

Category 3 FTP Central Office Cable

PVC and HFFR Sheath

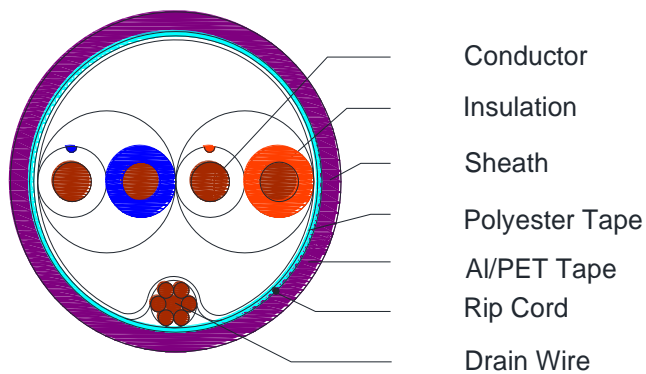


C I 445 to C I 453 & C I 485 to C I 493

Applications

Multi-Pair cables suitable as internal telephone cable, Category 3 Riser and LAN cable, 10 Base-T and 10 Base-T4

Cross Section Drawing



Design

Unit	Properties
Conductor	Solid Bare Copper wire
Insulation	Polyolefin
Twinning	Pair construction
Stranding	Pairs are stranded in units of 10 or 25 pairs
Wrapping	Polyester tape
Drain wire	Flexible tinned copper wire
Screen	Aluminium/Polyester 100% Coverage
Rip cord	Nylon Yarn
Sheath Material	Flame-Retardant Polyvinyl Chloride (PVC) Standard colour: Grey or Halogen-Free Flame-Retardant (HFFR) Standard colour: Purple
Put up Length	305m

*Other Colors, Put Up Lengths and structures can be manufactured upon request, please contact your local B3 International sales representative.

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C1445 to C1453 & C1485 to C1493

Physical Characteristics

PVC Sheath	C1445	C1446	C1447	C1448	C1449	C1450	C1451	C1452	C1453
HFFR Sheath	C1485	C1486	C1487	C1488	C1489	C1490	C1491	C1492	C1493
No of pairs	2	6	12	25	50	75	100	150	200
Conductor Size (AWG)	24								
Nom. Diameter Insulation (mm)	0.9								
Drain wire size (mm)	7×0.20		7×0.25			7×0.32			
Aluminium/Polyester tape overlap (%)	115								
Nom. Radial Thickness Sheath (mm)	0.5	0.5	0.75	0.8	0.8	1.0	1.0	1.0	1.0
Nom. Overall Diameter (mm)	4.15	6.15	7.3	12.0	16.2	18.8	20.7	27.1	29.7
Operating Temperature range(°C)	-15/+70								
Max. Pulling Tension (N)	30	90	180	375	750	1100	1500	2250	3000
Min. Bend Radius (install) (mm)	42	62	73	120	160	188	210	270	300
Nominal Cable Weight (kg/km)	21.0	47.9	100	177	349	460	561	814	1055

Electrical Characteristics at 20°C (1)

Maximum Conductor Resistance (Ω/km)	Maximum Mutual Capacitance (pF/m)	Nominal Capacitance Unbalance (pF/100m)	Nominal Velocity Propagation (%)	Maximum Time Delay(ns)	Minimum Insulation Resistance (MΩ*km)	Max. Operating Voltage (Vrms)
96	66	330	65	45	10000	300

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Electrical Characteristics at 20°C (2)

Frequency	Maximum Attenuation	Maximum NEXT	Minimum Return Loss	Impedance
1	2.6	41.3	12.0	100 ± 15
4	5.6	32.3	12.0	100 ± 15
8	8.5	27.8	12.0	100 ± 15
10	9.7	26.3	12.0	100 ± 15
16	13.1	23.3	10.0	100 ± 15

Cable Make-Up

PVC Sheath	C1445	C1446	C1447	C1448	C1449	C1450	C1451	C1452	C1453
HFFR Sheath	C1485	C1486	C1487	C1488	C1489	C1490	C1491	C1492	C1493
No of pairs	2	6	12	25	50	75	100	150	200
Number of pairs per unit				25	2*13 + 2*12	25	25	25	25
Number of units in the centre				1	4	3	4	1	1
Number of units in the 1e layer								5	7

Pair Colour Code

Pair No.	Pair Colours in 2 – 6 or 10 pairs units or cables	Pair No.	Continuation of Pair Colours in Cable or Unit of 12 or 25 pairs	Pair No.	Continuation of Pair Colours in Cable or Unit of 25 pairs
1	WHITE / Blue + BLUE	11	BLACK / Blue + BLUE	21	PURPLE / Blue + BLUE
2	WHITE / Orange + ORANGE	12	BLACK / Orange + ORANGE	22	PURPLE / Orange + ORANGE
3	WHITE / Green + GREEN	13	BLACK / Green + GREEN	23	PURPLE / Green + GREEN
4	WHITE / Brown + BROWN	14	BLACK / Brown + BROWN	24	PURPLE / Brown + BROWN
5	WHITE / Grey + GREY	15	BLACK / Grey + GREY	25	PURPLE / Grey + GREY
6	RED / Blue + BLUE	16	YELLOW / Blue + BLUE		
7	RED / Orange + ORANGE	17	YELLOW / Orange + ORANGE		
8	RED / Green + GREEN	18	YELLOW / Green + GREEN		
9	RED / Brown + BROWN	19	YELLOW / Brown + BROWN		
10	RED / Grey + GREY	20	YELLOW / Grey + GREY		

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Binder Colour Code

PVC Sheath	C1445	C1446	C1447	C1448	C1449	C1450	C1451	C1452	C1453
HFFR Sheath	C1485	C1486	C1487	C1488	C1489	C1490	C1491	C1492	C1493
No of pairs	2	6	12	25	50	75	100	150	200
Binder colours centre				Blue	Blue Orange Green Brown	Blue Orange Green	Blue Orange Green Brown	Blue	Blue
Binder colours first layer								Orange Green Brown Grey White	Orange Green Brown Grey White Red yellow

Number of units in the 1e layer

Reference Standards

ISO 11801: Category 3
TIA/EIA 568-C2: Category 3
IEC 60332-1
IEC 60754-1&-2 only for HFFR
IEC 61034 only for HFFR
EN 50290-2
RoHS directives