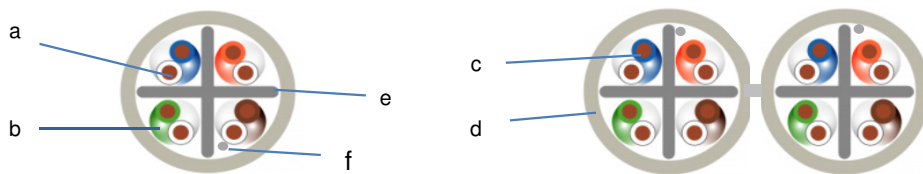


## Kerman Horizontal Cables U/UTP - 100 Ohms - Category 6 - 4 pair and 2 x 4 pair HF

High speed data transmission cables for backbone distribution local computer networks, supported by the class E and for use at frequencies of up to 250 MHz.



## Design & Materials

|                            |     |                    |
|----------------------------|-----|--------------------|
| Conductor Material:        | (a) | Bare solid copper  |
| Conductor Size:            |     | 23 AWG             |
| Conductor Construction:    |     | Solid              |
| Insulation Material:       | (b) | HDPE               |
| Insulation O.D.:           |     | 1.02 ± 0,04 mm     |
| Color code:                |     | Per TIA/EIA 568-B  |
| Total number of wires:     | (c) | 4 pair (8 pair)    |
| Outer Jacket Color:        | (d) | RAL7035 Light Gray |
| Marking:                   |     | Length (m)         |
| Star shaped central filler | (e) |                    |
| Rip-cord                   | (f) |                    |

**General Construction:** The cable contains 4 Unshielded Twisted Pairs (UTP) cabled with a special star shaped central filler, rip-cord and jacketed with LSZH compound.

**Outer Jacket Material:** LSZH  
**Outer Diameter:** 6.3 mm nom. (6.3/13 mm)  
**Weight:** 46 kg/km (92 kg)

**Applications:** Data-Centers/SANs, Indoor use, fixed installations, High bandwidth digital applications with low BER, High data rates

Electrical Properties: Cat. 6 Un-screened Pair Horizontal Cables

| Freq. MHz | Attenuation dB/100m |      | PS NEXT Loss / dB |      | NEXT Loss DB |      | RL /dB  |      | PS ELFEXT / dB |      | ELFEXT / dB |      |
|-----------|---------------------|------|-------------------|------|--------------|------|---------|------|----------------|------|-------------|------|
|           | Typical             | CAT6 | Typical           | CAT6 | Typical      | CAT6 | Typical | CAT6 | Typical        | CAT6 | Typical     | CAT6 |
| 1         | 2,0                 | 2,8  | 75,0              | 72,3 | 78,0         | 75,3 | 22,0    | 20,0 | 90,0           | 65,0 | 93,0        | 68,0 |
| 4         | 3,7                 | 3,8  | 66,0              | 63,3 | 69,0         | 66,3 | 25,0    | 23,0 | 90,0           | 53,0 | 93,0        | 56,0 |
| 10        | 5,7                 | 6,0  | 60,0              | 57,3 | 63,0         | 60,4 | 28,0    | 25,0 | 80,0           | 45,0 | 83,0        | 48,0 |
| 20        | 8,1                 | 8,5  | 56,0              | 52,8 | 59,0         | 55,8 | 28,0    | 25,0 | 80,0           | 39,0 | 83,0        | 42,0 |
| 30        | 10,0                | 10,5 | 53,0              | 50,1 | 56,0         | 53,1 | 27,0    | 23,8 | 70,0           | 35,5 | 73,0        | 28,5 |
| 100       | 19,0                | 19,9 | 44,0              | 42,3 | 48,0         | 45,3 | 24,0    | 21,1 | 63,0           | 25,0 | 66,0        | 28,0 |
| 150       | 23,6                | 24,9 | 43,0              | 39,7 | 46,0         | 42,7 | 22,0    | 18,8 | 60,0           | 21,5 | 63,0        | 24,5 |
| 200       | 27,7                | 29,1 | 41,0              | 37,8 | 44,0         | 40,8 | 21,0    | 18,0 | 58,0           | 19,0 | 61,0        | 22,0 |
| 250       | 31,4                | 33,0 | 38,0              | 36,3 | 41,0         | 39,3 | 20,0    | 17,3 | 55,0           | 17,0 | 58,0        | 20,0 |

Cables meet the minimum Cat. 6 transmission requirements as per IEC 61156-5 Ed. 2

## Performance

|                              |                 |
|------------------------------|-----------------|
| Frequency Range:             | 1 - 250 MHz     |
| Impedance:                   | 100 Ω           |
| Coupling Attenuation:        | Type III        |
| DC Resistance:               | 95 Ω/km nom.    |
| Max. Resistance Unbalance:   | 2 %             |
| Capacitance Unbalance:       | 1.2 pF/m max.   |
| Velocity of Propagation:     | 69 % nom.       |
| Propagation Delay Skew:      | 35 ns/100m max. |
| Dielectric Strength:         | 700 V/minute    |
| Min. Insulation Resistance : | 5 GΩ•km         |
| Max. Tensile Strength -      | 100 N           |
| Min. Bend Radius:            | 50 mm           |
| Max. Operating Temperature:  | +60 °C          |
| Min. Operating Temperature:  | -30 °C          |

|                     |                                       |
|---------------------|---------------------------------------|
| Standards:          | IEC 61156, ISO/IEC 11801, TIA/EIA-568 |
| Flamability Rating: | IEC 60332-1, IEC 60754, IEC 61034     |

## Cables information

| Reference | Jacket | Pairs<br>AWG23 | Max Diameter | Wteight<br>/ km | kg | Drum size | m |
|-----------|--------|----------------|--------------|-----------------|----|-----------|---|
| 0207024   | LSZH   | 4              | 6,3          | 46              |    | 500       |   |
| 0207026   | LSZH   | 2 x 4          | 6,3/13       | 92              |    | 500       |   |