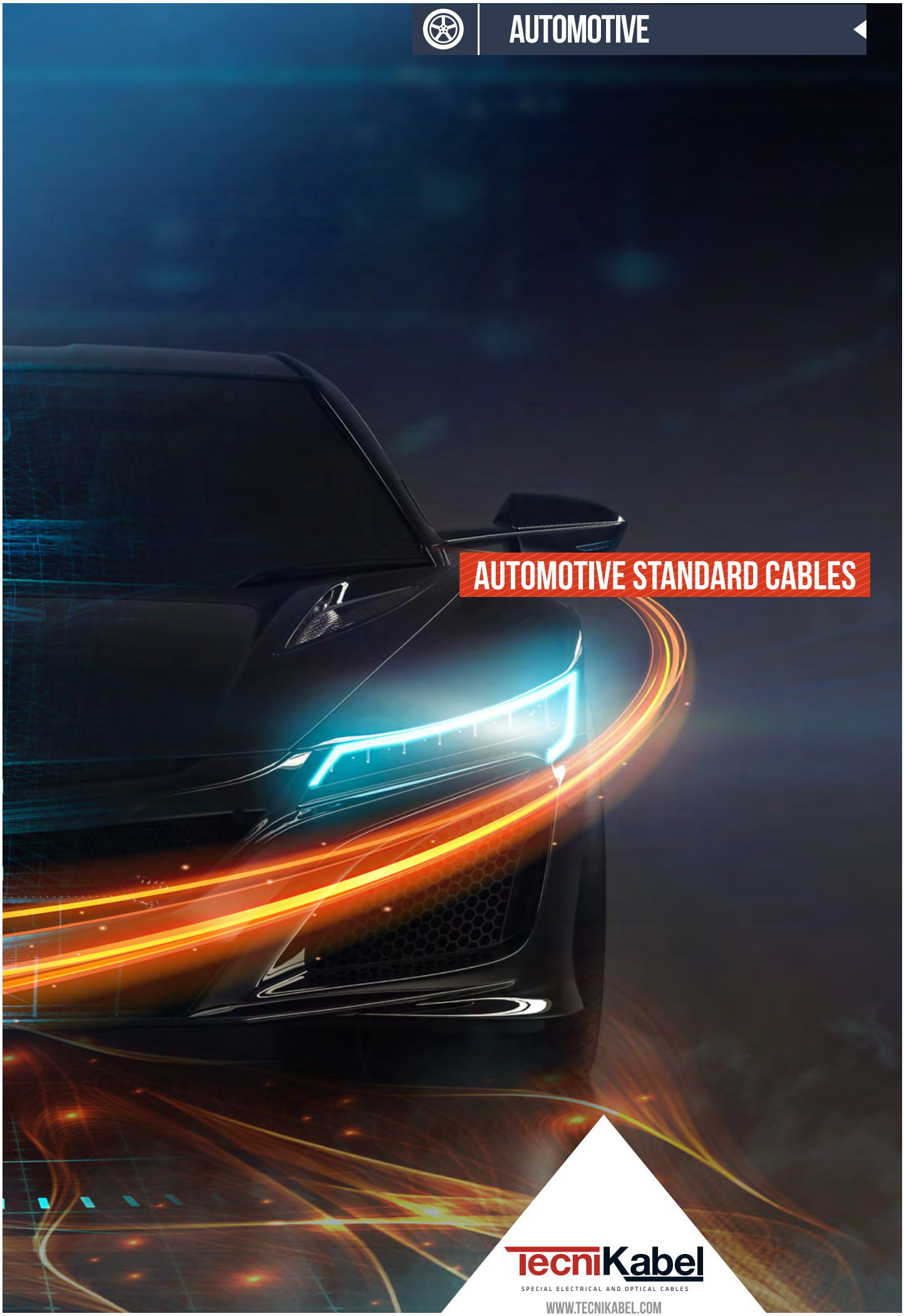


AUTOMOTIVE STANDARD CABLES

tecniKabel
SPECIAL ELECTRICAL AND OPTICAL CABLES
WWW.TECNIKABEL.COM

SPECIAL ELECTRICAL AND OPTICAL CABLES


Tecni Kabel

INTRODUCTION

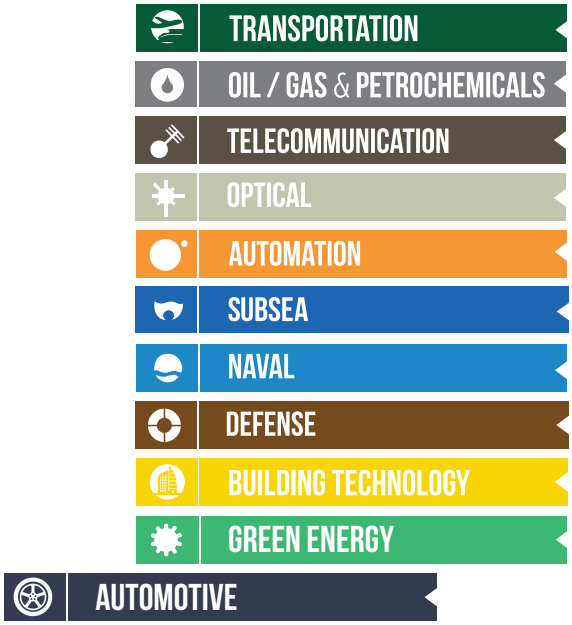
For over forty years, Tecnikabel has been designing and manufacturing copper and fiber optic cables for a wide range of applications ranging from underground to aerospace and submarine.

For the Automotive sector, Tecnikabel produces both standard copper cables, in compliance with ISO 6722-1: 2011 quality standards, and customized multi-cores cables.
ISO 6722-1: 2011 (Road vehicles - 60 V and 600 V singlecore cables) divides cables into different classes according to rated temperature and onboard vehicle use. Tecnikabel cables belong to T2 (105°C), T3 (125°C) and T4 (150°C) classes.

In addition, Tecnikabel's technical office uses all expertise gained in the field to design highly-customised cables tailored to specific customer applications and needs.

Flexible, multiskilled, and traceable processes ensure high quality products, unparalleled reliability and excellent customer care.

PRODUCT LINES



TECNIKABEL

is focused on constant product innovation to get competitive advantages with endless commitment to research and development.

PRODUCTION

Updated production systems, stringent process procedures and expert operators carry out our production with efficiency and flexibility.

In 30 years of activity, we produced more than 26.000 different types of cables.

FINAL INSPECTIONS

At the end of every production process each cable is checked for its electrical and physical performances for a complete compliance to customer specifications.

LABORATORY TESTS

We submit our cables to the most severe tests, simulating critical applications. In addition to the tests required by current norms, we continuously invest in equipment for mechanical and electrical testing, steadily increase the standard performance of our cables.

MATERIALS RESEARCH AND DEVELOPMENT

Our thirty year experience took us to carry on research of new materials in order to improve performances, costs and fulfil the standards required by our customers.

QUALITY SYSTEM

Since 1978, constant commitment to Quality has awarded Tecnikabel approval from American and European Authorities, complying with the most demanding international manufacturing and quality standards.

CSQ IQNet ISO 9001 edizione norma: 2015 9125.TEKA

Member of CISQ Federation RINA CERTIFIED MANAGEMENT SYSTEM ISO 14001

IRIS Certification

BRITISH APPROVALS SERVICE FOR CABLES BASEC UKAS PRODUCT CERTIFICATION 0004 PRODUCT MARKING LICENCE NO: 226001

ICIM EN 9100:2018 CERTIFIED MANAGEMENT SYSTEM Certified site: Volpiano

RINA

CSV CEI - UNEL

APPROVED LR

COMPLIANT · REACH · COMPLIANT

TYPE APPROVED PRODUCT DNV·GL MARITIME

c UL

RoHS compliant

ABS TYPE APPROVED PRODUCT

LOSS PREVENTION CERTIFICATION BOARD LPCB UKAS PRODUCT CERTIFICATION 0007 BS 6387:2013 Cert/LPCB ref. 1352

UL LISTED

CQC

DVE

WRAS APPROVED PRODUCT

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FLAME RETARDANT SINGLE WIRE (IEC 60332-1-2)


FLAME RETARDANT BUNCHED WIRES (IEC 60332-3)


FIRE RESISTANCE (IEC 60331 – EN50200 - BS6387 CWZ)


REDUCED EMISSION OF FUMES AND HALOGEN ACID GASES (IEC 60754-1)


SMOKE DENSITY (IEC 61034-1/2)


LOW ACIDITY AND CORROSIVITY OF EVOLVED GASES (IEC 60754-2)


WEATHERING TEST RESISTANCE (OUTDOOR)


INDOOR


WATER RESISTANCE


RODENT RESISTANCE


HAZARDOUS AREA


DYNAMIC APPLICATION


FULLY DIELECTRIC


DIRECT BURIAL


BULLET PROOF


WORK AT LOW TEMPERATURE

CHEMICAL PROPERTIES


MUD RESISTANCE


MINERAL OIL RESISTANCE

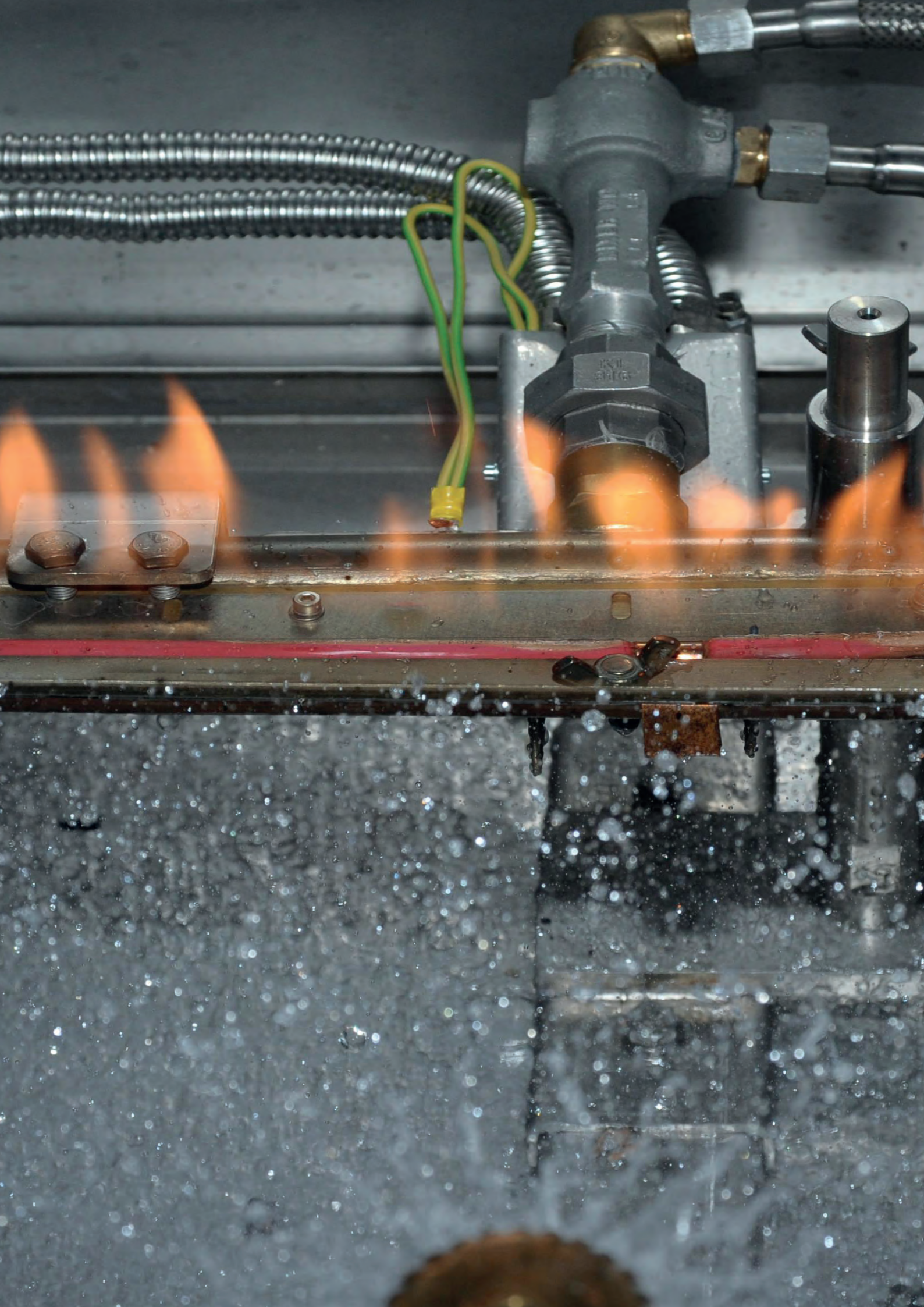

HYDROCARBONS RESISTANCE


ARCTIC TEMPERATURES

MECHANICAL PROPERTIES


MECHANICAL RESISTANCE


REDUCED BENDING RADIUS



FIRE PERFORMANCE

FIRE PERFORMANCES

IEC 60332-1-2 / EN 50265 / BS 4066:
Fire propagation on a vertical single cable

The single cable is mounted vertically and flamed with a Bunsen burner.

The flame must extinguish itself, at least 50 mm below the upper fixing clamp.

Power of burner, duration and angle of flame application, are described in the reference standards.

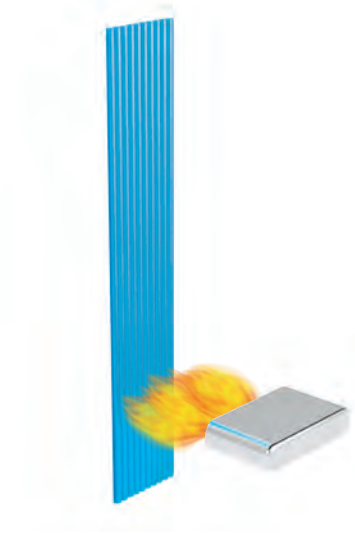
IEC 60332-3 / EN 50266:
Fire propagation on a vertical cables bundle

A certain number of cable samples are fixed on a 3.5m long ladder, and flamed with an appropriate burner.

The sample number, the duration of flame application, and the power/temperature of burner are described in the reference standards. After flame application, the visible area of fire damage must not exceed 2.5 m in height from the bottom of the burner.

The volume of tested material define a differentiation in categories:

A F/R Part 3-21	7 l/m
A Part 3-22	7 l/m
B Part 3-23	3.5 l/m
C Part 3-24	1.5 l/m
D Part 3-25	0.5 l/m



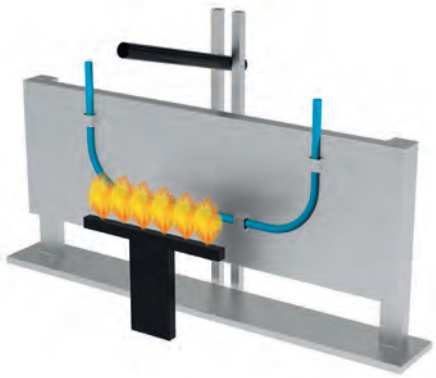
IEC 60331 / EN 50200: Fire test resistance

A sample of cable is horizontally applied supported by metal rings, or in U shape fixed on a fireproof wall.

Through using a gas burner the cable is maintained in flame contact for a certain time.

The test and the temperature of burner are described in the reference standards. In U shape test, the fireproof wall is hit every five minutes by a mechanical shock, to simulate a potential collapse during the fire.

The time of fire application, and the temperature of flame are described in the reference standards (typically 750°C or 830°C). The optical transmission of the fibers is checked and the change in attenuation is recorded during the test. and 15 minutes after flame extinction.



IEC 61034-1/2 - EN 50268-1/2: Measurement of smoke density of cables burning under defined conditions.

A few samples of cable are burnt in a cubic ($3x3x3m^3$) chamber using a flammable liquid.

The light transmittance of the resulting smoke is measured using an optical light detector. The test duration is about 40 minutes, depending on the quantity and composition of the liquid fuel. During the test the light transmittance of the smoke must be 60% minimum.

IEC 60754-1 - EN 50267-2-1: Test on gases evolved during combustion of materials from cables - Determination of the halogen acid gas content

This standard covers the general aspects of potential hazard caused from corrosiveness of smoke and combustion gases.

A small quantity of non-metallic material is heated in a tube, the resulting gases are tested for their halogen content. The flame temperature is 800 °C ± 10 °C, with a test duration of 40 ± 5 min in total.

The halogen content of non-metallic materials must be less than 0.5% or 5 mg/g.

IEC 60754-2 - EN 50267-2-: Test on gases evolved during combustion of materials from cables - Determination of acidity (by pH measurement) and conductivity

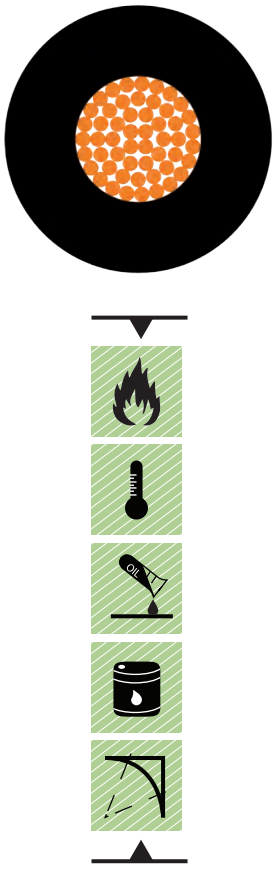
A small quantity of non-metallic material is burnt in a furnace, the pH and conductivity combustion gases dissolved in water are measured.

The minimum pH value of the washing water must 4.3, and the maximum conductivity must be 10 µS/mm.

NOTE

SINGLE CORE/MULTICORE T2 CLASS UP TO 105°C

TK - SINGLE-CORE T2 CLASS 105°C FLY



CONSTRUCTION

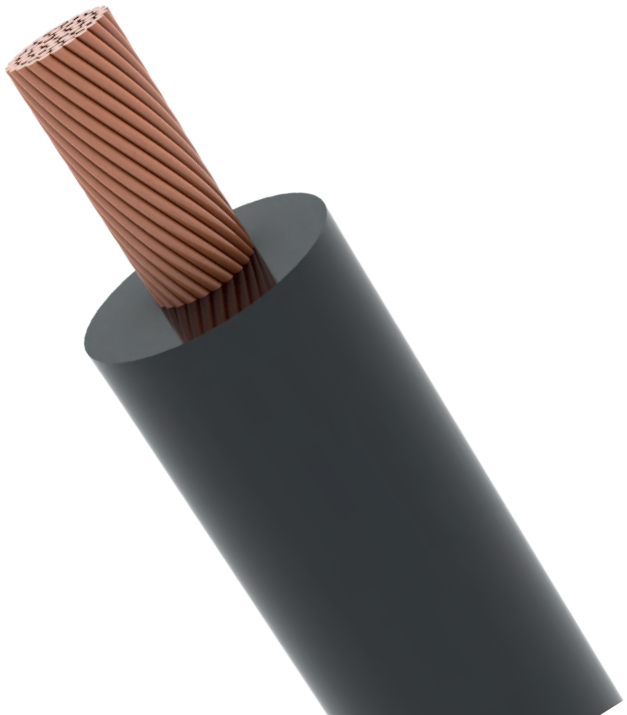
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 01*
Insulation	PVC compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class B – T2 – Lead Free Nominal diameter: *see table 01* Colours: Black or colored on request

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 105°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

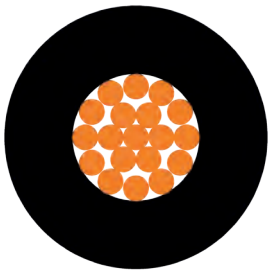


TK - SINGLE-CORE T2 CLASS 105°C FLY

TABLE 01

Nominal section	Max Electrical Resistance (at 20°C)	Wall Thickness (nom)	Nominal Diameter
0.50 mm²	37.1 Ω/km	0.6mm	2.2 mm
0.75 mm²	24.7 Ω/km	0.6mm	2.4 mm
1.0 mm²	18.5 Ω/km	0.6mm	2.55 mm
1.5 mm²	12.7 Ω/km	0.6mm	2.8 mm
2.0 mm²	9.5 Ω/km	0.6mm	3.0 mm
2.5 mm²	7.6 Ω/km	0.7mm	3.5 mm
4.0 mm²	4.7 Ω/km	0.8mm	4.2 mm
6.0 mm²	3.1 Ω/km	0.8mm	4.8 mm
10 mm²	1.82 Ω/km	1.0mm	6.2 mm
16 mm²	1.16 Ω/km	1.0mm	7.3 mm
25 mm²	0.75 Ω/km	1.3mm	9.1 mm
35 mm²	0.53 Ω/km	1.3mm	10.6 mm

TK - SINGLE-CORE T2 CLASS 105°C THIN WALL FLRY-A (TYPE A)



CONSTRUCTION

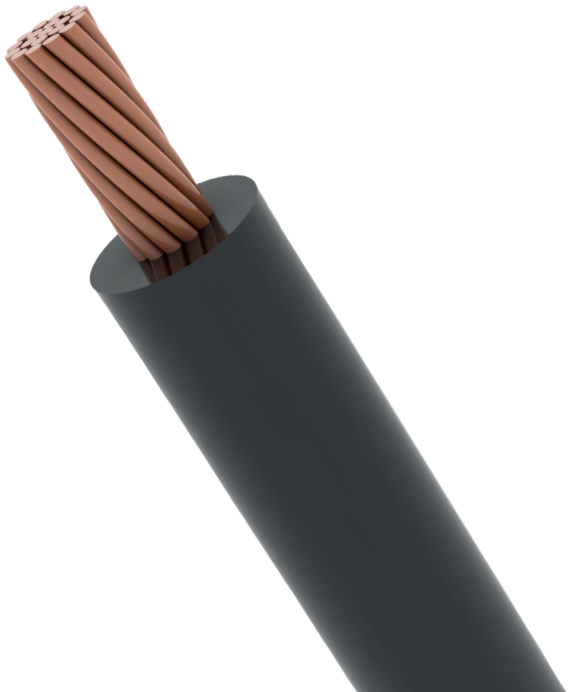
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 Concentric type (7 or 19 stranded) Section: *see table 02*
Insulation	PVC compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class B – T2 – Lead Free Nominal diameter: *see table 02* Colours: Black or colored on request

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 105°C (3000h)
CC temperature	160°C
Minimum bending radius	4 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

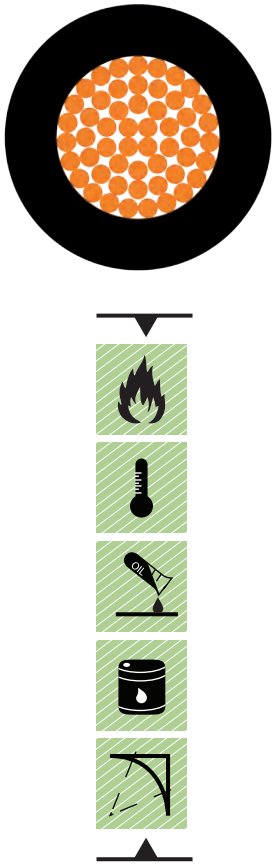


TK - SINGLE-CORE T2 CLASS 105°C THIN WALL FLRY-A (TYPE A)

TABLE 02

Nominal section	Max Electrical Resistance (at 20°C)	Wall Thickness (nom)	Nominal Diameter
0.13 mm²	136 Ω/km	0.2 mm	1.0 mm
0.22 mm²	85 Ω/km	0.2 mm	1.2 mm
0.35 mm²	55 Ω/km	0.2 mm	1.3 mm
0.50 mm²	37.1 Ω/km	0.22 mm	1.55 mm
0.75 mm²	24.7 Ω/km	0.24 mm	1.85 mm
1.0 mm²	18.5 Ω/km	0.24 mm	2.0 mm
1.5 mm²	12.7 Ω/km	0.24 mm	2.35 mm
2.5 mm²	7.6 Ω/km	0.28 mm	2.9 mm

TK - SINGLE-CORE T2 CLASS 105°C THIN WALL FLRY-B (TYPE B)



CONSTRUCTION

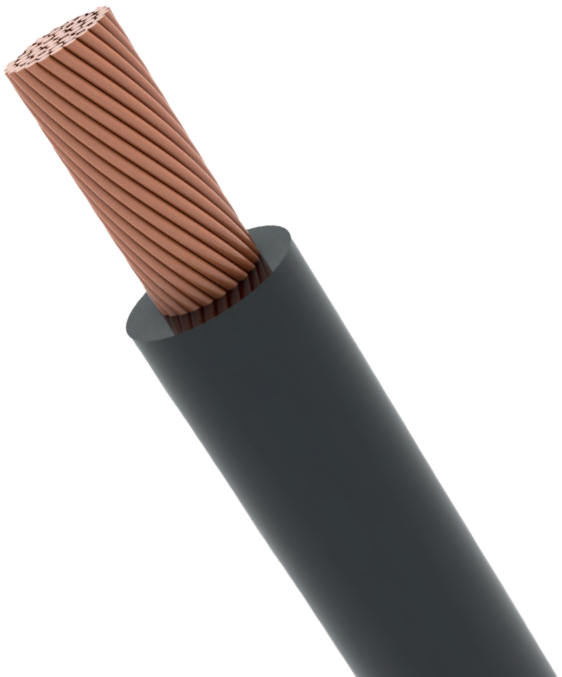
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 03*
Insulation	PVC compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class B – T2 – Lead Free Nominal diameter: *see table 03* Colours: Black or colored on request

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 105°C (3000h)
CC temperature	160°C
Minimum bending radius	4 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

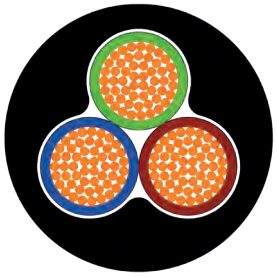


TK - SINGLE-CORE T2 CLASS 105°C THIN WALL FLRY-B (TYPE B)

TABLE 03

Nominal section	Max Electrical Resistance (at 20°C)	Wall Thickness (nom)	Nominal Diameter
0.35 mm²	54 Ω/km	0.2 mm	1.3 mm
0.50 mm²	37.1 Ω/km	0.22 mm	1.55 mm
0.75 mm²	24.7 Ω/km	0.24 mm	1.9 mm
1.0 mm²	18.5 Ω/km	0.24 mm	2.1 mm
1.5 mm²	12.7 Ω/km	0.24 mm	2.35 mm
2.5 mm²	7.6 Ω/km	0.28 mm	2.9 mm
4.0 mm²	4.7 Ω/km	0.32 mm	3.7 mm
6.0 mm²	3.1 Ω/km	0.32 mm	4.2 mm
10 mm²	1.82 Ω/km	0.48 mm	5.3 mm
16 mm²	1.16 Ω/km	0.52 mm	6.6 mm
25 mm²	0.75 Ω/km	0.52 mm	9.4 mm

TK - MULTI-CORE T2 CLASS 105°C FLRYY



CONSTRUCTION

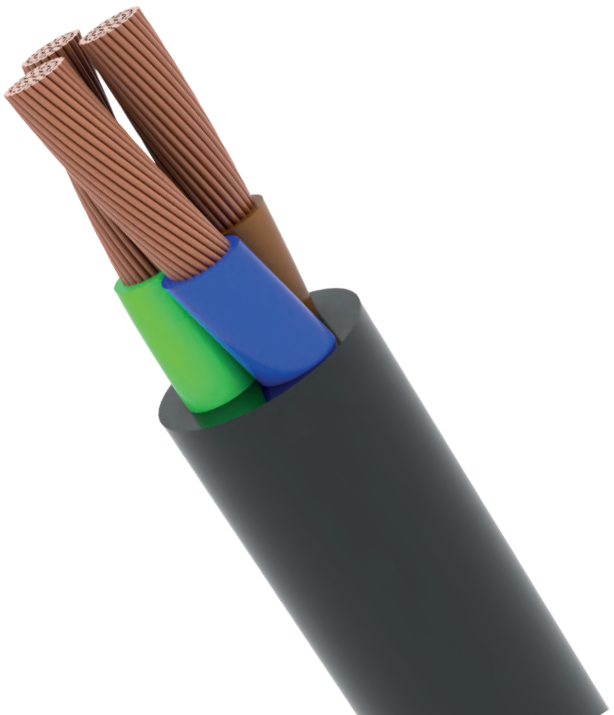
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 04*
Insulation	PVC compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class B – T2 – Lead Free
Total Assembly	Elements assembled
Overall Sheath	PVC compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class B – T2 – Lead Free Nominal diameter: *see table 04* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 105°C (3000h)
CC temperature	160°C
Minimum bending radius	4 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

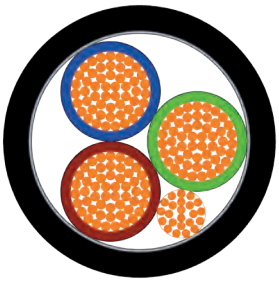


TK - MULTI-CORE T2 CLASS 105°C FLRYY

TABLE 04

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.5 mm	3.3 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.5 mm	3.6 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.3 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	4.9 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	5.3 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.8 mm	6.3 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.8 mm	7.5 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.8 mm	8.9 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.8 mm	10.0 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.5 mm	3.7 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.5 mm	3.9 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.6 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	5.2 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	5.6 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.8 mm	6.7 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.8 mm	8.0 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.0 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.2 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.8 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	5.7 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	6.2 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.4 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.6 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	5.4 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	6.2 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	6.8 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	5.1 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	6.0 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.8 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	7.6 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	8.7 mm
12x0.35 mm²	54 Ω/km	0.2 mm	0.9 mm	7.1 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	0.9 mm	8.3 mm

TK - MULTI-CORE T2 CLASS 105°C FLRYCY (SINGLE SHIELDED)



CONSTRUCTION

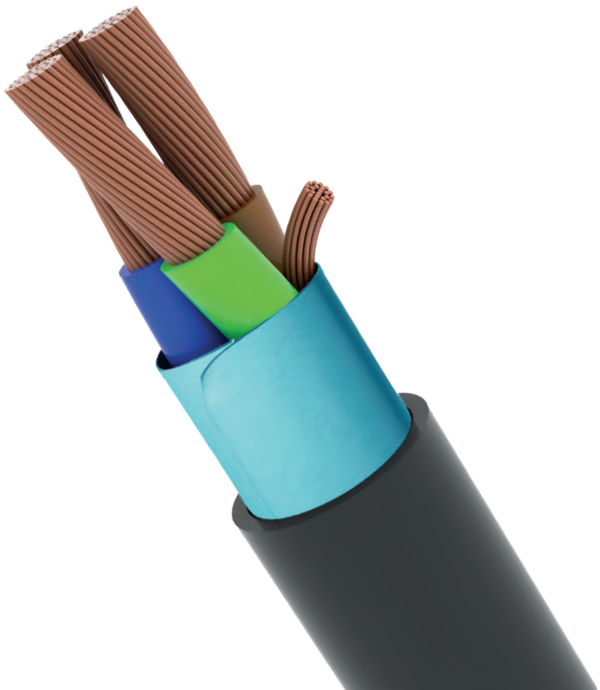
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 06*
Insulation	PVC compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class B – T2 – Lead Free
Total Assembly	Elements assembled
Shield	Aluminium/Plastic tape + Bare copper drain wire
Overall Sheath	PVC compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class B – T2 – Lead Free Nominal diameter: *see table 06* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 105°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

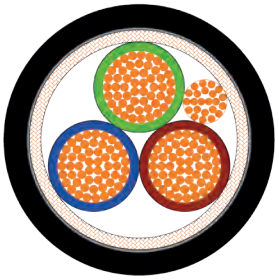


TK - MULTI-CORE T2 CLASS 105°C FLRYCY (SINGLE SHIELDED)

TABLE 05

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.2 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.5 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.2 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.8 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.2 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.2 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.4 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.9 mm	9.8 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.9 mm	10.9 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.6 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.8 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.5 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.1 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.5 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.6 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.9 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.9 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.1 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.7 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.6 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.1 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.3 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.5 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.3 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	7.1 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.7 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	6.0 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.9 mm
			0.1 mm	0.9 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.7 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.8 mm	8.5 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.8 mm	9.6 mm
12x0.35 mm²	54 Ω/km	0.2 mm	1 mm	8.0 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	1 mm	9.2 mm

TK - MULTI-CORE T2 CLASS 105°C FLRYBCY (DOUBLE SHIELDED)



CONSTRUCTION

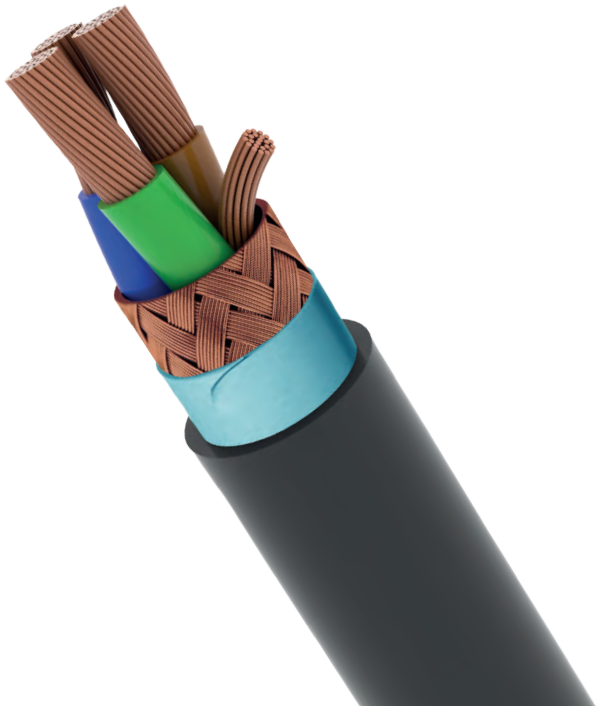
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 05*
Insulation	PVC compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class B – T2 – Lead Free
Total Assembly	Elements 1 assembled
1st Shield	Bare copper braid (nominal coverage 70%) + Bare copper drain wire
2st Shield	Aluminium/Plastic tape
Overall Sheath	PVC compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class B – T2 – Lead Free Nominal diameter: *see table 05* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 105°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

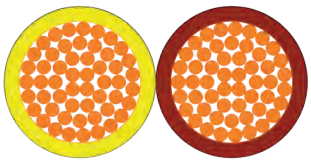


TK - MULTI-CORE T2 CLASS 105°C FLRYBCY (DOUBLE SHIELDED)

TABLE 06

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.2 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.5 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.2 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.8 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.2 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.2 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.4 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.9 mm	9.8 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.9 mm	10.9 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.6 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.8 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.5 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.1 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.5 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.6 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.9 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.9 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.1 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.7 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.6 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.1 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.3 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.5 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.3 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	7.1 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.7 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	6.0 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.9 mm
			0.1 mm	0.9 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.7 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.8 mm	8.5 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.8 mm	9.6 mm
12x0.35 mm²	54 Ω/km	0.2 mm	1 mm	8.0 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	1 mm	9.2 mm

TK - MULTI-CORE T2 CLASS 105°C FLRY TWISTED



CONSTRUCTION

Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 Type A: concentric Type B: CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 07*
Insulation	PVC compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class B – T2 – Lead Free
Total Assembly	Elements assembled

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 105°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

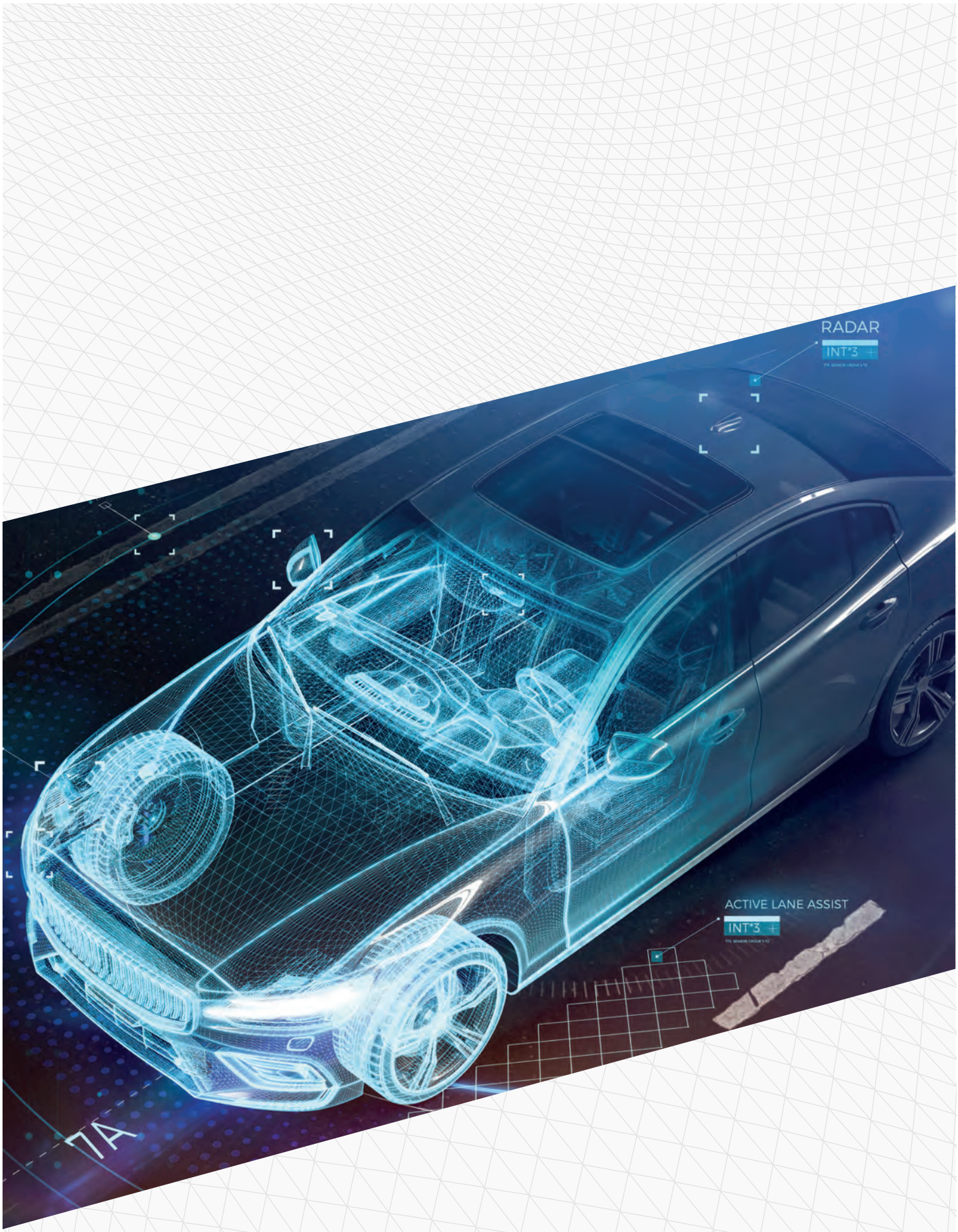
TK - MULTI-CORE T2 CLASS 105°C FLRY TWISTED

TABLE 07

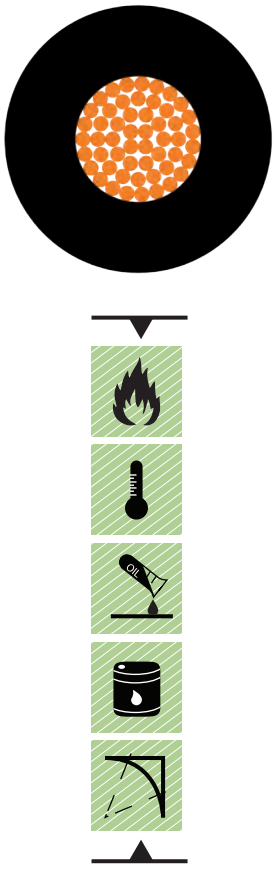
Nominal section	Type	Max Electrical Resistance (at 20°C)	Wall Thickness (nom)	Nominal Diameter
2x0.35 mm²	A	55 Ω/km	0.2 mm	2.6 mm
2x 0.50 mm²	A	37.1 Ω/km	0.22 mm	3.1 mm
2x 0.75 mm²	A	24.7 Ω/km	0.24 mm	3.6 mm
2x 1 mm²	A	18.5 Ω/km	0.24 mm	4.0 mm
2x 1.5 mm²	A	12.7 Ω/km	0.24 mm	4.6 mm
2x 2.5 mm²	A	7.6 Ω/km	0.28 mm	5.7 mm
2x 0.35 mm²	B	55 Ω/km	0.2 mm	2.6 mm
2x 0.50 mm²	B	37.1 Ω/km	0.22 mm	3.1 mm
2x 0.75 mm²	B	24.7 Ω/km	0.24 mm	3.8 mm
2x 1 mm²	B	18.5 Ω/km	0.24 mm	4.2 mm
2x 1.5 mm²	B	12.7 Ω/km	0.24 mm	4.7 mm
2x 2.5 mm²	B	7.6 Ω/km	0.28 mm	5.8 mm

NOTE

SINGLE CORE/MULTICORE T3 UP TO CLASS 125°C



TK - SINGLE-CORE T3 CLASS 125°C FLYW



CONSTRUCTION	**Conductor**	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 01*
	Insulation	PVC compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free Nominal diameter: *see table 01* Colours: Black or colored on request

TECHNICAL DATA	**Insulation Resistance**	≥ 20 MΩxkm at 20°C
	Test Voltage	2 kV
	Operating Voltage	300 V V_{DC} - 220 V V_{AC}
	Temperature range	-40°C ÷ 125°C (3000h)
	CC temperature	160°C
	Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS	**Flame retardancy**	ISO 6722

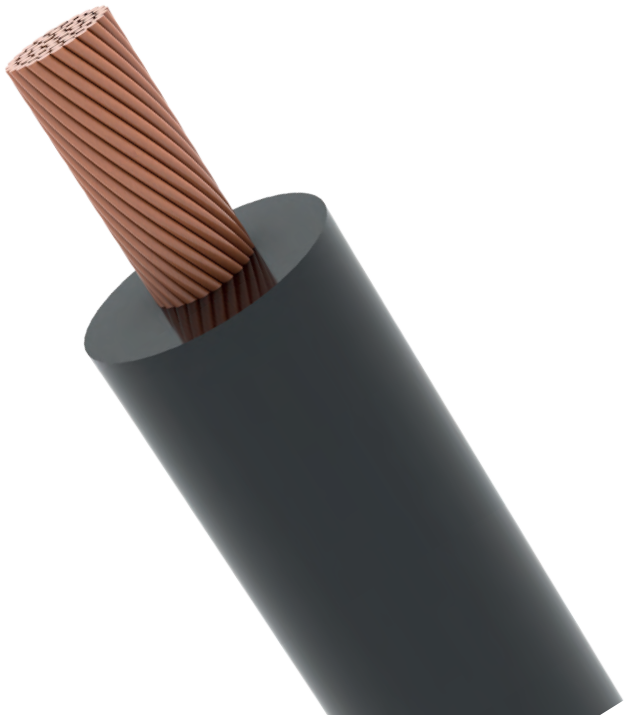
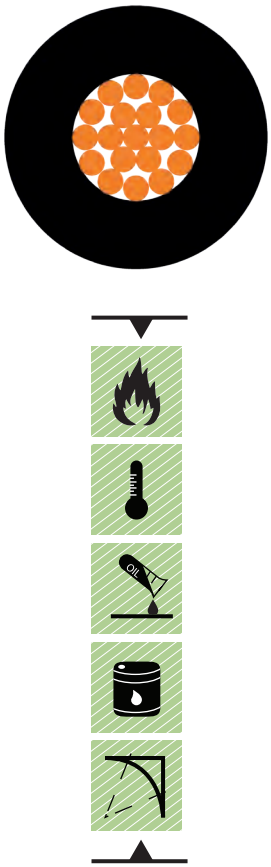


TABLE 01

Nominal section	Max Electrical Resistance (at 20°C)	Wall Thickness (nom)	Nominal Diameter
0.50 mm²	37.1 Ω/km	0.6mm	2.2 mm
0.75 mm²	24.7 Ω/km	0.6mm	2.4 mm
1 mm²	18.5 Ω/km	0.6mm	2.55 mm
1.5 mm²	12.7 Ω/km	0.6mm	2.8 mm
2.0 mm²	9.5 Ω/km	0.6mm	3.0 mm
2.5 mm²	7.6 Ω/km	0.7mm	3.5 mm
4 mm²	4.7 Ω/km	0.8mm	4.2 mm
6 mm²	3.1 Ω/km	0.8mm	4.8 mm
10 mm²	1.82 Ω/km	1.0mm	6.2 mm
16 mm²	1.16 Ω/km	1.0mm	7.3 mm
25 mm²	0.75 Ω/km	1.3mm	9.1 mm
35 mm²	0.53 Ω/km	1.3mm	10.6 mm

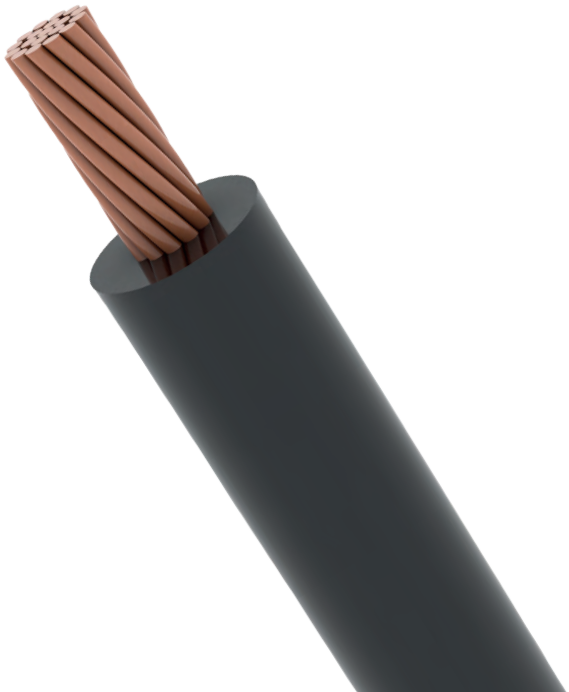
TK - SINGLE-CORE T3 CLASS 125°C THIN WALL FLRYW-A (TYPE A)



CONSTRUCTION	**Conductor**	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 Concentric type (7 or 19 stranded) Section: *see table 02*
	Insulation	PVC compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free Nominal diameter: *see table 02* Colours: Black or colored on request

TECHNICAL DATA	**Insulation Resistance**	≥ 20 MΩxkm at 20°C
	Test Voltage	2 kV
	Operating Voltage	300 V V_{DC} - 220 V V_{AC}
	Temperature range	-40°C ÷ 125°C (3000h)
	CC temperature	160°C
	Minimum bending radius	4 x outer diameter (installation)

REFERENCE STANDARDS	**Flame retardancy**	ISO 6722

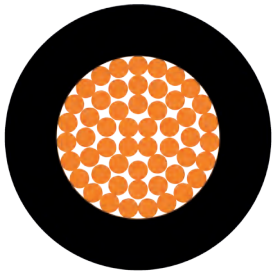


TK - SINGLE-CORE T3 CLASS 125°C THIN WALL FLRYW-A (TYPE A)

TABLE 02

Nominal section	Max Electrical Resistance (at 20°C)	Wall Thickness (nom)	Nominal Diameter
0.13 mm²	136 Ω/km	0.2 mm	1.0 mm
0.22 mm²	85 Ω/km	0.2 mm	1.2 mm
0.35 mm²	55 Ω/km	0.2 mm	1.3 mm
0.50 mm²	37.1 Ω/km	0.22 mm	1.55 mm
0.75 mm²	24.7 Ω/km	0.24 mm	1.85 mm
1 mm²	18.5 Ω/km	0.24 mm	2.0 mm
1.5 mm²	12.7 Ω/km	0.24 mm	2.35 mm
2.5 mm²	7.6 Ω/km	0.28 mm	2.9 mm

TK - SINGLE-CORE T3 CLASS 125°C THIN WALL FLRYW-B (TYPE B)



CONSTRUCTION

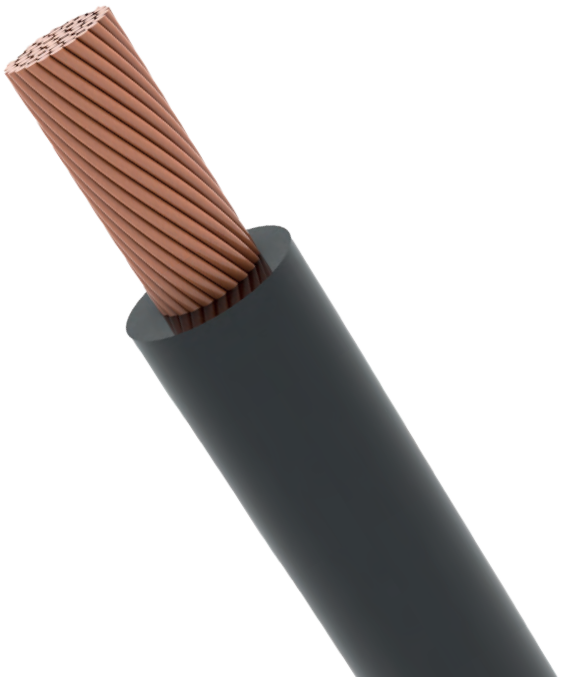
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 03*
Insulation	PVC compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free Nominal diameter: *see table 03* Colours: Black or colored on request

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 125°C (3000h)
CC temperature	160°C
Minimum bending radius	4 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

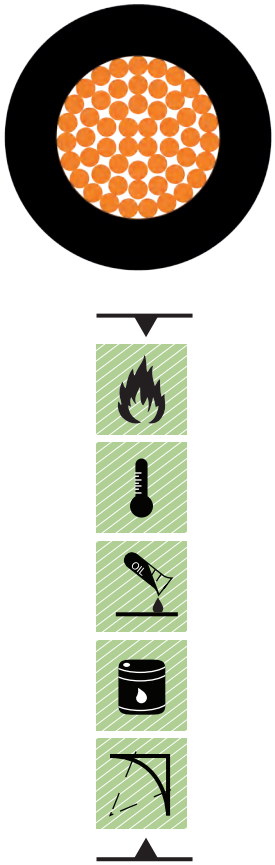


TK - SINGLE-CORE T2 CLASS 125°C THIN WALL FLRYW-B (TYPE B)

TABLE 03

Nominal section	Max Electrical Resistance (at 20°C)	Wall Thickness (nom)	Nominal Diameter
0.35 mm²	54 Ω/km	0.2 mm	1.3 mm
0.50 mm²	37.1 Ω/km	0.22 mm	1.55 mm
0.75 mm²	24.7 Ω/km	0.24 mm	1.9 mm
1 mm²	18.5 Ω/km	0.24 mm	2.1 mm
1.5 mm²	12.7 Ω/km	0.24 mm	2.35 mm
2.5 mm²	7.6 Ω/km	0.28 mm	2.9 mm
4 mm²	4.7 Ω/km	0.32 mm	3.7 mm
6 mm²	3.1 Ω/km	0.32 mm	4.2 mm
10 mm²	1.82 Ω/km	0.48 mm	5.3 mm
16 mm²	1.16 Ω/km	0.52 mm	6.6 mm
25 mm²	0.75 Ω/km	0.52 mm	9.4 mm

TK - SINGLE-CORE T3 CLASS 125°C THIN WALL FLH-A (TYPE A)



CONSTRUCTION

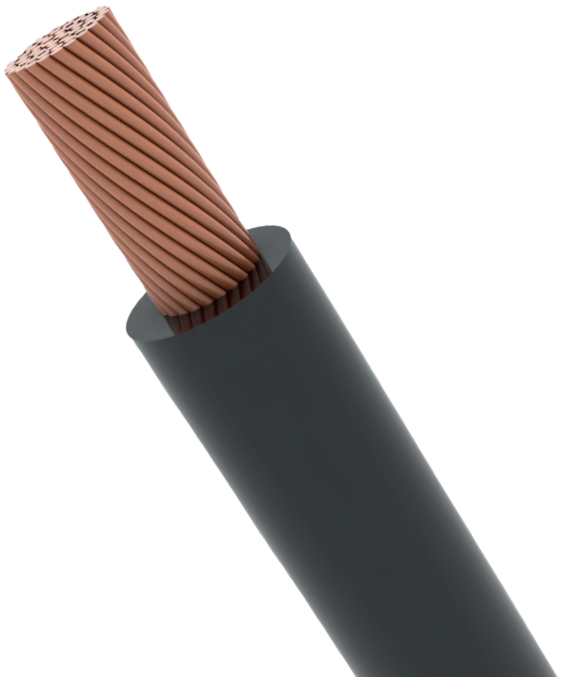
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 Concentric type (7 or 19 stranded) Section: *see table 03*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free Nominal diameter: *see table 04* Colours: Black or colored on request

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 125°C (3000h)
CC temperature	160°C
Minimum bending radius	4 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

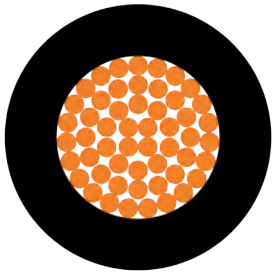


TK - SINGLE-CORE T3 CLASS 125°C THIN WALL FLH-A (TYPE A)

TABLE 04

Nominal section	Max Electrical Resistance (at 20°C)	Wall Thickness (nom)	Nominal Diameter
0.13 mm²	136 Ω/km	0.2 mm	1.0 mm
0.22 mm²	85 Ω/km	0.2 mm	1.2 mm
0.35 mm²	55 Ω/km	0.2 mm	1.3 mm
0.50 mm²	37.1 Ω/km	0.22 mm	1.55 mm
0.75 mm²	24.7 Ω/km	0.24 mm	1.85 mm
1 mm²	18.5 Ω/km	0.24 mm	2.0 mm
1.5 mm²	12.7 Ω/km	0.24 mm	2.35 mm
2.5 mm²	7.6 Ω/km	0.28 mm	2.9 mm

TK - SINGLE-CORE T3 CLASS 125°C THIN WALL FLH-B (TYPE B)



CONSTRUCTION

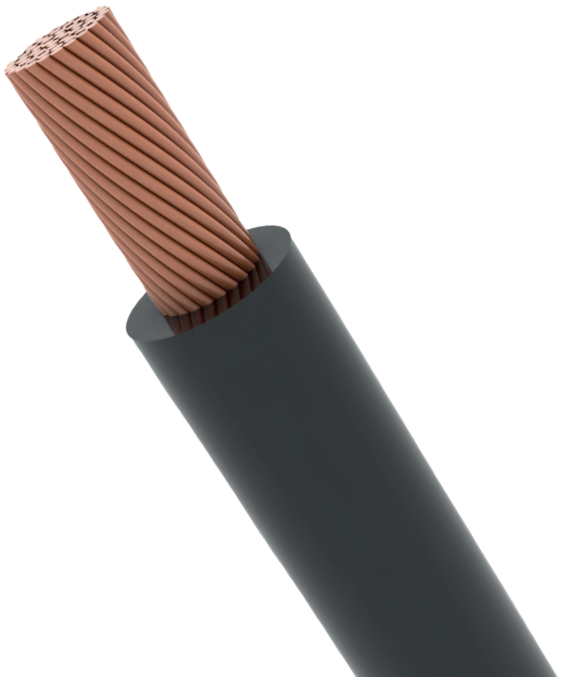
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 05*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free Nominal diameter: *see table 05* Colours: Black or colored on request

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 125°C (3000h)
CC temperature	160°C
Minimum bending radius	4 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

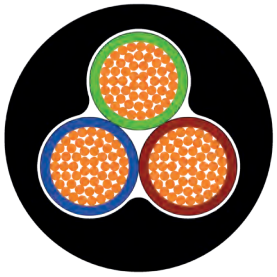


TK - SINGLE-CORE T3 CLASS 125°C THIN WALL FLH-B (TYPE B)

TABLE 05

Nominal section	Max Electrical Resistance (at 20°C)	Wall Thickness (nom)	Nominal Diameter
0.35 mm²	54 Ω/km	0.20 mm	1.3 mm
0.50 mm²	37.1 Ω/km	0.22 mm	1.55 mm
0.75 mm²	24.7 Ω/km	0.24 mm	1.9 mm
1 mm²	18.5 Ω/km	0.24 mm	2.1 mm
1.5 mm²	12.7 Ω/km	0.24 mm	2.35 mm
2.5 mm²	7.6 Ω/km	0.28 mm	2.9 mm
4 mm²	4.7 Ω/km	0.32 mm	3.7 mm
6 mm²	3.1 Ω/km	0.32 mm	4.2 mm
10 mm²	1.82 Ω/km	0.48 mm	5.3 mm
16 mm²	1.16 Ω/km	0.52 mm	6.6 mm
25 mm²	0.75 Ω/km	0.52 mm	9.4 mm

TK - MULTI-CORE T3 CLASS 125°C FLH91Y



CONSTRUCTION

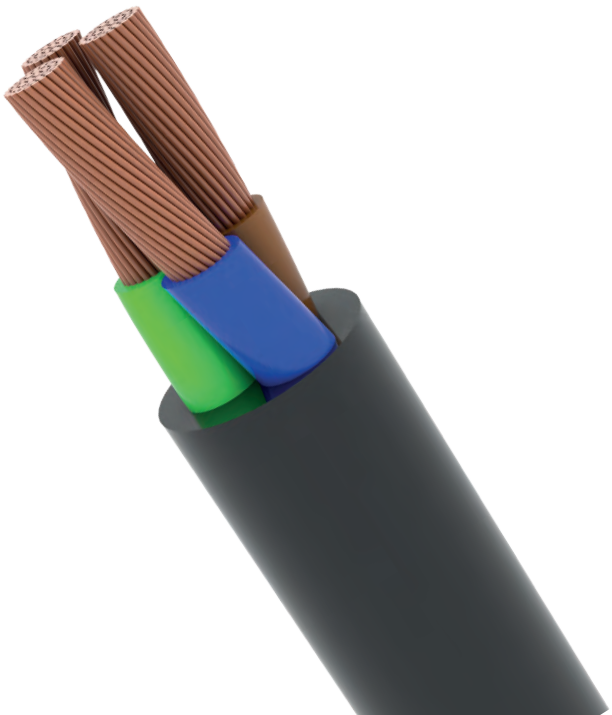
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 06*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free
Total Assembly	Elements assembled
Overall Sheath	Thermoplastic polyolefin elastomer Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free Nominal diameter: *see table 06* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 125°C (3000h)
CC temperature	160°C
Minimum bending radius	4 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

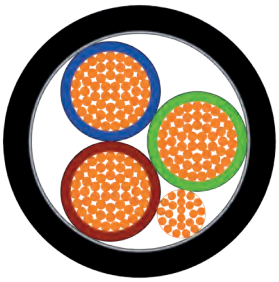


TK - MULTI-CORE T3 CLASS 125°C FLH91Y

TABLE 06

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.5 mm	3.3 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.5 mm	3.6 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.3 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	4.9 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	5.3 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.8 mm	6.3 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.8 mm	7.5 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.8 mm	8.9 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.8 mm	10.0 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.5 mm	3.7 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.5 mm	3.9 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.6 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	5.2 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	5.6 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.8 mm	6.7 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.8 mm	8.0 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.0 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.2 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.8 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	5.7 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	6.2 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.4 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.6 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	5.4 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	6.2 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	6.8 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	5.1 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	6.0 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.8 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	7.6 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	8.7 mm
12x0.35 mm²	54 Ω/km	0.2 mm	0.9 mm	7.1 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	0.9 mm	8.3 mm

TK - MULTI-CORE T3 CLASS 125°C FLHC9 1Y (SINGLE SHIELDED)



CONSTRUCTION

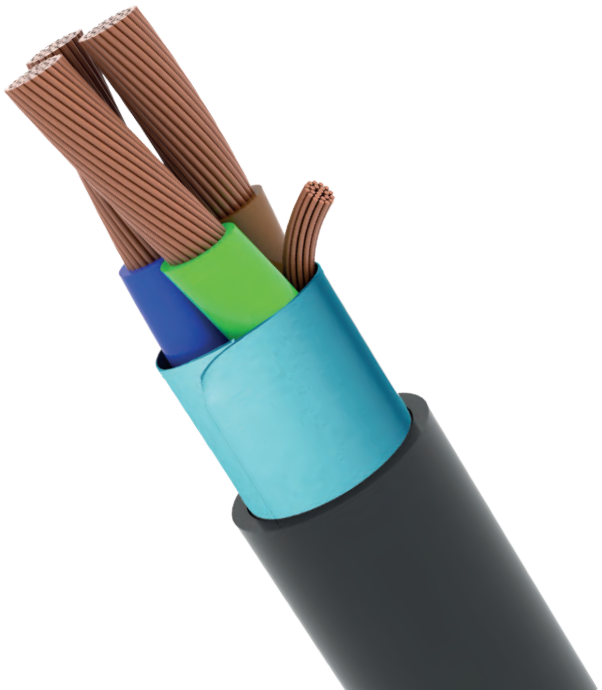
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 07*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free
Total Assembly	Elements assembled
Shield	Aluminium/Plastic tape + Bare copper drain wire
Overall Sheath	Thermoplastic polyolefin elastomer Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free Nominal diameter: *see table 07* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 125°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

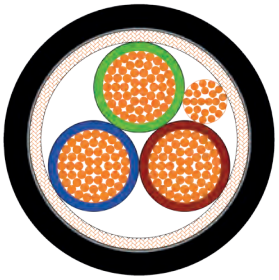


TK - MULTI-CORE T3 CLASS 125°C FLHC91Y (SINGLE SHIELDED)

TABLE 07

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	3.8 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.1 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	4.8 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.4 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	5.8 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	6.8 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.0 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.9 mm	9.4 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.9 mm	10.5 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.2 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.4 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.1 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.7 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.1 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.2 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.5 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.5 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	4.7 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.3 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.2 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.7 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.9 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.1 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.9 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.7 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.3 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.6 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.5 mm
			0.1 mm	0.5 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.3 mm
			0.1 mm	0.5 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.8 mm	8.1 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.8 mm	9.2 mm
12x0.35 mm²	54 Ω/km	0.2 mm	1 mm	7.6 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	1 mm	8.8 mm

TK - MULTI-CORE T3 CLASS 125°C FLHBC91Y (DOUBLE SHIELDED)



CONSTRUCTION

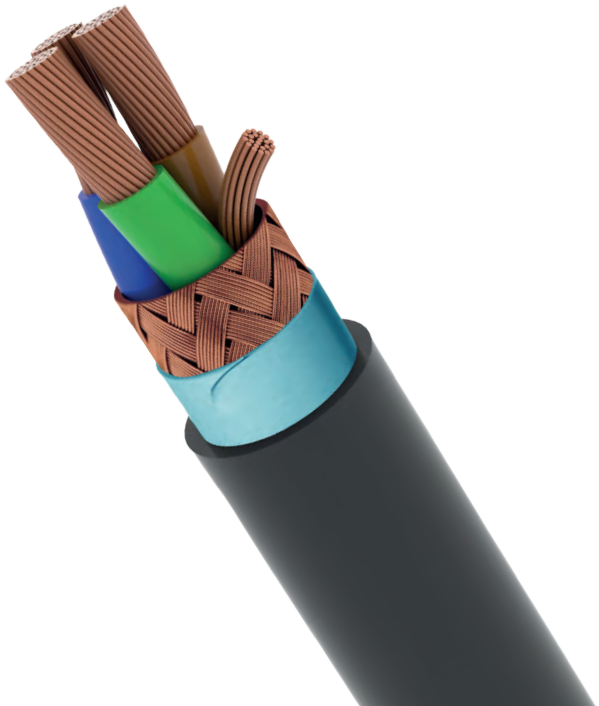
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 08*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free
Total Assembly	Elements assembled
1st Shield	Bare copper braid (nominal coverage 70%) + Bare copper drain wire
2st Shield	Aluminium/Plastic tape
Overall Sheath	Thermoplastic polyolefin elastomer Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free Nominal diameter: *see table 08* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 125°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

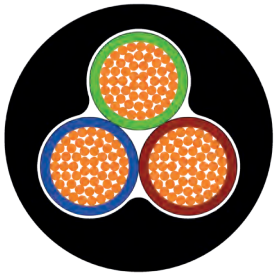


TK - MULTI-CORE T3 CLASS 125°C FLHBC91Y (DOUBLE SHIELDED)

TABLE 08

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.2 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.5 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.2 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.8 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.2 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.2 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.4 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.9 mm	9.8 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.9 mm	10.9 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.6 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.8 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.5 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.1 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.5 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.6 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.9 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.9 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.1 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.7 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.6 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.1 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.3 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.5 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.3 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	7.1 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.7 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	6.0 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.9 mm
			0.1 mm	0.9 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.7 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.8 mm	8.5 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.8 mm	9.6 mm
12x0.35 mm²	54 Ω/km	0.2 mm	1 mm	8.0 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	1 mm	9.2 mm

TK - MULTI-CORE T3 CLASS 125°C FLH11Y



CONSTRUCTION

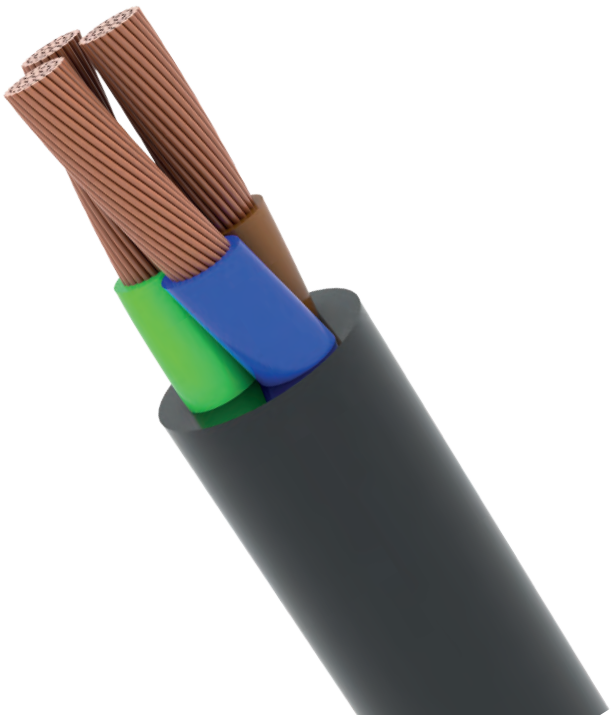
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 09*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free
Total Assembly	Elements assembled
Overall Sheath	Thermoplastic Polyether Polyurethane Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free Nominal diameter: *see table 09* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 125°C (3000h)
CC temperature	160°C
Minimum bending radius	4 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

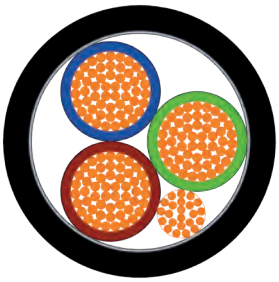


TK - MULTI-CORE T3 CLASS 125°C FLH11Y

TABLE 09

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.5 mm	3.3 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.5 mm	3.6 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.3 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	4.9 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	5.3 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.8 mm	6.3 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.8 mm	7.5 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.8 mm	8.9 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.8 mm	10.0 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.5 mm	3.7 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.5 mm	3.9 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.6 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	5.2 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	5.6 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.8 mm	6.7 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.8 mm	8.0 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.0 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.2 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.8 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	5.7 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	6.2 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.4 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.6 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	5.4 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	6.2 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	6.8 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	5.1 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	6.0 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.8 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	7.6 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	8.7 mm
12x0.35 mm²	54 Ω/km	0.2 mm	0.9 mm	7.1 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	0.9 mm	8.3 mm

TK - MULTI-CORE T3 CLASS 125°C FLHC11Y (SINGLE SHIELDED)



CONSTRUCTION

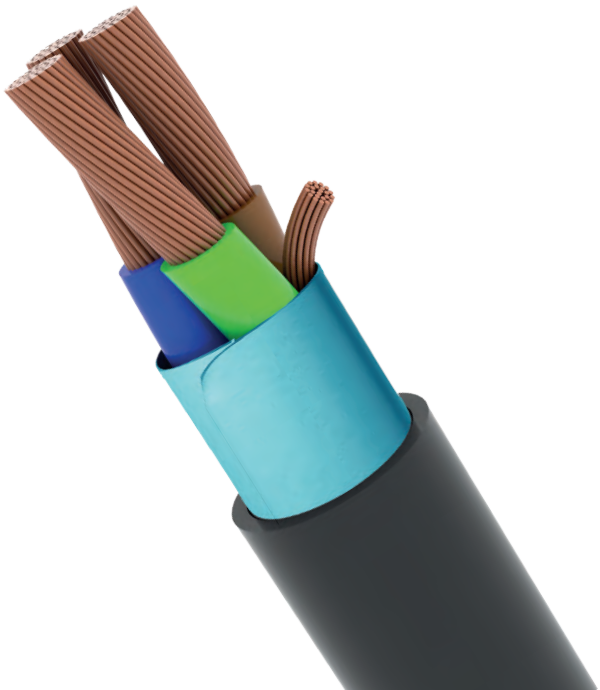
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 10*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free
Total Assembly	Elements assembled
Shield	Aluminium/Plastic tape + Bare copper drain wire
Overall Sheath	Thermoplastic Polyether Polyurethane Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free Nominal diameter: *see table 10* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 125°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

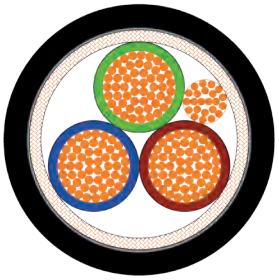


TK - MULTI-CORE T3 CLASS 125°C FLHC11Y (SINGLE SHIELDED)

TABLE 10

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	3.8 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.1 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	4.8 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.4 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	5.8 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	6.8 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.0 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.9 mm	9.4 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.9 mm	10.5 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.2 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.4 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.1 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.7 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.1 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.2 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.5 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.5 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	4.7 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.3 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.2 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.7 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.9 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.1 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.9 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.7 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.3 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.6 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.5 mm
			0.1 mm	0.5 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.3 mm
			0.1 mm	0.5 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.8 mm	8.1 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.8 mm	9.2 mm
12x0.35 mm²	54 Ω/km	0.2 mm	1 mm	7.6 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	1 mm	8.8 mm

TK - MULTI-CORE T3 CLASS 125°C FLHBC11Y (DOUBLE SHIELDED)



CONSTRUCTION

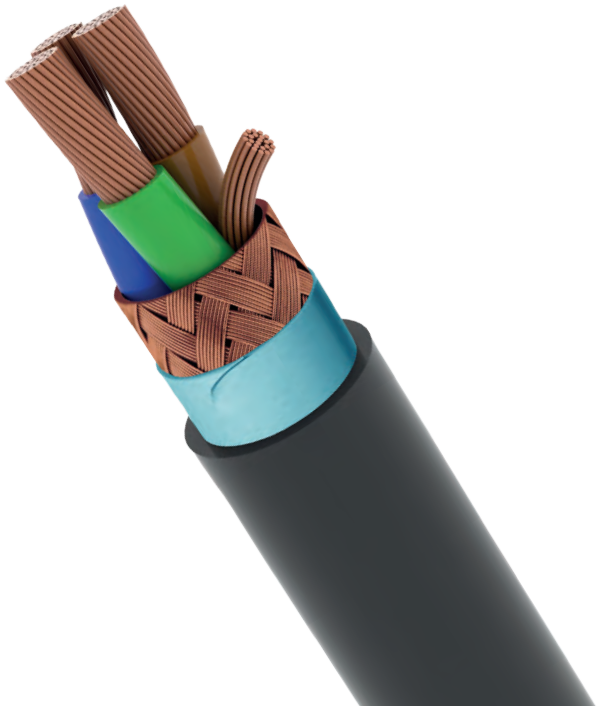
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 11*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free
Total Assembly	Elements 1 assembled
1st Shield	Bare copper braid (nominal coverage 70%) + Bare copper drain wire
2st Shield	Aluminium/Plastic tape
Overall Sheath	Thermoplastic Polyether Polyurethane Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free Nominal diameter: *see table 11* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 125°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

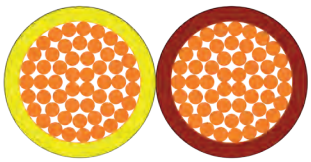


TK - MULTI-CORE T3 CLASS 125°C FLHBC11Y (DOUBLE SHIELDED)

TABLE 11

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.2 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.5 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.2 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.8 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.2 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.2 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.4 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.9 mm	9.8 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.9 mm	10.9 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.6 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.8 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.5 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.1 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.5 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.6 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.9 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.9 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.1 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.7 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.6 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.1 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.3 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.5 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.3 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	7.1 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.7 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	6.0 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.9 mm
			0.1 mm	0.9 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.7 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.8 mm	8.5 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.8 mm	9.6 mm
12x0.35 mm²	54 Ω/km	0.2 mm	1 mm	8.0 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	1 mm	9.2 mm

TK - MULTI-CORE T3 CLASS 125°C FLRH TWISTED



CONSTRUCTION

Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 Type A: concentric Type B: CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 12*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class C – T3 – Lead Free
Total Assembly	Elements assembled

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 125°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

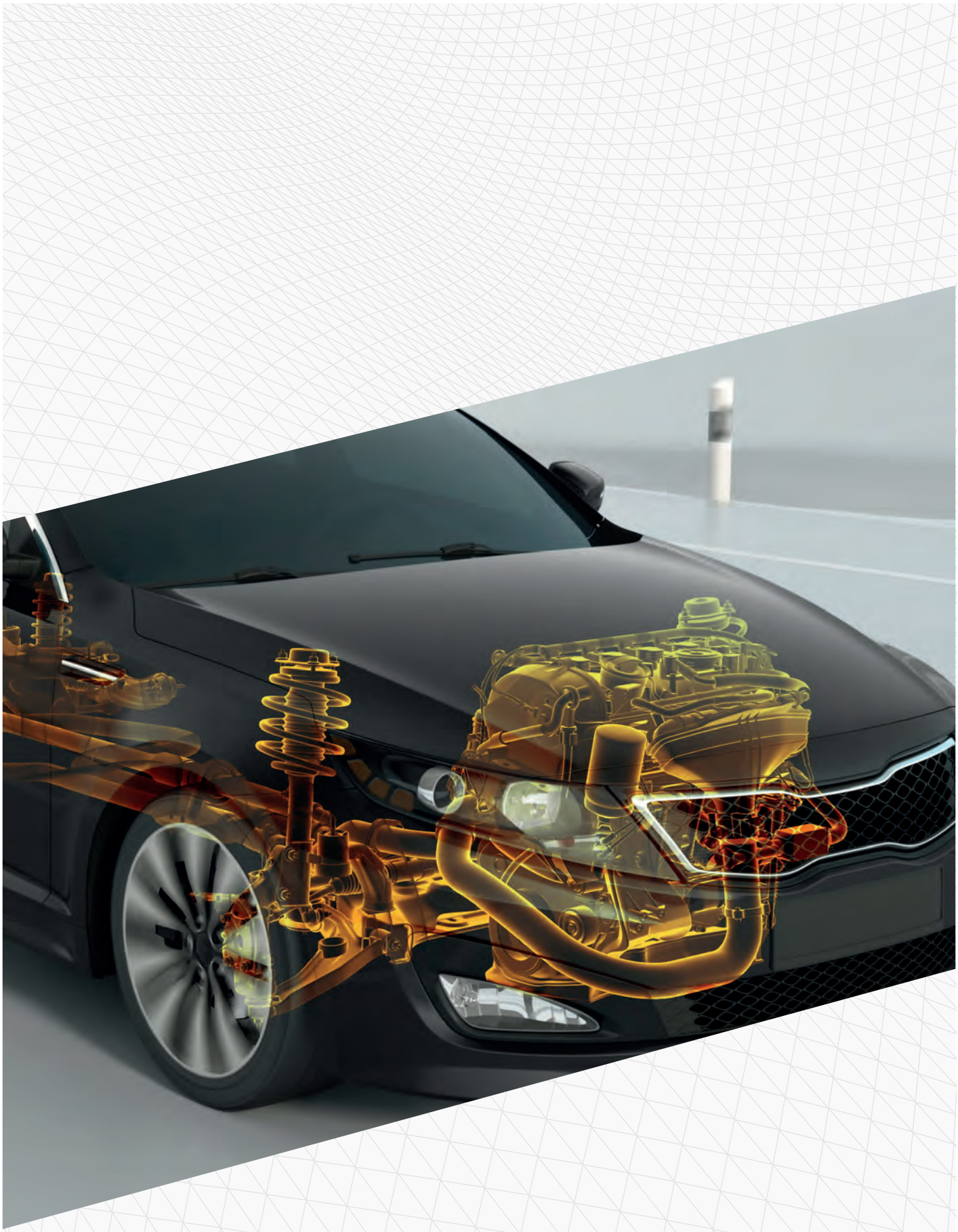
TK - MULTI-CORE T3 CLASS 125°C FLRH TWISTED

TABLE 12

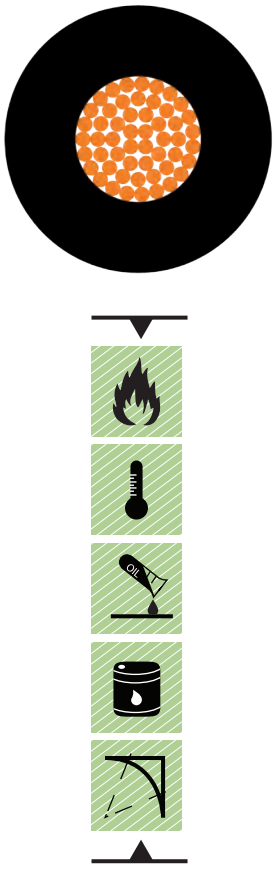
Nominal section	Type	Max Electrical Resistance (at 20°C)	Wall Thickness (nom)	Nominal Diameter
2x0.35 mm²	A	55 Ω/km	0.2 mm	2.6 mm
2x 0.50 mm²	A	37.1 Ω/km	0.22 mm	3.1 mm
2x 0.75 mm²	A	24.7 Ω/km	0.24 mm	3.6 mm
2x 1 mm²	A	18.5 Ω/km	0.24 mm	4.0 mm
2x 1.5 mm²	A	12.7 Ω/km	0.24 mm	4.6 mm
2x 2.5 mm²	A	7.6 Ω/km	0.28 mm	5.7 mm
2x 0.35 mm²	B	55 Ω/km	0.2 mm	2.6 mm
2x 0.50 mm²	B	37.1 Ω/km	0.22 mm	3.1 mm
2x 0.75 mm²	B	24.7 Ω/km	0.24 mm	3.8 mm
2x 1 mm²	B	18.5 Ω/km	0.24 mm	4.2 mm
2x 1.5 mm²	B	12.7 Ω/km	0.24 mm	4.7 mm
2x 2.5 mm²	B	7.6 Ω/km	0.28 mm	5.8 mm

NOTE

SINGLE CORE/MULTICORE T4 UP TO CLASS 150°C



TK - SINGLE-CORE T4 CLASS 150°C THIN WALL FLR12Y-A (TYPE A)



CONSTRUCTION

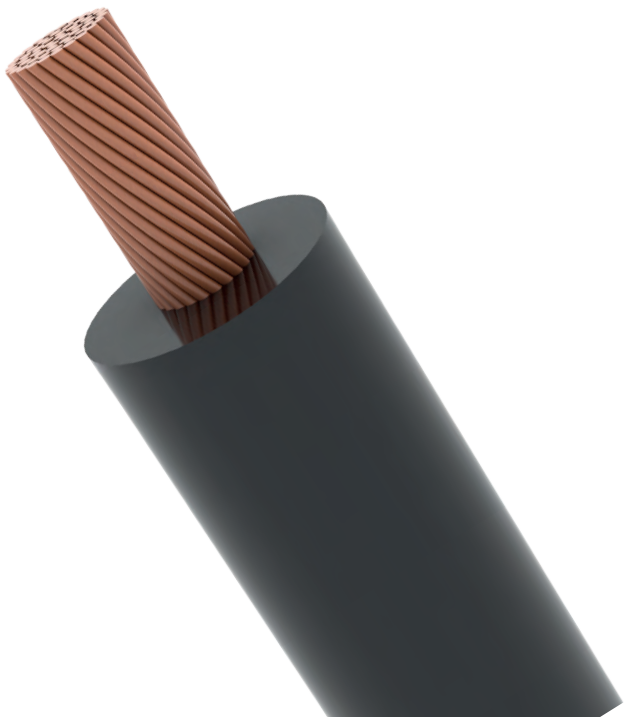
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 Concentric type (7 or 19 stranded) Section: *see table 01*
Insulation	TPE-E compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free Nominal diameter: *see table 01* Colours: Black or colored on request

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 150°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

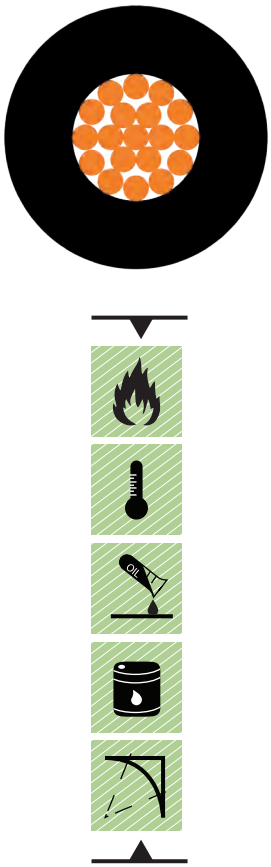


TK - SINGLE-CORE T4 CLASS 150°C THIN WALL FLR12Y-A (TYPE A)

TABLE 01

Nominal section	Max Electrical Resistance (at 20°C)	Wall Thickness (nom)	Nominal Diameter
0,13 mm²	136 Ω/km	0,2 mm	1,0 mm
0,22 mm²	85 Ω/km	0,2 mm	1,2 mm
0,35 mm²	55 Ω/km	0,2 mm	1,3 mm
0,50 mm²	37,1 Ω/km	0,22 mm	1,55 mm
0,75 mm²	24,7 Ω/km	0,24 mm	1,85 mm
1 mm²	18,5 Ω/km	0,24 mm	2,0 mm
1,5 mm²	12,7 Ω/km	0,24 mm	2,35 mm
2,5 mm²	7,6 Ω/km	0,28 mm	2,9 mm

TK - SINGLE-CORE T4 CLASS 150°C THIN WALL FLR12Y-B (TYPE B)



CONSTRUCTION

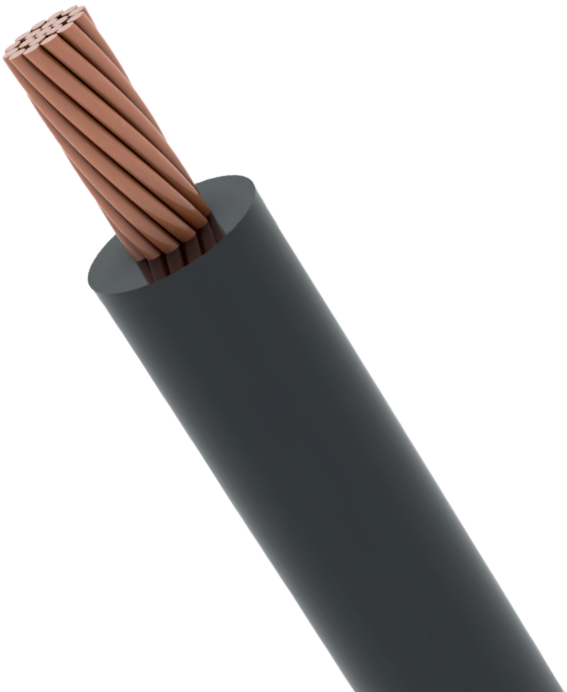
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 02*
Insulation	TPE-E compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free Nominal diameter: *see table 02* Colours: Black or colored on request

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 150°C (3000h)
CC temperature	160°C
Minimum bending radius	4 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

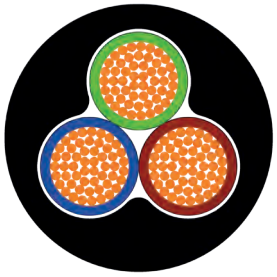


TK - SINGLE-CORE T4 CLASS 150°C THIN WALL FLR12Y-B (TYPE B)

TABLE 02

Nominal section	Max Electrical Resistance (at 20°C)	Wall Thickness (nom)	Nominal Diameter
0.35 mm²	54 Ω/km	0.2 mm	1.3 mm
0.50 mm²	37.1 Ω/km	0.22 mm	1.55 mm
0.75 mm²	24.7 Ω/km	0.24 mm	1.9 mm
1 mm²	18.5 Ω/km	0.24 mm	2.1 mm
1.5 mm²	12.7 Ω/km	0.24 mm	2.35 mm
2.5 mm²	7.6 Ω/km	0.28 mm	2.9 mm
4 mm²	4.7 Ω/km	0.32 mm	3.7 mm
6 mm²	3.1 Ω/km	0.32 mm	4.2 mm
10 mm²	1.82 Ω/km	0.48 mm	5.3 mm
16 mm²	1.16 Ω/km	0.52 mm	6.6 mm
25 mm²	0.75 Ω/km	0.52 mm	9.4 mm

TK - MULTI-CORE T4 CLASS 150°C FLH91Y



CONSTRUCTION

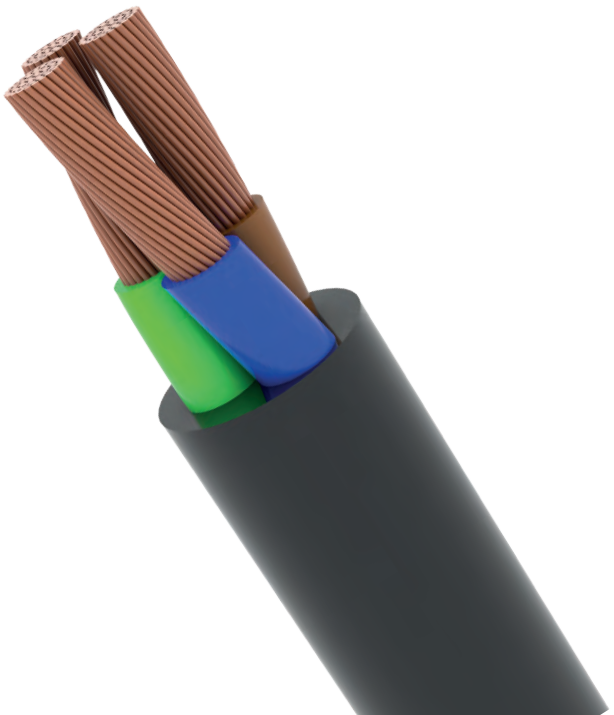
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 03*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free
Total Assembly	Elements assembled
Overall Sheath	Thermoplastic polyolefin elastomer Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free Nominal diameter: *see table 03* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 150°C (3000h)
CC temperature	160°C
Minimum bending radius	4 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

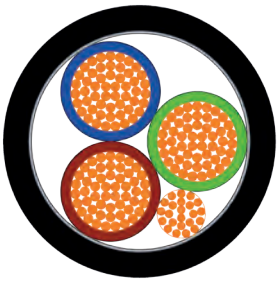


TK - MULTI-CORE T4 CLASS 150°C FLH91Y

TABLE 03

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.5 mm	3.3 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.5 mm	3.6 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.3 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	4.9 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	5.3 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.8 mm	6.3 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.8 mm	7.5 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.8 mm	8.9 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.8 mm	10.0 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.5 mm	3.7 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.5 mm	3.9 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.6 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	5.2 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	5.6 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.8 mm	6.7 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.8 mm	8.0 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.0 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.2 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.8 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	5.7 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	6.2 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.4 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.6 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	5.4 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	6.2 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	6.8 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	5.1 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	6.0 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.8 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	7.6 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	8.7 mm
12x0.35 mm²	54 Ω/km	0.2 mm	0.9 mm	7.1 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	0.9 mm	8.3 mm

TK - MULTI-CORE T4 CLASS 150°C FLHC9 1Y (SINGLE SHIELDED)



CONSTRUCTION

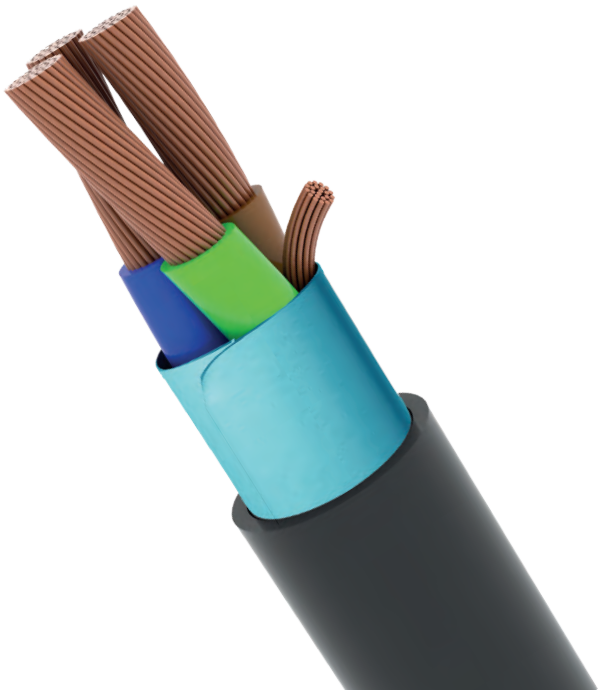
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 04*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free
Total Assembly	Elements assembled
Shield	Aluminium/Plastic tape + Bare copper drain wire
Overall Sheath	Thermoplastic polyolefin elastomer Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free Nominal diameter: *see table 04* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 150°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

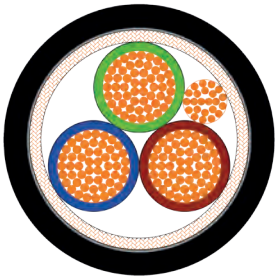


TK - MULTI-CORE T3 CLASS 125°C FLHC91Y (SINGLE SHIELDED)

TABLE 04

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	3.8 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.1 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	4.8 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.4 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	5.8 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	6.8 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.0 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.9 mm	9.4 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.9 mm	10.5 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.2 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.4 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.1 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.7 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.1 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.2 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.5 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.5 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	4.7 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.3 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.2 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.7 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.9 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.1 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.9 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.7 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.3 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.6 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.5 mm
			0.1 mm	0.5 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.3 mm
			0.1 mm	0.5 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.8 mm	8.1 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.8 mm	9.2 mm
12x0.35 mm²	54 Ω/km	0.2 mm	1 mm	7.6 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	1 mm	8.8 mm

TK - MULTI-CORE T4 CLASS 150°C FLHBC91Y (DOUBLE SHIELDED)



CONSTRUCTION

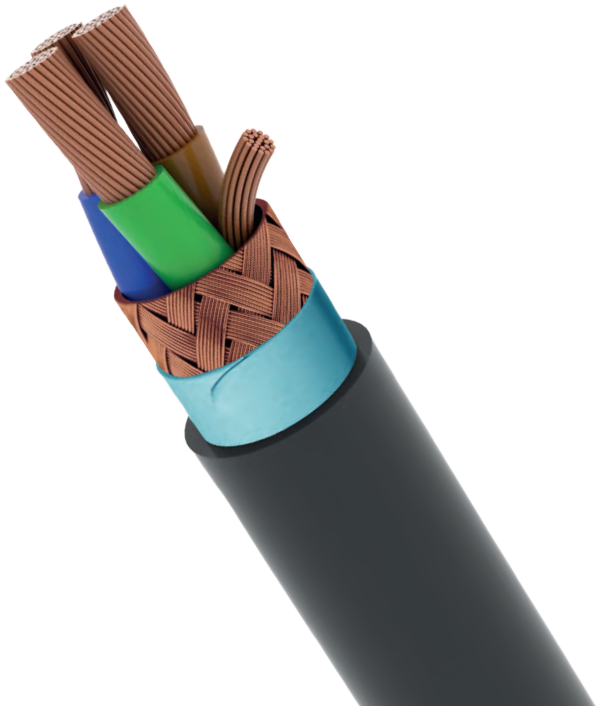
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 05*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free
Total Assembly	Elements assembled
1st Shield	Bare copper braid (nominal coverage 70%) + Bare copper drain wire
2st Shield	Aluminium/Plastic tape
Overall Sheath	Thermoplastic polyolefin elastomer – Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free Nominal diameter: *see table 05* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 150°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

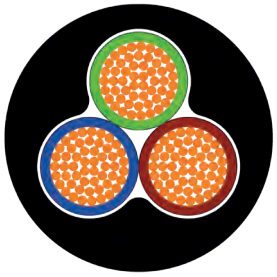


TK - MULTI-CORE T4 CLASS 150°C FLHBC91Y (DOUBLE SHIELDED)

TABLE 05

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.2 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.5 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.2 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.8 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.2 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.2 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.4 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.9 mm	9.8 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.9 mm	10.9 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.6 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.8 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.5 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.1 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.5 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.6 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.9 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.9 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.1 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.7 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.6 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.1 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.3 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.5 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.3 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	7.1 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.7 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	6.0 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.9 mm
			0.1 mm	0.9 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.7 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.8 mm	8.5 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.8 mm	9.6 mm
12x0.35 mm²	54 Ω/km	0.2 mm	1 mm	8.0 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	1 mm	9.2 mm

TK - MULTI-CORE T4 CLASS 150°C FLH11Y



CONSTRUCTION

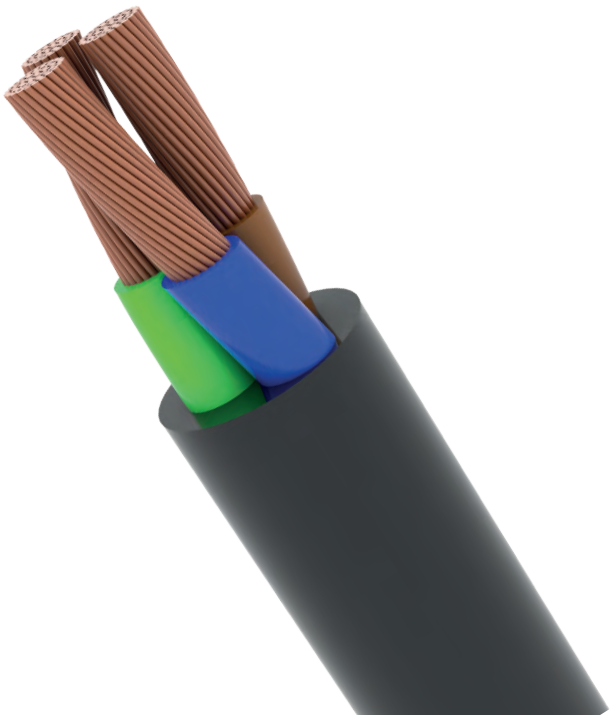
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 06*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free
Total Assembly	Elements assembled
Overall Sheath	Thermoplastic Polyether Polyurethane Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free Nominal diameter: *see table 06* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 150°C (3000h)
CC temperature	160°C
Minimum bending radius	4 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

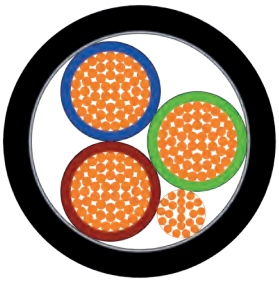


TK - MULTI-CORE T4 CLASS 150°C FLH11Y

TABLE 06

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.5 mm	3.3 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.5 mm	3.6 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.3 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	4.9 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	5.3 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.8 mm	6.3 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.8 mm	7.5 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.8 mm	8.9 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.8 mm	10.0 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.5 mm	3.7 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.5 mm	3.9 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.6 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	5.2 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	5.6 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.8 mm	6.7 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.8 mm	8.0 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.0 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.2 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	4.8 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	5.7 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	6.2 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.4 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.6 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	5.4 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.6 mm	6.2 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.6 mm	6.8 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	5.1 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.6 mm	6.0 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.8 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	7.6 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	8.7 mm
12x0.35 mm²	54 Ω/km	0.2 mm	0.9 mm	7.1 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	0.9 mm	8.3 mm

TK - MULTI-CORE T4 CLASS 150°C FLHC11Y (SINGLE SHIELDED)



CONSTRUCTION

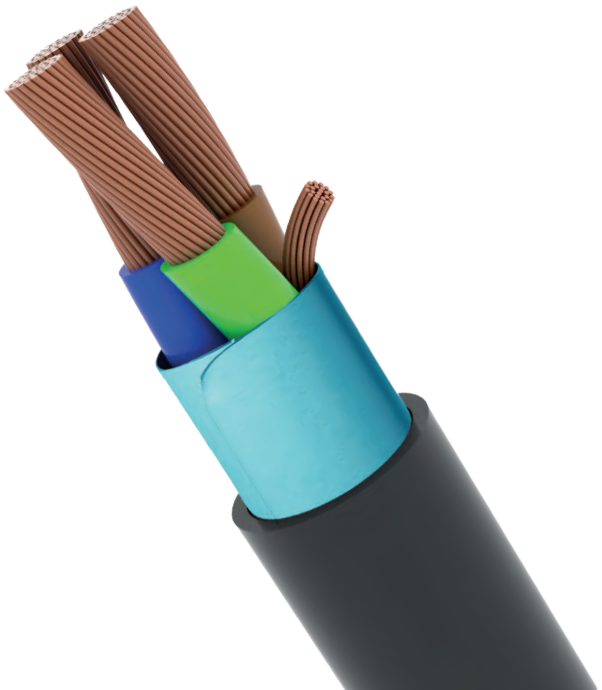
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 07*
Insulation	Flame retardant polyolefin compound - Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free
Total Assembly	Elements assembled
Shield	Aluminium/Plastic tape + Bare copper drain wire
Overall Sheath	Thermoplastic Polyether Polyurethane Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free Nominal diameter: *see table 07* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 150°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

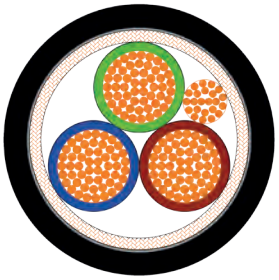


TK - MULTI-CORE T3 CLASS 125°C FLHC11Y (SINGLE SHIELDED)

TABLE 07

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	3.8 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.1 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	4.8 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.4 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	5.8 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	6.8 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.0 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.9 mm	9.4 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.9 mm	10.5 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.2 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.4 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.1 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.7 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.1 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.2 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.5 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.5 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	4.7 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.3 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.2 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.7 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.9 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.1 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.9 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.7 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.3 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.6 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.5 mm
			0.1 mm	0.5 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.3 mm
			0.1 mm	0.5 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.8 mm	8.1 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.8 mm	9.2 mm
12x0.35 mm²	54 Ω/km	0.2 mm	1 mm	7.6 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	1 mm	8.8 mm

TK - MULTI-CORE T4 CLASS 150°C FLHBC11Y (DOUBLE SHIELDED)



CONSTRUCTION

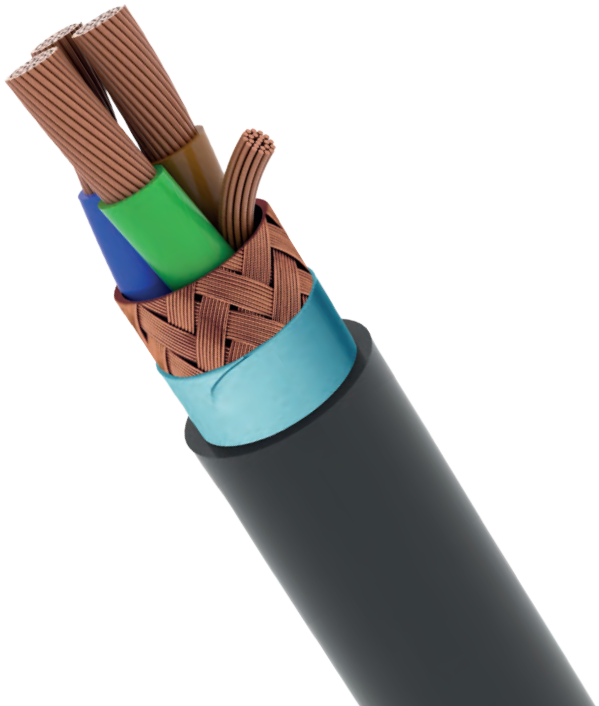
Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 08*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free
Total Assembly	Elements assembled
1st Shield	Bare copper braid (nominal coverage 70%) + Bare copper drain wire
2st Shield	Aluminium/Plastic tape
Overall Sheath	Thermoplastic Polyether Polyurethane Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free Nominal diameter: *see table 08* Colour: Black

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 150°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

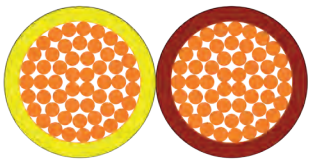


TK - MULTI-CORE T4 CLASS 150°C FLHBC11Y (DOUBLE SHIELDED)

TABLE 08

Nominal section	Max Electrical Resistance (at 20°C)	Insulation Thickness (nom)	Wall Thickness (nom)	Nominal Diameter
2x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.2 mm
2x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.5 mm
2x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.2 mm
2x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	5.8 mm
2x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.2 mm
2x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.2 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.4 mm
2x4 mm²	4.7 Ω/km	0.32 mm	0.9 mm	9.8 mm
2x6 mm²	3.1 Ω/km	0.32 mm	0.9 mm	10.9 mm
3x0.22 mm²	85 Ω/km	0.2 mm	0.6 mm	4.6 mm
3x0.35 mm²	54 Ω/km	0.2 mm	0.6 mm	4.8 mm
3x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.5 mm
3x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.1 mm
3x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	6.5 mm
3x1.5 mm²	12.7 Ω/km	0.24 mm	0.9 mm	7.6 mm
3x2.5 mm²	7.6 Ω/km	0.28 mm	0.9 mm	8.9 mm
4x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	4.9 mm
4x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.1 mm
4x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	5.7 mm
4x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	6.6 mm
4x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.1 mm
5x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.3 mm
5x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	5.5 mm
5x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.3 mm
5x0.75 mm²	24.7 Ω/km	0.24 mm	0.7 mm	7.1 mm
5x1 mm²	18.5 Ω/km	0.24 mm	0.7 mm	7.7 mm
6x0.35 mm²	54 Ω/km	0.2 mm	0.7 mm	6.0 mm
6x0.50 mm²	37.1 Ω/km	0.22 mm	0.7 mm	6.9 mm
			0.1 mm	0.9 mm
7x0.22 mm²	85 Ω/km	0.2 mm	0.7 mm	5.7 mm
9x0.50 mm²	37.1 Ω/km	0.22 mm	0.8 mm	8.5 mm
9x0.75 mm²	24.7 Ω/km	0.24 mm	0.8 mm	9.6 mm
12x0.35 mm²	54 Ω/km	0.2 mm	1 mm	8.0 mm
12x0.50 mm²	37.1 Ω/km	0.22 mm	1 mm	9.2 mm

TK - MULTI-CORE T4 CLASS 150°C FLRH TWISTED



CONSTRUCTION

Conductor	Bare Copper Conductor Cu-EPT1 acc.to CEI EN 13602 – ISO 6722 Type A: concentric Type B: CEI 20-29/IEC50228/VDE 0295 Class 5 or equivalent Section: *see table 09*
Insulation	Flame retardant polyolefin compound Oil resistant and Fuel Resistant according to ISO 6722-1 Class D – T4 – Lead Free
Total Assembly	Elements assembled

TECHNICAL DATA

Insulation Resistance	≥ 20 MΩxkm at 20°C
Test Voltage	2 kV
Operating Voltage	300 V V_{DC} - 220 V V_{AC}
Temperature range	-40°C ÷ 150°C (3000h)
CC temperature	160°C
Minimum bending radius	5 x outer diameter (installation)

REFERENCE STANDARDS

Flame retardancy	ISO 6722

TK - MULTI-CORE T4 CLASS 150°C FLRH TWISTED

TABLE 09

Nominal section	Type	Max Electrical Resistance (at 20°C)	Wall Thickness (nom)	Nominal Diameter
2x0.35 mm²	A	55 Ω/km	0.2 mm	2.6 mm
2x 0.50 mm²	A	37.1 Ω/km	0.22 mm	3.1 mm
2x 0.75 mm²	A	24.7 Ω/km	0.24 mm	3.6 mm
2x 1 mm²	A	18.5 Ω/km	0.24 mm	4.0 mm
2x 1.5 mm²	A	12.7 Ω/km	0.24 mm	4.6 mm
2x 2.5 mm²	A	7.6 Ω/km	0.28 mm	5.7 mm
2x 0.35 mm²	B	55 Ω/km	0.2 mm	2.6 mm
2x 0.50 mm²	B	37.1 Ω/km	0.22 mm	3.1 mm
2x 0.75 mm²	B	24.7 Ω/km	0.24 mm	3.8 mm
2x 1 mm²	B	18.5 Ω/km	0.24 mm	4.2 mm
2x 1.5 mm²	B	12.7 Ω/km	0.24 mm	4.7 mm
2x 2.5 mm²	B	7.6 Ω/km	0.28 mm	5.8 mm

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