MULTI CAT5 GL data sheet

Design	WISKA MULTI CAT5 GL
Wire LIH 1.5/2.8 (Power)	
Stranded bare copper wire	
19 X 0.32 (16 AWG)	ø 1.6 mm (0,063 in)
Insulation of Thermoplastic copolymer	
(FRNC)	ø 2.8 mm (0,110 in)
Wall thickness	about 0.6 mm
9Y(ST)CH 4X2X0.6/1.2-100 LI (Cat.5)	
Wire	
Stranded bare copper wire 7 X 0.2 (24 AWG)	ø 0.6 mm (0,024 in)
Insulation of Polypropylene	ø 1.2 mm (0,047 in)
2 wires twisted to a pair	
4 pairs twisted + fillers	
Sequence of colors:	WHBU/BU-WHOG/OG-WHGN/GN-WHBN/BN
Plastic tape, overlapped	
Alulaminate foil overlapped	
Shield braiding of tinned copper wires	0.13 mm dia (36 AWG)
Coverage about 85%	ø 5.8 mm (0,228 in)
Jacket:	Thermoplastic copolymer (FRNC) BK
Wall thickness about 0.5 mm	ø (6.8 ±0.2) mm (0,268 ±0,008 in)
Core:	
1 unit	9Y(ST)CH 4X2X0.6/1.2-100 LI (Cat.5)
3 wires + fillers	LIH 1.5/2.8 (Power) BN-BU-YEGN
Plastic tape, overlapped	
Shield braiding of tinned copper wires 0.2 mm dia (32 AWG)	
Coverage about 85%	ø 10.9 mm (0,429 in)
Jacket:	
Thermoplastic copolymer (FRNC) BK	ø (12.5 ±0.3) mm (0,492 ±0,012 in)
Wall thickness about 0.8 mm	WISKA CCTV MULTI CAT5 GL "internal lot number"
Printing: "sequential length in metres"	
Electrical data at 20°C	
Wire LIH 1.5/2.8 (Power)	
Conductor resistance	≤ 14 Ohm/km
Insulation resistance	≥ 20 MOhm*km
Operating voltage (peak)	≤ 300 V
Test voltage	
(wire/wire/screen rms 50Hz 1min)	1000 V
9Y(ST)C 4X2X0.6/1.2-100 LI (Cat5)	
Loop resistance	≤ 180 Ohm/km
Insulation resistance	≥ 5 GOhm*km
Signal run time	≤ 5.3 ns/m
Capacitance (1 kHz)	≈ 57 nF/km
Characteristic impedance 100 MHz	(100 ± 5) Ohm
Surface transfer impedance 10 MHz	≤ 100 mOhm/m
Operating voltage	100 V
Test voltage (wire/wire/screen rms 50Hz 1min)	1000 V

The correctness of data has been made to the best of our knowledge and no responsibility is accepted. Subject to alterations.. Date: 20. February 2009-Index: 02

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Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
Next (dB)	65.3	56.3	50.3	47.2	45.8	42.9	38.4	35.3
PSNext (dB)	62.3	53.3	47.3	44.2	42.8	39.9	35.4	32.3
ELFext (dB)	63.8	51.8	43.8	39.7	37.8	33.9	27.9	23.8
PSELfext (dB)	60.8	48.8	40.8	36.7	34.8	30.9	24.9	20.8
Attenuation typ. (dB/100m)	2.1	4.0	6.3	8.0	9.0	11.4	16.5	21.3
Frequency	4	8	10	16	20	31.25	62.5	100
Return loss (dB)	23.0	24.5	25	25	25	23.6	21.5	20.1

Electrical requirements at max. 90m installietes cable of the category 5 (EN 50288-2-1)

Mechanical and thermal characteristics

Conductor material acc. to DIN EN 13602 Cu-ETP-A...
Screen material acc. to DIN EN 13602 Cu-ETP-A...-B
Insulating material acc. to DIN EN 50290-2-25, compound type full PP (HD 624.5)
Insulating material acc. to DIN EN 50290-2-26 (VDE 0819) (HD 624.6)
Jacket material acc. to IEC 60092-359 / SHF1
Flame retardant acc. to IEC 60332-3-22 (Cat. A)

Other characteristics:

RoHS compliant (Directive 2002/95/EC)
Halogen free
UV-resistant

Permissible temperature range :	-25°C (-13°F) up to 80°C (176°F)
Min. bending radius allowed :	repeated 10X ø, single 5X ø
Weight about :	234 kg/km (157 lb/1000ft)

RoHS compliant
Halogen-free
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