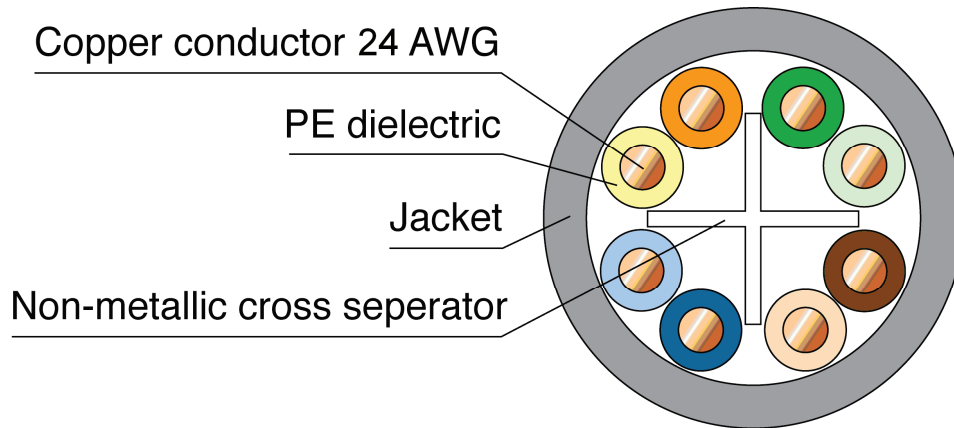


## GAR Series

## U/UTP Solid Cat.6

Cable: 4 Pair 24AWG Solid---LSZH



### Reference Standards

ISO/IEC 11801; IEC 61156-5; EN50173; EN50288-6-1; TIA/EIA -568B.2-1

## Construction

<b>Conductor</b>	Bare copper wire nom. 1 x 0.52 mm (AWG24)
<b>Insulation</b>	Polyethylene, nom. 0.97 mm
<b>Twisting</b>	4 twisted pairs, 2 single conductors paired, Twisted pair color code: 1: white-blue/blue                      2: white-orange/orange 3: white-green/green                    4: white-brown/brown
<b>Cable lay up</b>	4 pairs with different pitches Non-metallic cross separator (spine)
<b>Outer jacket</b>	LSZH
<b>Outer diameter</b>	nom. 5.7 mm

## Mechanical Properties

<b>Bending radius</b>	≥ 4xOD without load ≥ 8xOD with load
<b>Temperature range,</b>	
<b>during operation</b>	-20°C up to 60°C
<b>during installation</b>	0°C up to 50°C

## Electrical Properties (at 20°C ± 5°C)

<b>DC resistance</b>	max. 9.38Ω / 100m at 20°C
<b>Resistance unbalance</b>	max. 2% at 20°C
<b>Insulation resistance (500 V)</b>	min. 5000 MΩ/Km at 20°C
<b>Mutual capacitance</b>	nom. 5.1 nf / 100 m at 1 kHz
<b>Capacitance unbalance (pair to ground)</b>	max. 160 pf / 100 m at 1 kHz
<b>Nominal velocity of propagation</b>	nom. 67 %
<b>Test voltage (DC, 1 min)</b>	1 kV / 1 min

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### Transmission performance acc. to IEC 61156-5 Cat.6 (at 20°C)

Frequency (MHz)	Impedance (Ω)	Attenuation (dB) Max.	NEXT (dB) Min.	PSNEXT (dB) Min.	ELFEXT (dB) Min.	PSELFEXT (dB) Min.	
1	100 ± 15	*(2.0)	74.3	72.3	67.8	64.8	
4		3.8	65.3	63.3	55.8	52.8	
10		6.0	59.3	57.3	47.8	44.8	
16		7.6	56.3	54.3	43.7	40.7	
20		8.5	54.8	52.8	41.8	38.8	
31.25		10.7	51.9	49.9	37.9	34.9	
62.5		15.4	47.4	45.4	31.9	28.9	
100		19.8	44.3	42.3	27.8	24.8	
125		100 ±22	22.4	42.8	40.8	25.9	22.9
200			29.0	39.8	37.8	21.8	18.8
250	32.8		38.3	36.3	19.8	16.8	

Frequency (MHz)	Return Loss (dB) Min.	Propagation Delay (ns) Max.	Delay Skew (ns) Max.
1	20.0	570.0	45
4	23.0	552.0	
10	25.0	545.4	
16	25.0	543.0	
20	25.0	542.0	
31.25	23.6	540.4	
62.5	21.5	538.6	
100	20.1	537.6	
125	19.4	537.2	
200	18.0	536.6	
250	17.3	536.3	

\*Values shown on tables above are for reference purpose only.