



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
- EMC/Screened



## 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)
- Aluminum-coated foil
- Tinned-copper braiding
- Outer sheath made of special PVC compound, grey

## Norm references / Approvals

- Multi-standard cables have conductor strands with nominal sizes in mm<sup>2</sup> 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
- High degree of screening  
low transfer impedance  
(max. 250  $\Omega$ /km at 30 MHz)
- Suitable for torsional applications which are typical for the loop in wind turbine generators (WTG)

## Technical Data

Core identification code  
Classification

Black with white numbers  
ETIM 5.0 Class-ID: EC000104  
ETIM 5.0 Class-Description: Control cable  
Fine-wire, bare copper strand  
TW-0 & TW-2, refer to Appendix T0  
Static/Occ. moved: 5/20xOD\*  
UL/CSA: 600 V (TC, MTW, CIC), WTTC 1000 V  
UL/CSA: 1000 V (AWM)  
VDE U0 /U: 600/1000 V  
2000 V  
G = with GN-YE protective conductor  
X = without protective conductor  
-40°C (static)/ -25°C (occ. moved) to +90°C (AWM:  
+105°C)

Conductor stranding  
Torsion movement in WTG  
Minimum bending radius  
Nominal voltage

Test voltage  
Protective conductor

Temperature range