



Cable core design and identification

A 2 pair cable is designed as a star quad. All other cables are twisted pair designs with 10 pair sub units and 50 or 100 pair main units. The cable core lay-up and the identification scheme are described in the following tables. (The pairs in a 5 pairs cable are coloured as pairs 1-5 in a 10 pairs sub unit.)

1. Colour coding

Quad (2 pair cables)

Wire	Insulation colour
a	Blue
b	Red
c	Green
d	Black

Sub-unit

Pair number	Insulation colour	
	a-wire	b-wire
1	Blue	Red
2	White	Red
3	Yellow	Red
4	Grey	Red
5	Orange	Red
6	Blue	Black
7	White	Black
8	Yellow	Black
9	Grey	Black
10	Orange	Black

2. Identification of sub units

Each sub unit is identified by wrapping of a colour coded tape:

Sub unit number	Colour code
1	Blue
2	White
3	Yellow
4	Grey
5	Orange
6	Blue/Black
7	White/Black
8	Yellow/Black
9	Grey/Black
10	Orange/Black



3. *Cable cores with 10-100 pairs*

Number of pairs	Sub units	Remarks	Sub unit located in:	
			Centre	1 st layer
10	1	Sub unit	1	
20	2		1-2	
50	5	Main unit, 50 pairs	1-5	
100	3+7	Main unit, 100 pairs	1-3	4-10

4. *Cable cores with 200-2000 pairs*

Number of pairs	Number of main units	Main unit located in:		
		Centre	1 st layer	2 nd layer
200	4	1-4		
300	3	1-3		
500	5	1-5		
700	1+6	1	2-7	
1000	3+7	1-3	4-10	
1500	1+5+9	1	2-6	7-15
2000	2+7+11	1-2	3-9	10-20

The main units are identified by numbered bindings.

5. *Cable core dimensions*

Element	Nominal diameter (mm)		
	0.4	0.6	0.9
Conductor	0.4	0.6	0.9
Insulation, Foam/Solid	0.81	1.15/1.1	1.79/1.88
Quad	-	2.7	4.6
5 pairs unit	-	4.8	9.0
Sub unit, 10 pairs	5.1	7.2	11.0
Main unit, 50 pairs	10.7	15.4	24.1
Main unit, 100 pairs	15.1	21.2	34.1