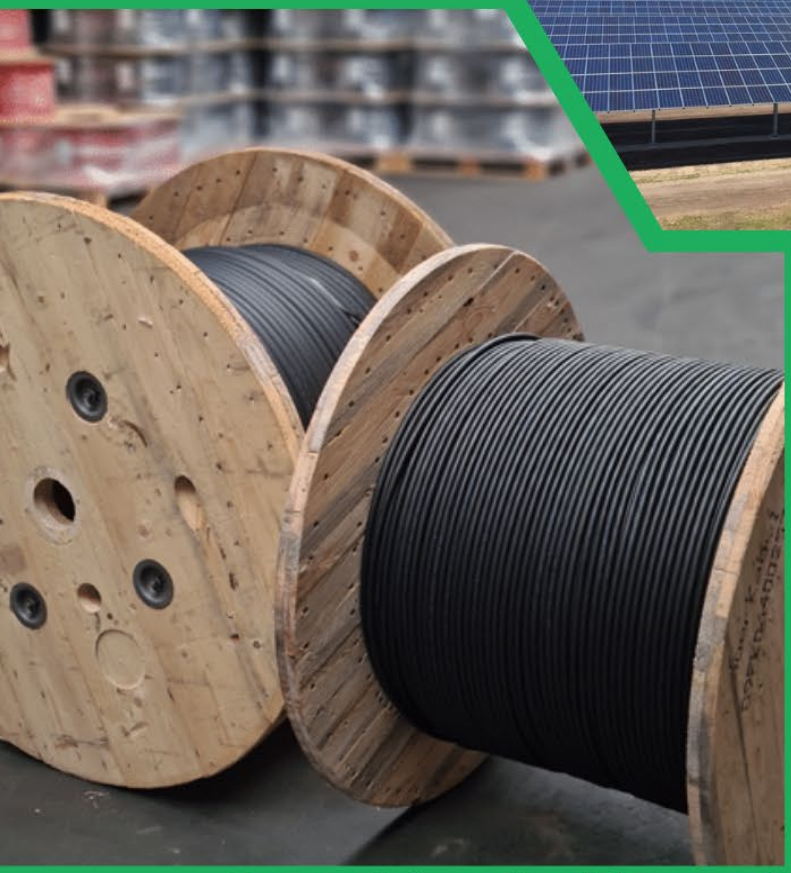
ATHILEX

Your Cable specialist!



For more information visit www.athilex.com or mail to info@athilex.com

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About the company

Athilex was founded in 2020 as a small cable distributor for the solar market. Because of knowledge and experience we developed a big and important cable company in a fast-changing market. The expansion in our product range is there for a crucial step towards being one of the best cable distributors. On top of that we try to maintain a storage so that orders will be shipped right as our customers order them.

Limited edition specially designed cables until huge projects, because we have a wide range of storage and knowledge, we can name ourselves a worthy partner in business.

Athilex has more than 20 years of experience and knowledge in the cable market, here for we can assist you with just only half an application. Our strength is apart from quick service and fast correct deliveries that we honestly think along with our customers to support them and come to a fitting solution to their problems.

Because we work closely with European factories, we have a noticeably short delivery time and a high-quality product that goes along with the international demands and norms.

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F-UTP – 6A 4x2AWG23/1 LSZH (B2CA)

DESIGN

Conductor
Solid Bare Copper

Drain Wire
Tinned Copper

Insulation
Polyethylene (PE) With a Diameter of 1,15 ± 0,05 (mm)

Twisted conductors in pairs , corded on a helical separator

Taping Shield
Aluminium / PET foil

Sheath Colour
Green RAL 6018

Material
Halogen-free LSZH TI7

Pairs Colours Brown – White/Brown
Blue - White/Blue
Green – White/Green
Orange – White/Orange

APPLICATIONS

Foil shielded twisted pair cable for Cat. 6A networks (up to 550 MHz). Suitable for installations in public buildings such as hospitals, airports, malls, in vertical bundle mounting

TECHNICAL DATA

Conductor Loop Resistance	140 Ohm/Km
Mutual Capacity C1	56 pF/m
Velocity Ratio	69%
Voltage Rating Uo/U	0 V
Test Voltage	2000 V (AC)
Temperature Range (Fixed installation)	-15°C / + 70°C
Minimum Bending Radius (Fixed installation)	10 x Diameter
Fire Behaviour (According to EN 50575)	B2CA

Frequency (Mhz)	1.0	4.0	10.0	16.0	20.0	31.3	62.5	100	200	250	500
Attenuation (Db)	2.1	3.8	5.9	7.5	8.4	10.5	15.0	19.1	27.6	31.1	45.3 **NEXT**
(Min. dB)	74.3	65.3	59.3	56.2	54.8	51.9	47.4	44.3	39.8	38.3	33.8

DIMENSION

Part Number	Cross Section	Construction Conductor	Resistance	Diameter	Weight	Drain Wire Construction
	(mm²)	(mm)	(MOhm/km)	(mm)	(Kg/Km)	(n x mm)
18060	4x2xAWG23/1	1x0.60	>20	7,50 ± 0,10	103	1x0.40

** The product and information presented in this document are for calculation only and subject to technical progress. Outer diameters are approximately **

Copper rope, Cu bare, hard drawn

DESIGN

Conductor
Class 2 = Stranded

Conductor material
Cu, bare, hard drawn

Standard
DIN 48201/1

APPLICATIONS

Hard-drawn conductors are used primarily as overhead lines. Their mathematical tensile strength is 400 N/sqmm.

Soft annealed conductors have a calculated tensile strength of 200 N/sqmm, whereas for hard drawn conductors this value is 400 N/sqmm

DIMENSIONS

Part Number	Cross Section (mm^2)	Conductor Resistance (Ohm/km)	Outer Diameter (mm)	Copper Weight (Kg/km)	Weight (Kg)
CR-001	1X10 sqmm (7x1.35mm)	1.83	4.1	96	90
CR-002	1X16 sqmm (7x1.7mm)	1.15	5.1	154	154
CR-003	1X25 sqmm (7x2.1mm)	0.727	6.3	240	240
CR-004	1X35 sqmm (7x2.5mm)	0.524	7.5	336	336
CR-005	1X35 sqmm (19x1.53mm)	0.524	7.6	336	336
CR-006	1X50 sqmm (7x3mm)	0.387	9	480	480
CR-007	1X50 sqmm (19x1.8mm)	0.387	9	480	480
CR-008	1X70 sqmm (7x3.55mm)	0.268	10.7	672	672
CR-009	1X70 sqmm (19x2.1mm)	0.268	10.5	672	672
CR-010	1X95 sqmm (19x2.5mm)	0.193	12.5	912	912

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H05RNH2-F

DESIGN

Conductor
Copper, Bare

Conductor construction
Class 5 = flexible

Insulation
Rubber (EPR) EI4

Sheath Material
Rubber (CR) EM2

APPLICATIONS

The Cable is suitable for dry and wet rooms as well as outdoors for temporary installation of fairy lights

CHARACTERISTICS

Flame Retardant	**VDE 0482-332-1-2/IEC 60332-1-2**
Max Temperature on Conductor	**60°C**
Permitted outer cable temperature, Fixed Min.	**-25°C - + 60°C**
Nominal Voltage Uo/u	**300/500 V**
Standards	**EN 50525-2-82**

DIMENSIONS – H05RNH2-F

Part Number	Cross Section	Conductor Resistance	Width of (flat) cable approx	Height of (flat) cable approx	Weight
	(mm^2)	(Ohm/Km)	(mm)	(mm)	(Kg/Km)
RF-001	**2x1.5 Green**	13.3	14	6	145
RF-002	**2x2.5 Black**	7.41	14	6	195

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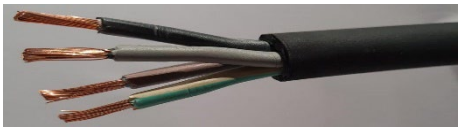
H07RN-F 450/750V



DESIGN

Conductor
Electrolytic annealed copper conductor class 5 (flexible) according to EN 60228 and IEC 60228).

Insulation
Thermosetting rubber insulation type EI7 according to EN 50363-1.
The standard identification according to HD 308 and HD 186 is the following:

1x	**Natural**
2x	**Blue, Brown**
3G	**Blue, Brown & Green/Yellow**
3x	**Brown, Black & Grey**
4G	**Brown, Black, Grey & Green/Yellow**
4x	**Brown, Black, Grey & Blue**
5G	**Brown, Black, Grey, Blue & Green/Yellow**
6+	**Black Number & Green/Yellow**

Outer Sheath
Thermosetting flexible rubber outer sheath type EM2 according to EN 50363-2-1, Black.

APPLICATIONS

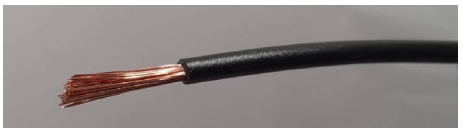
H07RN-F rubber cables are designed to supply power to low voltage appliances including electric motors and submersible pumps in deep water installations, as well as many other electrical equipment. Thanks to its extraordinary flexibility and mechanical strength, the H07RN-F cable is ideal for power transmission in both fixed installation or mobile service. The use nominal voltage up to 1000V is accepted in fixed protected assemblies. H07RN-F cables are designed to power all types of electrical equipment including motors and submersible pumps in deep water installation (AD8).
Cable for submersible pumps in drinkable water according to AS/NZS 4020. Deep wells, drinkable water, AWQC. Installation conditions: open air, submersible pumps cable.

- **Industrial use**
- **Mobile use**
- **Robotics**
- **Windmills**
- **Temporary site installations**

CHARACTERISTICS

Electrical Performance	**450/750 V**
Maximum Service Temperature	**90°C**
Maximum Short-Circuit Temperature	**250°C (Max. 5s)**
Minimum Service Temperature	**-40°C (Fixed and protected), 25°C (Mobile use)**
Flame non-propagation	**EN 60332-1 / IEC 60332-1**
CPR	**Eca according to EN 50575**
Minimum Bending Radius	**<12mm. 3x Outer Diameter, >12mm. 4x Outer Diameter**
Impact Resistance	**AG2 Medium Severity**
Chemical & Oil Resistance	**Excellent**
Grease & Mineral Oils Resistance	**Excellent**
Water Resistance	**AD8**
Standards & Approvals	**EN 50525-2-21, IEC 60092-353, IEC 60245, HAR, AENOR, DNV, RoHS, CE**

H07V-K



DESIGN

Conductor
Bare Copper, class 5 (flexible)

Insulation
PVC Insulation

APPLICATIONS

For laying in pipes on top of or under plaster and in closed installation ducts and for internal wiring of machinery, switchgear and distributor systems. The cable is not suitable for direct laying under plaster.

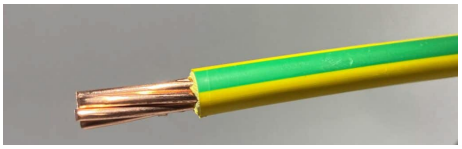
CHARACTERISTICS

Nominal Voltage Uo/U	**450/750 V**
Test Voltage	**2.5 kV**
Loop Resistance	**78.4 Ohm/km**
Maximum Operating Capacity	**100 nF/km**
Max. Temperature at Conductor	**70°C**
Permitted Outer Cable Temperature	**Fixed: -5°C to 70°C, Moved: 5°C to 70°C**
Bending Radius	**Fixed: 4 x Cable Diameter**
Flame Retardant	**VDE 0482-332-1 / IEC 60332-1-2**
CPR	**Eca**
Standard	**EN 50525-2-31**

DIMENSIONS

Section	Conductor Diameter	Conductor Resistance	Insulation Thickness	Ampacity in Air 30°C	Bedding Radius, Fixed	Outer Diameter	Approx. Weight
(mm^2)	(mm)	(Ohm/km)	(mm)	(A)	(mm)	(mm)	(Kg/Km)
1x2.5	2.6	7.98	0.8	32	13.6	3.4	32
1x4.0	3.2	4.95	0.8	42	15.6	3.9	46
1x6.0	3.9	3.3	0.8	54	18	4.5	65
1x10	5.1	1.91	1	73	17.4	5.8	115
1x16	6.3	1.21	1	98	21	7	170
1x25	7.8	0.78	1.2	129	34	8.5	260
1x35	9.2	0.554	1.2	158	39.2	9.8	360
1x50	11	0.386	1.4	198	46.4	11.6	515
1x70	13.1	0.272	1.4	245	53.2	13.3	710
1x95	15	0.206	1.6	292	61.2	15.3	940
1x120	17	0.161	1.6	344	67.6	16.9	1180
1x150	19	0.129	1.8	391	75.2	18.8	1600
1x185	21	0.106	2	448	84	21	2100
1x240	24	0.0801	2.2	528	96	24	3015

H07V-R 450/750V



DESIGN

Conductor
H07V-R Class2 stranded cu
H07V-U Class1 Solid cu

APPLICATIONS

For laying in pipes on top of or under plaster and in closed installation ducts and for internal wiring of machinery, switchgear and distributor systems. The cable is not suitable for direct laying under plaster.

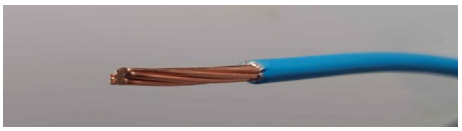
CHARACTERISTICS

CPR acc. To EN 50575	**ECA**
Standard	**EN 50525-2-31**
Flame-retardant	**VDE 0482-332-1-2 / IEC 60332-1-2**
Max. temperature at conductor	**70°C**
Permitted outer cable temperature, fixed	**-5°C up to +70°C**
Permitted outer cable temperature, moved	**5°C up to 70°C**
Bending radius, fixed	**6 x Outer Diameter**
Conductor resistance	**3.08**
Nominal voltage Uo/U	**450/750 V**
Test voltage	**2.5 kV**

DIMENSIONS

Cross Section (mm^2)	Diameter Conductor (mm)	Conductor Resistance (mm)	Insulation Thickness (mm)	Ampacity inAir (30°C) (A)	Outer Diameter (mm)	Weight (Kg/Km)
1x6	3.3	3.08	0.8		4.7	65
1x16	5.3	1.15	1.0	98	6.8	175
1x25	6.6	0.727	1.2	129	8.5	275
1x35	7.9	0.524	1.2	158	9.5	370
1x50	9.1	0.387	1.4	198	11.2	500
1x70	11	0.268	1.4	245	12.7	710
1x95	12.9	0.193	1.6	292	14.8	970
1x120	14.5	0.153	1.6	344	16.3	1200
1x150	16.2	0.124	1.8	391	18.2	1470
1x185	18	0.0991	2.0	448	20.4	1806

H07Z1-R – B2ca



DESIGN

Conductor
Bare Copper, Class 2 According to EN 60228

Insulation
Thermoplastic compound TI7 according to EN 50363-7

Sheath Colour
Green/Yellow

APPLICATIONS

Thermosetting insulated , non-sheathed , single core cables with low emission of smoke

CHARACTERISTICS

CPR Classification	**B2ca-s1,d0,a1 According to EN 13501-6:2018**
Nominal Voltage (U°/U)	**450/750 V**
Test Voltage	**2500 V**
Max Electrical resistance of conductors at 20°C	**Ω/km According to EN 60228 class.2**
Temperature Range	**20°C + 70°C During installation: Min +5 °C**
Max Temperature of conductor	**+ 70°C**
Short-Circuit Temperature conductors +300mm2	**+160°C**
Minimum Bending Radius	**4 x Ø ex**

DIMENSIONS

Part Number	Cross Section	External Diameter	Insulation Thickness	Conductor Resistance at 20°C Max.	Min insulation resistance at 70 °C	Cable Weight
	(mm^2)	(mm)	(mm)	(Ω/km)	(MΩ/km)	(Kg/Km)
HZRB2-001	1x1.5	2.9	0.7	12.1	0.010	20.8
HZRB2-002	1x2.5	3.8	0.8	7.41	0.0099	33.4
HZRB2-003	1x4	4.2	0.8	4.61	0.0082	48.8
HZRB2-004	1x6	4.6	0.8	3.08	0.0070	68.4
HZRB2-005	1x10	6.0	1.0	1.83	0.0067	114.3
HZRB2-006	1x16	7.0	1.0	1.15	0.0056	168.1
HZRB2-007	1x25	8.7	1.2	0.727	0.0053	260.9
HZRB2-008	1x35	9.8	1.2	0.524	0.0046	350.3
HZRB2-009	1x50	11.5	1.4	0.387	0.0046	482.8
HZRB2-010	1x70	13.4	1.4	0.268	0.0040	673.3
HZRB2-011	1x95	15.7	1.6	0.193	0.0039	925.1
HZRB2-012	1x120	17.2	1.6	0.153	0.0035	1144.8
HZRB2-013	1x150	19.1	1.8	0.124	0.0035	1413.8
HZRB2-014	1x185	21.2	2.0	0.0991	0.0035	1735.5
HZRB2-015	1x240	24.1	2.2	0.0754	0.0034	2289.5
HZRB2-016	1x300	27.2	2.4	0.0601	0.0033	2907.5
HZRB2-017	1x400	31.0	2.6	0.0470	0.0031	3829.2
HZRB2-018	1x500	34.4	2.8	0.0366	0.0030	4742.4
HZRB2-019	1x630	37.8	2.8	0.0283	0.0027	6030.1

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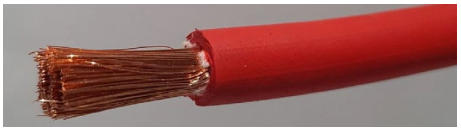
ATHIFLEX



DESIGN

Conductor
Flexible Red Copper

Outer Sheath
TM2 (EN 50363-4-1), Black

APPLICATIONS

For secondary side connection of powers sources for hand or automatic metal-arc welding for secondary voltage typical of welding equipment.

CHARACTERISTICS

Nominal Voltage	450/750 V
Test Voltage	2500 V
Operating Temperature	-20°C up to 70°C
Short Circuit Temperature	160°C
Self-Extinguishing	EN 60332-1-2; IEC 60332-1-2
Minimum Bending Radius	For cables with diameter up to 12mm: 5 times the max. outer diameter in case of non-constrained motion and 4 times in case of fixed installation. For cables with greater diameter: 6 times the max. outer diameter in case of non-constrained motion and 5 times in case of fixed installation.

DIMENSIONS

Part Number Black / Red	Cross Section (mm^2)	Wires Max. Diameter (mm)	Conductor Diameter (mm)	Core Thickness ± 0.1 (mm)	Medium Outer Diameter ± 0.2 (mm)	Electrical Resistance (20°C) (Ω/km)
180001 / 180002	1x16	0.310	5.40	1.80	8.7	1.28
180003 / 180004	1x25	0.310	6.50	1.90	10.3	0.85
180005 / 180006	1x35	0.310	7.60	2.10	12.2	0.58
180007 / 180008	1x50	0.310	9.30	2.20	14.1	0.41
180009 / 180010	1x70	0.310	10.80	2.40	15.6	0.28
180011 / 180012	1x95	0.310	12.50	2.64	17.8	0.21

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JE-H(st)H LG

DESIGN

Conductor
Solid Copper Wire (Class 1) acc. to EN 60228, IEC 60228

Insulation
LSZH (Low Smoke Zero Halogen) acc. to EN 50290-2-26, Diameter: 1.60mm
Colours (Red-Black, Yellow-White, Green/White, Brown/White)

Stranding
Pairwise, Pairs in Layers

Separator
PET (Polyester Tape)

Screen
0.80mm Tinned Drain Wire + AL/PET (Aluminium/Polyester Tape)

Outer Sheath
LSZH (Low Smoke Zero Halogen) acc. to EN 50290-2-27, Red

APPLICATIONS

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

TECHNICAL DATA

AC Test Voltage (Core-Core / Core Screen)	800 / 800 V
Rated Voltage	225 V
Min. Bending Radius (During Laying)	10 x Diameter
CPR Fire Performance	Cca-s1a,d2,a1
Working Temperature (Mobile)	-5°C up to +50°C
Working Temperature (Stable)	-30°C up to +70°C
Max. Working Temperature	+70°C
Applicable Standards	DIN VDE 0815, TS 13767
Flame Retardant Test (Bunched Cables)	EN IEC 60332-3-24 Cat. C
Smoke Density	EN 61034-2, IEC 61034-2
Determination of Halogen Acid Gas	EN 60754-1, IEC 60754-1
Determination of Acidity & Conductivity	EN 60754-2, IEC 60754-2
Standards	RoHS, REACH, European Conformity, Eurasian Conformity

DIMENSIONS

Part Number	Cross Section (mm^2)	Insulation Thickness (mm)	Sheath Thickness (mm)	Outer Diameter (mm)	Weight (Kg/Km)	Max. Loop Resistance Conductor (Ω/Km) (20°C)	Insulation Resistance (MΩ/Km)	Mutual Capacitance (nF/Km)
JE-H-001	1x2x0.80+0.80	0.40	0.75	4.90	37	73.20	100	100
JE-H-002	2x2x0.80+0.80	0.40	0.80	5.35	53	73.20	100	100
JE-H-003	4x2x0.80+0.80	0.40	0.80	8.75	96	73.20	100	100

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JE-H(st)H BD FE180/E30-E90

DESIGN

Conductor
Solid Copper Wire (Class 1) acc. to EN 60228, IEC 60228

Insulation
Cross-linked Elastomer Silicone acc. to EN 50363-1 EI2, Colour of Insulation acc. to VDE 0815

Stranding
2 Pair Star Quad, more than 2 pairs groups in layers.

Separator
PET (Polyester Tape), Glass Fibre Tape (Flame Barrier)

Screen
0.80mm Tinned Drain Wire + AL/PET (Aluminium/Polyester Tape)

Outer Sheath
LSZH (Low Smoke Zero Halogen) acc. to EN 50290-2-27, Orange

APPLICATIONS

Instrumentation and control engineering, industrial electronics, computers and office machines, indoor communication systems, indoor sound systems, in places where human life and valuable materials and equipment need to be protected.

TECHNICAL DATA

Test Voltage (Core-Core / Core Screen)	500 / 2000 V
Rated Voltage	225 V
Min. Bending Radius (During Laying)	10 x Diameter
CPR Fire Performance	B2ca
Working Temperature (Mobile)	-5°C up to +50°C
Working Temperature (Stable)	-30°C up to +70°C
Applicable Standards	DIN VDE 0815, TS 13767
Flame Retardant Test (Bunched Cables)	EN IEC 60332-3-24 Cat. C
Smoke Density	EN 61034-2, IEC 61034-2
Determination of Halogen Acid Gas	EN 60754-1, IEC 60754-1
Determination of Acidity & Conductivity	EN 60754-2, IEC 60754-2
Circuit Integrity Test (FE180)	IEC 60331-21
Cable System Circuit Integrity Test (E30-E90)	Din 4102-12
Standards	RoHS, REACH, European Conformity, Eurasian Conformity

DIMENSIONS

Part Number	Cross Section (mm²)	Insulation Thickness (mm)	Sheath Thickness (mm)	Outer Diameter (mm)	Weight (Kg/Km)	Max. Loop Resistance Conductor (Ω/Km) (20°C)	Insulation Resistance (MΩ/Km)	Mutual Capacitance (nF/Km)
E90-001	1x2x0.80+0.80	0.35	0.75	5.00	37	73.20	>100	120
E90-002	1x2x1.50+0.80	0.50	1.10	7.55	81	24.60	>100	120
E90-003	2x2x0.80+0.80	0.35	0.80	6.65	57	73.20	>100	120
E90-004	4x2x0.80+0.80	0.35	1.00	8.00	96	73.20	>100	120

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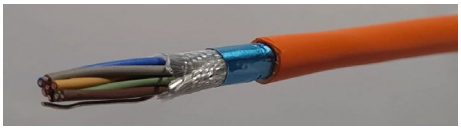
Li-YZ Loudspeaker 2x1.00



DESIGN

Conductor
Bare Copper , Stranded

Insulation
Polyvinylchloride (PVC) TM2 (YM2)

Sheath colour
Red/Black

APPLICATIONS

Connection and supply of small electronic devices and / or stereo systems. Not useable for electrical systems. The Eca CPR class allows it to be installed in ordinary buildings where permitted, in a single horizontal installation.

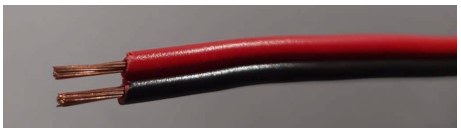
TECHNICAL DATA

Peak Operating Voltage	49 Vac / 110 Vdc
Voltage Rating Uo/U	300/300 V
Test Voltage	2000 V (AC)
Temperature Range (Fixed installation)	-15°C / + 70°C
Minimum Bending Radius (Fixed installation)	10 x Diameter
Fire Behaviour (According to EN 50575)	Eca

DIMENSION

Part Number	Cross Section	Construction	Insulation Resistance	Dimensions	Weight	Inner Conductor Resistance
	(mm^2)	(mm)	(MOhm/km)	(mm)	(Kg/Km)	(Ohm/Km)
99001	2x1.00	30 x 0.18	>20	2.45 x 4.90 ± 0.10	27.5	21.8

YMZ1Kmbzh AL



DESIGN

Conductor
AL, Class 1 or 2 according to EN 60228

Insulation
XLPE Compound

Bedding
Extruded elastomere or plastomere LSZH compound or plastic tape

Outer Sheath
LSZH Compound, type ZH1/ST

APPLICATIONS

In earth, ducts, on support brackets, in dry and wet conditions etc., where one does not expect mechanical damages and the cables are not exposed to the mechanical tensile strain. In urban networks industrial plants, electric power and plants, electric power plants and other electricity consumers and for connection of control devices in industry, traffic et., where fire prevention safety measures are requested, for elevated electricity and thermic strains.

TECHNICAL DATA

Nominal Voltage (Uo/U)	0.6/1 kV
Testing Voltage	4 kV
Max. Working Temperature	90°C
Max. short-circuit temperature	250°C
Min. Laying Temperature	-5°C
Min. Bending Radius	15 x Outer Diameter
CPR	CCA
Standard	HD 604 S1, IEC 60502-1

DIMENSIONS

Section (mm^2)	Conductor Shape	Max. Resistance at 20°C (Ω/Km)	Current Capacity in Air (A)	Current Capacity in Ground (A)	Outer Diameter Approx. (mm)	Weight (Kg/Km)
1x70	RM	0.443	204	199	14.4	324

** The product and information presented in this document are for calculation only and subject to technical progress. Outer diameters are approximately **

H01N2-D

DESIGN

Conductor
Copper conductor, bare, flexible, conductor structure according to VDE 0295 Class 5 and IEC 228 Class 5.

Cores
OZ: without green/yellow earthing core, number coded cable
JZ: with green/yellow earthing core, number coded cable
OB: without green/yellow earthing core, coloured cores.
JB: with green/yellow earthing core, coloured cores.

Stranding Method
Cores stranded in layers, with optimum lay lengths.

Protective Conductor
Green and yellow in the outer layer.

Outer Sheath
Sheath material made from special PVC compound.

APPLICATIONS

Used as a measuring and control cable on machinery, conveyor belts, in air conditioning technology, systems engineering and dry and damp rooms under low mechanical loads. Only for outdoor use in the case of shielded installation. Not suitable in water. The cable is largely resistant against the effects of acids, lyes and oils.

CHARACTERISTICS

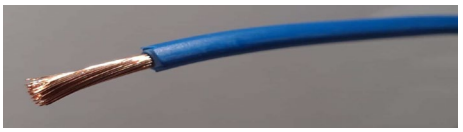
Nominal Voltage	300/500 V
Test Voltage	3000 V
Conductor Resistance	At 20°C acc. To VDE 0295 Class 5 and IEC 228 Class 5.
Conductor Temperature	Max. 70°C during operation, 150°C in case of short circuit.
Insulation Resistance	1.5 KG/mm^2
Nominal Voltage	100/100 V
Min. Bending Radius	4:8 x ∅
Standards	CEI EN 50525-1; CEI EN 50525-2-81; CEI 20-107-1; CEI 20-107-2-81; CEI EN/IEC 60228;

DIMENSIONS – H01N2-D

Part Number Black / Red	Cross Section (mm^2)	Conductor Wires (mm)	Sheath Thickness (mm)	Diameter Min / Max (mm)	Weight (Kg/Km)	Max. Electrical Resistance (20°C) (Ohm/Km)
56004 / 56104	1x10	0.21	2.0	7.7 / 9.7	135	1.91
56005 / 56105	1x16	0.21	2.0	8.8 / 11.0	198	1.21
56006 / 56106	1x25	0.21	2.0	10.1 / 12.7	285	0.780
56007 / 56107	1x35	0.21	2.0	11.4 / 14.2	385	0.554
56008 / 56108	1x50	0.21	2.2	13.2 / 16.5	550	0.386
56009 / 56109	1x70	0.21	2.4	15.3 / 19.2	750	0.272
56010 / 56110	1x95	0.21	2.6	17.1 / 21.4	1015	0.206
56011 / 56111	1x120	0.51	2.8	19.2 / 24.0	1250	0.161

** The product and information presented in this document are for calculation only and subject to technical progress. Outer diameters are approximately **

H05V-K - H07V-K



DESIGN

Conductor
Flexible Bare Copper, Class 5

Insulation
PVC Compound Type TI1

APPLICATIONS

For fixed laying on bare walls or stell structures, in pipes or ducts, or in signal and control panels, switchgear etc.

H05V-K – Installation inside appliances and in lighting fittings; The cables are suitable for installation in surface mounted or embedded conduits when used only for signalling or control circuits.

H07V-K - Installation in surface-mounted or embedded conduits, or similar closed systems. Suitable for fixed protected installation in, lighting and control gear for voltages up to and including 1000 V a.c. or up to 750 V d.c. to earth.

CHARACTERISTICS

Nominal Voltage Uo/U	450/750 V
Maximum Voltage Um	1 kV
Surface Operating Temperature	Fixed installation: -30°C up to +70°C
Flame Behaviour	Flame retardant according to EN 60332-1-2
Bending Radius	4 x Outer Diameter
Max. temperature in case of short circuit	160°C on the conductor (max. 5 seconds)
Standards	EN50525-2-31, HD21.3, EN50363, IEC/EN 60332-1-2
	IEC/EN 60228

DIMENSIONS H05V-K

Section	Max. Diameter of Conductor Wire	Insulation Thickness	Outer Diameter	Max. Cond. Resist. At 20°C	Weight
(mm^2)	(mm)	(mm)	(mm)	(Ohms/Km)	(Kg/Km)
1x0.5	0.21	0.6	2.1	39.0	9
1x0.75	0.21	0.6	2.4	26.0	12
1x1	0.21	0.6	2.5	19.5	15

DIMENSIONS H07V-K

Section	Max. Diameter of Conductor Wire	Insulation Thickness	Outer Diameter	Max. Cond. Resist. At 20°C	Weight
(mm^2)	(mm)	(mm)	(mm)	(Ohms/Km)	(Kg/Km)
1x1.5	0.26	0.7	2.9	13.3	20
1x2.5	0.26	0.8	3.6	7.98	30
1x4	0.31	0.8	4.1	4.95	45
1x6	0.31	0.8	4.7	3.3	65
1x10	0.41	1.0	6.1	1.91	110
1x16	0.41	1.0	6.9	1.21	160
1x25	0.41	1.2	8.7	0.78	250
1x35	0.41	1.2	9.9	0.554	340
1x50	0.41	1.4	11.6	0.386	480
1x70	0.51	1.4	13.3	0.272	670
1x95	0.51	1.6	15.2	0.206	890
1x120	0.51	1.6	17.0	0.161	1140
1x150	0.51	1.8	18.9	0.129	1410
1x185	0.51	2.0	21.0	0.106	1710
1x240	0.51	2.2	23.9	0.0801	2270

** The product and information presented in this document are for calculation only and subject to technical progress. Outer diameters are approximately **

H07Z1-K Tinned Copper

DESIGN

Conductor
Electrolytic annealed tinned copper conductor, flexible class 5 according to IEC 60228 & EN 60228.

Insulation
UV resistant (LSHF) polyolefin insulation type TI7 according to EN 50363-7.
The standard identification of insulated conductors are Green/Yellow acc. To RAL 6018/1021.

APPLICATIONS

Outdoor H07Z1-K is a LSHF safety cable specially engineered for earthing connections in outdoor installations. The tinned copper and the special UV resistant compound make the cable resistant against corrosion and UV rays degradation.

CHARACTERISTICS

Electrical Performance	450/750 V
CPR	B2ca-s1a,d1,a1, according to EN 50575
Thermal Performance	Min. service temperature: -40°C (fixed & protected installations)
	Max. service temperature: 70°C
	Maximum short-circuit temperature: 160°C (max. 5s.)
Fire Performance	Flame non-propagation: EN 60332-1 and IEC 60332-1
	Fire non-propagation: EN 60332-3-24/IEC 60332-3-24 & EN 50399
LSZH (Low Smoke Zero Halogen)	According to EN 60754-1 / IEC 60754-1
	HCl content < 0.5%
	pH > 4,3, conductivity < 10 µS/mm
Low Smoke Emission	According to EN 61034 / IEC 61034
Light Transmittance	> 80%
Low Corrosive Gases Emission	According to EN 60754-2 / IEC 60754-2
Minimum Bending Radius	5 x cable diameter
Environmental Performance	Chemical & Oil Resistance: Excellent
	Grease & Mineral Oils Resistance: Excellent
	UV Resistant: Acc. to EN 50618
	Ozone Resistance: Acc. to EN 50618
	Water Resistance: AD3 Sprays.
Standards	Acc. to EN 50525-3-31/ UNE 211002
Approvals	HAR, AENOR, BUREAU VERITAS, RoHS, CE

SHORT-CIRCUIT CURRENT-CARRYING CAPACITIES

Time (s)	0.1	0.2	0.3	0.5	1	1.5	2	2.5	3
A/mm²	364	257	210	163	115	94	81	73	66

CORRECTION FACTORS

Air T. (°C)	20	25	30	35	40	45	50	55	60
Factor	1.12	1.06	1	0.94	0.87	0.79	0.71	0.61	0.50

DIMENSIONS

Part Number	Section	Diameter	Weight	In conduit 2 cond.	In conduit 3 cond.	Voltage Drop
	(mm²)	(mm)	(Kg/KM)	(A)[1]	(A)[1]	(V/A, KM)[2]
200062	1x4.0	4.1	45	32	28	12.2
200060	1x6.0	4.7	65	41	36	8.11
200065	1x10	6.0	105	57	50	4.66
200064	1x16	7.0	160	76	68	2.97
200066	1x25	8.8	250	101	89	1.90
200067	1x35	9.9	335	125	110	1.35
200068	1x50	11.7	480	151	134	0.94

[1] Reference method B1 for two and three loaded conductors installed in conduit on a wall according to IEC 60364-5-52 in open air at 30°C ambient temperature.
[2]At 70°C conductor temperature, cos φ=1 and singe-phase circuit.

** The product and information presented in this document are for calculation only and subject to technical progress. Outer diameters are approximately **

Li2YCYv (TP)

DESIGN

Conductor
Barre Copper, Class 2 – 7 Wired Construction

Insulation
Polyethylene

Screen
Tinned Copper Braid (75% Coverage)

Outer Sheath
PVC Enforced, Black

APPLICATIONS

Low-capacitance cable for signal transmission in the mA-range under heavy environmental influences, outdoors and for direct burial. The cable is suitable for Maxi-Termi-Point contacting.

CHARACTERISTICS

Peak Operating Voltage	500 V
Test Voltage	2 kV
Maximum Operating Capacity	75 nF/km
Flame Retardant	VDE 0482-332-1-2 / IEC 60332-1-2
UV Resistant	Yes
Permitted Outer Cable Temperature	Fixed: -15°C up to +80°C, Moved: -5°C up to +70°C
Bending Radius	Fixed: 7.5 x Outer Diameter, Moved: 12 x Outer Diameter
Insulation Resistance	5000 MOhm x Km

DIMENSIONS

Part Number	Section	Diameter	Weight
	(mm^2)	(mm)	(KgKm)
30001	2x2x0.22	6.4	49
30002	3x2x0.22	7.2	64
30003	4x2x0.22	7.9	76
30004	8x2x0.22	9.8	125
30005	10x2x0.22	11.5	162
30006	1x2x0.34	7.4	44
30007	2x2x0.34	6.8	57
30008	3x2x0.34	7.7	76
30009	4x2x0.34	8.6	95
30010	8x2x0.34	10.8	158
30011	10x2x0.34	12.5	204
30012	1x2x0.5	6.2	48
30013	2x2x0.5	7.2	72
30014	3x2x0.5	9.1	101
30015	4x2x0.5	10.2	127
30016	8x2x0.5	12.5	205
30017	10x2x0.5	14.7	269
30018	12x2x0.5	15.3	301
30019	24x2x0.5	20.1	529
30020	2x2x0.75	10	122
30021	4x2x0.75	11.7	191
30022	8x2x0.75	15.1	308
30023	10x2x0.75	17.3	404
30024	1x2x1.0	6.6	54
30025	2x2x1.0	10.0	107
30026	4x2x1.0	12.3	203

** The product and information presented in this document are for calculation only and subject to technical progress. Outer diameters are approximately **

LIHCH – Signal and control cables.

DESIGN

Conductor
Electrolytic Stranded Copper Wire

Insulation
HFFR Insulation / Polyester Tape

Construction
Tinned copper wire braiding

Sheath Material
HFFR Outer Sheath – EN50290-2-22

APPLICATIONS

These screened cables are used as signal transmission cables for indoor applications. They can be easily used with their flexible construction in narrow applications like: electronic control systems of computer or audio systems or in 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 they don't burn easily and if they do the flames go off by themselves. They have low smoke density and they don't emit poisonous and corrosive gases during the fire. They are used in buildings where there are important goods or human population.

CHARACTERISTICS

Flame Retardant	EN 60332-1-2
Reaction to Fire Performance:	B2ca
Insulation Resistance	0.22-0.34mm² 200 MΩ .km ≥ 0.50 mm² = 20 MΩ .km
Min Bending Diameter	10 x Diameter
Conductor Standard No	EN 60228
Insulator colour No	DIN 47100
Outer sheath standard No	EN 50290-2-22
Outer sheath colour No	RAL 7032
Insulation standard No	EN 50290-2-21
Working Temperature	-30°C + 70°C
Test Voltage	0.22-0.34mm² = 1200 V- ≥0.50mm² = 2000V
Working Voltage	0.22-0.34mm² = 250 V- ≥0.50mm² = 300/500 V

With their flexible design they can easily be used in narrow spaces, these cables are not suitable for outdoor use.

OZ: Without Green/Yellow Earthing Core, Number Coded Cable
JZ: With Green/Yellow Earthing Core, Number Coded Cable
JB: With Green/Yellow Earthing Core, Colour Coded Cable

RESISTANCE

Conductor Resistance	Mutual Capacitance	Current Carrying Capacity
0.22 mm2 = 79 Ω/Km	0.22 mm2 = 110 pf/m	0.22 mm2 = 2.5 A
0.34 mm2 = 56 Ω/Km	0.34 mm2 = 110 pf/m	0.34 mm2 = 4.5 A
0.50 mm2 = 39 Ω/Km	0.50 mm2 = 120 pf/m	0.50 mm2 = 6A
0.75 mm2 = 26 Ω/Km	0.75 mm2 = 120 pf/m	0.75 mm2 = 13A
1,0 mm2 = 19.5 Ω/Km	1.0 mm2 = 130 pf/m	1,0 mm2 = 16 A
1,5 mm2 = 13.3 Ω/Km	1.5 mm2 = 140 pf/m	1.5 mm2 = 20 A
2,5 mm2 = 7,98 Ω/Km	2.5 mm2 = 150 pf/m	2,5 mm2 = 25 A

DIMENSIONS – LIHCH

Part Number	Cross Section (mm^2)	Overall Diameter (mm)	Cable Weight (kg/km)
LCH-001	2x0.22	4,2	26
LCH-002	3x0.22	4,3	29
LCH-003	4x0.22	4,7	39
LCH-004	5x0.22	5	44
LCH-005	6x0.22	5,3	50
LCH-006	8x0.22	5,6	61
LCH-007	10x0.22	6,7	79
LCH-008	12x0.22	7,1	90
LCH-009	14x0.22	7,4	100
LCH-010	16x0.22	7,7	104
LCH-011	18x0.22	8	110
LCH-012	20x0.22	8,3	121
LCH-013	2x0.34	4,6	30
LCH-014	3x0.34	4,8	36
LCH-015	4x0.34	5,2	46
LCH-016	5x0.34	5,6	56
LCH-017	6x0.34	5,9	63
LCH-018	8x0.34	6,2	76
LCH-019	10x0.34	7,6	96
LCH-020	12x0.34	7,9	109
LCH-021	14x0.34	8,2	120
LCH-022	16x0.34	8,7	132
LCH-023	18x0.34	9,2	144
LCH-024	20x0.34	9,6	161
LCH-025	2x0.50	5,4	33
LCH-026	3x0.50	5,6	54
LCH-027	4x0.50	6,2	67
LCH-028	5x0.50	6,9	78
LCH-029	6x0.50	7,4	90
LCH-030	7x0.50	7,4	98
LCH-031	8x0.50	7,7	104
LCH-032	10x0.50	9,6	135
LCH-033	12x0.50	9,7	150
LCH-034	14x0.50	10,1	164
LCH-035	16x0.50	10,7	185
LCH-036	18x0.50	11,2	203
LCH-037	20x0.50	11,6	217

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LI-H(ST)H

DESIGN

Inner Conductor
Bare Copper, Stranded

Insulation
Thermoplastic Halogen-free compound TI7 – EN 50363-7

Cabling
Conductors cabled in concentric layers

Taping
Polyester foil

Shield
Aluminium / PET foil

Drain Wire
Bare Copper, Stranded

Jacket
Thermoplastic Halogen-free compound M1, White

APPLICATIONS

Insulation and the sheath made in special polymer (LSZH), That does not emit halogen gases during combustion. Suitable for installation in public buildings (hospitals, theatres, ecc.). Do not have to be wired Together with energy cables

CHARACTERISTICS

Conductor Resistance 0,22	143,00 Ohm/km
Conductor Resistance 0,50	63,00 Ohm/km
Conductor Resistance 0,75	42,00 Ohm/km
Peak Operating Voltage	250 V (Not for purposes of Power)
Operating Voltage uo	500 V
Test voltage	1200 V
Peak Operating voltage	250 V
Insulation Resistance	MOhm / km >20
Temperature range, fixed installation	- 15°C / + 70 °C
Min. Bending radius, fixed installation	10 x Diameter

STANDARDS

Insulation	EN 50367-7
Jacket	EN 50363-8
Halogen Free	IEC 60754.1; EN 50267-2-1
Fire behaviour	IEC 60332.3; EN 60332-3
Low smoke emission	EN 61034.2
Corrosive gases and halogen	IEC 60754-2; EN 50267-2-1

COLOR LIST

Section 0.22

. White
. Red
. Yellow
. Green
. Grey
. Orange
. Light Blue
. Brown
. Black
. Violet
. Pink

White/Brown
White/Violet
White/Green
White/Blue
White/Grey
White/Yellow
White/Black
White/Red

Section 0.50 – 0.75

. Red
. Black

DIMENSIONS

Artikel	Cross Section (mm^2)	Construction (Approx)	Insulation Diameter (mm)	Diameter (Approx) (mm)	Weight (Kg/Km)
A001-CCA	2x0.22	7x0,15	1.00	3.60	14,9
A002-CCA	4x0.22	7x0,15	1.00	4.00	20,4
A003-CCA	6x0.22	7x0,15	1.00	4.60	26,3
A004-CCA	8x0.22	7x0,15	1.00	5.00	31,7
A005-CCA	10x0.22	7x0,15	1.00	5.50	37,4
A006-CCA	12x0.22	7x0,15	1.00	5.90	42,8
A007-CCA	20x0.22	7x0,15	1.00	7.00	65,5
A008-CCA	2x0.22+2x0.50	7x0,15 / 16x0,15	1.00 / 1,50	4.60	27,4
A009-CCA	4x0.22+2x0.50	7x0,15 / 16x0,15	1.00 / 1,50	5.20	33,3
A010-CCA	6x0.22+2x0.50	7x0,15 / 16x0,15	1.00 / 1,50	5.60	38,7
A011-CCA	8x0.22+2x0.50	7x0,15 / 16x0,15	1.00 / 1,50	5.80	43,5
A012-CCA	10x0.22+2x0.50	7x0,15 / 16x0,15	1.00 / 1,50	6.30	49,1
A013-CCA	12x0.22+2x0.50	7x0,15 / 16x0,15	1.00 / 1,50	6.40	53,7
A014-CCA	2x0.22+2x0.75	7x0,15 / 24x0,15	1.00 / 1,80	5.10	32,9
A015-CCA	4x0.22+2x0.75	7x0,15 / 24x0,15	1.00 / 1,80	5.50	38,3
A016-CCA	6x0.22+2x0.75	7x0,15 / 24x0,15	1.00 / 1,80	5.80	43,3
A017-CCA	8x0.22+2x0.75	7x0,15 / 24x0,15	1.00 / 1,80	6.30	48,9
A018-CCA	10x0.22+2x0.75	7x0,15 / 24x0.15	1.00 / 1,80	6.60	54,1
A019-CCA	20x0.22+2.0.75	7x0,15 / 24x0.15	1.00 / 1,80	8.10	82,7

** The product and information presented in this document are for calculation only and subject to technical progress. Outer diameters are approximately **

LIHH – Signal and control cables.

DESIGN

Conductor
Electrolytic Stranded Copper Wire

Insulation
HFFR Insulation / Pes Tape

Sheath Material
HFFR Outer Sheath – EN50290-2-27

APPLICATIONS

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

CHARACTERISTICS

Flame Retardant	IEC-EN-VDE 60332-1-2
Reaction to Fire Performance:	Cca
Insulation Resistance	0.22-0.34mm² 200 MΩ .km ≥ 0.50 mm² = 20 MΩ .km
Min Bending Diameter	10 x Diameter
Conductor Standard No	EN 60228
Insulator colour No	DIN 47100
Outer sheath standard No	EN 50290-2-27
Outer sheath colour No	RAL 7001
Insulation standard No	EN 50290-2-26
Working Temperature	-30°C + 80°C
Test Voltage	0.22-0.34mm² = 1200 V- ≥0.50mm² = 2000V
Working Voltage	0.22-0.34mm² = 250 V- ≥0.50mm² = 300/500 V

With their flexible design they can easily be used in narrow spaces, these cables are not suitable for outdoor use.

OZ: Without Green/Yellow Earthing Core, Number Coded Cable
JZ: With Green/Yellow Earthing Core, Number Coded Cable
JB: With Green/Yellow Earthing Core, Colour Coded Cable

RESISTANCE

Conductor Resistance	Mutual Capacitance	Current Carrying Capacity
0.22 mm2 = 79 Ω/Km	0.22 mm2 = 110 pf/m	0.22 mm2 = 2.5 A
0.34 mm2 = 56 Ω/Km	0.34 mm2 = 110 pf/m	0.34 mm2 = 4.5 A
0.50 mm2 = 39 Ω/Km	0.50 mm2 = 120 pf/m	0.50 mm2 = 6A
0.75 mm2 = 26 Ω/Km	0.75 mm2 = 120 pf/m	0.75 mm2 = 13A
1,0 mm2 = 19.5 Ω/Km	1.0 mm2 = 120 pf/m	1,0 mm2 = 16 A
1,5 mm2 = 13.3 Ω/Km	1.5 mm2 = 120 pf/m	1.5 mm2 = 20 A
2,5 mm2 = 7,98 Ω/Km	2.5 mm2 = 120 pf/m	2,5 mm2 = 25 A

DIMENSIONS – LIHH

Part Number	Cross Section (mm^2)	Overall Diameter (mm)	Cable Weight (kg/km)
LH-001	2x0.22	3.5	15
LH-002	3x0.22	3.9	19
LH-003	4x0.22	4.2	26
LH-004	5x0.22	4.5	30
LH-005	6x0.22	4.9	36
LH-006	8x0.22	5.3	45
LH-007	10x0.22	6.1	54
LH-008	12x0.22	6.3	63
LH-009	14x0.22	7	78
LH-010	16x0.22	7.3	97
LH-011	18x0.22	7.6	100
LH-012	20x0.22	7.8	106
LH-013	2x0.34	3.9	20
LH-014	3x0.34	4.4	26
LH-015	4x0.34	4.7	33
LH-016	5x0.34	5.1	43
LH-017	6x0.34	5.5	48
LH-018	8x0.34	5.9	63
LH-019	10x0.34	7.1	84
LH-020	12x0.34	7.3	97
LH-021	14x0.34	7.9	105
LH-022	16x0.34	8.3	117
LH-023	18x0.34	8.6	128
LH-024	20x0.34	9	143
LH-025	2x0.50	5	29
LH-026	3x0.50	5.2	36
LH-027	4x0.50	5.6	44
LH-028	5x0.50	6.2	53
LH-029	6x0.50	6.7	67
LH-030	7x0.50	6.7	73
LH-031	8x0.50	7.3	88
LH-032	10x0.50	8.4	106
LH-033	12x0.50	8.7	127
LH-034	14x0.50	9.3	143
LH-035	16x0.50	9.8	160
LH-036	18x0.50	10.3	177
LH-037	20x0.50	10.8	193

LiYCY 250V

DESIGN

Conductor
Bare Copper, Class 5 = Flexible

Insulation
PVC

Screen:
Tinned copper braid,70% coverage

Outer Sheath
PVC (tube extrusion), Grey RAL 7032

APPLICATIONS

For signal transmission between electronic devices, in computer systems, process control units or office equipment with increased electromagnetic compatibility requirements.

CHARACTERISTICS

Flame-Retardant	VDE 0482-332-1-2/IEC 60332-1-2
Permitted outer cable temperature, Fixed, °C	-30 - +80 °C
Permitted outer cable temperature, Moved °C	+5 - +70 °C
Bending radius, fixed installation	6 x Outer Diameter
Bending radius, moving application	15x Outer Diameter
Insulation resistance	100 MOhmxkm
Specific inductivity	0.65 mH/km
Maximum operating capacity	120 nF/km
Test voltage	1.2 kV
Core identification:	Colours acc. To DIN 47100
Peak operating voltage, V:	250 V

DIMENSIONS

Part Numbers	Cross Section	Conductor resistance	Ampacity in air	Outer diameter	Net weight per 1000
	(Mm^2)	(Ohm/km)	(30° C)	(mm)	(Kg)
LIYCY-001	03X0.14	138	2	4	40
LIYCY-002	04X0.14	138	2	4.1	43
LIYCY-003	05X0.14	138	2	4.8	47
LIYCY-004	06X0.14	138	2	4.9	52
LIYCY-005	07X0.14	138	2	5	54
LIYCY-006	08X0.14	138	2	5.3	58
LIYCY-007	10X0.14	138	2	6.4	76
LIYCY-008	12X0.14	138	2	6.7	81
LIYCY-009	02X0.25	79	4	3.9	28
LIYCY-010	03X0.25	79	4	4.3	34
LIYCY-011	04X0.25	79	4	4.5	40
LIYCY-012	05X0.25	79	4	5.1	47
LIYCY-013	06X0.25	79	4	5.5	54
LIYCY-014	07x0.25	79	4	5.9	61
LIYCY-015	08X0.25	79	4	5.9	66
LIYCY-016	10X0.25	79	4	6.4	80
LIYCY-017	12X0.25	79	4	6.5	91
LIYCY-018	02X0.34	57	6	4.6	31
LIYCY-019	03X0.34	57	6	4.7	38
LIYCY-020	04X0.34	57	6	5.2	46
LIYCY-021	05X0.34	57	6	5.6	54
LIYCY-022	06X0.34	57	6	5.8	62
LIYCY-023	07X0.34	57	6	5.9	70
LIYCY-024	08X0.34	57	6	6.2	76
LIYCY-025	10X0.34	57	6	8.9	114
LIYCY-026	12X0.34	57	6	7.2	128
LIYCY-027	02X0.5	39	9	5	36
LIYCY-028	03X0.5	39	9	5.4	45
LIYCY-029	04X0.5	39	9	5.9	54
LIYCY-030	05X0.5	39	9	6.6	67
LIYCY-031	06X0.5	39	9	7.1	76
LIYCY-032	07X0.5	39	9	7.2	84
LIYCY-033	08X0.5	39	9	7.6	107
LIYCY-034	10X0.5	39	9	8.8	134
LIYCY-035	12X0.5	39	9	8.9	155
LIYCY-036	02X0.75	26	12	5.6	62
LIYCY-037	03X0.75	26	12	6	73
LIYCY-038	04X0.75	26	12	6.6	92
LIYCY-039	05X0.75	26	12	7	110
LIYCY-040	06X0.75	26	12	7.7	128
LIYCY-041	07X0.75	26	12	7.8	145
LIYCY-042	08X0.75	26	12	9.8	151
LIYCY-043	10X0.75	26	12	9.4	182
LIYCY-044	12X0.75	26	12	9.9	216
LIYCY-045	02X1	19.5	19	6	74
LIYCY-046	03X1	19.5	19	6.4	89
LIYCY-047	04X1	19.5	19	6.9	107
LIYCY-048	05X1	19.5	19	7.5	132
LIYCY-049	06X1	19.5	19	8.1	147
LIYCY-050	07X1	19.5	19	8.3	158
LIYCY-051	08X1	19.5	19	9.8	179
LIYCY-052	10x1	19.5	19	8.5	215

N2XS(F)2Y Medium Voltage

DESIGN

Conductor
Bare Copper, Class 2 Stranded

Insulation
XLPE DIX8

Electrical Field Control
Inner and outer semiconducting layer (triple extrusion)

Screen
Copper wires + counter helix

Outer Sheath
PVC DMV6, Red or BLACK

APPLICATIONS

For installation in the ground, in water, outdoors, indoors and in cable ducts for power stations, industrial applications and distribution networks. The good installation properties of this cable make installation easy, even on difficult routes. According to VDE 0276-603 cables must be protected from sunlight.

CHARACTERISTICS

Flame retardant	VDE 0482-332-1-2 / IEC 60332-1-2
Permitted cable temperature, fixed	70°C
Permitted cable temperature, moved	-5°C up to +70°C
Max. temperature at conductor	90°C
Bending radius, fixed	15 x Outer diameter
Partial discharge	2 pC
Nominal voltage Uo/U	12/20 kV
Max. permitted voltage in three-phase systems:	24 kV
Test voltage	42 kV
Standard	VDE 0276-620

DIMENSIONS

Cross Section (Mm^2)	Conductor Resistance (Ohm/Km)	Ampacity in Air (30°C) (A)	Ampacity in Ground (20°C) (A)	Short Circuit Current (1s) (kA)	Tensile Strength (N)
1x35/16	0.524	200	189	5	1750
1x50/16	0.387	239	222	7.15	2500
1x70/16	0.268	297	271	10	3500
1x95/16	0.193	361	323	13.6	4750
1x120/16	0.153	416	367	17.2	6000
1x150/16	0.124	470	409	21.4	7500
1x150/25	0.124	470	409	21.4	7500
1x185/16	0.0991	538	461	26.5	9250
1x185/25	0.0991	538	461	26.5	9250
1x240/16	0.0754	634	532	34.3	12000
1x240/25	0.0754	634	532	34.3	12000
1x240/50	0.0754	634	532	34.3	12000
1x300/25	0.0601	724	599	42.9	15000
1x400/35	0.0470	829	671	57.2	20000
1x500/35	0.0366	953	754	71.5	25000
1x630/35	0.0283	1075	820	90.1	31500
1x800/50	0.0221	1205	890	114.4	40000
1x800/35	0.0221	1205	890	114.4	40000

Cross Section (Mm^2)	Diameter Conductor (mm)	Insulation Thickness (mm)	Sheath Thickness (mm)	Outer Diameter (Mm)	Weight (Kg/Km)
1x35/16	7.5	5.5	2.1	28	1100
1x50/16	8.6	5.5	2.1	29	1250
1x70/16	10.2	5.5	2.1	31	1500
1x95/16	12	5.5	2.1	32	1800
1x120/16	13.5	5.5	2.1	34	2050
1x150/16	15	5.5	2.1	35	2300
1x150/25	15	5.5	2.1	35	2400
1x185/16	16.8	5.5	2.1	37	2650
1x185/25	16.8	5.5	2.1	37	2800
1x240/16	19.2	5.5	2.1	40	3250
1x240/25	19.2	5.5	2.1	40	3400
1x240/50	19.2	5.5	2.1	40	3499
1x300/25	21.6	5.5	2.1	42	4000
1x400/35	24.6	5.5	2.1	45	4950
1x500/35	27.6	5.5	2.1	49	6050
1x630/35	32.5	5.5	2.1	53	7090
1x800/50	37.6	5.5	2.4	60	9249
1x800/35	37.6	5.5	2.4	60	9032

** The product and information presented in this document are for calculation only and subject to technical progress. Outer diameters are approximately **

NA2XS(F)2Y Medium Voltage.

DESIGN

Conductor
Stranded Aluminium, Class 2

Insulation
XLPE, Cross-linked Polyethylene.

Screen
Copper Wires + Counter Helix

Outer Sheath
Polyethylene DMP2, Black

APPLICATIONS

For installation in the ground, in water, outdoors, indoors and in cable ducts for power stations, industrial applications and distribution networks. The high mechanical durability of the PE-sheath permits strong mechanical during installation or operation. This cable is also suitable for unfavourable operating conditions, specifically where there is a need to avoid water penetration lengthwise following mechanical damage.

CHARACTERISTICS

UV-Resistant	Yes
Longitudinally watertight	Yes
Max. core temperature at conductor	90°C
Permitted cable temperature, fixed	70°C
Permitted cable temperature, moved	-20°C up to +70°C
Bending Radius, fixed	15 x Outer diameter
Standard	VDE 0276-620
Nominal voltage Uo/U	6/10 kV – 12/20 kV – 18/30 kV
Max. permitted operating voltage in three-phase systems:	21 kV – 24kV – 36 kV
Test voltage	21 kV – 42kV – 63 kV

DIMENSIONS – NA2XS(F)2Y 6/10 kV

Cross Section	Conductor Diameter	Conductor Resistance	Ampacity in Air (30°C) (A)	Ampacity in Ground (30°C) (A)	Short Circuit Current	Tensile strenght	Outer Diameter	Weight
(mm2)	(mm)	(Ohm/Km)	(mm^2)	(mm)	(1s)(kA)	(N)	(mm)	(Kg/Km)
1X50/16	8.6	0.641	183	171	4.7	1500	25	850
1X70/16	10.2	0.443	228	208	6.58	2100	27	950
1X95/16	12	0.32	278	248	8.93	2850	28	1100
1X120/16	13.5	0.253	321	283	11.3	3600	30	1200
1X150/25	15	0.206	364	315	14.1	4500	31	1400
1X185/25	16.8	0.164	418	357	17.4	5550	33	1550
1X240/25	19.2	0.125	494	413	22.6	7200	35	1750
1X300/25	21.6	0.1	568	466	28.2	9000	37	2050
1X400/35	24.6	0.0778	660	529	37.6	12000	40	2450
1X400/50	24.6	0.0778	660	529	37.6	12000	40	2200
1X500/35	27.6	0.0605	767	602	47	15000	44	2850
1X630/35	32.5	0.0469	890	675	59.2	18900	49	2969
1X800/35	37.6	0.0367	1022	733	75.2	24000	52	3400
1X1000/35	48.6	0.0291	1151	856	94	30000	63	4780

DIMENSIONS - NA2XS(F)2Y 12/20 Kv

Cross Section	Conductor Diameter	Conductor Resistance	Ampacity in Air (30°C) (A)	Ampacity in Ground (30°C) (A)	Short Circuit Current	Tensile strenght	Outer Diameter	Weight
(mm2)	(mm)	(Ohm/Km)	(mm^2)	(mm)	(1s)(kA)	(N)	(mm)	(Kg/Km)
1X50/16	8.6	0.641	185	172	4.7	1500	29	1050
1X70/16	10.2	0.443	231	210	6.58	2100	31	950
1X95/16	12	0.32	280	251	8.93	2850	32	1300
1X120/16	13.5	0.253	323	285	11.3	3600	34	1450
1X150/16	15	0.206	366	319	14.1	4500	36	1254
1X150/25	15	0.206	366	319	14.1	4500	36	1300
1X150/50	15	0.206	366	319	14.1	4500	36.4	1560
1X185/25	16.8	0.164	420	361	17.4	5550	37	1800
1X240/25	19.2	0.125	496	417	22.6	7200	40	2050
1x300/25	21.6	0.1	569	471	28.2	9000	42	2300
1X300/50	21.6	0.1	569	471	28.2	9000	42	2120
1X400/35	24.6	0.0778	660	535	37.6	12000	45	2800
1X500/35	27.6	0.0605	766	609	47	15000	48	3200
1X500/50	27.6	0.0605	766	609	47	15000	48.3	2840
1X630/35	32.5	0.0469	890	675	59.2	18900	52	3268
1X630/50	32.5	0.0469	890	675	59.2	18900	52.2	3320
1X800/35	37.6	0.0367	1015	750	75.2	24000	60	3973
1X1000/35		0.0291	1135	820	95.3	30000	62.6	4610

NAYCWY Power Cable

DESIGN

Conductor
Aluminium

Core Identification
According to HD 308, more then 5 cores: numbers

Insulation
PVC, DIV 4

Concentric Conductor
CU

Outer Sheath
PVC, DMV5 Black

APPLICATIONS

For fixed installation indoors, outdoors, in the ground, in water and in concrete.

CHARACTERISTICS

UV-Resistant	Yes
CPR	Eca according to EN 50575
Flame Retardant	VDE 0482-332-1-2 / IEC 60332-1-2
Max. Temperature at Conductor	70°C
Permitted Outer Cable Temperature, Fixed	70°C
Permitted Outer Cable Temperature, Fixed	-5°C - +70°C
Nominal voltage Uo/U	0.6/1 kV
Max. permitted operating voltage in three-phase systems:	1.2 kV
Nominal Voltage DC (core-earth/core-core)	1.8/1.8 kV
Test voltage	4 kV
Bending Radius	12 x Outer Diameter
Standard	VDE 0276-603

DIMENSIONS – NAYCWY Power Cable

Part Numbers	Cross Section	Conductor Resistance	Ampacity in Air (30°C) (A)	Ampacity in Ground (30°C) (A)	Short Circuit Current	Tensile strenght	Outer Diameter	Weight
(Articles)	(mm)	(Ohm/Km)	(mm^2)	(mm)	(1s)(kA)	(N)	(mm)	(Kg/Km)
NAY-001	1x240/35/RMv	0.125	374	358	18.2	7200	30.6	1517
NAY-002	2x10/10/RE	3.08	60	79	0.76	600	18.8	524
NAY-003	2x16/16/RE	1.91	80	102	1.21	960	20.6	649
NAY-004	3x10/10/RE	3.08	60	79	0.76	900	20.2	599
NAY-005	3x25/16/RM	1.2	83	103	2.6	2250	26.6	1046
NAY-006	3x50/25/SMv	0.641	121	145	3.8	4500	29.4	1283
NAY-007	3x95/50/SMv	0.32	189	216	7.22	8550	38.1	2136
NAY-008	3x120/70/SMv	0.253	220	246	9.12	10800	40.8	2612
NAY-009	3x150/70/SMv	0.206	249	276	11.4	13500	44.9	3019
NAY-010	3x50/50/SE	0.641	121	145	3.8	4500	31	1170
NAY-011	3x70/70/SE	0.443	155	180	5.32	6300	36	1670
NAY-012	3x95/95/SE	0.32	189	216	7.22	8550	41	2230
NAY-013	3x120/120/SE	0.253	220	246	9.12	10800	43	2670
NAY-014	3x150/150/SE	0.206	249	276	11.4	13500	47	3230
NAY-015	3x185/95/SMv	0.164	287	313	14.1		49.8	3895
NAY-016	3x185/95/SE	0.164	287	313	14.1	16650	47.2	3590
NAY-017	3x185/185/SE	0.164	287	313	14.1	16650	52	4020
NAY-018	3x240/240/SE	0.125	339	362	18.2	21600	58	5350
NAY-019	3x240/120/SE	0.125	339	362	18.2	2088	52.3	4500
NAY-020	4x16/16/RE	1.9	57	75	1.22	1920	22	950
NAY-021	4x25/16/RM	1.2	83	103	1.9	3000	26	1150
NAY-022	4x25/16/RE	1.2	83	103	1.9	3000	26	1150
NAY-023	4x35/16/RE	0.869	101	123	2.66	4200	27	1200
NAY-024	4x50/25/SMv	0.641	121	145	3.8	6000	31	1600
NAY-025	4x50/25/RE	0.641	121	145	3.8	6000	33	1600
NAY-026	4x50/25/SE	0.641	121	145	3.8	6000	31	1600
NAY-027	4x70/35/SMv	0.443	155	180	5.32	8400	36.5	2250
NAY-028	4x70/35/SE	0.443	155	186	5.32	8400	35	2250
NAY-029	4x95/50/SMv	0.32	189	216	7.22	11400	42	2900
NAY-030	4x95/50/SE	0.32	189	216	7.22	11400	40	2900
NAY-031	4x120/70/SMv	0.253	220	246	9.12	14400	45	3500
NAY-032	4x120/70/SE	0.253	220	246	9.12	14400	42.5	3500
NAY-033	4x150/70/SMv	0.206	249	276	11.4	18000	50	4200
NAY-034	4x150/70/SE	0.206	249	276	11.4	18000	46.5	4200
NAY-035	4x185/95/SMv	0.164	287	313	14.1	22200	57	4950
NAY-036	4x185/95/SE	0.164	287	313	14.1	22200	53	4950
NAY-037	4x240/120SMv	0.125	339	362	18.2	28800	64	5600
NAY-038	4x240/120/SE	0.125	339	362	18.2	28800	60	5600
NAY-039	4x300/150/SMv	0.1	401	415	22.8	3600	69	8080

** The product and information presented in this document are for calculation only and subject to technical progress. Outer diameters are approximately **

RV-K 0.6/1kV

DESIGN

Conductor
Flexible electrolytic annealed copper conductor, class 5 according to IEC 60228.

Insulation
XLPE insulation, type DIX 3 according to HD 603. The standard identification as per HD 308 is by colours.

Outer Sheath
Flexible PVC outer sheath, type DMV 18 according to HD 603. The special PVC compound provide excellent resistance to chemical corrosion and water absorption.

APPLICATIONS

This cable for energy distribution is suitable for all types of low voltage industrial-type connections, in urban grids, building installation, etc. Its high flexibility makes the installation process substantially easier and as a result is particularly suitable for use in difficult layouts. It can be buried or installed in a tube as well as outdoors without requiring additional protection. Lastly, the RV-K cable can withstand damp conditions including total immersion in water.

CHARACTERISTICS

Flexibility	The use of flexible copper conductor and special PVC compounds makes this cable highly flexible.
Great Power	The cross linked polyethylene insulation (XLPE) allows greater power transmission as well as higher resistance overloads. Additionally, it raises the maximum conductor temperature to 90°C (vs. 70°C in type NYY or VV cables).
Lower Installation Cost	The use of flexible cable noticeably speeds up the installation which in many cases means in many cases lower installation costs.
Fire Proof Properties	The No flame propagation properties of the RV-K cable contributes towards improving the overall safety of the installation.
Protection	The special PVC mix outer sheath provides a high level of protection against hydrocarbon and mineral oils.
Versatility	The RV-K's design permits it to be installed in almost all types of environments: outdoors, buried in humid environments and even submerged in water.

TECHNICAL DATA

The table shows diameter, weight, current-carrying capacity and voltage drop detailed for each cable.
Current-carrying capacities shown in the table are calculated according to IEC 60364 and fort he following conditions:

Open Air Installation	It is supposed an installation which allows effective air renewal with ambient temperature of 30°C (reference method F for single core and E for multi core cables).
Buried Installation	Cable in a duct buried at 70cm depth, with ground thermal resistivity of 2.5°K·m/W and ground temperature of 20°C (reference method D).

- For cables with 2 conductors and for cables with 3 conductors up to 10mm2 it is supposed a single-phase circuit. A three-phase circuit it is supposed for all other cables.
- Voltage drop, is the maximum that may occur. It is calculated tot he maximum conductor temperature and for cos Φ=1.

DIMENSIONS

Part Numbers	Section (mm^2)	Diameter (mm)	Weight (mm)	Open Air at 30°C (A)	Buried at 20°C (A)	Voltage Drop (V/A KM)
RVK-001	1x1.5	5.7	41	21	22	29.5
RVK-002	1x2.5	6.2	53	29	29	17.7
RVK-003	1x4.0	6.7	69	40	37	11.0
RVK-004	1x6.0	7.2	89	53	46	7.32
RVK-005	1x10	8.2	134	74	61	4.23
RVK-006	1x16	9.3	193	101	79	2.68
RVK-007	1x25	10.9	284	135	101	1.73
RVK-008	1x35	12.1	377	169	122	1.23
RVK-009	1x50	13.8	522	207	144	0.860
RVK-010	1x70	15.9	721	268	178	0.603
RVK-011	1x95	17.6	913	328	211	0.457
RVK-012	1x120	19.5	1156	383	240	0.357
RVK-013	1x150	21.7	1450	444	271	0.286
RVK-014	1x185	23.9	1745	510	304	0.235
RVK-015	1x240	26.9	2285	607	351	0.178
RVK-016	1x300	29.6	2844	703	396	0.142
RVK-017	1x400	33.8	3726	823	464	0.108
RVK-018	1x500	37.4	4728	946	525	0.085
RVK-019	1x630	42.7	6088	1088	596	0.064

DIMENSIONS

Part Numbers	Section (mm^2)	Diameter (mm)	Weight (mm)	Open Air at 30°C (A)	Buried at 20°C (A)	Voltage Drop (V/A KM)
RVK-020	2x1.5	91	25	26	26	34.0
RVK-021	2x2.5	121	36	36	34	20.4
RVK-022	2x4.0	162	49	49	44	12.7
RVK-023	2x6.0	208	63	63	56	8.45
RVK-024	2x10	346	86	86	73	4.89
RVK-025	2x16	512	115	115	95	3.10

DIMENSIONS

Part Numbers	Section (mm^2)	Diameter (mm)	Weight (mm)	Open Air at 30°C (A)	Buried at 20°C (A)	Voltage Drop (V/A KM)
RVK-026	3x1.5	9	108	26	26	34.0
RVK-027	3x2.5	10	145	36	34	20.4
RVK-028	3x4.0	11.1	196	49	44	12.7
RVK-029	3x6.0	12.3	262	63	56	8.45
RVK-030	3x10	15.2	434	86	73	4.89
RVK-031	3x16	17.6	645	100	79	2.68
RVK-032	3x25	21.1	972	127	101	1.73
RVK-033	3x35	24.1	1306	158	122	1.23
RVK-034	3x50	27.8	1822	192	144	0.860
RVK-035	3x70	30.8	2464	246	178	0.603

DIMENSIONS

Part Numbers	Section (mm^2)	Diameter (mm)	Weight (mm)	Open Air at 30°C (A)	Buried at 20°C (A)	Voltage Drop (V/A KM)
RVK-036	3x10/6	15.7	520	75	61	4.23
RVK-037	3x16/10	18.7	749	100	79	2.68
RVK-038	3x25/16	22.1	1112	127	101	1.73
RVK-039	3x35/16	24.6	1425	158	122	1.23
RVK-040	3x50/25	29.1	2045	192	144	0.860
RVK-041	3x70/35	33.8	2832	246	178	0.603
RVK-042	3x95/50	37.7	3628	298	211	0.457
RVK-043	3x120/70	42.9	4706	346	240	0.357
RVK-044	3x150/70	46.8	5747	399	271	0.286
RVK-045	3x185/95	53.5	7174	456	304	0.235
RVK-046	3x240/120	60.4	9300	538	351	0.178

DIMENSIONS

Part Numbers	Section (mm^2)	Diameter (mm)	Weight (mm)	Open Air at 30°C (A)	Buried at 20°C (A)	Voltage Drop (V/A KM)
RVK-047	4x1.5	9.6	128	23	22	29.5
RVK-048	4x2.5	10.8	174	32	29	17.7
RVK-049	4x4	12.1	241	42	37	11.0
RVK-050	4x6	13.3	322	54	46	7.32
RVK-051	4x10	16.5	537	75	61	4.23
RVK-052	4x16	19.6	817	100	79	2.68
RVK-053	4x25	23.1	1201	127	101	1.73
RVK-054	4x35	26.1	1642	158	122	1.23
RVK-055	4x50	31.3	2327	192	144	0.860
RVK-056	4x70	36.1	3206	246	178	0.603
RVK-057	4x95	40.4	4092	298	211	0.457
RVK-058	4x120	45.4	5227	346	240	0.357
RVK-059	4x150	50.4	6600	399	271	0.286
RVK-060	4x185	56.1	8026	456	304	0.235
RVK-061	4x240	63.1	10491	538	351	0.178

DIMENSIONS

Part Numbers	Section (mm^2)	Diameter (mm)	Weight (mm)	Open Air at 30°C (A)	Buried at 20°C (A)	Voltage Drop (V/A KM)
RVK-062	5x1.5	10.7	153	23	22	29.5
RVK-063	5x2.5	11.9	210	32	29	17.7
RVK-064	5x4	13.3	291	42	37	11.0
RVK-065	5x6	14.7	393	54	46	7.32
RVK-066	5x10	18.0	654	75	61	4.23
RVK-067	5x16	21.6	1013	100	79	2.68
RVK-068	5x25	25.6	1506	127	101	1.73
RVK-069	5x35	29.1	2040	158	122	1.23
RVK-070	5x50	34.5	2895	192	144	0.860

** The product and information presented in this document are for calculation only and subject to technical progress. Outer diameters are approximately **

SIHF 300/500V

DESIGN

Conductor
Bare copper or tinned conductors acc. To CEI 20/29 Class 5, IEC EN 60228 Class 5

Insulation
Silicone Rubber

Cores Colours
2 Cores: Blue, Brown

3 Cores: Green/Yellow, Blue, Brown

4 Cores: Green/Yellow, Brown, Black, Grey

5 Cores: Green/Yellow, Blue, Brown, Black, Grey

5+ Cores: Green/Yellow, Black Numbered

Outer Sheath
Silicone Rubber.

Sheath Colour
White, Grey, Black or Brown/Red

APPLICATIONS

Multicore flexible conductor silicone rubber insulated cable. Good resistance to high and low temperature, weather proof. Cables for static use

CHARACTERISTICS

Working Temperature	-60°C up to +180°C
Peaks at	210°C
Nominal Voltage	300/500 V
Max temperature at conductor	90°C
Voltage test	2 kV
Halogen free	CEI EN 50363

DIMENSIONS

Part Number	Cross Section (mm²)	Max. over Diam. Of Conductor (mm)	Insulation Thickness (mm)	Sheath Thickness (mm)	Outer Diameter (mm)	Max. Resistance Bare Copper (20°C) (Ohm/Km)	Max Resistance Tinned Copper (20°C) (Ohm/Km)
SF-001	2x0.50	0.21	0.60	0.70	5.40	39.00	40.10
SF-002	3x0.50	0.21	0.60	0.70	5.90	39.00	40.10
SF-003	4x0.50	0.21	0.60	0.70	6.40	39.00	40.10
SF-004	5x0.50	0.21	0.60	0.80	7.30	39.00	40.10
SF-005	2x0.75	0.21	0.60	0.80	6.40	26.00	26.70
SF-006	3x0.75	0.21	0.60	0.80	6.80	26.00	26.70
SF-007	4x0.75	0.21	0.60	1.00	7.80	26.00	26.70
SF-008	5x0.75	0.21	0.60	1.00	8.50	26.00	26.70
SF-009	6x0.75	0.21	0.60	1.00	9.20	26.00	26.70
SF-010	7x0.75	0.21	0.60	1.00	9.20	26.00	26.70
SF-011	2x1	0.21	0.60	0.80	6.60	19.50	20.00
SF-012	3x1	0.21	0.60	1.00	7.40	19.50	20.00
SF-013	4x1	0.21	0.60	1.00	8.00	19.50	20.00
SF-014	5x1	0.21	0.60	1.00	8.80	19.50	20.00
SF-015	6x1	0.21	0.60	1.00	9.50	19.50	20.00
SF-016	7x1	0.21	0.60	1.00	9.50	19.50	20.00
SF-017	2x1.50	0.26	0.60	1.00	7.60	13.30	13.70
SF-018	3x1.50	0.26	0.60	1.00	8.00	13.30	13.70
SF-019	4x1.50	0.26	0.60	1.00	8.80	13.30	13.70
SF-020	5x1.50	0.26	0.60	1.00	9.60	13.30	13.70
SF-021	6x1.50	0.26	0.60	1.00	10.40	13.30	13.70
SF-022	7x1.50	0.26	0.60	1.00	10.40	13.30	13.70
SF-023	2x2.50	0.26	0.70	1.20	9.20	7.98	8.21
SF-024	3x2.50	0.26	0.70	1.20	9.70	7.98	8.21
SF-025	4x2.50	0.26	0.70	1.20	10.60	7.98	8.21
SF-026	5x2.50	0.26	0.70	1.20	11.60	7.98	8.21
SF-027	6x2.50	0.26	0.70	1.20	12.60	7.98	8.21
SF-028	7x2.50	0.26	0.70	1.20	12.60	7.98	8.21
SF-029	2x4	0.31	0.80	1.20	10.80	4.95	5.09
SF-030	3x4	0.31	0.80	1.20	11.40	4.95	5.09
SF-031	4x4	0.31	0.80	1.50	13.10	4.95	5.09
SF-032	5x4	0.31	0.80	1.50	14.40	4.95	5.09
SF-033	2x6	0.31	0.80	1.50	13.40	3.30	3.39
SF-034	3x6	0.31	0.80	1.50	14.20	3.30	3.39
SF-035	4x6	0.31	0.80	1.60	16.20	3.30	3.39
SF-036	5x6	0.31	0.80	1.60	17.70	3.30	3.39
SF-037	2x10	0.41	1.00	1.60	16.50	1.91	1.95
SF-038	3x10	0.41	1.00	1.60	17.80	1.91	1.95
SF-039	4x10	0.41	1.00	1.80	20.00	1.91	1.95
SF-040	5x10	0.41	1.00	1.80	21.60	1.91	1.95
SF-041	2x16	0.41	1.00	1.60	19.20	1.21	1.24
SF-042	3x16	0.41	1.00	1.90	21.00	1.21	1.24
SF-043	4x16	0.41	1.00	2.00	23.40	1.21	1.24
SF-044	5x16	0.41	1.00	2.10	26.00	1.21	1.24
SF-045	2x25	0.41	1.20	2.00	24.00	0.780	0.795
SF-046	3x25	0.41	1.20	2.10	25.70	0.780	0.795
SF-047	4x25	0.41	1.20	2.20	28.50	0.780	0.795
SF-048	5x25	0.41	1.20	2.40	31.90	0.780	0.795
SF-049	2x35	0.41	1.20	2.10	26.60	0.554	0.565
SF-050	3x35	0.41	1.20	2.20	28.50	0.554	0.565
SF-051	4x35	0.41	1.20	2.40	31.80	0.554	0.565
SF-052	5x35	0.41	1.20	3.00	36.40	0.554	0.565

** The product and information presented in this document are for calculation only and subject to technical progress. Outer diameters are approximately **

H1Z2Z2-K TÜV SOLAR CCA

DESIGN

Conductor
Class 5 (flexible tinned copper, based on EN 60228 and IEC 60228.

Insulation
Low smoke zero halogen (LSZH) rubber.

Outer Sheath
Low smoke zero halogen (LSZH) rubber, red or black.

APPLICATIONS

The H1Z2Z2-K cable, which is TÜV certified according to IEC 62930 and EN 50618, is suitable for both fixed and mobile solar installations (solar farms, rooftop solar installations and floating plants).

CHARACTERISTICS

Electrical Performance	Low voltage 1,5/1,5 1kV (1,8)kV DC
CPR	Cca-s1,d2,a1, according to EN 50575
Thermal Performance	Maximum service temperature: 120°C
	Maximum short-circuit temperature: 250°C (max. 5 s).
	Minimum service temperature: -40°C
Fire Performance	Flame non-propagation: EN 60332-1 and IEC 60332-1
	LSZH: UNE-EN 6054-1 and IEC 60754-1
	Low smoke emission based on EN 61034 and IEC 61034: Light transmittance > 60%
	Low corrosive gases emission bases on UNE-EN 60754-2 and IEC 60754-2
Mechanical Performance	Minimum bending radius: 3 x cable diameter
	Impact resistance: AG2 Medium Severity
Chemical Performance	Chemical performance: Excellent
	Grease & mineral oils resistance: Excellent
	UV Resistant according to EN 50618
	Ozone resistant based on EN 50618
Water performance	Water presence: AD8 submerged
Standards	EN 50618, IEC 62930, UTE C 32-502

Installation conditions:

- Open Air
- Buried

  Conduit.

Approvals	TÜV, RETIE, CE, RoHS
Other	Estimated lifetime: 30 years based on UNE-EN 60216-2

Current-carrying capacities, in amperes, are according to EN 50618 (ambient temperature of 60 °C). In all cases it is supposed a direct current circuit. Voltage drop is calculated with conductor temperature of 120 °C.

CORRECTION FACTORS FOR AIR TEMPERATURE

Air Temp. (ºC)	Up to 60	70	80	90
Factor	1	0,92	0,84	0,75

For groups reduction factors according to IEC 60364-5-52, Table A.52-17 shall apply.

DIMENSIONS

Cross Section (mm^2)	Diameter (mm)	Open Air (A)	Int. on Surface (A)	Int. Adjoining to Surface (A)	Voltage Drop (V/A-km)	Weight (Kg/Km)
1x4.0	5.4	55	52	44	14.3	60
1x6.0	6.0	70	67	57	9.49	80
1x10	7.0	98	93	79	5.46	120
1x16	8.2	132	125	107	3.47	180
1x25	10.2	176	167	142	2.23	280
1x35	11.5	218	207	176	1.58	375
1x50	13.3	276	262	221	1.10	525
1x70	15.0	347	330	278	0.772	720
1x95	17.0	416	395	333	0.585	930
1x120	18.7	488	464	390	0.457	1.175

** The tolerances on the nominal outer diameters are:

Cables with outer diameter ≤ 7mm.: -0.1mm - +0.2mm

Cables with outer diameter 7mm < d < 10mm.: -0.1mm - +0.3mm

Cables with outer diameter d ≥ 10mm.: -0.2mm - +0.4mm

H1Z2Z2-K TÜV SOLAR DCA

DESIGN

Conductor
Twisted flexible tinned copper conductor.

Insulation
Low smoke Zero halogen LSZH

Outer Sheath
Low smoke Zero halogen LSZH

APPLICATIONS

The H1Z2Z2-K has been tested in accordance with the requirements of the harmonized standard EN 50618

- Use and type of installation for applications in photovoltaic (HD 60364-7-712).
- For fixed installation indoors and outdoors.
- For installation in conduits, pipes and similar systems.
- Direct burial, weather and water resistant
- The cables are suitable for use with Class II and earth fault proof acc.to HD 60364-5-52.

TECHNICAL DATA

Nominal Voltage Uo/U	1.0/1.0 kV AC – 1.5/1.5 kV DC
Maximum Permitted Voltage	1.8 kV DC
Test Voltage	6.5 kV AC
Operating Temperature	-40°C up to +90°C
Max. Core Temperature	+120°C (for 20.000 hrs.)
Min. Bending Radius	5 x cable diameter (fixed installation)
CPR	Dca-s2,d2,a1
Approval	TÜV Rheinland
Standards	EN 50618:2014, IEC 60228, EN 50395, EN 50396, EN 60332-1-2, EN 61034-1/2, EN 50525-1, EN 60216-1/2

DIMENSIONS

Section	Max. Wire Diameter of Conductor	Insulation Thickness 1st/2nd	Overall Diameter	Rame Stagnate Tinned Copper	Reactance at 50 Hz
(mm²)	(mm)	(mm)	(mm)	(Ω/km)	(Ω/km)
1x4.00	0.31	0.70 / 0.80	5.40	5.09	0.143
1x6.00	0.31	0.70 / 0.80	6.20	3..39	0.135
1x10.0	0.41	0.70 / 0.80	7.40	1.5	0.119

** Outer Diameter tolerance are +/- 0.15mm

CURRENT CARRYING CAPACITY

Section	Single Cable Free in Air	Single Cables on Surfaces	To Cables Adjacent on Surfaces
(mm²)	(A)	(A)	(A)
1x4.00	55	52	44
1x6.00	70	67	57
1x10.0	98	93	79

PROPERTIES

The cable is able to satisfy the latest requirements fixed for PV systems in accordance to standards: EN50618 – EN 60216-1-2 – EN 61034.

The insulation has qualities of high abrasion resistance to high temperature and has property of flame retardant + ozone resistance.

CHEMICAL PROPERTIES

Halogen Free	Acc. To EN 50525-1 Annex B (EN 50267-2-1, EN 50267-2-2, IEC 60754-1, IEC 60754-2)
Low Smoke Emission	Acc. to IEC 61034, EN 61034
Ozone Resistance	Acc. to EN 60811-403 Test Method A, EN 50396 clause 8.1.3 Test Method B
Weather/UV Resistance	AD8 Acc. to EN 50618 Annex E, EN 50289-4-17 (Method A), EN ISO 4892-1/2.
Acid and Alkaline Resistance	Acc. to EN 50618:2014 Annex B: EN 60811-404
Resistance to Fire	Flame acc. to EN 60332-1-2 (Single Cable Flame Test)
Tested according to CPR	EN 50399 common test methods for cables under fire conditions Heat release and smoke production measurement on cables during flame spread test, UNI EN 13501-6. Flammability class: **Dca** Smoke emission class: **s2** Drip particle: **d2** Fume acidity: **a1**

MECHANICAL PROPERTIES

Direct Burial	Impact test resistance of single conductor type USE and USE-2 cables (tested acc. to UL854)
Water resistance	AD8 category tested

THERMAL PROPERTIES

Lifetime	Acc. to EN 50618 : 25 years the cables are designed to operate at a normal max conductor temperature of 90°C, but for a maximum of 20.000 hours a max. conductor temperature of 120 °C at a max. ambient temperature of 90 °C is permitted. (test according to EN 60216-1 and EN 60216-2)
Max. Short Circuit Temperature	250°C (for 5 sec.)
Resistance to Cold	EN 50618, Table 2: Cold Bending Test at -40°C acc. to EN 60811-504; Cold Elongation Test at -40°C acc. to EN 60811-505; Cold Impact Test at -40°C acc. to EN 50618 Annex C and EN 60811-506. Damp-Heat Test Acc. to EN 50618, Table 2 (test acc. to EN 60068-2-78) : 90°C for 1.000h and min. 85% humidity

** There is no Fish oil used in the production of this solar cable **

H1Z1Z2-K AD8 Category compliance

Test according to EN 50525-2-21 "Annex E" (after immersed 100 days / 2.400 h at +50°C)

Object : H1Z2Z2-K - AD8 category compliance

- Resistance Test Voltage (2.5 kV AC): cable immersed in water at 50±2 °C for 24 hours

  Conform - No breakdown

- The increase in weight after 100 days in water at 50±2 °C

Weight variation		
Initial	Final	Variation
1.283 g	1.298 g	+1.169 %

- Tensile strength and elongation at break after 100 days in water at 50±2 °C

Tensile strength (N/mm^2)		
Initial	Final	Variation
12.1	12.8	+5.45 %

Elongation at break (%)		
Initial	Final	Variation
280	240	-14.28 %

** The product and information presented in this document are for calculation only and subject to technical progress. Outer diameters are approximately **

VG-YMVKAS AL

DESIGN

Conductor
AL, Class 2 according to EN 60228

Insulation
XLPE Compound

Inner Sheath
PVC Compound

Armour
Galvanized steel wires armour with copper earth wires and galvanized steel counter helix tape.

Outer Sheath
PVC, FR Compound, UV resistant.

APPLICATIONS

A power and control cable for general use in low voltage installations up to 1 kV. Suitable for applications indicated in NEN 1010. Suited for direct burial (also in wet conditions but not direct in water) and above ground, as power cable for mains and distribution boards.

CHARACTERISTICS

CPR	DCA (CCA available on request)
Voltage Rating (Uo/U)	0.6/1 kV
Testing Voltage	4 kV
Min. Temp. For Cable Laying	0°C
Max. Working Temperature	90°C
Max. Short-Circuit Temperature	250°C
Min. Bending Radius	16 x Outer Diameter
Min. Bending Radius During Installation	10 x Outer Diameter
Standard	HD 604 S1, IEC 60502-1

DIMENSIONS

Part Numbers	Cross Section	Max. Resistance at 20°C	Current Capacity in Air	Current Capacity in Ground	Outer Diameter Approx.	Weight
	(mm^2)	(Ohm/Km)	(A)	(A)	(mm)	(Kg/Km)
YKA-001	3x35/16	0.868	128	136	24.6	1109
YKA-002	3x50/16	0.641	152	159	27.0	1344
YKA-003	3x70/20	0.443	194	197	31.7	1869
YKA-004	3x95/30	0.320	239	236	34.9	2272
YKA-005	3x95/35	0.320	239	236	35.7	2466
YKA-006	3x120/35	0.253	278	269	38.7	2944
YKA-007	3x150/45	0.206	316	302	43.0	3470
YKA-008	3x185/60	0.164	365	342	47.9	4518
YKA-009	3x240/75	0.125	430	397	53.3	5356
YKA-010	3x300/95	0.100	506	454	59.2	7041

DIMENSIONS

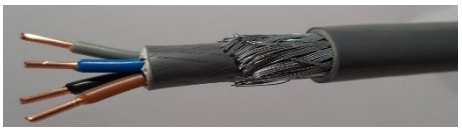
Part Numbers	Cross Section	Max. Resistance at 20°C	Current Capacity in Air	Current Capacity in Ground	Outer Diameter Approx.	Weight
	(mm^2)	(Ohm/Km)	(A)	(A)	(mm)	(Kg/Km)
YKA-011	4x35/16	0.868	128	136	27.2	1289
YKA-012	4x50/16	0.641	152	159	30.3	1593
YKA-013	4x70/20	0.443	194	197	35.4	2243
YKA-014	4x95/30	0.320	239	236	39.0	2718
YKA-015	4x120/35	0.253	278	269	44.1	3499
YKA-016	4x150/45	0.206	316	302	48.0	4150
YKA-017	4x185/60	0.164	365	342	53.8	5290
YKA-018	4x240/75	0.125	430	397	59.9	6432
YKA-019	4x300/95	0.100	506	454	66.1	8244

*Technical data for VG-YMVKASMB AL with stranded-shaped conductors.

** The product and information presented in this document are for calculation only and subject to technical progress. Outer diameters are approximately **

VO-YMVKAS – VG-YMVKAS – Dca

DESIGN



Conductor VO-YMVKAS
Copper Conductor Solid (Class 1)

Conductor VG-YMVKAS
Copper Conductor Solid (Class 2)

Insulation
XLPE Insulation

Core Covering
Common Core Covering

Inner Sheath
PVC Inner Sheath

Armour
Galvanized Steel Wire Braid, armour with a flexible tinned copper earth conductor

Outer Sheath
PVC Outer Sheath, Fire Retardant, Grey

APPLICATIONS

Power cable for industrial applications. Suitable for underground laying and where mechanical protection is required.

TECHNICAL DATA

Nominal Voltage	0.6/1 kV
Max. Conductor Temperature	90°C (250°C during short circuit of max. 5 sec.)
Service Temperature	-20°C to 90°C
Min. Laying Temperature	-5°C
Min. Bending Radius	10 x Cable Diameter
CPR / Reaction to fire	Dca-s2,d2,a3 acc to EN 50399, IEC/EN 60332-3-24

DIMENSIONS

Part Numbers	Section	Insulation Thickness	Outer Sheath Thickness	Outer Diameter	Approx. Weight
	(mm^2)	(mm)	(mm)	(mm)	(Kg/Km)
YKK-001	2x1.5/1.5	0.7	1.8	13.1	255
YKK-002	2x2.5/2.5	0.7	1.8	13.9	289
YKK-003	2x4/4	0.7	1.8	14.7	356
YKK-004	2x6/6	0.7	1.8	15.7	440
YKK-005	2x10/10	0.7	1.8	19.0	820
YKK-006	3x1.5/1.5	0.7	1.8	13.5	274

DIMENSIONS

Part Numbers	Section	Insulation Thickness	Outer Sheath Thickness	Outer Diameter	Approx. Weight
	(mm^2)	(mm)	(mm)	(mm)	(Kg/Km)
YKK-007	3x2.5/2.5	0.7	1.8	14.4	326
YKK-008	3x4/4	0.7	1.8	15.3	400
YKK-009	3x6/6	0.7	1.8	16.4	502
YKK-010	3x10/10	0.7	1.8	19.8	939
YKK-011	3x16/16	0.7	1.8	22.2	1212
YKK-012	3x25/16	0.9	1,8	25.6	1662
YKK-013	3x35/16	0.9	1.8	27.6	1999
YKK-014	3x50/25	1.0	1.8	28.3	2206
YKK-015	3x70/35	1.1	2.0	31.9	2973
YKK-016	3x95/50	1.1	2.1	35.3	3865
YKK-017	3x120/60	1.2	2.2	38.2	4688
YKK-018	3x150/75	1.4	2.4	42.9	5707
YKK-019	3x185/95	1.6	2.5	49.5	8046
YKK-020	3x240/120	1.7	2.7	55.0	10059
YKK-021	3x300/150	1.8	2.9	60.0	12300
YKK-022	4x1.5/1.5	0.7	1.8	14.2	309
YKK-023	4x2.5/2.5	0.7	1.8	15.2	363
YKK-024	4x4/4	0.7	1.8	16.2	459
YKK-025	4x6/6	0.7	1.8	17.4	589
YKK-026	4x10/10	0.7	1.8	21.1	1088
YKK-027	4x16/16	0.7	1.8	23.7	1429
YKK-028	4x25/16	0.9	1.8	27.8	2000
YKK-029	4x35/16	0.9	1.8	30.0	2434
YKK-030	4x50/25	1.0	1.9	32.1	2833
YKK-031	4x70/35	1.1	2.1	35.6	3781
YKK-032	4x95/50	1.1	2.2	40.0	4958
YKK-033	4x120/60	1.2	2.4	44.2	6096
YKK-034	4x150/75	1.4	2.5	49.4	7480
YKK-035	4x185/95	1.6	2.7	56.1	10308
YKK-036	4x240/120	1.7	2.9	62.8	12948
YKK-037	5x1.5/1.5	0.7	1.8	15.1	343
YKK-038	5x2.5/2.5	0.7	1.8	16.2	418
YKK-039	5x4/4	0.7	1.8	17.3	538
YKK-040	5x6/6	0.7	1.8	18.6	671
YKK-041	5x10/10	0.7	1.8	23.1	1301
YKK-042	6x1.5/1.5	0.7	1.8	15.9	387
YKK-043	6x2.5/2.5	0.7	1.8	17.1	468
YKK-044	7x1.5/1.5	0.7	1.8	15.9	394
YKK-045	7x2.5/2.5	0.7	1.8	17.1	480
YKK-046	8x1.5/1.5	0.7	1.8	16.5	391
YKK-047	8x2.5/2.5	0.7	1.8	17.8	492
YKK-048	10x1.51.5	0.7	1.8	19.0	503
YKK-049	10x2.5/2.5	0.7	1.8	20.9	663
YKK-050	12x1.5/1.5	0.7	1.8	18.2	491
YKK-051	12x2.5/2.5	0.7	1.8	19.7	625
YKK-052	14x1.5/1.5	0.7	1.8	18.8	532
YKK-053	14x2.5/2.5	0.7	1.8	20.7	706
YKK-054	16x1.5/1.5	0.7	1.8	19.9	594
YKK-055	16x2.5/2.5	0.7	1.8	21.7	775
YKK-056	19x1.5/1.5	0.7	1.8	21.1	662
YKK-057	19x2.5/2.5	0.7	1.8	23.0	871

DIMENSIONS

Part Numbers	Section	Insulation Thickness	Outer Sheath Thickness	Outer Diameter	Approx. Weight
	(mm^2)	(mm)	(mm)	(mm)	(Kg/Km)
YKK-058	24x1.5/1.5	0.7	1.8	22.0	784
YKK-059	24x2.5/2.5	0.7	1.8	25.0	1042
YKK-060	30x1.5/1.5	0.7	1.8	24.6	922
YKK-061	30x2.5/2.5	0.7	1.8	27.1	1243
YKK-062	37x1.5/1.5	0.7	1.8	26.6	1081
YKK-063	37x2.5/2.5	0.7	1.8	29.3	1464

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Outer diameters are approximately **

XGB Cca-s1,d2,a1

DESIGN

Conductor
Copper conductor

Insulation
XLPE Insulation, Core colours acc. To HD 308

Core Covering
Common Core Covering

Outer Sheath
Halogen-free Thermoplastic Outer Sheath, Green

APPLICATIONS

Overall where halogen-free cables are requested: in buildings with high concentration of people or valuable goods etc.. Laying in open air if protected from direct UV rays, in ducts (if no accumulation of water), in cable trays.

TECHNICAL DATA

Reaction to fire acc. to:	EN 50399 Cca-s1,d2,a1 (EN 50399 B2ca-s1,d2,a1 on request) NBN C30-004 F1: Flame-retardant (NBN EN 60332-1-2) F2: Fire-retardant (NBN EN 60332-3-24) ST: Toxicity of smoke (NF X 70-100-1+2) SD: Smoke density (NBN EN 61034-2) SA: Acidity of combustion gases (NBN EN 60754-2)
Max. Conductor temperature	90°C
Min. Laying Temperature	-5°C
Min. Bending Radius	Single core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter
Voltage	0.6/1 kV
Standard	NBN HD 604 5-L, EN 50575

DIMENSIONS

Part Numbers	Section	Outer Diameter	Weight
	(mm^2)	(mm)	(Kg/Km)
XGB-001	1x16/RM	11.2	265
XGB-002	1x25/RM	12.8	374
XGB-003	1x35/RM	14.0	474
XGB-004	1x50/RM	15.3	619
XGB-005	1x70/RM	17.2	837
XGB-006	1x95/RM	17.5	1023
XGB-007	1x120/RM	19.1	1264
XGB-008	1x150/RM	20.9	1540
XGB-009	1x185/RM	23.1	1917
XGB-010	1x240/RM	25.6	2430
XGB-011	1x300/RM	28.1	2996
XGB-012	2x1,5/RE	8.5	106
XGB-013	2x2.5/RE	9.3	135
XGB-014	2x4/RE	10.6	191
XGB-015	2x6/RE	11.6	244
XGB-016	2x10/RE	13.2	350
XGB-017	2x16/RM	15.8	540
XGB-018	2x25/RM	19.3	820
XGB-019	2x35/RM	21.7	1073
XGB-020	3x1.5/RE	9.2	130
XGB-021	3x2.5/RE	9.8	161
XGB-022	3x4/RE	11.2	231
XGB-023	3x6/RE	12.3	303
XGB-024	3x10/RE	14.0	441
XGB-025	3x16/RM	17.0	692
XGB-026	3x25/RM	20.5	1041
XGB-027	3x35/RM	23.4	1391
XGB-028	3x50/RM	27.4	1951
XGB-029	3x70/SM	29.8	2371
XGB-030	3x95/SM	30.8	2982
XGB-031	3x120/SM	33.7	3714
XGB-032	3x150/SM	38.2	4586
XGB-033	3x185/SM	42.6	5743
XGB-034	3x240/SM	47.9	7419
XGB-035	3x300/SM	52.4	9313
XGB-036	3x25/RM+1x16/RM	21.7	1198
XGB-037	3x35/RM+1x16/RM	24.3	1532
XGB-038	3x50/RM+1x25/RM	28.8	2194
XGB-039	3x70/SM+1x35/RM	33.1	2747
XGB-040	3x95/SM+1x50/RM	35.5	3497
XGB-041	3x120/SM+1x70/RM	39.3	4437
XGB-042	3x150/SM+1x70/RM	44.1	5300
XGB-043	3x185/SM+1x95/RM	48.8	6731
XGB-044	3x240/SM+1x120/RM	55.2	8646
XGB-045	3x300/SM+1x150/RM	61.2	10858

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XVB – Cca-s3,d2,a3

DESIGN

Conductor
Copper conductor

Insulation
XLPE Insulation

Core Covering
Common Core Covering, Taped or Extruded

Outer Sheath
PVC Outer Sheath, Fire Retardant, Grey

APPLICATIONS

Indoor and outdoor installation, in ducts, cable channels, open air protected from direct UV rays and in soil (only with protection).

TECHNICAL DATA

Nominal Voltage	0.6/1 kV
Max. Conductor Temperature	90°C (250°C during short circuit of max. 5 sec.)
Min. Laying Temperature	0°C
Min. Bending Radius	Single core: 15 x Cable Diameter, Multicore: 12 x Cable Diameter
CPR	Cca-s3,d2,a3 acc. to EN 50399, NBN C30-004 F2

DIMENSIONS

Part Numbers	Section	Insulation Thickness	Outer Sheath Thickness	Outer Diameter	Approx. Weight
	(mm^2)	(mm)	(mm)	(mm)	(Kg/Km)
XVB-001	1x16/RM	0.7	1.4	10.4	230
XVB-002	1x25/RM	0.9	1.4	12.0	330
XVB-003	1x35/RM	0.9	1.4	13.2	428
XVB-004	1x50/RM	1.0	1.4	14.5	567
XVB-005	1x70RM	1.1	1.4	16.4	778
XVB-006	1x95/RM	1.1	1.5	19.4	1092
XVB-007	1x120/RM	1.2	1.5	21.0	1338
XVB-008	1x150/RM	1.4	1.6	22.8	1619
XVB-009	1x185/RM	1.6	1.6	25.0	2005
XVB-010	1x240/RM	1.7	1.7	27.5	2525
XVB-011	1x300/RM	1.8	1.8	30.0	3100

DIMENSIONS

Part Numbers	Section	Insulation Thickness	Outer Sheath Thickness	Outer Diameter	Approx. Weight
	(mm^2)	(mm)	(mm)	(mm)	(Kg/Km)
XVB-012	2x1.5/RE	0.7	1.4	8.7	108
XVB-013	2x2.5/RE	0.7	1.4	9.5	138
XVB-014	2x4/RE	0.7	1.4	10.3	181
XVB-015	2x6/RE	0.7	1.4	11.3	234
XVB-016	2x10/RE	0.7	1.4	12.9	338
XVB-017	2x16/RM	0.7	1.4	15.7	515
XVB-018	2x25/RM	0.9	1.6	19.2	786
XVB-019	2x35/RM	0.9	1.6	22.6	1087
XVB-020	3x1.5/RE	0.7	1.4	9.1	125
XVB-021	3x2.5/RE	0.7	1.4	10.0	164
XVB-022	3x4/RE	0.7	1.4	10.9	221
XVB-023	3x6/RE	0.7	1.4	12.0	292
XVB-024	3x10/RE	0.7	1.4	13.7	428
XVB-025	3x16/RM	0.7	1.5	16.9	667
XVB-026	3x25/RM	0.9	1.6	20.4	1008
XVB-027	3x35/RM	0.9	1.7	24.3	1410
XVB-028	3x50/RM	1.0	1.8	27.3	1894
XVB-029	3x70/SM	1.1	1.9	28.0	2211
XVB-030	3x95/SM	1.1	2	31.2	2997
XVB-031	3x120/SM	1.2	2.1	34.1	3730
XVB-032	3x150/SM	1.4	2.3	38.6	4604
XVB-033	3x185/SM	1.6	2.4	43.0	5762
XVB-034	3x240/SM	1.7	2.6	48.3	7438
XVB-035	3x300/SM	1.8	2.8	52.8	9333
XVB-036	3x25/RM+16RM	0.9/0.7	1.6	21.6	1166
XVB-037	3x35/RM+16RM	0.9/0.7	1.7	25.2	1555
XVB-038	3x50/RM+25RM	1.0/0.9	1.8	28.7	2137
XVB-039	3x70/SM+35RM	1.1/0.9	1.9	31.3	2583
XVB-040	3x95/SM+50RM	1.1/1.0	2.1	35.9	3527
XVB-041	3x120/SM+70RM	1.2/1.1	2.2	39.7	4470
XVB-042	3x150/SM+70RM	1.4/1.1	2.3	44.5	5339
XVB-043	3x185/SM+95RM	1.6/1.1	2.5	49.2	6770
XVB-044	3x240/SM+120RM	1.7/1.2	2.7	55.6	8687
XVB-045	3x300/SM+150RM	1.8/1.4	2.9	61.6	10906
XVB-046	4x1.5/RE	0.7	1.4	9.8	148
XVB-047	4x2.5/RE	0.7	1.4	10.8	197
XVB-048	4x4/RE	0.7	1.4	11.8	267
XVB-049	4x6/RE	0.7	1.4	13.0	359
XVB-050	4x10/RE	0.7	1.5	15.1	540
XVB-051	4x16/RM	0.7	1.5	18.4	834
XVB-052	4x25/RM	0.9	1.7	22.6	1283
XVB-053	4x35/RM	0.9	1.8	26.7	1778
XVB-054	4x50/RM	1.0	1.9	30.1	2403
XVB-055	4x70/SM	1.1	2.0	31.5	2925
XVB-056	4x95/SM	1.1	2.1	35.9	3975
XVB-057	4x120/SM	1.2	2.3	39.9	4969
XVB-058	4x150/SM	1.4	2.4	44.7	6106
XVB-059	4x185/SM	1.6	2.6	49.4	7658
XVB-060	4x240/SM	1.7	2.8	55.8	9871
XVB-061	4x300/SM	1.8	3.0	61.7	12414

YMVK FLEX – Dca-s2,d2,a3

DESIGN

Conductor
Flexible Copper Conductor (Class 5) (Electrical resistance as for class 2 acc. to KEMA K42C-1-4-D)

Insulation
XLPE Insulation

Core Covering
Common Core Covering

Outer Sheath
PVC Outer Sheath, Fire Retardant, Grey

APPLICATIONS

Power cable for industrial applications. Suitable in air, ducts, pipes and in ground with protection. Particularly suitable for installations within limited room and/or with a lot of bends with short radius.

TECHNICAL DATA

Nominal Voltage	0.6/1 kV
Max. Conductor Temperature	90°C (250°C during short circuit of max. 5 sec.)
Service Temperature	-20°C to 90°C
Min. Laying Temperature	-5°C
Min. Bending Radius	5 x Cable Diameter
CPR / Reaction to fire	Dca or Cca, acc to EN 50399, IEC/EN 60332-3-24

DIMENSIONS

Part Numbers	Section	Insulation Thickness	Outer Sheath Thickness	Outer Diameter	Approx. Weight
	(mm^2)	(mm)	(mm)	(mm)	(Kg/Km)
YKF-001	1x35	0.9	1.8	13.5	438
YKF-002	1x50	1.0	1.8	14.9	556
YKF-003	1x70	1.1	1.8	16.7	768
YKF-004	1x95	1.1	1.8	18.8	1041
YKF-005	1x120	1.2	1.8	20.6	1273
YKF-006	1x150	1.4	1.8	22.8	1594
YKF-007	1x185	1.6	1.8	25.3	1935
YKF-008	1x240	1.7	1.8	27.7	2543
YKF-009	1x300	1.8	1.8	30.5	3070
YKF-010	1x400	2.0	1.9	33.9	3959

DIMENSIONS

Part Numbers	Section	Insulation Thickness	Outer Sheath Thickness	Outer Diameter	Approx. Weight
	(mm^2)	(mm)	(mm)	(mm)	(Kg/Km)
YKF-011	4x35	0.9	1.8	29.2	1916
YKF-012	4x50	1.0	1.9	33.2	2565
YKF-013	4x70	1.1	2.0	37.7	3551
YKF-014	4x95	1.1	2.1	43.0	4825
YKF-015	4x120	1.2	2.3	48.1	6005
YKF-016	4x150	1.4	2.4	53.6	7547
YKF-017	4x185	1.6	2.6	60.1	9267
YKF-018	4x240	1.7	2.8	66.2	12072

DIMENSIONS

Part Numbers	Section	Insulation Thickness	Outer Sheath Thickness	Outer Diameter	Approx. Weight
	(mm^2)	(mm)	(mm)	(mm)	(Kg/Km)
YKF-019	5x10	0.7	1.8	20.0	777
YKF-020	5x16	0.7	1.8	23.3	1132
YKF-021	5x25	0.9	1.8	28.9	1793
YKF-022	5x35	0.9	1.8	32.6	2437
YKF-023	5x50	1.0	2.0	36.8	3151
YKF-024	5x70	1.1	2.1	41.8	4367
YKF-025	5x95	1.1	2.3	48.3	6019
YKF-026	5x120	1.2	2.5	53.4	7395
YKF-027	5x150	1.4	2.6	59.8	9331
YKF-028	5x185	1.6	2.8	66.9	11436

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YMVKMB AL

DESIGN

Conductor
AL, Class 2 according to EN 60228

Insulation
XLPE Compound

Bedding
Extruded compound or plastic tape.

Outer Sheath
PVC Compound

APPLICATIONS

A power and control cable for general use in low voltage installations up to 1 kV. Suitable for applications indicated in NEN 1010. Suited for direct burial (also in wet conditions but not direct in water) and above ground, as power cable for mains and distribution boards.

CHARACTERISTICS

CPR	Dca-s3,d1,a3 (CCA possible on request)
Voltage Rating (Uo/U)	0.6/1 kV
Testing Voltage	4 kV
Min. Temp. For Cable Laying	0°C
Max. Working Temperature	90°C
Max. Short-Circuit Temperature	250°C
Min. Bending Radius	Single core: 15 x Diameter, Multicore: 12 x Diameter
Standard	HD 604 S1, IEC 60502-1

DIMENSIONS

Part Numbers	Cross Section (mm^2)	Max. Resistance at 20°C (Ohm/Km)	Current Capacity in Air (A)	Current Capacity in Ground (A)	Outer Diameter Approx. (mm)	Weight (Kg/Km)
YKB-001	3x35	0.868	126	135	20.5	489
YKB-002	3x50	0.641	149	158	22.9	646
YKB-003	3x70	0.443	191	196	26.5	871
YKB-004	3x95	0.320	234	234	29.5	1134
YKB-005	3x120	0.253	273	268	32.5	1404
YKB-006	3x150	0.206	311	300	37.0	1759
YKB-007	3x185	0.164	360	342	40.9	2144
YKB-008	3x240	0.125	427	398	45.7	2738

DIMENSIONS

Part Numbers	Cross Section (mm^2)	Max. Resistance at 20°C (Ohm/Km)	Current Capacity in Air (A)	Current Capacity in Ground (A)	Outer Diameter Approx. (mm)	Weight (Kg/Km)
YKB-009	4x16	1.910	-	-	18.7	550
YKB-010	4x25	1.200	102	112	22.3	782
YKB-011	4x35	0.868	126	135	25.0	990
YKB-012	4x50	0.641	149	158	28.0	1348
YKB-013	4x70	0.443	191	196	32.7	1778
YKB-014	4x95	0.320	234	234	36.1	2259
YKB-015	4x120	0.253	273	268	40.4	2844
YKB-016	4x150	0.206	311	300	45.0	3491
YKB-017	4x185	0.164	360	342	50.0	4322
YKB-018	4x240	0.125	427	398	56.2	5433
YKB-019	4x300	0.100	507	457	61.9	6609

DIMENSIONS

Part Numbers	Cross Section (mm^2)	Max. Resistance at 20°C (Ohm/Km)	Current Capacity in Air (A)	Current Capacity in Ground (A)	Outer Diameter Approx. (mm)	Weight (Kg/Km)
YKB-020	5x16	1.910	-	-	20.3	635
YKB-021	5x25	1.200	102	112	24.4	907
YKB-022	5x35	0.868	126	135	27.4	1154
YKB-023	5x50	0.641	149	158	31.8	1598
YKB-024	5x70	0.443	191	196	36.3	2101
YKB-025	5x95	0.320	234	234	41.0	2702
YKB-026	5x120	0.253	273	268	45.6	3373
YKB-027	5x150	0.206	311	300	51.2	4172






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