

AIS Dual Wall Polyolefin Tubing

雙壁合膠型熱收縮套管

Applications

Manufactured by co-extrusion of polyolefin and hot-melt adhesive. Especially recommended for water-proofing for cable and wire harnesses, and protection of connector-to-cable transitions. Typically applied in the insulation and sealing of electrical and electronic components and communication industry.

應用

由聚烯烴和熱熔膠共擠製造而成，用於需要防水的電線電纜、配線和連接器的保護。可以很好地應用於電子元件和通信工業中。

Characteristic

Shrinkage ratio : 3:1 / 4:1

High expansion ratio to provide excellently sealing for connector-to-cable transitions

Environmentally seals and protects indoor electrical applications

Conveniently repair most damaged cable jackets without removing connectors

EVA hot melt adhesive or high melting PA adhesive are available

特性

收縮率:3:1 / 4:1

高的擴張倍率提供了優異的電線和連接器的密封

用於戶內電子應用的密封和保護

不需要移開連接器就可以方便的修補損壞的電纜內層

可選用 EVA 熱融膠或高溫溶點聚烯烴(PA)熱融膠

Operating temperature range

Operating temperature : -45°C ~ 110°C

Minimum shrink temperature : 80°C

Minimum fully recovery temperature : 110°C

操作溫度範圍

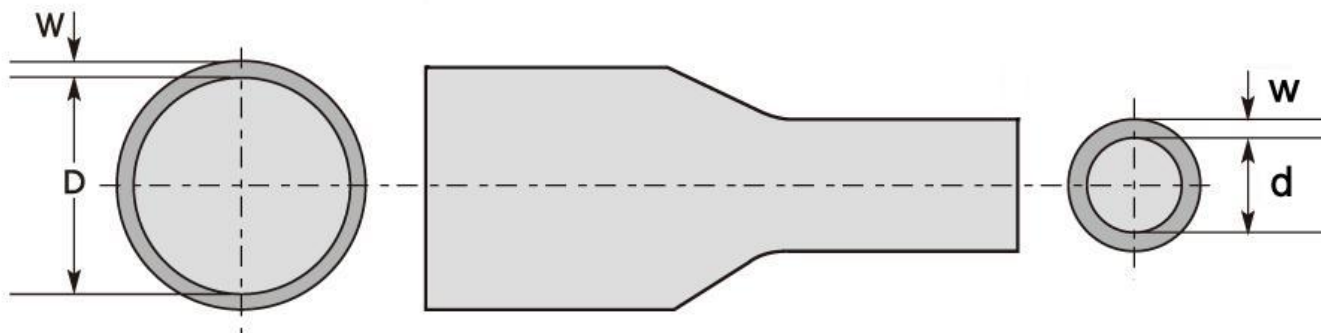
操作溫度： -45°C ~ 110°C

最低收縮溫度： 80°C

最低完全收縮溫度： 110°C

Product Dimensions 產品規格

Part Number 產品型號	Nominal Size (尺寸)		As supplied (mm) 收縮前(毫米)		After recovered (mm) 收縮後(毫米)			Standard Length (Meter) 標準長度(米)
	mm 毫米	Inch 英吋	I.D.(min) 內徑	W.T. (nominal)min 壁厚	I.D.(max) 內徑	W.T.壁厚	Adhesive thickness 膠厚度	
AIS-3X 3:1 Shrinkage Ratio 收縮率								
AIS(3X)-3.2	3.2	1/8	3.2	0.45	1.0	1.00±0.28	0.45±0.08	200
AIS(3X)-4.8	4.8	3/16	4.8	0.45	1.6	1.00±0.28	0.50±0.08	100
AIS(3X)-6.4	6.4	1/4	6.4	0.50	2.0	1.00±0.28	0.50±0.08	100
AIS(3X)-9.5	9.5	3/8	9.5	0.50	3.0	1.40±0.28	0.60±0.08	50
AIS(3X)-12.7	12.7	1/2	12.7	0.65	4.0	1.70±0.38	0.76±0.15	1.22
AIS(3X)-15	15.0	5/8	15.0	0.65	5.0	1.90±0.38	0.76±0.15	1.22
AIS(3X)-19.1	19.1	3/4	19.1	0.70	6.0	2.25±0.55	0.76±0.15	1.22
AIS(3X)-25.4	25.4	1	25.4	0.80	8.0	2.54±0.55	1.00±0.20	1.22
AIS(3X)-38.1	38.1	1 1/2	38.1	0.80	13.0	2.54±0.55	1.00±0.20	1.22
Part Number 產品型號	Nominal Size (尺寸)		As supplied 收縮前 (mm)		After recovered 收縮後 (mm)			Standard Length (Meter) 標準長度(米)
	mm 毫米	Inch 英吋	I.D.(min) 內徑	W.T. (nominal)min 壁厚	I.D.(max) 內徑	W.T.壁厚	Adhesive thickness 膠厚度	
AIS-4X Shrinkage Ratio 4:1 收縮率								
AIS(4X)-4	4	3/16	4.0	0.40	1.0	1.00±0.28	0.50±0.08	1.22
AIS(4X)-8	8	5/16	8.0	0.45	2.0	1.00±0.28	0.50±0.08	1.22
AIS(4X)-12	12	1/2	12.0	0.45	3.0	1.40±0.28	0.60±0.10	1.22
AIS(4X)-16	16	5/8	16.0	0.55	4.0	1.70±0.38	0.76±0.15	1.22
AIS(4X)-24	24	1	24.0	0.70	6.0	2.25±0.55	0.76±0.15	1.22
AIS(4X)-32	32	1 1/4	32.0	0.70	8.0	2.54±0.55	1.00±0.20	1.22
AIS(4X)-50	50	2	50.0	0.70	13.0	2.54±0.55	1.00±0.20	1.22



Technical Data

Property	Specification Requirement	Test Method	Typical Value
Tensile strength	10.3MPa min	ASTM D 638	≧ 12MPa
Elongation at break	200% min	ASTM D 638	≧ 400 %(min.)
Tensile strength after aging 158°C, 168hrs	70% of original min	ASTM D 638	≧ 90%
Elongation at break after 158°C, 168hrs	100% min	ASTM D 638	≧ 300 %(min.)
Longitudinal shrinkage	15% max	UL 224	0 ~ 10%
Heat shock	No cracking	ASTM D 2671	PASS
Cold bend -30°C, 1hr	No cracking	ASTM D 2671	No cracking
Dielectric voltage withstand and breakdown	2500V.60 sec no breakdown	ASTM D 2671	No breakdown
Volume resistance	$10^{13}\Omega \cdot \text{cm}$ min	ASTM D 876	$\geq 10^{14}\Omega \cdot \text{cm}(\text{min.})$
Flammability	All tubing flame test	UL224	Pass
Copper corrosion 158°C, 168hrs	No corrosion	ASTM D 2671	Pass

技術性能

特性	標準	測試方法	結果
抗張強度	10.3MPa min	ASTM D 638	≧ 12MPa
斷裂伸長率	200% min	ASTM D 638	≧ 400 %(min.)
老化抗張強度 158°C, 168hrs.	70% of original min	ASTM D 638	≧ 90%
老化斷裂伸長率 158°C, 168hrs.	100% min	ASTM D 638	≧ 300 %(min.)
縱向收縮率	15% max	UL 224	0 ~ 10%
熱衝擊	No cracking	ASTM D 2671	PASS
冷彎曲 -30°C, 1hr	No cracking	ASTM D 2671	No cracking
絕緣耐壓	2500V.60 sec no breakdown	ASTM D 2671	No breakdown
體積電阻率	$10^{13}\Omega \cdot \text{cm}$ min	ASTM D 876	$\geq 10^{14}\Omega \cdot \text{cm}(\text{min.})$
阻燃性	All tubing flame test	UL224	Pass
銅腐蝕	No corrosion	ASTM D 2671	Pass

Standard color : Black (Other colors ,special size, cut pieces are available on request.)

標準顏色：黑色 (其他顏色，其他尺寸，裁切可依客戶需求另行訂制)

