

## GAALNET® U/UTP 6 PE Solid 100 V

Voice and data transmission cables for outdoor use, acc. to CEI UNEL 36762, EN 50575:2014 + A1:2016, Fca



ELETTROTEK KABEL® GAALNET® U/UTP 6 PE Solid 100 V, Fca



### Construction:

<b>Conductor:</b>	solid plain annealed copper conductor, Cl. 1, acc. to IEC 60228
<b>Insulation:</b>	PE compound
<b>Colour cores:</b>	1st. pair: white/blue - blue 2nd pair: white/orange - orange 3th. pair: white/green - green 4th. pair: white/brown - brown
<b>Stranding:</b>	cores twisted in pairs, pairs twisted together
<b>Filler:</b>	jelly filling
<b>Outer sheath:</b>	black (similar RAL 9005), PE compound

### Resistance:



**Oil resistance acc. to:**  
IEC 60811-2-1

### Technical data:

<b>Nominal voltage:</b>	100 V
<b>Test voltage:</b>	
<i>alternate current (50 Hz):</i>	700 V
<i>direct current:</i>	1000 V
<b>Temperature range:</b>	
<i>operating temperature:</i>	-30°C up to +80°C
<i>installation temperature:</i>	-10°C up to +50°C
<b>Min. bending radius:</b>	6 x d
<b>DC Loop resistance at 20°C:</b>	165 Ohm/km
<b>Insulation resistance:</b>	min. 5 GOhm/km
<b>Resistance unbalance:</b>	max. 2%
<b>Characteristic impedance at 100 MHz:</b>	100 ± 5 Ω
<b>Capacitance at 1 KHz:</b>	50 ± 5 nF/m
<b>Capacitance unbalance pair to ground at 1 kHz:</b>	max. 1600 pF/Km
<b>NVP value:</b>	67%
<b>Return loss (min.):</b>	
<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)
<b>Bandwidth:</b>	350 MHz

### Features:

suitable for outdoor use  
UV resistant  
Water resistant  
acc. to CPR UE 305/11, EN 50575:2014 + A1:2016, Fca  
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<sup>o</sup> 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	66	64	66	64
4	23	3,8	65,3	63,3	58	55
10	25	6	59,3	57,3	50	47
16	25	7,6	56,2	54,2	45,9	42,9
20	25	8,5	54,8	52,8	44	41
30	23,8	10,5	52,1	50,1	40,5	37,5
45	22,5	13	49,5	47,5	36,9	33,9
60	21,7	15,1	47,6	45,6	34,5	31,4
80	20,8	17,7	45,8	43,8	32	28,9
100	20,1	19,9	44,3	42,3	30	27
120	19,5	22	43,1	41,1	28,4	25,4
150	18,9	24,8	41,7	39,7	26,5	23,5
180	18,3	27,5	40,5	38,5	24,9	21,9
200	18	29,1	39,8	37,8	24	21
220	17,7	30,7	39,2	37,2	23,1	20,1
250	17,3	33	38,3	36,3	22	19
280	17	35,2	37,6	35,6	21	18
300	16,8	36,6	37,1	35,1	20,5	17,5
320	16,6	38	36,7	34,7	19,9	16,9
350	16,3	40	36,1	34,1	19,1	16,1

Part no.	Nominal cross-section no. of pairs x AWG	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km
71090B7X042A23	4x2x23/1	6,5	21	50

Other dimensions and colours available on request.