



VAN DAMME TOURCAT CAT 7 SOLID S/FTP PUR



Van Damme TourCat Cat 7 S/FTP solid conductor is a polyurethane (PUR) jacketed 0.56 mm solid conductor cable with individually screened pairs and an 80% coverage overall braided screen. Suitable for Gigabit and 100 Mbit data and ethernet based digital audio & video transmissions to the maximum length shown in the Application Notes below.

Applications

- Long run cables for Ethernet and Ethernet based protocols
- Tough PUR jacket for robust touring and dynamic use
- Ideal for use with the Neutrik Cat 6_A Ethercon

Application Notes

- Meets the requirements of ISO/IEC 11801 Class F
- NB When terminated with an RJ45 connector the assembly will be rated as Cat 6_A only
- Suitable for Gigabit and 100 Mbit to a maximum recommended channel link distance of 105 metres
- Suitable for 10G Cat 6_A to a maximum recommended channel link distance of 95 metres
- Tested using a Fluke DTX1800 cable verifier. Longer runs are possible but are not guaranteed



Mechanical Specifications

Conductor	Material	Solid bare copper
	Overall diameter	0.56 ± 0.01 mm (0.246 mm ²) AWG 23
Dielectric	Material	Skin/Foam/Skin Polyethylene
	Diameter	1.33 ± 0.10 mm
Construction	4 x twisted pair	Pair 1: White-Blue, Pair 2: White-Orange, Pair 3: White-Green, Pair 4: White-Brown
Pair Screen	Material	Aluminium/Polyester foil
	Coverage	≥ 115 %
Common Drain Wire	Material	Solid tinned copper
	Overall Diameter	0.40 ± 0.10 mm
Overall Screen	Material	Tinned copper braid
	Stranding (mm)	0.12 x 16 x 9
	Coverage	80 ± 5 %
Overall Jacket	Material	Polyurethane (PUR)
	Colour	Jet Black RAL 9005
	Overall diameter	7.80 ± 0.20 mm

Physical Properties

Operating Temperature	-10 to +60 °C
-----------------------	---------------

Electrical Specifications

Characteristic Impedance (Ω)	1-100 MHz	100 ± 15				
	100-250 MHz	100 ± 20				
	250-600 MHz	100 ± 25				
Velocity of Propagation Skew		70 % nominal < 0.20 ns				
Resistance @20°C	Conductor	≤ 86 Ohms/km				
Frequency (MHz)	Attenuation (dB/100m)	NEXT (dB)	PSNEXT (dB)	ELFEXT (dB/100m)	PSELFEXT (dB/100m)	Return Loss (dB)
4	3.74	78.00	75.00	78.00	75.00	23.01
10	5.86	78.00	75.00	75.30	72.30	25.00
16	7.41	78.00	75.00	71.22	68.22	25.00
31.25	10.41	78.00	75.00	65.40	62.40	23.64
62.50	14.88	75.46	72.46	59.38	56.38	21.54
100	19.02	72.40	69.40	55.30	52.30	20.11
250	30.97	66.43	63.43	47.34	44.34	17.30
500	45.26	61.92	61.92	41.32	38.32	17.30
600	50.10	60.73	60.73	39.74	36.74	17.30



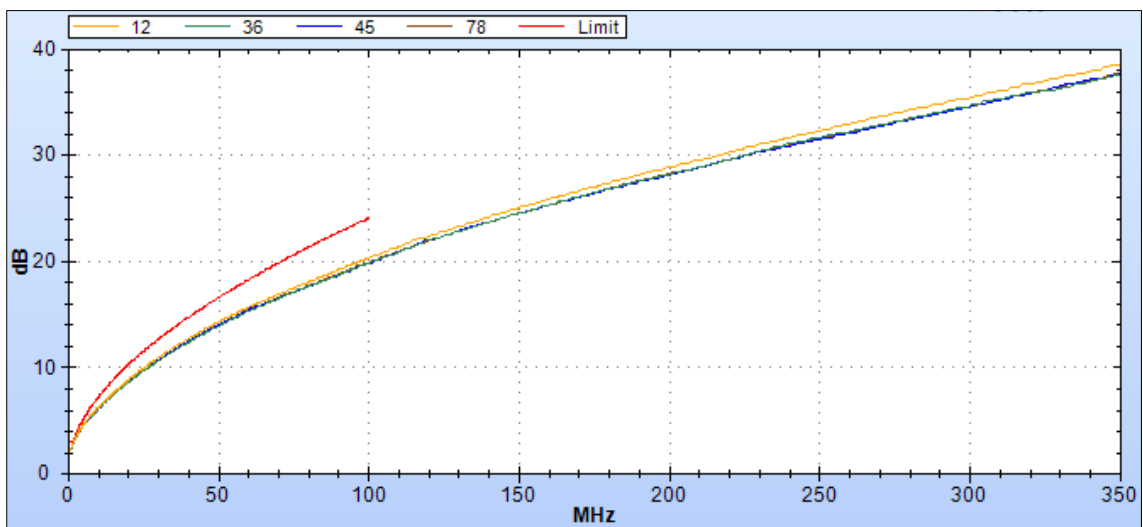
Electrical Specifications (cont.)

Fluke DTX1800 Test Results:

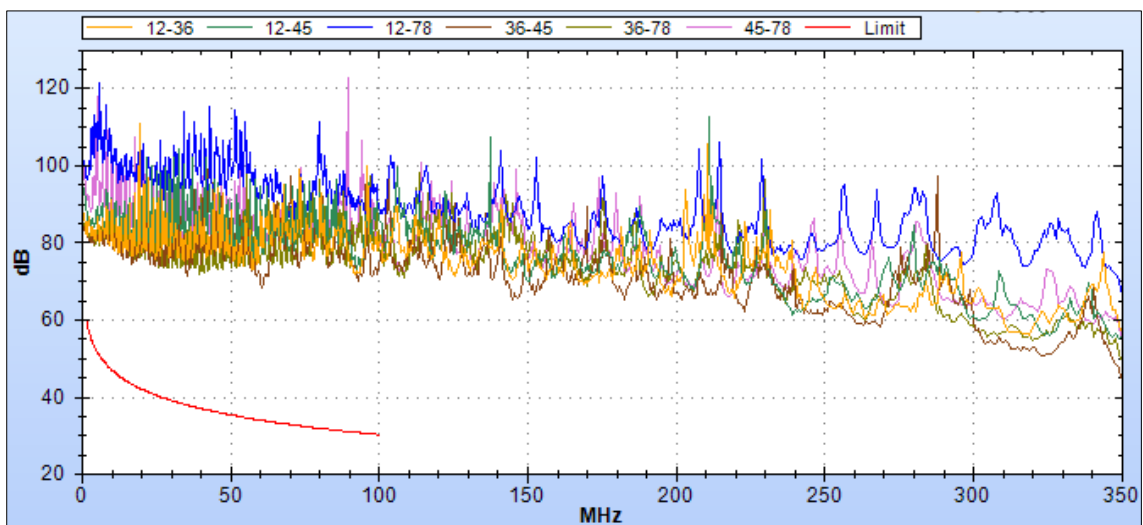
NB All test results are for 105 metres shielded RJ45 termination (S/FTP), Category 5E channel link

Category 6A 10G Fluke test results are available on request

ATTENUATION



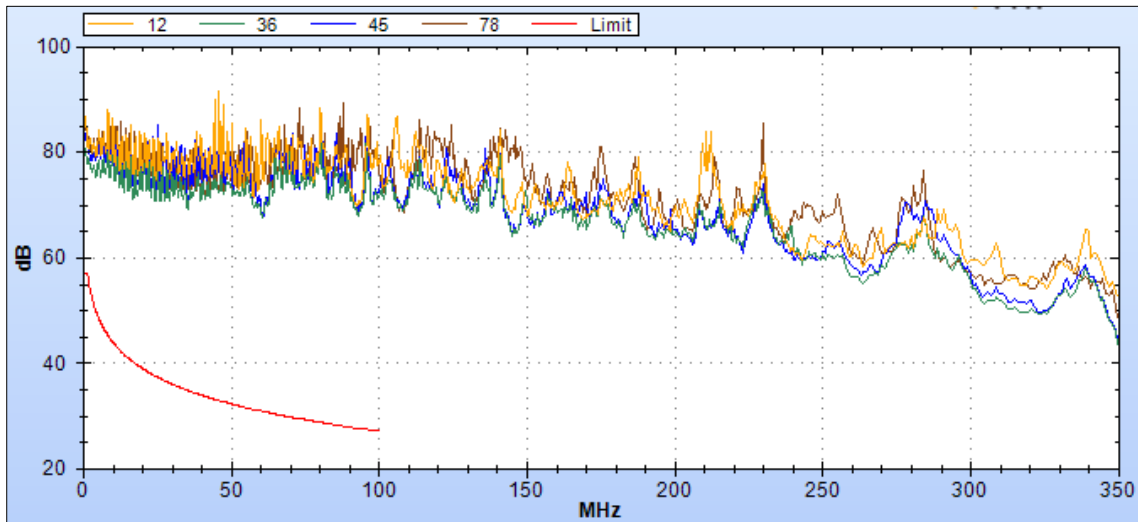
NEXT (Near End Cross Talk)



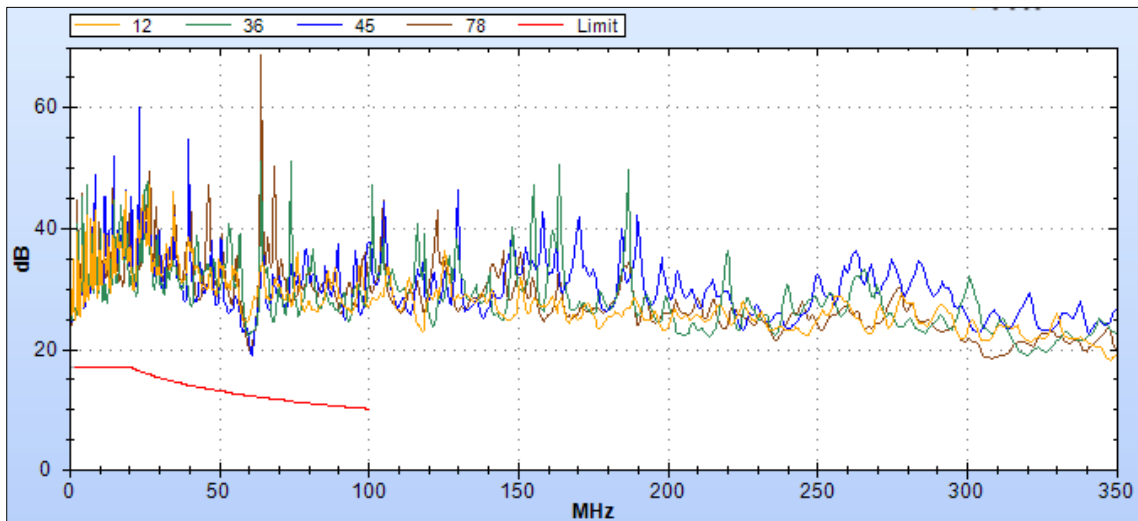


Electrical Specifications (cont.)

PS-NEXT (Power Sum Near End Crosstalk)



RETURN LOSS



Part Number & Description

Part number	Description	RAL code	Max. Reel length
268-470-000	Van Damme TourCat 7 Solid S/FTP	Jet Black RAL 9005	500m



Recommended RJ45 Connectors

Screened:

Van Damme Shielded Cat 6_A RJ45 (oversize conductors), part no. 351-000-000

Neutrik NE8MX6-T Ethercon cable connector (nickel)

Neutrik NE8MX6-B-T Ethercon cable connector (black)

Neutrik NE8FDX-Y6 Ethercon chassis IDC connector (nickel)

Neutrik NE8FDX-B-Y6 Ethercon chassis IDC connector (black)

Connector selection criteria:

Conductor size 23AWG solid; conductor diameter 1.33 mm; overall diameter 7.80 mm

Compliance

ISO/IEC 11801

RoHS 2 (2011/65/EU)

REACH

CPR Class Fca Not for installation use

Architectural Specification

Tour grade Category 6_A / Category 7 solid conductor PUR jacketed cable (field deployable)

The cable shall be a field deployable, polyurethane jacketed 23 AWG solid conductor Category 7 cable compliant with ISO/IEC 11801, with a conductor diameter of 1.33 mm and an overall diameter of 7.80 mm. The cable shall be designed for dynamic use and multiple rigging and de-rigging operations, and shall maintain Category 5E channel performance up to a length of 105 metres, and Category 6_A channel performance up to a length of 95 metres.

It shall be CPR Class Fca, and therefore not suitable for installation.