

## SYT +Digital Telephone cable technical requirements

### 1.General

Conductor	Solid-Bare annealed copper
Insulation	PE
Twisting	2 wires twisted
Composition of cable core	Each unit core Wrapped with single color ribbon
Cable core wrapping	Wrapped with polyester tape
Moistureproof belt	0.035mm Aluminium tape, AL-side inward
Sheath	PVC or LSZH material
Surface Printing	It will be printed as customer's requirement with batch produce.

### 2.Cable Core Structure and Sheath Thickness

Conductor Nom. O.D. (mm)	Nor.Insulation Dia. mm	Pairs	Sheath Thickness mm	Nor.Cable OD.	
24AWG	0.90	1	0.55	4.5	
		2	0.55	5.0	
		3	0.55	6.0	
		5	0.55	6.5	
		10	0.65	8.0	
		15	0.70	9.5	
		30	0.95	13.0	
		56	1.0	16.0	
		112	1.2	21.0	

Conductor Nom. O.D. (mm)	Nor. Insulation Dia. mm	Pairs	Sheath Thickness mm	Nor. Cable OD.	
22AWG	1.40	1	0.60	5.0	
		2	0.60	6.5	
		3	0.60	8.0	
		5	0.65	9.0	
		10	0.85	12.0	
		15	0.90	13.5	
		30	1.0	17.5	
		56	1.1	22.0	

### 3. Insulation Chromatogram

Two Pairs over Color table							
Pair Number	Insulation Chromatogram			Pair Number	Insulation Chromatogram		
	Binder	A	B		Binder	A	B
1	White	Light-blue	White	8-14	White	Grey	White to Green
2			Dark blue	15-21	Yellow	Orange	
3			Yellow	22-28		Violet	
4			Brown	29-35	Blue	Light blue	
5			Black	36-42		Grey	
6			Red	43-49	Brown	Orange	
7			Green	50-56		Violet	
NOTE: For the cable of 112P, colors are to be repeated sequence							
Two Pairs under Color table							
Pairs	Pair 1			Pair 2			
	A	B		A	B		
1	White	Red					
2	White	Dark blue		Light blue	Dark blue		

#### 4. Electrical Performance Requirements

Item	24AWG	20AWG
Direct Current Resistance of Single conductor (Maximum) ohm/km	98.0	37.5
DC attenuation at 2MHz (Maximum) dB/km	42	35
Characteristic Impedance at 1MHz $\Omega$	100 $\pm$ 20	
NEXT crosstalk 2MHz min dB/km	40	
Insulation resistance of each single insulated conductor to other conductors shield DC 500V (M-ohm/km)	>1500	
Working Capacitance (800Hz/km) nF/km Maximum	80	
Electrical Strength DC Sustainable Time Between conductor and conductor	1min 1KV	