

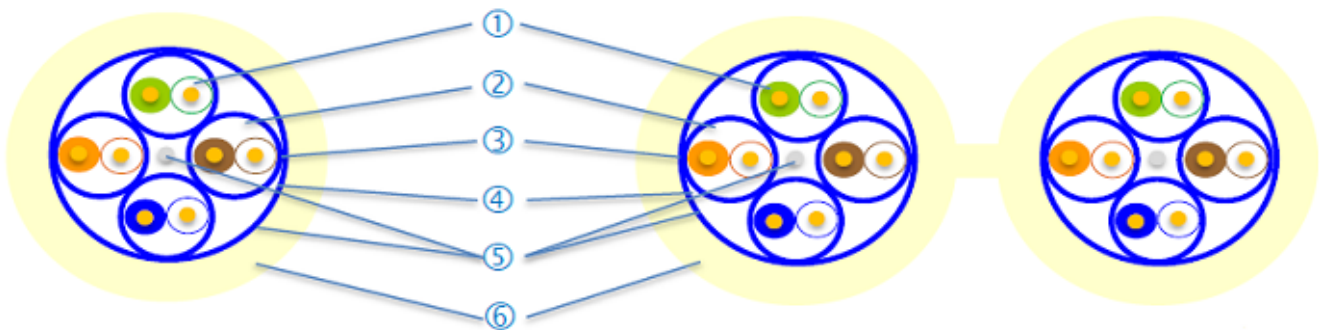
R7249A-T500 ACOLAN® COPPER

F/FTP Cat.6 450MHz 4P LSOH-FR DRUM 500m IVORY

APPLICATIONS

- 2,5 Gigabit high speed data transmission cables are designed for horizontal cable distribution local computer networks.
- These cables allow the use of the protocol supported by the E class applications.
- They are characterized of up to 450 MHz.
- They are compatibles with PoE, PoE+ & UPoE applications.

GENERAL CHARACTERISTICS



1. Conductor	Solid annealed red copper wire AWG 23 Foam skin Pe insulation $\varnothing \leq 1.45$ mm
2. Cable element	Cable assembly in Twisted Pairs
3. Pair screening	Pet/Alu foil around each pair
4. Stranding	4 pairs screening assembly
5. Screen	Pet/Alu foil and tinned drain wire AWG26
6. External sheath	LSOH-FR: Low Smoke « Zero » Halogen - Flame Retardant

GENERAL

Designation ACOLAN	Ref.	Colour	Diameter	Weight	Superior calorific capacity (PCS)		Max pulling tension
			mm	Kg/km	MJ/km	KWh/m	N
450 FF 4P LSOH-FR	R7249A	Ivory	7.30	53	550	0,153	98
450 FFD 2x4P LSOH-FR	R7287A	Ivory	7.30 x 15.30	102	1125	0,312	196

MECHANICAL

Characteristics		Values
Bending radius	Dynamic (installation)	≥ 60 mm
	Static (installed)	≥ 30 mm
Temperature range	In service	- 20°C à + 60°C
	At the installation	0°C à + 50°C
	Transport and storage	0°C à + 50°C

ELECTRICAL

Electrical characteristics at 20°C

Characteristics		Values
Complete conductor resistance		≤ 146.4 Ω / km
Resistance unbalance		≤ 2 %
Dielectric strength	Continuous current	1kV during 1 minute = No breakdown
Insulation resistance	(500 V)	≥ 5000 MΩ . km
Capacitance unbalance	Real-ground	≤ 1600 pF / km
Characteristic impedance	à 100 MHz	100 ± 5 Ω
Velocity	nominal	78%
Coupling attenuation		≥ 70 dB
Transfer impedance	à 1 MHz	≤ 30 mΩ / m
	à 10 MHz	≤ 30 mΩ / m
	à 30 MHz	≤ 50 mΩ / m
	à 100 MHz	≤ 100 mΩ / m
Segregation classification acc. EN 50174-2		"c"

Transmission characteristics at 20° C

Frequency (MHz)		4	10	20	62.5	100	250	300**	450**
Attenuation (dB/100m)	Typical value	3.6	5.7	8.3	14.8	19	31	34	43
	Imposition (max)*	3.8	6	8.5	15.5	19.9	33	-	-
Next (dB)	Typical value	90	90	90	90	90	83	82	80
	Imposition (min)*	65.3	59.3	54.8	47.4	44.3	38.3	-	-
ACR (dB)	Typical value	86.4	84.3	81.7	75.2	71	52	48	37
	Imposition (min)*	61.5	53.3	46.3	31.9	24.4	5.3	-	-
PS Next (dB)	Typical value	87	87	87	87	87	80	79	77
	Imposition (min)*	63.3	57.3	52.8	45.4	42.3	36.3	-	-
ELFEXT (dB/100 m)	Typical value	80	80	79	77	73	65	64	60
	Imposition (min)*	58	50	44	34.1	30	22	-	-
PS ELFEXT (dB/100 m)	Typical value	77	77	76	74	70	62	61	57
	Imposition (min)*	55	47	41	31.1	27	19	-	-
Return Loss (dB)	Typical value	26	28	28	26	24	22	19	19
	Imposition (min)*	23	25	25	21.5	20.1	17.3	-	-

* Category 6 according IEC 61156-5

** For information only

NORMS AND STANDARDS

GENERAL



Applications

- IEEE 802.3 :10Base-T; 100Base-TX;1000Base-T; 2,5GBase-T
- IEEE 802.3 af (PoE) / 802.3 at (PoE+)
- IEEE 802.5 / FDDI / ATM / RNIS

Cables

- IEC 61156-5 ed.2 / EN 50288-5-1

Cabling System standards

- ISO 11801 2nd ed. / EN 50173-1 / TIA 568.2-D

Cabling System installation standards

- EN 50174

Directive / Regulation

- RoHS 2011/65/UE
- REACH 1907/2006/EC

EUROCLASS



Fire behaviour

Europe

Type	Euroclass	Standards	Declaration of performance
4P	Dca-s2,d2,a1	IEC 60332-1, EN 50399, IEC 60754-2	17FFTP001
2x4P			17FFTP005

Outside Europe

No flame propagation	IEC 60332-1 / EN 60332-1
Low smoke opacity	IEC 61034-2 / EN 61034-2
Low gas corrosivity	IEC 60754-2 / EN 60754-2
Low toxicity	IEC 60754-1 / EN 60754-1

RECOMMENDATIONS

DELIVERY LENGTH

Type	References	Unitaire			Expedition		
		Type	Weight	EAN code	Quantity	Weight	EAN code
4P LSOH-FR	R7249A-T500	Touret KT de 500 m	29 kg	3700223666744	18 tourets	529 kg	3700223631575
	R7249A-T1000	Touret XL de 1000 m	58 kg	3700223666751	4 tourets	246 kg	3700223631582
2 x 4P LSOH-FR	R7287A-T500	Touret XL de 500 m	58 kg	3700223666768	4 tourets	238 kg	3700223631834
	R7287A-T1000	Touret AC de 1000 m	112 kg	3700223666775	4 tourets	460 kg	3700223631841