

NETWORK CABLE SERIES 155431-1xxx
ProfiBUS DP 150Ω - 2x22AWG - shield - PUR jacket
Style 20233 (80°C / 300V)

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 (mm ²)	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	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 (mm ²)	Nominal Ø (mm)	Nominal thickness (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:

Polyurethane (PUR, TPU), ether base, Halogen free, nominal hardness 90 Shore A; Silicone, Pb,Cd,Hg & FCKW free;
according to UL758.

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

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2. TECHNICAL DATA

2.1 ELECTRICAL:

Voltage rating 300 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) -20°C to +60°C (free motion without periodic recurrence and forced guidance)

2.3 CHEMICAL:

Oil resistance UL758/UL2556/EN50363-10-2 (7days @ 100°C - IRM902 oil)
Free of FCKW, Silicone and Pb yes
Halogen free yes (IEC60754-1 EN50267-2-1 VDE0472-815)

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:

- 2006/95/CE; 2004/108/CE; 2011/65/CE (RoHS)
- UL/CSA (UL AWM Style 20233, use: external interconnect 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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ANNEX 1

mm ²	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	1554311004	 <p>Red-Green</p>
				Violet	M	1x500m	1554311005	
				Violet	L	1x1000m	1554311006	

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