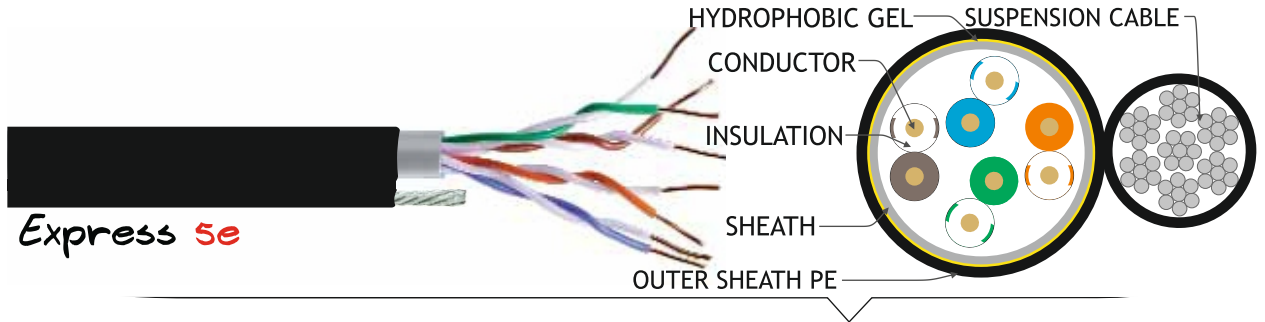


Structural Cabling System Fibrain Data
Category 5e cabling
 U/UTP PVC+PE sheath

01



OUTDOOR Cable 200 MHz PVC+PE sheath with suspension cable
 U/UTP cat. 5e+

FIBRAIN DATA cabling Express series is fully complied to requirements of category 5e (class D) according to the norm ISO/IEC 11801 2nd edition: 2002. Moreover all channels components are complied to directive ROHS 2002/95/WE.

Electrical and construction parameters:		
Parameter		
Resistance (max) Ohm/100 m(328 ft) @ 20 °C		8,90
Mutual capacitance (max) nF/100 m(328 ft) @ 1 kHz		5,60
Nominal velocity of propagation NVP (% speed of light)		68
Impedence characteristic (Ohm)		(min-max)
values at:	772 kHz	87-117
	1,0-200 MHz	85-115
Return loss (RL) dB (min)		
values at:	1,0 - 10 MHz	20+5 log(f)
	10 - 20 MHz	25
	20 - 100 MHz	25-7 log(f/20)
Propagation delay (max) (ns @ 10 MHz)		540
Delay skew (max) (ns/100 m)		45
Diameter (mm)		10,3
Weight (kg/km)		60
Minimal bending radius (mm)		62

- Construction:**
- Conductor - 24AWG (0,51 mm)
 - Insulation - polyolefin
 - Pair number - 4 pairs twisted
 - Internal jacket - PVC grey color
 - External jacket - PE black color
 - Steel suspension cable Φ 2mm
 - Hydrophobic gel under the outer sheath

Application:

- 10BASE-T (IEEE 802.3)
- 4/16 Mbps Token Ring (IEEE 802.5)
- 100BASE-VG-AnyLAN
- 100 Mbps TP-PMD (ANSI X3T9.5)
- 100BASE-T (IEEE 802.3)
- 55/155 Mbps ATM
- 1000BASE-T (Gigabit Ethernet)

Norms:

- IEC 60332-1
- ANSI/TIA/EIA 568-C.2 (Cat. 5e)
- ISO/IEC 11801
- IEC 61156-5
- EN 50173, EN 50288

Cable marking:

Every cable meter is marked as follow:

- Brand: FIBRAIN DATA
- Cable type: U/UTP 4PR 24AWG CAT.5E 200 MHz
- Jacket type: PVC+PE
- Norms: IEC 61156-5 ISO/IEC 11801 EN 50173
- Production year: XXXX
- Identification: XXXXX
- Length mark in meters



Frequency MHz:	Attenuation Max dB/100 m:	NEXT dB/100 m(min):	PS-NEXT dB/100 m(min):	ACR-F dB/100 m(min):	PS-ACR-F dB/100 m(min):
0,772	1,8	72,0	69,0	68,2	65,2
1	2,1	70,3	67,3	66,0	53,0
4	4,0	61,3	58,3	54,0	51,0
10	6,2	55,3	52,3	46,0	43,0
16	7,9	52,2	49,2	41,9	38,9
25	10,0	49,3	46,3	38,0	35,0
31,25	11,2	47,9	44,9	36,1	33,1
62,5	16,2	43,4	40,4	30,1	27,1
100	20,9	40,3	37,3	26,0	23,0
155	26,7	37,4	34,4	22,2	19,2
200	30,8	35,8	32,8	20,0	17,0

XE100.155.A FIBRAIN DATA Express U/UTP Kat.5e+ 200 MHz box 305 m OUTDOOR sheath type PVC+PE black color with suspension cable

- XE100.156.A drum 500 m
- XE100.157.A drum 1000 m