

# ADTRONICS® AD-C4C6FU-450 MHz

Ethernet Cable CAT6 F/UTP

4P,LSZH, 450MHz AWG24



## Application

Primary (Campus), Secondary (Riser), Tertiary (Horizontal)

IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T;

IEEE 802.5 16 MB; ISDN; TPDDI; ATM

IEEE 802.3af Power over Ethernet (PoE) / IEEE 802.3at PoE+

## Standards

IEEE 802.3at : 10Base-T ; 100Base-TX ; 1000Base-T IEEE 802.5 / FDDI / ATM / RNIS

Class E compliant ANSI/TIA/EIA

IEC 61156-5 ed.2 / EN 50288-3-1 / EN 50174 / EN 50173-1

ISO/IEC 11801 2<sup>nd</sup>ed. / EIA/TIA 568-A/B2.10/C2

RoHS 2002/95/EC

## Fire Rating

PVC IEC 60332-1-2

LSZH IEC 60332-1-2; IEC 60754-1&2; IEC 61034-2

LSFRZH IEC 60332-1-2; IEC 60332-3-24; IEC 60754-1&2; IEC 61034-2

## Construction

Conductor	Bare copper wire Nom. $\varnothing$ 0.54 mm (AWG24)
Insulation	PE, Nom. $\varnothing$ 1.12 mm
Twisting	2 cores to the pair
Overall Screen	Aluminum Polyester Tape
Inner Sheath	Special Flame retardant and halogen free LSZH or LSFRZH
Sheath colour	PVC, LSZH, LSFRZH : GREY
Outer Diameter	Nom. 7.2 mm
Armouring	0.3mm Galvanised Steel Braid, Coverage 80%



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## Mechanical properties

Minimum bending radius	Installation	8 x D
	Installed	4 x D
Temperature range	during operation	-20°C up to + 75°C
	during installation	0°C up to + 50°C

## Electrical properties at 20°C± 5°C

loop resistance		≤ 176 Ω /km
Resistance unbalance		≤ 2%
Insulation resistance	(500 V)	≥ 5000 MΩ *km
Mutual Capacitance	at 800 Hz	Nom. 43 nF/km
Capacitance unbalance	(pair to ground)	≤ 1500 pF/km
Mean impedance	100 MHz	20.1dB
	250 MHz	8.47dB
Nominal velocity of propagation		Approx. 66 %
Propagation delay		Nominal ≤ 427 ns/100m
Delay skew		Nominal ≤ 12 ns/100m
Test voltage	(DC, 1 min) Core/Core and core/screen	1000 V

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## Electrical data (nominal) acc. to Cat.6 (at 20°C)

Frequency (MHz)	4	10	20	62.5	100	250	350	450**
Attenuation Max. (dB/100m)	3.8	6	8.5	15.5	19.9	33	38	43
Min. Next (dB)	69.3	63.3	58.8	51.4	48.3	42.3	41.2	40
PS-Next (dB)	66.3	60.3	55.8	48.4	45.3	39.3	38.6	37
ELFEXT (dB/100 m)	55	47	41	31	27	19	18	32
PS ELFEXT (dB/100 m)	53	45	39	29	25	17	16	29
Return Loss (dB)	23	25	25	22	20	17.3	16.8	21

## References

References	Description
AD-C4C6FUPVC-450MHz	Cable Cat. 6 F/UTP PVC, 450 MHz AWG 24, 6.8 mm
AD-C4C6FULSZH-450MHz	Cable Cat. 6 F/UTP LSZH, 450 MHz AWG 24, 6.8 mm