

ACOLAN[®] FU550

Horizontal cable 10 Gigabit Ethernet F/UTP
550 MHz - Category 6a - 4P LSOH



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 EA class for the 10 GBASE-T applications.
- They are characterized of up to 550 MHz.

Additional information and references

Type	Reference	Colour	Max diameter (mm)	Weight (kg/km)	Reel packaging	Palette packaging
ACOLAN [®] 550 FU 4P LSOH	R7291	Ivoire	6.70	48	500m T KC 27 kg	18 T KC 489 kg

Product	Superior Calorific Capacity (PCS)	Max. pulling tension (N)
4P	710 MJ/Km 0,197 KWh/m	80

Directives/standard

Applications	Cables	Cabling System standard	Cabling system installation standards	Directive
IEEE 802.3 IEE 802.5 FDDI ATM RNIS	IEC 61156-5 ed.2 Draft EN 50288-10	IS 11801 ed.2 EN 50173-1 EIA/TIA 568	EN 50174	RoHS 2002/95/EC

Fire resistance

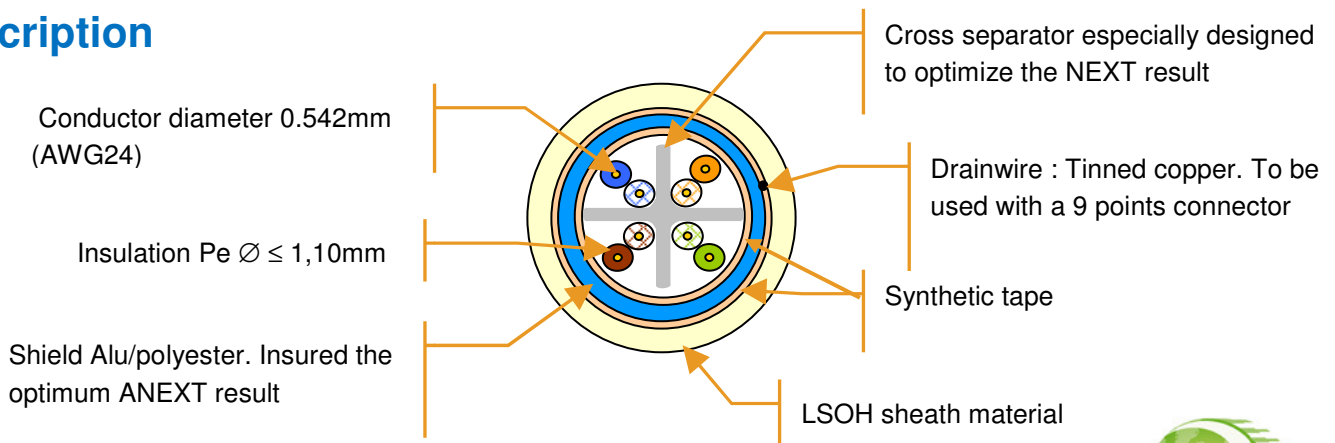
Sheath LSOH

IEC 60332-1
NF C 32-070 2.1 (C2) - NF C 32-070 2.2 (C1)
(low smoke emission)
IEC 60754-1
IEC 60754-2
IEC 61034

ACOLAN[®] FU550

Horizontal cable 10 Gigabit Ethernet F/UTP
550 MHz - Category 6a - 4P LSOH

Description



Colour code

- Blue + White/Blue
- Orange + White/Orange
- Green + White/Green
- Brown + White/ Brown

Mechanical characteristics

Characteristics		Value
Bending radius	Dynamic (installation)	≥ 50 mm
	Static (installed)	≥ 25 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

ACOLAN[®] FU550

Horizontal cable 10 Gigabit Ethernet F/UTP
550 MHz - Category 6a - 4P LSOH

Electrical characteristics at 20 °C

Characteristics		Value
Complete conductor resistance		≤ 190 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	at 100 MHz	100 ± 5 Ω
Velocity	nominal	78 %
Transfer impedance	at 1 MHz	≤ 40 mΩ / m
		≤ 40 mΩ / m
		≤ 50 mΩ / m
		≤ 200 mΩ / m

Transmission characteristics at 20 °C

(indicatives values not contractual pending of the standardization)

Frequency (MHz)		4	10	20	62.5	100	250	500	550**
Max. attenuat. (dB/100m)	Typical value	3.6	5.6	8	14.2	18.1	28.9	41.2	43.5
	<i>Cat. 6a[*] (max.)</i>	3.8	5.9	8.4	15	19.1	31.1	45.3	-
Next (dB)	Typical value	71	65	61	53	50	44	40	39
	<i>Cat. 6a[*] (min.)</i>	66.3	60.3	55.8	48.4	45.3	39.3	34.8	-
PS Next (dB)	Typical value	68	62	58	50	47	41	37	36
	<i>Cat. 6a[*] (min.)</i>	63.3	57.3	52.8	45.4	42.3	36.3	31.8	-
ELFEXT (dB/100 m)	Typical value	73	65	59	49	45	37	31	30
	<i>Cat. 6a[*] (min.)</i>	58	50	44	34.1	30	22	16	-
PS ELFEXT (dB/100 m)	Typical value	70	62	56	46	42	34	28	27
	<i>Cat. 6a[*] (min.)</i>	55	47	41	31.1	27	19	13	-
Return Loss (dB)	Typical value	27	27	27	25.8	25	22	18	17
	<i>Cat. 6a[*] (min.)</i>	23	25	25	21.5	20.1	17.3	17.3	-
PS ANEXT (dB)	Typical value	85	85	80	75	75	75	75	75
	<i>Cat. 6a[*] (min.)</i>	76.5	72.5	69.5	64.5	62.5	56.5	52	-

* Category 6a acc. to Draft IEC 61156-5 Ed.2

** For information only