

R8481A-T1000 ACOLAN® COPPER

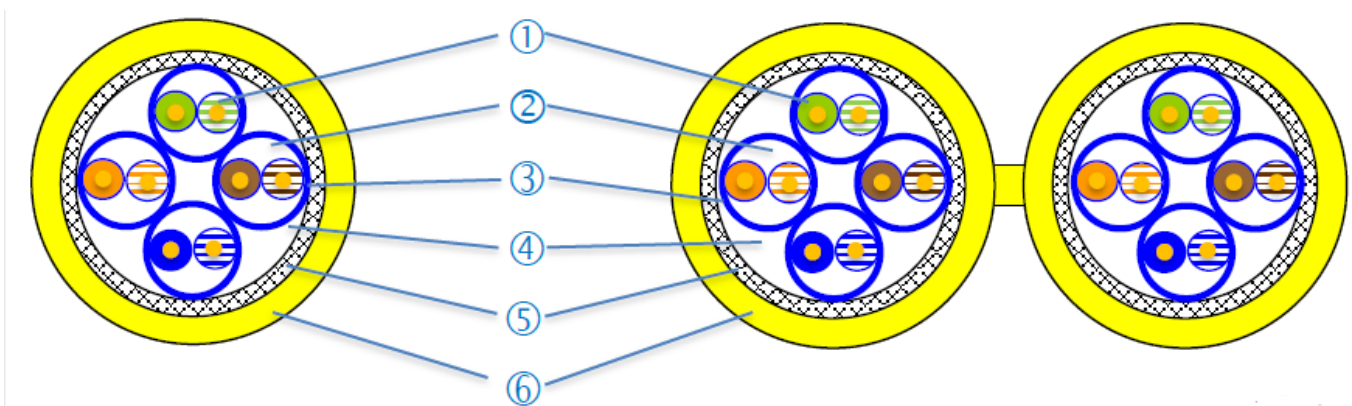
S/FTP Cat.7a 1500 MHz 4P LSOH-FR DRUM 1000m YELLOW

APPLICATIONS

- 10 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 class FA for the 10 GBASE-T applications.
- They are characterized of up to 1500 MHz.
- They are compatibles with PoE & PoE+, UPoE & 4PPoE (PoE++) applications.

See our White Paper on installation conditions on www.acle.com also available on demand.

GENERAL CHARACTERISTICS



1. Conductor	Solid annealed red copper wire, AWG 22 Foam skin Pe insulation $\delta \leq 1.52$ 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	Tinned copper braid
6. External sheath	LSOH-FR : Low Smoke « Zero » Halogen - Flame Retardant

GENERAL

Designation ACOLAN FIREPROTECT	Ref.	Colour	Diameter	Weight	Superior calorific capacity (PCS)		Max pulling tension
			mm	Kg/km	MJ/km	KWh/m	N
1500 SF-S 4P LSOH-FR	R8481A	Yellow	7.70	57	521	0,145	125
1500 SFD-S 4P LSOH-FR	R8482A	Yellow	7.90 x 16.00	124	1169	0,325	250

MECHANICAL

Characteristics		Values
Bending radius	Dynamics (installation)	≥ 70 mm
	Static (installed)	≥ 35 mm
Temperature range	In service	- 20°C at + 60°C
	At the installation	0°C at + 50°C
	Transport and storage	0°C at + 50°C

ELECTRICAL

Electrical characteristics at 20°C (68°F)

Characteristics		Values	
Complete conductor resistance		$\leq 120 \Omega / \text{km}$	
Resistance unbalance		$\leq 2 \%$	
Dielectric strength	Continuous current	1kV during 1 minute = no breakdown	
Insulation resistance	(500 V)	$\geq 5000 \text{ M}\Omega \cdot \text{km}$	
Capacitance unbalance	Real-ground	$\leq 1200 \text{ pF} / \text{km}$	
Characteristic impedance	at 100 MHz	$100 \pm 5 \Omega$	
Velocity	nominal	78%	
Coupling attenuation		$\geq 85 \text{ dB}$	TYPE 1b
Transfert impedance	at 1 MHz	$\leq 10 \text{ m}\Omega / \text{m}$	GRADE 1
	at 10 MHz	$\leq 10 \text{ m}\Omega / \text{m}$	
	at 30 MHz	$\leq 20 \text{ m}\Omega / \text{m}$	
	at 100 MHz	$\leq 30 \text{ m}\Omega / \text{m}$	
Segregation classification acc. to EN 50174-2		"d"	

Frequency (MHz)		4	10	20	62.5	100	250	300	600	1000	1200	1500**
Attenuation. (dB/100m)	Typical value	3.4	5.2	7.4	13.4	16.8	27.4	30	43.0	57.8	64.0	73.0
	Imposition (max)*	3.7	5.8	8.2	14.6	18.5	29.7	32.7	47.1	61.9	-	-
Next (dB)	Typical value	100	100	100	100	100	92	90	87	85	83	80
	Imposition (min)*	75	75	75	75	73	67	66	61	58	-	-
PS Next (dB)	Typical value	97	97	97	97	97	89	87	84	82	80	77
	Imposition (min)*	75	75	75	73	70	64	63	58	55	-	-
ELFEXT (dB/100 m)	Typical value	90	90	85	84	80	72	69	61	56	53	50
	Imposition (min)*	78	74	68	58	54	46	44	38	34	-	-
PS ELFEXT (dB/100 m)	Typical value	87	87	82	81	77	69	66	58	53	50	47
	Imposition (min)*	75	71	65	55	51	43	41	35	31	-	-
Return Loss (dB)	Typical value	26	28	28	28	26	24	22	19	18	18	17
	Imposition (min)*	23	25	25	21.5	20.1	17.3	17.3	17.3	15.1	-	-

* Category 7a according IEC 61 156-5 Ed. 2nd

** For information only

NORMS AND STANDARDS

GENERAL



Applications

IEEE 802.3 :10Base-T; 100Base-TX;1000Base-T; 2,5GBase-T ; 5GBase-T ; 10GBase -T

IEEE 802.3 af (PoE) / 802.3 at (PoE+) / 802.3 bt (4PPoE 90W)

IEEE 802.5 / FDDI / ATM / RNIS

Cable

IEC 61156-5 ed.2 / EN 50288-9-1

Cabling system standard

ISO/IEC 11801 2nd ed. / EN 50173-1

Cabling system installation standards

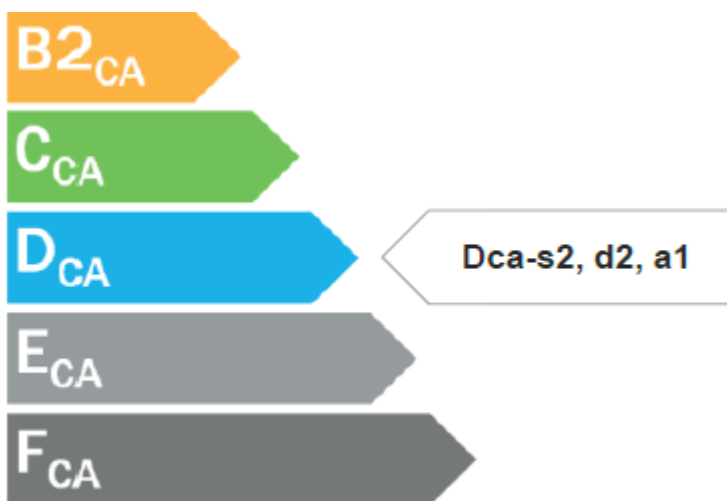
EN 50174

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	20SFTP018
2x4P			20SFTP019

Hors 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	Individual			Expedition		
		Type	Weight	EAN code	Quantity	Weight	EAN code
4P LSOH-FR	R8481A-T500	Drum KT of 500 m	31 kg	3700223642267	12 drums	389 kg	3700223642274
	R8481A-T1000	Drum XL of 1000 m	62 kg	3700223644384	4 drums	262 kg	3700223644377
2 x 4P LSOH-FR	R8482A-T500	Drum XL of 500 m	67 kg	3700223644278	4 drums	282 kg	3700223644285