

AIR BLOWN

AIS 氣吹光纖解決方案 低煙無鹵 LSZH 室內用微管

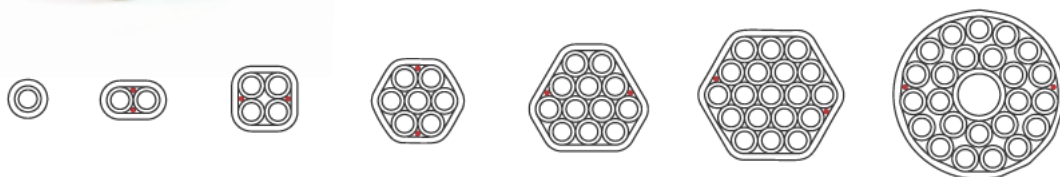


產品簡介

AIS 為您精心準備了一系列高端氣吹光纖端接產品，包含一系列室內與室外不同規格的氣吹微管 (Microduct)、一系列氣吹光纖束 (Air Blown fiber unit) 及氣吹光纜 (Air Blown Cable) 相關使用上的配件等等。氣吹光纖在歐美國家已經廣泛地使用，氣吹光纖先進的施工方式能為業主省下 30% 建造與維修成本。氣吹光纖有佈放快速優勢，日後擴充線路極為便利優勢，佈放成本低廉優勢等等。

產品亮點

- 快速光纖佈放，施工佈放速度是傳統拉光纜的三分之一
- 快速光纖佈放，施工佈放人員數量是傳統拉光纜的四分之一
- 節省未來維修成本，擴充施工簡易方便。
- 節省未來擴充成本，擴充施工簡易方便。



LSOH 室內佈放微管

- 外皮與內管皆為低煙無鹵 LSZH 材質，符合國內建築防火法規。
- 依照您的需求，5/3.5mm 我們有 1管, 2管, 4管, 7管, 12管, 19管, 24管供您選擇。
- 抗拉力測試符合國際標準 IEC 60794-1-2 Method E1，抗糾結測試符合國際標準 IEC 60794-1-2 Method E10
耐衝擊測試符合國際標準 IEC 60794-1-2 Method E4，抗壓碎測試符合國際標準 IEC 60794-1-2 Method E3
耐彎曲測試符合國際標準 IEC 60794-1-2 Method E11，耐氣壓測試符合國際標準 IEC 86A/1205/CD Annex C
耐延燃測試符合國際標準 IEC 60332，煙霧排放毒物測試符合國際標準 IEC 60754
煙霧排放量測試符合國際標準 IEC 61034-2，燃燒測試符合國際標準 BS EN ISO 4589-3
- 常規尺寸 5mm 外徑，3.5mm 內徑，5/3.5mm。其他管徑 10/8mm 與 12/10mm 可訂製。
- LSZH 材質適用於戶內應用

技術參數

	外徑		內徑		外皮厚度		壓力
	Min (mm)	Max (mm)	Min (mm)	Max (mm)	Min (mm)	Max (mm)	Silicon MBar
5/3.5mm	4.9	5.1	3.4	3.6	0.75	0.85	0.1 12
10/8mm	9.9	10.1	7.9	8.1	1.0	1.1	
12/10mm	11.9	12.1	9.9	10.1	1.0	1.1	

	外徑 (mm)	最大拉力 (N)	重量 (kg/km)	彎曲半徑 (mm)	抗壓力 (N)	
5/3.5mm LSZH 微管	1 管	5.0	75	15	60	400
	2 管	12.2 x 7.2	375	75	150 x 90	400
	4 管	14.3 x 12.2	610	122	175 x 150	400
	7 管	17 x 15.7	925	185	205 x 190	400
	12 管	22.3 x 20	1450	290	270 x 240	400
	19 管	27 x 24.3	2100	420	325 x 295	400
	24 管	32 x 31.8	2900	580	385 x 380	400

LSZH 單管測試

測試項目	國際標準	測試條件	測試結果
拉力張力	IEC 60794-1-2 Method E1	Microduct length under tension : > 1m, Tensile load : 0.5 W* Rate of Extension : ≥ 20mm/min Duration of max load 10 min Where Maximum tensile load = 0.5x 9.81x W , N, W = mass of 1Km of component in Kg	Pass : No permanent damage or deformation to the primary tubing or component parts of the sheath assembly after an applied load at 20mm/minute.
糾結測試	IEC 60794-1-2 Method E10	Diameter : ≤ 20 x O D	Pass : The outer and inner diameter of the microducts shall show, under visual examination without magnification no damage and no reduction of diameter greater than 15%
衝擊測試	IEC 60794-1-2 Method E4	Striking surface radius : 10mm Impact : 1 Joules Number of impacts 3 Recovery Time : 1hr	Pass : Under visual examination, without magnification, there shall be no damage to the microduct. There shall be no residual deformation greater than 15% of the microduct diameter and no splitting or permanent damage. The imprint of the anvil on the sheath is not considered as mechanical damage.
壓碎測試	IEC 60794-1-2 Method E3	Sample length : 1 m Load : 400N Duration of maximum load : 1 minute No applied loads : 3 (500mm apart) Recovery time : 1 hr	Pass : No permanent damage shall be imparted to the tubes as a result of this test Permanent deformation of the individual primary tube diameter shall be less than 0.5mm as a result of this test.
彎曲測試	IEC 60794-1-2 Method E11	No Turns : 5 Mandrel diameter : ≤ 12 x OD Number of Cycles : 3	Pass : No permanent damage shall be imparted to the tubes as a result of this test Permanent deformation of the individual primary tube diameter shall be less than 0.5mm as a result of this test.
摩擦測試		Sample length : 1.5 m Mandrel diameter : 300mm The sample length is secured with 450wrap around the mandrel with one end of the tube hanging downwards, the other end pointing horizontally towards the tensile machine	Pass : A 5kg weight shall be pulled at 1000mm/min and travel 100mm. An average force of 2 pulls shall be recorded to give a coefficient of friction less than 0.1
耐氣壓測試	IEC 86A/1205/CD Annex C	Test temperatures : 0°C to +40°C Pressure medium : Water (+anti freeze) Proof test pressure 12925 mbar Duration of proof test pressure : 24 hours Minimum burst test pressure 25850 mbar horizontally towards the tensile machine	Pass : Primary tubing shall be capable of sustaining the stated requirements without bursting or loss of pressure

LSZH 管束測試

測試項目	國際標準	測試條件	測試結果
拉力張力	IEC 60794-1-2 Method E1	Microduct length under tension : > 1m Tensile load : 0.5 W* Rate of Extension : ≥ 20mm/min Duration of max load 10 min Where Maximum tensile load = 0.5x 9.81 x W, N, W = mass of 1Km of component in Kg	Pass : No permanent damage or deformation to the primary tubing or component parts of the sheath assembly after an applied load at 20mm/minute.
彎曲測試	IEC 60794-1-2 Method E11	No Turns : 5 Mandrel diamete : ≤12 x OD Number of Cycle : 3	Pass : The outer and inner diameter of the microducts shall show, under visual examination without magnification no damage and no reduction of diameter greater than 15%
糾結測試	IEC 60794-1-2 Method E10	Diameter: 20 x OD	Pass : No permanent damage shall be imparted to the sheath or tubes as a result of this test Permanent deformation of the individual primary tube diameter shall be less than 0.5mm as a result of this test.
衝擊測試	IEC 60794-1-2 Method E4	Striking surface radius : 10 mm Impact : 3 Joules Number of impacts 3 Recovery Time : 1 hr	Pass : Under visual examination, without magnification, there shall be no damage to the microduct. There shall be no residual deformation greater than 15% of the microduct diameter and no splitting or permanent damage. This shall be verified by passing the inner clearance test. The imprint of the anvil on the sheath is not considered as mechanical damage.
壓碎測試	IEC 60794-1-2 Method E3	Sample length : 1 m Load : 400N Duration of maximum load : 1 minute No applied loads : 3 (500mm apart) Recovery time : 1 hr	Pass : No permanent damage shall be imparted to the sheath or tubes as a result of this test Permanent deformation of the individual primary tube diameter shall be less than 0.5mm as a result of this test.
延燃測試	IEC 60332	Single Cable Vertical Burning Test The completed cable shall conform to IEC 60332-1. Bunched Cable Vertical Burning Test. The completed cables shall conform to IEC 60332-3.	
煙霧排放毒物測試	IEC 60754	Acid Gas Emission - The materials shall conform to IEC 60754-1. Corrosivity of Evolved Gases. The materials shall conform to IEC60754-2 Fume Emission The material shall not include any functional groups containing Halogen, Phosphorous, Nitrogen or Sulphur, however, trace amounts up to 0.5% w/w maybe permitted.	

LSZH 管束測試

測試項目	國際標準	測試條件	測試結果
煙霧排放量測試	IEC 61034-2	Cables shall conform to IEC 61034-2	During the tests there shall be no significant flame spread beyond the area of flame impingement, no dripping of liquid from the cable and no after burning
燃燒測試	BS EN ISO 4589-3	BS EN ISO 4589-3 not less than 270°C	

產品規格

產品編號	描述
AB-101NLWH	1 管 LSOH 氣吹光纖微管 · 5 / 3.5mm
AB-102NLWH	2 管 LSOH 氣吹光纖微管 · 5 / 3.5mm
AB-104NLWH	4 管 LSOH 氣吹光纖微管 · 5 / 3.5mm
AB-107NLWH	7 管 LSOH 氣吹光纖微管 · 5 / 3.5mm
AB-112NLWH	12 管 LSOH 氣吹光纖微管 · 5 / 3.5mm
AB-119NLWH	19 管 LSOH 氣吹光纖微管 · 5 / 3.5mm
AB-124NLWH	24 管 LSOH 氣吹光纖微管 · 5 / 3.5mm