

PRODUCT SPECIFICATION



NETWORK CABLE SERIES 155421-6xxx

EtherNET-Cat5e (2 or 4 pairs) shield - WSOR jacket ("Weld-Slag and Oil-Resistant") c \$10°C / 600V)

1. CONSTRUCTION DATA

CONDUCTOR:

Bare copper strand; according to EN 13602 - ETP1; stranding according to DIN VDE 0295, EN60228 class 6, Stranded lay compliant with UL 758.

WIRE STRUCTURE: 1.2

Nominal section (mm²)	AWG	Stranding (nbr of wires x wire diameter in mm)	Diameter of stranded core (mm)	Max Resistance Ref. std. IEC 60344 (Ω/km)	
0.14	26	19x0.10	0.50	145.8	
0.22	24	19x0.12	0.60	97.5	

1.3 **INSULATION:**

Thermoplastic PE; Max Insulation resistance >200 MΩxkm (IEC60189-1&IEC60885-1 or EN50289-1-4); nominal hardness 61 Shore D; according to UL758, cores colors refer to Annex #1

1.4 **INSULATION DIAMETER**

Nominal section	Nominal Ø	Nominal thickness
(mm²)	(mm)	(mm)
0.14	1.00	0.25
0.22	1.15	0.28

ASSEMBLY IN PAIRS:

Cores twisted in pairs (2 or 4) with different lay.

ASSEMBLY: 1.6

Pairs stranded together

TAPE: 1.7

Wrap over assembly.

TAPE SHIELD: 1.8

Aluminum/PET tape (Al face outside), nominal optical coverage 100%.

BRAID SHIELD: 1.9

Tin copper wire, nominal optical coverage 80%.

1.10 JACKET:

Special compound Polyurethane based, nominal hardness 78 Shore A; Silicone, Pb,Cd,Hg & FCKW free; according to

For overall diameter, jacket colour refer to Annex #1.

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2. TECHNICAL DATA

2.1 ELECTRICAL:

Voltage rating 600 Vrms

Voltage test on core 2000 Vrms x 1 min. (EN50395)

2.2 TEMPERATURE:

Temperature range (fixed) -40°C to +80°C

Temperature range (flex) -10°C to +60°C (free motion without periodic recurrence and forced guidance)

2.3 CHEMICAL:

Oil resistance UL758/UL2556 (4 days @ 100°C – IRM902 oil)

Free of FCKW, Silicone and Pb yes Halogen free no

2.4 PHYSICAL:

UV resistant yes (UL1581/2556– 300h)

Max installation pulling force 50N
Bending radius (fixed) >10xOD
Bending radius (flex) >15xOD

Drag chain use (@ 20°C) >15xOD (max cycles 2Mio in a freely suspended chain)*

2.5 FLAME:

UL Vertical Flame Test pass
UL VW-1, CSA FT-1 pass
IEC 60332-1 pass
IEC 60332-2 pass

3. COMPLIANCE

Accordance to: • 2006/95/CE; 2004/108/CE; 2011/65/CE (RoHS)

EtherNET cabling and interconnection technology

Cat.5e flex patch cord

Weld Slag Resistance: yes S-300 Molex test

• UL/CSA (UL AWM Style 21215, use: external interconnect

or internal wiring of electronic equipment)

4. PRINTING & PACKAGE

Printing text Ink-jet type; conform to UL758

Package available in different packaging sizes (refer to Annex #1)

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^{*}Default criterium of the norm-bendings is electrical failure due to conductor breakage or conductor short-circuit. Extreme sheath adhesion is not a default criterium since it cannot be influenced by the cable manufacturer (e.g. through big abrasion between cable and chain, non-suitable chain construction or wrong installation of cable in the chain).



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ANNEX 1

mm ²	AWG	Number of conductors	Outer Diameter (mm)	Jacket color	Packaging size	Packaging composition	Standard order number	Sketch*
		2X2		Teal	S	3x100m	1554216001	2x2
			6,5	Teal	М	1x500m	1554216002	
0.11	2.5			Teal	L	1x1000m	1554216003	
0,14	26	4x2	4x2 7,2	Teal	S	3x100m	1554216004	
				Teal	М	1x500m	1554216005	(Green-White/Green) (Orange-White/Orange)
				Teal	L	1x1000m	1554216006	4x2
		2X2	2X2 7,0	Teal	S	3x100m	1554216007	
0,22				Teal	М	1x500m	1554216008	
	24			Teal	L	1x1000m	1554216009	
	24	4x2	4x2 7,8	Teal	S	3x100m	1554216010	
				Teal	М	1x500m	1554216011	
				Teal	L	1x1000m	1554216012	(Green-White/Green)-(Brown-White/Brown) (Blue-White/Blue)-(Orange-White/Orange)

^{*}Colour Sequence

for packaging size L: colors clockwise exit drum (as in sketch) for packaging size S and M; colors counterclockwise

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