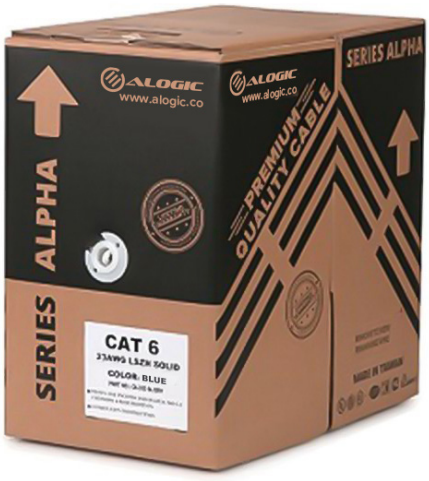
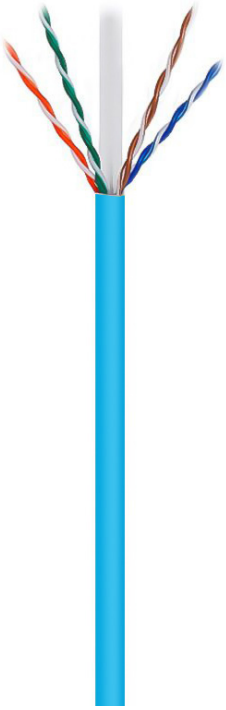
NETWORK CABLE

305m 23AWG PVC Solid **CAT6 Network Cable** - U-UTP / 4 Pair



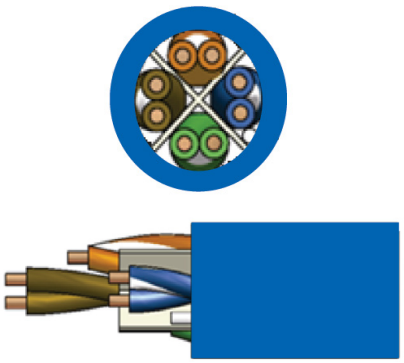


Ordering Information

Part no.	Colour
C6-305-SL/PVBLU	Blue
C6-305-SL/PVGRY	Grey
C6-305-SL/PVBLK	Black
C6-305-SL/PVGRN	Green
C6-305-SL/PVRD	Red
C6-305-SL/PVWH	White
C6-305-SL/PVPUR	Purple
C6-305-SL/PVORG	Orange
C6-305-SL/PVPNK	Pink
C6-305-SL/PVYEL	Yellow

Application

For horizontal network and voice application in a structured cabling system , including IEEE802.3 1000 Base-T, 100 Base-Tx, 10 Base-T, 1000 Base-Tx (ANSI/TIA/EIA-854-2001), 155Mb/s ATM, 4/16 Mb/s Token ring etc.



Construction

Solid bare copper conductors insulated with polyolefin. Two insulated conductors twisted together to form a pair and four such pairs cabled to form the basic unit. A cross filler is cabled in between to separate the 4 pairs insulated conductors Overall jacket with PVC compound.

REFERENCE STANDARDS

REQUIREMENTS AS PER ANSI/TIA/EIA, ISO/IEC, AND CENELEC EN STANDARDS. ANSI/TIA/EIA 568-B.2-1 CAT.6, ISO/IEC 11801 CLASS E, 2ND EDITION IEC 61156-6, CENELEC EN 50173-1 CENELEC EN 50288-5-1,CENELEC EN 50288-5-2, FLAME RETARDANCY IS VERIFIED ACCORDING TO IEC 60332-1-2.
WE IMPLEMENTED ROHS COMPLIANCE FOR THE REQUIREMENT OF EUROPEAN UNION ISSUED DIRECTIVE 2002/95/EC.

COMPLIANCE

Delta EC, ETL, RCM

CABLE DESCRIPTION

1 – CONDUCTOR	Size	23AWG
	Type	Solid bare copper
	Diameter (mm)	0.55± 0.01
2 – INSULATION	Type	PE
	Diameter (mm)	0.973± 0.05
	Min. thickness (mm)	0.186

CABLE DESCRIPTION

3 – PAIRS	Color code	
	Pair 1 -	Blue / White – blue strip
	Pair 2 -	Orange / White – orange strip
	Pair 3 -	Green / White – green strip
	Pair 4 -	Brown / White – brown strip
4 – CENTRAL ELEMENT	Type	PE cross separator
5 – JACKET	Type P	VC
	Overall Diameter (mm)	6.1 ± 0.3

TECHNICAL DATA – PHYSICAL

1. Cold Blend Test	-20 ± 2˚C X 4 hrs no. crack	
2. Dielectric strength	AC 1.7 KV for 2S.	
3. Insulation	Before Aging	After aging
Min. Tension strength (psi)	2400	75% before aging (100 ˚C X 48hrs)
Min elongation (%)	300	75% before aging (100 ˚C X 48hrs)
4. Jacket		
Min. Tension strength (psi)	2000	85% before aging (100 ˚C X 168 hrs)
Min elongation (%)	100	50% before aging (100 ˚C X 168 hrs)
5. Min. bending radius (mm)	50	
6. Max. pulling tension (lbs)	40	
7. Installation temperature	-10˚C to +60˚C	
8. Operating temperature	-10˚C to +60˚C	

PACKING :

305m cable roll packed in a Cardboard Pull Box

TECHNICAL DATA - ELECTRICAL

1. **Conductor resistance** (Ω/100m @ 20 ˚C)	Max.	9.5	
2. **DC resistance unbalance** (%)	Max.	4	
3. **Pair-to-ground capacitance unbalance** (pF/km)	Max.	1600	
4. **Delay skew** (ns/100m)	Max.	45	4 ≤ f ≤ 250MHz
5. **Insertion Loss** (dB/100m)	Max.	1.82* √f + 0.0169 * f +0.25/√f	1 ≤ f ≤ 250MHz
6. **Pair to Pair NEXT** (dB/100m)	Min.	75.3 - 15 * log(f)	1 ≤ f ≤ 250MHz
7. **PowerSum pr-pr NEXT** (dB/100m)	Min.	72.3 - 15 * log(f)	1 ≤ f ≤ 250MHz
8. **ELFEXT** (dB/100m)	Min.	68 - 20 * log(f)	1 ≤ f ≤ 250MHz
9. **PowerSum ELFEXT** (dB/100m)	Min.	65 – 20 * log(f)	1 ≤ f ≤ 250MHz
10. **Return Loss** (dB)	Min.	20 + 5 * log(f)	1 ≤ f < 10MHz
		25	10 ≤ f < 20MHz
		25 - 7 * log(f / 20)	20 ≤ f ≤250MHz
11. **Propagation Delay** (ns/100m)	Max.	534 + 36 / √f	1 ≤ f ≤ 250MHz
12. **Input Impedance** (Ω)		100 ± 15%	1 ≤ f ≤ 100MHz
		100 ± 22%	100< f≤ 250MHz

IEC 61156-5 ed2.0 Category 6 Horizontal cable parameters

Freq. (MHz)	Ins. Loss (dB/100m)	RL (dB)	Pair to Pair		Power Sum		Po. Delay (ns/100)
			NEXT	ELFEXT	NEXT	ELFEXT	
			(dB/100m) (		dB/100m)		
	Max.	Min.	Min.	Min.	Min.	Min.	Max.
1	2.1	20	75.0 6	8.0	72.3 6	5.0	570.0
4	3.8 2	3	66.3	56.0	63.3	53.0	552.0
10 6	.0	25 6	0.3 4	8.0 5	7.3 4	5.0 5	45.4
16 7	.6	25 5	7.2 4	3.9 5	4.2 4	0.9 5	43.0
20 8	.5	25 5	5.8 4	2.0 5	2.8 3	9.0 5	42.0
31.25	10.7	23.6 5	2.9 3	8.1 4	9.9 3	5.1 5	40.4
62.51	5.5 2	1.5	48.4	32.1	45.4	29.1	538.6
100	19.9	20.1 4	5.3 2	8.0 4	2.3 2	5.0 5	37.6
200	29.1	18 4	0.8 2	2.0 3	7.8 1	9.0 5	36.5
250	33.0	17.3 3	9.3 2	0.0 3	6.3 1	7.0 5	36.3

Note1: All tests include 401 points swept frequency measurements.

Note2: All electrical characteristics are given at 20˚C