

# AIR BLOWN

## AIS 吹气光纤解决方案 管道PE 直接安装室外用微管



### 产品简介

AIS 为您精心准备了一系列高端吹气光纤端接产品，包含一系列室内与室外不同规格的吹气微管 (Microduct)、一系列吹气光纤束 (Air Blown fiber unit) 及吹气光缆 (Air Blown Cable) 相关使用上的配件等等。吹气光纤在欧美国家已经广泛地使用，吹气光纤先进的施工方式能为业主省下 30% 建造与维修成本。吹气光纤有布放快速优势，日后扩充线路极为便利优势，布放成本低廉优势等等。

### 产品亮点

- 快速光纤布放，施工布放速度是传统拉光缆的三分之一。
- 快速光纤布放，施工布放人员数量是传统拉光缆的四分之一。
- 节省未来维修成本，扩充施工简易方便。
- 节省未来扩充成本，扩充施工简易方便。

### 管道 PE 室外布放微管

- 依照您的需求，5/3.5 mm 我们有 1管, 2管, 4管, 7管, 12管, 19管, 24管供您选择。
- 抗拉力测试符合国际标准 IEC 60794-1-2 Method E1，抗纠结测试符合国际标准 IEC 60794-1-2 Method E10，耐冲击测试符合国际标准 IEC 60794-1-2 Method E4，抗压碎测试符合国际标准 IEC 60794-1-2 Method E3，耐弯曲测试符合国际标准 IEC 60794-1-2 Method E11，耐气压测试符合国际标准 IEC 86A/1205/CD Annex C。
- 常规尺寸 5mm 外径，3.5mm 内径，5/3.5mm。其他管径，10/8mm 与 12/10mm 可订制。
- PE 材质适用于已铺设好管路户外应用。
- 铠装接受订制。

### 技术参数

	外径		内径		外皮厚度		压力 MBar
	Min (mm)	Max (mm)	Min (mm)	Max (mm)	Min (mm)	Max (mm)	
5/3.5mm	4.9	5.1	3.4	3.6	0.75	0.85	0.1
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	

		外径 (mm)	最大拉力 (N)	重量 (kg/km)	弯曲半径 (mm)	抗压力 (N)
5/3.5mm PE微管	1 管	8.4	500	51	120	1000
	2 管	13.4 x 8.4	800	77	120	1000
	4 管	15.4	1200	124	200	1000
	7 管	18.4	1650	171	240	1000
	12 管	23.6	2450	253	300	1000
	19 管	27.7	3400	347	360	1000
	24 管	33.3	4400	422	460	1000
10/8mm PE微管	1 管	13.4	800	98	190	1000
	2 管	23.4 x 13.4	1400	163	170	1000
	4 管	27.9	2400	279	390	1000
	7 管	33.8	3500	398	470	1000
12/10mm PE微管	1 管	15.4	1000	115	220	1000
	2 管	27.4 x 15.4	1700	194	220	1000
	4 管	32.8	2900	334	460	1000
	7 管	39.8	4300	480	560	1000

## PE 单管测试

测试项目	国际标准	测试条件	测试结果
拉力张力	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.
纠结测试	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%
冲击测试	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.
压碎测试	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.
弯曲测试	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.
摩擦测试		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
耐气压测试	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

## PE 管束测试

测试项目	国际标准	测试条件	测试结果
拉力张力	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.
弯曲测试	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%
纠结测试	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.
冲击测试	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.
压碎测试	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.

## 产品规格

产品编号	描述
AB-201NLBK	1 管 PE 室外吹气光纤微管 · 5 / 3.5mm
AB-202NLBK	2 管 PE 室外吹气光纤微管 · 5 / 3.5mm
AB-204NLBK	4 管 PE 室外吹气光纤微管 · 5 / 3.5mm
AB-207NLBK	7 管 PE 室外吹气光纤微管 · 5 / 3.5mm
AB-212NLBK	12 管 PE 室外吹气光纤微管 · 5 / 3.5mm
AB-219NLBK	19 管 PE 室外吹气光纤微管 · 5 / 3.5mm
AB-224NLBK	24 管 PE 室外吹气光纤微管 · 5 / 3.5mm
AB-231NLBK	1 管 PE 室外吹气光纤微管 · 10 / 8mm
AB-232NLBK	2 管 PE 室外吹气光纤微管 · 10 / 8mm
AB-234NLBK	4 管 PE 室外吹气光纤微管 · 10 / 8mm
AB-237NLBK	7 管 PE 室外吹气光纤微管 · 10 / 8mm
AB-251NLBK	1 管 PE 室外吹气光纤微管 · 12 / 10mm
AB-252NLBK	2 管 PE 室外吹气光纤微管 · 12 / 10mm
AB-254NLBK	4 管 PE 室外吹气光纤微管 · 12 / 10mm
AB-257NLBK	7 管 PE 室外吹气光纤微管 · 12 / 10mm