

Power Sum Category 5e 25-Pair UTP Riser

Berk-Tek's Category 5e 25 pair UTP Cables are designed for use in data and voice backbone applications and are ideal for Category 5e zone cabling applications and interconnect cable assemblies.

Description

Construction

24 AWG bare copper wire insulated with polyethylene (non-plenum). Two layer core construction jacketed in flame-retardant PVC (non-plenum).

Standards

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

Flame Rating

- Non-Plenum - UL 1666, CMR
- ETL Listed

Applications

Berk-Tek's 25 pair Power Sum Category 5e cable is intended for voice and data applications including:

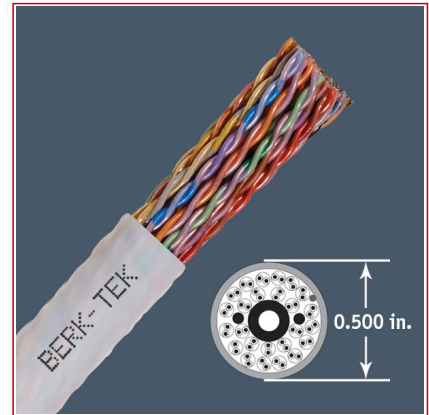
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|--------------|------------|----------|
| • ATM | 155 Mb/s | 155 Mb/s |
| • IEEE 802.3 | 100BASE-TX | 100 Mb/s |
| • CDDI | | 100 Mb/s |
| • IEEE 802.3 | 10BASE-T | 10 Mb/s |

Features

- ETL Verified to TIA/EIA-568-B.2 Category 5e backbone cable power sum performance
- Supports 10BASE-T, 100BASE-TX, 1000BASE-T, Token Ring, TP-PMD, Voice, Multimedia, 155 Mb/s ATM
- Small diameter and flexible construction with stable cable geometry.
- Ideally suited for backbone, cross-connect and pre-connectorized assemblies.

Benefits

- Supports current networking protocols
- Simplified structured cabling solution preserving long-term network investment
- High-performance multi-pair cable assemblies compatible with today's most common network interconnections.
- Characterized to 250 MHz, 150 MHz greater than the standard



Standards

National TIA/EIA-568-B.2

Power Sum Category 5e 25-Pair UTP Riser

Characteristics

Construction characteristics	
Type of cable	UTP
Dimensional characteristics	
Length per reel	1000.0 ft
Number of pairs	25
Usage characteristics	
Packaging	Reel
Field of application	Indoor
Category	Cat. 5e
Fire safety	Riser Rated

Technical Data - Physical

Technical Data - Physical			Color Code	
Conductor	24 AWG Bare Copper		See Below	
Conductor diameter—in. (mm)	0.021	(0.53)		
Insulated Conductor Diameter- in. (mm)	0.038	(0.97)		
Cable diameter—in. (mm)	0.5	(11.6)		
Nominal cable weight—lb./kft. (kg/km)	132	(210)		
Max. installation tension—lb. (N)	25	(110)		
Min. bend radius—in. (mm)	5	(127)	Temperature Rating	
			Installation	0°C to +50°C
			Operation	-20°C to +75°C

Color Code

Pair 1	White	Blue	Pair 13	Black	Green
Pair 2	White	Orange	Pair 14	Black	Brown
Pair 3	White	Green	Pair 15	Black	Gray
Pair 4	White	Brown	Pair 16	Yellow	Blue
Pair 5	White	Gray	Pair 17	Yellow	Orange
Pair 6	Red	Blue	Pair 18	Yellow	Green
Pair 7	Red	Orange	Pair 19	Yellow	Brown
Pair 8	Red	Green	Pair 20	Yellow	Gray
Pair 9	Red	Brown	Pair 21	Violet	Blue
Pair 10	Red	Gray	Pair 22	Violet	Orange
Pair 11	Black	Blue	Pair 23	Violet	Green
Pair 12	Black	Orange	Pair 24	Violet	Brown
			Pair 25	Violet	Gray

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Technical Data - Parametrics

Mutual Capacitance	5.6 nF/100 m nom. @ 1 KHz
DC resistance	9.38 Ohms/100 m max.
Skew	45 ns/100 m max.
Pair to ground Unbalance	330 pF/100 m max.
Velocity of Propagation	72% nom.
Input Impedance	100 ± 15% 0.772-100 MHz
DC Resistance Unbalance:	5% max.

Technical Data - Electrical

FREQUENCY (MHz)	Insertion Loss (dB/100 m max.)	RL (dB min.)	SRL (dB min.)	PS-NEXT (dB min.)	NEXT (dB min.)	ELFEXT (dB min.)	PS-ELFEXT (dB min.)
1	2	20	25	62.3	65.3	63.8	60.8
4	4.1	23	25	53.2	56.3	51.7	48.7
10	6.5	25	25	47.3	50.3	43.8	40.8
16	8.2	25	25	44.2	47.3	39.7	36.7
20	9.3	25	25	42.7	45.8	37.7	34.7
31.25	11.7	23.6	23.6	39.8	42.9	33.9	30.9
62.5	17	21.5	21.5	35.3	38.4	27.8	24.8
100	22	20.1	20.1	32.3	35.3	23.8	20.8
150	27.5	18.9	18.9	29.7	32.7	20.2	17.2
200	32.4	18.0	18.0	27.8	30.8	17.7	14.7
250	36.9	17.3	17.3	26.3	29.3	15.8	12.8

IMPORTANT: Berk-Tek performance guarantees are based on swept-frequency testing and apply to all frequencies for the entire specified frequency range and are not limited to the tables of data shown which are presented to demonstrate our guarantees at "representative" frequencies. Values above 100 MHz are for engineering information. Other jacket colors available.

Product List

☎=Make to order, 🏠=Make to stock

Part Number	Description	Colour
🏠 10061456	Power Sum Category 5e 25 pair UTP Riser	Grey
🏠 10063038	Power Sum Category 5e 25 pair UTP Riser	Green
🏠 1080224	Power Sum Category 5e 25 pair UTP Riser	White
🏠 10092804	Power Sum Category 5e 25 pair UTP Riser	Blue
🏠 10063037	Power Sum Category 5e 25 pair UTP Riser	Violet
🏠 10063040	Power Sum Category 5e 25 pair UTP Riser	Pink
🏠 10082785	Power Sum Category 5e 25 pair UTP Riser	Red

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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.