

**NETWORK CABLE SERIES 155421-5xxx**  
**ProfiNET TYPE C - 2x2x22AWG shield - WSOR jacket ("Weld-Slag and Oil-Resistant")**  
**UL US Style 21215 (80°C / 600V)**

**1. CONSTRUCTION DATA**

**1.1 CONDUCTOR:**

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

**1.2 WIRE STRUCTURE:**

Nominal section (mm <sup>2</sup> )	AWG	Stranding (nbr of wires x wire diameter in mm)	Diameter of stranded core (mm)	Max Resistance Ref. std. IEC 60344 (Ω/km)
0.34	22	19x0.15	0.75	64.2

**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 colours refer to Annex #1

**1.4 INSULATION DIAMETER**

Nominal section (mm <sup>2</sup> )	Nominal Ø (mm)	Nominal thickness (mm)
0.34	1.45	0.38

**1.5 ASSEMBLY:**

Cores stranded together.

**1.6 INNER JACKET:**

Flame retardant compound. Nominal diameter 4.30mm, colours natural.

**1.7 TAPES:**

Wrap over assembly and if needed over inner jacket.

**1.8 BRAID SHIELD:**

Tin copper wire, nominal optical coverage 80%.

**1.9 JACKET:**

Special compound Polyurethane based, nominal hardness 78 Shore A; Silicone, Pb,Cd,Hg & FCKW free; according to UL758.

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	1500 Vrms x 1 min. (EN50395)

### 2.2 TEMPERATURE:

Temperature range (fixed)	-40°C to +80°C
Temperature range (flex)	-10°C to +70°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)	>7.5xOD
Bending radius (flex)	>15xOD
Drag chain use (@ 20°C)	>15xOD (max cycles 2Mio in a freely suspended chain)*
Torsion (@ 20°C)	± 30°/m (max cycles 2Mio)*

\*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).

### 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)
- ProfiNET cabling and interconnection technology Guideline for ProfiNET (3.1 March 2014)
- 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 ( <i>refer to Annex #1</i> )

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**ANNEX 1**

mm <sup>2</sup>	AWG	Number of conductors	Outer Diameter (mm)	Jacket color	Packaging size	Packaging composition	Standard order number	Sketch*
0,34	22	2x2	6,8	Green RAL 6018	S	3x100m	1554215001	 <p>Yellow-Blue-Orange-White</p>
				Green RAL 6018	M	1x500m	1554215002	
				Green RAL 6018	L	1x1000m	1554215003	
				Green RAL 6018	N.A.	Use as component in cordsets 130048 - 120108	1202098313	

\*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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