

## LANmark-5e FTP Plenum

With independently verified performance that meets the TIA/EIA Category 5e standard, Berk-Tek's LANmark-5e FTP provides the additional signal isolation advantages of an F/UTP design and is ideal for network installations that may be subjected to higher than normal external electromagnetic noise sources.

### Description

**Construction:** Bare copper wire insulated with FEP. Two insulated conductors twisted together to form a pair and four such pairs laid up to form the basic unit. The cable is shielded with an overall polyester aluminum foil with a 26 AWG stranded tinned copper drain wire and is jacketed with flame-retardant PVC.

### Standards:

- North American: ANSI/TIA/EIA-568-B.2, Category 5e, UL 444 and C22.2 No. 214-02
- International: ISO/IEC 11801-2nd Edition, EU Directive 2002/95/EC (RoHS)

### Flame Rating:

- Plenum-NFPA 262
- UL Listed

**Applications:** LANmark-5e FTP cable is intended for high speed data applications up to 100 MHz including:

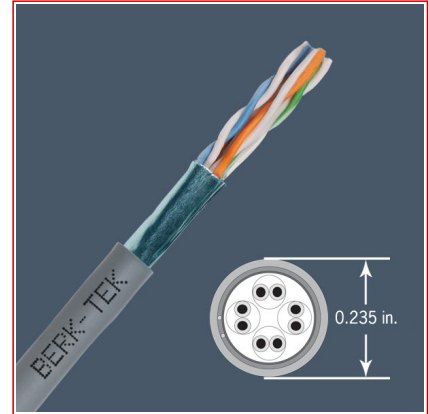
- IEEE802.3 1000BASE-T 1 Gb/s
- ATM 155 Mb/s 155 Mb/s
- IEEE 802.3 100BASE-TX 100 Mb/s
- CDDI 100 Mb/s
- IEEE 802.3 10BASE-T 10 Mb/s

### Features

- Independently verified to TIA/EIA Category 5e
- Supports 10BASE-T, 100BASE-T, 1000BASE-T
- Reduces signal emissions for secure transmission

### Benefits

- Reduced cable interference problems in areas of high EMI
- Extends performance limits for network applications thus increasing cabling lifetime
- Reduces signal emissions for secure transmissions



### Standards

National TIA/EIA-568-B.2

## LANmark-5e FTP Plenum

### Characteristics

<b>Construction characteristics</b>	
Type of cable	FTP
<b>Dimensional characteristics</b>	
Length per reel	1000.0 ft
Number of pairs	4
<b>Usage characteristics</b>	
Packaging	Reel
Field of application	Indoor
Category	Cat. 5e
Fire safety	Plenum Rated

### Technical Data

Technical Data - Physical			Color Code		
			Pair-1	White	Blue
Conductor	24 AWG Bare Copper		Pair-2	White	Orange
Conductor diameter—in. (mm)	0.022	(0.56)	Pair-3	White	Green
Insulated Conductor Diameter- in. (mm)	0.042	(1.07)	Pair-4	White	Brown
Cable diameter—in. (mm)	0.231	(5.9)			
Nominal cable weight—lb./kft. (kg/km)	30	(45.9)	<b>Temperature Rating</b>		
Max. installation tension—lb. (N)	25	(110)	Installation	0°C to +50°C	
Min. bend radius—in. (mm)	1	(25.4)	Operation	-20°C to +60°C	

### Technical Data - Parametrics

<b>Mutual Capacitance</b>	5.6 nF/100 m max.
<b>DC resistance</b>	9.38 Ohms/100 m max.
<b>Skew</b>	45 ns/100 m max.
<b>Pair to ground Unbalance</b>	330 pF/100 m max.
<b>Velocity of Propagation</b>	72% nom.
<b>DC Resistance Unbalance</b>	5% max.
<b>Transfer Impedance</b>	50 mOhms/m @ 1 MHz

## LANmark-5e FTP Plenum

### Technical Data - Electrical

FREQ MHz	RL (dB)		INSERTION LOSS (dB/100m)		PS-NEXT (dB)		NEXT (dB)	
	min.	typical	max.	typical	min.	typical	min.	typical
1	20.0	30.0	2.0	1.7	62.3	85	65.3	90.2
4	23.0	35.7	4.1	3.5	53.3	73.3	56.3	78.8
10	25.0	38.5	6.5	5.6	47.3	66.9	50.3	72.9
16	25.0	42.0	8.2	7.2	44.3	61.8	47.3	67.5
20	25.0	40.6	9.3	8.1	42.8	60.5	45.8	65.9
31.25	23.6	38.6	11.7	10.1	39.9	59.4	42.9	64.9
62.5	21.5	39.2	17.0	14.6	35.4	57.7	38.4	63.4
100	20.1	32.0	22.0	18.7	32.3	55.5	35.3	62.6
250	17.3	32.9	36.9	30.7	26.3	41.8	29.3	48.5
350	16.3	28.0	44.9	36.9	24.2	44.7	27.2	53.8

### Technical Data - Electrical

FREQ Mhz	ACR (dB@100m)		PS-ACR (dB@100m)		ELFEXT (dB)		PS-ELFEXT (dB)	
	min.	typical	min.	typical	min.	typical	min.	typical
1	63.3	86.5	60.3	83.1	63.8	94.7	60.8	88.2
4	52.2	72.2	49.3	69.6	51.7	84.9	48.7	76.6
10	43.8	63.2	40.9	61.1	43.7	76.3	40.8	68.8
16	39.1	56.9	36.0	54.5	39.7	72.7	36.7	65.1
20	36.5	54.8	33.6	52.3	37.7	71.2	34.7	63.3
31.25	31.2	51.8	28.3	49.0	33.9	65.3	30.9	58.4
62.5	21.4	45.0	18.4	42.7	27.8	56.4	24.8	50.3
100	13.3	38.3	10.4	36.3	23.8	53.8	20.8	48.4
250	--	12.3	--	10.3	15.8	46.0	12.8	39.9
350	--	7.5	--	6.7	12.9	41.5	9.9	36.1

Electrical characteristics above 100 MHz are for engineering information.

### Product List

☎ = Make to order, 📦 = Make to stock




Part Number	Description	Colour
📦 10032121	LANmark-5e FTP Plenum	Grey
📦 10041941	LANmark-5e FTP Plenum	Violet
📦 10053567	LANmark-5e FTP Plenum	Yellow
📦 10047419	LANmark-5e FTP Plenum	White
📦 10034841	LANmark-5e FTP Plenum	Blue
📦 10053566	LANmark-5e FTP Plenum	Red
📦 10061862	LANmark-5e FTP Plenum	Black
📦 10093001	LANmark-5e FTP Plenum	Green

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**Contact**

Copper LAN Product Inquiry  
Phone: 717-354-6200  
berktek.support@nexans.com

## LANmark-5e FTP Plenum

Part Number	Description	Colour
 10172306	LANmark-5e FTP Plenum	Orange
 = Make to order,  = Make to stock		

### Selling delivery information

PLEASE NOTE: In the interest of product improvement, Berk-Tek, a Nexans company may make improvements or changes in the products, the programs or services described at any time without notice. Additionally, the information contained herein may include typographical errors or technical inaccuracies. Changes will be periodically made to address any such issues.