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- X Cat6 23 AWG copper cable
- X U/UTP no overall screening
- No conductor screening
- X Outer sheath colour: violet
- X Reaction-to-fire class according to EN 13501-6: B2ca
- X Smoke development class according to EN 13501-6:
- X CIBSE TM65 Embodied Carbon: 96.389 kg CO26

#### **Product Overview**

Excel solid Cat6 ethernet cable U/UTP 23 AWG LSOH CPR B2ca manufactured and tested to the TIA/EIA 568-B.2-1, EN50173-1 and ISO/ IEC 11801 Cat 6 specifications, 305 m or 500 m. Each cable consists of 8 colour coded solid copper conductors twisted together to form four pairs.

These are then formed around a central X-shaped polyethylene centre with the whole cable produced in a LSOH sheath.

### **Product Specifications**

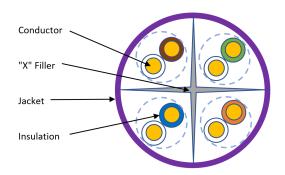
Feature	Values	
Conductor surface	Bare	
Diameter of conductor	0.55 +/-0.01	
AWG size	23	
Conductor category	Class $1 = solid$	
Total number of cores	8	
Stranding element	Pairs	
Core insulation	Solid HDPE	

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Specification core insulation	Polyethylene (PE)
Core identification	Colour
Overall screening	None
Conductor screening	None
Outer sheath material	Copolymer, thermoplastic (LS0H)
Outer sheath colour	Violet
Flame retardant according to IEC 60332-1-2	yes
Reaction-to-fire class according to EN 13501-6	B2ca
Smoke development class according to EN 13501-6	sla
Euro class flaming droplets/particles according to EN 13501-6	d0
Euro class acidity according to EN 13501-6	al
Outer diameter approx.	6.2 mm
Installation Temperature Range	-1060 °C
Operating Temperature Range	-1060 °C
Category	6
NVP value	65 %

### **Cross-section diagram**



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### **Cable specifications**

Features	Values
Pair-to-Ground Capacitance Unbalance	≤330pF/100m
Mutual Capacitance	≤5.6nF/100m
Max.Delay Skew(ns/100m)	≤45ns/100m
Max.Conductor DC Resistance @ 20 Deg.C	95 (Ohm/km)
Min.Insulation Resistance(Mohm.km)	5000
Dielectric strength	DC ,1KV/min
MBR during installation	8x cable OD
MBR installed	4x cable OD

#### **Standards**

Applicable standard	Detail
ISO/IEC 11801:2017	Information technology - Generic cabling for customer premises: Part 1 General Requirements
IEC 61156-5:2020	Multicore and symmetrical pair/quad cables for digital communications - Part 5: Symmetrical pair/quad cables with transmission characteristics up to 1000 MHz - Horizontal floor wiring - Sectional specification
EN 50173-1:2018	Information technology. Generic cabling systems - General requirements
EN 50173-2:2018	Information technology. Generic cabling systems - Office premises
BS EN 50288-3-1:2013	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 60332-1-2:2004 + A12:2020	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-D:2015	Balanced Twisted-Pair Telecommunications Cabling and Components Standards
IEC 60754-2:2014	Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH

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	measurement) and conductivity
IEC 61034-2:2005+A2:2020	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
IEEE 802.3bt (Type 4)	Compliant to IEEE 802.3bt (Type 4)
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 — compliant. For Great Britain, compliance is aligned with the Persistent Organic Pollutants (Amendment) (EU Exit) Regulations 2020 (SI 2020 No. 1355).
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).
Directive (EU) 2015/863 (RoHS III)	Amending Directive 2011/65/EU to add four phthalates (DEHP, BBP, DBP, DIBP) to Annex II — compliant.
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.
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
190-071	Excel Solid Cat6 Cable U/UTP 23AWG LSOH CPR B2ca 305 m Box Violet
190-078	Excel Solid Cat6 Cable U/UTP 23AWG LSOH CPR B2ca 305 m Box Black
190-097	Excel Solid Cat6 Cable U/UTP 23AWG LSOH CPR B2ca 305 m Box Red
190-098	Excel Solid Cat6 Cable U/UTP 23AWG LSOH CPR B2ca 305 m Box Blue
190-099	Excel Solid Cat6 Cable U/UTP 23AWG LSOH CPR B2ca 305 m Box Yellow

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.