

电缆分配系统用物理发泡聚乙烯绝缘同轴电缆

Coaxial Cable with Physically Foamed PE Insulation for Cable Distribution System

本产品适用于1GHz以下闭路电视系统、共用天线电视系统作分支线和用户线以及其它电子装置。电缆分配系统用物理发泡聚乙烯绝缘同轴电缆比实芯聚乙烯、化学发泡聚乙烯和纵孔聚乙烯绝缘电视电缆具有更优良的高频性能，它有衰减低、一致性好、不易受潮等突出优点，为此在国际、国内市场已获得广泛使用。

This product is used as a branch line and a user line. It is suitable for closed-circuit television system, common antenna TV system, and other electronic devices. (under 1GHz) Coaxial cable with physically foamed PE insulation for cable distribution system has good features of high frequency performance, low attenuation, good consistency and humidity resistance etc compared with TV cable with solid core PE, chemically foamed PE and cell PE insulation. Now, it is widely used in domestic and international market.

一、生产执行标准

SJ/T11138-1~7~1997.

Executive standard

SJ/T11138-1~7~1997.

二、使用特性

环境条件：-25℃~+70℃（PVC护套）；
-40℃~+70℃（PE护套）；
相对湿度：当温度为40±2℃，为90%~95%。

Operational performance

Environment temperature: -25℃~+70℃（PVC sheath）
-40℃~+70℃（PE sheath）
Relative humidity is 90%~95% under the temperature of 40±2℃.

三、常用型号及名称

Common Type and Name

型号 Type	名称 Name
SYWV-75-5 SYWV-75-7 SYWV-75-9	电缆分配系统用物理发泡聚乙烯绝缘聚氯乙烯护套同轴电缆 Coaxial cable with physically foamed PE insulation, PVC sheath for cable distribution system
SYWY-75-7 SYWY-75-9	电缆分配系统用物理发泡聚乙烯绝缘聚乙烯护套同轴电缆 Coaxial cable with physically foamed PE insulation and PE sheath for cable distribution system

四、电缆的结构尺寸

Structure Dimension of Cable

型号 Type	内导体 mm Inner conductor	绝缘外径 mm Insulation OD	外导体 mm Outer conductor	护套 mm Sheath	单位重量 kg/km Unit weight
SYWV-75-5	1.0±0.02	4.8±0.2	≤5.8	≤7.5	46
SYWV-75-7 SYWY-75-7	1.66±0.02	7.25±0.25	≤8.3	≤10.6	85 (PVC) 75 (PE)
SYWV-75-9 SYWY-75-9	2.15±0.03	9.00±0.25	≤10.3	≤12.6	120 (PVC) 110 (PE)

备注：
1、内导体为单根圆铜线或铜包铝线；
2、绝缘为物理发泡聚乙烯；
3、外导体为铝塑复合膜和镀锡圆铜线（或铝合金线）编织双层屏蔽形式；
4、护套为聚氯乙烯或聚乙烯。

Note:
1.Inner conductor consists of single round copper wire OR copper-clad aluminum wire
2.Insulation material is physically foamed PE.
3.Outer conductor consists of aluminum-plastic compound film and tinned round copper wire(aluminum-alloy wire) braid dual shielding.
4.Sheath material is PVC or PE.

五、电气性能

Electric Performance

试验项目 Teating item	试验条件 Teat condition	单位 Unit	技术要求 Technical requirements		
			SYWV-75-5	SYWV-75-7 SYWY-75-7	SYWV-75-9 SYWY-75-9
绝缘电阻 Insulated resistance	500V DC(20°C)	MΩ.km	≥5000	≥5000	≥5000
护套介电强度 Sheath dielectric strength 浸水试验 Immersion test in water 火花试验 Spark test	40Hz~60Hz	KV	2.0 3.0	3.0 5.0	5.0 8.0
特性阻抗 Characteristic impedance	200MHz	Ω	72.0~78.0	72.5~77.5	72.5~77.5
衰减常数 20°C Attenuation coefficient	50MHz 200MHz 550MHz 800MHz	dB/100m	≤4.8 ≤9.7 ≤16.8 ≤20.3	≤3.2 ≤6.4 ≤10.7 ≤13.3	≤2.4 ≤5.0 ≤8.5 ≤10.4
回波损耗 Return-loss	VHF UHF	dB dB	≤20.0 ≤18.0	≤20.0 ≤18.0	≤20.0 ≤18.0
屏蔽衰减 Shielding attenuation	50MHz 200MHz 800MHz	dB dB dB	60 70 70	60 70 70	60 70 70