can be used on cable terminations up to 36kV.

### **Ordering information:**

Standard colors:

Black

Special colors:

N/A

Packaging:





- Medium wall tubing with/without adhesive
- Good environmental protection
- Good electrical & mechanical performance
- Ideal for LV application

- UV resistant
- Operating temp.: -55°C to +110°C
- Min. full recovery temp.: 120°C
- Voltage: /

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	≥14 MPa
Ultimate elongation	ASTM D 2671	≥400%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671(150℃, 168 hrs.)	≥12 MPa ≥300%
Density	ASTM D 792	1.05g/cm <sup>3</sup>
Longitudinal shrinkage	UL 224	0~-12%
Dielectric strength	IEC60243	≥18 kV/mm
Volume resistance	IEC 93	≥10 <sup>13</sup> Ω.cm
Copper stability	ASTM D 2671	Pass
Water absorption	ISO 62/23℃,14days	<0.15%
Property of adhesive		
Water absorption	ISO 62	<0.2%
Softening point	ASTM E28	85±5℃
Peel strength (PE)	DIN 30672	4 N/cm
Resistance to fungus and decay	ISO 846	Pass

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00
Item		D Inside diameter	d Inside diameter	t Wall thickness	Tube Shape	(	Amphenol P/N	D
No	mm	(Min)	(Max)	(Min)		(meters/roll)	CUSTOMER	Description
1	22/6	22	6	2.4	0	1.22	HST ARA2 22.0/6.0 (00)	ARA2 22.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
2	28/6	28	6	2.7	0	1.22	HST ARA2 28.0/6.0 (00)	ARA2 28.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
3	33/8	33	8	2.6	0	1.22	HST ARA2 33.0/8.0 (00)	ARA2 33.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
4	40/12	40	12	2.6	0	1.22	HST ARA2 40.0/12.0 (00)	ARA2 40.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
5	55/16	55	16	2.7	0	1.22	HST ARA2 55.0/16.0 (00)	ARA2 55.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
6	65/19	65	19	2.9	0	1.22	HST ARA2 65.0/19.0 (00)	ARA2 65.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
7	75/22	75	22	3.0	0	1.22	HST ARA2 75.0/22.0 (00)	ARA2 75.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
8	85/25	85	25	3.2	0	1.22	HST ARA2 85.0/25.0 (00)	ARA2 85.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
9	95/25	95	25	3.6	0	1.22	HST ARA2 95.0/25.0 (00)	ARA2 95.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
10	115/34	115	34	3.5	0	1.22	HST ARA2 115.0/34.0 (00)	ARA2 115.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
11	140/42	140	42	3.3	0	1.22	HST ARA2 140.0/42.0 (00)	ARA2 140.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
12	160/50	160	50	3.3	0	1.22	HST ARA2 160.0/50.0 (00)	ARA2 160.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
13	180/58	180	58	3.3	0	1.22	HST ARA2 180.0/58.0 (00)	ARA2 180.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
14	200/65	200	65	3.3	0	1.22	HST ARA2 205.0/65.0 (00)	ARA2 200.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
15	235/65	235	65	3.7	0	1.22	HST ARA2 235.0/65.0 (00)	ARA2 235.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
16	265/75	265	75	3.8	0	1.22	HST ARA2 265.0/75.0 (00)	ARA2 265.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
17	300/85	300	75	3.8	0	1.22	HST ARA2 300.0/85.0 (00)	ARA2 300.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
18	350/100	350	100	4.3	0	1.22	HST ARA2 350.0/100.0 (00)	ARA2 350.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK
19	380/150	380	150	4.3	0	1.22	HST ARA2 380.0/110.0 (00)	ARA2 380.0MM MEDIUM WALL TUBE WITH ADHESIVE 3:1 BK

It is designed for applications to seal and protect electrical splices, cable terminations and joints where electrical insulation and water proof are required. 3: 1 shrink ratio allows it easily fit over irregular shape and large connectors.

### **Ordering information:**

Standard colors:

Black

Special colors:

N/A

Packaging:

Standard packaging of 1m, 1.2m, 1.5m pieces are available on request.





- Medium wall tubing with/without adhesive
- Good environmental protection
- Good electrical & mechanical performance
- Ideal for LV application

- UV resistant
- Operating temp.: -55°C to +110°C
- Min. full recovery temp.: 120°C
- Voltage: /

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	≥14 MPa
Ultimate elongation	ASTM D 2671	≥400%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671(150℃, 168 hrs.)	≥12 MPa ≥300%
Density	ASTM D 792	1.05g/cm <sup>3</sup>
Longitudinal shrinkage	UL 224	0~-12%
Dielectric strength	IEC60243	≥18 kV/mm
Volume resistance	IEC 93	≥10 <sup>13</sup> Ω.cm
Copper stability	ASTM D 2671	Pass
Water absorption	ISO 62/23℃,14days	<0.15%
Property of adhesive		
Water absorption	ISO 62	<0.2%
Softening point	ASTM E28	85±5℃
Peel strength (PE)	DIN 30672	4 N/cm
Resistance to fungus and decay	ISO 846	Pass

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00
Item	Normal size	D	d	t	Tube Shape		Amphenol P/N	
No	mm	Inside diameter (Min)	Inside diameter (Max)	Wall thickness (Min)		(meters/roll)	CUSTOMER	Description
1	8/2	8	2	1.8	0	1.22	HST AR2 8.0/2.0 (00)	AR2 8.0MM MEDIUM WALL TUBE 3:1 BK
2	12/3	12	3	1.8	0	1.22	HST AR2 12.0/3.0 (00)	AR2 12.0MM MEDIUM WALL TUBE 3:1 BK
3	16/5	16	5	2.1	0	1.22	HST AR2 16.0/5.0 (00)	AR2 16.0MM MEDIUM WALL TUBE 3:1 BK
4	22/6	22	6	2.4	0	1.22	HST AR2 22.0/6.0 (00)	AR2 22.0MM MEDIUM WALL TUBE 3:1 BK
5	28/6	28	6	2.6	0	1.22	HST AR2 28.0/6.0 (00)	AR2 28.0MM MEDIUM WALL TUBE 3:1 BK
6	33/8	33	8	2.6	0	1.22	HST AR2 33.0/8.0 (00)	AR2 33.0MM MEDIUM WALL TUBE 3:1 BK
7	40/12	40	12	2.6	0	1.22	HST AR2 40.0/12.0 (00)	AR2 33.0MM MEDIUM WALL TUBE 3:1 BK
8	55/16	55	16	2.7	0	1.22	HST AR2 55.0/16.0 (00)	AR2 55.0MM MEDIUM WALL TUBE 3:1 BK
9	65/19	65	19	2.9	0	1.22	HST AR2 65.0/19.0 (00)	AR2 65.0MM MEDIUM WALL TUBE 3:1 BK
10	75/22	75	22	3.0	0	1.22	HST AR2 75.0/22.0 (00)	AR2 75.0MM MEDIUM WALL TUBE 3:1 BK
11	85/25	85	25	3.2	0	1.22	HST AR2 85.0/25.0 (00)	AR2 85.0MM MEDIUM WALL TUBE 3:1 BK
12	95/25	95	25	3.6	0	1.22	HST AR2 95.0/25.0 (00)	AR2 95.0MM MEDIUM WALL TUBE 3:1 BK
13	115/34	115	34	3.5	0	1.22	HST AR2 115.0/34.0 (00)	AR2 115.0MM MEDIUM WALL TUBE 3:1 BK
14	140/42	140	42	3.3	0	1.22	HST AR2 140.0/42.0 (00)	AR2 140.0MM MEDIUM WALL TUBE 3:1 BK
15	160/50	160	50	3.3	0	1.22	HST AR2 160.0/50.0 (00)	AR2 160.0MM MEDIUM WALL TUBE 3:1 BK
16	180/58	180	58	3.3	0	1.22	HST AR2 180.0/58.0 (00)	AR2 180.0MM MEDIUM WALL TUBE 3:1 BK
17	200/65	200	65	3.3	0	1.22	HST AR2 205.0/65.0 (00)	AR2 205.0MM MEDIUM WALL TUBE 3:1 BK
18	235/65	235	65	3.7	0	1.22	HST AR2 235.0/65.0 (00)	AR2 235.0MM MEDIUM WALL TUBE 3:1 BK
19	265/75	265	75	3.8	0	1.22	HST AR2 265.0/75.0 (00)	AR2 265.0MM MEDIUM WALL TUBE 3:1 BK
20	300/75	300	75	3.8	0	1.22	HST AR2 300.0/75.0 (00)	AR2 300.0MM MEDIUM WALL TUBE 3:1 BK
21	350/100	350	100	4.3	0	1.22	HST AR2 350.0/100.0 (00)	AR2 350.0MM MEDIUM WALL TUBE 3:1 BK
22	380/150	380	150	4.3	0	1.22	HST AR2 380.0/150.0 (00)	AR2 380.0MM MEDIUM WALL TUBE 3:1 BK
23	410/150	410	150	4.3	0	1.22	HST AR2 410.0/150.0 (00)	AR2 410.0MM MEDIUM WALL TUBE 3:1 BK

Designed to seal and protect electrical splices, cable terminations, and joints where electrical insulation and water ingress protection are required. Has a 3:1 shrink ratio which allows the tubing to fit over irregular shaped and large connectors.

# Ordering information:

Standard colors:

Black

Special colors:

N/A

Packaging:

Standard packaging of 1m, 1.2m, 1.5m pieces are available on request.





- Heavy wall tubing with/without adhesive
- Superior electrical & environmental insulation
- Excellent abrasion and impact resistance
- UV resistant

- Superior sealing property
- Operating temp.: -55°C to +110°C
- Min. full recovery temp.: 120°C
- Voltage: /

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	≥14 MPa
Ultimate elongation	ASTM D 2671	≥400%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671(150℃, 168 hrs.)	≥12 MPa ≥300%
Density	ASTM D 792	1.05g/cm <sup>3</sup>
Longitudinal shrinkage	UL 224	0~-12%
Dielectric strength	IEC 60243	≥18 kV/mm
Volume resistance	IEC 93	≥10 <sup>13</sup> Ω.cm
Copper stability	ASTM D 2671	Pass
Water absorption	ISO 62	<0.15%
Property of adhesive		
Water absorption	ISO 62	<0.2%
Softening point	ASTM E28	85±5℃
Peel strength (PE)	DIN 30672	4 N/cm
Resistance to fungus and decay	ISO 846	Pass

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00
Item		D	d	t Wall thickness	Tube Shape		Amphenol P/N	
No	mm	Inside diameter (Min)	Inside diameter (Max)	(Min)		(meters/roll)	CUSTOMER	Description
1	9/3	9	3	2.0	0	1.22	HST AR3 9.0/3.0 (00)	AR3 9.0MM HEAVY WALL TUBE 3:1 BK
2	13/4	13	4	2.4	0	1.22	HST AR3 13.0/4.0 (00)	AR3 13.0MM HEAVY WALL TUBE 3:1 BK
3	22/6	22	6	2.7	0	1.22	HST AR3 22.0/6.0 (00)	AR3 22.0MM HEAVY WALL TUBE 3:1 BK
4	33/8	33	8	3.2	0	1.22	HST AR3 33.0/8.0 (00)	AR3 33.0MM HEAVY WALL TUBE 3:1 BK
5	40/12	40	12	3.9	0	1.22	HST AR3 40.0/12.0 (00)	AR3 40.0MM HEAVY WALL TUBE 3:1 BK
6	45/12	45	12	3.9	0	1.22	HST AR3 45.0/12.0 (00)	AR3 45.0MM HEAVY WALL TUBE 3:1 BK
7	55/16	55	16	4.0	0	1.22	HST AR3 55.0/16.0 (00)	AR3 55.0MM HEAVY WALL TUBE 3:1 BK
8	65/19	65	19	4.0	0	1.22	HST AR3 65.0/19.0 (00)	AR3 65.0MM HEAVY WALL TUBE 3:1 BK
9	75/22	75	22	4.0	0	1.22	HST AR3 75.0/22.0 (00)	AR3 75.0MM HEAVY WALL TUBE 3:1 BK
10	85/25	85	25	4.2	0	1.22	HST AR3 85.0/25.0 (00)	AR3 85.0MM HEAVY WALL TUBE 3:1 BK
11	95/29	95	29	4.2	0	1.22	HST AR3 95.0/29.0 (00)	AR3 95.0MM HEAVY WALL TUBE 3:1 BK
12	105/29	105	29	4.2	0	1.22	HST AR3 105.0/29.0 (00)	AR3 105.0MM HEAVY WALL TUBE 3:1 BK
13	115/34	115	34	4.2	0	1.22	HST AR3 115.0/34.0 (00)	AR3 115.0MM HEAVY WALL TUBE 3:1 BK
14	130/36	130	36	4.2	0	1.22	HST AR3 130.0/36.0 (00)	AR3 130.0MM HEAVY WALL TUBE 3:1 BK
15	160/50	160	50	4.2	0	1.22	HST AR3 160.0/50.0 (00)	AR3 160.0MM HEAVY WALL TUBE 3:1 BK
16	180/50	180	50	4.2	0	1.22	HST AR3 180.0/50.0 (00)	AR3 180.0MM HEAVY WALL TUBE 3:1 BK
17	200/60	200	60	4.2	0	1.22	HST AR3 200.0/60.0 (00)	AR3 200.0MM HEAVY WALL TUBE 3:1 BK
18	235/65	235	65	4.3	0	1.22	HST AR3 235.0/65.0 (00)	AR3 235.0MM HEAVY WALL TUBE 3:1 BK
19	265/75	265	75	4.6	0	1.22	HST AR3 265.0/75.0 (00)	AR3 265.0MM HEAVY WALL TUBE 3:1 BK
20	300/85	300	85	4.6	0	1.22	HST AR3 300.0/85.0 (00)	AR3 300.0MM HEAVY WALL TUBE 3:1 BK
21	350/100	350	100	4.8	0	1.22	HST AR3 350.0/100.0 (00)	AR3 350.0MM HEAVY WALL TUBE 3:1 BK
22	385/110	385	110	4.8	0	1.22	HST AR3 385.0/110.0 (00)	AR3 385.0MM HEAVY WALL TUBE 3:1 BK

Designed to seal and protect electrical splices, cable terminations, and joints where electrical insulation and water ingress protection are required. Has a 3:1 shrink ratio which allows the tubing to fit over irregular shaped and large connectors.

### **Ordering information:**

Standard colors:

Black

Special colors:

N/A

#### Packaging:

Standard packaging of 1m, 1.2m, 1.5m pieces are available on request.





- Heavy wall tubing with/without adhesive
- Superior electrical & environmental insulation
- Excellent abrasion and impact resistance
- UV resistant

- Superior sealing property
- Operating temp.: -55°C to +110°C
- Min. full recovery temp.: 120°C
- Voltage: /

Property	Test Method	Typical Data
Property of jacket		
Tensile strength	ASTM D 2671	≥14 MPa
Ultimate elongation	ASTM D 2671	≥400%
Heat aging Tensile strength Ultimate elongation	ASTM D 2671(150℃, 168 hrs.)	≥12 MPa ≥300%
Density	ASTM D 792	1.05g/cm³
Longitudinal shrinkage	UL 224	0~-12%
Dielectric strength	IEC 60243	≥18 kV/mm
Volume resistance	IEC 93	≥10 <sup>13</sup> Ω.cm
Copper stability	ASTM D 2671	Pass
Water absorption	ISO 62	<0.15%
Property of adhesive		
Water absorption	ISO 62	<0.2%
Softening point	ASTM E28	85±5℃
Peel strength (PE)	DIN 30672	4 N/cm
Resistance to fungus and decay	ISO 846	Pass

	Normal size	As supplied(mm)	After reco	overed(mm)		Standard length		Black 00
Item	TTOTTING SIZE	D Inside diameter	d Inside diameter	t Wall thickness	Tube Shape	( , ( 11)	Amphenol P/N	5
No	mm	(Min)	(Max)	(Min)	(n	(meters/roll)	CUSTOMER	
1	22/6	22	6	2.7	0	1.22	HST ARA3 22.0/6.0 (00)	ARA3 22.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
2	33/8	33	8	3.2	0	1.22	HST ARA3 33.0/8.0 (00)	ARA3 33.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
3	40/12	40	12	4.0	0	1.22	HST ARA3 40.0/12.0 (00)	ARA3 40.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
4	45/12	45	12	4.0	0	1.22	HST ARA3 45.0/12.0 (00)	ARA3 45.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
5	55/16	55	16	4.0	0	1.22	HST ARA3 55.0/16.0 (00)	ARA3 55.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
6	65/19	65	19	4.0	0	1.22	HST ARA3 65.0/19.0 (00)	ARA3 65.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
7	75/22	75	22	4.0	0	1.22	HST ARA3 75.0/22.0 (00)	ARA3 75.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
8	85/25	85	25	4.2	0	1.22	HST ARA3 85.0/25.0 (00)	ARA3 85.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
9	95/29	95	29	4.2	0	1.22	HST ARA3 95.0/29.0 (00)	ARA3 95.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
10	105/29	105	29	4.2	0	1.22	HST ARA3 105.0/29.0 (00)	ARA3 105.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
11	115/34	115	34	4.2	0	1.22	HST ARA3 115.0/34.0 (00)	ARA3 115.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
12	140/42	140	42	4.2	0	1.22	HST ARA3 140.0/42.0 (00)	ARA3 140.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
13	160/50	160	50	4.2	0	1.22	HST ARA3 160.0/50.0 (00)	ARA3 160.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
14	180/58	180	58	4.2	0	1.22	HST ARA3 180.0/58.0 (00)	ARA3 180.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
15	200/65	200	65	4.2	0	1.22	HST ARA3 200.0/60.0 (00)	ARA3 200.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
16	235/65	235	65	4.4	0	1.22	HST ARA3 235.0/65.0 (00)	ARA3 235.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
17	265/75	265	75	4.8	0	1.22	HST ARA3 265.0/75.0 (00)	ARA3 265.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
18	300/85	300	85	4.8	0	1.22	HST ARA3 300.0/85.0 (00)	ARA3 300.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
19	350/100	350	100	4.8	0	1.22	HST ARA3 350.0/100.0 (00)	ARA3 350.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK
20	385/110	385	110	4.8	0	1.22	HST ARA3 385.0/110.0 (00)	ARA3 385.0MM HEAVY WALL TUBE WITH ADHESIVE 3:1 BK

Designed to seal and protect electrical splices, cable terminations, and joints where electrical insulation and water ingress protection are required. Has a 3:1 shrink ratio which allows the tubing to fit over irregular shaped and large connectors.

### **Ordering information:**

Standard colors:

Black

Special colors:

N/A

#### Packaging:

Standard packaging of 1m, 1.2m, 1.5m pieces are available on request.

# **Amphe-Mark Sleeves**

### How to Order

1	2	3	4	5	6	7
A-2F-2PF-	2.4/	50	S1-	09-	A-	250
Series	Expanded Diameter (D)(mm)	Length(mm)	Perforated Scores	Color	Carrier Tape	Pack Size Option
A-2F-2PF	2.4	50	Omit	09	А	250: for 250' spool
A-2F-3PF	3.2		S1	04	В	1K: for 1000 Pcs/Box
A-2(HF)-2PF	4.8		\$2	02	С	
A-2(HF)-3PF	6.4		\$3	06		
	9.5					
	12.7					
	19.1					
	25.4					
	38.1					
	50.8					

StandardColor				
09 White				
04 Yellow				
02 Red				
06 Blue				

#### **Tube Diameter**

D (mm)	A-2F-2PF & A-2 (HF)-2PFd (mm)	A-2F-3PF&A-2(HF) -3PFd (mm)	
2.4	1.2	0.8	
3.2	1.6	1.1	
4.8	2.4	1.6	
6.4	3.2	2.1	
9.5	4.8	3.2	
12.7	6.4	4.2	
19.1	9.5	6.4	
25.4	12.7	8.5	
38.1	19.1	12.7	
50.8	25.4	16.9	



#### **Perforated Scores**

Code	Definition	# of markers from 1
omit	none	1
S1	1 prescores	2
S2	2 prescores	3
S3	3 prescores	4



Single Sided Carrier Type - A



Double Sided Carrier Tape - B



Double Sided Carrier Tape – C

### **Application Equipment**

- · Thermal Transfer Printer
- · Hand Operated Heating Tool
- Tabletop Oven / Belt Heater

 $<sup>\</sup>hbox{$^*$Consult Amphenol for Suggestions}$ 

# **Amphenol**

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