

ÖLFLEX® CONTROL TM & TM CY
DB 28 1803
valid from: 01.10.2012
Application

ÖLFLEX® CONTROL TM as well as TM CY is a flexible and highly oil resistant multi-conductor Machine Tool and Tray Cable, 600 Volt, 90°C, UL Type TC-ER, MTW, AWM, c(UL) CIC/TC, AWM and CE-compliant.

It is a control cable for fixed installation and randomly flexible use under medium mechanical stress for use in wet and dry locations. In Hazardous Locations Class 1, Div. 2 per NEC Art. 336, 392, 501.

This cable is suitable for torsion application in wind turbines (WTG). The torsional load is limited to applications as they typically occur in the loop of a wind turbine.

Technical data

Conductor	Fine bare copper wires, flexing service per UL 1063; UL 1581 ASTM B3, metric-sized
Design / Make-up	Cable is constructed in accordance with the requirements of the Underwriters Laboratories Inc.'s Standard for Machine Tool Wire per UL Standard 1063 as well as electrical Power and Control Tray Cables per UL Standard 1277 & CSA Standard C22.2 No 230 & 239
Core Insulation	Specially formulated PVC/Nylon insulation
Identification	Black cores with white numbers and green/yellow ground conductor in accordance with EN 50334 respectively VDE 0293-334
Screen	Aluminium-plated foil and tinned copper braid with 85% coverage (only ÖLFLEX CONTROL TM CY)
Outer Sheath	Special PVC compound, oil resistant (OIL RES I & II), silver-grey
Rated Voltage	1000V UL AWM, WTTC; 600V UL Type TC, MTW, c(UL) CIC/TC, CSA AWM; VDE U ₀ /U: 0,6/1kV
Min. bending radius	Fixed installation: 5 x outer diameter Occasional flexing: 15 x outer diameter (screened version: 20 x)
Temperature Range	fixed installation: -40°C to + 90°C (AWM: +105°C) occasional flexing: -25°C to + 90°C (AWM: +105°C)
Torsion movement in WTG	TW-0 (5000 cycles at ≥ +5°C) TW-2 (2000 cycles at ≥ -40°C) ± 150 °/m at 1 revolution per minute
Flame retardant	UL1581 section 1160, which exceeds IEC 60332-1 (conform to EN 60332-1); CSA FT4
Approvals	UL MTW (Machine Tool Wire); UL AWM (Appliance Wire Material); UL Wet Approval 75°C, UL Type TC (Tray Cable) - ER (Exposed Run), UL WTTC OIL RES. I and OIL RES. II c(UL) CIC/TC and FT4 CSA-AWM I/II A/B FT4
File numbers:	UL MTW: E155920; UL TC: E171371; UL AWM: E100338; WTTC: E323700
Conformity	Meets European CE Low Voltage Directive 2006/95/EC Meets European RoHS Directive 2002/95/EC