

**NETWORK CABLE SERIES 155421-1xxx**  
**Profibus DP 150Ω - 2x22AWG - shield**  
**WSOR jacket ("Weld-Slag and Oil-Resistant")**  
**cULus Style 21215 (80°C / 600V)**

## 1. CONSTRUCTION DATA

### 1.1 CONDUCTOR:

Bare 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<br>(mm <sup>2</sup> ) | AWG | Stranding<br>(nbr of wires x wire<br>diameter in mm) | Diameter of<br>stranded core<br>(mm) | Max Resistance<br>Ref. std. IEC 60344<br>(Ω/km) |
|---------------------------------------|-----|------------------------------------------------------|--------------------------------------|-------------------------------------------------|
| 0.34                                  | 22  | 19x0.15                                              | 0.75                                 | 60.0                                            |

### 1.3 INSULATION:

Foam PE; Max Insulation resistance >200 MΩxkm (IEC60189-1&IEC60885-1 or EN50289-1-4); according to UL758,  
cores colors refer to Annex #1

### 1.4 INSULATION DIAMETER

| Nominal section<br>(mm <sup>2</sup> ) | Nominal Ø<br>(mm) | Nominal thickness<br>(mm) |
|---------------------------------------|-------------------|---------------------------|
| 0.34                                  | 2.75              | 1.00                      |

### 1.5 ASSEMBLY:

Cores stranded together, with two fillers between cores

### 1.6 TAPE SHIELD:

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

### 1.7 BRAID SHIELD:

Tin copper wire, nominal optical coverage 80%.

### 1.8 TAPE:

Over braid shield

### 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 color refer to Annex #1.

|                                                                                                                                                                               |                                           |                                                 |                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------|-----------------------------------|
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| Document Number:<br><b>1554211004 PS P1E A</b>                                                                                                                                | Created/Revised by:<br><b>M. Arrigoni</b> | Checked by:<br><b>A. Defendi</b>                | Approved by:<br><b>C. Leroose</b> |
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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 +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 | 100N                                                    |
| Bending radius (fixed)         | >10xOD                                                  |
| Bending radius (flex)          | >15xOD                                                  |
| Drag chain use (@ 20°C)        | >15xOD (up to 2Mio @ 20°C in a freely suspended chain)* |

\*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: | <ul style="list-style-type: none"> <li>2006/95/CE; 2004/108/CE; 2011/65/CE (RoHS)</li> <li>Weld Slag resistant: yes, S-300 Molex test</li> <li>UL/CSA (UL AWM Style 21215, use: External interconnect or internal wiring of electronic equipment)</li> </ul> |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 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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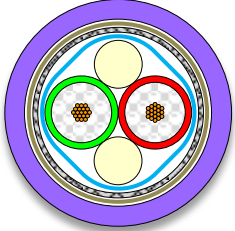
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**ANNEX 1**

| mm <sup>2</sup> | AWG | Number of conductors | Outer Diameter (mm) | Jacket color | Packaging size | Packaging composition | Standard order number | Sketch                                                                                               |
|-----------------|-----|----------------------|---------------------|--------------|----------------|-----------------------|-----------------------|------------------------------------------------------------------------------------------------------|
| 0.34            | 22  | 2                    | 8,20                | Violet       | S              | 1x200m                | 1554211004            |  <p>Red-Green</p> |
|                 |     |                      |                     | Violet       | M              | 1x500m                | 1554211005            |                                                                                                      |
|                 |     |                      |                     | Violet       | L              | 1x1000m               | 1554211006            |                                                                                                      |

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