

NETWORK & HOME AUTOMATION CABLES

GAALNET® U/UTP 5E PVC 100 V

Voice and data transmission cables, acc. to CEI UNEL 36762, EN 50575:2014 + A1:2016, Eca

ELETTROTEK KABEL® GAALNET® U/UTP 5E PVC 100 V, Eca



Construction:

| | |
|----------------------|---|
| Conductor: | solid plain annealed copper conductor, Cl. 1, acc. to IEC 60228 |
| Insulation: | PE compound |
| Colour cores: | 1st. pair: white/blue - blue 2nd pair: white/orange - orange 3th. pair: white/green - green 4th. pair: white/brown - brown |
| Stranding: | cores twisted in pairs, pairs twisted together |
| Outer sheath: | grey (similar RAL 7035), PVC compound |

Resistance:



Flame retardant acc. to:
EN 60332-1-2

Technical data:

| | |
|--|-------------------|
| Nominal voltage: | 100 V |
| Test voltage: | |
| <i>alternate current (50 Hz):</i> | 700 V |
| <i>direct current:</i> | 1000 V |
| Temperature range: | |
| <i>operating temperature:</i> | -30°C up to +70°C |
| <i>installation temperature:</i> | -10°C up to +50°C |
| Min. bending radius | 4 x d |
| Loop resistance at 20°C: | 190 Ohm/km |
| Insulation resistance: | 5 GOhm/km |
| Resistance unbalance: | max. 2% |
| Characteristic impedance: | 100 ± 5 Ω |
| Capacitance at 1 KHz: | 50 ± 5 nF/m |
| Capacitance unbalance at 1 kHz: | max. 1600 pF/Km |
| NVP value: | 69% |
| Return loss (min.): | |
| <i>from 4 up to 10 MHz:</i> | 20 + 5lg(f) |
| <i>from 10 up to 20 MHz:</i> | 25 |
| <i>from 20 up to 200 MHz:</i> | 25 - 7lg(f) |
| Bandwidth: | 200 MHz |

Features:

suitable for indoor use

on request with LSOH outer sheath

acc. to CPR UE 305/11, EN 50575:2014 + A1:2016, Eca

classification (CEI UNEL 35016), EN 13501-6

suitable for installation in a single conduit or channel or bridge, without interposing separators, with cable system of Category I° marked "450/750" or "0,6/1 kV" (as required by CEI-UNEL 36762)

RoHS and CE approval



ELECTRICAL CHARACTERISTICS AT 20°C

| Frequency MHz | RL dB | Attenuation dB/100 m | NEXT dB | PS NEXT dB | ELFEXT dB | PS ELFEXT dB |
|---------------|-------|----------------------|---------|------------|-----------|--------------|
| 1 | 20 | 2,1 | 65,3 | 62,3 | 63,8 | 60,8 |
| 4 | 23 | 4 | 56,3 | 53,3 | 51,8 | 48,8 |
| 10 | 25 | 6,3 | 50,3 | 47,3 | 43,8 | 40,8 |
| 16 | 25 | 8 | 47,2 | 44,2 | 39,7 | 36,7 |
| 20 | 25 | 9 | 45,8 | 42,8 | 37,8 | 34,8 |
| 30 | 23,8 | 11,2 | 43,1 | 40,1 | 34,3 | 31,3 |
| 45 | 22,5 | 13,9 | 40,5 | 37,5 | 30,7 | 27,7 |
| 60 | 21,7 | 16,2 | 38,6 | 35,6 | 28,2 | 25,2 |
| 80 | 20,8 | 18,9 | 36,7 | 33,8 | 25,7 | 22,7 |
| 100 | 20,1 | 21,3 | 35,3 | 32,3 | 23,8 | 20,8 |
| 120 | 19,5 | 23,6 | 34,1 | 31,1 | 22,2 | 19,2 |
| 130 | 19,3 | 24,7 | 33,6 | 30,6 | 21,5 | 18,5 |
| 155 | 18,8 | 27,2 | 32,4 | 29,5 | 20 | 17 |
| 175 | 18,4 | 29,2 | 31,6 | 28,6 | 19 | 16 |
| 200 | 18 | 31,5 | 30,8 | 27,8 | 17,8 | 14,8 |

| Part no. | Nominal cross-section no. of pairs x AWG | Outer-Ø ca.mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km |
|----------------|--|---------------------|---------------------|----------------------------|
| 71010B8X042A24 | 4x2x24/1 | 4,8 | 15 | 28 |

Other dimensions and colours available on request.