

Uppgjord (även faktaansvarig om annan) - Prepared (also subject responsible if other)		Nr - No.		
ECA/E/T Mattias Råbacka		1301-TFL1045 Uen		
Dokansv/Godk - Doc respons/Approved	Kontr - Checked	Datum - Date	Rev	File
ECA/E/MP Roger Erikers		2008-05-06	M	

CABLE

- 1 General**
Description
Single core cable with flexible conductor and halogen free insulation for internal wiring in, and grounding of, telecom equipment.
UL recognized, AWM style 10900.
To be used under dry conditions.
- 2 Design**
Dimensions and other engineering data according to product list table 2.
- Conductor: Stranded copper wires according to IEC60228, class 5.
Tinned copper wires: $\leq 10\text{AWG}$ ($\leq 6 \text{ mm}^2$)
Copper wires: $\geq 8\text{AWG}$ ($\geq 10 \text{ mm}^2$)
- Insulation: Halogen free, flame-retardant.
- 3 Quantity shall be given in meters.**
Standard length:
 $\leq 10\text{AWG}$ ($\leq 6 \text{ mm}^2$): 100 m coil (alternative lengths are optional)
8AWG (10 mm^2): 500 m plastic drum
6AWG (16 mm^2): 300 m plastic drum
 $\geq 4\text{AWG}$ ($\geq 25 \text{ mm}^2$): 500 m wooden drum
- 4 Limiting values, table 1**

Parameter	Value
Operating voltage	600 V DC
Operating temperature	-20 (-40 when fixed) to + 90 °C
Bending radius	8 (4 when fixed)x outer diameter
Fire performance	IEC332-1 $\geq 18\text{AWG}$ (0,85 mm^2) VW-1 $\geq 12\text{AWG}$ (4 mm^2)

Uppgjord (även faktaansvarig om annan) - Prepared (also subject responsible if other)		Nr - No.		
ECA/E/T Mattias Råbacka		1301-TFL1045 Uen		
Dokansv/Godk - Doc respons/Approved	Kontr - Checked	Datum - Date	Rev	File
ECA/E/MP Roger Erikers		2008-05-06	M	

5 Marking on cable

Manufacturer name.

Product number according to product list. (Sizes over 6 mm² or 10AWG)

Code designation and conductor size. (Sizes over 6 mm² or 10AWG)

Date of manufacture. (Sizes over 6 mm² or 10AWG)

Fire resistance class. (Sizes over 6 mm² or 10AWG)

Temperature and voltage rating is optional.

Note: Sizes smaller than 6 mm² or 10AWG only has manufacturer name on the cable.

Demands:

Marking shall be eligible and durable.

Marking shall be repeated twice every meter.

6 Marking on package

6 Manufacturer name.

Code designation and conductor size.

Product number according to product list.

Fire resistance.

IEC 60332-1 ≥ 18AWG (0,85 mm²)

VW-1 ≥ 12AWG (4 mm²)

7 Product list, table 2

Product number (Colour* according to index)	Nominal cross sectional area of the conductor (mm ²)	Maximum diameter of wires in conductor	Wall thickness insulation. Nominal value (mm)	Mean overall diameter over insulation		Maximum resistance (ohm/km)	Weight (kg/100m)
				(mm)	(mm)		
				Lower limit	Upper limit		
TFL104501/xx*	0,85 (18 AWG)	0,26	0,6	2,2	2,5	21,8	1,2
TFL104502/xx*	1,5 (16 AWG)	0,26	0,8	3,1	3,3	13,7	2,2
TFL104503/xx*	2,5 (14 AWG)	0,26	0,8	3,4	3,6	8,21	3,1
TFL104504/xx*	4 (12 AWG)	0,31	0,8	4,2	4,4	5,09	4,6
TFL104505/xx*	6 (10 AWG)	0,31	0,8	4,6	4,8	3,39	6,4
TFL104506/xx*	10 (8 AWG)	0,41	0,8	5,6	5,9	1,91	11,5
TFL104507/xx*	16 (6 AWG)	0,41	1,2	7,7	8,0	1,21	17,3
TFL104508/xx*	25 (4 AWG)	0,41	1,2	9,4	10,0	0,780	27
TFL104509/xx*	35 (2 AWG)	0,41	1,2	9,5	11,0	0,554	35
TFL104510/xx*	50 (1 AWG)	0,41	1,6	12,0	13,0	0,386	49
TFL104511/xx*	70 (2/0 AWG)	0,51	1,6	13,3	14,5	0,272	66
TFL104512/xx	95 (3/0 AWG)	0,51	1,6	15	17	0,206	90

* Index xx indicate colour of insulation:

00=Black, 01=Brown, 02=Red, 04=Yellow, 05=Green, 06=Blue, 08=Grey, 09=White,
45=Yellow/Green

Uppgjord (även faktaansvarig om annan) - Prepared (also subject responsible if other)		Nr - No.		
ECA/E/T Mattias Råbacka		1301-TFL1045 Uen		
Dokansv/Godk - Doc respons/Approved	Kontr - Checked	Datum - Date	Rev	File
ECA/E/MP Roger Erikers		2008-05-06	M	

8 References:

UL758	AWM approval
IEC 60228	Conductor resistance
IEC 60332-1	Fire performance
VW-1	Fire performance

9 Document revision information

Rev C Size 2,5 - 35 mm² added. Colour index added. References added.
Voltage rating changed.

Rev E Colour index 04 and 05 added

Rev F UL AWM approval, wall thickness adjusted according with UL requirement, 18AWG, (0,85 mm²), added and new colours added.

Rev G: Weight and diameter values adjusted.

Rev. H: Editorial changes, Marking requirements changed, Demand on thermoplastic insulation deleted.

Rev. I: Marking demands changed. Sizes 6 mm² / 10AWG and below only manufacturer name. Fire performance change to include VW-1 from 12AWG.

Rev J: Size 3/0AWG added.

Rev K: Operating temperature and bending radius changed.

Rev L: Information update concerning general description.

Rev M: Added information in general description.