42 TourCat Series Category cables





Widely expanded for this product release, the Tourcat Range now has 3 types of single Cat 5E cable and 2 multicore versions. Ethernet and Ethernet based protocols continue to proliferate in the professional and domestic audio visual market and the choice of products in the Tourcat Range now supports most applications.

The original Van Damme Tourcat is a flexible patch cable that has the feel and flexibility of Van Damme Microphone Cable.

Van Damme U/UTP Tactical Cat 5E is a rugged solid conductor unscreened cable with polyethylene cross member for touring use – ideal for longer runs.

Van Damme SF/UTP Tactical Cat 5E is a foil & braid screened version of the U/UTP Tourcat for long runs in electrically noisy environments.

In addition there are 2 multicore versions – one comprising 4 x Van Damme U/UTP Tourcat, and one with 2 x Van Damme U/UTP Tourcat cables and 4 AES/EBU screened pairs.

Applications

Van Damme Tourcat Flexible

- Patch cords and link cables for Ethernet and Ethernet based protocols
- Flexible and robust so ideal for touring and dynamic use
- Ideal for use with the Neutrik Ethercon

Van Damme Tourcat U/UTP solid conductor

- Long runs of Ethernet based Digital Audio signals
- Lower skew than standard Cat 5E offers improved performance with video and data baluns and active Cat X interfaces
- Ideal for use with the Neutrik Ethercon

Van Damme Tourcat SF/UTP solid conductor

- Foil and braid screened version of Tourcat U/UTP for electrically noisy environments
- Screening also offers greater mechanical strength
- Ideal for use with the Neutrik Ethercon

Van Damme Tourcat 4 way U/UTP multicore

- Ideal for use with cat 5E based digital consoles
- 4 individual Cat 5E cables for greater flexibility – run video or digital audio with control data in the same multicore

Van Damme Tourcat 2 x U/UTP 4 x AES/Analogue pair multicore

- One multicore solution for digital audio consoles – main digital audio multicore, redundancy, left and right returns and comms all in one cable
- Also ideal for balun or Cat X interface applications with AES/Analogue pairs for additional control, DMX or audio signals

Application notes

Van Damme Tourcat Flexible

- Meets the requirements of Category 5E TIA/EIA-568-B.2-2001
- Recommended maximum distance for 100MBits/s data rate is 75 metres; longer runs are possible but not guaranteed

Van Damme Tourcat U/UTP and SF/UTP solid conductor

- Exceeds the requirements of Category 5E TIA/EIA-568-B.2-2001

Van Damme Tourcat Multicores

- Multicores use the Van Damme Tourcat U/UTP cables
- Audio pairs in 268-460-402 suitable for AES/EBU digital or balanced analogue audio
- Cat 5E cable to cable crosstalk results in slightly reduced performance
- Cat 5E Cables still exceed the requirements of Category 5E TIA/EIA-568-B.2-2001

Single Tourcat Cables

Mechanical specifications

		Tourcat Flexible 268-450-000	Tourcat U/UTP 268-460-000	Tourcat SF/UTP 268-462-000
Conductor	Material	Bare oxygen free copper	Bare oxygen free copper	Bare oxygen free copper
	Size	7x 0.16mm (0.14mm²) AWG 26/7	1 x 0.53mm (0.22mm²) AWG24	1 x 0.53mm (0.22mm²) AWG24
Dielectric	Material	Polyethylene	Polyolefin	Polyolefin
	Diameter	0.94mm	1.05mm	1.05mm
Lay up		4 x twisted pairs to TIA 568B around polyolefin cross member	4 x twisted pairs to TIA 568B around polyolefin cross member	
Screen	Material	Aluminium/polyethylene foil	N/A	Aluminium/polyester foil + 82% coverage tinned copper braid
	Drain wire	7x 0.16mm (0.14mm²) AWG 26/7	N/A	N/A
Overall Jacket	Material	Flexible PVC Composite	Flexible cross-linked elastomer	Flexible cross-linked elastomer
		Jet Black RAL 9005	Jet Black RAL 9005	Jet Black RAL 9005
	Overall diameter	6.00mm	6.80mm	7.40mm
Bend radius		15 x overall diameter	15 x overall diameter	15 x overall diameter
Weight (Kg/km)		34	44.6	56.5

AES/EBU screened pair

Mechanical specifications

Conductor	Material	Bare oxygen free copper
	Size	7x 0.20mm (0.22mm²) AWG 24/7
Insulation	Type	Foil skin polyolefin
	Colour	Red/Black
Screen	Material	Aluminium/polyester foil
Drain wire		7x 0.20mm (0.22mm²) AWG 24/7
Overall Jacket	Material	PVC
	Overall diameter	4.00mm

cable

Electrical Specifications - elements

	268-450-000	268-460-000	268-462-000	268-460-402 AES pair
Dielectric test	1500Vdc x 1 min		500Vdc x 1 min	
Insulation resistance	>5000 MOhm/km		>9000 MOhm/km	
Conductor resistance	135 Ohms/km	88 Ohms/km		81 Ohms/km
Impedance	100 Ohms ± 10	100 Ohms ± 10	100 Ohms ± 10	110 Ohms ± 20%
Capacitance (core to core)	55pF/m	55pF/m		53pF/m
Skew	0.40 ns/m max	0.30 ns/m	0.30 ns/m	N/A

Cat 5E electrical specifications -attenuation

Attenuation	268-450-000 flexible	268-460-000 U/UTP	268-460-004/402	268-462-000 SF/UTP
MHz			db/100m	
1	3.20	2.00	2.00	2.30
4	6.50	4.00	4.10	4.80
10	9.90	6.30	6.40	7.60
16	12.30	7.50	7.80	9.10
20	13.80	9.00	9.00	10.50
31.25	17.70	10.40	10.70	11.90
62.50	25.70	16.80	17.50	18.00
100	33.00	21.80	23.40	24.80

Cat 5E electrical specifications -NEXT

NEXT	268-450-000 flexible	268-460-000 U/UTP	268-460-004/402	268-462-000 SF/UTP
MHz			db	
1	62	83	82	87
4	53	78	78	79
10	47	74	76	78
16	44	73	75	75
20	42	73	73	72
31.25	40	71	73	70
62.50	35	68	63	67
100	32	55	50	60

Mechanical Specifications – Multicores

Stock code	268-460-004	268-460-402
Description	Multicore comprising 4 x 268-460-000 U/UTP Cat 5E cables laid up with central thermoplastic fillers	Multicore comprising 2 x 268-460-000 U/UTP Cat 5E cables and 4 x EAS/EBU twisted pairs laid up with polyester fillers
Identification	Numbered 1 – 4	Cat 5E element numbered 1 – 2, AES pairs numbered 1 - 4
Overall Jacket	RAL 9005 Black special PVC Composite	RAL 9005 Black special PVC Composite
Overall Diameter	18.30mm	21.0mm
Bend Radius	15 x Overall Diameter	15 x Overall Diameter
Weight (Kg/km)	431	392

Description

Stock code	Description	Reel length
268-450-000	Van Damme Tourcat Cat 5E flexible stranded conductor	1,000m only
268-460-000	Van Damme Tourcat Cat 5E U/UTP solid conductor	500m
268-462-000	Van Damme Tourcat Cat 5E SF/UTP solid conductor	500m
268-460-004	Van Damme Tourcat 4 x U/UTP solid conductor multicore	500m
268-460-402	Van Damme Tourcat 2 x U/UTP solid conductor 4 x AES/EBU screened pair multicore	500m