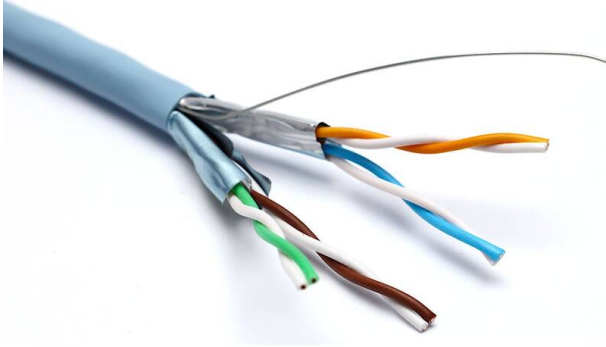


# Excel Solid Cat6A Cable U/FTP S-Foil LSOH CPR Euroclass Dca 305 m Reel Aqua

Item Code: 100-191-305M

**excel**  
without compromise.



Cat6A solid copper cable

U/FTP no overall screening

S-Foil screened pairs

Outer sheath colour: aqua

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

Smoke development class according to EN 13501-6: s2

## Product Overview

Excel Solid Category 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 to 90 metres which supports the applications including 10GBASE-T, 10 Gigabit Ethernet. Each cable consists of two sets of two pairs wrapped together in an "S" configuration with high quality, strong, aluminium/polyester foil tape providing screening for each pair.

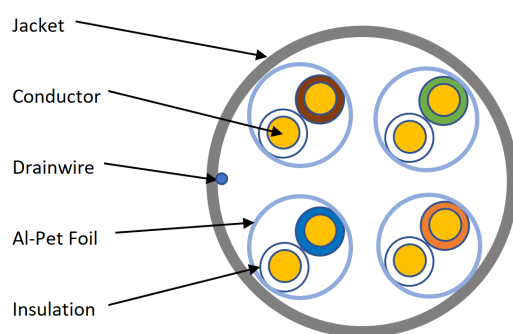
The "S" Foil configuration ensures separation of the pairs that ensures the performance. The individual pairs are set to different lay lengths to ensure optimum performance.

## 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
Overall screening	None
Conductor screening	Foil
Outer sheath material	Copolymer, thermoplastic (LSOH)
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	a1
Outer diameter approx.	6.7 mm
Installation Temperature Range	0...60 °C
Operating Temperature Range	-20...60 °C
Category	6A (IEC)
NVP value	78 %

### Cross-section diagram



### Cable specifications

Features	Values
Maximum Pulling Load	60 N/6.1 kgF
MBR during installation	8x cable OD
MBR installed	4x cable OD
Impedance (Ω)	100±15

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

## Performance parameters

Freq. (MHz)	Ins. Loss (dB / 100m) Max.	RL (dB) Min.	NEXT (dB / 100m) Min.	ACR-F (dB / 100m) Min.	PS NEXT (dB / 100m) Min.	PS ACR-F (dB / 100m) Min.	Delay Skew (ns / 100m) Max.	Prop. Delay (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

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
Directive 2011/65/EU (RoHS II)	Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment — compliant. Applies within EU member states).
Directive (EU) 2015/863 (RoHS III)	Amending Directive 2011/65/EU to add four phthalates (DEHP, BBP, DBP, DIBP) to Annex II — compliant.
Directive 2008/98/EC (WFD)	Waste Framework Directive — compliant. Implemented in the UK through the Waste (England and Wales) Regulations 2011 (SI 2011 No. 988).
ECHA SCIP Database	Compliant; product does not contain SVHCs (Substances of Very High Concern) as defined under REACH Article 33(1). Submission obligations met under EU REACH and UK REACH.
Regulation (EU) 2019/1021 (POPs)	EU Regulation on Persistent Organic Pollutants —

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compliant. For Great Britain, compliance is aligned with the Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020 (SI 2020 No. 1355).

UK SI 2012 No. 3032

The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (UK RoHS) — compliant for Great Britain. Retained EU law, as amended by the Product Safety and Metrology (Amendment etc.) (EU Exit) Regulations 2019.

### 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](mailto:sales@excel-networking.com)



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