

CAT. 5E F/UTP 4X2X24 AWG

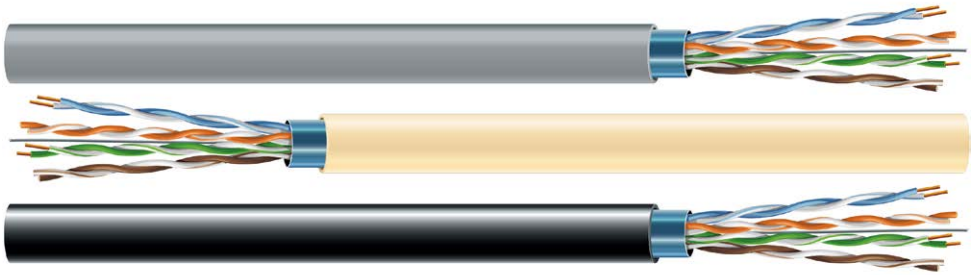
CAT. 5E F/UTP 4X2X24 AWG LSZH

CAT. 5E F/UTP 4X2X24 AWG PE

INTO LINE WITH THE REQUIREMENTS

TU U 27.3-36911851-025:2020

DSTU IEC 61156-5



SCOPE OF APPLICATION

Multicore and symmetrical twisted pair cable for digital communications:

- Type **Cat. 5e F/UTP 4x2x24AWG** is designed for structured cabling networks with single laying inside buildings, constructions and equipment. This cable type can operate at frequencies up to 100 MHz in conditions of increased electromagnetic action;
- Type **Cat. 5e F/UTP 4x2x24AWG LSZH** is designed for structured cabling networks with single laying and laying in bundles inside buildings, constructions and equipment. This cable type can operate at frequencies up to 100 MHz in conditions of increased electromagnetic action and where low smoke emission is required;
- Type **Cat. 5e F/UTP 4x2x24AWG PE** is designed for structured cabling networks with external laying along the walls of buildings, constructions, in mines and collectors. This cable type can operate at frequencies up to 100 MHz in conditions of increased electromagnetic action.

TECHNICAL SPECIFICATIONS

Tensile strength	max. 90 N
Crushing strength.....	min. 1000N/10 cm
Conductor resistance.....	max. 95 Ω/km
Resistance imbalance.....	max. 2%
Insulation resistance.....	min. 5000 MΩ x m.
Working capacity.....	nom. 50 pF/m
Capacitive asymmetry of the ground pair.....	1600 pF/km
Nominal velocity of propagation.....	67-69%
Signal propagation delay.....	max. 537ns/100m
Test voltage.....	1000 V
Operating voltage.....	max. 72 V

OPERATING CHARACTERISTICS

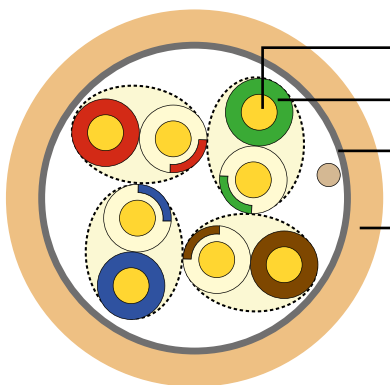
Cable operating temperature:

- at stationary (fixed) laying.....from -20°C to +60°C
- during laying, installation and operational bending (flexible).....from 0°C to + 50°C

Minimum bending radius:

- at stationary (fixed) laying.....4 x cable diameter
- during laying, installation and operational bending (flexible).....8 x cable diameter

CONSTRUCTION



- **Conductive core:**
24 AWG copper soft wire
- **Insulation:** HDPE polyethylene, colored marking of insulation
- **Shield:** lumopolymer tape. A tinned copper contact wire – Ø 26 AWG – is laid under the shield
- **Outer shell:**
PVC – polyvinyl chloride plastic RAL 7001 grey, TM51 70°C
LSZH – halogen-free compound RAL 1015 cream, 70°C
PE – light-stabilized polyethylene RAL 9011 black, 80°C

Fre- quency, MHz	Attenuation [dB/100 m]		NEXT [dB]		PS-NEXT [dB]		ACR [dB/100 m]		PS-ACR [dB/100 m]		ACR-F [dB/100 m]		PS-ACR-F [dB/100 m]		RL [dB]	
	typ	max.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.	typ	min.
1	1,9	2,1	71	65,3	68	62,3	69	63,2	66	60,2	82	63,8	79	60,8	23	20
4	3,6	4	62	56,3	59	53,3	58	52,3	55	49,3	70	51,8	67	48,8	33	23
10	5,5	6,3	56	50,3	53	47,3	51	44	48	41	55	43,8	52	40,8	31	25
16	7,7	8	54	47,2	51	44,2	46	39,2	43	36,2	48	39,7	45	36,7	32	25
31.25	11,3	11,4	50	42,9	47	39,9	39	31,5	36	28,5	40	33,9	37	30,9	32	23,6
62.50	16,2	16,5	45	38,4	42	35,4	29	21,8	26	18,8	37	27,9	34	24,9	29	21,5
100	21	21,3	42	35,3	39	32,3	21	14	18	11	30	23,8	27	20,8	27	20,1
200	27,5	-	36	-	33	-	9	-	6	-	22	-	19	-	19	-

Type of cable	Diametr, mm	Copper weight, kg/km	Cable weight, kg/km	Packing, m
Cat. 5e F/UTP 4x2x24AWG	6,0	17	42	500/1000
Cat. 5e F/UTP 4x2x24AWG LSZH	6,0	17	42	500/1000
Cat. 5e F/UTP 4x2x24AWG PE	6,0	17	35	500/1000

The cable length of 305 m is delivered in cardboard boxes, and the cable length of 500 m or 1000 m is delivered on plywood coils.