Wide application range due to multiple approvals; Cost-saving, easy installation due to omission of closed raceways (suitable for open wiring)

- Torsion resistant for drip loops
- Wide application range (NFPA 70/NEC)/ compliance with NFPA 79 for industrial machinery
- (UL) SUN. RES. approval in preparation

**Product description**

**Application range**

- Industrial machinery; plant engineering
- Machine tools compliant with UL MTW (Machine Tool Wiring)
- TC-ER (Tray Cable Exposed Run) approval for open wiring between cable tray and industrial machines/plants acc. to NEC 336.10(7)
- Wind turbines: USA Wind Turbine Tray Cable (WTTC)
- Class 1, Div. 2 in accordance with NEC "National Electrical Code" Art. 336, 392, 501

**Benefits**

- Wide application range due to multiple approvals
- Cost-saving, easy installation due to omission of closed raceways (suitable for open wiring)

**Product Make-up**
• Fine-wire strand made of bare copper wires
• Insulation: PVC with nylon sheath (PA skin)
• Outer sheath made of special PVC compound, grey

Norm references / Approvals

• Multi-standard cables have conductor strands with nominal sizes in mm² or AWG/kcmil. The master size is mentioned in the table below, while the equivalent size of the other system can be found in the Appendix T16 of this catalogue. For this related secondary size the cross-section of the conductor mostly works out to be greater than the specified nominal value.
• Cable type certifications UL MTW, TC-ER, WTTC 1000 V, BUS DROP, c(UL) Type TC, CIC FT4, CSA AWM I/II A/B FT4, UL AWM style 20886

Product features

• Flame-retardant according to CSA FT4
  UL Vertical-Tray Flame Test
• Oil-resistant according to UL OIL RES I & II
• Water-resistant, UL Wet Approval 75 °C
• Suitable for torsional applications which are typical for the loop in wind turbine generators (WTG)
• Suitable for outdoor use thanks to technical UV and ozone resistance

Technical Data

Core identification code
Black with white numbers

Classification
ETIM 5.0 Class-ID: EC000104
ETIM 5.0 Class-Description: Control cable

Conductor stranding
Fine-wire, bare copper strand

Torsion movement in WTG
TW-0 & TW-2, refer to Appendix T0

Minimum bending radius
Static/Occ. moved: 5/15xOD*

Nominal voltage
UL/CSA: 600 V (TC, MTW, CIC), WTTC 1000 V
UL/CSA: 1000 V (AWM)
VDE U0 /U: 600/1000 V

Test voltage
2000 V

Protective conductor
G = with GN-YE protective conductor
X = without protective conductor

Temperature range
-40°C (static)/ -25°C (occ. moved) to +90°C (AWM: +105°C)