

### Product Description

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



### Application range

- Industrial machinery; plant engineering
- Machine tools UL MTW (Machine Tool Wiring) conforming
- 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 per NEC "National Electrical Code" Art. 336, 392, 501

### Benefits

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

### Design

- Fine strands of bare copper wires
- Insulation: PVC with nylon jacket (PA skin)
- Special blended PVC outer sheath, grey (RAL 7001)

### Approvals (Norm references)

- Multi standard cables have conductor strands with nominal sizes in mm<sup>2</sup> or AWG/kcmil nominal sizes. The master size is mentioned in the table below, the equivalent size of the other system can be found in the catalogue appendix table T16. For this related secondary size the conductor cross-section mostly works out greater than the specified nominal value.



Product features

- Flame retardant according to CSA FT4 UL Vertical-Tray Flame Test
- Oil resistant according to UL OIL RES I
- Water resistant UL Wet Approval 75 °C

Technical Data

Core identification code

Black with white numbers

Approvals

UL MTW, TC-ER, WTTTC 1000V, BUS DROP c(UL)

Type TC and CIC FT4 CSA AWM I/II A/B FT4

Specific insulation resistance

> 20 GOhm x cm

Conductor stranding

Finely stranded bare copper wires

Minimum bending radius

6 x cable diameter

Rated voltage

UL/CSA: 600 V (TC, MTW, CIC), WTTTC 1000V

UL/CSA: 1000 V (AWM) HAR U0 /U: 300/500 V

Test voltage

2000 V

Protective conductor

G = with protective conductor GN/YE

X = without protective conductor

Range of temperature

Fixed installation: -40°C up to +90°C

Article List

Part number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter in mm	Copper index kg/km	Weight kg/km
ÖLFLEX® CONTROL TM				
281803	3 G 1,0	7,4	28.8	82
281804	4 G 1,0	8.0	38.4	95
281805	5 G 1,0	8,6	48.0	112
281807	7 G 1,0	9,3	67.0	144
281812	12 G 1,0	12.0	115.0	247
281818	18 G 1,0	14,9	173.0	365
281825	25 G 1,0	16,7	240.0	464
281602	2 X 1,5	7,3	28.8	74
281603	3 G 1,5	8,1	43.0	100
281604	4 G 1,5	8,8	58.0	119
281605	5 G 1,5	9,5	72.0	141

281607	7 G 1,5	10,3	101.0	183
281609	9 G 1,5	11,9	129.6	247
281612	12 G 1,5	14,2	173.0	328
281618	18 G 1,5	16,2	259.0	403
281625	25 G 1,5	18,6	360.0	464
281403	3 G 2,5	9,1	72.0	125
281404	4 G 2,5	9,8	96.0	155
281405	5 G 2,5	10,7	120.0	185
281407	7 G 2,5	11,6	168.0	244
281203	3 G 4	10,6	115.0	165
281204	4 G 4	11,5	154.0	220
281205	5 G 4	12,6	192.0	269
281207	7 G 4	14,6	269.0	482
281004	4 G 6	14,5	231.0	382
281005	5 G 6	15,8	288.0	457
280804	4 G 10	19,5	384.0	615
280805	5 G 10	22,6	480.0	771
280604	4 G 16	22,8	615.0	864

**Footnote:**

All product related values as shown are nominal values unless specified differently. Further values, e.g. tolerances we submit on request - if available and released for publication.

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: Coil ≤ 30 kg and ≤ 250 m, otherwise drum

Please specify the desired make-up (e.g. 1 x 610 m drum or 8 x 76 m coils)

Photographs are not to scale and do not represent detailed images of the respective products.