

Tecnikabel

WHERE FUTURE FLOWS

CABLES FOR
Bulding Application

BUILDING TECHNOLOGY
SECTOR

Tecnikabel
WHERE FUTURE FLOWS



Introduction

Tecnikabel is a European manufacturer specialising in cables for civil, commercial and infrastructural applications, with a range engineered to meet the requirements of every built environment – from public spaces to offices, data centres to hospital facilities.

The growing complexity of modern buildings demands integrated cabling solutions: data transmission, video signal, access control, security. Teknikabel supplies complete copper and fibre-optic systems for voice, data and image – suited to building entrances, meeting rooms, auditoriums and individual workstations.

Safety is a non-negotiable requirement. Offices, hospitals, airports, retail outlets, schools and stadiums all require surveillance, fire detection and alarm systems that maintain continuous operation, even under critical conditions. Our building cables are engineered to ensure high alarm circuit efficiency and sustained performance under direct fire exposure – with fire-resistant constructions, low smoke emission and zero halogen compounds, safeguarding both personnel and assets.

OUR SECTORS



TRANSPORTATION



AUTOMATION



TELECOMMUNICATION



DEFENSE



MARINE OIL & GAS



SUBSEA



BUILDING TECHNOLOGY

Where project specifications exceed standard solutions, our custom design capability becomes essential. Teknikabel acts as a technical partner, developing and manufacturing cables precisely engineered for the functional and environmental demands of each individual application.

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

PRODUCTION

Updated production systems, rigorous process controls and skilled operators ensure an efficient, flexible and reliable manufacturing flow. Over nearly half a century of activity, we have engineered and produced more than 26,000 different cable configurations.

FINAL INSPECTIONS

At the end of every production cycle, each cable undergoes full electrical, optical and physical verification to ensure complete compliance with the customer's technical specifications.

LABORATORY TESTS

Our cables are subjected to demanding laboratory tests that replicate critical application conditions. Beyond the standard evaluations required by current regulations, we have developed dedicated equipment for mechanical, environmental, electrical and optical testing to validate performance in extreme scenarios.

MATERIALS RESEARCH AND DEVELOPMENT

With nearly fifty years of experience, we continue to research and develop advanced materials aimed at improving performance, optimising costs and meeting the evolving technical requirements of our customers.

QUALITY SYSTEM

Since 1978, our commitment to Quality has earned Tecnikabel recognition from major American and European authorities, ensuring compliance with the most rigorous international manufacturing and quality standards.

Guaranteed
excellence

Tecnikabel's constant commitment to quality has earned recognition from leading American and European authorities, ensuring full compliance with the most demanding international manufacturing and quality standards.

COMPANY MANAGEMENT
SYSTEM CERTIFICATION



PRODUCT
CERTIFICATION



All cables in this sector are certified:



Reliability you can trust

Safety-driven cable innovation

ADDRESSING NEW HOMOLOGATION REQUIREMENTS: EXTENDED FIRE DURATION

Engineers are continuously designing powerful systems with extensive cabling infrastructures, where high-speed transmission protocols must handle massive volumes of data—including signals and images. These critical communication systems demand maximum stability and peak performance, utilizing both optical fiber and copper cables. Teknikabel proactively meets the latest offshore and shipbuilding requirements set by homologation bodies. We ensure full-circuit integrity during fire scenarios, complying with IEC 60331 standards for an extended duration of up to 180 minutes. We transform these stringent technical challenges into reliable, future-ready solutions.

GAS-TIGHT RESISTANCE FOR SAFER OPERATIONS IN EXPLOSIVE ENVIRONMENTS

The demand for high-quality data connections between explosive areas and safe zones is growing. Gas-permeable cavities in cables can allow explosive mixtures to migrate to densely populated areas, making strict adherence to technical specifications essential. This need is increasingly important with the expanded use of LNG (Liquefied Natural Gas) for vessel propulsion, storage, and transportation. Teknikabel, as a co-designer and problem solver, has developed a complete range of copper data cables specifically for such environments. These solutions comply with IEC 60079-14, meeting not only the mechanical, chemical, and thermal requirements for explosive areas but also the critical standards for gas migration. Our cables can therefore be installed in offshore applications without restrictions, providing the optimal solution for safety and reliability.

ENHANCED CABLE PERFORMANCE FOR ARCTIC ENVIRONMENTS

Our cable range is engineered for superior performance in extremely cold conditions. They are suitable for installation at temperatures down to -30°C , with permanent operating capability as low as -62°C . The performance of our TKSEA cables in Arctic conditions is validated through cold bend and cold impact tests, in accordance with the North American (Canadian) standard CSA 22/2. Through continuous innovation and proven reliability, Teknikabel contributes significantly to enhancing safety and operational longevity on board ships and offshore structures worldwide.

Passion flows through our cables.

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ENVIRONMENTAL PROPERTIES



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



FLAME RETARDANT BUNCHED WIRES
(IEC 60332-3)



FIRE RESISTANCE (IEC 60331
- EN50200 - BS6387 CWZ)



REDUCED EMISSION OF FUMES AND
TOXIC GASES (IEC 60754-1; EN 50267-2-1)



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



FLEXIBLE INSTALLATION



FULLY DIELECTRIC



DIRECT BURIAL



ANTIBALLISTIC PROTECTION

CHEMICAL PROPERTIES



MUD RESISTANCE



MINERAL OIL RESISTANCE



HYDROCARBONS RESISTANCE



PVC VERSION

MECHANICAL PROPERTIES



MECHANICAL RESISTANCE



REDUCED BENDING RADIUS



WORK AT LOW TEMPERATURE



FIRE PERFORMANCE

Built and tested
for fire safety

International testing norms for fire-resistant cable performance



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.



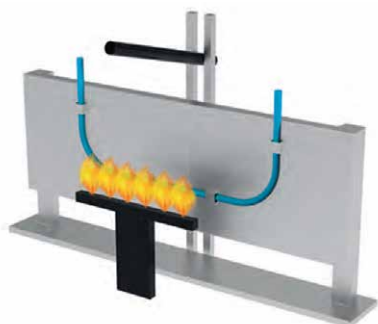
IEC 60332-3 / EN 50266

FIRE PROPAGATION ON A VERTICAL CABLES BUNDLE

A certain number of cable samples are fixed on a 3.5 m 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



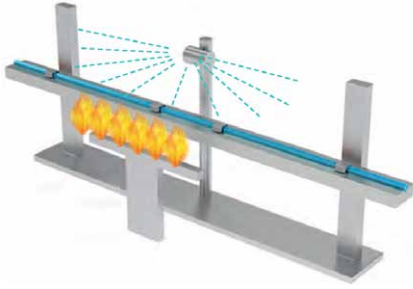
IEC 60331 / EN 50200

FIRE RESISTANCE TEST

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.



BS 6387 Category CWZ

FIRE RESISTANCE PROTOCOLS

The full test consists of subjecting the cable to 3 different protocols:

- C:** a flame with a temperature attack of 950 °C is applied to the cable
 - W:** a flame with a temperature attack of 650 °C is applied to the cable together with water simulating a sprinkler system
 - Z:** a flame with a temperature attack of 950 °C is applied to the cable together with mechanical shock.
-

IEC 61034-1/2 - EN 50268-1/2

MEASUREMENT OF SMOKE DENSITY UNDER DEFINED CONDITIONS

The amount of smoke of a cable burnt in a cubic (3x3x3 m) chamber using a flammable liquid. The light transmittance of the resulting smoke is measured using an optical light meter. The test duration is 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.

BS 8434-2 2003 + A2 2009

FIRE RESISTANCE TEST

Test for unprotected small cables for use in emergency circuits. The fire resistance test is carried out according to BS 6387 and BS 8434-2. The test is based on the requirements of BS EN 50200 and includes mechanical shock and water spray. The cable is mounted on a vertical ladder and exposed to a flame of 830 °C. The test duration is 120 minutes.

The cable must continue to operate normally during the test.

The test is considered successful if the cable can supply power to emergency equipment safely for a 120 min duration.

IEC 60754-1 - EN 50267-2-1

TEST ON GASES EVOLVED DURING COMBUSTION OF MATERIALS FROM CABLES - MEASUREMENT OF AMOUNT OF HALOGEN ACID GAS

The cable is burned in a tube with a constant stream of air. The combustion gases are collected in water. The amount of halogen acid gas is measured. The concentration of halogen acid gas must be less than 5 mg/g.

IEC 60754-2 - EN 50267-2-2

TEST ON GASES EVOLVED DURING COMBUSTION OF MATERIALS FROM CABLES - DETERMINATION OF ACIDITY (BY PH MEASUREMENT) AND CONDUCTIVITY

A small quantity of cable is burned. 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.



These images are for illustrative purposes.

TK-BT SERIES-3

TK-MUCASCB1/SERIES 3



characteristics



* Only for LSZH version ** Only for PVC version

CABLE SPECIFICATIONS

Conductor	Stranded Bare Copper
Insulation	Polyolefin
Core identification	Black, Red. (2 Cores) Black, Red, White. (3 Cores) Black, Red, White, Green. (4 Cores) Black, Red, White, Green, Brown, Blue. (6 Cores) Black, Red, White, Green, Brown, Blue, Orange, Yellow. (8 Cores)
Outer sheath	Flame retardant, low smoke and halogen-free or PVC material
Colour	Grey Other colours available upon request

TECHNICAL DATA

Operating Voltage	300V
Operating Temperature Range	-40°C + +80°C (LSZH) -20°C + +70°C (PVC)
Installation Temperature	-10°C + +50°C
Minimum Bending Radius	Static: 5 x outer diameter Dynamic: 15 x outer diameter

FIRE PERFORMANCE

Fire Propagation	IEC 60332-1-2
Halogen-Free	IEC 60754-1/2 (only LSZH material)
Low Smoke Density	IEC 61034-1/2 (only LSZH material)

MAIN FEATURES

N° of Cores & Conductor Cross Section	Nominal diameter Sheath	Conductor resistance @20°C max.	Insulation resistance @20°C min.	Max pulling force	Cable weight	TK code
N° X AWG	mm	Ω/km	MΩxkm	N	Kg/Km	p/n
2 x AWG22	3.7	58	20	34	18.2	324TK36222
3 x AWG22	3.9	58	20	51	23.3	324TK36322
4 x AWG22	4.2	58	20	68	28.8	324TK36422
6 x AWG22	5	58	20	102	41.3	324TK36622
8 x AWG22	5.4	58	20	136	52.2	324TK36822
2 x AWG20	4.5	38	20	56	27.9	331TK36220
3 x AWG20	4.7	38	20	84	35.1	331TK36320
4 x AWG20	5.1	38	20	112	44.4	331TK36420
6 x AWG20	6.1	38	20	168	62.3	331TK36620
8 x AWG20	6.6	38	20	224	76.8	331TK36820
2 x AWG18	4.9	24	20	80	36.6	338TK36218
3 x AWG18	5.2	24	20	120	48	338TK36318
4 x AWG18	5.6	24	20	160	59.4	338TK36418
6 x AWG18	6.6	24	20	240	84.5	338TK36618
8 x AWG18	7.1	24	20	320	106.2	338TK36818
2 x AWG16	5.2	16	20	132	44.2	343TK36216
3 x AWG16	5.5	16	20	198	59.3	343TK36316
4 x AWG16	6	16	20	264	74.9	343TK36416
6 x AWG16	7.1	16	20	396	104.2	343TK36616
8 x AWG16	7.7	16	20	528	133.1	343TK36816
2 x AWG14	6.3	10	20	204	63.3	350TK36214
3 x AWG14	6.7	10	20	306	88.6	350TK36314
4 x AWG14	7.3	10	20	408	110.5	350TK36414
6 x AWG14	8.7	10	20	612	159.6	350TK36614
8 x AWG14	9.4	10	20	813	206.2	350TK36814
2 x AWG12	7.5	6.4	20	326	98.2	363TK36212
3 x AWG12	7.9	6.4	20	489	130.6	363TK36312
4 x AWG12	8.7	6.4	20	652	164.9	363TK36412
6 x AWG12	10.4	6.4	20	978	237.4	363TK36612
8 x AWG12	11.5	6.4	20	1304	306.8	363TK36812

TK-MSCASCBI/SERIES 3



characteristics



* Only for LSZH version ** Only for PVC version

CABLE SPECIFICATIONS

Conductor	Stranded Bare Copper
Insulation	Polyolefin
Core Identification	Black, Red. (2 Cores) Black, Red, White. (3 Cores) Black, Red, White, Green. (4 Cores) Black, Red, White, Green, Brown, Blue. (6 Cores) Black, Red, White, Green, Brown, Blue, Orange, Yellow. (8 Cores)
Overall Shield	Aluminium/Plastic Tape with Tinned Copper Drain Wire
Outer Sheath	Flame retardant, low smoke and halogen-free or PVC material
Colour	Grey Other colours available upon request

TECHNICAL DATA

Operating Voltage	300V
Operating Temperature Range	-40°C + +80°C (LSZH) -20°C + +70°C (PVC)
Installation Temperature	-10°C + +50°C
Minimum Bending Radius	Static: 5 x outer diameter Dynamic: 15 x outer diameter

FIRE PERFORMANCE

Fire Propagation	IEC 60332-1-2
Halogen-Free	IEC 60754-1/2 (only LSZH material)
Low Smoke Density	IEC 61034-1/2 (only LSZH material)

MAIN FEATURES

N° of Cores & Conductor Cross Section	Nominal diameter Sheath	Conductor resistance @20°C max.	Insulation resistance @20°C min.	Max pulling force	Cable weight	TK code
N° X AWG	mm	Ω/km	MΩxkm	N	Kg/Km	p/n
2 x AWG22	3.8	58	20	34	21.5	424TK35222
3 x AWG22	4	58	20	51	26.6	424TK35322
4 x AWG22	4.3	58	20	68	32.1	424TK35422
6 x AWG22	5.1	58	20	102	44.6	424TK35622
8 x AWG22	5.5	58	20	136	55.5	424TK35822
2 x AWG20	4.6	38	20	56	31.2	431TK35220
3 x AWG20	4.8	38	20	84	38.4	431TK35320
4 x AWG20	5.2	38	20	112	47.7	431TK35420
6 x AWG20	6.2	38	20	168	65.6	431TK35620
8 x AWG20	6.7	38	20	224	80.1	431TK35820
2 x AWG18	5	24	20	80	39.9	438TK35218
3 x AWG18	5.3	24	20	120	51.3	438TK35318
4 x AWG18	5.7	24	20	160	62.7	438TK35418
6 x AWG18	6.7	24	20	240	87.8	438TK35618
8 x AWG18	7.2	24	20	320	109.5	438TK35818
2 x AWG16	5.3	16	20	132	47.5	443TK35216
3 x AWG16	5.6	16	20	198	62.6	443TK35316
4 x AWG16	6.1	16	20	264	78.2	443TK35416
6 x AWG16	7.2	16	20	396	107.5	443TK35616
8 x AWG16	7.8	16	20	528	136.4	443TK35816
2 x AWG14	6.4	10	20	204	66.6	450TK35214
3 x AWG14	6.8	10	20	306	91.9	450TK35314
4 x AWG14	7.4	10	20	408	113.8	450TK35414
6 x AWG14	8.8	10	20	612	162.9	450TK35614
8 x AWG14	9.5	10	20	813	209.5	450TK35814
2 x AWG12	7.6	6.4	20	326	101.5	463TK35212
3 x AWG12	8	6.4	20	489	133.9	463TK35312
4 x AWG12	8.8	6.4	20	652	168.2	463TK35412
6 x AWG12	10.5	6.4	20	978	240.7	463TK35612
8 x AWG12	11.6	6.4	20	1304	310.1	463TK35812



These images are for illustrative purposes.

TK-BT SERIES-6

TK-MPSCRS485/SERIES 6



characteristics



* Only for LSZH version ** Only for PVC version

CABLE SPECIFICATIONS

Conductor	Stranded Tinned Copper
Insulation	Foam or Solid Polyolefin
Core Identification	1 Pair (White/Blue, Blue/White) 2 Pairs (White/Blue, Blue/White) (White/Orange, Orange/White) 3 Pairs (White/Blue, Blue/White) (White/Orange, Orange/White) (White/Green, Green/White) 4 Pairs (White/Blue, Blue/White) (White/Orange, Orange/White) (White/Green, Green/White) (White/Brown, Brown/White)
Overall Shield	Aluminium/Plastic Tape with Tinned Copper Drain Wire and Tinned Copper Braid
Outer Sheath	Flame retardant, low smoke and halogen-free or PVC material
Colour	Grey Other colours available upon request

TECHNICAL DATA

Characteristic Impedance	120Ω (nominal)
Mutual Capacitance	42 pF/m (nominal)
Operating Voltage	300V
Operating Temperature Range	-40°C + +80°C (LSZH) -20°C + +70°C (PVC)
Installation Temperature	-10°C + +50°C
Minimum Bending Radius	Static: 5 x outer diameter Dynamic: 15 x outer diameter

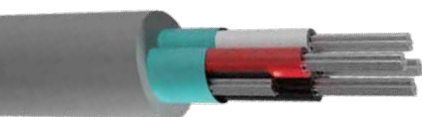
FIRE PERFORMANCE

Fire Propagation	IEC 60332-1-2
Halogen-Free	IEC 60754-1/2 (only LSZH material)
Low Smoke Density	IEC 61034-1/2 (only LSZH material)

MAIN FEATURES

N° of Cores & Conductor Cross Section	Nominal diameter Sheath	Conductor resistance @20°C max.	Insulation resistance @20°C min.	Max pulling force	Cable weight	TK code
N°. X AWG	mm	Ω/km	MΩxkm	N	Kg/Km	p/n
1 x 2 x AWG24	5.9	90	500	22	49	518TK69124
2 x 2 x AWG24	8.7	90	500	44	81.8	518TK69224
3 x 2 x AWG24	9.2	90	500	66	90.9	518TK69324
4 x 2 x AWG24	9.9	90	500	88	114.1	518TK69424
1 x 2 x AWG22	7.3	59	500	35	67.5	524TK69122
2 x 2 x AWG22	9.1	59	500	70	76.1	524TK69222
3 x 2 x AWG22	10.5	59	500	105	97.6	524TK69322
4 x 2 x AWG22	11.4	59	500	140	120.2	524TK69422

TK-MPISCRS422/SERIES 6



characteristics



* Only for LSZH version ** Only for PVC version

CABLE SPECIFICATIONS

Conductor	Stranded Tinned Copper
Insulation	Foam Polyolefin
Core Identification	2 Pairs (Black/Red, Black/White) 3 Pairs (Black/Red) (Black/White) (Black/Green) 4 Pairs (Black/Red) (Black/White) (Black/Green) (Black/Blue) 6 Pairs (Black/Red) (Black/White) (Black/Green) (Black/Blue) (Black/Yellow) (Black/Brown)
Overall Shield	Aluminium/Plastic Tape with Tinned Copper Drain Wire
Outer Sheath	Flame retardant, low smoke and halogen-free or PVC material
Colour	Grey Other colours available upon request

TECHNICAL DATA

Characteristic Impedance	100Ω (nominal)
Mutual Capacitance	46 pF/m (nominal)
Operating Voltage	300V
Operating Temperature Range	-40°C + +80°C (LSZH) -20°C + +70°C (PVC)
Installation Temperature	-10°C + +50°C
Minimum Bending Radius	Static: 5 x outer diameter Dynamic: 15 x outer diameter

FIRE PERFORMANCE

Fire Propagation	IEC 60332-1-2
Halogen-Free	IEC 60754-1/2 (only LSZH material)
Smoke Density	IEC 61034-1/2 (only LSZH material)

MAIN FEATURES

N° of Cores & Conductor Cross Section	Nominal diameter Sheath	Conductor resistance @20°C max.	Insulation resistance @20°C min.	Max pulling force	Cable weight	TK code
N°. X AWG	mm	Ω/km	MΩxkm	N	Kg/Km	p/n
2 x 2 x AWG24	6.7	90	500	44	42.1	418TK68224
3 x 2 x AWG24	8.4	90	500	66	58.8	418TK68324
4 x 2 x AWG24	9.2	90	500	88	74.6	418TK68424
6 x 2 x AWG24	10.7	59	500	132	105.1	418TK68624
1 x 2 x AWG22	7.3	59	500	35	67.5	424TK68122
2 x 2 x AWG22	9.1	59	500	70	76.1	424TK68222
3 x 2 x AWG22	10.5	59	500	105	97.6	424TK68322
4 x 2 x AWG22	11.4	59	500	140	120.2	424TK68422

TK-MPSCRS232/SERIES 6



characteristics



** Only for PVC version

CABLE SPECIFICATIONS

Conductor	Stranded Tinned Copper
Insulation	Semi-Rigid PVC
Core Identification	<ul style="list-style-type: none"> 1 Pair (Black/Red) 2 Pairs (Black/Red) (Black/White) 3 Pairs (Black/Red) (Black/White) (Black/Green) 4 Pairs (Black/Red) (Black/White) (Black/Green) (Black/Blue) 5 Pairs (Black/Red) (Black/White) (Black/Green) (Black/Blue) (Black/Yellow) 6 Pairs (Black/Red) (Black/White) (Black/Green) (Black/Blue) (Black/Yellow) (Black/Brown) 7 Pairs (Black/Red) (Black/White) (Black/Green) (Black/Blue) (Black/Yellow) (Black/Brown) (Black/Orange) 8 Pairs (Black/Red) (Black/White) (Black/Green) (Black/Blue) (Black/Yellow) (Black/Brown) (Black/Orange) (Black/White)
Overall Shield	Aluminium/Plastic Tape with Tinned Copper Drain Wire
Outer Sheath	Flame retardant, low smoke and halogen-free or PVC material
Colour	Grey Other colours available upon request

TECHNICAL DATA

Characteristic Impedance	100Ω (nominal)
Mutual Capacitance	46 pF/m (nominal)
Operating Voltage	300V
Operating Temperature Range	-40°C + +80°C (LSZH) -20°C + +70°C (PVC)
Installation Temperature	-10°C + +50°C
Minimum Bending Radius	Static: 5 x outer diameter Dynamic: 15 x outer diameter

FIRE PERFORMANCE

Fire Propagation	IEC 60332-1-2
Halogen-Free	IEC 60754-1/2 (only LSZH material)
Low Smoke Density	IEC 61034-1/2 (only LSZH material)

MAIN FEATURES

N° of Cores & Conductor Cross Section	Nominal diameter Sheath	Conductor resistance @20°C max.	Insulation resistance @20°C min.	Max pulling force	Cable weight	TK code
N°. X AWG	mm	Ω/km	MΩxkm	N	Kg/Km	p/n
1 x 2 x AWG24	4	90	20	22.5	18.1	418TK67124
2 x 2 x AWG24	5.7	90	20	45	27.5	418TK67224
3 x 2 x AWG24	5.9	90	20	67.5	38.9	418TK67324
4 x 2 x AWG24	6.7	90	20	90	48.2	418TK67424
5 x 2 x AWG24	7.3	90	20	112.5	57	418TK67524
6 x 2 x AWG24	7.4	90	20	135	65.6	418TK67624
7 x 2 x AWG24	7.5	90	20	157.5	72.8	418TK67724
8 x 2 x AWG24	8.3	90	20	180	85	418TK67824

TK-PQSCKNX/EIB/SERIES 6



characteristics



* Only for LSZH version ** Only for PVC version

CABLE SPECIFICATIONS

Conductor	Solid Bare Copper
Insulation	Polyolefin
Core Identification	Pair (Black/White) Star quad (Black, Red, White, Green)
Overall Shield	Aluminium/Plastic Tape with Tinned Copper Drain Wire
Outer Sheath	Flame retardant, low smoke and halogen-free or PVC material
Colour	Grey Other colours available upon request

TECHNICAL DATA

Mutual Capacitance	≤ 100 pF/m
Operating Voltage	300V
Operating Temperature Range	-40°C + +80°C (LSZH) -20°C + +70°C (PVC)
Installation Temperature	-10°C + +50°C
Minimum Bending Radius	Static: 5 x outer diameter Dynamic: 15 x outer diameter

FIRE PERFORMANCE

Fire Propagation	IEC 60332-1-2
Halogen-Free	IEC 60754-1/2 (only LSZH material)
Smoke Density	IEC 61034-1/2 (only LSZH material)

MAIN FEATURES

N° of Cores & Conductor Cross Section	Nominal diameter Sheath	Conductor resistance @20°C max.	Insulation resistance @20°C min.	Max pulling force	Cable weight	TK code
N°. X AWG	mm	Ω/km	MΩxkm	N	Kg/Km	p/n
1 x 2 x AWG20	5.6	39	500	50	38.1	431TKXE208
1 x 4 x AWG20	6.2	39	500	100	52.2	431TKXE408

TK-MPUCLB/SERIES 6



characteristics



* Only for LSZH version ** Only for PVC version

CABLE SPECIFICATIONS

Conductor	Solid Bare Copper
Insulation	Polyolefin
Core Identification	1 Pair (White/Blue, Blue/White) (White/Blue, Blue/White) 2 Pairs (White/Orange, Orange/White)
Outer Sheath	Flame retardant, low smoke and halogen-free or PVC material
Colour	Violet Other colours available upon request

TECHNICAL DATA

Characteristic Impedance	100Ω (nominal)
Mutual Capacitance	46 pF/m (nominal)
Operating Voltage	300V
Operating Temperature Range	-40°C ÷ +80°C (LSZH) -20°C ÷ +70°C (PVC)
Installation Temperature	-10°C ÷ +50°C
Minimum Bending Radius	Static: 5 x outer diameter Dynamic: 15 x outer diameter

FIRE PERFORMANCE

Fire Propagation	IEC 60332-1-2
Halogen-Free	IEC 60754-1/2 (only LSZH material)
Smoke Density	IEC 61034-1/2 (only LSZH material)

MAIN FEATURES

N° of Cores & Conductor Cross Section	Nominal diameter Sheath	Conductor resistance @20°C max.	Insulation resistance @20°C min.	Max pulling force	Cable weight	TK code
N°. X AWG	mm	Ω/km	MΩxkm	N	Kg/Km	p/n
1 x 2 x AWG22	3.5	61	500	33	17.5	324TK66122
2 x 2 x AWG22	4.6	61	500	66	23.9	324TK66222

TK-MPISCLB/SERIES 6



characteristics



* Only for LSZH version ** Only for PVC version

CABLE SPECIFICATIONS

Conductor	Solid Bare Copper
Insulation	Polyolefin
Core Identification	1 Pair (White/Blue, Blue/White) 2 Pairs (White/Blue, Blue/White) (White/Orange, Orange/White)
Individual Shield	Aluminium/Plastic Tape with Tinned Copper Drain Wire
Outer Sheath	Flame retardant, low smoke and halogen-free or PVC material
Colour	Violet Other colours available upon request

TECHNICAL DATA

Characteristic Impedance	100Ω (nominal)
Mutual Capacitance	46 pF/m (nominal)
Operating Voltage	300V
Operating Temperature Range	-40°C + +80°C (LSZH) -20°C + +70°C (PVC)
Installation Temperature	-10°C + +50°C
Minimum Bending Radius	Static: 5 x outer diameter Dynamic: 15 x outer diameter

FIRE PERFORMANCE

Fire Propagation	IEC 60332-1-2
Halogen-Free	IEC 60754-1/2 (only LSZH material)
Smoke Density	IEC 61034-1/2 (only LSZH material)

MAIN FEATURES

N° of Cores & Conductor Cross Section	Nominal diameter Sheath	Conductor resistance @20°C max.	Insulation resistance @20°C min.	Max pulling force	Cable weight	TK code
N°. X AWG	mm	Ω/km	MΩxkm	N	Kg/Km	p/n
1 x 2 x AWG22	5.2	61	500	33	27.5	424TK65122
2 x 2 x AWG22	7.6	61	500	66	56.2	424TK65222

TK-PUCIB/SERIES 6



characteristics



* Only for LSZH version ** Only for PVC version

CABLE SPECIFICATIONS

Conductor	Stranded Tinned Copper
Insulation	Polyolefin
Core Identification	- White/Black
Outer Sheath	Flame retardant, low smoke and halogen-free or PVC material
Colour	Grey Other colours available upon request

TECHNICAL DATA

Mutual Capacitance	≤ 100 pF/m
Operating Voltage	300V
Operating Temperature Range	-40°C + +80°C (LSZH) -20°C + +70°C (PVC)
Installation Temperature	-10°C + +50°C
Minimum Bending Radius	Static: 5 x outer diameter Dynamic: 15 x outer diameter

FIRE PERFORMANCE

Fire Propagation	IEC 60332-1-2
Halogen-Free	IEC 60754-1/2 (only LSZH material)
Smoke Density	IEC 61034-1/2 (only LSZH material)

MAIN FEATURES

N° of Cores & Conductor Cross Section	Nominal diameter Sheath	Conductor resistance @20°C max.	Insulation resistance @20°C min.	Max pulling force	Cable weight	TK code
N°. X AWG	mm	Ω/km	MΩxkm	N	Kg/Km	p/n
1 x 2 x AWG22	4.5	59	500	35	26.9	324TK66122P
1 x 2 x AWG20	5.3	38	500	60	36.8	331TK66120P
1 x 2 x AWG18	6	24	500	88	48.1	338TK66118P
1 x 2 x AWG16	7.9	16	500	125	75.2	343TK66116P
1 x 2 x AWG14	8.9	10	500	215	103.8	350TK66114P
1 x 2 x AWG12	10.1	6	500	344	123.8	363TK66112P

TK-PSCIB/SERIES 6



characteristics



* Only for LSZH version ** Only for PVC version

CABLE SPECIFICATIONS

Conductor	Stranded Tinned Copper
Insulation	Polyolefin
Core Identification	- White/Black
Outer Sheath	Flame retardant, low smoke and halogen-free or PVC material
Overall Shield	Aluminium/Plastic Tape with Tinned Copper Drain Wire
Colour	Grey Other colours available upon request

TECHNICAL DATA

Mutual Capacitance	≤ 100 pF/m
Operating Voltage	300V
Operating Temperature Range	-40°C + +80°C (LSZH) -20°C + +70°C (PVC)
Installation Temperature	-10°C + +50°C
Minimum Bending Radius	Static: 5 x outer diameter Dynamic: 15 x outer diameter

FIRE PERFORMANCE

Fire Propagation	IEC 60332-1-2
Halogen-Free	IEC 60754-1/2 (only LSZH material)
Smoke Density	IEC 61034-1/2 (only LSZH material)

MAIN FEATURES

N° of Cores & Conductor Cross Section	Nominal diameter Sheath	Conductor resistance @20°C max.	Insulation resistance @20°C min.	Max pulling force	Cable weight	TK code
N°. X AWG	mm	Ω/km	MΩxkm	N	Kg/Km	p/n
1 x 2 x AWG22	4.6	59	500	35	27.9	424TK65122P
1 x 2 x AWG20	5.4	38	500	60	37.8	431TK65220P
1 x 2 x AWG18	6.1	24	500	88	49.1	438TK65218P
1 x 2 x AWG16	8	16	500	125	76.2	443TK65216P
1 x 2 x AWG14	9	10	500	215	104.8	450TK65214P
1 x 2 x AWG12	10.2	6	500	344	124.8	463TK65212P

TK-MPISCIB/SERIES 6



characteristics



* Only for LSZH version ** Only for PVC version

CABLE SPECIFICATIONS

Conductor	Stranded Tinned Copper
Insulation	Polyolefin
Core Identification	2 Pairs (Black/Red) (Black/White) 3 Pairs (Black/Red) (Black/White) (Black/Green) 6 Pairs (Black/Red) (Black/White) (Black/Green) (Black/Blue) (Black/Yellow) (Black/Brown)
Individual Shield	Aluminium/Plastic Tape with Tinned Copper Drain Wire and on each pair
Outer Sheath	Aluminium/Plastic Tape with Tinned Copper Drain Wire
Colour	Grey Other colours available upon request

TECHNICAL DATA

Characteristic Impedance	50Ω (nominal)
Mutual Capacitance	100 pF/m (nominal)
Operating Voltage	300V
Operating Temperature Range	-40°C + +80°C (LSZH) -20°C + +70°C (PVC)
Installation Temperature	-10°C + +50°C
Minimum Bending Radius	Static: 5 x outer diameter Dynamic: 15 x outer diameter

FIRE PERFORMANCE

Fire Propagation	IEC 60332-1-2
Halogen-Free	IEC 60754-1/2 (only LSZH material)
Smoke Density	IEC 61034-1/2 (only LSZH material)

MAIN FEATURES

N° of Cores & Conductor Cross Section	Nominal diameter Sheath	Conductor resistance @20°C max.	Insulation resistance @20°C min.	Max pulling force	Cable weight	TK code
N°. X AWG	mm	Ω/km	MΩxkm	N	Kg/Km	p/n
2 x 2 x AWG22	4.2	61	500	33	50.1	424TK65222P
3 x 2 x AWG22	7.1	61	500	50	73.3	424TK65322P
6 x 2 x AWG22	9.3	61	500	100	149.5	424TK65622P



TK-BT SERIES-7

TK-CCCTVAVA/SERIES 7

These images are for illustrative purposes.



characteristics



* Only for LSZH version ** Only for PVC version

CABLE SPECIFICATIONS

Conductor	Solid or Stranded Bare Copper
Insulation	Foam or Solid Polyolefin
Core Identification	Natural
Individual Shield	Bare Copper Braid - Coverage 95%
Outer Sheath	Flame retardant, low smoke and halogen-free or PVC material
Colour	Black Other colours available upon request

TECHNICAL DATA

Characteristic Impedance	75Ω (nominal)
Mutual Capacitance	53 pF/m (nominal)
Return Loss 1 + 1000MHz	< 20 dB
Operating Temperature Range	-40°C + +80°C (LSZH) -20°C + +70°C (PVC)
Installation Temperature	-10°C + +50°C
Minimum Bending Radius	Static: 5 x outer diameter Dynamic: 15 x outer diameter

FIRE PERFORMANCE

Fire Propagation	IEC 60332-1-2
Halogen-Free	IEC 60754-1/2 (only LSZH material)
Smoke Density	IEC 61034-1/2 (only LSZH material)

MAIN FEATURES

Coax Type	Nominal diameter Conductor	Nominal diameter Insulation	Nominal diameter Sheath	Conductor resistance @20°C max	Insulation resistance @20°C min	Max pulling force	Cable weight	TK code
	mm	mm	mm	Ω/Km	MΩ x Km	N	Kg/Km	p/n
RG59	0.81	3.7	6	35	500	32	49	6059TK7559A
RG59 flex	19 x 0.18	3.7	6	40	500	25	50	6059TK7559AF
RG6	1.02	4.6	6.8	23	500	40	56	6006TK7506A
RG6 flex	19 x 0.22	4.6	6.8	30	500	33	57	6006TK7506AF
RG11	1.63	7.1	10	9	500	65	116	6011TK7511A
RG11 flex	19 x 0.34	7.1	10	10	500	86	117	6011TK7511AF

Nominal attenuation in dB/100 m

	5 MHz	10 MHz	50 MHz	100 MHz	200 MHz	300 MHz	400 MHz	450 MHz	550 MHz	700 MHz	750 MHz	870 MHz	1000 MHz
RG59	1.9	2.95	6.23	8.53	11.81	15.3	16.41	18.92	21.03	22.97	24.8	26.84	27.89
RG6	1.78	2.36	4.92	6.56	9.51	12.43	13.78	15.14	17.15	18.37	19.73	20.26	21.96
RG11	0.99	1.51	2.96	4.27	6.23	8.27	9.51	10.31	11.51	13.45	13.95	14.87	17.06

TK-CHDTVVDHVA/SERIES 7



characteristics



* Only for LSZH version ** Only for PVC version

CABLE SPECIFICATIONS

Conductor	Solid Bare Copper
Insulation	Foam or Solid Polyolefin
Core Identification	Natural
Overall Shield	Aluminium/Plastic Tape with Tinned Copper Drain Wire and Tinned Copper Braid - Coverage 95%
Individual Shield	Tinned Copper Braid - Coverage 95%
Outer Sheath	Flame retardant, low smoke and halogen-free or PVC material
Colour	Black Other colours available upon request

TECHNICAL DATA

Characteristic Impedance	75Ω (nominal)
Mutual Capacitance	53 pF/m (nominal)
Operating Temperature Range	-40°C + +80°C (LSZH) -20°C + +70°C (PVC)
Installation Temperature	-10°C + +50°C
Minimum Bending Radius	Static: 5 x outer diameter Dynamic: 15 x outer diameter

FIRE PERFORMANCE

Fire Propagation	IEC 60332-1-2
Halogen-Free	IEC 60754-1/2 (only LSZH material)
Smoke Density	IEC 61034-1/2 (only LSZH material)

MAIN FEATURES

Coax Type	Nominal diameter Conductor	Nominal diameter Insulation	Nominal diameter Sheath	Conductor resistance @20°C max	Insulation resistance @20°C min	Max pulling force	Cable weight	TK code
	mm	mm	mm	Ω/Km	MΩ x Km	N	Kg/Km	p/n
RG59	0.81	3.7	6	35	500	32	49	6059TK7559H
RG6	1.02	4.6	6.8	23	500	40	56	6006TK7506H
RG11 flex	19 x 0.34	7.1	10	10	500	86	117	6011TK7511HF

Nominal Return Loss (dB)

	< 1000 MHz	< 2000 MHz	< 3000 MHz	< 4500 MHz
RG59	23	22	16	15
RG6	23	22	16	15
RG11	23	22	16	15

Nominal attenuation in dB/100 m

	1 MHz	5 MHz	10 MHz	50 MHz	100 MHz	300 MHz	550 MHz	750 MHz	1000 MHz	2000 MHz	3000 MHz	4500 MHz
RG59	0.98	2.07	2.95	6.23	7.55	13.68	18.83	22.23	25.29	38.24	46.13	56.5
RG6	0.79	1.71	2.33	4.57	6.4	11.96	15.76	18.05	21.36	31.44	39.76	50.46
RG11	0.53	1.12	1.51	2.96	4.2	7.49	10.41	12.38	14.57	21.84	27.84	35.98

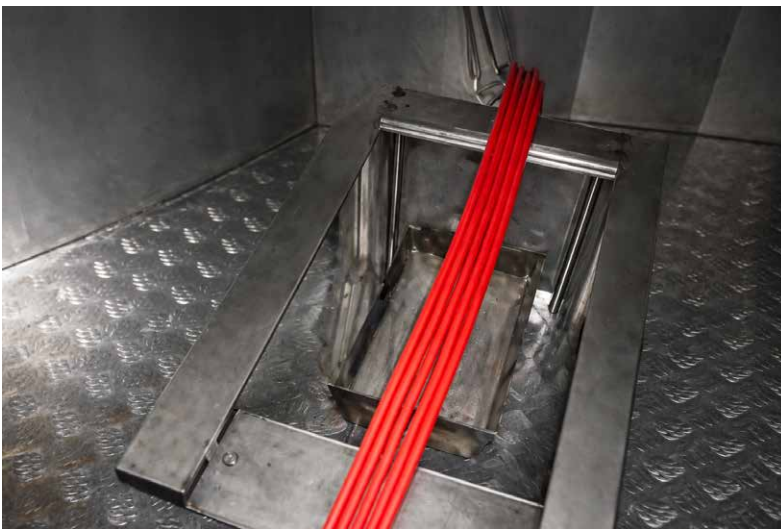
FIRE AND FLAME BEHAVIOUR TESTS

It is essential to stay within the fire behavior and flame-fire-retardant limits set by the strictest reference standards and our own internal QA. Four tests are carried out to assess specific properties under fire conditions:



Test for vertical flame propagation for a single insulated wire or cable.

- According to UL standards (Cable Flame, VW1, Horizontal Flame Test)
- CSA (FT1, FT2)
- CEI EN or IEC 60332-1-2 / 60332-1-3 / 60332-2-2



Measurement of smoke density of cables burning under defined conditions

- According to IEC 61034-1 and IEC 61034-2

Tecnikabel

Passion flows through our cables

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