Amphenol-Air LB

GPC
VG96927T018 Type B / C / D

CAT6a ethernet cable assembly according to VG
for reliable 10GBit high-speed data transmission

WE CONNECT THE WORLD AND BEYOND

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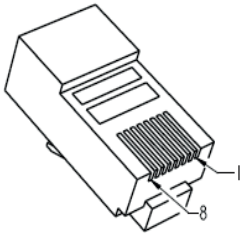
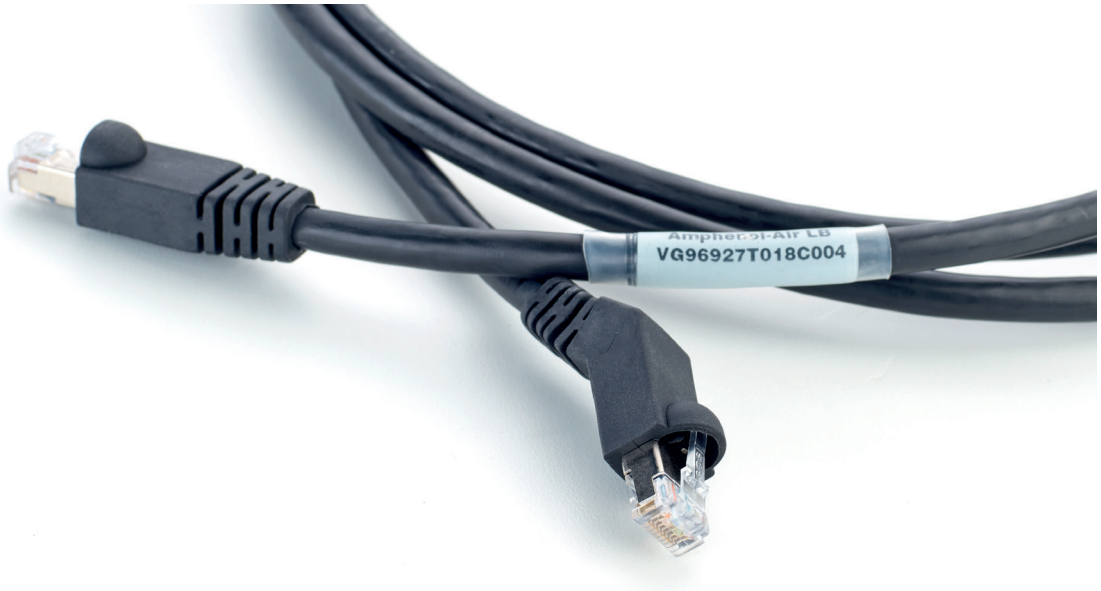
CHARACTERISTICS & FEATURES

- The GPC patch cable is designed to provide highest performance according to the conditions of the following VG specifications:
  * RJ45 connectors according to VG96938-03Z1
  * Amphenol´s CAT7 Ethernet cable according to VG95218T031B001
  * Cable assembly according to the requirements of VG96927
- 10 Gigabit Ethernet Class EA 500 MHz patch cable
- S/FTP 4 x 2 x AWG 26
- UV resistant and halogenfree
- Molded strain relief including kink protection also in 45° and 90° design (thermoplastic UL QMFZ8)
- RoHS compliant

TIA / EIA Type 568B Standard:



Pin	Pair	Colour
1	2	orange / white
2	2	orange
3	3	green / white
4	1	blue
5	1	blue / white
6	3	green
7	4	brown / white
8	4	brown



HOW TO ORDER

	GPC -	6A -	LN -	RA -	0300
GPC-Series Amphenol-Air LB					
Category 6A					
RJ 45 connector position on left termination side (locking clip down)					
A – 90° down					
B – 90° up					
C – 90° left					
D – 90° right					
E – 45° down					
F – 45° up					
N – straight					
RJ 45 connector position on right termination side (locking clip up)					
A – 90° down					
B – 90° up					
C – 90° left					
D – 90° right					
E – 45° down					
F – 45° up					
N – straight					
Cable lenght in cm					
min. 0030					
max. 9000					

	VG96927T018	B	001
VG Standard			
RJ 45 connector position locking clip left side down, right side up			
B - Straight on both sides			
C - left side 45° up, right side straight			
D - left side 45° up, right side 45° down			
Cable lenght			
001 - 30 cm			
002 - 50 cm			
003 - 100 cm			
004 - 180 cm			
005 - 300 cm			
006 - 500 cm			
007 - 700 cm			
008 - 1000 cm			

TECHNICAL CHARACTERISTICS

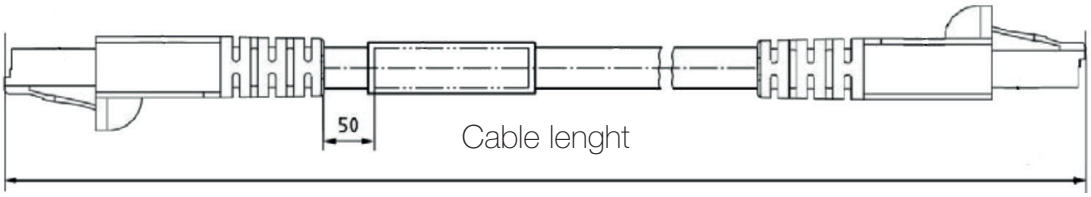
Cable Design	**According to VG95218T031B001**
Wire	Stranded bare copper wire AWG 26 Insulation of foamed Polyethylene (PE) with skin max. 1,05mm
Screened pair	2 wires twisted to a pair Alulaminate foil overlapped
Core	Strain member of kevlar, 4 twisted pairs Sequence of colours: white/blue-white/orange-white/green white/brown Shield braided of tinned copper wires, coverage about 80%
Jacket	Thermoplastic copolymer (FRNC), black
Mechanical and thermal Characteristics	
Cable diameter	7,0 +/- 0,3 mm
Bending radius	Min. repeated 8x cable dia., single 4x cable dia.
Weight	~54 kg/km
Temperature range	-40° C up to +85°C
Max. pulling force	800N
Electrical requirements	**according to EN 50288-4-2 (at 20°C)**
Loop resistance	≤ 290 Ohm/km
Screen resistance	≤ 10 Ohm/km
Speed of propagation	≤ 0,1949 m/ns
Nominal Velocity of Propagation	0,6501
Insulation resistance	≥ 5 GOhm*km
Characteristic impedance 100 MHz	100±5 Ohm
Operating voltage (peak)	≤ 100V
Screening attenuation 30 - 600 MHz	≥ 90 dB
Transfer impedance of screen (1 - 30 MHz)	≤ 10 mOhm/m
Test voltage (wire/wire/screen rms 50Hz 1min)	700 V
Other characteristics	
RoHS compliant	Yes
Sunlight resistant	acc. to UL 444 Sec. 7.12
Smoke-density	acc. to IEC 61034-2
Halogen free	Yes
Hydrolysis resistance	Yes
RJ45 Connectors	**According to VG96938-03Z1**
Cable assembly	**According to VG96927**
Pin assignment	According to TIA / EIA 568B
Molded strain relief	Thermoplastic UL QMFZ8

Attenuation values

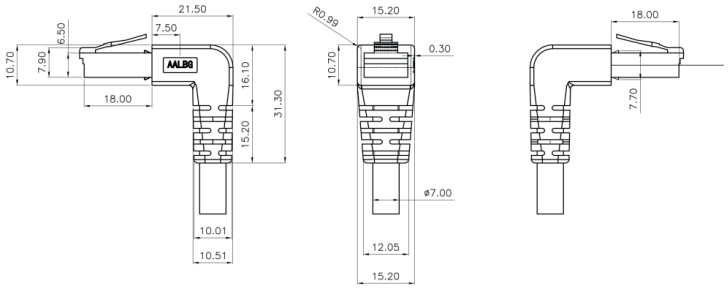
Frequency MHz	1	4	10	16	20	31,25	62,5	100	155	200	300	600
Next (dB)	80	80	80	80	80	80	75,1	72,4	69,6	67,9	65,3	60,8
PSNext (dB)	77	77	77	77	77	77	72,5	69,4	66,6	64,9	62,3	57,8
ELFext (dB)	80,0	80,0	74,0	69,9	68	64,1	58,1	54	50,2	48,0	44,5	38,4
PSELfext (dB)	77	77	71	66,9	65	61,1	55,1	51	47,2	45,0	41,5	35,4
Attenuation (dB/100m)	2,9	5,5	8,5	10,8	12,1	15,2	21,7	27,8	35,0	40,1	50,0	73,3

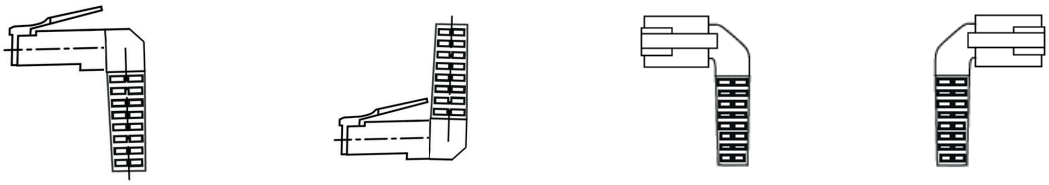
Frequency MHz	4	8	10	16	20	31,25	62,5	100	155	250	350	600
Return loss (dB)	23,1	24,5	25	25	25	23,6	21,5	20,1	18,8	17,3	17,3	17,3

DIMENSIONS



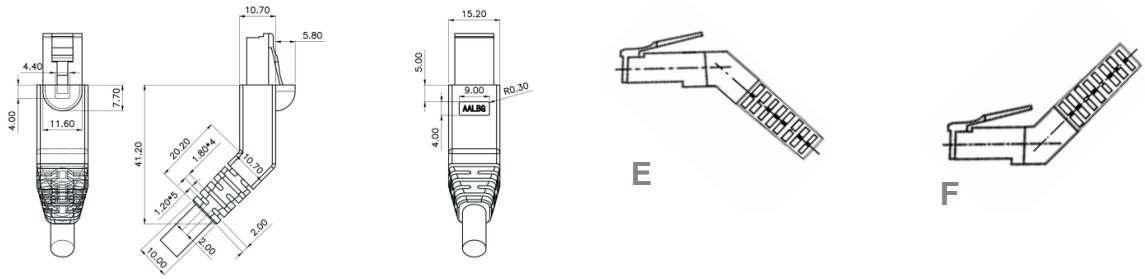
Angular 90°





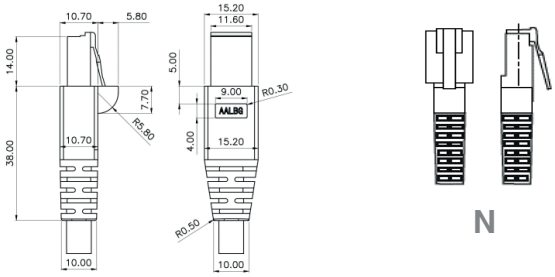
A B C D

Angular 45°



E F

Straight 180°



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