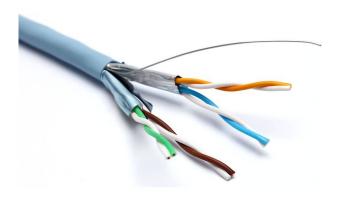
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	Cat6A	colid	conno	r cabla
\sim	CalbA	SOIIG	coppe	Cable

$-\mathbf{x}$	II/ETD	no ovoral	I screening
	U/FIF	TIO OVELAI	1 SCIEELIII IQ

7			
X	S-Foil	screened	pairs

X Reaction-to-fire class according to EN 13501-6: Dca



Product Overview

Excel Solid Caregory 6A cable screened U/FTP LSOH S-Foil CPR Euroclass Dca designed and manufactured to meet and exceed the ISO, CENELEC and TIA standards and supplied on 305 m boxes. Excel Cat6A screened (U/FTP) cable takes the performance capabilities of copper infrastructure to new levels.

This delivers Class EA/Augmented Category 6 link performance over distances of up 90 metres which supports the applications including 10GBASE-T, 10 Gigabit Ethernet. Each cable consists of two sets of two pairs are wrapped together in an "S" configuration with high quality, strong, aluminium/polyester foil tape providing screening for each pair.

The "S" Foil configuration ensures separation of the pairs that ensures the performance. The individual pairs are set to different lay lengths to ensure optimum performance.

Product Specifications

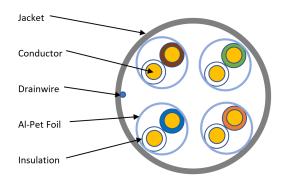
Feature	Values
Conductor surface	Bare
AWG size	23
Conductor category	Class $1 = solid$
Total number of cores	8
Stranding element	Pairs
Specification core insulation	Polyethylene (PE)
Core identification	Colour

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Overall screening	None
Conductor screening	Foil
Outer sheath material	Copolymer, thermoplastic (LS0H)
Outer sheath colour	Ice blue
Flame retardant according to IEC 60332-1-2	yes
Reaction-to-fire class according to EN 13501-6	Dca
Smoke development class according to EN 13501-6	s2
Euro class flaming droplets/particles according to EN 13501-6	d2
Euro class acidity according to EN 13501-6	al
Outer diameter approx.	6.7 mm
Installation Temperature Range	060 °C
Operating Temperature Range	-2060 °C
Category	6A (IEC)
NVP value	78 %

Cross-section diagram



Cable specifications

Features	Values
Dielectric strength	2.5 kV for 2s
Maximum Pulling Load	60 N/6.1 kgF
MBR during installation	8x cable OD
MBR installed	4x cable OD
Impedance (Ω)	100±15

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Conductor resistance ($\Omega/100$ m)	≤9.5
DC resistance unbalance (%)	≤4
Pair-to-ground capacitance unbalance (pF/km)	≤1600
Insulation resistance	>5000

Performance parameters

Freq. (MHz)	Ins. Loss	RL (dB)	NEXT	ACR-F	PS NEXT	PS ACR-F	Delay Skew	Prop. Delay
	(dB / 100m) Max.	Min.	(dB / 100m) Min.	(dB / 100m) Min.	(dB / 100m) Min.	(dB / 100m) Min.	(ns / 100m) Max.	(ns / 100m) Max.
1	-	20	-	-	-	-	-	-
4	3.8	23	66.3	56	63.3	53	45	552
10	5.9	25	60.3	48	57.3	45	45	545.4
16	7.5	25	57.2	43.9	54.2	40.9	45	543
20	8.4	25	55.8	42	52.8	39	45	542
31.25	10.5	24.3	52.9	38.1	49.9	35.1	45	540.4
62.5	15	23.6	48.4	32.1	45.4	29.1	45	538.6
100	19.1	21.5	45.3	28	42.3	25	45	537.6
200	27.6	18	40.8	22.2	37.8	19	45	536.5
250	31.1	17.3	39.3	20	36.6	17	45	536.3
300	34.3	17.3	38.1	18.5	35.1	15.5	45	536.1
400	40.1	17.3	36.3	16	33.3	13	45	535.8
500	45.3	17.3	34.8	14	31.8	11	45	535.6

Standards

Applicable standard	Subject
ISO/IEC 11801-1:2017	Information technology - Generic cabling for customer premises: Part 1 General Requirements
IEC 61156-5:2009+AMD1:2012 CSV	Multicore and symmetrical pair/quad cables for digital communications - Part 5: Symmetrical pair/quad cables with transmission characteristics up to 1 000 MHz - Horizontal floor wiring - Sectional specification

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EN 50173-1:2018	Information technology. Generic cabling systems - General requirements
EN 50173-2:2007 + A1:2010	Information technology. Generic cabling systems - Office premises
BS EN 50288-6-1:2013	Multi-element metallic cables used in analogue and digital communication and control. Sectional specification for unscreened cables characterised up to 250 MHz
EN 50399:2011+A1:2016	Common test methods for cables under fire conditions. Heat release and smoke production measurement on cables during flame spread test. Test apparatus, procedures, results
IEC 60332-1-1:2004	Tests on electric and optical fibre cables under fire conditions - Part 1-1: Test for vertical flame propagation for a single insulated wire or cable - Apparatus
IEC 60332-1-2:2004	Tests on electric and optical fibre cables under fire conditions. Test for vertical flame propagation for a single insulated wire or cable. Procedure for $1\ kW$ pre-mixed flame
ANSI/TIA 568-2.D	Balanced Twisted-Pair Telecommunications Cabling and Components Standards
IEC 60754-2:2011	Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH measurement) and conductivity
IEC 61034-1:2005	Measurement of smoke density of cables burning under defined conditions - Part 1: Test apparatus
IEC 61034-2:2005+A1:2013	Measurement of smoke density of cables burning under defined conditions - Part 2: Test procedure and requirements
EN 50575:2014 + A1:2016	Power, control and communication cables — Cables for general applications in construction works subject to reaction to fire requirements
RoHS-II/-III (2011/65/EU & 2015/863): 2023	Our products, demonstrate full adherence to the regulatory stipulations of the EU Directive 2011/65/EU (RoHS-II) and its corresponding delegated directive 2015/863 (RoHS-III).
WFD: 2023	Compliant to Waste Framework Directive
SCIP: 2023	Compliant - Does Not Contain Substances of Concern In articles as such or in complex objects (Products)
POPs (EU) No 2019/1021	EU Regulation for the restriction of Persistent Organic Pollutants.

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Part Number Table

Part Number	Description
100-191-305M	Excel Solid Cat6A Cable U/FTP S-Foil LSOH CPR Euroclass Dca 305 m Reel Aqua

Excel is a world class premium performing end to end infrastructure solution designed, Manufactured, supported and delivered without compromise.



Contact us at sales@excel-networking.com

E&OE. Excel is a registered trade name of Mayflex Holdings Ltd.