RE-Y(St)Y-fl

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications.

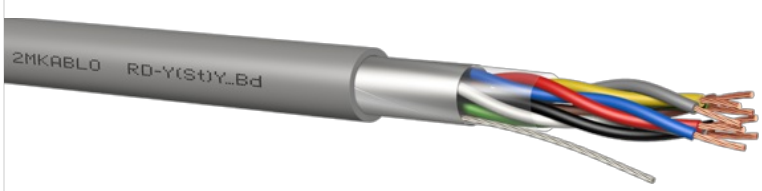
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤250 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter
Insulation Resistance	>10 M.Ωxkm

RD-Y(St)Y...Bd - fl



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PVC (EN 50290-2-21)
Stranding	Two cores twisted to a pair (20 pitch / m), each bundle laid up with 4 pairs, each bundle is wrapped by numbered or colored PET Foil
Lay-up	Bundles laid-up in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 7000 - Grey, RAL 5015 - Blue (other colors open request)
Reference Standards	VDE 0815
Core Colors	1. Pair: Blue / Red 2. Pair: Gray / Yellow 3. Pair: Green / Brown 4. Pair: Black / White

Technical Properties

Operating Voltage	300 V
Test Voltage	Core - Core: 1000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 1.00 mm² - ≤18.1 Ω/km
Capacitance Unbalance (800 Hz)	≤200 pF/100m
Capacitance (@800Hz)	≤100 nF/km (capacitance values may increase by 20% up to 4 pair)
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter
Insulation Resistance	>100 M.Ωxkm

RE-2X(St)Y(ö)

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Additional oil and hydrocarbon resistance are achieved by its special design.

Cable Construction

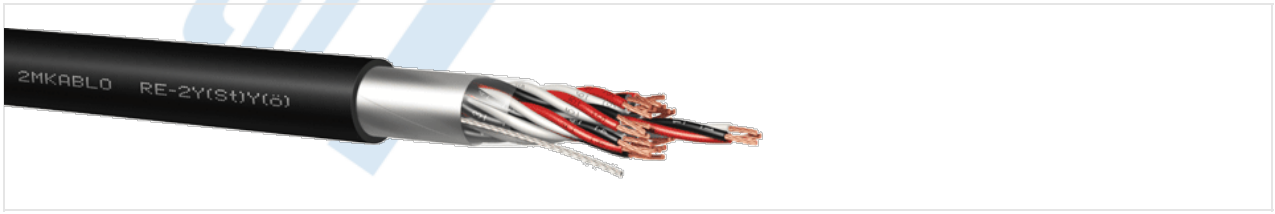
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red,

	Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	8 x Cable Diameter

RE-2Y(St)Y(ö)



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Additional oil and hydrocarbon resistance are achieved by its special design.

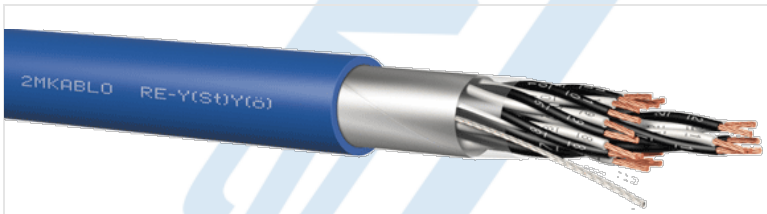
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7
Lay-up	Cores / pairs / triples / quads are stranded in layers

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	8 x Cable Diameter

RE-Y(St)Y(ö)



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Additional oil and hydrocarbon resistance are achieved by its special design.

Cable Construction

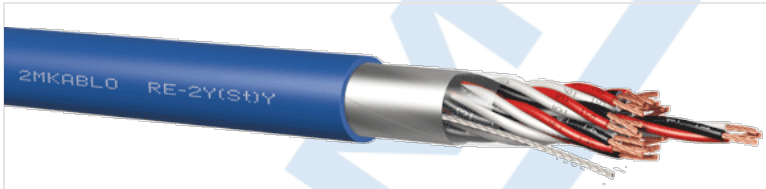
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7
Lay-up	Cores / pairs / triples / quads are stranded in layers

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m

Capacitance (@800Hz)	≤170 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	8 x Cable Diameter
Insulation Resistance	>10 M.Ωxkm

RE-2Y(St)Y-fl



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤150 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours

Min. Bending Radius (Fixed)	8 x Cable Diameter

RE-2X(St)H

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Reference Standards	BS/EN 50288-7
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter

RE-2Y(St)H

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire.

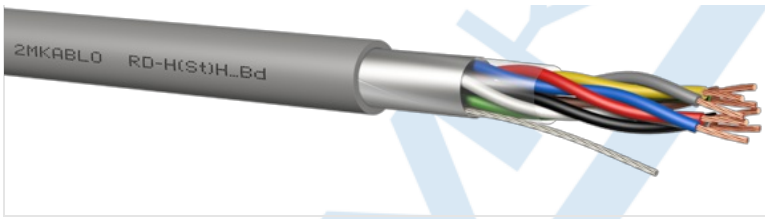
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Reference Standards	BS/EN 50288-7
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Min. Bending Radius (Fixed)	8 x Cable Diameter

RD-H(St)H...Bd



Areas of Use

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Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	HFFR (LSZH, LSOH, FRNC) (EN 50290-2-26)
Stranding	Two cores twisted to a pair (20 pitch / m), each bundle laid up with 4 pairs, each bundle is wrapped by numbered or colored PET Foil
Lay-up	Bundles laid-up in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 7000 - Grey, RAL 5015 - Blue (other colors open request)
Reference Standards	VDE 0815
Core Colors	1. Pair: Blue / Red 2. Pair: Gray / Yellow 3. Pair: Green / Brown 4. Pair: Black / White

Technical Properties

Operating Voltage	300 V
Test Voltage	Core - Core: 1000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 1.00 mm² - ≤18.1 Ω/km
Insulation Resistance	>100 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤200 pF/100m
Capacitance (@800Hz)	≤100 nF/km (capacitance values may increase by 20% up to 4 pair)
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter

RE-Y(St)Yv-fl

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. The reinforced outer sheath provides additional mechanical strength.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 7000 - Grey, RAL 5015 - Blue (other colors open request)
Reference Standards	BS/EN 50288-7, VDE 0816 (for Yv thickness)
Lay-up	Cores / pairs / triples / quads are stranded in layers

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤170 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter
Insulation Resistance	>10 M.Ωxkm

RE-2Y(St)Yv-fl

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. The reinforced outer sheath provides additional mechanical strength.

Cable Construction

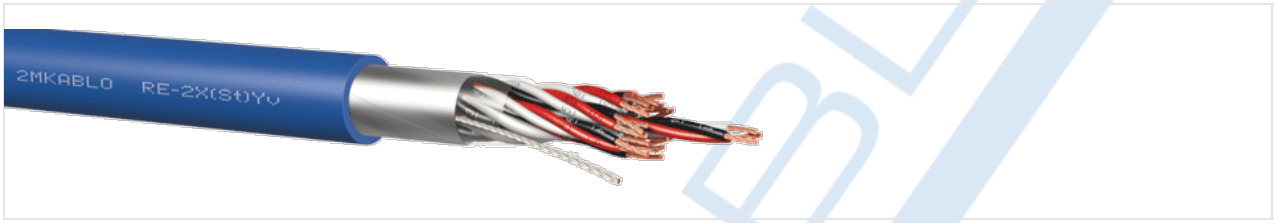
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)

Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 7000 - Grey, RAL 5015 - Blue (other colors open request)
Reference Standards	BS/EN 50288-7, VDE 0816 (for Yv thickness)

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-2X(St)Yv-fl



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. The reinforced outer sheath provides additional mechanical strength.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 7000 - Grey, RAL 5015 - Blue (other colors open request)
Reference Standards	BS/EN 50288-7, VDE 0816 (for Yv thickness)

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-2X(St)Y-fI

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications.

Cable Construction

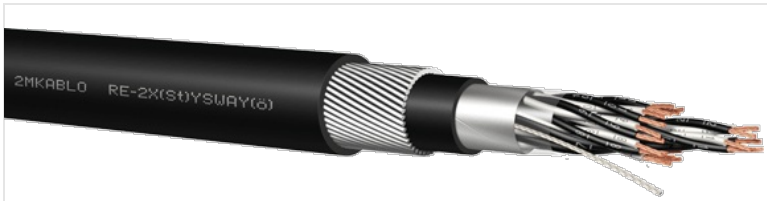
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m

Capacitance (@800Hz)	≤150 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter

RE-2X(St)YSWAY(ö)



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Additional oil and hydrocarbon resistance are achieved by its special design.

Cable Construction

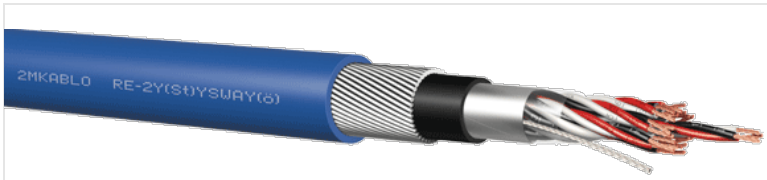
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7
Lay-up	Cores / pairs / triples / quads are stranded in layers

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)

Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	12 x Cable Diameter

RE-2Y(St)YSWAY(ö)



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Additional oil and hydrocarbon resistance are achieved by its special design.

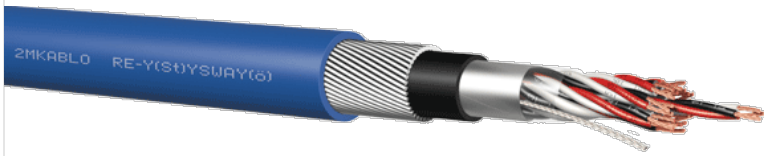
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7
Lay-up	Cores / pairs / triples / quads are stranded in layers

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	12 x Cable Diameter

RE-Y(St)YSWAY(ö)



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Additional oil and hydrocarbon resistance are achieved by its special design.

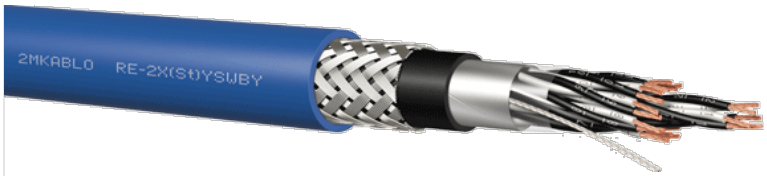
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤170 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	12 x Cable Diameter
Insulation Resistance	>10 M.Ωxkm

RE-2X(St)YSWBY-fl



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-2Y(St)YSWBY-fl

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-Y(St)YSWBY-fl

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects.

Cable Construction

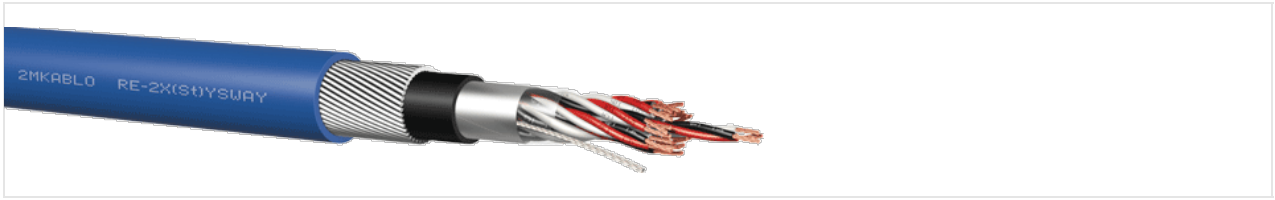
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)

Insulation	PVC (EN 50290-2-21)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤170 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter
Insulation Resistance	>10 M.Ωxkm

RE-2X(St)YSWAY-fl



Areas of Use

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Cable Construction

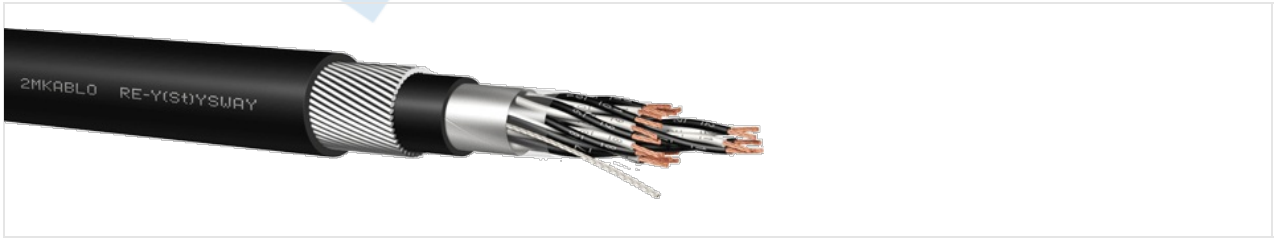
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)

Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>500 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

RE-Y(St)YSWAY-fl



Areas of Use

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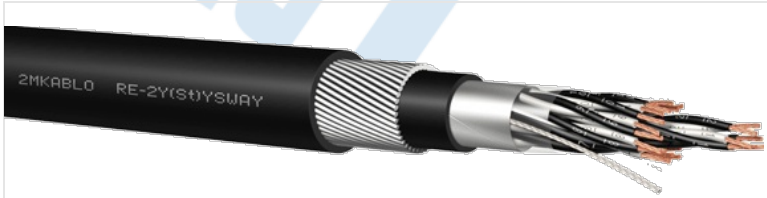
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7
Lay-up	Cores / pairs / triples / quads are stranded in layers

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤250 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter
Insulation Resistance	>10 M.Ωxkm

RE-2Y(St)YSWAY-fl



Areas of Use

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Cable Construction

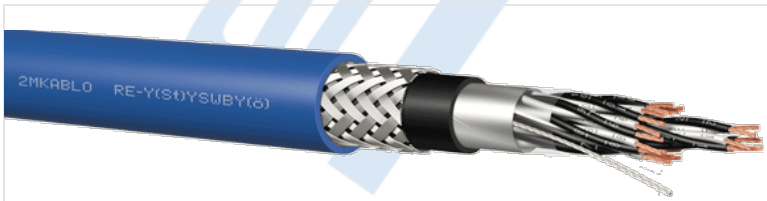
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7
Lay-up	Cores / pairs / triples / quads are stranded in layers

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm

Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

RE-Y(St)YSWBY(ö)



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Additional oil and hydrocarbon resistance are achieved by its special design.

Cable Construction

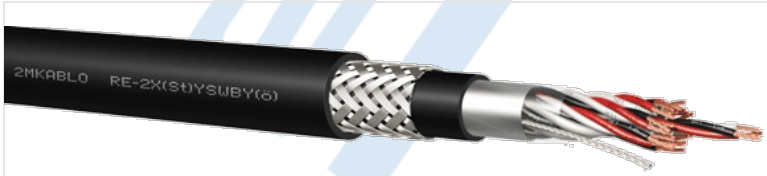
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Inner Sheath	PVC (EN 50290-2-22)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤170 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)

Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	10 x Cable Diameter
Insulation Resistance	>10 M.Ωxkm

RE-2X(St)YSWBY(ö)



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Additional oil and hydrocarbon resistance are achieved by its special design.

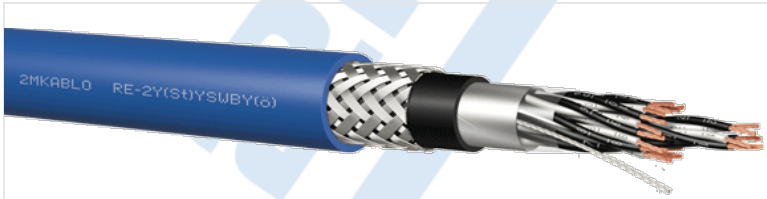
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-2Y(St)YSWBY(ö)



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Additional oil and hydrocarbon resistance are achieved by its special design.

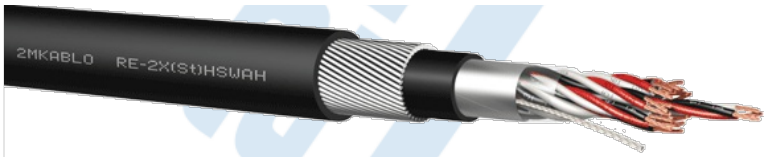
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-2X(St)HSWAH



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Insulation	XLPE (EN 50290-2-29)
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

RE-2Y(St)HSWAH

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

RE-2X(St)HSWBH

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects.

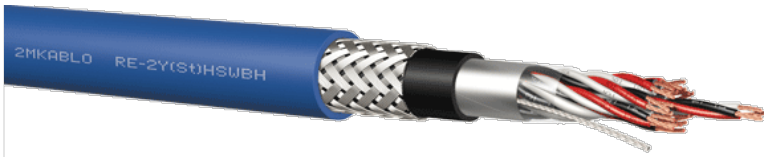
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-2Y(St)HSWBH



Areas of Use

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Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 MΩxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-Y(St)Y-fl-PiMF/TiMF

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤250 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter
Insulation Resistance	>10 M.Ωxkm

RE-2X(St)Y-fl-PiMF/TiMF

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter

RE-2X(St)Y(ö)-PiMF/TiMF

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Additional oil and hydrocarbon resistance are achieved by its special design.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)

Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	8 x Cable Diameter

RE-2Y(St)Y(ö)-PiMF/TiMF

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Additional oil and hydrocarbon resistance are achieved by its special design.

Cable Construction

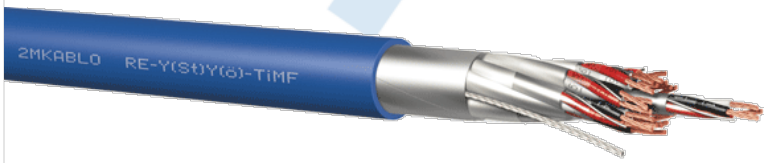
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers

Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	8 x Cable Diameter

RE-Y(St)Y(ö)-PiMF/TiMF



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Additional oil and hydrocarbon resistance are achieved by its special design.

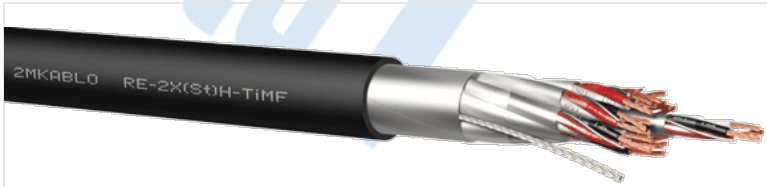
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤220 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	8 x Cable Diameter
Insulation Resistance	>10 M.Ωxkm

RE-2X(St)H-PiMF/TiMF



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire.

Cable Construction

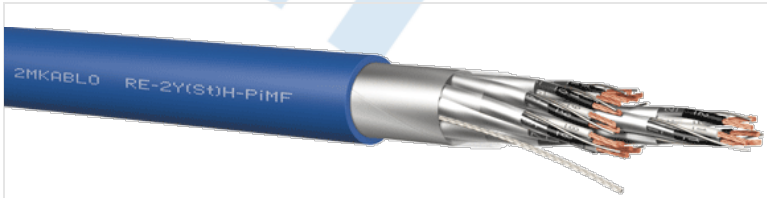
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V

Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter

RE-2Y(St)H-PiMF/TiMF



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire.

Cable Construction

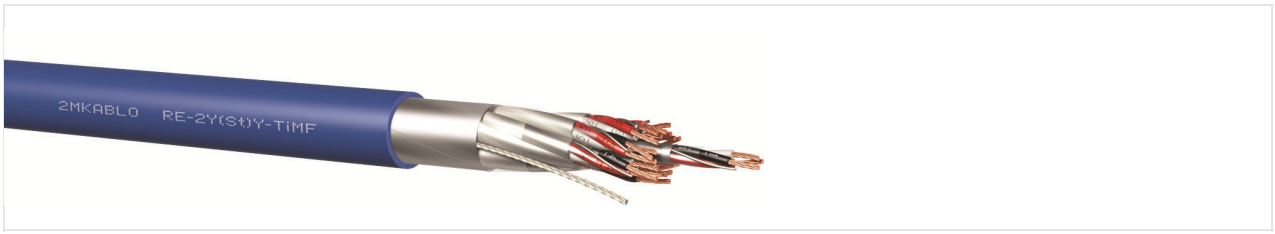
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km

Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter

RE-2Y(St)Y-fl-PiMF/TiMF



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications.

Cable Construction

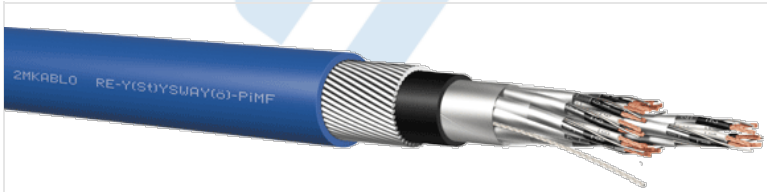
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 7000 - Grey, RAL 5015 - Blue (other colors open request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)

L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter

RE-Y(St)YSWAY(ö)-PiMF/TiMF



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Additional oil and hydrocarbon resistance are achieved by its special design.

Cable Construction

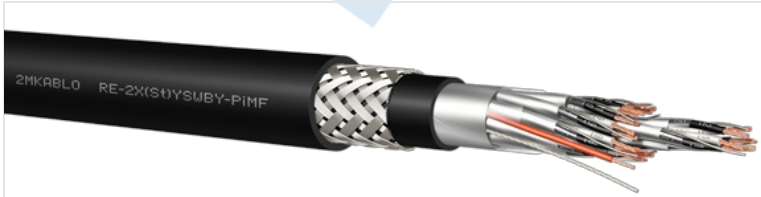
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤220 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)

Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	12 x Cable Diameter
Insulation Resistance	>10 M.Ωxkm

RE-2X(St)YSWBY-fl-PiMF/TiMF



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects.

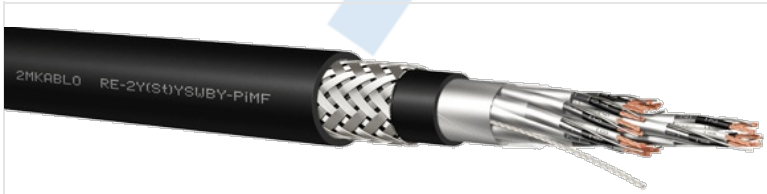
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-2Y(St)YSWBY-fl-PiMF/TiMF



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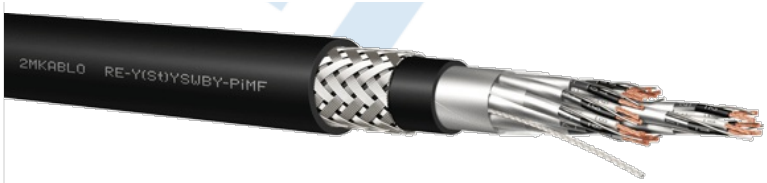
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-Y(St)YSWBY-fl-PiMF/TiMF



Areas of Use

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Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤220 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter
Insulation Resistance	>10 M.Ωxkm

RE-2X(St)YSWAY-fl-PiMF/TiMF

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

RE-2Y(St)YSWAY-fl-PiMF/TiMF

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects.

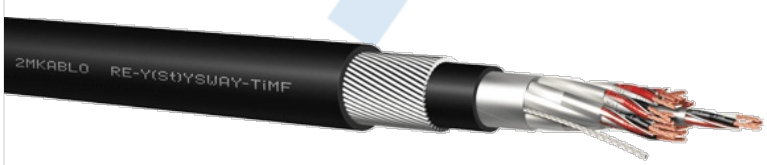
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

RE-Y(St)YSWAY-fl-PiMF/TiMF



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects.

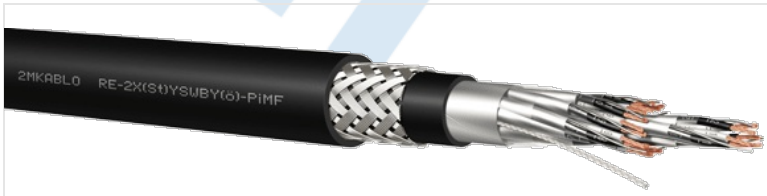
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤220 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter
Insulation Resistance	>10 M.Ωxkm

RE-2X(St)YSWBY(ö)-PiMF/TiMF



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Additional oil and hydrocarbon resistance are achieved by its special design.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)

Insulation	XLPE (EN 50290-2-29)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -30 °C.....+90 °C, Flexible: -5 °C .....+60 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-2Y(St)YSWBY(ö)-PiMF/TiMF

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Additional oil and hydrocarbon resistance are achieved by its special design.

Cable Construction

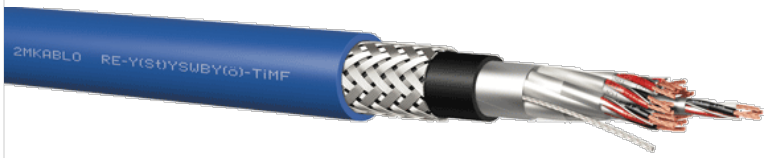
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered

Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-Y(St)YSWBY(ö)-PiMF/TiMF



Areas of Use

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Cable Construction

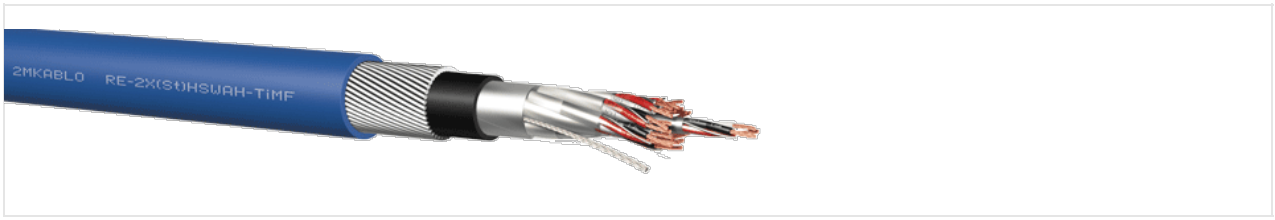
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)

Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤220 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	10 x Cable Diameter
Insulation Resistance	>10 M.Ωxkm

RE-2X(St)HSWAH-PiMF/TiMF



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects.

Cable Construction

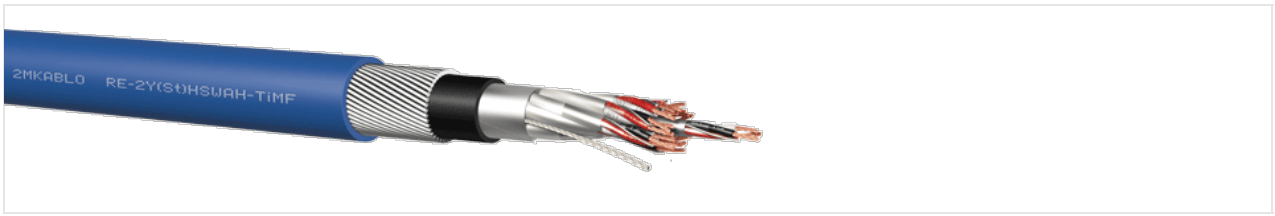
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil

Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 1000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

RE-2Y(St)HSWAH-PiMF/TiMF



Areas of Use

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Cable Construction

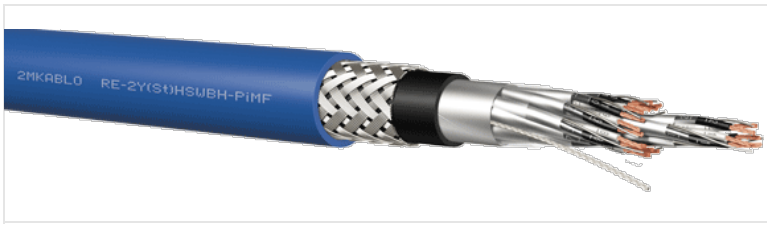
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil

Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
Capacitance Unbalance (800 Hz)	≤500 pF/500m
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

RE-2Y(St)HSWBH-PiMF/TiMF



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Cable Construction

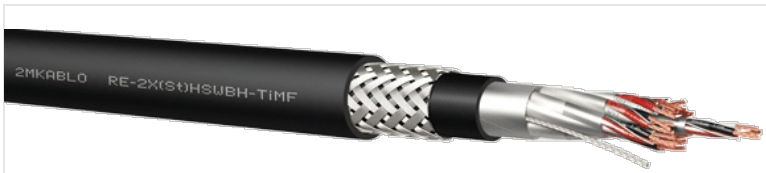
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil

Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-2X(St)HSWBH-PiMF/TiMF



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Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)

Inner Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27)
Armour	Galvanized Steel Wire Braiding (Min. Diameter 0.30 mm, 75% Coverage)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

RE-2Y(St)YSWAY(ö)-PiMF/TiMF

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Additional oil and hydrocarbon resistance are achieved by its special design.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)

Inner Sheath	PVC (EN 50290-2-22)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	12 x Cable Diameter

RE-2X(St)YSWAY(ö)-PiMF/TiMF

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	XLPE (EN 50290-2-29)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resisdant, Flame Retardant, Oil and Aliphatic Hydrocarbon Resistant, NBR/PVC, RAL

	9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404 ASTM No 2 oil 90 °C 168 hours (7x24)
Aliphatic Hydrocarbon Resistant	NF M 87-202
Min. Bending Radius (Fixed)	12 x Cable Diameter

FireKab RE-2G(St)H...CI

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

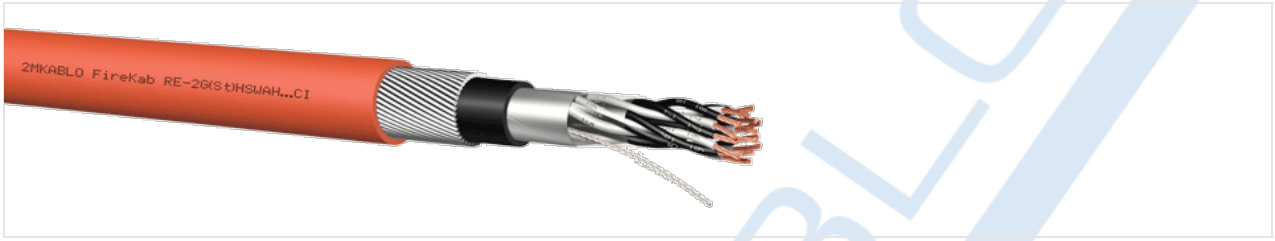
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	Halogen free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 2004 - Orange, RAL 9005 - Black, RAL 5015 - Blue, (other colors open request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V

Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>300 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤95 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

FireKab RE-2G(St)HSWAH...CI



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	Halogen free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 2004 - Orange, RAL 9005 - Black, RAL 5015 - Blue, (other colors open request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V

Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>300 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤95 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

FireKab RE-2G(St)H-PiMF/TiMF...CI

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	Halogen free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 2004 - Orange, RAL 9005 - Black, RAL 5015 - Blue, (other colors open request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km

Insulation Resistance	>300 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤130 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

FireKab RE-2X(St)H...CI

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Flame Barrier	Mica Tape
Insulation	XLPE (EN 50290-2-29)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	Halogen free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 2004 - Orange, RAL 9005 - Black, RAL 5015 - Blue, (other colors open request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m

Capacitance (@800Hz)	≤85 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

FireKab RE-2X(St)H-PiMF/TiMF...CI

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

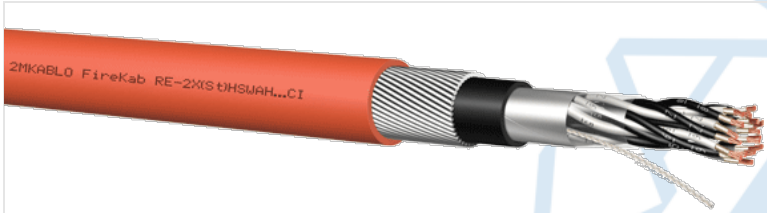
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Flame Barrier	Mica Tape
Insulation	XLPE (EN 50290-2-29)
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	Halogen free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 2004 - Orange, RAL 9005 - Black, RAL 5015 - Blue, (other colors open request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60

	µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	10 x Cable Diameter

FireKab RE-2X(St)HSWAH...CI



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

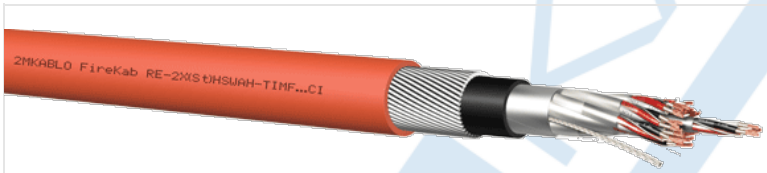
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Flame Barrier	Mica Tape
Insulation	XLPE (EN 50290-2-29)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	Halogen free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 2004 - Orange, RAL 9005 - Black, RAL 5015 - Blue, (other colors open request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤150 nF/km (Capacitance values may increase by 20% up to 4 pairs)

L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	15 x Cable Diameter

FireKab RE-2X(St)HSWAH-PiMF/TİMF...CI



Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Flame Barrier	Mica Tape
Insulation	XLPE (EN 50290-2-29)
Core Colors	Multicore: White Numbered Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	Halogen free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 2004 - Orange, RAL 9005 - Black, RAL 5015 - Blue, (other colors open request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Insulation Resistance	>5000 M.Ωxkm

Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

FireKab RE-2G(St)HSWAH-PiMF/TİMF...CI

Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire. Armoured types provide mechanical strength and protect the cable core against outer mechanical effects. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2)
Insulation	Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered
Separator	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	Halogen free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 2004 - Orange, RAL 9005 - Black, RAL 5015 - Blue, (other colors open request)
Reference Standards	BS/EN 50288-7

Technical Properties

Operating Voltage	500 V*
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km

Insulation Resistance	>300 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤130 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

PT1 T1

Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants, etc. make up the general areas that these cables are used.

Cable Construction

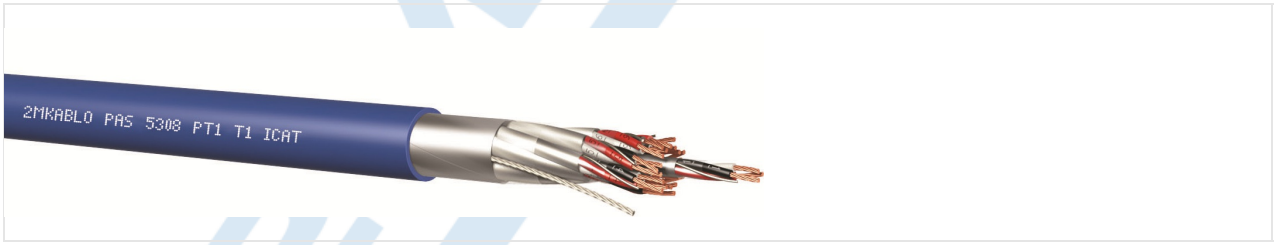
Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1, 2,5) -Table 1
Insulation	PE (EN 50290-2-23)
Core Colors	According to PAS 5308-1 Annex C-Table 2
Lay-up	Cores / pairs / triples are stranded in layers, Two-pair cables laid in quad formation
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	PAS 5308 Part 1 - Type 1

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36.8 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.4 Ω/km; 1.50 mm² - ≤12.3 Ω/km; 2.50 mm² - ≤7.6 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	Table-3
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω

Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+60 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter

PT1 T1 ICAT



Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants, etc. make up the general areas that these cables are used.

Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1, 2,5) -Table 1
Insulation	PE (EN 50290-2-23)
Core Colors	According to PAS 5308-1 Annex C-Table 2
Separator	PET Foil
Individual Screen	Al-PET Foil (with 7x0.30 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	PAS 5308 Part 1 - Type 1

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36.8 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.4 Ω/km; 1.50 mm² - ≤12.3 Ω/km; 2.50 mm² - ≤7.6 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	Table-3
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter

PT1 T2

Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants, etc. make up the general areas that these cables are used.

Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1, 2,5) -Table 1
Insulation	PE (EN 50290-2-23)
Core Colors	According to PAS 5308-1 Annex C-Table 2
Lay-up	Cores / pairs / triples are stranded in layers, Two-pair cables laid in quad formation
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PE
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	PAS 5308 Part 1 - Type 2

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36.8 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.4 Ω/km; 1.50 mm² - ≤12.3 Ω/km; 2.50 mm² - ≤7.6 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	Table-3
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

PT1 T2 ICAT

Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants, etc. make up the general areas that these cables are used.

Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1, 2,5) -Table 1
Insulation	PE (EN 50290-2-23)
Core Colors	According to PAS 5308-1 Annex C-Table 2
Separator	PET Foil
Individual Screen	Al-PET Foil (with 7x0.30 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PE
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	PAS 5308 Part 1 - Type 2

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36.8 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.4 Ω/km; 1.50 mm² - ≤12.3 Ω/km; 2.50 mm² - ≤7.6 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	Table-3
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

PT1 T1 LSZH

Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants, etc. make up the general areas that these cables are used.

Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1, 2,5) -Table 1
Insulation	PE (EN 50290-2-23)
Core Colors	According to PAS 5308-1 Annex C-Table 2
Lay-up	Cores / pairs / triples are stranded in layers, Two-pair cables laid in quad formation
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	PAS 5308 Part 1 - Type 1

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Conductor Resistance	0.50 mm² - ≤36.8 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.4 Ω/km; 1.50 mm² - ≤12.3 Ω/km; 2.50 mm² - ≤7.6 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	Table-3
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter

PT1 T1 ICAT LSZH

Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants, etc. make up the general areas that these cables are used.

Cable Construction

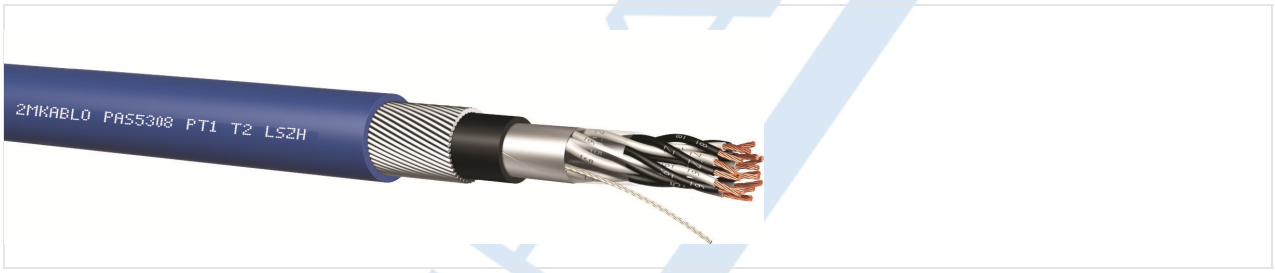
Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1, 2,5) -Table 1

Insulation	PE (EN 50290-2-23)
Core Colors	According to PAS 5308-1 Annex C-Table 2
Separator	PET Foil
Individual Screen	Al-PET Foil (with 7x0.30 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36.8 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.4 Ω/km; 1.50 mm² - ≤12.3 Ω/km; 2.50 mm² - ≤7.6 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	Table-3
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter

PT1 T2 LSZH



Areas of Use

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Cable Construction

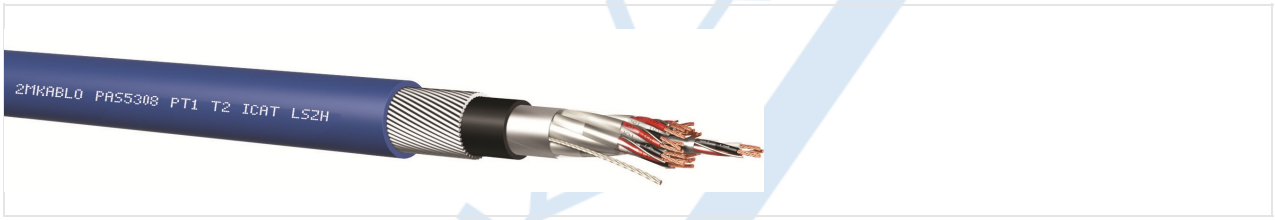
Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1, 2,5) -Table 1
Insulation	PE (EN 50290-2-23)
Core Colors	According to PAS 5308-1 Annex C-Table 2
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil

Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PE
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	PAS 5308 Part 1 - Type 1

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36.8 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.4 Ω/km; 1.50 mm² - ≤12.3 Ω/km; 2.50 mm² - ≤7.6 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	Table-3
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

PT1 T2 ICAT LSZH



Areas of Use

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Cable Construction

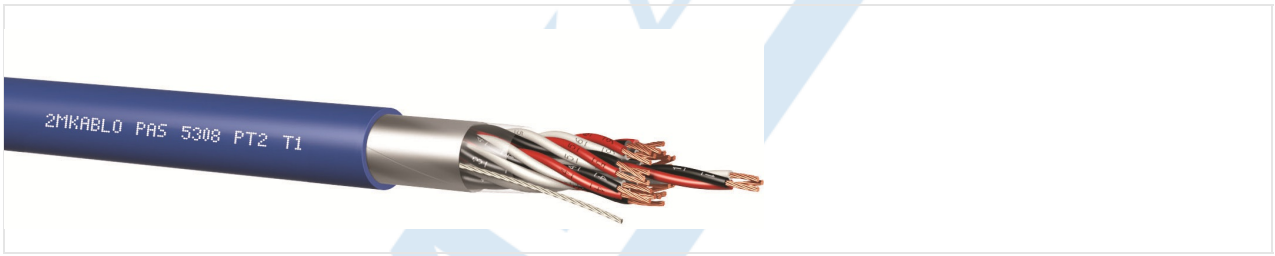
Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1, 2,5) -Table 1
Insulation	PE (EN 50290-2-23)
Core Colors	According to PAS 5308-1 Annex C-Table 2
Separator	PET Foil
Individual Screen	Al-PET Foil (with 7x0.30 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PE

Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	PAS 5308 Part 1 - Type 1

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36.8 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.4 Ω/km; 1.50 mm² - ≤12.3 Ω/km; 2.50 mm² - ≤7.6 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	Table-3
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter

PT2 T1



Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants, etc. make up the general areas that these cables are used.

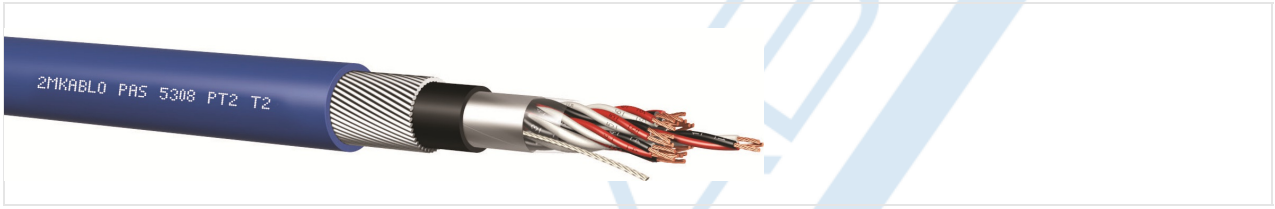
Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1, 2,5) -Table 1
Insulation	PVC (EN 50290-2-21)
Core Colors	According to PAS 5308-2 Annex C-Table 2
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	PAS 5308 Part 2 - Type 1

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤250 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter
Insulation Resistance	>25 M.Ωxkm

PT2 T2



Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants, etc. make up the general areas that these cables are used.

Cable Construction

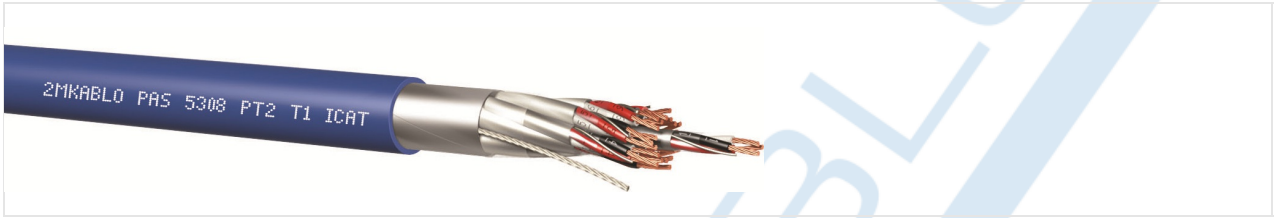
Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1, 2,5) -Table 1
Insulation	PVC (EN 50290-2-21)
Core Colors	According to PAS 5308-2 Annex C-Table 2
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	PAS 5308 Part 2 - Type 2

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤250 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω

Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter
Insulation Resistance	>25 M.Ωxkm

PT2 T1 ICAT



Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants, etc. make up the general areas that these cables are used.

Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1, 2,5) -Table 1
Insulation	PVC (EN 50290-2-21)
Core Colors	According to PAS 5308-2 Annex C-Table 2
Separator	PET Foil
Individual Screen	Al-PET Foil (with 7x0.30 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	PAS 5308 Part 2 - Type 1

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
Capacitance (@800Hz)	≤250 nF/km (Capacitance values may increase by 20% up to 4 pairs)
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	8 x Cable Diameter
Insulation Resistance	>25 M.Ωxkm

PT2 T2 ICAT

Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants, etc. make up the general areas that these cables are used.

Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1, 2,5) -Table 1
Insulation	PVC (EN 50290-2-21)
Core Colors	According to PAS 5308-2 Annex C-Table 2
Separator	PET Foil
Individual Screen	Al-PET Foil (with 7x0.30 mm Tinned Copper Drain Wire)
Separator	PET Foil
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resistant, Flame Retardant PVC (EN 50290-2-22), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request)
Reference Standards	PAS 5308 Part 2 - Type 2

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	Core - Core: 2000 V; Core - Screen: 1000 V
Conductor Resistance	0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km
Capacitance Unbalance (800 Hz)	≤500 pF/500m
L/R Ratio	0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω
Temperature Range	Fixed: -40 °C .....+70 °C, Flexible: -5 °C .....+50 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours
Min. Bending Radius (Fixed)	12 x Cable Diameter
Capacitance (@800Hz)	≤250 nF/km (Capacitance values may increase by 20% up to 4 pairs)
Insulation Resistance	>25 M.Ωxkm

FireKab LIHH-TP FE180 PH120

Areas of Use

FireKab fire resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. FireKab products have low smoke density, are halogen-free and they don't emit poisonous gases.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	Fire Resistant Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	DIN 47100 (for more than 2 pairs black-white / numbered)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Flame Barrier	Fiber Glass Tape
Outer Sheath	HFFR (EN 50290-2-27), RAL 2004 - Orange (other colors upon request)
Reference Standards	TS 13734

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	2000 V
Conductor Resistance	0.50 mm² - ≤39 Ω/km; 0.75 mm² - ≤26 Ω/km; 1.00 mm² - ≤19.5 Ω/km; 1.50 mm² - ≤13.3 Ω/km; 2.50 mm² - ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21, EN 50200 PH120
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 7.5 x Cable Diameter, Flexible: 15 x Cable Diameter
Temperature Range	-30 °C.....+70 °C, Flexible: -5 °C .....+60 °C

FireKab LIHH FE180 PH120

Areas of Use

FireKab fire resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. FireKab products have low smoke density, are halogen-free and they don't emit poisonous gases.

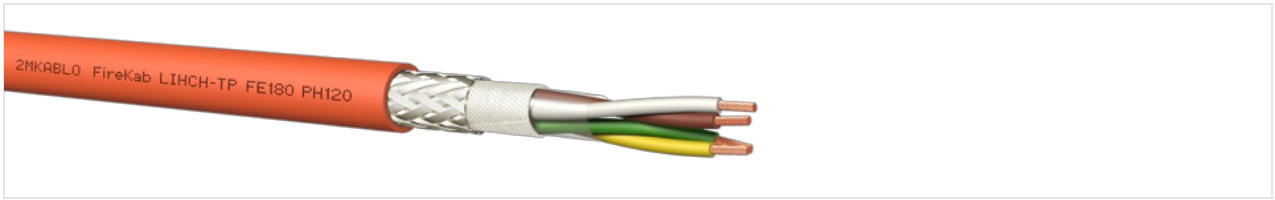
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	Fire Resistant Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green, for more than 5 cores white core-black numbered)
Lay-up	Cores are stranded in layers
Flame Barrier	Fiber Glass Tape
Outer Sheath	HFFR (EN 50290-2-27), RAL 2004 - Orange (other colors upon request)
Reference Standards	TS 13734

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	2000 V
Insulation Resistance	>200 M.Ωxkm
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21, EN 50200 PH120
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 7.5 x Cable Diameter, Flexible: 15 x Cable Diameter
Conductor Resistance	0.50 mm² - ≤39 Ω/km; 0.75 mm² - ≤26 Ω/km; 1.00 mm² - ≤19.5 Ω/km; 1.50 mm² - ≤13.3 Ω/km; 2.50 mm² - ≤7.98 Ω/km
Temperature Range	-30 °C.....+70 °C, Flexible: -5 °C .....+60 °C

FireKab LIHCH-TP FE180 PH120



Areas of Use

FireKab fire resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. FireKab products have low smoke density, are halogen-free and they don't emit poisonous gases.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	Fire Resistant Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	DIN 47100 (for more than 2 pairs black-white / numbered)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Flame Barrier	Fiber Glass Tape
Screen	Tinned Copper Wire Braid
Outer Sheath	HFFR (EN 50290-2-27), RAL 2004 - Orange (other colors upon request)
Reference Standards	TS 13734

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	2000 V
Conductor Resistance	0.50 mm² - ≤39 Ω/km; 0.75 mm² - ≤26 Ω/km; 1.00 mm² - ≤19.5 Ω/km; 1.50 mm² - ≤13.3 Ω/km; 2.50 mm² - ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21, EN 50200 PH120
Smoke Density	IEC/EN 61034-2
Corrosive Gases Measurement	IEC/EN 60754-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter
Temperature Range	-30 °C.....+70 °C, Flexible: -5 °C .....+60 °C

FireKab LIHCH FE180 PH120

Areas of Use

FireKab fire resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. FireKab products have low smoke density, are halogen-free and they don't emit poisonous gases.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	Fire Resistant Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green, for more than 5 cores white core-black numbered)
Lay-up	Cores are stranded in layers
Flame Barrier	Fiber Glass Tape
Screen	Tinned Copper Wire Braid
Outer Sheath	HFFR (EN 50290-2-27), RAL 2004 - Orange (other colors upon request)
Reference Standards	TS 13734

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	2000 V
Conductor Resistance	0.50 mm² - ≤39 Ω/km; 0.75 mm² - ≤26 Ω/km; 1.00 mm² - ≤19.5 Ω/km; 1.50 mm² - ≤13.3 Ω/km; 2.50 mm² - ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21, EN 50200 PH120
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1

Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter
Temperature Range	-30 °C.....+70 °C, Flexible: -5 °C .....+60 °C

FireKab LIH(St)H-TP FE180 PH120

Areas of Use

FireKab fire resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. FireKab products have low smoke density, are halogen-free and they don't emit poisonous gases.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	Fire Resistant Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	DIN 47100 (for more than 2 pairs black-white / numbered)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Flame Barrier	Fiber Glass Tape
Screen	Al-PET Foil + Stranded Tinned Copper Drain Wire
Outer Sheath	HFFR (EN 50290-2-27), RAL 2004 - Orange (other colors upon request)
Reference Standards	TS 13734

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	2000 V
Conductor Resistance	0.50 mm² - ≤39 Ω/km; 0.75 mm² - ≤26 Ω/km; 1.00 mm² - ≤19.5 Ω/km; 1.50 mm² - ≤13.3 Ω/km; 2.50 mm² - ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21, EN 50200 PH120
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 7.5 x Cable Diameter, Flexible: 15 x Cable Diameter
Temperature Range	-30 °C.....+70 °C, Flexible: -5 °C .....+60 °C

FireKab LIH(St)H FE180 PH120

Areas of Use

FireKab fire resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. FireKab products have low smoke density, are halogen-free and they don't emit poisonous gases.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	Fire Resistant Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green, for more than 5 cores white core-black numbered)
Lay-up	Cores are stranded in layers
Flame Barrier	Fiber Glass Tape
Screen	Al-PET Foil + Stranded Tinned Copper Drain Wire
Outer Sheath	HFFR (EN 50290-2-27), RAL 2004 - Orange (other colors upon request)
Reference Standards	TS 13734

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	2000 V
Conductor Resistance	0.50 mm² - ≤39 Ω/km; 0.75 mm² - ≤26 Ω/km; 1.00 mm² - ≤19.5 Ω/km; 1.50 mm² - ≤13.3 Ω/km; 2.50 mm² - ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21, EN 50200 PH120
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 7.5 x Cable Diameter, Flexible: 15 x Cable Diameter
Temperature Range	-30 °C.....+70 °C, Flexible: -5 °C .....+60 °C

FireKab LIH(St)CH FE180 PH120

Areas of Use

FireKab fire resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. FireKab products have low smoke density, are halogen-free and they don't emit poisonous gases.

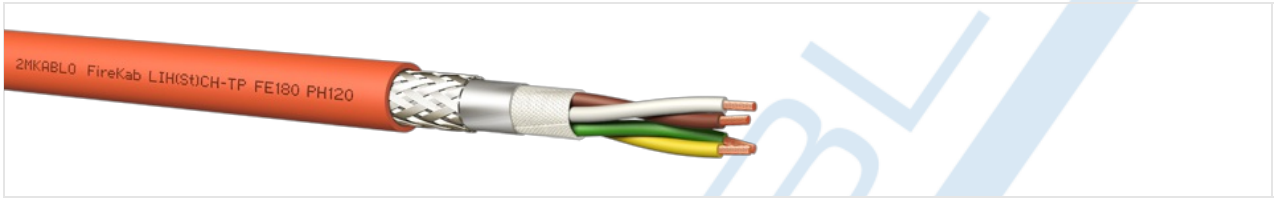
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	Fire Resistant Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green, for more than 5 cores white core-black numbered)
Lay-up	Cores are stranded in layers
Flame Barrier	Fiber Glass Tape
1. Screen	Al-PET Foil (100% Coverage)
2. Screen	Tinned Copper Wire Braid (50% Coverage)
Outer Sheath	HFFR (EN 50290-2-27), RAL 2004 - Orange (other colors upon request)
Reference Standards	TS 13734

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	2000 V
Conductor Resistance	0.50 mm² - ≤39 Ω/km; 0.75 mm² - ≤26 Ω/km; 1.00 mm² - ≤19.5 Ω/km; 1.50 mm² - ≤13.3 Ω/km; 2.50 mm² - ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21, EN 50200 PH120
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 7.5 x Cable Diameter, Flexible: 15 x Cable Diameter
Temperature Range	-30 °C.....+70 °C, Flexible: -5 °C .....+60 °C

FireKab LIH(St)CH-TP FE180 PH120



Areas of Use

FireKab fire resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. FireKab products have low smoke density, are halogen-free and they don't emit poisonous gases.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	Fire Resistant Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	DIN 47100 (for more than 2 pairs black-white / numbered)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Flame Barrier	Fiber Glass Tape
1. Screen	Al-PET Foil (100% Coverage)

2. Screen	Tinned Copper Wire Braid (50% Coverage)
Outer Sheath	HFFR (EN 50290-2-27), RAL 2004 - Orange (other colors upon request)
Reference Standards	TS 13734

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	2000 V
Conductor Resistance	0.50 mm² - ≤39 Ω/km; 0.75 mm² - ≤26 Ω/km; 1.00 mm² - ≤19.5 Ω/km; 1.50 mm² - ≤13.3 Ω/km; 2.50 mm² - ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21, EN 50200 PH120
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter
Temperature Range	-30 °C.....+70 °C, Flexible: -5 °C .....+60 °C

FireKab JE-H(St)H...Bd FE180 PH120

Areas of Use

FireKab fire resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. FireKab products have low smoke density, are halogen-free and they don't emit poisonous gases.

Cable Construction

Conductor	Annealed Solid Copper (IEC/EN 60228)
Insulation	Fire Resistant Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	Blue/Red, Grey/Yellow, Green/Brown, White/Black - VDE 0815
Lay-up	4 pairs laid up to a bundle, bundles idendified by spiral numbered or colored polyester tape, bundles laid up in layers. (Two pairs laid up as a star quad)
Separator	PET Foil
Flame Barrier	Fiber Glass Tape
Drain Wire	0.80 mm Solid Tinned Copper
Screen	Al-PET Foil
Outer Sheath	HFFR (EN 50290-2-27), RAL 2004 - Orange (other colors upon request)

Technical Properties

Operating Voltage	300 V
Test Voltage	Core - Core 500 V; Core - Screen 2000 V

Insulation Resistance	>200 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤200 pF/100m
Capacitance (@800Hz)	≤120 nF/km
Temperature Range	Fixed: -30 °C.....+90 °C, Flexible: -5 °C .....+60 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21, EN 50200 PH120
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 7.5 x Cable Diameter, Flexible: 15 x Cable Diameter
Conductor Resistance	0.80mm - ≤36.6 Ω/km; 1.00 mm - ≤22.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km

FireKab JE-H(St) HSWBH...Bd FE180 PH120

Areas of Use

FireKab fire resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. FireKab products have low smoke density, are halogen-free and they don't emit poisonous gases.

Cable Construction

Conductor	Annealed Solid Copper (IEC/EN 60228)
Core Colors	Blue/Red, Grey/Yellow, Green/Brown, White/Black - VDE 0815
Lay-up	4 pairs laid up to a bundle, bundles idendified by spiral numbered or colored polyester tape, bundles laid up in layers. (Two pairs laid up as a star quad)
Separator	PET Foil
Drain Wire	0.80 mm Solid Tinned Copper
Screen	Al-PET Foil
Inner Sheath	HFFR, (EN 50290-2-27, VDE 0207 HM2)
Armour	Galvanized Steel Wire Braiding (70% Coverage)
Outer Sheath	HFFR (EN 50290-2-27), RAL 3000 - Red or RAL 2004 - Orange
Insulation	Fire Resistant Silicon Rubber (EN 50363-1, BS 7655 EI2)
Flame Barrier	Fiber Glass Tape

Technical Properties

Operating Voltage	300 V
Test Voltage	Core - Core 500 V; Core - Screen 2000 V
Conductor Resistance	0.80mm - ≤36.6 Ω/km; 1.00 mm² - ≤18 Ω/km; 1.50 mm² - ≤12.1 Ω/km
Insulation Resistance	>500 M.Ωxkm
Capacitance Unbalance (800 Hz)	≤200 pF/100m
Capacitance (@800Hz)	≤120 nF/km

Temperature Range	Fixed: -30 °C.....+90 °C, Flexible: -5 °C .....+60 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21, EN 50200 PH120
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 10 x Cable Diameter, Flexible: 15 x Cable Diameter

FireKab SFR FE180 PH120 Annex E

Areas of Use

FireKab fire resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. FireKab products have low smoke density, are halogen-free and they don't emit poisonous gases.

Cable Construction

Conductor	Annealed Solid Copper (IEC/EN 60228 Class 1)
Insulation	Fire Resistant Silicon Rubber (BS 7655 EI2)
Lay-up	Cores are stranded in layers
Separator	PET Foil
Drain Wire	Solid tinned copper with the same of conductor
Screen	Al-PET Foil
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR / LSZH / LSOH / FRNC, BS 7655-6 LTS3), RAL 3000 - Red or RAL 9003 - White
Reference Standards	BS 7629 - 1:2008
Core Colors	BS 7671 / HD308 S2

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	2000 V
Conductor Resistance	1.00 mm² - ≤18 Ω/km; 1.50 mm² - ≤12 Ω/km; 2.50 mm² - ≤7.4 Ω/km
Insulation Resistance	>200 M.Ωxkm
Temperature Range	Fixed: -30 °C.....+90 °C, Flexible: -5 °C .....+60 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21, BS 6387 C,W,Z, EN 50200 PH120, EN Annex E (30 min.)
Smoke Density	IEC 61034-1/2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

FireKab SIHF FE180

Areas of Use

FireKab fire resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. FireKab products have low smoke density, are halogen-free and they don't emit poisonous gases.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	Fire Resistant Silicon Rubber (EN 50363-1, BS 7655 EI2)
Core Colors	BS 7671, HD 308-S2,VDE 0293-308 (for more than 5 cores white core-black numbered)
Outer Sheath	Special Fire Resistant Silicon Rubber, Oxbrown - Red

Technical Properties

Operating Voltage	<1.5 mm² 300 V - 500 V; >1.5 mm² 450 V - 750 V
Test Voltage	2500 V
Conductor Resistance	0.75 mm² - ≤26 Ω/km; 1.00 mm² - ≤19.3 Ω/km; 1.50 mm² - ≤13.3 Ω/km; 2.50 mm² - ≤8 Ω/km
Insulation Resistance	>200 M.Ωxkm
Temperature Range	Sabit: -50 °C.....+180 °C, Hareketli: -20 °C.....+150 °C
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	7.5 x Cable Diameter
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21

2MKAB NGF FE180 PH30

Areas of Use

Fire-resistant cables are used for fire alarm systems, power supply or control of equipment that needs to function during a fire such as warning, emergency lighting, evacuation and monitor systems. The place of usage is intelligent or semi-intelligent buildings where dense human population or valuable goods are found. These can be hospitals, cinemas, theatres, schools, shopping centers, airports, factories, etc. Fire-resistant products have low smoke density, are halogen-free and they don't emit poisonous gases.

Cable Construction

Insulation	Fire Resistant Silicon Rubber (BS 7655 EI2)
Conductor	Annealed Solid Copper (IEC/EN 60228 Class 1)
Lay-up	Cores are stranded in layers
Separator	PET Foil
Drain Wire	0.80 mm Solid Tinned Copper
Screen	Al-PET Foil
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR / LSZH / LSOH / FRNC, BS 7655-6 LTS3), RAL 3000 - Red or RAL 9003 - White
Core Colors	BS 7671 / HD308 S2

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	2000 V
Insulation Resistance	>200 M.Ωxkm
Temperature Range	Fixed: -30 °C.....+90 °C, Flexible: -5 °C .....+60 °C
Flame Retardancy	IEC/EN 60332-1, IEC/EN 60332-3-24
Fire Resistance	IEC 60331-21, BS 6387 C,W,Z, EN 50200 PH30
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter
Conductor Resistance	1.50 mm² - ≤12 Ω/km; 2.50 mm² - ≤7.4 Ω/km
Smoke Density	IEC 61034-1/2

Solar Cables

Areas of Use

cables are specialized electrical conductors designed to transmit power generated by solar panels to inverters and other components within a photovoltaic system. The cables are designed to operate at a normal continuous maximum conductor temperature of 90°C. The permissible period of use at a maximum conductor temperature of 120 °C is limited to 20 000 h. They are suitable for applications indoor and/or outdoor, in industrial and agriculture areas.

Cable Construction

Technical Properties

LI2YCY-PiMF

Areas of Use

These polyethylene insulated and double screened signal transmission cables are used for indoor applications. These used in electronic control systems of in communication sector, electronic circuits, measurement devices, machine design, office equipment, computer systems which requires sensitive signal transmission, not being affected by electromagnetic signals.

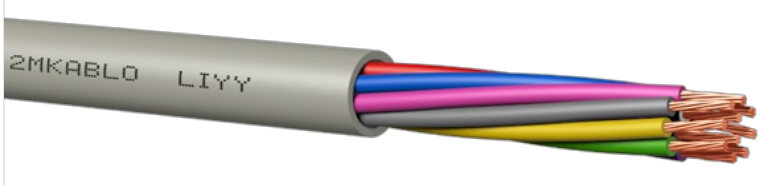
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	PE (EN 50290-2-23)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green)
Separator	PET Foil
Individual Screen	Al-PET Foil (with Stranded Tinned Copper Drain Wire)
Lay-up	All shielded pairs are stranded in layers
Separator	PET Foil
Overall Screen	Tinned Copper Wire Braiding (60% Coverage)*
Outer Sheath	PVC (EN 50290-2-22), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	0.14 mm² - 800 V; 0.22 mm² ....1.00 mm²- 1200 V; 1.50 mm²..... 2.50 mm² - 2500 V
Loop Resistance	0.22 mm²- ≤170 Ω/km; 0.34 mm²- ≤112 Ω/km; 0.50 mm²- ≤78 Ω/km; 0.75 mm²- ≤52 Ω/km; 1.00 mm²- ≤39 Ω/km
Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.22 mm²..0.34 mm²-≤70 nF/km; 0.50 mm²-≤75 nF/km; 75 mm²-≤80nF/km;1.00 mm²-≤85nF/km
Impedance	0.22 mm²..0.34 mm²-85 Ω(1MHz); 0.50 mm²-80 Ω(1MHz); 0.75 mm²-75±3 Ω(1MHz); 1.00 mm²-70 Ω(1MHz)
Indutance (approx.)	0.4 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIYY



Areas of Use

These PVC cables are used in industrial applications for signal transmission. These can be easily used with their flexible construction in narrow applications

like electronic control systems of computer or audio systems or communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These for indoor applications.

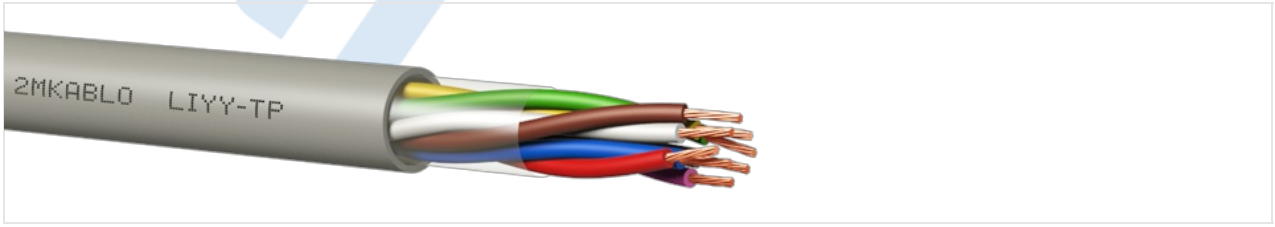
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green)
Lay-up	Cores are stranded in layers
Outer Sheath	PVC (EN 50290-2-22), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	0.14 mm² - 800 V; 0.22 mm² ....1.00 mm²- 1200 V; 1.50 mm²..... 2.50 mm² - 2500 V
Conductor Resistance	0.14 mm²- ≤138 Ω/km; 0.22 mm²- ≤85 Ω/km; 0.25 mm²- ≤77.8 Ω/km;0.34 mm²- ≤56 Ω/km; 0.50 mm²- ≤39 Ω/km; 0.75 mm²- ≤26 Ω/km; 1.00 mm²- ≤19.5 Ω/km; 1.50 mm²- ≤13.3 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIYY-TP



Areas of Use

These PVC cables are used in industrial applications for signal transmission. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These for indoor applications.

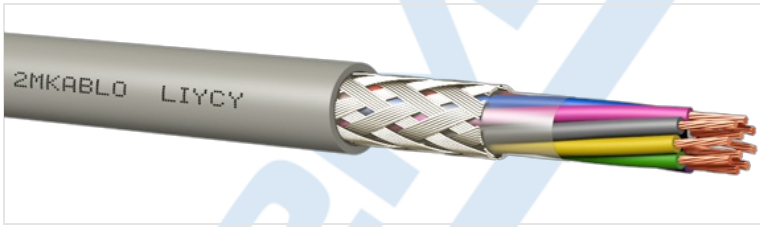
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	PVC (EN 50290-2-21)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Outer Sheath	PVC (EN 50290-2-22), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755
Core Colors	DIN 47100 or Black-White and Numbered

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	0.14 mm² - 800 V; 0.22 mm² ....1.00 mm²- 1200 V; 1.50 mm²..... 2.50 mm² - 2500 V
Loop Resistance	0.14 mm²-≤276 Ω/km; 0.22 mm²-≤170 Ω/km; 0.25 mm²-≤155.6 Ω/km; 0.34 mm²-≤112 Ω/km; 0.50 mm²-≤78 Ω/km; 0.75 mm²-≤52 Ω/km; 1.00 mm²-≤39 Ω/km; 1.50 mm²-≤26.6 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIYCY



Areas of Use

This PVC (screened) cables are used in industrial applications for signal transmission. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. Screening protects the cable from the outer electrical effects.

Cable Construction

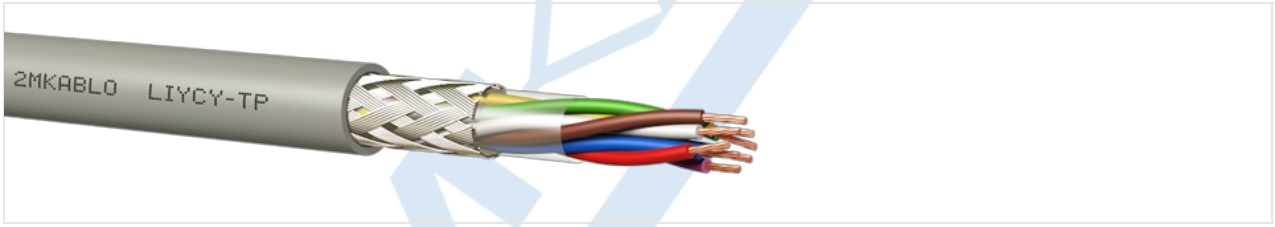
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green)
Lay-up	Cores are stranded in layers
Separator	PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (EN 50290-2-22), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	0.14 mm² - 800 V; 0.22 mm² ....1.00 mm²- 1200 V; 1.50 mm²..... 2.50 mm² - 2500 V
Conductor Resistance	0.14 mm²- ≤138 Ω/km; 0.22 mm²- ≤85 Ω/km; 0.25 mm²- ≤77.8 Ω/km;0.34 mm²-≤56 Ω/km; 0.50 mm²- ≤39 Ω/km; 0.75 mm²- ≤26 Ω/km; 1.00 mm²- ≤19.5 Ω/km; 1.50 mm²- ≤13.3 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km Core-Screen: 0.14 mm²-≤120 nF/km; 0.22 mm²..0.34 mm²-≤150 nF/km; 0.50

	mm²..0.75 mm²-≤170 nF/km; 1.00 mm²..1.50 mm²-≤180nF/km; 2.50 mm²- ≤240 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIYCY-TP



Areas of Use

These PVC sheathed cables(screened) are used in industrial applications for signal transmission. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. Screening protects the cable against the outer electrical effects.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	DIN 47100 or Black-White and Numbered
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (EN 50290-2-22), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	0.14 mm² - 800 V; 0.22 mm² ....1.00 mm²- 1200 V; 1.50 mm²..... 2.50 mm² - 2500 V
Loop Resistance	0.14 mm²-≤276 Ω/km; 0.22 mm²-≤170 Ω/km; 0.25 mm²-≤155.6 Ω/km; 0.34 mm²-≤112 Ω/km; 0.50 mm²-≤78 Ω/km; 0.75 mm²-≤52 Ω/km; 1.00 mm²-≤39 Ω/km; 1.50 mm²-≤26.6 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km Core-Screen: 0.14 mm²-≤120 nF/km; 0.22 mm²..0.34 mm²-≤150 nF/km; 0.50 mm²..0.75 mm²-≤170 nF/km; 1.00 mm²..1.50 mm²-≤180nF/km; 2.50 mm²- ≤240 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIY(St)Y

Areas of Use

These shielded and PVC insulated cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green)
Lay-up	Cores are stranded in layers
Separator	PET Foil
Drain Wire	Stranded Tinned Copper
Screen	Al-PET Foil
Outer Sheath	PVC (EN 50290-2-22), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	0.14 mm² - 800 V; 0.22 mm² ....1.00 mm²- 1200 V; 1.50 mm²..... 2.50 mm² - 2500 V
Conductor Resistance	0.14 mm²- ≤138 Ω/km; 0.22 mm²- ≤85 Ω/km; 0.25 mm²- ≤77.8 Ω/km; 0.34 mm²- ≤56 Ω/km; 0.50 mm²- ≤39 Ω/km; 0.75 mm²- ≤26Ω/km; 1.00 mm²- ≤19.5 Ω/km; 1.50 mm²- ≤13.3 Ω/km; 2.50 mm²- ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km Core-Screen: 0.14 mm²-≤120 nF/km; 0.22 mm²..0.34 mm²-≤150 nF/km; 0.50 mm²..0.75 mm²-≤170 nF/km; 1.00 mm²..1.50 mm²-≤180nF/km; 2.50 mm²- ≤240 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIY(St)Y-TP

Areas of Use

These shielded and PVC insulated cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects.

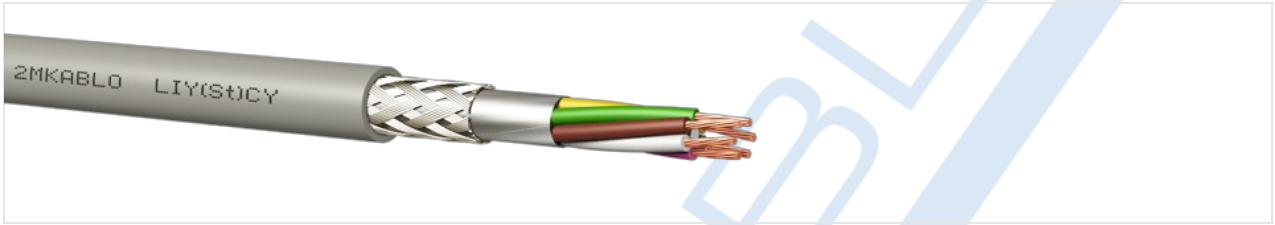
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	PVC (EN 50290-2-21)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil
Drain Wire	Stranded Tinned Copper
Screen	Al-PET Foil
Outer Sheath	PVC (EN 50290-2-22), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755
Core Colors	DIN 47100 or Black-White and Numbered

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	0.14 mm²..25 mm² 1200 V; 0.34 mm²..10 mm² 1500 V; 1.50 mm²..... 2500 V
Loop Resistance	0.14 mm²-≤276 Ω/km; 0.22 mm²-≤170 Ω/km; 0.25 mm²-≤155.6 Ω/km; 0.34 mm²-≤112 Ω/km; 0.50 mm²-≤78 Ω/km; 0.75 mm²-≤52 Ω/km; 1.00 mm²-≤39 Ω/km; 1.50 mm²-≤26.6 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km Core-Screen: 0.14 mm²-≤120 nF/km; 0.22 mm²..0.34 mm²-≤150 nF/km; 0.50 mm²..0.75 mm²-≤170 nF/km; 1.00 mm²..1.50 mm²-≤180nF/km; 2.50 mm²- ≤240 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIY(St)CY



Areas of Use

These double screened cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects.

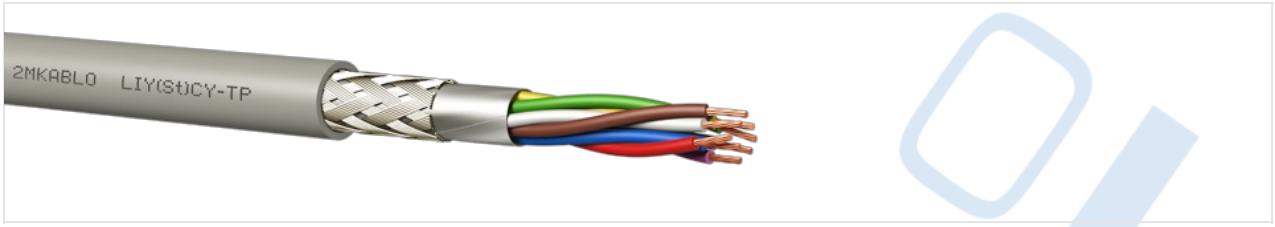
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	PVC (EN 50290-2-21)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green)
Lay-up	Cores are stranded in layers
1. Screen	Al-PET Foil
2. Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (EN 50290-2-22), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V
Test Voltage	0.14 mm²..25 mm² 1200 V; 0.34 mm²..10 mm² 1500 V; 1.50 mm²..... 2500 V
Conductor Resistance	0.14 mm²- ≤138 Ω/km; 0.22 mm²- ≤85 Ω/km; 0.25 mm²- ≤77.8 Ω/km;0.34 mm²- ≤56 Ω/km; 0.50 mm²- ≤39 Ω/km; 0.75 mm²- ≤26 Ω/km; 1.00 mm²- ≤19.5 Ω/km; 1.50 mm²- ≤13.3 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km Core-Screen: 0.14 mm²-≤120 nF/km; 0.22 mm²..0.34 mm²-≤150 nF/km; 0.50 mm²..0.75 mm²-≤170 nF/km; 1.00 mm²..1.50 mm²-≤180nF/km; 2.50 mm²- ≤240 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIY(St)CY-TP



Areas of Use

These double screened cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	PVC (EN 50290-2-21)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
1. Screen	Al-PET Foil
2. Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (EN 50290-2-22), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755
Core Colors	DIN 47100 or Black-White and Numbered

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V
Test Voltage	0.14 mm²..25 mm² 1200 V; 0.34 mm²..10 mm² 1500 V; 1.50 mm²..... 2500 V
Loop Resistance	0.14 mm²-≤276 Ω/km; 0.22 mm²-≤170 Ω/km; 0.25 mm²-≤155.6 Ω/km; 0.34 mm²-≤112 Ω/km; 0.50 mm²-≤78 Ω/km; 0.75 mm²-≤52 Ω/km; 1.00 mm²-≤39 Ω/km; 1.50 mm²-≤26.6 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km Core-Screen: 0.14 mm²-≤120 nF/km; 0.22 mm²..0.34 mm²-≤150 nF/km; 0.50 mm²..0.75 mm²-≤170 nF/km; 1.00 mm²..1.50 mm²-≤180nF/km; 2.50 mm²- ≤240 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

YSLY-JZ

Areas of Use

These types of cables are used in office equipment, electronic control systems, air condition systems, power stations, engineering projects for control, vision and measurement purposes. These can be used in wet or dry indoor applications but for outdoor use, UV protected PVC must be used where the cable is exposed to sunlight.

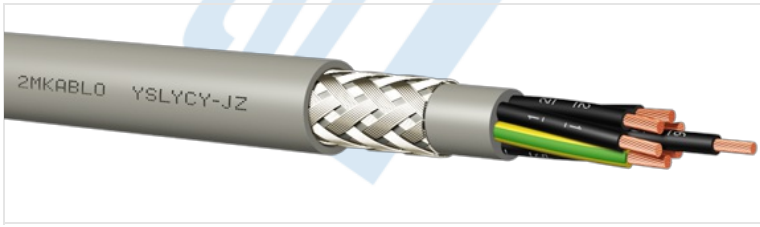
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PVC (EN 50290-2-21, TSE K 373)
Core Colors	Black (white numbered) Green-Yellow earth core in the outer layer (3 cores and above)
Lay-up	Cores are stranded in layers
Outer Sheath	PVC (EN 50290-2-22, EN 50363-4-1), RAL 7001 - Grey
Reference Standards	TSE K 373

Technical Properties

Operating Voltage	0.50 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	2500 V
Conductor Resistance	0.50 mm²- ≤39 Ω/km; 0.75 mm²- ≤26 Ω/km; 1.00 mm²- ≤19.5 Ω/km; 1.50 mm²-≤13.3 Ω/km; 2.50 mm²- ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

YSLYCY-JZ



Areas of Use

These PVC cables (screened) are used in office equipment, electronic control systems, air condition systems, power stations, engineering projects for control, vision and measurement purposes. These can be used in wet or dry indoor applications. Screening protects the cable from the outer electrical effects.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PVC (EN 50290-2-21, TSE K 373)
Core Colors	Black (white numbered) Green-Yellow earth core in the outer layer (3 cores and above)
Lay-up	Cores are stranded in layers
Inner Sheath	PVC (EN 50290-2-22, EN 50363-4-1)
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (EN 50290-2-22, EN 50363-4-1), RAL 7001 - Grey
Reference Standards	TSE K 373

Technical Properties

Operating Voltage	0.50 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	2500 V
Conductor Resistance	0.50 mm² - ≤39 Ω/km; 0.75 mm² - ≤26 Ω/km; 1.00 mm² - ≤19.5 Ω/km; 1.50 mm² - ≤13.3 Ω/km; 2.50 mm² - ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Transfer Impedance	≤250m Ω/m (30MHz)
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius	Fixed: 10 x Cable Diameter, Flexible: 15 x Cable Diameter

YSLYSY / YSLYQY

Areas of Use

These PVC cables (armored) are used in office equipment, electronic control systems, air condition systems, power stations, engineering projects for control, vision, and measurement purposes. These can be used in wet or dry indoor applications. Armor; protect against mechanical traverse loads and act as a magnetic screen against interference.

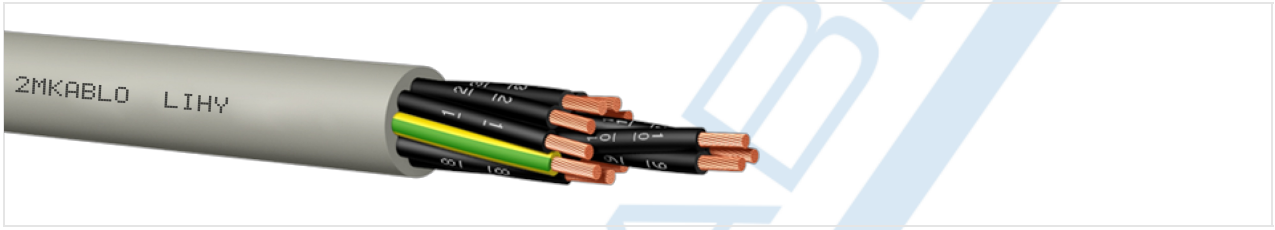
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PVC (EN 50290-2-21, TSE K 373)
Core Colors	Black (white numbered) Green-Yellow earth core in the outer layer (3 cores and above)
Lay-up	Cores are stranded in layers
Inner Sheath	PVC (EN 50290-2-22, EN 50363-4-1)
Armour	Galvanised Steel Wire Braid
Outer Sheath	PVC (EN 50290-2-22, EN 50363-4-1), Transparent, RAL 7001 - Grey (other colors upon request)
Reference Standards	With reference to VDE 0245

Technical Properties

Operating Voltage	0.50 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	2500 V
Conductor Resistance	0.14 mm²- ≤138 Ω/km; 0.22 mm²- ≤85 Ω/km; 0.25 mm²- ≤77.8 Ω/km; 0.34 mm²- ≤56 Ω/km; 0.50 mm²- ≤39 Ω/km; 0.75 mm²- ≤26Ω/km; 1.00 mm²- ≤19.5 Ω/km; 1.50 mm²- ≤13.3 Ω/km; 2.50 mm²- ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius	Fixed: 10 x Cable Diameter, Flexible: 15 x Cable Diameter

LIHY



Areas of Use

Used in signal transmission of control systems for many applications in buildings. Depending on the applications need, PVC,HFFR or TPU outer sheathed, bare or tinned copper, screened or unscreened types are available. gasses during fire. Have low smoke density and they do not emit poisonous and corrosive HFFR versions are less flammable in case of fire, mostly self extinguishing, These cables are operated with 300/500 V and with the cross-section of 0.34 mm² to 2.50 mm² and produced from 2 cores to 44 cores.

Cable Construction

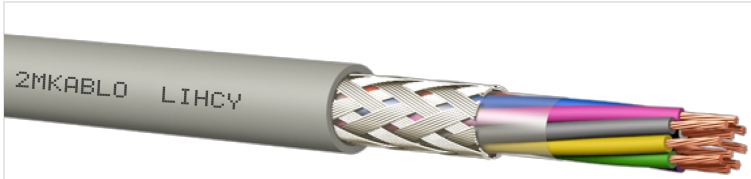
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	HFFR (EN 50290-2-26)
Core Colors	Upon Customer Request
Lay-up	Cores are stranded in layers
Outer Sheath	PVC (EN 50290-2-22, EN 50363-4-1), RAL 7001 - Grey
Reference Standards	Based on VDE 0812

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	2 kV

Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC 60332-1-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

LIHCY



Areas of Use

Used in signal transmission of control systems for many applications in buildings. Depending on the applications need, PVC,HFFR or TPU outer sheathed, bare or tinned copper, screened or unscreened types are available. gasses during fire. Have low smoke density and they do not emit poisonous and corrosive HFFR versions are less flammable in case of fire, mostly self extinguishing, These cables are operated with 300/500 V and with the cross-section of 0.34 mm² to 2.50 mm² and produced from 2 cores to 44 cores.

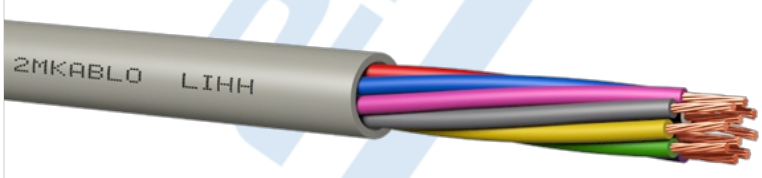
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	HFFR (EN 50290-2-26)
Core Colors	Upon Customer Request
Lay-up	Cores are stranded in layers
Separator	PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (EN 50290-2-22, EN 50363-4-1), RAL 7001 - Grey
Reference Standards	Based on VDE 0812

Technical Properties

Operating Voltage	300 V / 500 V
Test Voltage	2 kV
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1-2
Min. Bending Radius (Fixed)	10 x Cable Diameter

LIHH



Areas of Use

LIHH cables are used in the industrial applications for indoor use for signal transmission. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc.LIHH cables have HFFR material in their construction and These don't burn easily and the flames go off by themselves. These

have low smoke density and these don't emit poisonous and corrosive gases during the fire. These used in buildings where there are important goods or human population.

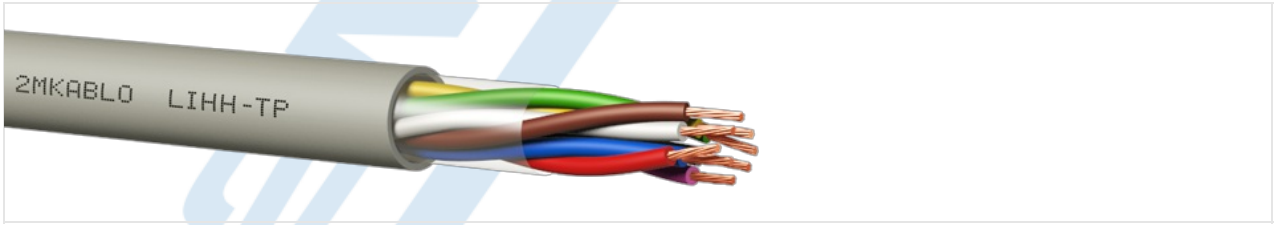
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	HFFR (EN 50290-2-26)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green)
Lay-up	Cores are stranded in layers
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755
CPR Classes	B2ca s1a d1 a1

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	0.14 mm²..25 mm² 1200 V; 0.34 mm²..10 mm² 1500 V; 1.50 mm²..... 2500 V
Conductor Resistance	0.14 mm²- ≤138 Ω/km; 0.22 mm²- ≤85 Ω/km; 0.25 mm²- ≤77.8 Ω/km; 0.34 mm²- ≤56 Ω/km; 0.50 mm²- ≤39 Ω/km; 0.75 mm²- ≤26Ω/km; 1.00 mm²- ≤19.5 Ω/km; 1.50 mm²- ≤13.3 Ω/km; 2.50 mm²- ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIHH-TP



Areas of Use

LIHH-TP cables are used in the industrial applications for signal transmission. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. LIHH-TP cables have HFFR material in their construction and These don't burn easily and the flames go off by themselves. These have low smoke density and These don't emit poisonous and corrosive gases during the fire. These used in buildings where there are important goods or human population.

Cable Construction

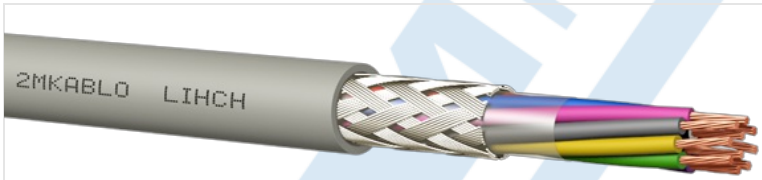
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	HFFR (EN 50290-2-26)

Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755
Core Colors	DIN 47100 or Black-White and Numbered

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	0.14 mm² - 800 V; 0.22 mm² ....1.00 mm²- 1200 V; 1.50 mm²..... 2.50 mm² - 2500 V
Conductor Resistance	0.14 mm²- ≤138 Ω/km; 0.22 mm²- ≤85 Ω/km; 0.25 mm²- ≤77.8 Ω/km; 0.34 mm²- ≤56 Ω/km; 0.50 mm²- ≤39 Ω/km; 0.75 mm²- ≤26Ω/km; 1.00 mm²- ≤19.5 Ω/km; 1.50 mm²- ≤13.3 Ω/km; 2.50 mm²- ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIHCH



Areas of Use

These screened cables are used as signal transmission cables for indoor applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. Screening protects the cable from the outer electrical effects. These cables have HFFR material in their construction and These don't burn easily and if these do the flames go off by themselves. These have low smoke density and These don't emit poisonous and corrosive gases during the fire. These used in buildings where there are important goods or human population.

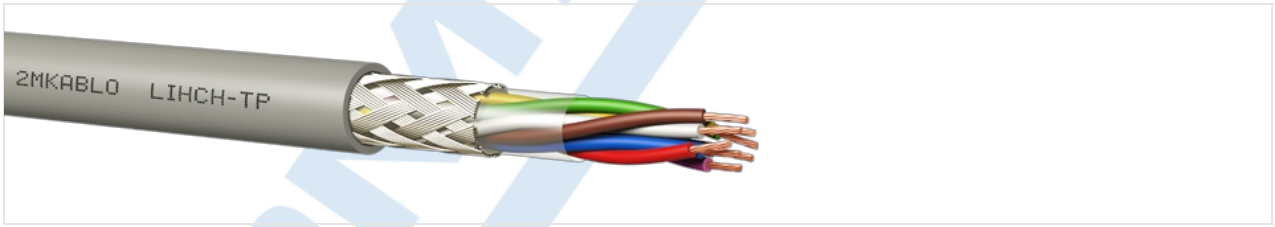
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	HFFR (EN 50290-2-26)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green)
Lay-up	Cores are stranded in layers
Separator	PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755
CPR Classes	B2ca s1a d1 a1

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	0.14 mm² - 800 V; 0.22 mm² ....1.00 mm²- 1200 V; 1.50 mm²..... 2.50 mm² - 2500 V
Conductor Resistance	0.14 mm²- ≤138 Ω/km; 0.22 mm²- ≤85 Ω/km; 0.25 mm²- ≤77.8 Ω/km; 0.34 mm²- ≤56 Ω/km; 0.50 mm²- ≤39 Ω/km; 0.75 mm²- ≤26Ω/km; 1.00 mm²- ≤19.5 Ω/km; 1.50 mm²- ≤13.3 Ω/km; 2.50 mm²- ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km Core-Screen: 0.14 mm²-≤120 nF/km; 0.22 mm²..0.34 mm²-≤150 nF/km; 0.50 mm²..0.75 mm²-≤170 nF/km; 1.00 mm²..1.50 mm²-≤180nF/km; 2.50 mm²- ≤240 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIHCH-TP



Areas of Use

These screened HFFR cables are used as signal transmission cables for indoor applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. Screening protects the cable against the outer electrical effects. Because of the HFFR material, These don't burn easily and the flames go off by themselves. These have low smoke density and These don't emit poisonous and corrosive gases during the fire. These used in buildings where there are important goods or human population.

Cable Construction

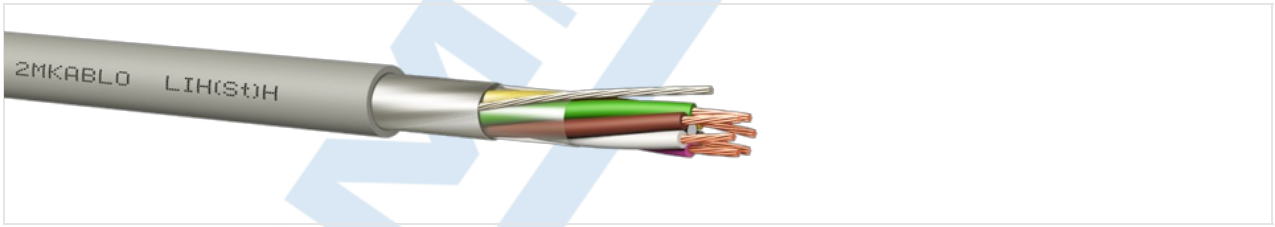
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	HFFR (EN 50290-2-26)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755
Core Colors	DIN 47100 or Black-White and Numbered

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V

Test Voltage	0.14 mm²..25 mm² 1200 V; 0.34 mm²..10 mm² 1500 V; 1.50 mm²..... 2500 V
Loop Resistance	0.14 mm²-≤276 Ω/km; 0.22 mm²-≤170 Ω/km; 0.25 mm²-≤155.6 Ω/km; 0.34 mm²-≤112 Ω/km; 0.50 mm²-≤78 Ω/km; 0.75 mm²-≤52 Ω/km; 1.00 mm²-≤39 Ω/km; 1.50 mm²-≤26.6 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km Core-Screen: 0.14 mm²-≤120 nF/km; 0.22 mm²..0.34 mm²-≤150 nF/km; 0.50 mm²..0.75 mm²-≤170 nF/km; 1.00 mm²..1.50 mm²-≤180nF/km; 2.50 mm²- ≤240 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIH(St)H



Areas of Use

These shielded and Halogen Free Flame Retardant insulated cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or in the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects. Because of the HFFR material, These don't burn easily and if these do, flames go off by themselves. These have low smoke density and these don't emit poisonous and corrosive gases during the fire. These used in buildings where there are important goods or the human population.

Cable Construction

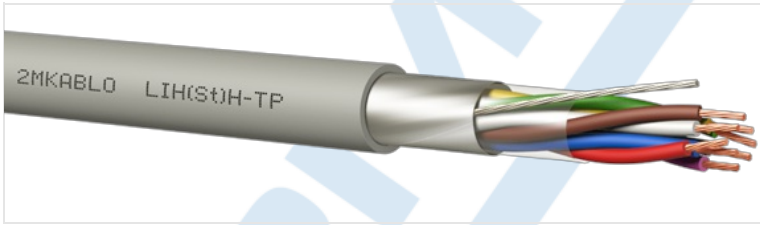
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	HFFR (EN 50290-2-26)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green)
Lay-up	Cores are stranded in layers
Separator	PET Foil
Drain Wire	Stranded Tinned Copper
Screen	Al-PET Foil
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	0.14 mm² - 800 V; 0.22 mm² ....1.00 mm²- 1200 V; 1.50 mm²..... 2.50 mm² - 2500 V
Conductor Resistance	0.14 mm²- ≤138 Ω/km; 0.22 mm²- ≤85 Ω/km; 0.25 mm²- ≤77.8 Ω/km; 0.34 mm²-≤56 Ω/km; 0.50 mm²- ≤39 Ω/km; 0.75 mm²- ≤26Ω/km; 1.00 mm²- ≤19.5 Ω/km;

	1.50 mm²- ≤13.3 Ω/km; 2.50 mm²- ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km Core-Screen: 0.14 mm²-≤120 nF/km; 0.22 mm²..0.34 mm²-≤150 nF/km; 0.50 mm²..0.75 mm²-≤170 nF/km; 1.00 mm²..1.50 mm²-≤180nF/km; 2.50 mm²- ≤240 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIH(St)H-TP



Areas of Use

These shielded and HFFR insulated cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects. Because of the HFFR material, These don't burn easily and the flames go off by themselves. These have low smoke density and These don't emit poisonous and corrosive gases during the fire. These used in buildings where there are important goods or human population.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	HFFR (EN 50290-2-26)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil
Drain Wire	Stranded Tinned Copper
Screen	Al-PET Foil
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755
Core Colors	DIN 47100 or Black-White and Numbered

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V
Test Voltage	0.14 mm²..25 mm² 1200 V; 0.34 mm²..10 mm² 1500 V; 1.50 mm²..... 2500 V
Loop Resistance	0.14 mm²-≤276 Ω/km; 0.22 mm²-≤170 Ω/km; 0.25 mm²-≤155.6 Ω/km; 0.34 mm²-≤112 Ω/km; 0.50 mm²-≤78 Ω/km; 0.75 mm²-≤52 Ω/km; 1.00 mm²-≤39 Ω/km; 1.50 mm²-≤26.6 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140

	nF/km Core-Screen: 0.14 mm²-≤120 nF/km; 0.22 mm²..0.34 mm²-≤150 nF/km; 0.50 mm²..0.75 mm²-≤170 nF/km; 1.00 mm²..1.50 mm²-≤180nF/km; 2.50 mm²- ≤240 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIH(St)CH

Areas of Use

These double screened and HFFR cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects. Because of the HFFR material, These don't burn easily and when These do, the flames go off by themselves. These have low smoke density and These don't emit poisonous and corrosive gases during the fire. These used in buildings where there are important goods or human population.

Cable Construction

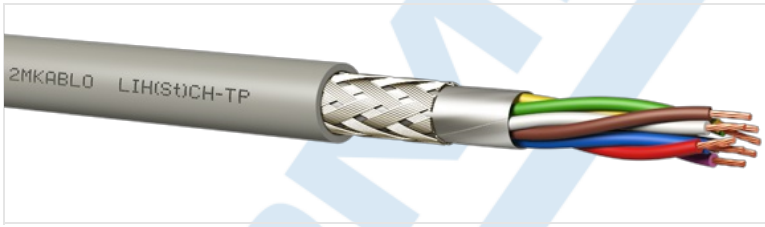
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	HFFR (EN 50290-2-26)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green)
Lay-up	Cores are stranded in layers
1. Screen	Al-PET Foil
2. Screen	Tinned Copper Wire Braid
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey
Reference Standards	VDE 0812, TS 13755

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V
Test Voltage	0.14 mm²..25 mm² 1200 V; 0.34 mm²..10 mm² 1500 V; 1.50 mm²..... 2500 V
Conductor Resistance	0.14 mm²- ≤138 Ω/km; 0.22 mm²- ≤85 Ω/km; 0.25 mm²- ≤77.8 Ω/km;0.34 mm²- ≤56 Ω/km; 0.50 mm²- ≤39 Ω/km; 0.75 mm²- ≤26 Ω/km; 1.00 mm²- ≤19.5 Ω/km; 1.50 mm²- ≤13.3 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km Core-Screen: 0.14 mm²-≤120 nF/km; 0.22 mm²..0.34 mm²-≤150 nF/km; 0.50 mm²..0.75 mm²-≤170 nF/km; 1.00 mm²..1.50 mm²-≤180nF/km; 2.50 mm²- ≤240 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C

Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

LIH(St)CH-TP



Areas of Use

These screened HFFR cables are used as signal transmission cables for indoor applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. Screening protects the cable against the outer electrical effects. Because of the HFFR material, These don't burn easily and the flames go off by themselves. These have low smoke density and These don't emit poisonous and corrosive gases during the fire. These used in buildings where there are important goods or human population.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5, 0.34 mm²: Class 2)
Insulation	HFFR (EN 50290-2-26)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
1. Screen	Al-PET Foil
2. Screen	Tinned Copper Wire Braid
Outer Sheath	HFFR (EN 50290-2-27), RAL 7032 - Grey
Reference Standards	VDE 0812, TS 13755
Core Colors	DIN 47100 or Black-White and Numbered

Technical Properties

Operating Voltage	0.14 mm²..0.25 mm² 250 V; 0.34 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	0.14 mm²..25 mm² 1200 V; 0.34 mm²..10 mm² 1500 V; 1.50 mm²..... 2500 V
Loop Resistance	0.14 mm²-≤276 Ω/km; 0.22 mm²-≤170 Ω/km; 0.25 mm²-≤155.6 Ω/km; 0.34 mm²-≤112 Ω/km; 0.50 mm²-≤78 Ω/km; 0.75 mm²-≤52 Ω/km; 1.00 mm²-≤39 Ω/km; 1.50 mm²-≤26.6 Ω/km
Insulation Resistance	>200 M.Ωxkm
Capacitance (@800Hz)	Core - Core: 0.14 mm²-≤80 nF/km; 0.22 mm²..0.34 mm²-≤100 nF/km; 0.50 mm²..0.75 mm²-≤110 nF/km; 1.00 mm²..1.50 mm²-≤120nF/km; 2.50 mm²- ≤140 nF/km Core-Screen: 0.14 mm²-≤120 nF/km; 0.22 mm²..0.34 mm²-≤150 nF/km; 0.50 mm²..0.75 mm²-≤170 nF/km; 1.00 mm²..1.50 mm²-≤180nF/km; 2.50 mm²- ≤240 nF/km
Indutance (approx.)	0.65 mH/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2

Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

HSLH-JZ

Areas of Use

These types of HFFR cables are used in office equipment, electronic control systems, air condition systems, power stations, engineering projects for control, vision and measurement purposes. These can be used in wet or dry indoor applications. Because of the HFFR material, These don't burn easily and when These do, the flames go off by themselves. These have low smoke density and These don't emit poisonous and corrosive gases during a fire. These used in buildings where there are important goods or human population.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	HFFR (EN 50290-2-26)
Core Colors	Black (white numbered) Green-Yellow earth core in the outer layer (3 cores and above)
Lay-up	Cores are stranded in layers
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey
Reference Standards	TS 13734

Technical Properties

Operating Voltage	0.50 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	2500 V
Conductor Resistance	0.50 mm² - ≤39 Ω/km; 0.75 mm² - ≤26 Ω/km; 1.00 mm² - ≤19.5 Ω/km; 1.50 mm² - ≤13.3 Ω/km; 2.50 mm² - ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 8 x Cable Diameter, Flexible: 15 x Cable Diameter

HSLHCH-JZ

Areas of Use

These Halogen Free Flame Retardant cables (screened) are used for office equipment, electronic control systems, air condition systems, power stations,

engineering projects for control, vision and measurement purposes. These can be used in wet or dry indoor applications. Because of the HFFR material, These don't burn easily and when These do the flames go off by themselves. These have low smoke density and These don't emit poisonous and corrosive gases during the fire. They are used in buildings where there are important goods or human population.

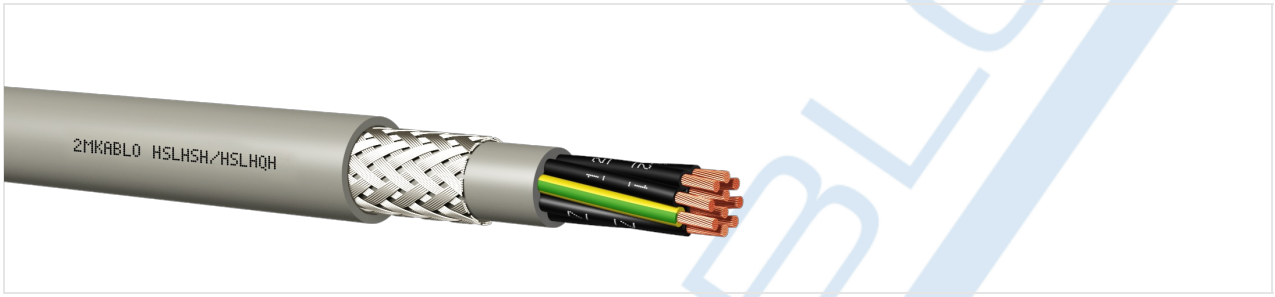
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	HFFR (EN 50290-2-26)
Core Colors	Black (white numbered) Green-Yellow earth core in the outer layer (3 cores and above)
Lay-up	Cores are stranded in layers
Inner Sheath	HFFR (EN 50290-2-27)
Screen	Tinned Copper Wire Braid
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey
Reference Standards	TSE K 373

Technical Properties

Operating Voltage	0.50 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	2500 V
Conductor Resistance	0.50 mm² - ≤39 Ω/km; 0.75 mm² - ≤26 Ω/km; 1.00 mm² - ≤19.5 Ω/km; 1.50 mm² - ≤13.3 Ω/km; 2.50 mm² - ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Transfer Impedance	≤250m Ω/m (30MHz)
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius	Fixed: 10 x Cable Diameter, Flexible: 15 x Cable Diameter

HSLHSH/ HSLHQH



Areas of Use

These Halogen Free Flame Retardant cables (armored) are used for office equipment, electronic control systems, air condition systems, power stations, engineering projects for control, vision, and measurement purposes. These can be used in wet or dry indoor applications. Because of the HFFR material, These don't burn easily, and when These do the flames go off by themselves. These have low smoke density and don't emit poisonous and corrosive gases during the fire. They are used in buildings where there are important goods or human populations. Armor; protect against mechanical traverse loads and act as a magnetic screen against interference.

Cable Construction

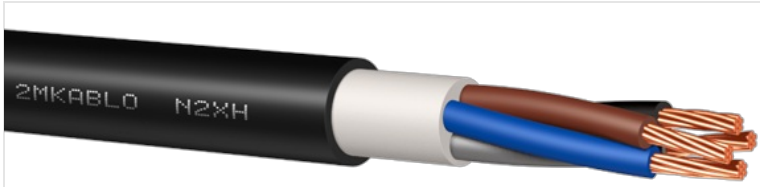
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	HFFR (EN 50290-2-26)

Core Colors	Black (white numbered) Green-Yellow earth core in the outer layer (3 cores and above)
Lay-up	Cores are stranded in layers
Inner Sheath	HFFR (EN 50290-2-27)
Armour	Galvanised Steel Wire Braid
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey
Reference Standards	With reference to VDE 0245

Technical Properties

Operating Voltage	0.50 mm²..1.50 mm² 300 V / 500 V; 2.50 mm²..... 450 V / 750 V
Test Voltage	2500 V
Conductor Resistance	0.14 mm²- ≤138 Ω/km; 0.22 mm²- ≤85 Ω/km; 0.25 mm²- ≤77.8 Ω/km; 0.34 mm²- ≤56 Ω/km; 0.50 mm²- ≤39 Ω/km; 0.75 mm²- ≤26Ω/km; 1.00 mm²- ≤19.5 Ω/km; 1.50 mm²- ≤13.3 Ω/km; 2.50 mm²- ≤7.98 Ω/km
Insulation Resistance	>200 M.Ωxkm
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius	Fixed: 10 x Cable Diameter, Flexible: 15 x Cable Diameter

N2XH



Areas of Use

0.6/1 kV XLPE insulated, halogen-free, flame retardant, single and multi-core power cables are used in intelligent or semi-intelligent buildings which has high dense human population like hospitals, cinemas, theatres, schools, shopping centers.

Cable Construction

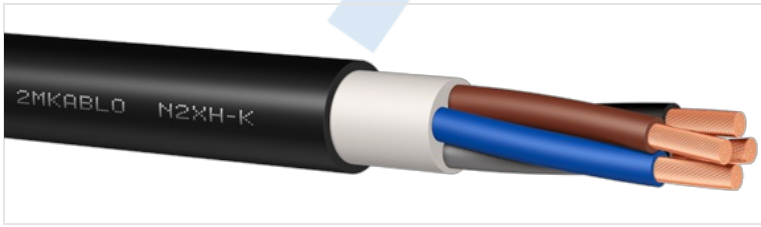
Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1 / Class 2)
Insulation	XLPE
Core Colors	HD 308 S2
Filler	HFFR
Outer Sheath	HFFR
Reference Standards	TS IEC 60502-1, HD 604 S1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Max. Operating Temperature	90 °C
Flame Retardancy	IEC/EN 60332-3-24
Smoke Density	IEC/EN 61034-1+2
Corrosive Gases Measurement	IEC/EN 60754-2
Amount of Halogen Acid Gas	IEC/EN 60754-1

Min. Bending Radius	Single Core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter

N2XH-K (RZ1-K)



Areas of Use

0.6/1 kV XLPE insulated, halogen-free, flame retardant, single and multi-core power cables are used in intelligent or semi-intelligent buildings which has high dense human population like hospitals, cinemas, theatres, schools, shopping centers.

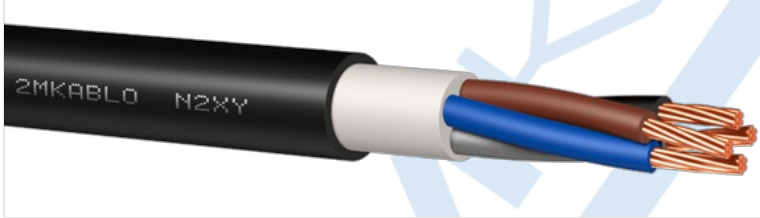
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	XLPE
Core Colors	HD 308 S2
Filler	HFFR
Outer Sheath	HFFR
Reference Standards	TS IEC 60502-1, HD 604 S1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Max. Operating Temperature	90 °C
Flame Retardancy	IEC/EN 60332-3-24
Smoke Density	IEC/EN 61034-1+2
Corrosive Gases Measurement	IEC/EN 60754-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Min. Bending Radius	Single Core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter

N2XY



Areas of Use

0.6/1 kV XLPE insulated, single or multi-core power cables are used indoors and outdoors where mechanical stresses are not high, underground applications and in cable ducts, for high operating temperature (90°C). There are resistant to sudden and short-term operating temperature increases.

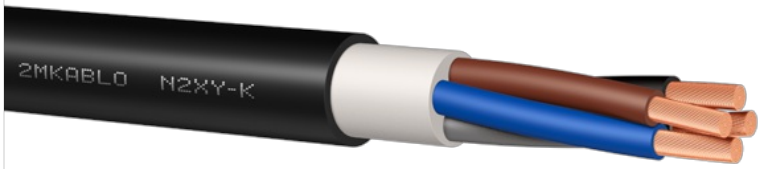
Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1 / Class 2)
Insulation	XLPE
Core Colors	HD 308 S2
Filler	PVC
Outer Sheath	PVC
Reference Standards	TS IEC 60502-1, DIN VDE 0276-603

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Max. Operating Temperature	90 °C
Flame Retardancy	IEC/EN 60332-1-2
Min. Bending Radius	Single Core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter

N2XY-K (RV-K)



Areas of Use

0.6/1 kV XLPE insulated, single or multi-core power cables are used indoors and outdoors where mechanical stresses are not high, underground applications and in cable ducts, for high operating temperature (90°C). There are resistant to sudden and short-term operating temperature increases.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	XLPE
Core Colors	HD 308 S2
Filler	PVC
Outer Sheath	PVC
Reference Standards	TS IEC 60502-1, DIN VDE 0276-603

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Max. Operating Temperature	90 °C
Flame Retardancy	IEC/EN 60332-1-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

NYRY

Areas of Use

0.6/1 kV, galvanized steel wire armored, single or multi-core power cables are used in generally underground where high tensile stresses and mechanical protection are needed during the operation. These are resistant to increasing operating temperature in the short term.

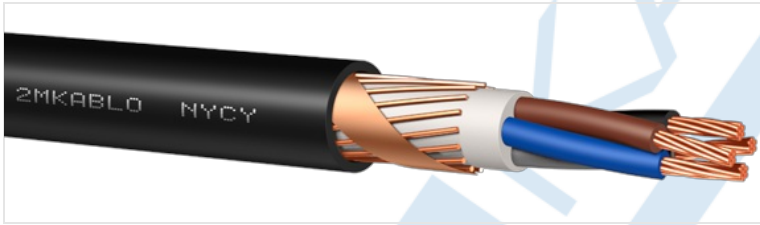
Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1 / Class 2)
Insulation	PVC
Core Colors	HD 308 S2
Filler	PVC
Armour	Round Galvanised Steel Wire
Reference Standards	TS IEC 60502-1, DIN VDE 0271

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Max. Operating Temperature	70 °C
Flame Retardancy	IEC/EN 60332-1-2
Min. Bending Radius	Single Core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter

NYCY



Areas of Use

0.6/1 kV power cables with copper concentric conductors and tape are used in outdoor and underground applications. The concentric conductor can be used as neutral, protective or earth and connection monitoring the impacts on the cable through a control switch or a relay.

Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1 / Class 2)
Insulation	PVC
Core Colors	HD 308 S2
Filler	PVC
Concentric Conductor	Copper Wire and Copper Tape
Outer Sheath	PVC
Reference Standards	TS IEC 60502-1, DIN VDE 0276-603

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Max. Operating Temperature	70 °C
Flame Retardancy	IEC/EN 60332-1-2
Min. Bending Radius	Single Core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter

N2XRY (BS 5467)

Areas of Use

0.6/1 kV XLPE insulated, single or multi-core galvanized steel wire armoured power cables are used in generally underground where high tensile stresses and mechanical protection are needed during the operation. These are resistant to increasing operating temperature in the short term.

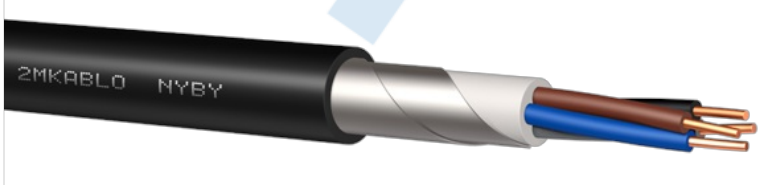
Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1 / Class 2)
Insulation	XLPE
Core Colors	HD 308 S2
Filler	PVC
Armour	Round Galvanised Steel Wire
Outer Sheath	PVC
Reference Standards	TS IEC 60502-1, DIN VDE 0271, BS 5467

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Max. Operating Temperature	90 °C
Flame Retardancy	IEC/EN 60332-1-2
Min. Bending Radius	Single Core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter

NYBY



Areas of Use

0.6/1 kV, galvanized steel tape armoured power cables are used in generally underground where high tensile stresses and mechanical protection are needed during the operation. These are resistant to increasing operating temperature in the short term.

Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1 / Class 2)
Insulation	PVC
Core Colors	HD 308 S2
Filler	PVC
Armour	Galvanised Steel Tape
Outer Sheath	PVC
Reference Standards	TS IEC 60502-1, DIN VDE 0271

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Max. Operating Temperature	70 °C
Flame Retardancy	IEC/EN 60332-1-2
Min. Bending Radius	Single Core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter

N2XRH (LSF SWA BS 6724)

Areas of Use

0.6/1 kV XLPE insulated, halogen-free, flame retardant, single or multi-core galvanized steel wire armoured power cables are used in generally underground where high tensile stresses and mechanical protection are needed during the operation. These are resistant to increasing operating temperature in the short term. These cables are used in intelligent or semi-intelligent buildings which has high dense human population like hospitals, cinemas, theatres, schools, shopping centers.

Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1 / Class 2)
Insulation	XLPE
Core Colors	HD 308 S2
Filler	HFFR
Armour	Round Galvanised Steel Wire
Outer Sheath	HFFR
Reference Standards	TS IEC 60502-1, DIN VDE 0271

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Flame Retardancy	IEC/EN 60332-3-24
Smoke Density	IEC/EN 61034-1+2
Corrosive Gases Measurement	IEC/EN 60754-2

Amount of Halogen Acid Gas	IEC/EN 60754-1
Min. Bending Radius	Single Core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter
Max. Operating Temperature	90 °C

N2XCY

Areas of Use

0.6/1 kV XLPE insulated, power cables with copper concentric conductors and tape are used in outdoor and underground applications. The concentric conductor can be used as neutral, protective or earth and connection monitoring the impacts on the cable through a control switch or a relay.

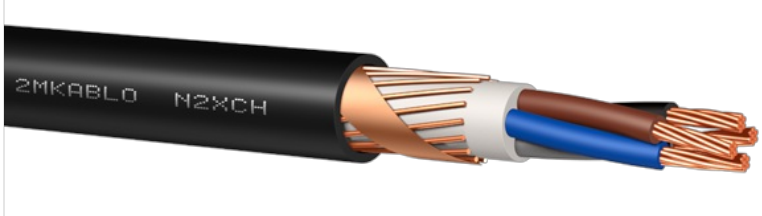
Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1 / Class 2)
Insulation	XLPE
Core Colors	HD 308 S2
Filler	PVC
Concentric Conductor	Copper Wire and Copper Tape
Outer Sheath	PVC
Reference Standards	TS IEC 60502-1, DIN VDE 0276-603

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Max. Operating Temperature	90 °C
Flame Retardancy	IEC/EN 60332-1-2
Min. Bending Radius	Single Core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter

N2XCH



Areas of Use

0.6/1 kV XLPE insulated, halogen-free, flame retardant, power cables with copper concentric conductors and tape are used in outdoor and underground applications. The concentric conductor can be used as neutral, protective or earth and connection monitoring the impacts on the cable through a control switch or a relay. These cables are used in intelligent or semi-intelligent buildings which has high dense human population like hospitals, cinemas, theatres, schools, shopping centers.

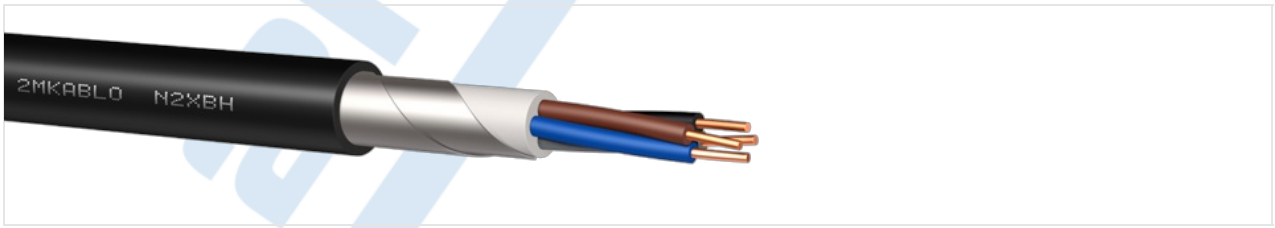
Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1 / Class 2)
Insulation	XLPE
Core Colors	HD 308 S2
Filler	HFFR
Concentric Conductor	Copper Wire and Copper Tape
Outer Sheath	HFFR
Reference Standards	TS IEC 60502-1, HD 604 S1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Max. Operating Temperature	90 °C
Flame Retardancy	IEC/EN 60332-3-24
Smoke Density	IEC/EN 61034-1+2
Corrosive Gases Measurement	IEC/EN 60754-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Min. Bending Radius	Single Core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter

N2XBH



Areas of Use

0.6/1 kV XLPE insulated, halogen-free, flame retardant, galvanized steel tape armoured power cables are used in generally underground where high tensile stresses and mechanical protection are needed during the operation. These cables are used in intelligent or semi-intelligent buildings which has high dense human population like hospitals, cinemas, theatres, schools, shopping centers.

Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1 / Class 2)
Insulation	XLPE
Core Colors	HD 308 S2
Filler	HFFR
Armour	Galvanised Steel Tape
Outer Sheath	HFFR
Reference Standards	TS IEC 60502-1, DIN VDE 0271

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Max. Operating Temperature	90 °C

Flame Retardancy	IEC/EN 60332-3-24
Smoke Density	IEC/EN 61034-1+2
Corrosive Gases Measurement	IEC/EN 60754-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Min. Bending Radius	Single Core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter

N2XBY

Areas of Use

0.6/1 kV XLPE insulated, galvanized steel tape armoured power cables are used in generally underground where high tensile stresses and mechanical protection are needed during the operation. These are resistant to increasing operating temperature in the short term.

Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1 / Class 2)
Insulation	XLPE
Core Colors	HD 308 S2
Filler	PVC
Armour	Galvanised Steel Tape
Outer Sheath	PVC
Reference Standards	TS IEC 60502-1, DIN VDE 0271

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Max. Operating Temperature	90 °C
Flame Retardancy	IEC/EN 60332-1-2
Min. Bending Radius	Single Core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter

FireKab N2XH FE180

Areas of Use

0.6/1 kV FireKab halogen-free, fire-resistant and flame retardant, single or multi-core power cables are used in intelligent or semi-intelligent buildings which has high dense human population like hospitals, cinemas, theatres, schools, shopping centers.

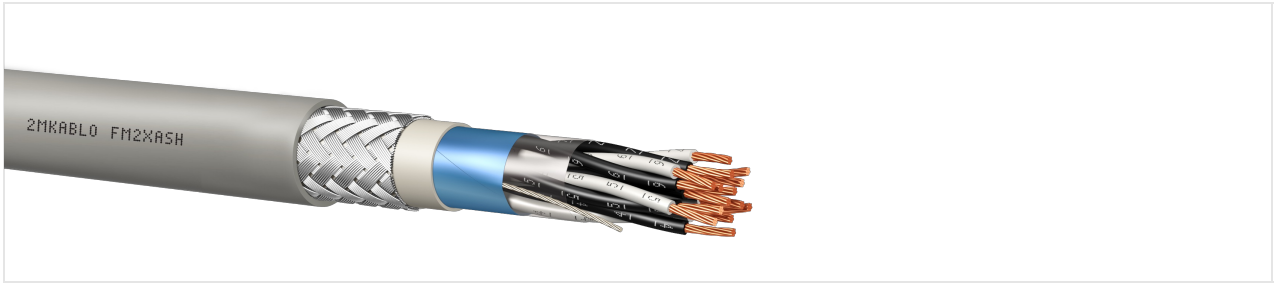
Cable Construction

Conductor	Solid or Stranded Annealed Copper (IEC/EN 60228, Class 1 / Class 2)
Flame Barrier	Mica Tape
Insulation	XLPE
Core Colors	HD 308 S2
Filler	HFFR
Outer Sheath	HFFR
Reference Standards	TS IEC 60502-1, HD 604 S1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Max. Operating Temperature	90 °C
Flame Retardancy	IEC/EN 60332-3-24, IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Corrosive Gases Measurement	IEC/EN 60754-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Min. Bending Radius	Single Core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter

FM2XASH



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

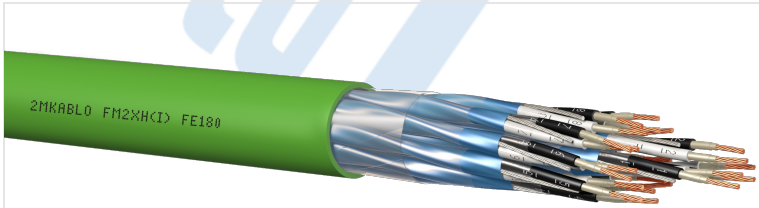
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Inner Sheath	HFFR
Armour	Galvanised Steel Wire Braid
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XH(I) FE180



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensures non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

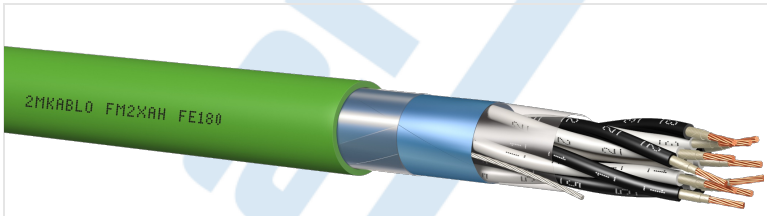
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5) (tinned copper and/or Class 2 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
1. Separator	PET Foil
Individual Screen	Al-PET Foil (with Tinned Copper Drain Wire)
2. Separator	PET Foil
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)

Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XAH FE180



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

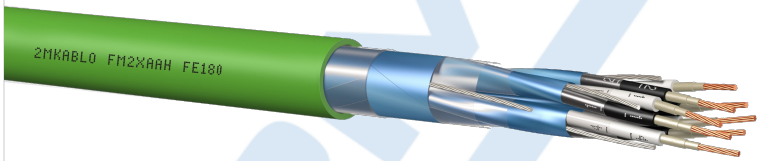
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XAAH FE180



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

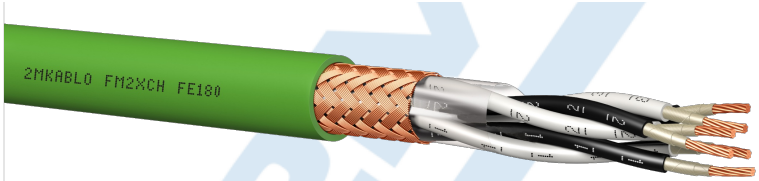
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
1. Separator	PET Foil
Individual Screen	Al-PET Foil (with Tinned Copper Drain Wire)
2. Separator	PET Foil
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XCH FE180



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

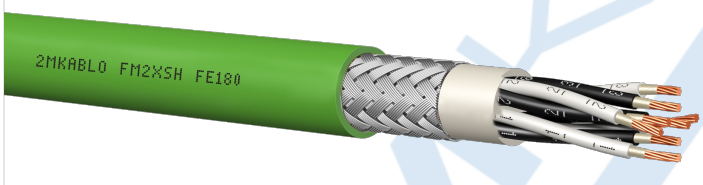
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Overall Screen	Annealed Copper Wire Braiding (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XSH FE180



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also,

min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

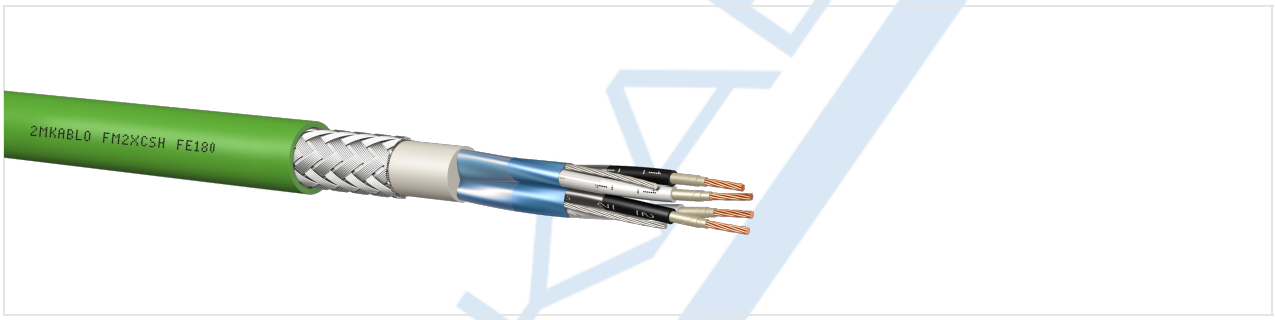
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores are stranded in layers
Inner Sheath	HFFR
Overall Screen	Galvanised Steel Wire Braid
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XCSH FE180



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

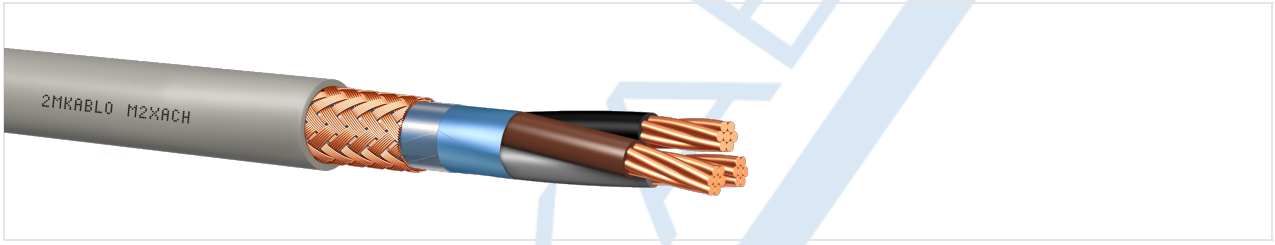
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)

Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
1. Separator	PET Foil
Individual Screen	Al-PET Foil (with Tinned Copper Drain Wire)
2. Separator	PET Foil
Lay-up	Shielded pairs / triples are stranded in layers
Inner Sheath	HFFR
Overall Screen	Galvanised Steel Wire Braid
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

M2XACH



Areas of Use

Used as fixed installation cable in marine vehicles. Screening layer forms a shield for protection against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

Cable Construction

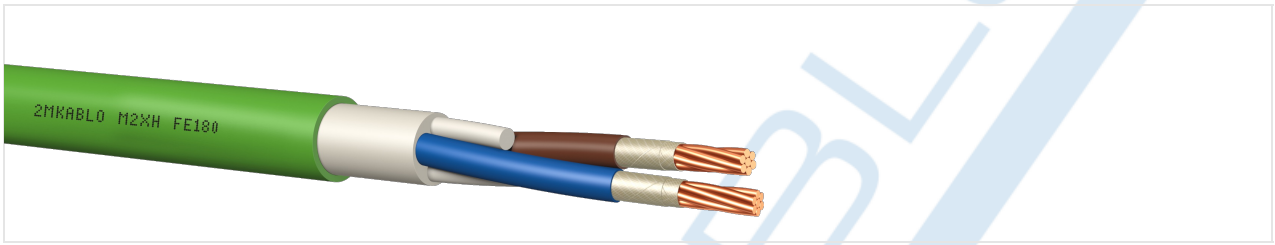
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Lay-up	Cores are stranded in layers
Separator	PET Foil
1. Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Separator	PET Foil (HFFR filler upon request)
2. Overall Screen	Annealed Copper Wire Braid (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey

Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

M2XH FE180



Areas of Use

Used as fixed installation cable in marine vehicles. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. In addition, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Lay-up	Cores are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21

Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

MGH

Areas of Use

Used as fixed installation cable in marine vehicles. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

Cable Construction

Insulation	HEPR (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Separator	PET Foil (HFFR filler upon request)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-353
Conductor	Stranded Annealed Tinned Copper (IEC 60228, Class 2)

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	6 x Cable Diameter

MGCH

Areas of Use

Used as fixed installation cable in marine vehicles. Screening layer forms a shield for protection against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	HEPR (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Separator	PET Foil (HFFR filler upon request)
Overall Screen	Annealed Copper Wire Braiding (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 MΩxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FMGACH

Areas of Use

These halogen-free screened control and communication cables are used in radio, radar and information systems for marine applications in all conditions in the marine environment such as dry, wet or oily locations, and inside engine rooms. Enables proper transmission of high-frequency signals while minimizing environmental electromagnetic interference.

Cable Construction

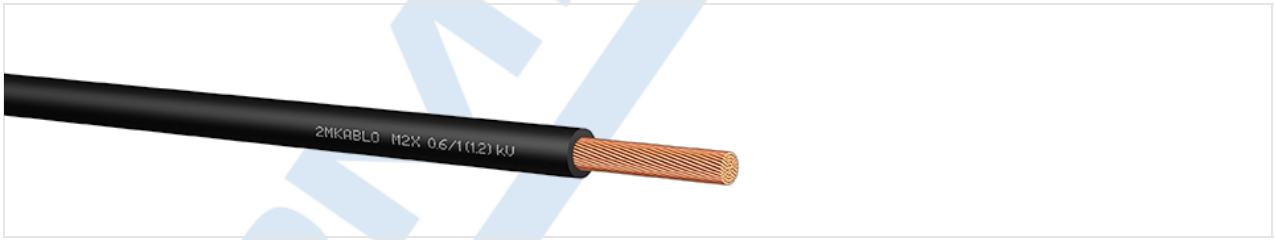
Insulation	HEPR (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
1. Separator	PET Foil
Individual Screen	Al-PET Foil (with Tinned Copper Drain Wire)
2. Separator	PET Foil
Lay-up	Cores are twisted as pairs and pairs are stranded in layers

Separator	PET Foil (HFFR filler upon request)
Overall Screen	Annealed Copper Wire Braiding (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-376
Conductor	Stranded Annealed Tinned Copper (IEC 60228, Class 2)

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	12 x Cable Diameter

M2X



Areas of Use

Used as fixed installation cable in marine vehicles. Halogen-Free and Flame Retardant construction ensures non-corrosive and highly visible environment during a fire.

Cable Construction

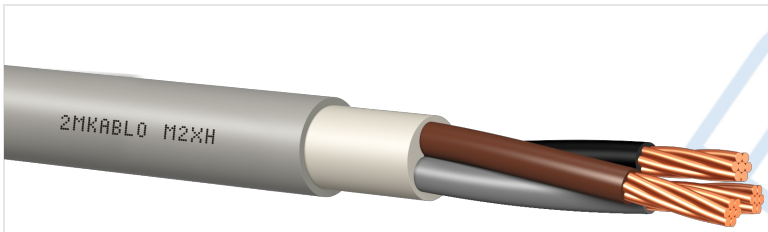
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5) (tinned copper and/or Class 2 versions are available upon request)
Insulation	XL HFFR (IEC 60092-360 HF90), Standard Outer Sheath: Black (other colors and double sheath upon request)
Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>4000 M.Ω x km
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1

Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	4 x Cable Diameter

M2XH



Areas of Use

Used as fixed installation cable in marine vehicles. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

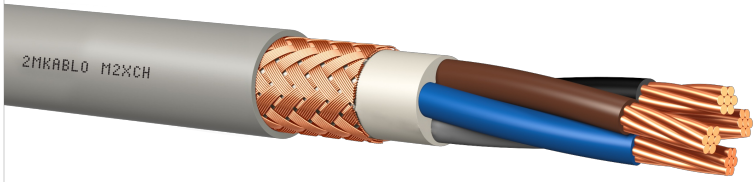
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Lay-up	Cores are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

M2XCH



Areas of Use

Used as fixed installation cable in marine vehicles. Screening layer forms a shield for protection against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

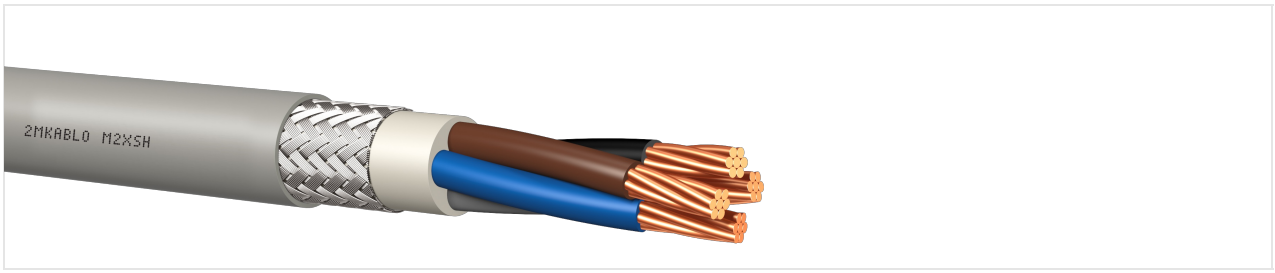
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Inner Sheath / Separator	PET Foil (HFFR filler upon request)
Overall Screen	Annealed Copper Wire Braiding (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

M2XSH



Areas of Use

Used as fixed installation cable in marine vehicles. Screening layer forms a shield for protection against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensures non-corrosive and highly visible environment during a fire.

Cable Construction

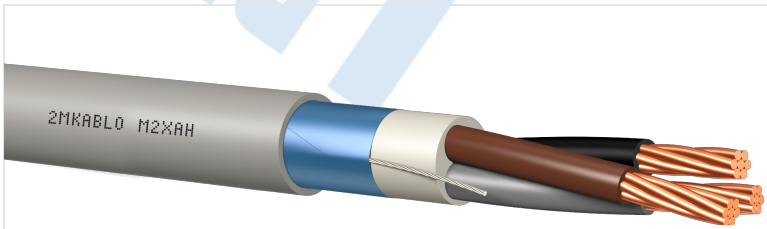
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Lay-up	Cores are stranded in layers
Inner Sheath	HFFR

Armour	Galvanised Steel Wire Braid
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

M2XAH



Areas of Use

Used as fixed installation cable in marine vehicles. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

Cable Construction

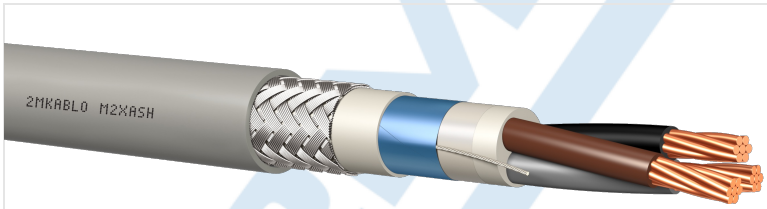
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Lay-up	Cores are stranded in layers
Inner Sheath / Separator	PET Foil (HFFR filler upon request)
Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C

Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

M2XASH



Areas of Use

Used as fixed installation cable in marine vehicles. Screening layer forms a shield for protection against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

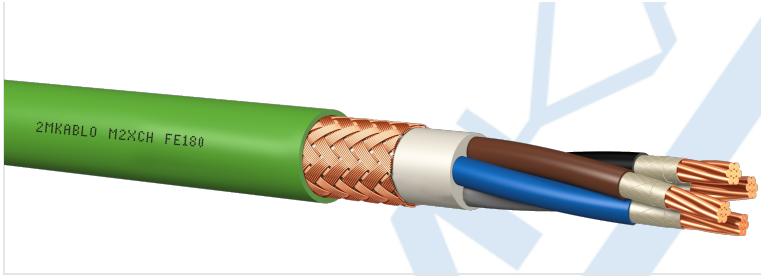
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Lay-up	Cores are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Inner Sheath	HFFR
Armour	Galvanised Steel Wire Braid
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

M2XCH FE180



Areas of Use

Used as fixed installation cable in marine vehicles. Screening layer forms a shield for protection against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

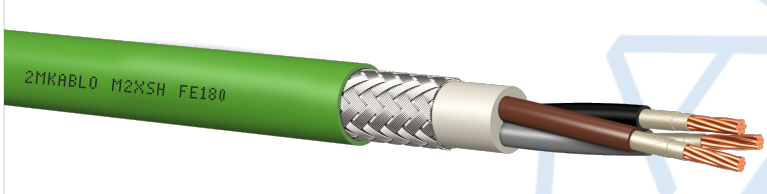
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Lay-up	Cores are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Overall Screen	Annealed Copper Wire Braiding (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

M2XSH FE180



Areas of Use

Used as fixed installation cable in marine vehicles. Screening layer forms a shield for protection against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensures non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

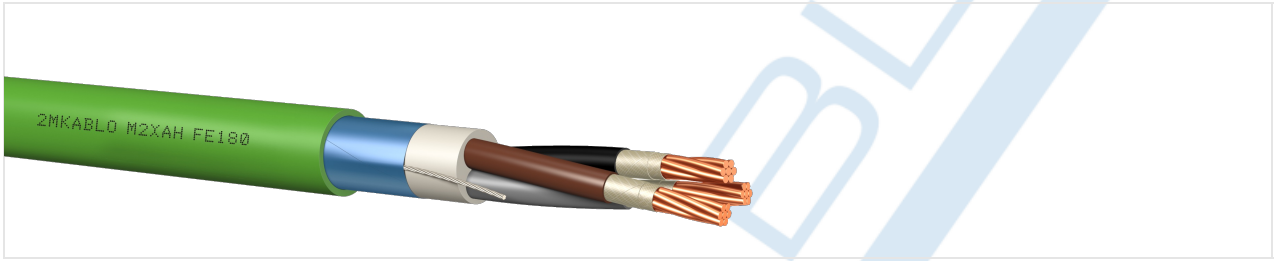
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Lay-up	Cores are stranded in layers
Inner Sheath	HFFR
Overall Screen	Galvanised Steel Wire Braid
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

M2XAH FE180



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. In addition, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

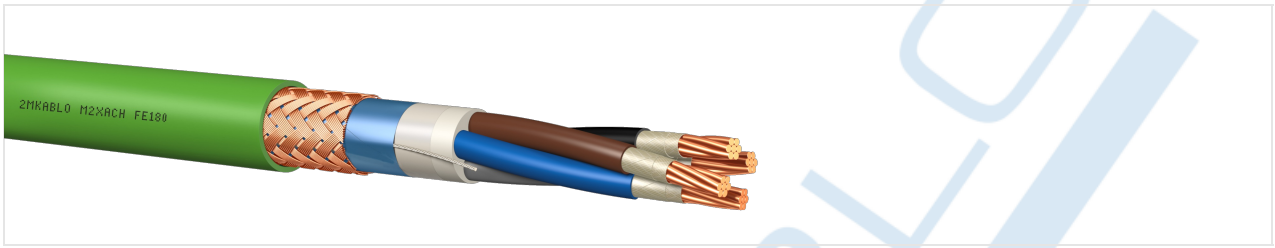
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape

Insulation	XLPE (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

M2XACH FE180



Areas of Use

Used as fixed installation cable in marine vehicles. Screening layer forms a shield for protection against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

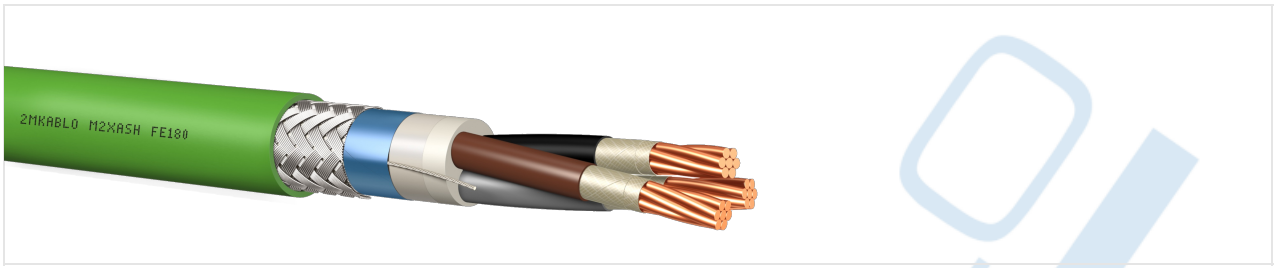
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Lay-up	Cores are stranded in layers
Separator	PET Foil
1. Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Separator	PET Foil (HFFR filler upon request)
2. Overall Screen	Annealed Copper Wire Braid (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green

Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

M2XASH FE180



Areas of Use

Used as fixed installation cable in marine vehicles. Screening layer forms a shield for protection against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensures non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Lay-up	Cores are stranded in layers
Inner Sheath	PET Foil
Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Separator	HFFR
Armour	Galvanised Steel Wire Braid
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)

Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XH

Areas of Use

Used as fixed installation cable in marine vehicles. Halogen Free and Flame Retardant construction ensures non-corrosive and highly visible environment during fire.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XH(I)

Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

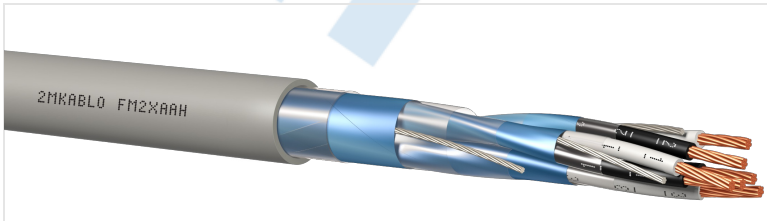
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
1. Separator	PET Foil
Individual Screen	Al-PET Foil (with Tinned Copper Drain Wire)
2. Separator	PET Foil
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XAAH



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

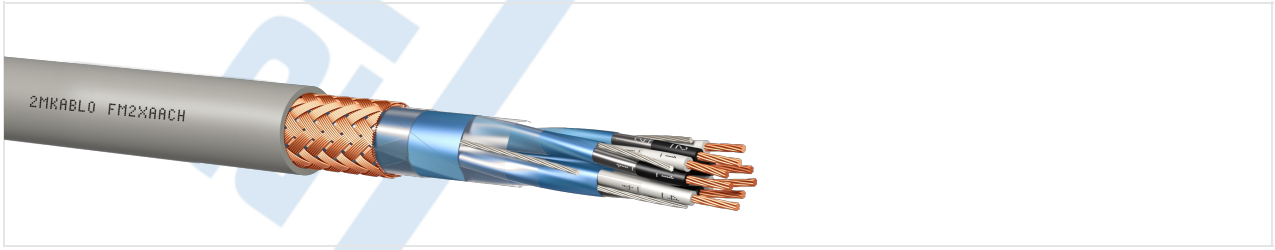
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
1. Separator	PET Foil
Individual Screen	Al-PET Foil (with Tinned Copper Drain Wire)
2. Separator	PET Foil
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XAACH



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered

1. Separator	PET Foil
Individual Screen	Al-PET Foil (with Tinned Copper Drain Wire)
2. Separator	PET Foil
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil
1. Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Separator	PET Foil (HFFR filler upon request)
2. Overall Screen	Annealed Copper Wire Braid (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FMGCH

Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

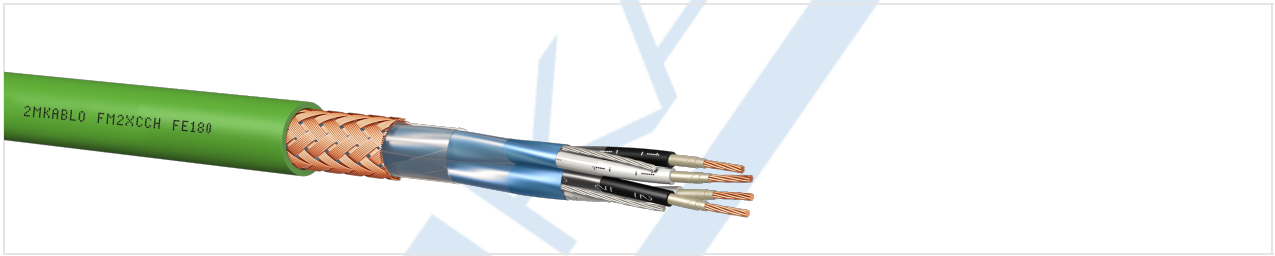
Cable Construction

Insulation	HEPR (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Overall Screen	Annealed Copper Wire Braiding (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-376
Conductor	Stranded Annealed Tinned Copper (IEC 60228, Class 2)

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XCCH FE180



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
1. Separator	PET Foil
Individual Screen	Al-PET Foil (with Tinned Copper Drain Wire)
2. Separator	PET Foil
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Overall Screen	Annealed Copper Wire Braiding (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm

Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XAH

Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XCH

Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Overall Screen	Annealed Copper Wire Braiding (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XSH

Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensures non-corrosive and highly visible environment during a fire.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Inner Sheath	HFFR
Armour	Galvanised Steel Wire Braid
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

MGH FE180

Areas of Use

Used as fixed installation cable in marine vehicles. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

Flame Barrier	Mica Tape
Insulation	HEPR (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Separator	PET Foil (HFFR filler upon request)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-353
Conductor	Stranded Annealed Tinned Copper (IEC 60228, Class 2)

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	6 x Cable Diameter

MGCH FE180

Areas of Use

Used as fixed installation cable in marine vehicles. Screening layer forms a shield for protection against electromagnetic interferences. Halogen Free and Flame Retardant construction ensures non-corrosive and highly visible environment during fire. In addition, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

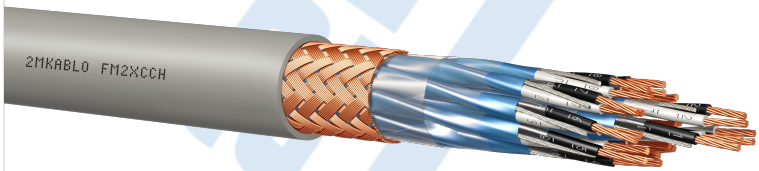
Flame Barrier	Mica Tape
Insulation	HEPR (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Lay-up	Cores are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Overall Screen	Annealed Copper Wire Braiding (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-353
Conductor	Stranded Annealed Tinned Copper (IEC 60228, Class 2)

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21

Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XCCH



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

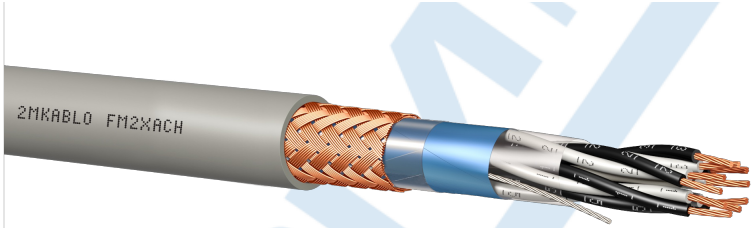
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
1. Separator	PET Foil
Individual Screen	Al-PET Foil (with Tinned Copper Drain Wire)
2. Separator	PET Foil
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Overall Screen	Annealed Copper Wire Braiding (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XACH



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire.

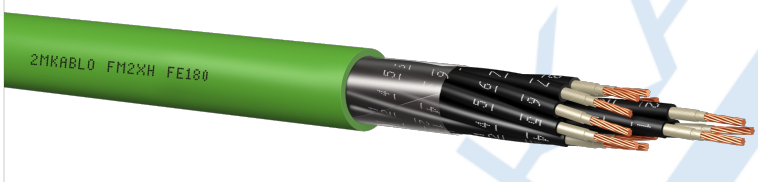
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores / pairs / triples / quads are stranded in layers
Separator	PET Foil
1. Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Separator	PET Foil
2. Overall Screen	Annealed Copper Wire Braid (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XH FE180



Areas of Use

Used as fixed installation cable in marine vehicles, Halogen Free and Flame Retardant construction ensures non- corrosive and highly visible environment during fire. In addition, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

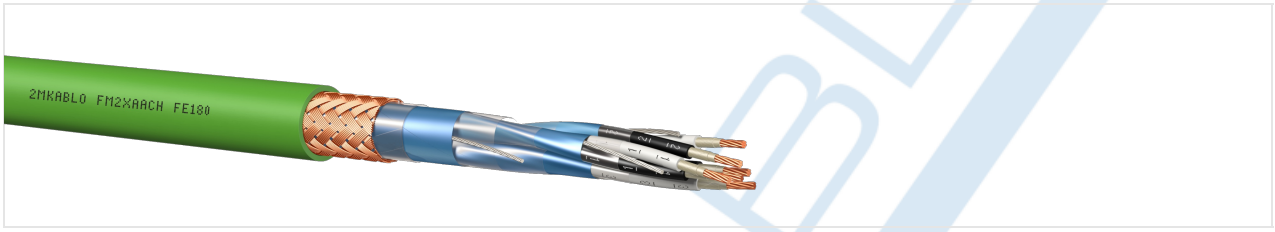
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XAACH FE180



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

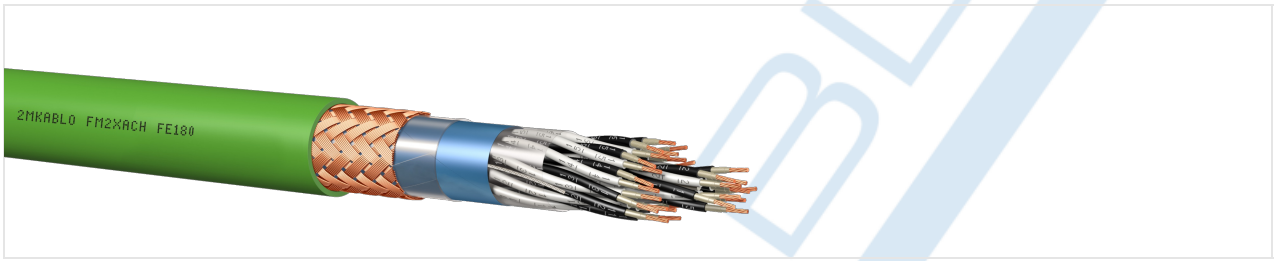
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
1. Separator	PET Foil
Individual Screen	Al-PET Foil (with Tinned Copper Drain Wire)
2. Separator	PET Foil

Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil
1. Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Separator	PET Foil (HFFR filler upon request)
2. Overall Screen	Annealed Copper Wire Braid (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XACH FE180



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

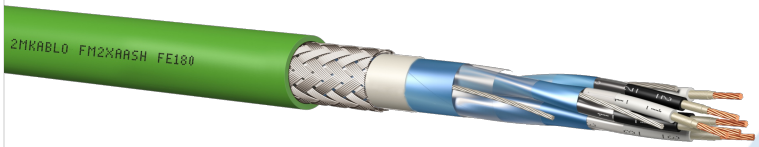
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores are stranded in layers
Separator	PET Foil
1. Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Separator	PET Foil (HFFR filler upon request)
2. Overall Screen	Annealed Copper Wire Braid (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green

Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FM2XAASH FE180



Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Flame Barrier	Mica Tape
Insulation	XLPE (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
1. Separator	PET Foil
Individual Screen	Al-PET Foil (with Tinned Copper Drain Wire)
2. Separator	PET Foil
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil
1. Overall Screen	Al-PET Foil (with Tinned Copper Drain Wire)
Inner Sheath	HFFR
2. Overall Screen	Galvanised Steel Wire Braid
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-376

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

FMGCH FE180

Areas of Use

Used for communication and instrumentation purpose in electronic systems of marine vehicles. Screening layer protects the transmitting signal against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensure non-corrosive and highly visible environment during a fire. Also, min.180 minutes of circuit integrity under fire conditions is achieved by its special design.

Cable Construction

Flame Barrier	Mica Tape
Insulation	HEPR (IEC 60092-360)
Core Colors	Pair: Black / White, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil (HFFR filler upon request)
Overall Screen	Annealed Copper Wire Braiding (90% Coverage)
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 6018 - Green
Reference Standards	IEC 60092-376
Conductor	Stranded Annealed Tinned Copper (IEC 60228, Class 2)

Technical Properties

Operating Voltage	150/250 (300) V
Test Voltage	1.5 kV (a.c) 3.6 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Fire Resistance	IEC 60331-21
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1

Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

M2XCH VFD

Areas of Use

Used as fixed installation cable in marine vehicles. Screening layer forms a shield for protection against electromagnetic interferences. Halogen-Free and Flame Retardant construction ensures non-corrosive and highly visible environment during a fire.

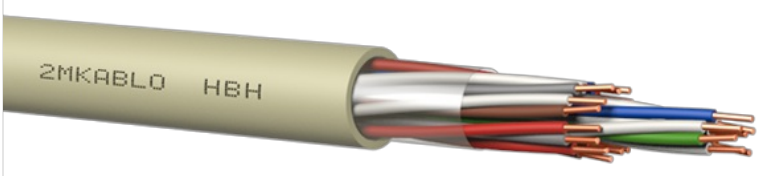
Cable Construction

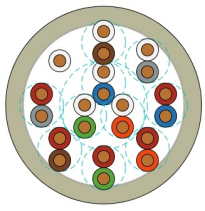
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 2) (tinned copper and/or Class 5 versions are available upon request)
Insulation	XLPE (IEC 60092-360)
Core Colors	According to HD 308 S2 (# of Cores ≥5 => White numbered)
Lay-up	Cores are stranded in layers
Inner Sheath / Separator	PET Foil (HFFR filler upon request)
Overall Screen	Annealed Copper Wire Braiding (90% Coverage) and Copper Tape with Drain Wire
Outer Sheath	HFFR (IEC 60092-360 SHF1), RAL 9005 - Black or RAL 7001 - Grey
Reference Standards	IEC 60092-353

Technical Properties

Operating Voltage	0.6/1 (1.2) kV
Test Voltage	3.5 kV (a.c.) 8.4 kV (d.c)
Conductor Resistance	IEC/EN 60228
Insulation Resistance	>5000 M.Ωxkm
Temperature Range	-40 °C.....+90 °C
Flame Retardancy	IEC/EN 60332-1-2, IEC/EN 60332-3-22 (CAT A)
Smoke Density	IEC/EN 61034-1+2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

HBH





Areas of Use

These indoor telephone cables are used in the subscriber and switchboard system. These cables have halogen-free and flame retardant insulation and sheath.

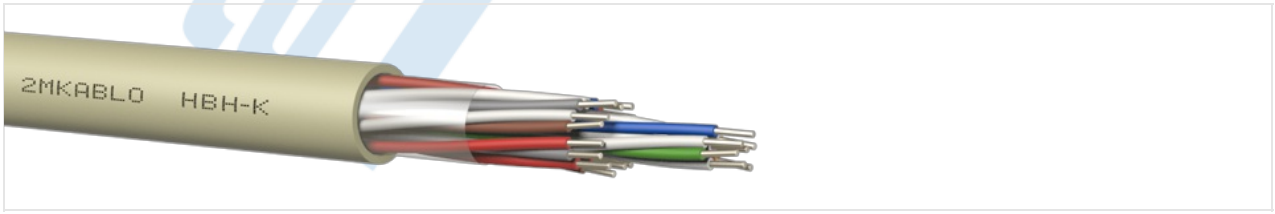
Cable Construction

Conductor	Annealed Solid Copper (IEC/EN 60228)
Insulation	HFFR (EN 50290-2-26)
Core Colors	TSE K 116, IEC 60189-2
Lay-up	Pairs and bundles (each bundle contains of 10 pairs and identified by colored spiral tape)
Drain Core	Insulated Solid Annealed Copper (white color with red ring color)
Separator	PET Foil
Outer Sheath	HFFR (EN 50290-2-27), RAL 7032 - Grey
Reference Standards	TSE K 116, IEC 60189-2

Technical Properties

Operating Voltage	250 V
Test Voltage	1000 V
Conductor Resistance	≤97.8 Ω/km
Insulation Resistance	>200 M.Ωxkm
Mutual Capacitance	<120 nF/km
Capacitance (@800Hz)	≤400 pF/500m
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

HBH-K



Areas of Use

These indoor tinned telephone cables are used in the subscriber and switchboard system. These cables have halogen-free and flame retardant insulation and sheath.

Cable Construction

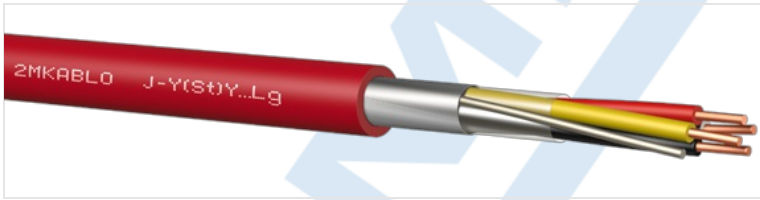
Conductor	Solid Tinned Copper (IEC/EN 60228)
Insulation	HFFR (EN 50290-2-26)
Core Colors	TSE K 116, IEC 60189-2
Lay-up	Pairs and bundles (each bundle contains of 10 pairs and identified by colored spiral tape)
Drain Core	Insulated Solid Annealed Copper (white color with red ring color)
Separator	PET Foil

Outer Sheath	HFFR (EN 50290-2-27), RAL 7032 - Grey
Reference Standards	TSE K 116, IEC 60189-2

Technical Properties

Operating Voltage	250 V
Test Voltage	1000 V
Conductor Resistance	≤97.8 Ω/km
Insulation Resistance	>100 M.Ωxkm
Mutual Capacitance	<120 nF/km
Capacitance Unbalance (800 Hz)	≤400 pF/500m
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

J-Y(St)Y...Lg



Areas of Use

Fire alarm and telecommunication installation cables with electrostatic screen for information processing, signal transmission, voice communication and telephone stations for indoor applications. The static screen protects the signal from external electrical interference.

Cable Construction

Conductor	Annealed Solid Copper (IEC/EN 60228)
Insulation	PVC (EN 50290-2-21 TI1, VDE 0207 Part 4 YI1)
Core Colors	TS 13767, VDE 0815
Lay-up	Two cores twisted in pair and pairs stranded together (2 pairs cables are star quad lay-up)
Separator	PET Foil
Drain Wire	Solid Tinned Copper Wire
Screen	Al-PET Foil
Outer Sheath	PVC (EN 50290-2-22 TM1, VDE 0207 Part 5 YM1), RAL 3000 - Red
Reference Standards	TS 13767, VDE 0815

Technical Properties

Operating Voltage	300 V
Test Voltage	800 V
Insulation Resistance	>100 M.Ωxkm
Capacitance (@800Hz)	≤100 nF/km (capacitance values may increase by 20% up to 4 pair)

Temperature Range	-30 °C.....+70 °C
Loop Resistance	0.60 mm..... ≤130.0 Ω/km; 0.80 mm ..... ≤73.2 Ω/km 1.12 mm.....≤36.0 Ω/km; 1.37 mm ..... ≤24.0 Ω/km; 1.75 mm.....≤14.5 Ω/km
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius (Fixed)	8 x Cable Diameter

J-H(St)H...Lg

Areas of Use

Fire alarm and telecommunication installation cables with electrostatic screen for information processing, signal transmission, voice communication and telephone stations for indoor applications. The static screen protects the signal from external electrical interference. J-H(St)H...Lg cables are halogen-free flame retardant insulated and sheathed.

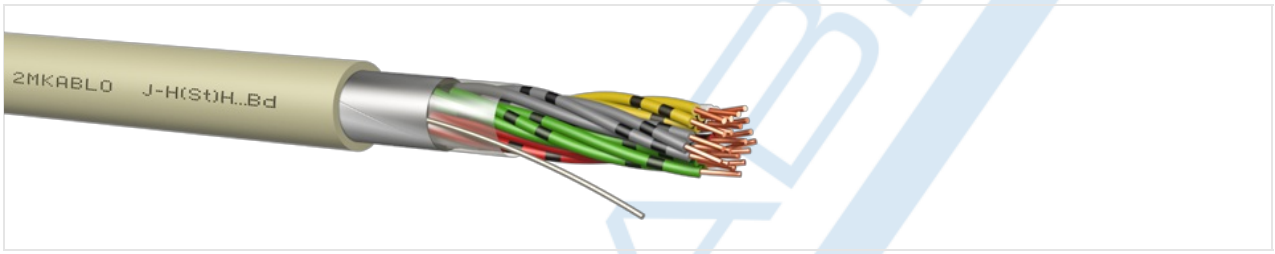
Cable Construction

Conductor	Annealed Solid Copper (IEC/EN 60228)
Insulation	HFFR (EN 50290-2-26)
Core Colors	TS 13767, VDE 0815
Lay-up	Two cores twisted in pair and pairs stranded together (2 pairs cables are star quad lay-up)
Separator	PET Foil
Drain Wire	Solid Tinned Copper Wire
Screen	Al-PET Foil
Outer Sheath	HFFR (EN 50290-2-27), RAL 7032 - Grey or RAL 3000 - Red
Reference Standards	TS 13767, VDE 0815
CPR Classes	B2ca s1a d1 a1

Technical Properties

Operating Voltage	300 V
Test Voltage	800 V
Insulation Resistance	>100 M.Ωxkm
Capacitance (@800Hz)	≤120 nF/km (capacitance values may increase by 20% up to 4 pair)
Loop Resistance	0.60 mm..... ≤130.0 Ω/km; 0.80 mm ..... ≤73.2 Ω/km 1.12 mm.....≤36.0 Ω/km; 1.37 mm ..... ≤24.0 Ω/km; 1.75 mm.....≤14.5 Ω/km
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

J-H(St)H...Bd



Areas of Use

Halogen-free installation cables according to VDE 0815 with the electrostatic screen are used telecommunication, measurement and information/data process systems. This halogen-free flame retardant cable type has low smoke emission and no corrosive gases during a fire.

Cable Construction

Conductor	Annealed Solid Copper (IEC/EN 60228)
Insulation	HFFR (EN 50290-2-26)
Core Colors	TS 13767, VDE 0815
Lay-up	5 star quads laid up to a bundle, bundles laid up in layers
Separator	PET Foil
Drain Wire	Solid Tinned Copper Wire
Screen	Al-PET Foil
Outer Sheath	HFFR (EN 50290-2-27), RAL 7032 - Grey
Reference Standards	TS 13767, VDE 0815

Technical Properties

Operating Voltage	300 V
Test Voltage	800 V
Insulation Resistance	>100 M.Ωxkm
Capacitance (@800Hz)	≤120 nF/km (capacitance values may increase by 20% up to 4 pair)
Loop Resistance	0.60 mm..... ≤130 Ω/km; 0.80 mm ..... ≤73.2 Ω/km
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

JE-Y(St)Y...Bd

Areas of Use

These installation cables according to VDE 0815 with electrostatic screen for industrial electronics are used telecommunication, measurement and information/data process systems.

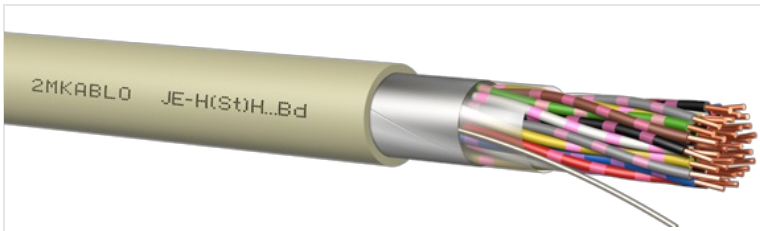
Cable Construction

Conductor	Annealed Solid Copper (IEC/EN 60228)
Insulation	PVC (EN 50290-2-21 TI1, VDE 0207 Part 4 YI1)
Core Colors	TS 13767, VDE 0815
Lay-up	5 star quads laid up to a bundle, bundles laid up in layers
Separator	PET Foil
Drain Wire	Solid Tinned Copper Wire
Screen	Al-PET Foil
Outer Sheath	PVC (EN 50290-2-22 TM1, VDE 0207 Part 5 YM1), RAL 7032 - Grey
Reference Standards	TS 13767, VDE 0815

Technical Properties

Operating Voltage	300 V
Test Voltage	800 V
Insulation Resistance	>100 M.Ωxkm
Capacitance (@800Hz)	≤100 nF/km (capacitance values may increase by 20% up to 4 pair)
Loop Resistance	≤73.2 Ω/km
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius (Fixed)	8 x Cable Diameter

JE-H(St)H...Bd



Areas of Use

These installation cables according to VDE 0815 with electrostatic screen for industrial electronics are used telecommunication, measurement and information /data process systems.JE-H(St)H...Bd halogen free flame retardant cable type has low smoke emission and no corrosive gases during fire.

Cable Construction

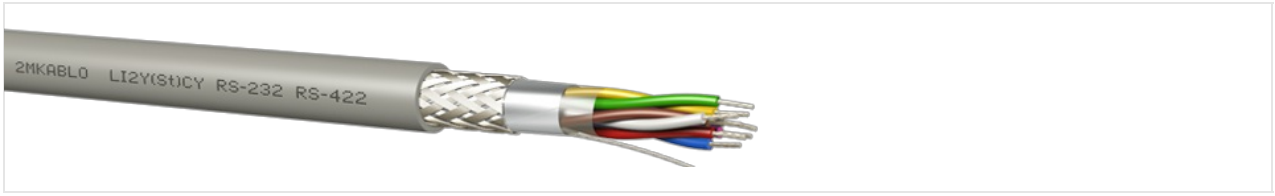
Conductor	Annealed Solid Copper (IEC/EN 60228)
Insulation	HFFR (EN 50290-2-26)
Core Colors	TS 13767, VDE 0815
Lay-up	5 star quads laid up to a bundle, bundles laid up in layers
Separator	PET Foil
Drain Wire	Solid Tinned Copper Wire
Screen	Al-PET Foil
Reference Standards	TS 13767, VDE 0815

Outer Sheath	HFFR (EN 50290-2-27), RAL 7032 - Grey or RAL 3000 - Red

Technical Properties

Operating Voltage	300 V
Test Voltage	800 V
Insulation Resistance	>100 M.Ωxkm
Capacitance (@800Hz)	≤120 nF/km (capacitance values may increase by 20% up to 4 pair)
Loop Resistance	≤73.2 Ω/km
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-2
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	8 x Cable Diameter

LI2Y(St)CY (RS 232 - 422)



Areas of Use

Used for transmission of the data signal in computer, information and communication systems as well as process control for computer systems and terminals.

Cable Construction

Conductor	0.22 mm² Stranded Tinned Copper (7x0.20 mm AWG 24), 0.34 mm² Stranded Tinned Copper (7x0.25 mm AWG 22)
Insulation	PE (EN 50290-2-23, VDE 0207-2YI1)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil
1. Screen	Al-PET Foil (with stranded tinned copper drain wire)
2. Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (EN 50290-2-22 TM 51), RAL 7001 - Grey

Technical Properties

Operating Voltage	300 V
Test Voltage	1200 V
Velocity of Propagation	0,66
Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	Core - Core: ≤52 nF/km, Core - Cores - Screen: ≤90 nF/km
Characteristic Impedance	100±10 Ω
Loop Resistance	AWG 24: ≤182 Ω/km; AWG 22: ≤115 Ω/km

Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius (Fixed)	10 x Cable Diameter

LI2Y(St)CH (RS 232 - 422)

Areas of Use

Used for transmission of the data signal in computer, information and communication systems as well as process control for computer systems and terminals. HFFR versions are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire.

Cable Construction

Conductor	0.22 mm² Stranded Tinned Copper (7x0.20 mm AWG 24), 0.34 mm² Stranded Tinned Copper (7x0.25 mm AWG 22)
Insulation	PE (EN 50290-2-23, VDE 0207-2YI1)
Core Colors	DIN 47100 (4 cores colors, white, yellow, brown, green)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil
1. Screen	Al-PET Foil (with stranded tinned copper drain wire)
2. Screen	Tinned Copper Wire Braid
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey

Technical Properties

Operating Voltage	300 V
Test Voltage	1200 V
Velocity of Propagation	0,66
Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	Core - Core: ≤52 nF/km, Core - Cores - Screen: ≤90 nF/km
Characteristic Impedance	100±10 Ω
Loop Resistance	AWG 24: ≤182 Ω/km; AWG 22: ≤115 Ω/km
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	10 x Cable Diameter

LI2Y(St)Y-PiMF (RS 232 - 422)

Areas of Use

Used for transmission of the data signal in computer, information and communication systems as well as process control for computer systems and terminals.

Cable Construction

Conductor	0.22 mm² Stranded Tinned Copper (7x0.20 mm AWG 24), 0.34 mm² Stranded Tinned Copper (7x0.25 mm AWG 22)
Insulation	PE (EN 50290-2-23, VDE 0207-2YI1)
Core Colors	Pair 1: Black / Red Pair 2: Black / White Pair 3: Black / Green Pair 4: Black / Blue
Separator	PET Foil
Individual Screen	Al-PET Foil (with Stranded Tinned Copper Drain Wire)
Lay-up	All shielded pairs are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with Stranded Tinned Copper Drain Wire)
Outer Sheath	PVC (EN 50290-2-22 TM 51), RAL 7001 - Grey

Technical Properties

Operating Voltage	300 V
Test Voltage	1200 V
Velocity of Propagation	0,66
Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	Core - Core: ≤52 nF/km, Core - Cores - Screen: ≤90 nF/km
Characteristic Impedance	100±10 Ω
Loop Resistance	AWG 24: ≤182 Ω/km; AWG 22: ≤115 Ω/km
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius (Fixed)	10 x Cable Diameter

LI2Y(St)H-PiMF (RS 232 - 422)

Areas of Use

Used for transmission of the data signal in computer, information and communication systems as well as process control for computer systems and terminals. HFFR versions are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire.

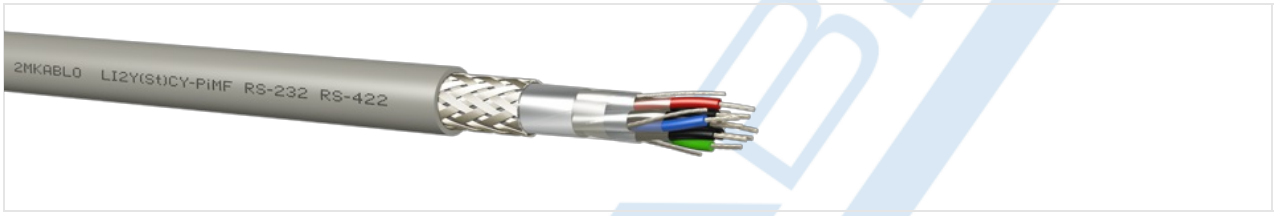
Cable Construction

Conductor	0.22 mm² Stranded Tinned Copper (7x0.20 mm AWG 24), 0.34 mm² Stranded Tinned Copper (7x0.25 mm AWG 22)
Insulation	PE (EN 50290-2-23, VDE 0207-2YI1)
Core Colors	Pair 1: Black / Red Pair 2: Black / White Pair 3: Black / Green Pair 4: Black / Blue
Separator	PET Foil
Individual Screen	Al-PET Foil (with Stranded Tinned Copper Drain Wire)
Lay-up	All shielded pairs are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with Stranded Tinned Copper Drain Wire)
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey

Technical Properties

Operating Voltage	300 V
Test Voltage	1200 V
Velocity of Propagation	0,66
Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	Core - Core: ≤52 nF/km, Core - Cores - Screen: ≤90 nF/km
Characteristic Impedance	100±10 Ω
Loop Resistance	AWG 24: ≤182 Ω/km; AWG 22: ≤115 Ω/km
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	10 x Cable Diameter

LI2Y(St)CY-PiMF (RS 232 - 422)



Areas of Use

Used for transmission of the data signal in computer, information and communication systems as well as process control for computer systems and terminals.

Cable Construction

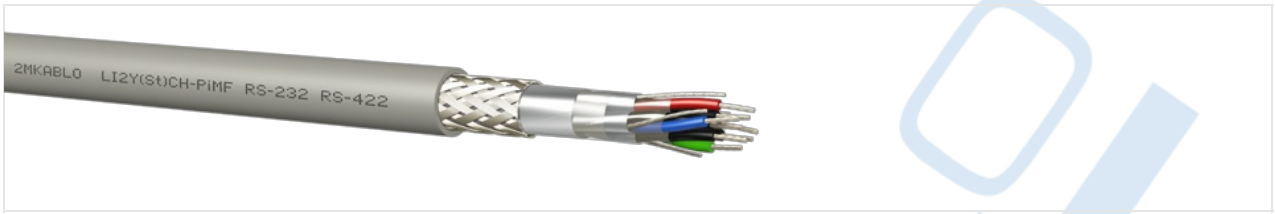
Conductor	0.22 mm² Stranded Tinned Copper (7x0.20 mm AWG 24), 0.34 mm² Stranded Tinned Copper (7x0.25 mm AWG 22)
Insulation	PE (EN 50290-2-23, VDE 0207-2YI1)
Core Colors	Pair 1: Black / Red Pair 2: Black / White Pair 3: Black / Green Pair 4: Black / Blue
Separator	PET Foil
Individual Screen	Al-PET Foil (with Stranded Tinned Copper Drain Wire)
Lay-up	All shielded pairs are stranded in layers
2. Screen	Al-PET Foil

3. Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (EN 50290-2-22 TM 51), RAL 7001 - Grey

Technical Properties

Operating Voltage	300 V
Test Voltage	1200 V
Velocity of Propagation	0,66
Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	Core - Core: ≤52 nF/km, Core - Cores - Screen: ≤90 nF/km
Characteristic Impedance	100±10 Ω
Loop Resistance	AWG 24: ≤182 Ω/km; AWG 22: ≤115 Ω/km
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius (Fixed)	10 x Cable Diameter

LI2Y(St)CH-PiMF (RS 232 - 422)



Areas of Use

Used for transmission of the data signal in computer, information and communication systems as well as process control for computer systems and terminals. HFFR versions are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire.

Cable Construction

Conductor	0.22 mm² Stranded Tinned Copper (7x0.20 mm AWG 24), 0.34 mm² Stranded Tinned Copper (7x0.25 mm AWG 22)
Insulation	PE (EN 50290-2-23, VDE 0207-2YI1)
Core Colors	Pair 1: Black / Red Pair 2: Black / White Pair 3: Black / Green Pair 4: Black / Blue
Separator	PET Foil
Individual Screen	Al-PET Foil (with Stranded Tinned Copper Drain Wire)
Lay-up	All shielded pairs are stranded in layers
2. Screen	Al-PET Foil
3. Screen	Tinned Copper Wire Braid
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey

Technical Properties

Operating Voltage	300 V
Test Voltage	1200 V
Velocity of Propagation	0,66
Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	Core - Core: ≤52 nF/km, Core - Cores - Screen: ≤90 nF/km

Loop Resistance	AWG 24: ≤182 Ω/km; AWG 22: ≤115 Ω/km
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	10 x Cable Diameter

LI2Y(St)YSWAY-PiMF (RS - 422)

Areas of Use

Used in industrial automation systems for computer networks and electronic control systems for data transmission. Provides longer transmission lengths and larger data rates compared to RS 232-422. Armouring layer provides mechanical strength and protects the cable core from outer mechanical effects.

Cable Construction

Conductor	0.22 mm² Stranded Tinned Copper (7x0.20 mm AWG 24), 0.34 mm² Stranded Tinned Copper (7x0.25 mm AWG 22)
Insulation	PE (EN 50290-2-23, VDE 0207-2YI1)
Separator	PET Foil
Individual Screen	Al-PET Foil (with Stranded Tinned Copper Drain Wire)
Lay-up	All shielded pairs are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with Stranded Tinned Copper Drain Wire)
Inner Sheath	PVC (EN 50290-2-22, TM1)
Armour	Round Galvanized Steel Wire (Min. Diameter 0.90 mm ±0.02 mm)
Outer Sheath	UV Resisdant, Flame Retardant PVC (BS/EN 50290-2), RAL 9005 - Black
Core Colors	DIN 47100

Technical Properties

Operating Voltage	300 V
Test Voltage	1200 V
Velocity of Propagation	0,66
Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	Core - Core: ≤52 nF/km, Core - Cores - Screen: ≤95 nF/km
Characteristic Impedance	100±10 Ω
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius (Fixed)	12 x Cable Diameter

LI2Y(St)CY (RS - 485)

Areas of Use

Used in industrial automation systems for computer networks and electronic control systems for data transmission. Provides longer transmission lengths and larger data rates compared to RS 232-422.

Cable Construction

Conductor	0.22 mm² Stranded Tinned Copper (7x0.20 mm AWG 24), 0.34 mm² Stranded Tinned Copper (7x0.25 mm AWG 22)
Insulation	PE (EN 50290-2-23, VDE 0207-2YI1)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil
1. Screen	Al-PET Foil (with stranded tinned copper drain wire)
2. Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (EN 50290-2-22 TM 51), RAL 7001 - Grey
Core Colors	DIN 47100

Technical Properties

Operating Voltage	300 V
Test Voltage	1200 V
Velocity of Propagation	0,66
Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	Core - Core: ≤45 nF/km, Core - Cores - Screen: ≤80 nF/km
Characteristic Impedance	120±10 Ω
Loop Resistance	AWG 24: ≤182 Ω/km; AWG 22: ≤115 Ω/km; AWG 20: ≤72 Ω/km
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius (Fixed)	10 x Cable Diameter

LI2Y(St)CH (RS - 485)

Areas of Use

Used in industrial automation systems for computer networks and electronic control systems for data transmission. Provides longer transmission lengths and larger data rates compared to RS 232-422. HFFR versions are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire.

Cable Construction

Conductor	0.22 mm² Stranded Tinned Copper (7x0.20 mm AWG 24), 0.34 mm² Stranded Tinned Copper (7x0.25 mm AWG 22)
Insulation	PE (EN 50290-2-23, VDE 0207-2YI1)
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil
1. Screen	Al-PET Foil (with stranded tinned copper drain wire)
2. Screen	Tinned Copper Wire Braid
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey
Core Colors	DIN 47100

Technical Properties

Operating Voltage	300 V
Test Voltage	1200 V
Velocity of Propagation	0,66
Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	Core - Core: ≤45 nF/km, Core - Cores - Screen: ≤80 nF/km
Characteristic Impedance	120±10 Ω
Loop Resistance	AWG 24: ≤182 Ω/km; AWG 22: ≤115 Ω/km; AWG 20: ≤72 Ω/km
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	10 x Cable Diameter

LI2Y(St)CY-PiMF (RS - 485)

Areas of Use

Used in industrial automation systems for computer networks and electronic control systems for data transmission. Provides longer transmission lengths and larger data rates compared to RS 232-422.

Cable Construction

Conductor	0.22 mm² Stranded Tinned Copper (7x0.20 mm AWG 24), 0.34 mm² Stranded Tinned Copper (7x0.25 mm AWG 22)
Insulation	PE (EN 50290-2-23, VDE 0207-2YI1)
Separator	PET Foil
1. Screen	Al-PET Foil (with stranded tinned copper drain wire)
Lay-up	All shielded pairs are stranded in layers

2. Screen	Al-PET Foil
3. Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (EN 50290-2-22 TM 51), RAL 7001 - Grey
Core Colors	DIN 47100

Technical Properties

Operating Voltage	300 V
Test Voltage	1200 V
Velocity of Propagation	0,66
Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	Core - Core: ≤45 nF/km, Core - Cores - Screen: ≤85 nF/km
Characteristic Impedance	120±10 Ω
Loop Resistance	AWG 24: ≤182 Ω/km; AWG 22: ≤115 Ω/km; AWG 20: ≤72 Ω/km
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius (Fixed)	10 x Cable Diameter

LI2Y(St)CH -PiMF (RS - 485)

Areas of Use

Used in industrial automation systems for computer networks and electronic control systems for data transmission. Provides longer transmission lengths and larger data rates compared to RS 232-422. HFFR versions are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire.

Cable Construction

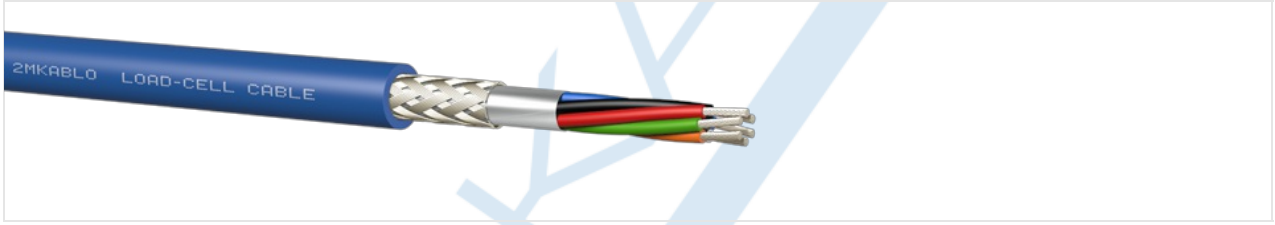
Conductor	0.22 mm² Stranded Tinned Copper (7x0.20 mm AWG 24), 0.34 mm² Stranded Tinned Copper (7x0.25 mm AWG 22)
Insulation	PE (EN 50290-2-23, VDE 0207-2YI1)
Separator	PET Foil
1. Screen	Al-PET Foil (with stranded tinned copper drain wire)
Lay-up	All shielded pairs are stranded in layers
2. Screen	Al-PET Foil
3. Screen	Tinned Copper Wire Braid
Outer Sheath	HFFR (EN 50290-2-27), RAL 7001 - Grey
Core Colors	DIN 47100

Technical Properties

Operating Voltage	300 V
Test Voltage	1200 V
Velocity of Propagation	0,66

Insulation Resistance	>5000 M.Ωxkm
Capacitance (@800Hz)	Core - Core: ≤45 nF/km, Core - Cores - Screen: ≤80 nF/km
Characteristic Impedance	120±10 Ω
Loop Resistance	AWG 24: ≤182 Ω/km; AWG 22: ≤115 Ω/km; AWG 20: ≤72 Ω/km
Temperature Range	-30 °C.....+70 °C
Flame Retardancy	IEC/EN 60332-1
Smoke Density	IEC/EN 61034-1
Amount of Halogen Acid Gas	IEC/EN 60754-1
Corrosive Gases Measurement	IEC/EN 60754-2
Min. Bending Radius (Fixed)	10 x Cable Diameter

LOAD CELL Cables



Areas of Use

Used in electronic systems and electronic weighing devices in industrial applications. TPE outer sheathed versions are required to use where resistant to high mechanical stress, weather conditions, solvent, oil, and oil derivatives are needed.

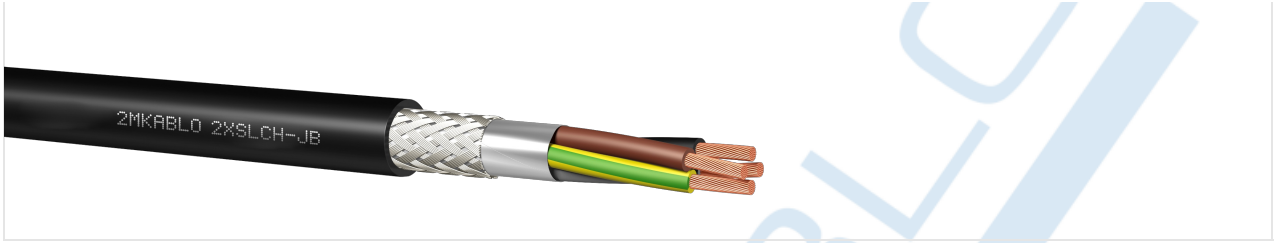
Cable Construction

Conductor	Stranded Tinned Copper (IEC/EN 60228, Class 6)
Insulation	PVC (EN 50290-2-21, TI52)
Core Colors	White, Black, Red, Blue, Green, Grey
Lay-up	Cores are stranded in layers
1. Screen	Al-PET Foil
2. Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (EN 50290-2-22, TM51), RAL 5015 - Blue

Technical Properties

Operating Voltage	300 V
Test Voltage	1000 V
Capacitance (@800Hz)	Core - Core: ≤100 nF/km, Core - Cores - Screen: ≤190 nF/km
Temperature Range	Fixed: -30 °C .....+70 °C, Flexible: -5 °C .....+70 °C
Flame Retardancy	IEC/EN 60332-1
Min. Bending Radius (Fixed)	8 x Cable Diameter
Insulation Resistance	>100 M.Ωxkm

2XSLCH-JB



Areas of Use

Used in frequency converter controlled motors for control and/or power purposes, and suitable for use in dry, moist or wet environments in heavy industries. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire.

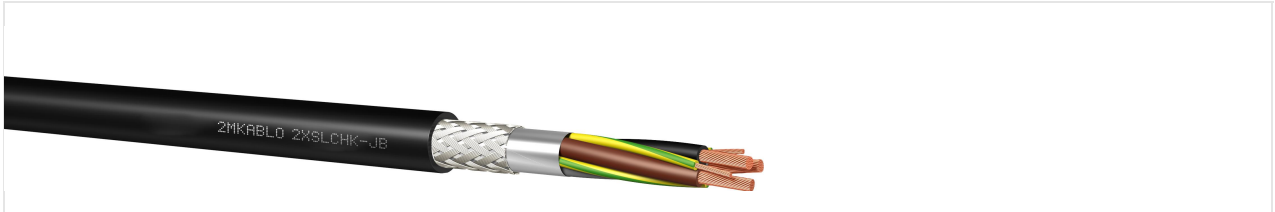
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	XLPE (Cross-Linked Polyethylene)
Core Colors	HD 308 S2
Lay-up	4 cores twisted together
Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC), RAL 9005 - Black
Reference Standards	Based on IEC 60502-1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+90°C, Installation: -10°C...+90°C
Smoke Density	IEC 61034-1/2
Corrosive Gases Measurement	IEC 60754-1/2
Min. Bending Radius	10 x Cable Diameter
Flame Retardancy	IEC 60332-1-2, IEC 60332-3-24
Conductor Resistance	IEC/EN 60228

2XSLCHK-JB



Areas of Use

Used in frequency converter controlled motors for control and/or power purposes, and suitable for use in dry, moist, or wet environments in heavy industries. Symmetrical core oriented type provides smaller cross-section for grounding wires. This structure protects the connected system from high-frequency discharge currents. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density, and do not emit poisonous and corrosive gasses during a fire.

Cable Construction

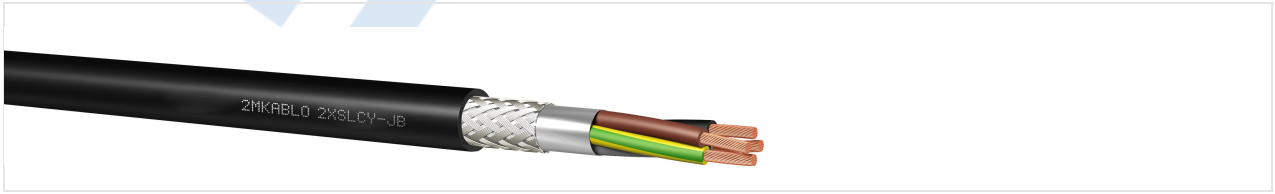
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)

Insulation	XLPE (Cross-Linked Polyethylene)
Core Colors	HD 308 S2
Lay-up	3 power cores twisted together and 3 ground cores arranged symmetrically in the interstices
Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC), RAL 9005 - Black
Reference Standards	Based on IEC 60502-1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+90°C, Installation: -10°C...+90°C
Smoke Density	IEC 61034-1/2
Corrosive Gases Measurement	IEC 60754-1/2
Min. Bending Radius	10 x Cable Diameter
Flame Retardancy	IEC 60332-1-2, IEC 60332-3-24
Conductor Resistance	IEC/EN 60228

2XSLCY-JB



Areas of Use

Used in frequency converter controlled motors for control and/or power purposes, and suitable for use in dry, moist or wet environments in heavy industries.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	XLPE (Cross-Linked Polyethylene)
Core Colors	HD 308 S2
Lay-up	4 cores twisted together
Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (Polyvinyl Chloride), RAL 9005 - Black (Transparent outer sheath is available upon request)
Reference Standards	Based on IEC 60502-1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3 kV
Temperature Range	Operating: -30°C...+70°C, Installation: -5°C...+70°C
Min. Bending Radius	10 x Cable Diameter
Flame Retardancy	IEC 60332-1-2

Conductor Resistance	IEC/EN 60228

2XSLCYK-JB

Areas of Use

Used in frequency converter controlled motors for control and/or power purposes, and suitable for use in dry, moist or wet environments in heavy industries. Symmetrical core oriented type provides smaller cross-section for grounding wires. This structure protects the connected system from high-frequency discharge currents.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	XLPE (Cross-Linked Polyethylene)
Core Colors	HD 308 S2
Lay-up	3 power cores twisted together and 3 ground cores arranged symmetrically in the interstices
Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (Polyvinyl Chloride), RAL 9005 - Black (Transparent outer sheath is available upon request)
Reference Standards	Based on IEC 60502-1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+70°C, Installation: -5°C...+70°C
Min. Bending Radius	10 x Cable Diameter
Flame Retardancy	IEC 60332-1-2
Conductor Resistance	IEC/EN 60228

2YSLCH-JB

Areas of Use

Used in frequency converter controlled motors for control and/or power purposes, and suitable for use in dry, moist, or wet environments in heavy industries. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density, and do not emit poisonous and corrosive gasses during a fire.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PE (Polyethylene)
Core Colors	HD 308 S2
Lay-up	4 cores twisted together
Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC), RAL 9005 - Black
Reference Standards	Based on IEC 60502-1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+80°C, Installation: -10°C...+80°C
Smoke Density	IEC 61034-1/2
Corrosive Gases Measurement	IEC 60754-1/2
Min. Bending Radius	10 x Cable Diameter
Flame Retardancy	IEC 60332-1-2, IEC 60332-3-24
Conductor Resistance	IEC/EN 60228

2YSLCHK-JB

Areas of Use

Used in frequency converter controlled motors for control and/or power purposes, and suitable for use in dry, moist, or wet environments in heavy industries. Symmetrical core oriented type provides smaller cross-section for grounding wires. This structure protects the connected system from high-frequency discharge currents. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density, and do not emit poisonous and corrosive gasses during a fire.

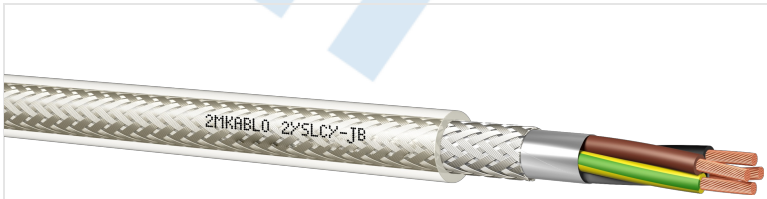
Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PE (Polyethylene)
Core Colors	HD 308 S2
Lay-up	3 power cores twisted together and 3 ground cores arranged symmetrically in the interstices
Separator	Al-PET Foil
Outer Sheath	Halogen Free Flame Retardant Compound (HFFR/LSZH/LSOH/FRNC), RAL 9005 - Black
Screen	Tinned Copper Wire Braid
Reference Standards	Based on IEC 60502-1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+80°C, Installation: -10°C...+80°C
Smoke Density	IEC 61034-1/2
Corrosive Gases Measurement	IEC 60754-1/2
Min. Bending Radius	10 x Cable Diameter
Flame Retardancy	IEC 60332-1-2, IEC 60332-3-24
Conductor Resistance	IEC/EN 60228

2YSLCY-JB



Areas of Use

Used in frequency converter controlled motors for control and/or power purposes, and suitable for use in dry, moist or wet environments in heavy industries.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PE (Polyethylene)
Core Colors	HD 308 S2
Lay-up	4 cores twisted together
Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (Polyvinyl Chloride), RAL 9005 - Black (Transparent outer sheath is available upon request)
Reference Standards	Based on IEC 60502-1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+80°C, Installation: -10°C...+80°C
Flame Retardancy	IEC 60332-1-2
Min. Bending Radius	10 x Cable Diameter
Conductor Resistance	IEC/EN 60228

2YSLCYK-JB

Areas of Use

Used in frequency converter controlled motors for control and/or power purposes, and suitable for use in dry, moist or wet environments in heavy industries. Symmetrical core-oriented type provides a smaller cross-section for grounding wires. This structure protects the connected system from high-frequency discharge currents.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PE (Polyethylene)
Core Colors	HD 308 S2
Lay-up	3 power cores twisted together and 3 ground cores arranged symmetrically in the interstices
Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (Polyvinyl Chloride), RAL 9005 - Black (Transparent outer sheath is available upon request)
Reference Standards	Based on IEC 60502-1
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PE (Polyethylene)
Core Colors	HD 308 S2
Lay-up	3 power cores twisted together and 3 ground cores arranged symmetrically in the interstices
Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (Polyvinyl Chloride), RAL 9005 - Black (Transparent outer sheath is available upon request)
Reference Standards	Based on IEC 60502-1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+70°C, Installation: -5°C...+70°C
Flame Retardancy	IEC 60332-1-2
Min. Bending Radius	10 x Cable Diameter
Conductor Resistance	IEC/EN 60228
Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+70°C, Installation: -5°C...+70°C
Flame Retardancy	IEC 60332-1-2
Min. Bending Radius	10 x Cable Diameter
Conductor Resistance	IEC/EN 60228

2YSLCYK-JB

Areas of Use

Used in frequency converter controlled motors for control and/or power purposes, and suitable for use in dry, moist or wet environments in heavy industries. Symmetrical core-oriented type provides a smaller cross-section for grounding wires. This structure protects the connected system from high-frequency discharge currents.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PE (Polyethylene)
Core Colors	HD 308 S2
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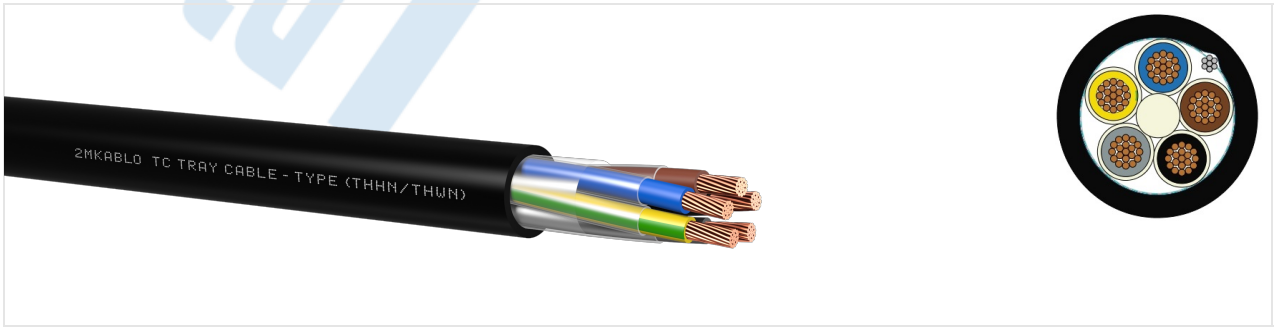
Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (Polyvinyl Chloride), RAL 9005 - Black (Transparent outer sheath is available upon request)
Reference Standards	Based on IEC 60502-1
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PE (Polyethylene)
Core Colors	HD 308 S2
Lay-up	3 power cores twisted together and 3 ground cores arranged symmetrically in the interstices
Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (Polyvinyl Chloride), RAL 9005 - Black (Transparent outer sheath is available upon request)
Reference Standards	Based on IEC 60502-1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+70°C, Installation: -5°C...+70°C
Flame Retardancy	IEC 60332-1-2
Min. Bending Radius	10 x Cable Diameter
Conductor Resistance	IEC/EN 60228
Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+70°C, Installation: -5°C...+70°C
Flame Retardancy	IEC 60332-1-2
Min. Bending Radius	10 x Cable Diameter
Conductor Resistance	IEC/EN 60228

TC - TYPE (THHN/THWN)



Areas of Use

UL-approved, flexible cables for use up to 600 V cables are installed in cable trays, ducts, and conduit. They are used in manufacturing facilities, for all machines, tools and installation work, industries such as petrochemical. Suitable for use in dry, damp and wet areas, outside, in cable ducts, open cable trays.

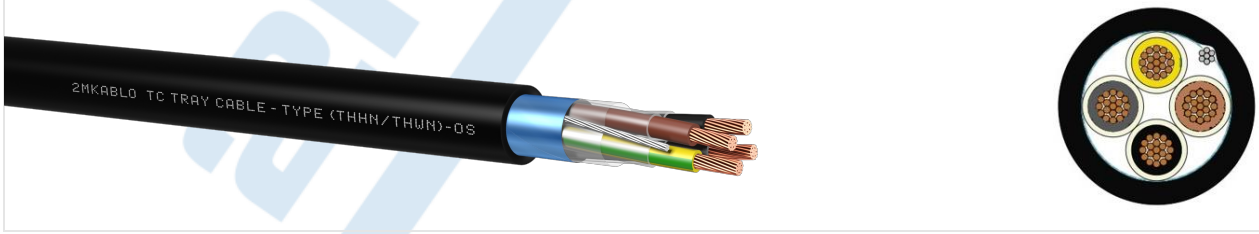
Cable Construction

Conductor	Solid or Stranded Annealed Copper (ASTM B3, stranding per ASTM B8)
Insulation	PVC / Nylon (UL 1581 Class 90°C, EN 50363-3 TI3). UL 83 for THHN or THWN, UL 66 for TFN or TFFN
Core Colors	HD 308 or ICEA Method 1 Table E2
Insulated Conductors	AWG16 & AWG18 - Types TFN and TFFN, AWG14 & Larger - THHN and THWN
Lay-up	Cores are stranded in layers
Separator	PET Foil
Outer Sheath	PVC Jacket (UL 1581 Class 90°C). The thickness of the overall jacket is in accordance with the UL1277
Reference Standards	UL 1277, UL 83, UL 1685, CSA C22.2 NO. 239, NEC Article 336

Technical Properties

Operating Voltage	600 V
Test Voltage	2.5 kV
Dielectric Voltage Withstand	UL 1277
Short Term Insulation Resistance In Water At 15°c	UL 2556
Max. Operating Temperature	THHN or THWN 90°C dry 75°C wet, TFN and TFFN 90°C dry
Flame Retardancy	CSA FT4, UL 1685, IEC/EN 60332-1, IEC 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Cold Bend Rated	-40
Flexibility Test After Aging	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	7.5 x Cable Diameter

TC - TYPE (THHN/THWN) Overall Shielded



Areas of Use

UL-approved, flexible cables for use up to 600 V cables are installed in cable trays, ducts, and conduit. They are used in manufacturing facilities, for all machines, tools and installation work, industries such as petrochemical. Suitable for use in dry, damp and wet areas, outside, in cable ducts, open cable trays.

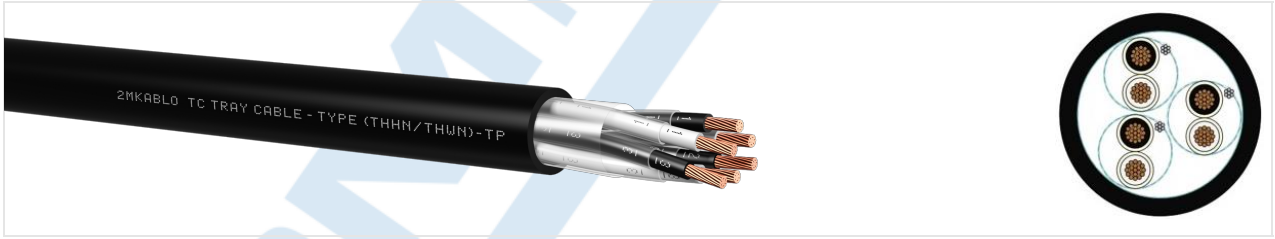
Cable Construction

Conductor	Solid or Stranded Annealed Copper (ASTM B3, stranding per ASTM B8)
Insulation	PVC / Nylon (UL 1581 Class 90°C, EN 50363-3 TI3). UL 83 for THHN or THWN, UL 66 for TFN or TFFN
Core Colors	HD 308 or ICEA Method 1 Table E2
Insulated Conductors	AWG16 & AWG18 - Types TFN and TFFN, AWG14 & Larger - THHN and THWN
Lay-up	Cores are stranded in layers
Separator	PET Foil
Outer Sheath	PVC Jacket (UL 1581 Class 90°C). The thickness of the overall jacket is in accordance with the UL1277
Reference Standards	UL 1277, UL 83, UL 1685, CSA C22.2 NO. 239, NEC Article 336

Technical Properties

Operating Voltage	600 V
Test Voltage	2.5 kV
Dielectric Voltage Withstand	UL 1277
Short Term Insulation Resistance In Water At 15°c	UL 2556
Max. Operating Temperature	THHN or THWN 90°C dry 75°C wet, TFN and TFFN 90°C dry
Flame Retardancy	CSA FT4, UL 1685, IEC/EN 60332-1, IEC 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Cold Bend Rated	-40
Flexibility Test After Aging	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	7.5 x Cable Diameter

TC - TYPE (THHN/THWN) Overall Shielded Pairs (Triads)



Areas of Use

UL-approved, flexible cables for use up to 600 V cables are installed in cable trays, ducts, and conduit. They are used in manufacturing facilities, for all machines, tools and installation work, industries such as petrochemical. Suitable for use in dry, damp and wet areas, outside, in cable ducts, open cable trays.

Cable Construction

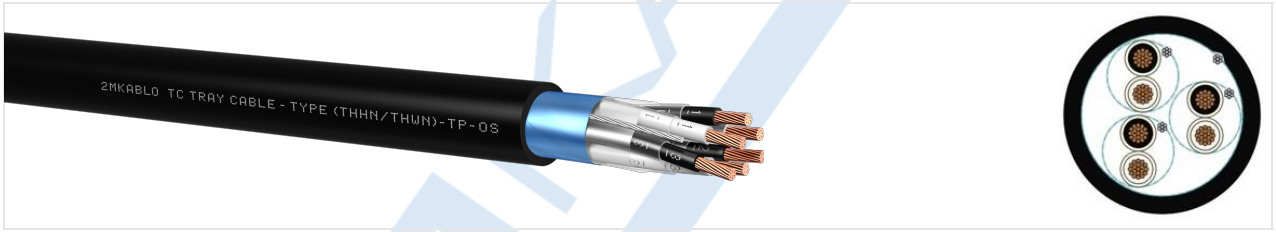
Conductor	Solid or Stranded Annealed Copper (ASTM B3, stranding per ASTM B8)
Insulation	PVC / Nylon (UL 1581 Class 90°C, EN 50363-3 TI3). UL 83 for THHN or THWN, UL 66 for TFN or TFFN
Core Colors	Pair: Black / White, Numbered, Triples: Black / White / Red, Numbered

Insulated Conductors	AWG16 & AWG18 - Types TFN and TFFN, AWG14 & Larger - THHN and THWN
Lay-up	Pairs are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	PVC Jacket (UL 1581 Class 90°C). The thickness of the overall jacket is in accordance with the UL1277
Reference Standards	UL 1277, UL 83, UL 1685, CSA C22.2 NO. 239, NEC Article 336

Technical Properties

Operating Voltage	600 V
Test Voltage	2.5 kV
Dielectric Voltage Withstand	UL 1277
Short Term Insulation Resistance In Water At 15°c	UL 2556
Max. Operating Temperature	THHN or THWN 90°C dry 75°C wet, TFN and TFFN 90°C dry
Flame Retardancy	CSA FT4, UL 1685, IEC/EN 60332-1, IEC 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Cold Bend Rated	-40
Flexibility Test After Aging	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	7.5 x Cable Diameter

TC - TYPE (THHN/THWN) Individual Shielded Pairs



Areas of Use

UL-approved, flexible cables for use up to 600 V cables are installed in cable trays, ducts, and conduit. They are used in manufacturing facilities, for all machines, tools and installation work, industries such as petrochemical. Suitable for use in dry, damp and wet areas, outside, in cable ducts, open cable trays.

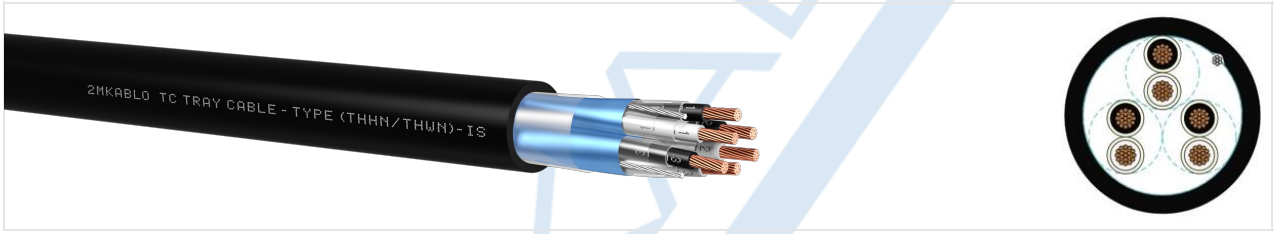
Cable Construction

Conductor	Solid or Stranded Annealed Copper (ASTM B3, stranding per ASTM B8)
Insulation	PVC / Nylon (UL 1581 Class 90°C, EN 50363-3 TI3). UL 83 for THHN or THWN, UL 66 for TFN or TFFN
Core Colors	Pair: Black / White, Numbered, Triples: Black / White / Red, Numbered
Insulated Conductors	AWG16 & AWG18 - Types TFN and TFFN, AWG14 & Larger - THHN and THWN
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Separator	PET Foil
Outer Sheath	PVC Jacket (UL 1581 Class 90°C). The thickness of the overall jacket is in accordance with the UL1277
Reference Standards	UL 1277, UL 83, UL 1685, CSA C22.2 NO. 239, NEC Article 336
Individual Seperaor	PET Foil
Lay-up	Shielded pairs / triples are stranded in layers

Technical Properties

Operating Voltage	600 V
Test Voltage	2.5 kV
Dielectric Voltage Withstand	UL 1277
Short Term Insulation Resistance In Water At 15°c	UL 2556
Max. Operating Temperature	THHN or THWN 90°C dry 75°C wet, TFN and TFFN 90°C dry
Flame Retardancy	CSA FT4, UL 1685, IEC/EN 60332-1, IEC 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Cold Bend Rated	-40
Flexibility Test After Aging	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	7.5 x Cable Diameter

TC - TYPE (THHN/THWN) Individual & Overall Shielded Pairs



Areas of Use

UL-approved, flexible cables for use up to 600 V cables are installed in cable trays, ducts, and conduit. They are used in manufacturing facilities, for all machines, tools and installation work, industries such as petrochemical. Suitable for use in dry, damp and wet areas, outside, in cable ducts, open cable trays.

Cable Construction

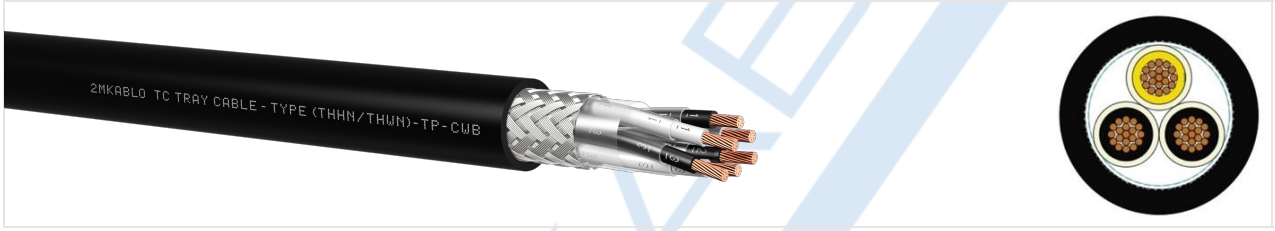
Conductor	Solid or Stranded Annealed Copper (ASTM B3, stranding per ASTM B8)
Insulation	PVC / Nylon (UL 1581 Class 90°C, EN 50363-3 TI3). UL 83 for THHN or THWN, UL 66 for TFN or TFFN
Core Colors	Pair: Black / White, Numbered, Triples: Black / White / Red, Numbered
Insulated Conductors	AWG16 & AWG18 - Types TFN and TFFN, AWG14 & Larger - THHN and THWN
Individual Seperaor	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Outer Sheath	PVC Jacket (UL 1581 Class 90°C). The thickness of the overall jacket is in accordance with the UL1277
Reference Standards	UL 1277, UL 83, UL 1685, CSA C22.2 NO. 239, NEC Article 336

Technical Properties

Operating Voltage	600 V
Test Voltage	2.5 kV
Dielectric Voltage Withstand	UL 1277

Short Term Insulation Resistance In Water At 15°c	UL 2556
Max. Operating Temperature	THHN or THWN 90°C dry 75°C wet, TFN and TFFN 90°C dry
Flame Retardancy	CSA FT4, UL 1685, IEC/EN 60332-1, IEC 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Cold Bend Rated	-40
Flexibility Test After Aging	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	7.5 x Cable Diameter

TC - TYPE (THHN/THWN) Pairs (Triads) Braided



Areas of Use

UL-approved, flexible cables for use up to 600 V cables are installed in cable trays, ducts, and conduit. They are used in manufacturing facilities, for all machines, tools and installation work, industries such as petrochemical. Suitable for use in dry, damp and wet areas, outside, in cable ducts, open cable trays.

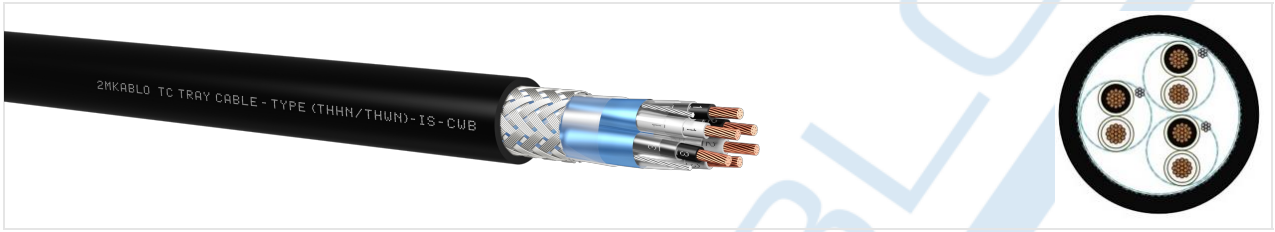
Cable Construction

Conductor	Solid or Stranded Annealed Copper (ASTM B3, stranding per ASTM B8)
Insulation	PVC / Nylon (UL 1581 Class 90°C, EN 50363-3 TI3). UL 83 for THHN or THWN, UL 66 for TFN or TFFN
Core Colors	Pair: Black / White, Numbered, Triples: Black / White / Red, Numbered
Insulated Conductors	AWG16 & AWG18 - Types TFN and TFFN, AWG14 & Larger - THHN and THWN
Lay-up	Pairs are stranded in layers
Separator	PET Foil
Overall Screen	Tinned Copper Wire Braiding (60% Coverage)*
Reference Standards	UL 1277, UL 83, UL 1685, CSA C22.2 NO. 239, NEC Article 336

Technical Properties

Operating Voltage	600 V
Test Voltage	2.5 kV
Dielectric Voltage Withstand	UL 1277
Short Term Insulation Resistance In Water At 15°c	UL 2556
Max. Operating Temperature	THHN or THWN 90°C dry 75°C wet, TFN and TFFN 90°C dry
Flame Retardancy	CSA FT4, UL 1685, IEC/EN 60332-1, IEC 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Cold Bend Rated	-40
Flexibility Test After Aging	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	7.5 x Cable Diameter

TC - TYPE (THHN/THWN) Individual Shielded Pairs Braided



Areas of Use

UL-approved, flexible cables for use up to 600 V cables are installed in cable trays, ducts, and conduit. They are used in manufacturing facilities, for all machines, tools and installation work, industries such as petrochemical. Suitable for use in dry, damp and wet areas, outside, in cable ducts, open cable trays.

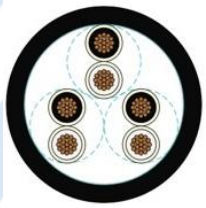
Cable Construction

Conductor	Solid or Stranded Annealed Copper (ASTM B3, stranding per ASTM B8)
Insulation	PVC / Nylon (UL 1581 Class 90°C, EN 50363-3 TI3). UL 83 for THHN or THWN, UL 66 for TFN or TFFN
Core Colors	Pair: Black / White, Numbered, Triples: Black / White / Red, Numbered
Insulated Conductors	AWG16 & AWG18 - Types TFN and TFFN, AWG14 & Larger - THHN and THWN
Individual Seperaor	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples are stranded in layers
Separator	PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC Jacket (UL 1581 Class 90°C). The thickness of the overall jacket is in accordance with the UL1277
Reference Standards	UL 1277, UL 83, UL 1685, CSA C22.2 NO. 239, NEC Article 336

Technical Properties

Operating Voltage	600 V
Test Voltage	2.5 kV
Dielectric Voltage Withstand	UL 1277
Short Term Insulation Resistance In Water At 15°c	UL 2556
Max. Operating Temperature	THHN or THWN 90°C dry 75°C wet, TFN and TFFN 90°C dry
Flame Retardancy	CSA FT4, UL 1685, IEC/EN 60332-1, IEC 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Cold Bend Rated	-40
Flexibility Test After Aging	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	7.5 x Cable Diameter

TC - TYPE (THHN/THWN) Pairs (Triads)



Areas of Use

UL-approved, flexible cables for use up to 600 V cables are installed in cable trays, ducts, and conduit. They are used in manufacturing facilities, for all machines, tools and installation work, industries such as petrochemical. Suitable for use in dry, damp and wet areas, outside, in cable ducts, open cable trays.

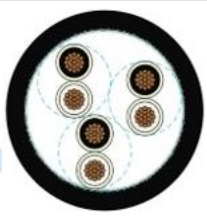
Cable Construction

Conductor	Solid or Stranded Annealed Copper (ASTM B3, stranding per ASTM B8)
Insulation	PVC / Nylon (UL 1581 Class 90°C, EN 50363-3 TI3). UL 83 for THHN or THWN, UL 66 for TFN or TFFN
Core Colors	Pair: Black / White, Numbered, Triples: Black / White / Red, Numbered
Insulated Conductors	AWG16 & AWG18 - Types TFN and TFFN, AWG14 & Larger - THHN and THWN
Lay-up	Pairs are stranded in layers
Separator	PET Foil
Outer Sheath	PVC Jacket (UL 1581 Class 90°C). The thickness of the overall jacket is in accordance with the UL1277
Reference Standards	UL 1277, UL 83, UL 1685, CSA C22.2 NO. 239, NEC Article 336

Technical Properties

Operating Voltage	600 V
Test Voltage	2.5 kV
Dielectric Voltage Withstand	UL 1277
Short Term Insulation Resistance In Water At 15°c	UL 2556
Max. Operating Temperature	THHN or THWN 90°C dry 75°C wet, TFN and TFFN 90°C dry
Flame Retardancy	CSA FT4, UL 1685, IEC/EN 60332-1, IEC 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Cold Bend Rated	-40
Flexibility Test After Aging	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	7.5 x Cable Diameter

TC - TYPE (THHN/THWN) Braided



Areas of Use

UL-approved, flexible cables for use up to 600 V cables are installed in cable trays, ducts, and conduit. They are used in manufacturing facilities, for all machines, tools and installation work, industries such as petrochemical. Suitable for use in dry, damp and wet areas, outside, in cable ducts, open cable trays.

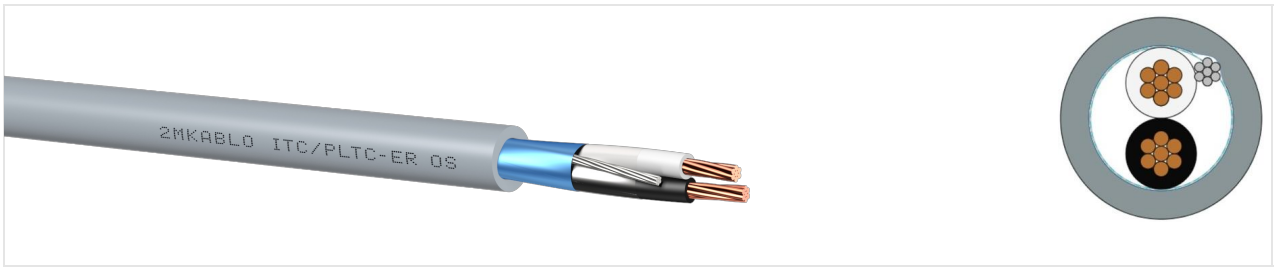
Cable Construction

Conductor	Solid or Stranded Annealed Copper (ASTM B3, stranding per ASTM B8)
Insulation	PVC / Nylon (UL 1581 Class 90°C, EN 50363-3 TI3). UL 83 for THHN or THWN, UL 66 for TFN or TFFN
Core Colors	HD 308 or ICEA Method 1 Table E2
Insulated Conductors	AWG16 & AWG18 - Types TFN and TFFN, AWG14 & Larger - THHN and THWN
Lay-up	Cores are stranded in layers
Separator	PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC Jacket (UL 1581 Class 90°C). The thickness of the overall jacket is in accordance with the UL1277
Reference Standards	UL 1277, UL 83, UL 1685, CSA C22.2 NO. 239, NEC Article 336

Technical Properties

Operating Voltage	600 V
Test Voltage	2.5 kV
Dielectric Voltage Withstand	UL 1277
Short Term Insulation Resistance In Water At 15°c	UL 2556
Max. Operating Temperature	THHN or THWN 90°C dry 75°C wet, TFN and TFFN 90°C dry
Flame Retardancy	CSA FT4, UL 1685, IEC/EN 60332-1, IEC 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Cold Bend Rated	-40
Flexibility Test After Aging	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	7.5 x Cable Diameter

TYPE ITC/PLTC-ER - Overall Shielded



Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants etc. make up the general areas that these cables are used. These cables meets the crush and impact requirements and deformation resistance according to UL 2556.

Cable Construction

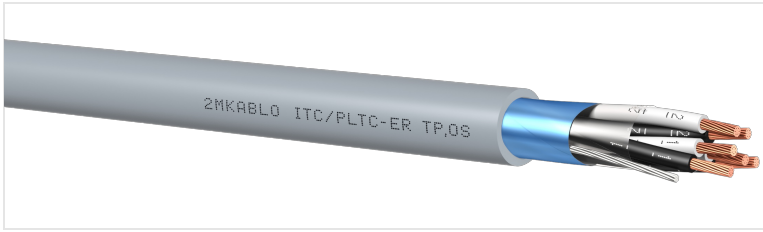
Conductor	Stranded Annealed Copper (ASTM B3)
Insulation	PVC (UL 1581 Class 105°C, EN 50363-3 TI3)
Core Colors	Multicore: White Numbered
Lay-up	Cores are stranded in layers

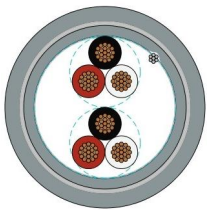
Separator	PET Foil
Outer Sheath	Heat Resistant and Sunlight Resistant PVC (UL 1581 Class 105°C), Black, Blue (other colors upon request)
Reference Standards	UL 13, UL 2250, NEC Article 725, NEC Article 727
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)

Technical Properties

Operating Voltage	300 V
Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556
Conductor Resistance	UL 1581 - Section 220
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)
Max. Operating Temperature	Fixed: -40°C ... +105°C, Flexible: -5°C ... +60°C
Flame Retardancy	FT4/IEEE 1202 Flame Test (UL 1685), IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Min. Bending Radius (Fixed)	8 x Cable Diameter

TYPE ITC/PLTC-ER - Overall Shielded Pairs (Triads)





Areas of Use

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Cable Construction

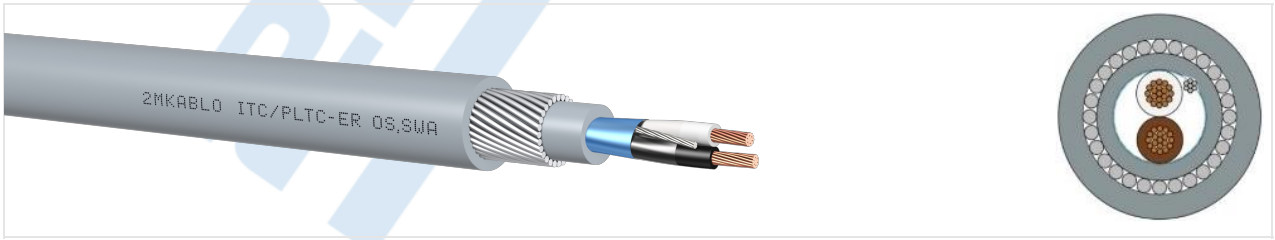
Conductor	Stranded Annealed Copper (ASTM B3)
Insulation	PVC (UL 1581 Class 105°C, EN 50363-3 TI3)
Core Colors	Pair: Black / White, Numbered Triples: Black / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Pairs / triples / quads are stranded in layers
Separator	PET Foil
Outer Sheath	Heat Resistant and Sunlight Resistant PVC (UL 1581 Class 105°C), Black, Blue (other colors upon request)
Reference Standards	UL 13, UL 2250, NEC Article 725, NEC Article 727
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)

Technical Properties

Operating Voltage	300 V
Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556

Conductor Resistance	UL 1581 - Section 220
Max. Operating Temperature	Fixed: -40°C ... +105°C, Flexible: -5°C ... +60°C
Flame Retardancy	FT4/IEEE 1202 Flame Test (UL 1685), IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Min. Bending Radius (Fixed)	8 x Cable Diameter
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)

TYPE ITC/PLTC-ER - Overall Shielded Armored



Areas of Use

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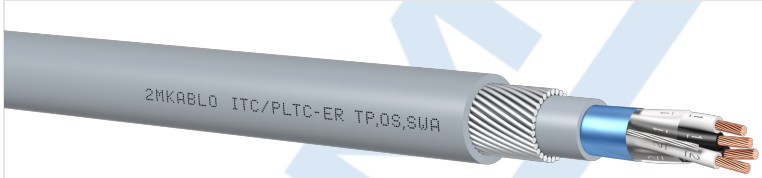
Cable Construction

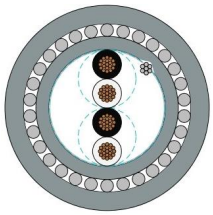
Conductor	Stranded Annealed Copper (ASTM B3)
Insulation	PVC (UL 1581 Class 105°C, EN 50363-3 TI3)
Core Colors	Multicore: White Numbered
Lay-up	Cores are stranded in layers
Separator	PET Foil
Inner Sheath	PVC (UL 1581 Class 105°C)
Armour	Round Galvanised Steel Wire
Outer Sheath	Heat Resistant and Sunlight Resistant PVC (UL 1581 Class 105°C), Black, Blue (other colors upon request)
Reference Standards	UL 13, UL 2250, NEC Article 725, NEC Article 727
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)

Technical Properties

Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556
Max. Operating Temperature	Fixed: -40°C ... +105°C, Flexible: -5°C ... +60°C
Operating Voltage	300 V
Flame Retardancy	FT4/IEEE 1202 Flame Test (UL 1685), IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Min. Bending Radius	8 x Cable Diameter
Conductor Resistance	UL 1581 - Section 220
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)

TYPE ITC/PLTC-ER - Overall Shielded Pairs (Triads) Armored





Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants etc. make up the general areas that these cables are used. These cables meets the crush and impact requirements and deformation resistance according to UL 2556.

Cable Construction

Conductor	Stranded Annealed Copper (ASTM B3)
Insulation	PVC (UL 1581 Class 105°C, EN 50363-3 TI3)
Core Colors	Pair: Black / White, Numbered Triples: Black / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Pairs / triples / quads are stranded in layers
Inner Sheath	PVC (UL 1581 Class 105°C)
Armour	Round Galvanised Steel Wire
Outer Sheath	Heat Resistant and Sunlight Resistant PVC (UL 1581 Class 105°C), Black, Blue (other colors upon request)
Reference Standards	UL 13, UL 2250, NEC Article 725, NEC Article 727
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)

Technical Properties

Operating Voltage	300 V
Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556
Conductor Resistance	UL 1581 - Section 220
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)
Max. Operating Temperature	Fixed: -40°C ... +105°C, Flexible: -5°C ... +60°C
Flame Retardancy	FT4/IEEE 1202 Flame Test (UL 1685), IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Min. Bending Radius (Fixed)	8 x Cable Diameter

TYPE ITC/PLTC-ER - Overall Shielded Braid Armored

Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants etc. make up the general areas that these cables are used. These cables meets the crush and impact requirements and deformation resistance according to UL 2556.

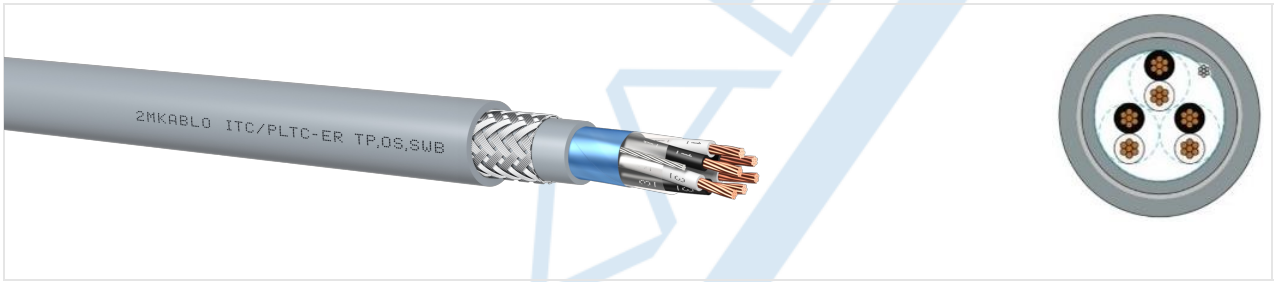
Cable Construction

Conductor	Stranded Annealed Copper (ASTM B3)
Insulation	PVC (UL 1581 Class 105°C, EN 50363-3 TI3)
Core Colors	Multicore: White Numbered
Lay-up	Cores are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (UL 1581 Class 105°C)
Reference Standards	UL 13, UL 2250, NEC Article 725, NEC Article 727
Armour	Galvanised Steel Wire Braid
Outer Sheath	Heat Resistant and Sunlight Resistant PVC (UL 1581 Class 105°C), Black, Blue (other colors upon request)

Technical Properties

Operating Voltage	300 V
Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556
Conductor Resistance	UL 1581 - Section 220
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)
Max. Operating Temperature	Fixed: -40°C ... +105°C, Flexible: -5°C ... +60°C
Flame Retardancy	FT4/IEEE 1202 Flame Test (UL 1685), IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Min. Bending Radius (Fixed)	8 x Cable Diameter

TYPE ITC/PLTC-ER - Overall Shielded Pairs (Triads) Braid Armored



Areas of Use

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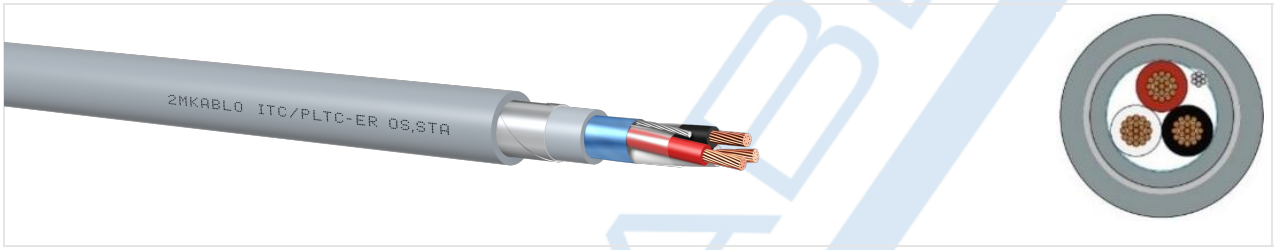
Cable Construction

Insulation	PVC (UL 1581 Class 105°C, EN 50363-3 TI3)
Core Colors	Pair: Black / White, Numbered Triples: Black / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Pairs / triples / quads are stranded in layers
Conductor	Stranded Annealed Copper (ASTM B3)
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire)
Inner Sheath	PVC (UL 1581 Class 105°C)
Armour	Galvanised Steel Wire Braid
Outer Sheath	Heat Resistant and Sunlight Resistant PVC (UL 1581 Class 105°C), Black, Blue (other colors upon request)
Reference Standards	UL 13, UL 2250, NEC Article 725, NEC Article 727

Technical Properties

Operating Voltage	300 V
Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556
Conductor Resistance	UL 1581 - Section 220
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)
Max. Operating Temperature	Fixed: -40°C ... +105°C, Flexible: -5°C ... +60°C
Flame Retardancy	FT4/IEEE 1202 Flame Test (UL 1685), IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Min. Bending Radius (Fixed)	8 x Cable Diameter

TYPE ITC/PLTC-ER - Overall Shielded Tape Armored



Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants etc. make up the general areas that these cables are used. These cables meets the crush and impact requirements and deformation resistance according to UL 2556.

Cable Construction

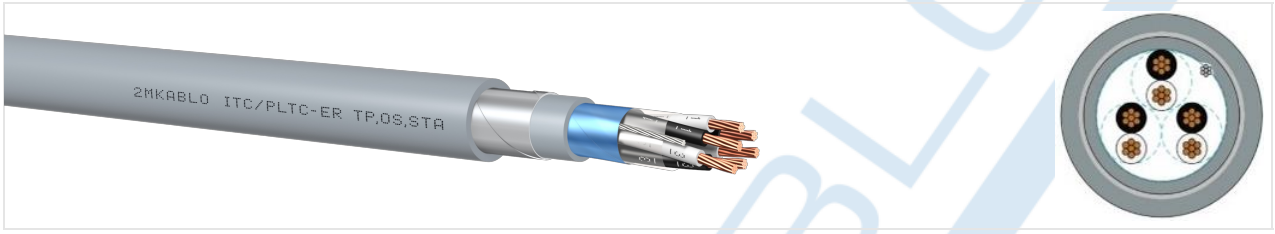
Conductor	Stranded Annealed Copper (ASTM B3)
Insulation	PVC (UL 1581 Class 105°C, EN 50363-3 TI3)
Core Colors	Multicore: White Numbered
Lay-up	Cores are stranded in layers
Separator	PET Foil
Inner Sheath	PVC (UL 1581 Class 105°C)
Outer Sheath	Heat Resistant and Sunlight Resistant PVC (UL 1581 Class 105°C), Black, Blue (other colors upon request)

Reference Standards	UL 13, UL 2250, NEC Article 725, NEC Article 727
Armour	Galvanised Steel Tape
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)

Technical Properties

Operating Voltage	300 V
Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556
Conductor Resistance	UL 1581 - Section 220
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)
Max. Operating Temperature	Fixed: -40°C ... +105°C, Flexible: -5°C ... +60°C
Flame Retardancy	FT4/IEEE 1202 Flame Test (UL 1685), IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Min. Bending Radius (Fixed)	8 x Cable Diameter

TYPE ITC/PLTC-ER - Overall Shielded Pairs (Triads) Tape Armored



Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants etc. make up the general areas that these cables are used. These cables meets the crush and impact requirements and deformation resistance according to UL 2556.

Cable Construction

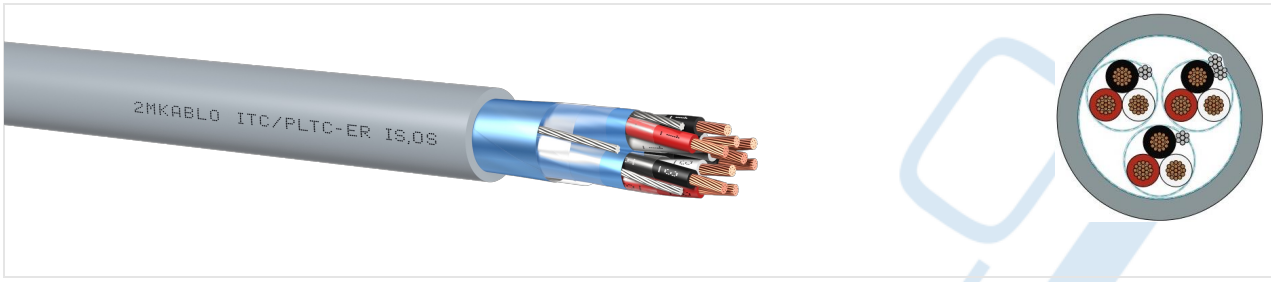
Conductor	Stranded Annealed Copper (ASTM B3)
Insulation	PVC (UL 1581 Class 105°C, EN 50363-3 TI3)
Core Colors	Pair: Black / White, Numbered Triples: Black / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Pairs / triples / quads are stranded in layers
Separator	PET Foil
Inner Sheath	PVC (UL 1581 Class 105°C)
Outer Sheath	Heat Resistant and Sunlight Resistant PVC (UL 1581 Class 105°C), Black, Blue (other colors upon request)
Reference Standards	UL 13, UL 2250, NEC Article 725, NEC Article 727
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)
Armour	Galvanised Steel Tape

Technical Properties

Operating Voltage	300 V

Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556
Conductor Resistance	UL 1581 - Section 220
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)
Max. Operating Temperature	Fixed: -40°C ... +105°C, Flexible: -5°C ... +60°C
Flame Retardancy	FT4/IEEE 1202 Flame Test (UL 1685), IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Min. Bending Radius (Fixed)	8 x Cable Diameter

TYPE ITC/PLTC-ER - Individual & Overall Shielded



Areas of Use

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Cable Construction

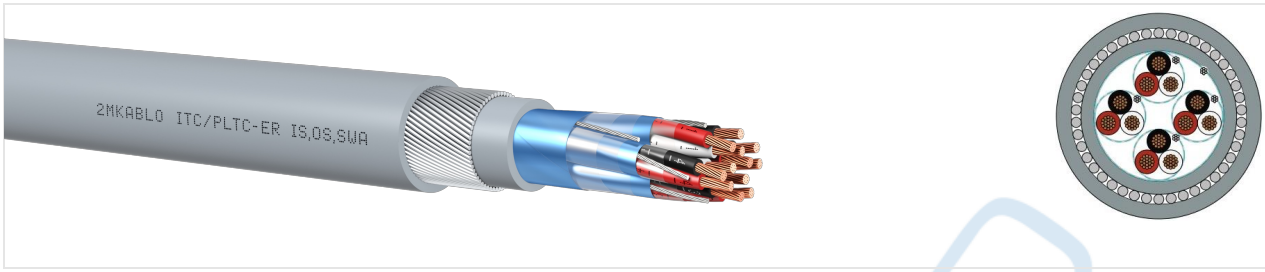
Conductor	Stranded Annealed Copper (ASTM B3)
Core Colors	Pair: Black / White, Numbered Triples: Black / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Individual Seperaor	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Outer Sheath	Heat Resistant and Sunlight Resistant PVC (UL 1581 Class 105°C), Black, Blue (other colors upon request)
Reference Standards	UL 13, UL 2250, NEC Article 725, NEC Article 727
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)
Insulation	PVC / Nylon (UL 1581 Class 90°C, EN 50363-3 TI3)

Technical Properties

Operating Voltage	300 V
Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556
Conductor Resistance	UL 1581 - Section 220
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)
Max. Operating Temperature	Fixed: -40°C ... +105°C, Flexible: -5°C ... +60°C
Flame Retardancy	FT4/IEEE 1202 Flame Test (UL 1685), IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)

Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Min. Bending Radius (Fixed)	8 x Cable Diameter

TYPE ITC/PLTC-ER - Individual & Overall Shielded Armored



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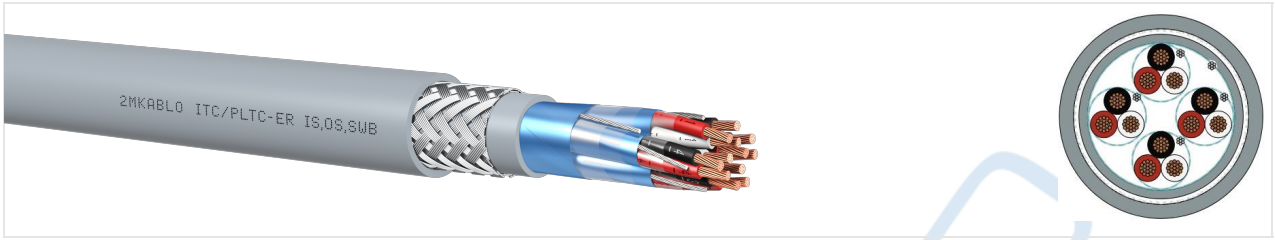
Cable Construction

Conductor	Stranded Annealed Copper (ASTM B3)
Insulation	PVC (UL 1581 Class 105°C, EN 50363-3 TI3)
Core Colors	Pair: Black / White, Numbered Triples: Black / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Individual Seperaor	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Inner Sheath	PVC (UL 1581 Class 105°C)
Armour	Round Galvanised Steel Wire
Outer Sheath	Heat Resistant and Sunlight Resistant PVC (UL 1581 Class 105°C), Black, Blue (other colors upon request)
Reference Standards	UL 13, UL 2250, NEC Article 725, NEC Article 727
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)

Technical Properties

Operating Voltage	300 V
Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556
Conductor Resistance	UL 1581 - Section 220
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)
Max. Operating Temperature	Fixed: -40°C ... +105°C, Flexible: -5°C ... +60°C
Flame Retardancy	FT4/IEEE 1202 Flame Test (UL 1685), IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Min. Bending Radius (Fixed)	8 x Cable Diameter

TYPE ITC/PLTC-ER - Individual & Overall Shielded Braid Armored



Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants etc. make up the general areas that these cables are used. These cables meets the crush and impact requirements and deformation resistance according to UL 2556.

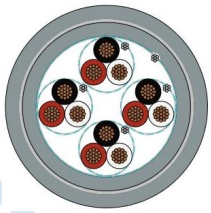
Cable Construction

Conductor	Stranded Annealed Copper (ASTM B3)
Insulation	PVC (UL 1581 Class 105°C, EN 50363-3 TI3)
Core Colors	Pair: Black / White, Numbered Triples: Black / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Individual Seperaor	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Inner Sheath	PVC (UL 1581 Class 105°C)
Armour	Galvanised Steel Wire Braid
Outer Sheath	Heat Resistant and Sunlight Resistant PVC (UL 1581 Class 105°C), Black, Blue (other colors upon request)
Reference Standards	UL 13, UL 2250, NEC Article 725, NEC Article 727
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)

Technical Properties

Operating Voltage	300 V
Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556
Conductor Resistance	UL 1581 - Section 220
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)
Max. Operating Temperature	Fixed: -40°C ... +105°C, Flexible: -5°C ... +60°C
Flame Retardancy	FT4/IEEE 1202 Flame Test (UL 1685), IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Min. Bending Radius (Fixed)	8 x Cable Diameter

TYPE ITC/PLTC-ER - Individual & Overall Shielded Tape Armored



Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants etc. make up the general areas that these cables are used. These cables meets the crush and impact requirements and deformation resistance according to UL 2556.

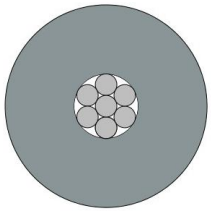
Cable Construction

Conductor	Stranded Annealed Copper (ASTM B3)
Insulation	PVC (UL 1581 Class 105°C, EN 50363-3 TI3)
Core Colors	Pair: Black / White, Numbered Triples: Black / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Individual Seperaor	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded pairs / triples / quads are stranded in layers
Separator	PET Foil
Inner Sheath	PVC (UL 1581 Class 105°C)
Outer Sheath	Heat Resistant and Sunlight Resistant PVC (UL 1581 Class 105°C), Black, Blue (other colors upon request)
Reference Standards	UL 13, UL 2250, NEC Article 725, NEC Article 727
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)
Armour	Galvanised Steel Tape

Technical Properties

Operating Voltage	300 V
Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556
Conductor Resistance	UL 1581 - Section 220
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)
Max. Operating Temperature	Fixed: -40°C ... +105°C, Flexible: -5°C ... +60°C
Flame Retardancy	FT4/IEEE 1202 Flame Test (UL 1685), IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Min. Bending Radius (Fixed)	8 x Cable Diameter

STYLE 1095



Areas of Use

These PVC single core cables are used in industrial applications for signal transmission. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These cores are rated 80C and 300VAC and designed for indoor applications.

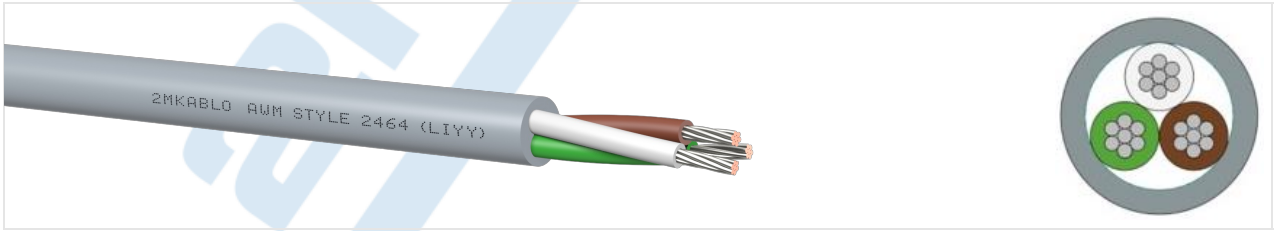
Cable Construction

Conductor	Stranded Annealed Tinned Copper (ASTM B-33)
Insulation	PVC (80°C) UL 1581
Core Colors	Can be manufactured according to the customer's request
Reference Standards	UL Style 1095, UL 758

Technical Properties

Operating Voltage	300 V
Test Voltage	2 kV
Conductor Resistance	UL 1581 - Section 220
Max. Operating Temperature	Fixed: -30°C ... +80°C / Flexible: -5°C ... +50°C
Flame Retardancy	FT2 Horizontal Flame Test (UL 2556), VW-1 Flame Test (UL 2556), IEC/EN 60332-1
Conductor Corrosion	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	8 x Cable Diameter

STYLE 2464 (LIYY)



Areas of Use

Multiple-conductor cable using non-integral jacket. These double screened cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects

Cable Construction

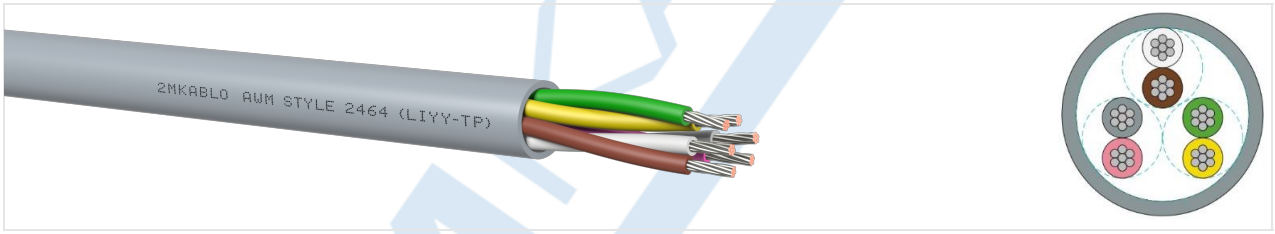
Conductor	Stranded Annealed Tinned Copper (ASTM B-33)
Insulation	PVC (80°C) UL 1581
Core Colors	Can be manufactured according to the customer's request
Insulated Conductors	AWG16 & AWG22 Style 1095
Lay-up	Cores are stranded in layers
Separator	PET Foil
Outer Sheath	PVC Jacket (UL 1581 Class 80°C). The thickness of the overall jacket is in accordance with the UL 758.
Reference Standards	UL Style 1095, UL 758

Technical Properties

Operating Voltage	300 V

Test Voltage	2 kV
Conductor Resistance	UL 1581 - Section 220
Max. Operating Temperature	Fixed: -30°C ... +80°C / Flexible: -5°C ... +50°C
Flame Retardancy	FT2 Horizontal Flame Test (UL 2556), VW-1 Flame Test (UL 2556), IEC/EN 60332-1
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	8 x Cable Diameter
Conductor Corrosion	UL 2556

STYLE 2464 (LIYY-TP)



Areas of Use

Multiple-conductor cable using non-integral jacket. These double screened cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects

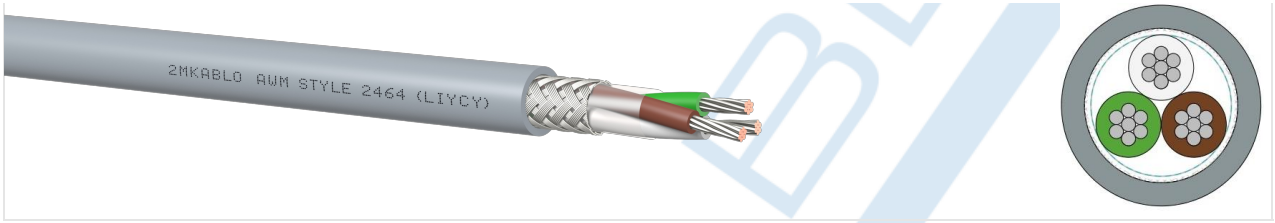
Cable Construction

Conductor	Stranded Annealed Tinned Copper (ASTM B-33)
Insulation	PVC (80°C) UL 1581
Core Colors	Can be manufactured according to the customer's request
Insulated Conductors	AWG16 & AWG22 Style 1095
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil
Outer Sheath	PVC Jacket (UL 1581 Class 80°C). The thickness of the overall jacket is in accordance with the UL 758.
Reference Standards	UL Style 1095, UL 758

Technical Properties

Operating Voltage	300 V
Test Voltage	2 kV
Conductor Resistance	UL 1581 - Section 220
Max. Operating Temperature	Fixed: -30°C ... +80°C / Flexible: -5°C ... +50°C
Flame Retardancy	FT2 Horizontal Flame Test (UL 2556), VW-1 Flame Test (UL 2556), IEC/EN 60332-1
Conductor Corrosion	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	8 x Cable Diameter

STYLE 2464 (LIYCY)



Areas of Use

Multiple-conductor cable using non-integral jacket. These double screened cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects

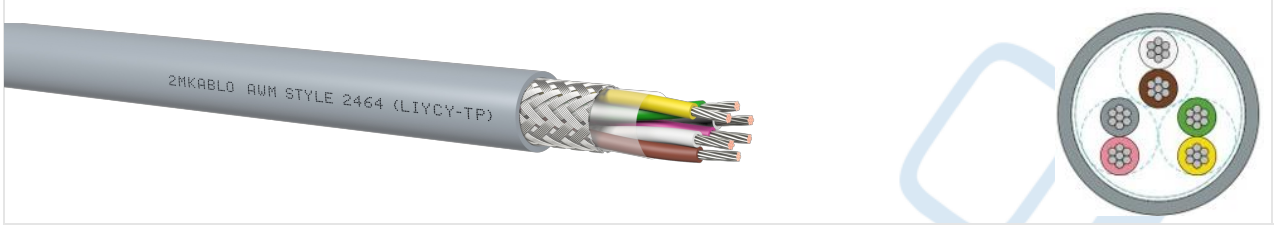
Cable Construction

Conductor	Stranded Annealed Tinned Copper (ASTM B-33)
Insulation	PVC (80°C) UL 1581
Core Colors	Can be manufactured according to the customer's request
Insulated Conductors	AWG16 & AWG22 Style 1095
Lay-up	Cores are stranded in layers
Separator	PET Foil
Overall Screen	Tinned Copper Wire Braid
Outer Sheath	PVC Jacket (UL 1581 Class 80°C). The thickness of the overall jacket is in accordance with the UL 758.
Reference Standards	UL Style 1095, UL 758

Technical Properties

Operating Voltage	300 V
Test Voltage	2 kV
Conductor Resistance	UL 1581 - Section 220
Max. Operating Temperature	Fixed: -30°C ... +80°C / Flexible: -5°C ... +50°C
Flame Retardancy	FT2 Horizontal Flame Test (UL 2556), VW-1 Flame Test (UL 2556), IEC/EN 60332-1
Conductor Corrosion	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	8 x Cable Diameter

STYLE 2464 (LIYCY-TP)



Areas of Use

Multiple-conductor cable using non-integral jacket. These double screened cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects.

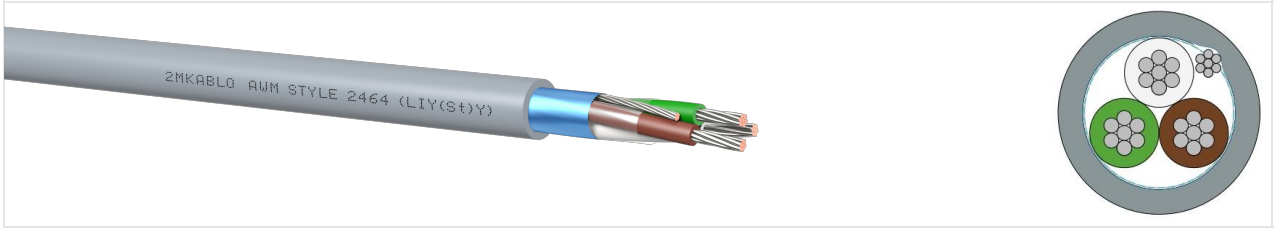
Cable Construction

Conductor	Stranded Annealed Tinned Copper (ASTM B-33)
Insulation	PVC (80°C) UL 1581
Core Colors	Can be manufactured according to the customer's request
Insulated Conductors	AWG16 & AWG22 Style 1095
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil
Overall Screen	Tinned Copper Wire Braid
Outer Sheath	PVC Jacket (UL 1581 Class 80°C). The thickness of the overall jacket is in accordance with the UL 758.
Reference Standards	UL Style 1095, UL 758

Technical Properties

Operating Voltage	300 V
Test Voltage	2 kV
Conductor Resistance	UL 1581 - Section 220
Max. Operating Temperature	Fixed: -30°C ... +80°C / Flexible: -5°C ... +50°C
Flame Retardancy	FT2 Horizontal Flame Test (UL 2556), VW-1 Flame Test (UL 2556), IEC/EN 60332-1
Conductor Corrosion	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	8 x Cable Diameter

STYLE 2464 (LIY(St)Y)



Areas of Use

Multiple-conductor cable using non-integral jacket. These double screened cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects.

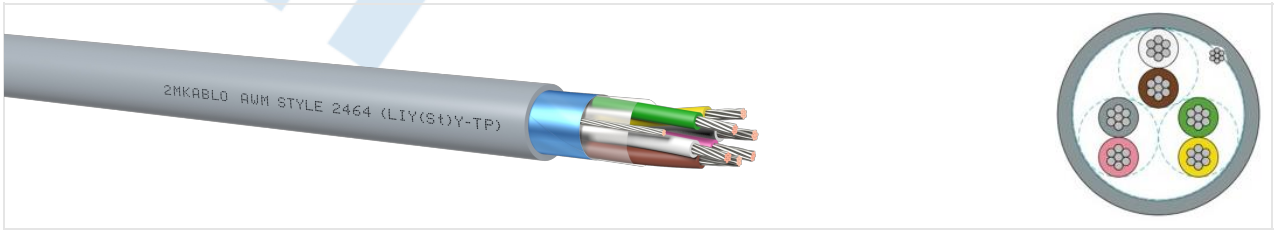
Cable Construction

Conductor	Stranded Annealed Tinned Copper (ASTM B-33)
Insulation	PVC (80°C) UL 1581
Core Colors	Can be manufactured according to the customer's request
Insulated Conductors	AWG16 & AWG22 Style 1095
Lay-up	Cores are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)
Outer Sheath	PVC Jacket (UL 1581 Class 80°C). The thickness of the overall jacket is in accordance with the UL 758.
Reference Standards	UL Style 1095, UL 758

Technical Properties

Operating Voltage	300 V
Test Voltage	2 kV
Conductor Resistance	UL 1581 - Section 220
Max. Operating Temperature	Fixed: -30°C ... +80°C / Flexible: -5°C ... +50°C
Flame Retardancy	FT2 Horizontal Flame Test (UL 2556), VW-1 Flame Test (UL 2556), IEC/EN 60332-1
Conductor Corrosion	UL 2556
Min. Bending Radius (Fixed)	8 x Cable Diameter
Deformation Resistance	UL 2556

STYLE 2464 (LIY(St)Y-TP)



Areas of Use

Multiple-conductor cable using non-integral jacket. These double screened cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects.

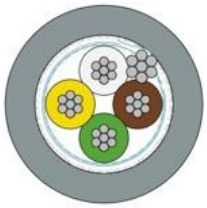
Cable Construction

Conductor	Stranded Annealed Tinned Copper (ASTM B-33)
Insulation	PVC (80°C) UL 1581
Core Colors	Can be manufactured according to the customer's request
Insulated Conductors	AWG16 & AWG22 Style 1095
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)
Outer Sheath	PVC Jacket (UL 1581 Class 80°C). The thickness of the overall jacket is in accordance with the UL 758.
Reference Standards	UL Style 1095, UL 758

Technical Properties

Operating Voltage	300 V
Test Voltage	2 kV
Conductor Resistance	UL 1581 - Section 220
Max. Operating Temperature	Fixed: -30°C ... +80°C / Flexible: -5°C ... +50°C
Flame Retardancy	FT2 Horizontal Flame Test (UL 2556), VW-1 Flame Test (UL 2556), IEC/EN 60332-1
Conductor Corrosion	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	8 x Cable Diameter

STYLE 2464 (LIY(St)CY)



Areas of Use

Multiple-conductor cable using non-integral jacket. These double screened cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects.

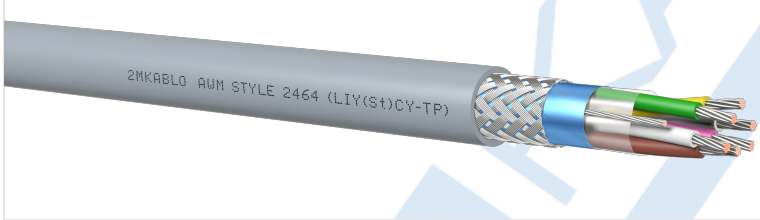
Cable Construction

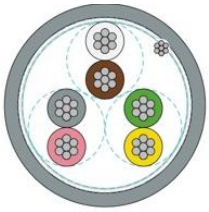
Conductor	Stranded Annealed Tinned Copper (ASTM B-33)
Insulation	PVC (80°C) UL 1581
Core Colors	Can be manufactured according to the customer's request
Insulated Conductors	AWG16 & AWG22 Style 1095
Lay-up	Cores are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)
2. Overall Screen	Tinned Copper Wire Braid
Outer Sheath	PVC Jacket (UL 1581 Class 80°C). The thickness of the overall jacket is in accordance with the UL 758.
Reference Standards	UL Style 1095, UL 758

Technical Properties

Operating Voltage	300 V
Test Voltage	2 kV
Conductor Resistance	UL 1581 - Section 220
Max. Operating Temperature	Fixed: -30°C ... +80°C / Flexible: -5°C ... +50°C
Flame Retardancy	FT2 Horizontal Flame Test (UL 2556), VW-1 Flame Test (UL 2556), IEC/EN 60332-1
Conductor Corrosion	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	8 x Cable Diameter

STYLE 2464 (LIY(St)CY-TP)





Areas of Use

Multiple-conductor cable using non-integral jacket. These double screened cables are used as signal transmission cables in industrial applications. These can be easily used with their flexible construction in narrow applications like electronic control systems of computer or audio systems or the communication sector, electronic circuits, measurement devices, machine design, office equipment, etc. These used for indoor applications. Screening protects the cable from the outer electrical effects.

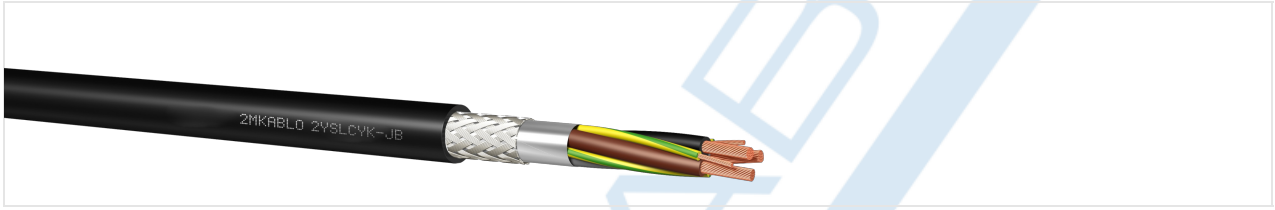
Cable Construction

Conductor	Stranded Annealed Tinned Copper (ASTM B-33)
Insulation	PVC (80°C) UL 1581
Core Colors	Can be manufactured according to the customer's request
Insulated Conductors	AWG16 & AWG22 Style 1095
Lay-up	Cores are twisted as pairs and pairs are stranded in layers
Separator	PET Foil
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)
2. Overall Screen	Tinned Copper Wire Braid
Outer Sheath	PVC Jacket (UL 1581 Class 80°C). The thickness of the overall jacket is in accordance with the UL 758.
Reference Standards	UL Style 1095, UL 758

Technical Properties

Operating Voltage	300 V
Test Voltage	2 kV
Conductor Resistance	UL 1581 - Section 220
Max. Operating Temperature	Fixed: -30°C ... +80°C / Flexible: -5°C ... +50°C
Flame Retardancy	FT2 Horizontal Flame Test (UL 2556), VW-1 Flame Test (UL 2556), IEC/EN 60332-1
Conductor Corrosion	UL 2556
Deformation Resistance	UL 2556
Min. Bending Radius (Fixed)	8 x Cable Diameter

2YSLCYK-JB



Areas of Use

Used in frequency converter controlled motors for control and/or power purposes, and suitable for use in dry, moist or wet environments in heavy industries. Symmetrical core-oriented type provides a smaller cross-section for grounding wires. This structure protects the connected system from high-frequency discharge currents.

Cable Construction

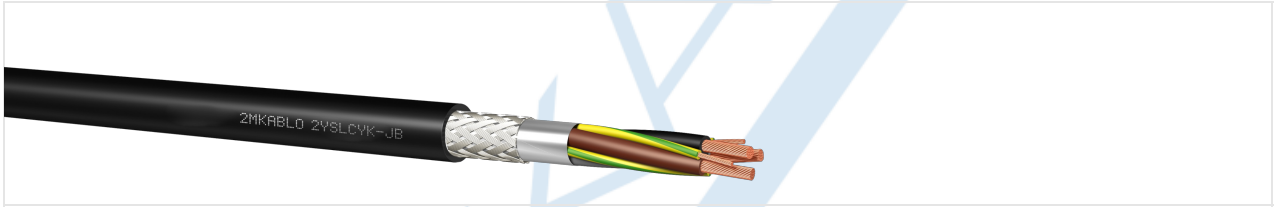
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PE (Polyethylene)
Core Colors	HD 308 S2
Lay-up	3 power cores twisted together and 3 ground cores arranged symmetrically in the interstices

Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (Polyvinyl Chloride), RAL 9005 - Black (Transparent outer sheath is available upon request)
Reference Standards	Based on IEC 60502-1
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PE (Polyethylene)
Core Colors	HD 308 S2
Lay-up	3 power cores twisted together and 3 ground cores arranged symmetrically in the interstices
Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (Polyvinyl Chloride), RAL 9005 - Black (Transparent outer sheath is available upon request)
Reference Standards	Based on IEC 60502-1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+70°C, Installation: -5°C...+70°C
Flame Retardancy	IEC 60332-1-2
Min. Bending Radius	10 x Cable Diameter
Conductor Resistance	IEC/EN 60228
Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+70°C, Installation: -5°C...+70°C
Flame Retardancy	IEC 60332-1-2
Min. Bending Radius	10 x Cable Diameter
Conductor Resistance	IEC/EN 60228

2YSLCYK-JB



Areas of Use

Used in frequency converter controlled motors for control and/or power purposes, and suitable for use in dry, moist or wet environments in heavy industries. Symmetrical core-oriented type provides a smaller cross-section for grounding wires. This structure protects the connected system from high-frequency discharge currents.

Cable Construction

Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PE (Polyethylene)
Core Colors	HD 308 S2
Lay-up	3 power cores twisted together and 3 ground cores arranged symmetrically in the

	interstices
Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (Polyvinyl Chloride), RAL 9005 - Black (Transparent outer sheath is available upon request)
Reference Standards	Based on IEC 60502-1
Conductor	Stranded Annealed Copper (IEC/EN 60228, Class 5)
Insulation	PE (Polyethylene)
Core Colors	HD 308 S2
Lay-up	3 power cores twisted together and 3 ground cores arranged symmetrically in the interstices
Separator	Al-PET Foil
Screen	Tinned Copper Wire Braid
Outer Sheath	PVC (Polyvinyl Chloride), RAL 9005 - Black (Transparent outer sheath is available upon request)
Reference Standards	Based on IEC 60502-1

Technical Properties

Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+70°C, Installation: -5°C...+70°C
Flame Retardancy	IEC 60332-1-2
Min. Bending Radius	10 x Cable Diameter
Conductor Resistance	IEC/EN 60228
Operating Voltage	0.6/1 kV
Test Voltage	3.5 kV
Temperature Range	Operating: -30°C...+70°C, Installation: -5°C...+70°C
Flame Retardancy	IEC 60332-1-2
Min. Bending Radius	10 x Cable Diameter
Conductor Resistance	IEC/EN 60228

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