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**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.

KEY BENEFITS	MATERIALS	APPLICATIONS
 Extended distance transmission  Category 6A TIA/EIA-568-C-2  Tour Grade Construction	 Oxygen Free Copper  Polyurethane  Skin-Foam-Skin Dielectric	 Broadcast  Presentations  Live Sound

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### 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 6A 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 6A only
- Suitable for Gigabit and 100 Mbit to a maximum recommended channel link distance of 105 metres
- Suitable for 10G Cat 6A 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 Specification

Conductor	0.56 mm solid bare oxygen free copper
Conductor size	0.56 mm, 0.246 mm <sup>2</sup> , AWG 23
Dielectric	Skin/Foam/Skin Polyethylene
Diameter	1.33 ± 0.10 mm
Colour Code	Pair 1: White-Blue, Pair 2: White-Orange, Pair 3: White-Green, Pair 4: White-Brown
Pair Screen	Aluminium/Polyester foil > 115% coverage
Common Drain Wire	0.40 mm solid tinned copper
Overall Screen	0.12 mm x 16 x 9 tinned copper braid 80 ± 5 % coverage
Jacket	Polyurethane (PUR) Jet Black RAL 9005
Overall diameter	7.80 ± 0.20 mm
Bend radius	10 x overall diameter
Operating temperature	-20 to +80 °C

### Electrical Specification

Conductor resistance		≤ 86 Ohms/km
Characteristic Impedance (Ω)	1-100 MHz	100 ± 15
	100-250 MHz	100 ± 20
	250-600 MHz	100 ± 25
Capacitance (core to core)		54 pF/m
Velocity of Propagation		70 %
Skew		< 0.20 ns

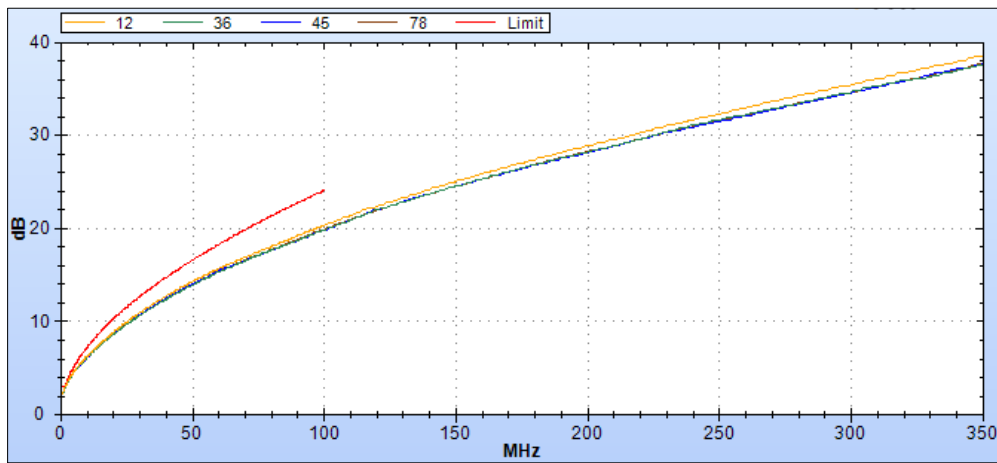
Frequency (MHz)	Attenuation (dB/100m)	NEXT (dB)	PSNEXT (dB)	ELFEXT (dB/100m)	PSELFEXT (dB/100m)	Return Loss (dB)
10	5.86	78.00	75.00	75.30	72.30	25.00
16	7.41	78.00	75.00	71.22	68.22	25.00
31.25	10.41	78.00	75.00	65.40	62.40	23.64
62.50	14.88	75.46	72.46	59.38	56.38	21.54
100	19.02	72.40	69.40	55.30	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

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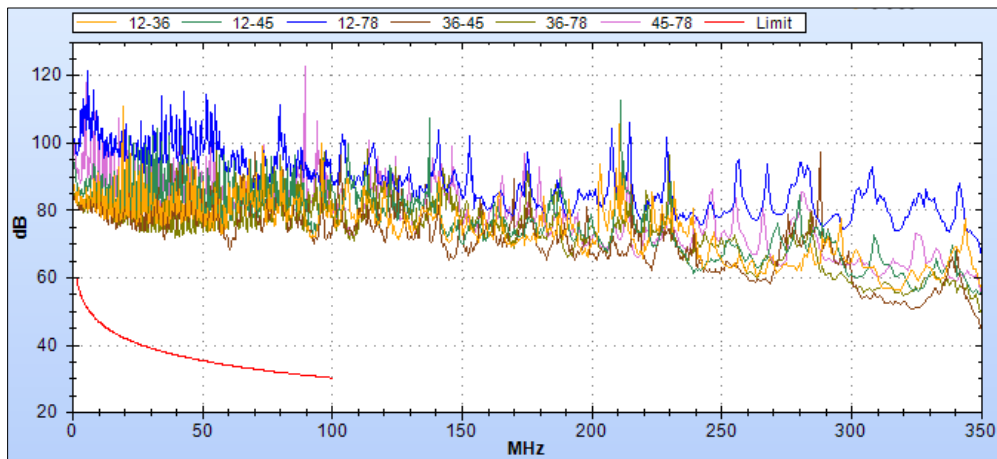
Fluke DTX1800 Test Results:

NB All test results are for 105 metres shielded RJ45 termination (S/FTP), Category 5E channel link  
**Red line denotes performance limits**

### ATTENUATION

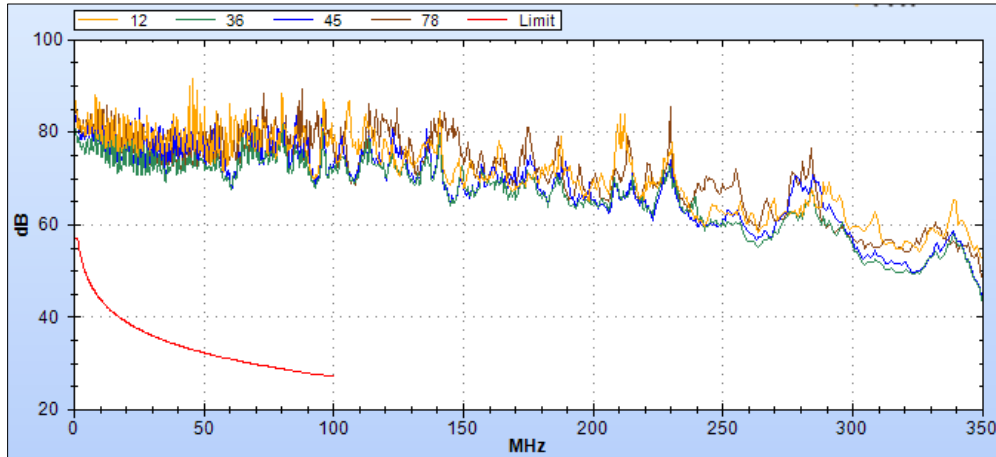


### NEXT (Near End Cross Talk)

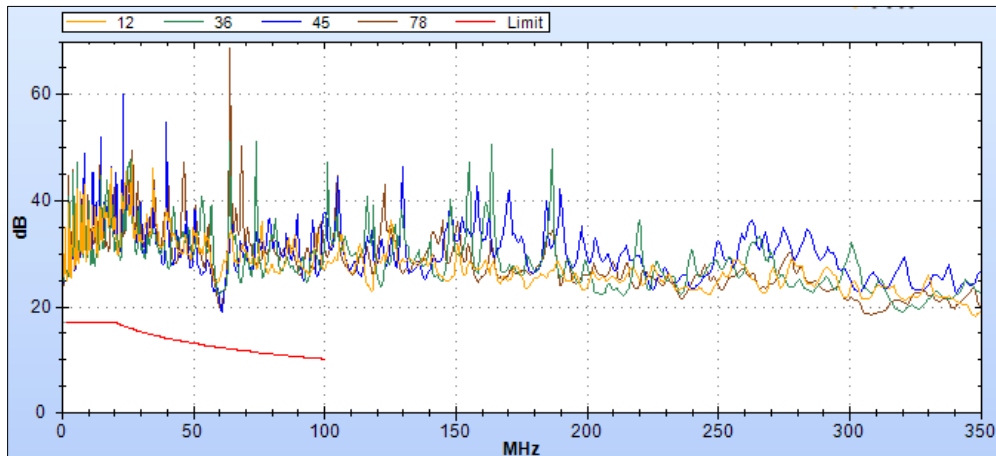


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### PS-NEXT (Power Sum Near End Crosstalk)



### RETURN LOSS



### Part Number & Description

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



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### Recommended RJ45 Connectors

Van Damme Shielded Cat 6A RJ45, part no. 351-000-000

Neutrik NE8MX6 Ethercon cable connector (nickel)

Neutrik NE8MX6-B 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 2011/65/EU

Restriction of Hazardous Substances

REACH

Registration, Evaluation, Authorisation and Restriction of Chemicals