



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 (WTTTC)
- 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 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
- 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)