

**Application**

- Horizontal and building backbone cable.
- Support current **Category 5** and **Category 5 enhanced** applications, such as: 10 Base-T, 100 Base-T, 1000 Base-T (Gigabit Ethernet), FDDI, ATM

**Standards**

- Aktuelle Normung: **ISO/IEC 11801, EN 50173**
- Zukünftige Normung: **ISO/IEC 11801 2<sup>nd</sup> edition, EN 50173 2<sup>nd</sup> edition und prEN 50288-3-1**

**Construction & Dimensions**

- Construction: shielded 4 twisted pairs
- Conductor: solid bare copper
- Conductor diameter: AWG 24 (0,52 mm)
- Conductor insulation material: Polyethylene (PE)
- Diameter over insulation: 1.10 mm ± 0.05 mm
- Drain wire: AWG 26 tinned copper
- Shield: Aluminium/polyester foil
- Jacket material: PVC (Flame retardant)
- Outer diameter: 6.0 mm ± 0.3 mm



**Colour code**

- Pair 1 White-Blue/Blue
- Pair 2 White-Orange/Orange
- Pair 3 White-Green/Green
- Pair 4 White-Brown/Brown

**Electrical characteristics (at 20 °C)**

**Attenuation**

Frequency	1	4	10	16	20	31.25	62.5	100	MHz
Maximum <sup>1)</sup>	4.0	4.0	6.3	8.0	9.0	11.4	16.5	21.3	dB/100m
Typical	2.0	3.8	6.0	7.6	8.5	10.8	15.0	19.2	dB/100m

**NEXT**

Frequency	1	4	10	16	20	31.25	62.5	100	MHz
Minimum <sup>1)</sup>	60.0	56.3	50.3	47.2	45.8	42.9	38.4	35.3	dB
Typical	70	62	57	54	52	49	45	43	dB

**Power Sum NEXT**

Frequency	1	4	10	16	20	31.25	62.5	100	MHz
Minimum <sup>1)</sup>	57.0	53.3	47.3	44.2	42.8	39.9	35.4	32.3	dB
Typical	68	60	55	52	50	47	43	41	dB

**Power Sum ELFEXT**

Frequency	1	4	10	16	20	31.25	62.5	100	MHz
Minimum <sup>1)</sup>	60.8	48.8	40.8	36.7	34.8	30.9	24.9	20.8	dB
Typical	73	61	53	47	45	41	37	33	dB

**ACR**

Frequency	1	4	10	16	20	31.25	62.5	100	MHz
Minimum <sup>1)</sup>	56.0	52.3	44.0	39.2	36.8	31.5	21.8	14.0	dB/100m
Typical	68.0	58.2	51.0	46.4	43.5	38.2	30.0	23.8	dB/100m

**Power Sum ACR**

Frequency	1	4	10	16	20	31.25	62.5	100	MHz
Minimum <sup>1)</sup>	53.0	49.3	41.0	36.2	33.8	28.5	18.8	11.0	dB/100m
Typical	66.0	56.2	49.0	44.4	41.5	36.2	28.0	21.8	dB/100m

<sup>1)</sup>: Values according to cable requirements of ISO/IEC 11801 category 5 enhanced

**Electrical characteristics (at 20 °C)**

Nominal mutual capacitance at 1 kHz	50 nF/km
Maximum conductor DCR	93,5 Ohm/km
NVP - Nominal Velocity of Propagation	0.70 c
SKEW – Propagation delay difference (100 MHz)	typical $\leq$ 15 ns/100m
Impedance 1 - 100 MHz	100 $\pm$ 15 Ohm

**General and environmental characteristics**

Temperature range - operation	-20°C - +60°C
Temperature range - installation	+0°C - +50°C
Minimum bending radius - operation	24 mm
Minimum bending radius - installation	48 mm
Maximum pulling tension	80 N
Flame retardancy	IEC 332-1
Energy of flame	515 kJ/m
Weight (approx.)	43 kg/km
Maximum operating voltage	48 V rms
Maximum continuous current per conductor (25°C)	1.4 A

**Ordering information****MARKING**

Text on the cable jacket                      Inkjet printing

**BELDEN 1633E FTP CAT5E 4PR AWG24 ISO/IEC 11801 EN 50173 VERIFIED 100 OHM**

Meter marking:                      Yes

**JACKET COLOUR**

Colour	RAL code	Belden colour code
Grey	RAL 7032	3251

**PACKAGING (PUT UP)**

Belden code	Delivery length	Weight	Remark
43132 xxxx 240	500 m	21.0 kg	Non returnable reel
43132 xxxx 241	1000 m	42.0 kg	Non returnable reel

xxxx: Belden colour code