CABLES AND CORDSETS



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CAT.5E CABLE AND CORDSET

Description

This Cat.5e cable has been specially selected for fixed or deployable military or industrial application. Can be ordered as cordset with RJ45 at both end or as reel of cable. Its special Polyurethane jacket can withstand the harshest environnements.

How to order : Please refer to page 122 and 123

Design

Wire	Conductors	8 x 24 AWG Stranded tinned copper wires (Ø0,6mm)
	Insulation	Polyethylene (max Ø1,05mm)
	Colors	Pair 1 : White and blue Pair 2 : White and orange Pair 3 : White and green Pair 4 : White and brown
4 pairs twisted		

Overall		Strain member of kevlar Fillers Plastic tapes, overlapped
Shield 1		Aluminate foil, overlapped
Shield 2		Tinned copper braid (Ø5,5mm) 80% coverage
Jacket	Insulation	Polyurethane (Ø7,1±0,3mm)
	Color	Black

Electrical characteristics at 20°c

Conductor resistance	≤ 96 Ohm/km
Resistance difference	3 %
Screen resistance	≤ 12 Ohm/km
Insulation resistance	≥ 150 MOhm*km
Capacitance (1 kHz)	46 nF/km
Signal runtime	≤ 5,2 ns/km
Delay screw	≤ 20 ns/100m

Structural Return loss (1 – 20 MHz)	≤ 23 dB	
Capacity unbalanced to ground	3400 pF/Km	
Characteristic impedance (1 – 100 MHz)	100 ± 15 Ohm	
Operating voltage (peak)	≥ 100 V	
Velocity of propagation	81 % nom.	
Test voltage (wire/wire/screen rms 50Hz 1min)	700 V	
Attenuation (dB/100m)	1 MHz – 3,15 4 MHz – 6,45 10 MHz – 9,9	16 MHz – 12,3 20 MHz – 13,8 100 MHz – 33,0

Other characteristics

ETL qualified

Halogen Free Flame Retardant

Resitance to microbial/fungus growth acc. IEC60068-2-10 Environmental Testing – Test J degree of mould growth 1

Flame retardant acc. to UL 1581, sec. 1090 (H)
Flame retardant acc. to IEC 60332-1-2

RoHS compliant (Directive 2011/65/EC)

Sunlight resistant acc. to UL444 sec. 7.12

Hydrolysis resistance

Highly flexible

Permissible temperature range for transport and fixed installation : -50°C up to 85°C
Permissible temperature range for installation and flexible use : -40°C up to 85°C

Humidity range : 5 – 93% at 40°C

Maximum pulling force : 800N

Min. bending radius allowed : repeated 8 X Ø single 4 X Ø

Weight : 61 kg/km

CAT.6 CABLE AND CORDSET

Description

This Cat.6 cable has been specially selected for fixed or deployable military or industrial application. Can be ordered as cordset with RJ45 at both end or as reel of cable. Its special Polyurethane jacket can withstand the harshest environnements.

How to order : Please refer to page 122 and 123

Design

Wire	Conductors	8 x 26 AWG Stranded tinned copper wires (Ø0,6mm)
	Insulation	Polyethylene (Ø1,0mm)
	Shield	Aluminate foil overlapped
	Colors	Pair 1 : White and blue Pair 2 : White and orange Pair 3 : White and green Pair 4 : White and brown

4 screened pairs twisted

Overall		Strain member of kevlar Plastic tapes, overlapped
Shield 1		Aluminate foil, overlapped
Shield 2		Tinned copper braid (Ø5,3mm) 80% coverage
Jacket	Insulation	Polyurethane (Ø6,9±0,3mm)
	Color	Black

Electrical characteristics at 20°c

Conductor resistance	≤ 960 Ohm/km
Resistance difference	2 %
Screen resistance	≤ 13 Ohm/km
Signal run time	≈ 4,6 ns/m
Insulation resistance	≥ 5 GOhm*km
Characteristic impedance 100MHz	(100 ±5) Ohm
Capacitance (1 kHz)	50 nF/km nom.

Capacity unbalanced to ground	≤ 1600 pF/Km	
Velocity of propagation	72 % nom.	
Skew	≤ 45ns/100m	
Operating voltage (peak)	≤ 100 V	
Test voltage (wire/wire/screen rms 50Hz 1min)	700 V	
Attenuation (dB/100m)	1 MHz – 3,1 4 MHz – 6,45 10 MHz – 9,9 16 MHz – 11,4	20 MHz – 12,8 100 MHz – 29,9 200 MHz – 43,7 250 MHz – 49,7

Other characteristics

Halogen Free Flame Retardant

Resitance to microbial/fungus growth acc. IEC60068-2-10 Environmental Testing – Test J degree of mould growth 1

Flame retardant acc. to UL 1581, sec. 1090 (H)
Flame retardant acc. to IEC 60332-1-2

RoHS compliant (Directive 2011/65/EC)

Sunlight resistant acc. to UL444 sec. 7.12

Hydrolysis resistance

Highly flexible

Permissible temperature range for transport and fixed installation : -50°C up to 85°C
Permissible temperature range for installation and flexible use : -40°C up to 85°C

Maximum pulling force : 800N

Min. bending radius allowed : repeated 10 X Ø single 5 X Ø

Weight : 55 kg/km

CAT.6A CABLE AND CORDSET

Description

This Cat.6A cable has been specially selected for fixed or deployable military or industrial application. Can be ordered as cordset with RJ45 at both end or as reel of cable. Its special Polyurethane jacket can withstand the harshest environnements.

How to order : Please refer to page 122 and 123

Design

Wire	Conductors	8 x 26 AWG Stranded tinned copper wires (Ø0,6mm)
	Insulation	Polyethylene (Ø1,0mm)
	Shield	Aluminate foil overlapped
	Colors	Pair 1 : White and blue Pair 2 : White and orange Pair 3 : White and green Pair 4 : White and brown
4 screened pairs twisted		

Overall		Strain member of kevlar
		Plastic tapes, overlapped
Shield 1		Aluminate foil, overlapped
Shield 2		Tinned copper braid (Ø5,3mm) 80% coverage
Jacket	Insulation	Polyurethane (Ø6,9±0,3mm)
	Color	Black

Electrical characteristics at 20°c

Conductor resistance	≤ 290 Ohm/km
Resistance difference	2 %
Screen resistance	≤ 13 Ohm/km
Signal run time	≈ 4,6 ns/m
Insulation resistance	≥ 5 GOhm*km
Characteristic impedance 100MHz	(100 ±5) Ohm
Capacitance (1 kHz)	50 nF/km nom.

Capacity unbalanced to ground	≤ 1600 pF/km	
Velocity of propagation	nom. 72%	
Skew	≤ 45 ns/100m	
Operating voltage (peak)	≤ 230 V	
Test voltage (wire/wire/screen rms 50Hz 1min)	≤ 700 V	
Attenuation (dB/100m)	1 MHz – 3,1 4 MHz – 5,7 10 MHz – 8,9 16 MHz – 11,2 20 MHz – 12,6	100 MHz – 28,7 200 MHz – 41,4 300 MHz – 51,4 400 MHz – 60,1 500 MHz – 67,9

Other characteristics

Halogen Free Flame Retardant

Resitance to microbial/fungus growth acc. IEC60068-2-10 Environmental Testing – Test J degree of mould growth 1

Flame retardant acc. to UL 1581, sec. 1090 (H)
Flame retardant acc. to IEC 60332-1-2

RoHS compliant (Directive 2011/65/EC)

Sunlight resistant acc. to UL444 sec. 7.12

Hydrolysis resistance

Highly flexible

Permissible temperature range for transport and fixed installation : -50°C up to 85°C
Permissible temperature range for installation and flexible use : -40°C up to 85°C

Maximum pulling force : 800N

Min. bending radius allowed : repeated 10 X Ø single 5 X Ø

Weight : 55 kg/km

CAT.7 CABLE AND CORDSET

Description

This Cat.7 cable has been specially selected for fixed or deployable military or industrial application. Can be ordered as cordset with RJ45 at both end or as reel of cable. Its special Polyurethane jacket can withstand the harshest environnements.

How to order : Please refer to page 122 and 123

Design

Wire	Conductors	8 x 26 AWG Stranded bare copper wires
	Insulation	Polyethylene (max Ø1,05mm)
	Shield	Aluminate foil overlapped
	Colors	Pair 1 : White and blue Pair 2 : White and orange Pair 3 : White and green Pair 4 : White and brown

4 pairs twisted

Overall		Strain member of kevlar
		Plastic tapes, overlapped
Shield		Tinned copper braid 80% coverage
Jacket	Insulation	Polyurethane (Ø7,0±0,3mm)
	Color	Black

Electrical characteristics at 20°c

Loop resistance	≤ 290 Ohm/km
Screen resistance	≤ 10 Ohm/km
Signal run time	≈ 5,3 ns/m
Insulation resistance	≥ 500 MOhm*km
Characteristic impedance 100MHz	(100 ±5) Ohm

Screening attenuation 30 – 600 MHz	≥ 90 dB	
Operating voltage (peak)	≤ 100 V	
Test voltage (wire/wire/screen rms 50Hz 1min)	700 V	
Attenuation (dB/100m)	1 MHz – 3,1 4 MHz – 5,7 10 MHz – 8,9 16 MHz – 11,2 20 MHz – 12,6	100 MHz – 28,7 200 MHz – 41,4 300 MHz – 51,4 400 MHz – 60,1 500 MHz – 67,9

Other characteristics

Halogen Free Flame Retardant

Resitance to microbial/fungus growth acc. IEC60068-2-10 Environmental Testing – Test J degree of mould growth 1

Flame retardant acc. to UL 1581, sec. 1090 (H)
Flame retardant acc. to IEC 60332-1-2

RoHS compliant (Directive 2011/65/EC)

Sunlight resistant acc. to UL444 sec. 7.12

Hydrolysis resistance

Highly flexible

Permissible temperature range for transport and fixed installation : -50°C up to 85°C
Permissible temperature range for installation and flexible use : -40°C up to 85°C

Maximum pulling force : 800N

Min. bending radius allowed : repeated 10 X Ø single 5 X Ø

Weight : 54 kg/km

CAT.7 VG95218T031 CABLE AND CORDSET

Description

This Cat.7 cable has been specially designed for fixed or deployable military or industrial application. Can be ordered as cordset with RJ45 at both ends or as reel of cable. Its special Polyurethane jacket can withstand the harshest environnements. Moreover, this Cat.7 cable is VG95218T031 approved.

How to order : Please refer to page 122 and 123

Design

Wire	Conductors	8 x 26 AWG Stranded bare copper wires
	Insulation	Polyethylene (max Ø1,05mm)
	Shield	Aluminate foil overlapped
	Colors	Pair 1 : White and blue Pair 2 : White and orange Pair 3 : White and green Pair 4 : White and brown

4 pairs twisted

Overall		Strain member of kevlar Plastic tapes, overlapped
Shield		Tinned copper braid 80% coverage
Jacket	Insulation	Thermoplastic copolymer (Ø7,0±0,3mm)
	Color	Black

Electrical characteristics at 20°c

Loop resistance	≤ 290 Ohm/km
Screen resistance	≤ 10 Ohm/km
Signal run time	≈ 5,3 ns/m
Insulation resistance	≥ 15 GOhm*km
Characteristic impedance 100MHz	(100 ±5) Ohm

Screening attenuation 30 – 600 MHz	≥ 90 dB	
Transfer impedance of screen (1 - 30 MHz)	≤ 10 Ohm/km	
Operating voltage (peak)	≤ 100 V	
Test voltage (wire/wire/screen rms 50Hz 1min)	700 V	
Attenuation (dB/100m)	1 MHz – 2,9 4 MHz – 5,5 10 MHz – 8,5 16 MHz – 10,8 20 MHz – 12,1	100 MHz – 27,8 155 MHz – 35,0 200 MHz – 40,1 300 MHz – 50,0 600 MHz – 73,3

Other characteristics

Acc. to VG95218TO31 type B001 C001 & C002

RoHS compliant (Directive 2011/65/EC)

Sunlight resistant acc. to UL444 sec. 7.12

Smoke-density acc. to IEC 61034-2

Halogen Free

Permissible temperature range for transport and fixed installation : -40°C up to 85°C
Permissible temperature range for installation and flexible use : -40°C up to 85°C

Maximum pulling force : 800N

Min. bending radius allowed : repeated 8 X Ø single 4 X Ø

Weight : 46 kg/km

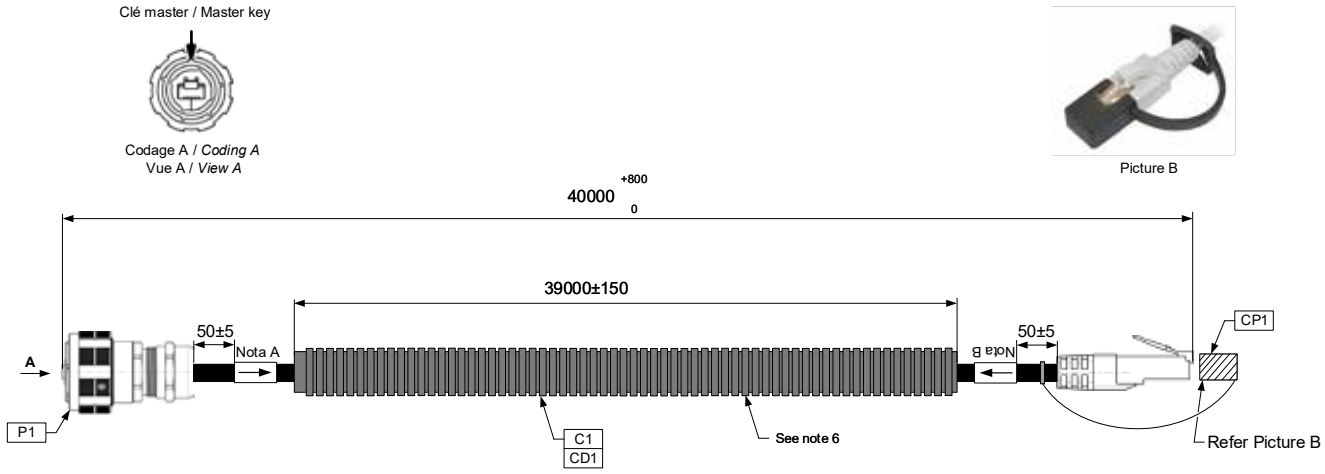
CABLE ASSEMBLY AND HANESSES

Description

We have the capabilities to supply complete solution of cable assemblies, harnesses, military cable reel and deployement system. Please consult us to define together your project.

Example of configuration

Armored ethernet cable



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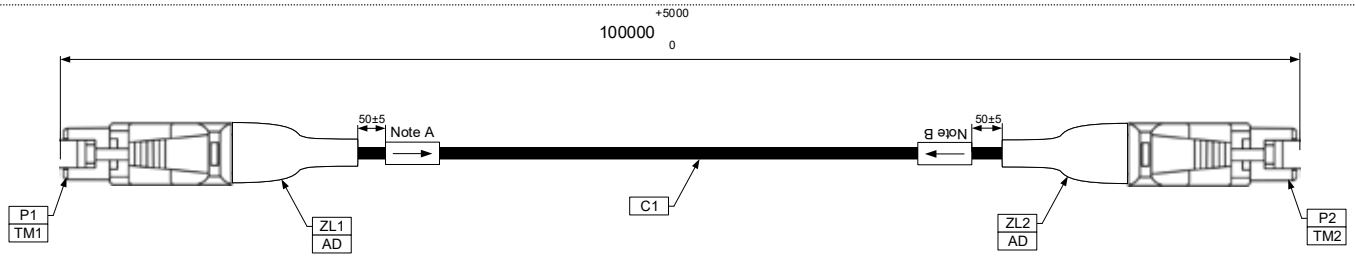

Secondary Winding

Lock the cable end using locking belt

A. Cable winding shall be done for 5 to 6M

Primary Winding

B. Wound remaining cable on Primary Winding

Note C Position

C. Reference for Note C position

A. Top View

B. Bottom View

C. Side View