



R R Kabel is a part of R R Global, which is one of the leading conglomerates in the electrical sector. Working with determination to produce products with best technologies, R R Kabel has always made the latest advances in wire design and engineering. Today, R R Kabel offers the latest and widest range of premium wires & cables for various residential, commercial, industrial and infrastructure purposes.

For us at R R Kabel think wires are not just objects, we believe that wires play the role of nerves in the body. When you believe this, you have designers, engineers, fabricators, and other partners who need to have incredible design and commitment to pursue and create a product that can be trusted, and relied upon.

We believe that the future of design lies with innovation that instigates one to push boundaries, eliminate borders between sciences. The materials we use may sometimes be unique, sometimes experimental, many are collaborations but they all represent extraordinary research and dedication by engineers, designers and visionaries.

R R Kabel is constantly emerging with new marketing and technical perspectives that are globally significant, we are aiming to create significance of our multi-faceted range when designing making it better environment and the customers.

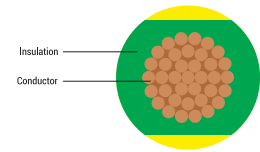


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PVC INSULATED NON SHEATHED (H05V-U / H07V-U / H07V-R)

PSB
Certification
Singapore



Conductors

Plain annealed copper conductor 1 Sq. mm to 2.5 Sq. mm solid Class 1
1.5 Sq. mm to 630 mm² stranded Class 2 complying with BS EN 60228, HD 383, I

Temperature Rating

Fixed application -15° C TO +70° C

Insulation

PVC (Polyvinyl chloride) complying BS EN 50363-3, HD 21.1, IEC 60227-1, SABS 1411-2

Colours Available

Red, Yellow, Black, Blue, Brown, Yellow/Green, Grey, White. Other colours available on request.

Application

Suitable for power and lighting circuits and building wiring.
Suitable for use in semi-flush exposed conduits, embedded conduits and in closed installation ducts.
Ideal for the internal wiring of appliance.

Standards

BS EN 50525-2-31, DIN VDE 0281-3, NFC 32-201-3, SABS 1507-2, SS 358: Part 3

Harmonised Code Designation

1 Sq. mm solid wire H05V-U
1.5 Sq. mm and 2.5 Sq. mm solid wire H07V-U
1.5 Sq. mm to 630 Sq. mm stranded wire H07V-R

Voltage Rating

1100V

Minimum Bending Radius

Upto 10 Sq. mm : 3 x Overall diameter.
16 & 25 Sq. mm : 4 x Overall diameter.
Above 25 Sq. mm : 5 x Overall diameter.

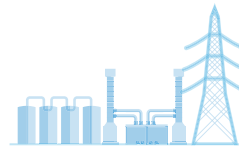
Single Core PVC Insulated Unsheathed TYPE (NYA)

Dimensions

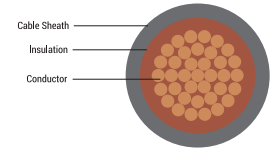
Nominal Cross Sectional Area (Sq. mm)	Conductor Details		Nominal Insulation Thickness (mm)	Nominal Overall Diameter (mm)	Approx. net Weight Kg/Km
	No. of Strands	Max DC Resistance at 20°C (Ω/km)			
1	1	18.1	0.6	2.4	14
1.5	1	12.1	0.7	2.8	20
1.5	7	12.1	0.7	3.0	19
2.5	1	7.41	0.8	3.4	32
2.5	7	7.41	0.8	3.6	33
4	7	4.61	0.8	4.2	50
6	7	3.08	0.8	5.1	74
10	7	1.83	1.0	6.7	126
16	7	1.15	1.0	7.8	184
25	7	0.727	1.2	9.6	295
35	7	0.524	1.2	10.0	375
50	19	0.387	1.4	11.7	510
70	19	0.268	1.4	13.5	710
95	19	0.193	1.6	15.8	950
120	37	0.153	1.6	17.5	1240
150	37	0.124	1.8	19.5	1530
185	37	0.0991	2.0	21.3	1800
240	37	0.0754	2.2	25.0	2500
300	61	0.0601	2.4	27.2	2990
400	61	0.0470	2.6	31.0	3860
500	61	0.0366	2.8	34.5	4900
630	91	0.0283	2.8	39.0	6370

Note:- Size 1.5 to 150 Sq. mm BASEC Approved
Size 1 to 4 Sq. mm VDE Approved

Size 1 to 120 Sq. mm NF – USE Approved
For other sizes kindly contact for details



DOUBLE INSULATED PVC WIRING CABLE - 6181Y



Conductors

Plain Annealed Copper Conductor
 Solid Class 1: 1 to 2.5 Sq. mm
 Stranded Class 2: 1.5 - 35 Sq. mm
 Complying with BS EN 60228, HD 383, IEC 60228, SABS 1411 -1

Temperature Rating

0° C to +70° C (PVC)

Insulation

PVC (Polyvinyl Chloride)
 Complying BS EN 50363 - 3, HD 21.1, IEC 60227-1

Insulation Colour

Blue & Brown

Application

Fixed installations in dry or damp areas for domestic and light industrial wiring. Not meant for direct burial underground.

Dimensions

Nominal Cross Sectional Area (Sq. mm)	Conductor Details		Nominal Thickness of Insulation (mm)	Nominal Diameter Over Core (mm)	Nominal Overall Diameter (mm)	Approx. net Weight Kg/Km
	No. of Strands	Max DC Resistance at 20°C (Ω/km)				
1	1	18.1	0.6	2.4	4.1	27
1.5	1	12.1	0.7	2.8	4.5	34
1.5	7	12.1	0.7	2.8	4.5	35
2.5	1	7.41	0.8	3.4	5.1	49
2.5	7	7.41	0.8	3.6	5.2	50
4	7	4.61	0.8	4.2	6.1	73
6	7	3.08	0.8	5.1	7.0	100
10	7	1.83	1.0	6.7	8.6	160
16	7	1.15	1.0	7.8	9.9	225
25	7	0.727	1.2	9.6	12.0	350
35	7	0.524	1.2	10.0	12.5	440

Standards

BS 6004:2012

Voltage Rating

1100 V

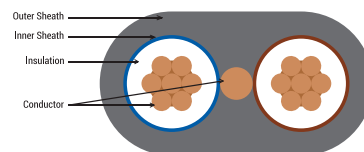
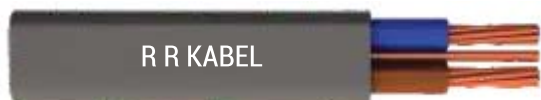
Minimum Bending Radius

Upto 10 Sq. mm : 3 x Overall diameter.
 16 & 25 Sq. mm : 4 x Overall diameter.
 Above 25 Sq. mm : 5 x Overall diameter.

Sheath

PVC (Polyvinyl Chloride) in Grey color

ECC TWIN PLUS EARTH



Conductors

Plain annealed copper conductor

Temperature Rating

-15 to +70° C

Insulation

PVC insulated one, two or three cores laid flat with an uninsulated circuit protective conductor and PVC sheathed.

Ref 6241/2/3Y 300/500 V to Bs6004

Insulation Colour

Grey

Dimensions

CCC Code	Conductor Size Sq. mm	Stranding (mm)	No. of Cores	CPC Size Sq. mm	Weight (Kg/Km)	Overall Diameter (mm)
6241Y1BR	1.0	1/1.13	1	1.0	49	4.15 X 5.40
6241Y1/5BR	1.5	1/1.37	1	1.0	51	4.65 X 5.80
6242Y1	1.0	1/1.13	2	1.0	69	4.10 X 8.65
6242Y1/5	1.5	1/1.38	2	1.0	85	4.55 X 8.80
6242Y1/5BRBR	1.5	1/1.38	2	1.0	85	4.55 X 8.80
6242Y2/5	2.5	1/1.77	2	1.5	120	5.40 X 10.50
6242Y4	4.0	7/0.85	2	1.5	175	6.10 X 12.00
6242Y6	6.0	7/1.04	2	2.5	240	6.90 X 13.80
6242Y10	10.0	7/1.35	2	4.0	390	8.40 X 18.50
6242Y16	16.0	7/1.70	2	6.0	560	9.70 X 20.60
6243Y1	1.0	1/1.13	3	1.0	92	4.60 X 10.20
6243Y1/5	1.5	1/1.37	3	1.0	115	4.75 X 11.45
6243Y2/5	2.5	1/1.77	3	1.5	170	5.45 X 13.40

Standards

Flame propagation to BS EN 50265

Voltage Rating

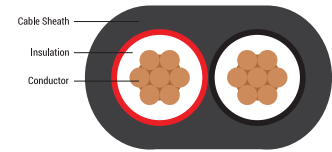
1100 V

Minimum Bending Radius

Upto 10 mm : 3 x Overall diameter.

Above 25 mm : 6 x Overall diameter.

2 CORE FLAT CABLE



Application

PVC 70°C cables suitable for wiring in residential and commercial infrastructure.

HR PVC 85°C cables are suitable for wiring in residential and commercial infrastructure for a higher ambient temperature.

FR-LSH cables are suitable for wiring in public places like schools, hospitals, theatres, etc. These are also suitable for fire prone areas and chemical factories.

Conductor : Electrolytic grade annealed copper

Core Colour : Red, black

Sheath Colour : Black, grey and white

Packing : Standard packing of 100m in coils. Longer length available on request.

Voltage Rating

1100 V

Technical Data

Approvals : IS 694 marked, FIA / TAC

Variants Available

Product Type	Specifications
PVC 70°C	IS 694, IS 8130 Class 5, IS 5831 Type A insulation & ST-1 sheath.
HR 85°C	IS 694, IS 8130 Class 5, IS 5831 Type C insulation & ST-2 sheath.
FR 70°C	IS 694, IS 8130 Class 5, IS 5831 Type A insulation & ST-1 (FR) sheath.
HR 85°C + FR	IS 694, IS 8130 Class 5, IS 5831 Type C insulation & ST-2 (FR) sheath.
FR-LSH	IS 694, IS 8130 Class 5, IS 5831 Type A insulation & ST-1 (FR-LSH) sheath.

Cable Design Parameters

Kindly complete the part numbers for these cables by adding the suffix (in place of 'y') for the product type required:

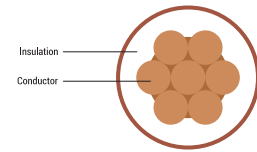
1 – PVC 70°C, 2 - PVC FR 70°C, 3 - PVC HR 85°C, 4 - PVC HR 85°C +FR, 5 - PVC FR-LSH and (in place of 'z') for the sheath colour required as per the list: 1 - black, 2 - grey, 3 - white

Part Number	Nominal Cross Sectional Area (Sq. mm)	Nominal Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Maximum Overall Dimension (W x H) (mm x mm)
0117110132yz	0.5	0.6	0.9	7.2 X 4.9
0117110232yz	0.75	0.6	0.9	7.8 X 5.2
0117110332yz	1	0.6	0.9	8.0 X 5.4
0117110432yz	1.5	0.6	0.9	8.6 X 5.6
0117110532yz	2.5	0.7	1.0	10.5 x 6.6

Part Number	Nominal Cross Sectional Area (Sq. mm)	Nominal Insulation Thickness (mm)	Nominal Sheath Thickness (mm)	Maximum Overall Dimension (W x H) (mm x mm)
0117110632yz	4	0.8	1.0	12.0 X 7.4
0117110732yz	6	0.8	1.1	13.0 X 8.0
0117110832yz	10	1.0	1.4	16.0 X 9.6
0117110932yz	16	1.0	1.4	18.5 X 11.0
0117111032yz	25	1.2	2.0	22.5 X 13.0
0117111132yz	35	1.2	2.0	25.5 X 14.5
0117111232yz	50	1.4	2.2	29.0 X 16.5



HALOGEN FREE INSULATED NON SHEATHED (H07Z-R)



Conductors

Plain Annealed Copper Conductor
 1.0 Sq. mm to 2.5 Sq. mm Solid Class 1
 1.5 Sq. mm to 300 Sq. mm Stranded Class 2
 Complying with BS EN 60228, HD 383, IEC 60228, SABS 1411 -1

Temperature Rating

0° C to 90° C

Insulation

X linkable, Low Smoke Zero Halogen (LSOH)

Colors Available

Red, Black, Blue, Brown, Yellow / Green.
 Other Colours Available On Request.

Application

The cables are suitable for conduit wiring, especially in installation where fire, smoke emission and toxic fumes create a potential threat.

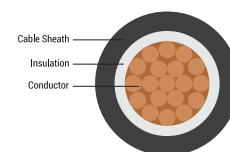
Single Core Low Smoke Zero Halogen (LSOH)

Dimensions

Nominal Cross Sectional Area (Sq. mm)	Conductor Details		Nominal Insulation Thickness (mm)	Nominal Overall Diameter (mm)	Approx. net Weight Kg/Km
	No. of Strands	Max DC Resistance at 20°C (Ω/km)			
1 x 1	1	18.1	0.6	2.4	14
1 x 1.5	1	12.1	0.7	2.8	20
1 x 1.5	7	12.1	0.7	2.8	19
1 x 2.5	1	7.41	0.8	3.4	32
1 x 2.5	7	7.41	0.8	3.6	33
1 x 4	7	4.61	0.8	4.2	50
1 x 6	7	3.08	0.8	5.1	74
1 x 10	7	1.83	1.0	6.7	126
1 x 16	7	1.15	1.0	7.8	184
1 x 25	7	0.727	1.2	9.6	295

Note: Size 1.5 to 25 Sq. mm BASEC approved. For sizes above 25 Sq. mm, kindly call for more information.

DOUBLE INSULATED WIRING CABLE - CU/ XLPE/ PVC - 6181XY



Conductors

Plain annealed copper conductor, 1.0 to 2.5 Solid Class 1
1.5 to 300 mm² stranded Class 2 complying with BS EN 60228,
HD 383, IEC 60228, SABS 1411-1

Temperature Rating

0° C to +90° C

Insulation & Insulation Colour

XLPE (Cross Linked Polyethylene)
Color: Blue & Brown

Sheath

PVC (Polyvinyl Chloride) in Grey color

Application

Fixed installations in dry and damp areas for domestic and light industrial wiring.

Not meant for direct burial underground.

Standards

IEC 60502-1, BS 7889

Voltage Rating

1100V

Minimum Bending Radius

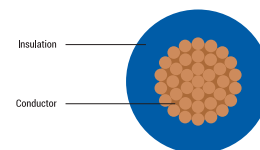
Up to 25 mm : 4 x Overall diameter.

Above 25 mm : 6 x Overall diameter.

Dimensions

Nominal Cross Sectional Area (Sq. mm)	Conductor Details		Nominal Thickness of Insulation (mm)	Nominal Diameter Over Core (mm)	Nominal Overall Diameter (mm)	Approx. Net Weight Kg/Km
	No. of Strands	Max DC Resistance at 20°C (Ω/km)				
1.5	1	12.1	0.7	2.8	5.0	37
1.5	7	12.1	0.7	3.0	5.3	41
2.5	1	7.41	0.7	3.2	5.5	51
2.5	7	7.41	0.7	3.4	5.7	52
4	7	4.61	0.7	4.0	6.3	71
6	7	3.08	0.7	4.5	6.9	94
10	7	1.83	0.7	5.5	7.9	140
16	7	1.15	0.7	6.4	9.0	199
25	7	0.727	0.9	8.2	10.9	310
35	7	0.524	0.9	9.4	12.1	410
50	19	0.387	1.0	10.9	13.8	545
70	19	0.268	1.1	12.9	15.9	765
95	19	0.193	1.1	14.8	17.9	1030
120	37	0.153	1.2	16.6	19.9	1295
150	37	0.124	1.4	18.6	21.9	1580
185	37	0.0991	1.6	20.4	23.9	1875
240	37	0.0754	1.7	23.7	27.4	2565
300	61	0.0601	1.8	25.7	29.5	3020
400	61	0.0470	2.0	29.0	33.2	3871
500	61	0.0366	2.2	32.8	37.1	4929
630	91	0.0283	2.4	37.3	42.0	6412

PVC INSULATED SINGLE CORE FLEXIBLE CABLE (H05V-K / H07V-K)



Conductors

Plain annealed copper conductor 0.5 to 240 flexible copper complying to BS EN 60228 : (earlier BS 6360), HD 383, IEC60228

Temperature Rating

0° C to +70° C

Insulation

PVC insulation complying to BS EN 50363-3 requirements for TYPET I1

Colours Available

Black, Red, Blue, Yellow, Green / Yellow, Grey, Brown.
Other colours available on request.

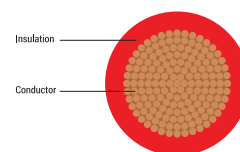
Dimensions

Nominal Cross Sectional Area (Sq. mm)	Max. Strand Diameter (mm)	Max DC Resistance at 20°C (Ω/km)	Nominal Insulation Thickness (mm)	Nominal Overall Diameter (mm)	Approx. net Weight Kg/Km
1 x 0.5	0.21	39.0	0.6	2.1	9.0
1 x 0.75	0.21	26.0	0.6	2.3	11.7
1 x 1.0	0.21	19.5	0.6	2.5	14.7
1 x 1.5	0.26	13.3	0.7	3.0	21.3
1 x 2.5	0.26	7.98	0.8	3.6	33.2
1 x 4	0.31	4.95	0.8	4.2	50.0
1 x 6	0.31	3.30	0.8	5.0	73.0
1 x 10	0.41	1.91	1.0	6.3	119.5
1 x 16	0.41	1.21	1.0	7.3	179.5
1 x 25	0.41	0.780	1.2	9.3	283.0
1 x 35	0.41	0.554	1.2	10.5	385.0
1 x 50	0.41	0.386	1.4	12.8	559.0
1 x 70	0.51	0.272	1.4	14.7	754.2
1 x 95	0.51	0.206	1.6	16.5	987.2
1 x 120	0.51	0.161	1.6	18.2	1235.0
1 x 150	0.51	0.129	1.8	20.2	1522.5
1 x 185	0.51	0.106	2.0	22.5	1889.5
1 x 240	0.51	0.0801	2.2	25.5	2433.0

1 x 0.5...120 is NF-USE Certified. 1 x 0.5...4 is VDE Certified.

Note: Also available with Halogen Free (LSOH) insulation.

HEAT RESISTANT PVC INSULATED SINGLE CORE FLEXIBLE CABLE BS 6231 / TRI RATED CABLE (H07V2-K)



Application

High temperature, flame retardant cable designed for use in switch control, relay and instrumentation panels of power switchgear and for purposes such as internal connectors in rectifier equipment, motor starters and controllers.

Conductor

Class 5 flexible plain copper conductor to BS EN 60228:2005 (previously BS6360)

Colours Available

Black, Red, Blue, Yellow, Green/Yellow, Grey, Brown, Orange, White, Violet, Green, Pink

Temperature Rating

BS6231 : 90°C
UL, CSA : 105°C

Dimensions

No. of Cores x Nominal Cross Sectional Area	AWG	Nominal Thickness of Insulation (mm)	Nominal Overall Diameter (mm)	Nominal Weight Kg/Km	UL Style Number	Max. Strand Diameter (mm)	Max. DC Resistance at 20°C (Ω/km)
1 x 0.5	22	0.80	2.50	11	1015	0.21	39.0
1 x 0.75	20	0.80	2.75	15	1015	0.21	26.0
1 x 1	18	0.80	2.90	18	1015	0.21	19.5
1 x 1.5	16	0.80	3.15	23	1015	0.26	13.3
1 x 2.5	14	0.80	3.60	35	1015	0.26	7.98
1 x 4	12	0.80	4.15	48	1015	0.31	4.95
1 x 6	10	0.80	4.70	69	1015	0.31	3.30
1 x 10	8	1.15	6.40	117	1015	0.41	1.91
1 x 16	6	1.55	8.45	191	1015	0.41	1.21
1 x 25	4	1.55	9.60	281	1015	0.41	0.78
1 x 35	2	1.55	10.90	389	1015	0.41	0.5335
1 x 50	1	2.10	13.30	560	1015	0.41	0.386
1 x 70	2/0	2.10	15.30	774	1015	0.51	0.2650
1 x 95	3/0	2.10	17.10	991	1015	0.51	0.206
1 x 120	4/0	2.10	18.45	1231	1015	0.51	0.161
1 x 150	250	2.45	21.00	1534	1015	0.51	0.129
1 x 185	350	2.45	22.90	1878	1015	0.51	0.1011
1 x 240	450	2.45	25.60	2381	1015	0.51	0.0787

Standards

BS6231 Type CK, UL Subj.758, CSA c.22.2 No. 210-05

Insulation

PVC (Polyvinyl Chloride)

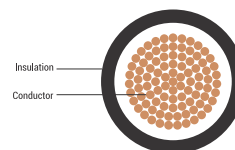
Voltage Rating

BS6231: 1100V
UL, CSA : 1100V

Minimum Bending Radius

6 x overall diameter

APPLIANCE WIRING MATERIAL (AWM) – UL 1015



Cable Construction

Stranded copper conductor plain PVC conductor insulation according to UL-Std. 1581 class 43 and CSA-C22.2 No. 210 UL VW-1 and CSA

FT1, heat and damp resistant properties

Technical Data

PVC insulated jumper wire to UL AWM Style 1015 and CSA-AWM as per UL Style 1015

Temperature Range

Flexible -5°C to +105°C (+23°F to +221°F)

Fixed installation -30°C to +105°C (22°F to +221°F)

Temperature at Conductor

Max. UL and CSA: +105°C/ +221°F

Voltage Rating

1100V

Dimensions

Cross Section Area Sq. mm	AWG No.	Nom Insulation Thickness mm	Approx. Cable Diameter mm
0.4	22	0.78	2.6
0.7	20	0.78	2.8
0.9	18	0.78	2.9
1.3	16	0.78	3.2
2.2	14	0.78	3.6
3.4	12	0.78	4.2
5.2	10	0.78	4.7
8.8	8	1.143	6.4
14.7	6	1.524	8.5
22.8	4	1.524	9.6
33.1	2	1.524	10.9
46.1	1	2.04	13.3
67.3	2/0	2.04	15.3
86.9	3/0	2.04	17.1
110.1	4/0	2.04	18.5
135.8	250 MCM	2.42	21.00
177.0	350 MCM	2.42	22.9
227.7	450 MCM	2.42	25.6

Note : AWG sizes are approximate equivalent size. The actual cross-section is in

Properties

PVC self-extinguishing and flame retardant, test method to UL VW-1/CSA FT1. The materials used in manufacture are RoHS compliant.

Test Voltage (spark Test)

AWG 24 = 4 Kv

AWG 22 and 20 = 5 kV

AWG 18 to 10 = 6 kV

≥ AWG 8 = 7.5 kV

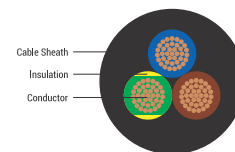
UL-Type AWM +105°C/+221°F

Bending Radius

Approx. 5 x cable ø

AWM - Appliance Wiring Material. Intended for Internal wiring of appliances UL - Underwriters Laboratories Inc. (USA) CSA - Canadian Standards Association (Canada) CE. The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

PVC INSULATED & SHEATHED MULTICORE FLEXIBLE CABLE - (H05VV-F)



Conductor

Plain annealed stopper flexible stranded, class 5, Circular conductor to BS EN 60228, IEC 60228

Temperature Rating

-15°C to 70°C

Insulation

PVC insulation complying with BS 50363-3, HD 21.1 requirements of type T12.

Outer Sheath

PVC insulation complying with BS EN 50363-4-1, HD 21.1 requirements of type TM2.

Application

Suitable for indoor general wiring cable primarily for installations in public areas. Suitable on pendant lighting drops and as a general supply lead.

Sheath Color

Normally WHITE, but other colours available on request.

Standards

BS EN 50525-2-11, VDE 0281-5, IEC 60227-5 SANS 1574

Harmonised Code Designation

H03VVH2-F
H05VVH2-F
H03VV-F
H05VV-F

Voltage Rating

1100V

Minimum Bending Radius

6 X Cable Diameter

Table 1 : Dimensions

Specification No. of Cores x Cross sectional area (mm)	Max Strand Diameter (mm)	Radial Thickness of Insulation (mm)	Radial Thickness of Sheath (mm)	Mean Overall Dimension W x H (mm)	Approx Cable Weight (Kg/Km)
H03VVH2-F					
2 x 0.5	0.21	0.6	0.6	5.1 x 3.2	33
2 x 0.75	0.21	0.6	0.6	5.5 x 3.4	41
H05VVH2-F					
2 x 0.75	0.21	0.6	0.8	6.3 x 4.0	48
2 x 1	0.21	0.6	0.8	6.6 x 4.1	55

Note : H03VVH2-F offered with VDE & DEMKO mark. H05VVH2-F offered with BASEC and VDE mark
Also available with Halogen Free (LSOH) insulation & sheath.

Table 2 : Dimensions

Specification No. of Cores x Cross sectional area (mm)	Max Strand Diameter (mm)	Radial Thickness of Insulation (mm)	Radial Thickness of Sheath (mm)	Mean Overall Dimension W x H (mm)	Approx Cable Weight (Kg/Km)
H03VV-F					
2 x 0.5	0.21	0.6	0.6	5.3	40
3G 0.5	0.21	0.6	0.6	5.6	47
4G 0.5	0.21	0.6	0.6	6.1	58
2 x 0.75	0.21	0.6	0.6	5.7	49
3G 0.75	0.21	0.6	0.6	6.0	58
4G 0.75	0.21	0.6	0.6	6.6	73

Note : H03VVH2-F offered with VDE & DEMKO mark. H05VVH2-F offered with BASEC and VDE mark

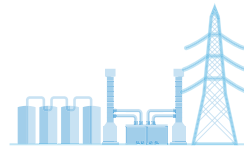
Table 3 : Dimensions

Specification No. of Cores x Cross sectional area (mm)	Max Strand Diameter (mm)	Radial Thickness of Insulation (mm)	Radial Thickness of Sheath (mm)	Mean Overall Dimension W x H (mm)	Approx Cable Weight (Kg/Km)
H05VV-F					
2 x 0.75	0.21	0.6	0.8	6.3	53
3G 0.75	0.21	0.6	0.8	6.6	58
4G 0.75	0.21	0.6	0.8	7.3	70
5G 0.75	0.21	0.6	0.9	8.1	85
2 x 1	0.21	0.6	0.8	6.6	60
3G 1	0.21	0.6	0.8	7.0	69
4G 1	0.21	0.6	0.9	7.9	86
5G 1	0.21	0.6	0.9	8.5	100
2 x 1.5	0.26	0.7	0.8	7.6	81
3G 1.5	0.26	0.7	0.9	8.2	96
4G 1.5	0.26	0.7	1.0	9.3	121
5G 1.5	0.26	0.7	1.1	10.3	147
2 x 2.5	0.26	0.8	1.0	9.0	121
3G 2.5	0.26	0.8	1.1	9.7	144
4G 2.5	0.26	0.8	1.1	10.7	176
5G 2.5	0.26	0.8	1.2	11.8	213
2 x 4	0.31	0.8	1.1	10.5	174
3G 4	0.31	0.8	1.2	11.3	210
4V 4	0.31	0.8	1.2	12.5	260
5G 4	0.31	0.8	1.4	13.9	318

Range : 0.75...2.5 Sq. mm x 2...5C with BASEC mark. 0.75...4 Sq. mm x 2...3C with VDE mark. 0.75...4 Sq. mm x 2...5C with DEMKO mark. For others kindly call in for more Information.

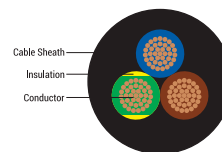
Table 4 : Dimensions Customized Flexible Cable

Specification No. of Cores x Cross sectional area (mm)	Max Strand Diameter (mm)	Radial Thickness of Insulation (mm)	Radial Thickness of Sheath (mm)	Mean Overall Dimension W x H (mm)	Approx Cable Weight (Kg/Km)
2 x 6	0.41	0.8	1.1	12.0	240
3G 6	0.41	0.8	1.2	13.2	300
4G 6	0.41	0.8	1.2	14.0	350
5G 6	0.41	0.8	1.5	16.0	450
2 x 10	0.41	1.0	1.1	14.4	360
3G 10	0.41	1.0	1.2	15.5	444
4G 10	0.41	1.0	1.3	17.6	570
5G 10	0.41	1.0	1.8	20.0	720
2 x 16	0.41	1.0	1.3	17.0	537
3G 16	0.41	1.0	1.4	18.0	662
4G 16	0.41	1.0	2.0	21.5	905
5G 16	0.41	1.0	2.1	23.4	1088
2 x 25	0.41	1.2	1.3	20.5	800
3G 25	0.41	1.2	1.4	22.5	1025
4G 25	0.41	1.2	1.5	25.3	1310
2 x 35	0.41	1.2	1.7	23.5	1095
3G 35	0.41	1.2	1.8	25.0	1375
4G 35	0.41	1.2	2.1	29.4	1850



HEAT RESISTANT PVC 105°C INSULATED & SHEATHED MULTICORE FLEXIBLE CABLE -(H05V2V2-F)

R R KABEL



Conductor

Plain annealed copper flexible stranded, Class 5 Circular conductor to BS EN 60228

Temperature Rating

-15° C to 90° C (105° C for 15000 Hrs)

Insulation

PVC insulation complying with BS 50363-3, requirements of type Ti3

Outer Sheath

PVC insulation complying with BS 50363-4-1 requirements of type Tm3

Application

Suitable for use in high temperature zones, Suitable for internal

Dimensions

No. of Cores x Cross Sectional area (mm)	Max Strand Dia. (mm)	Radial Thickness of Insulation (mm)	Radial Thickness of Sheath (mm)	Mean Overall Diameter (mm)	Approx Weight (Kg/Km)
H05V2V2-F					
2 x 0.75	0.21	0.6	0.8	6.3	53
3G 0.75	0.21	0.6	0.8	6.6	58
4G 0.75	0.21	0.6	0.8	7.3	70
5G 0.75	0.21	0.6	0.9	8.1	85
2 x 1	0.21	0.6	0.8	6.6	60
3G 1	0.21	0.6	0.8	7.0	69
4G 1	0.21	0.6	0.9	7.9	86
5G 1	0.21	0.6	0.9	8.5	100
2 x 1.5	0.26	0.7	0.8	7.6	81
3G 1.5	0.26	0.7	0.9	8.2	96
4G 1.5	0.26	0.7	1.0	9.3	121
5G 1.5	0.26	0.7	1.1	10.3	147
2 x 2.5	0.26	0.8	1.0	9.0	121
3 x 2.5	0.26	0.8	1.1	9.7	144
4G 2.5	0.26	0.8	1.1	10.7	176
5G 2.5	0.26	0.8	1.2	11.8	213
2 x 4	0.31	0.8	1.10	10.4	170
3G 4	0.31	0.8	1.20	11.0	210
4G 4	0.31	0.8	1.20	12.3	270
5G 4	0.31	0.8	1.40	13.8	340

wiring and supply cords to electrical apparatus

Standards

BS 6500

Voltage Rating

1100V

Harmonised Code Designation

H05V2V2-F

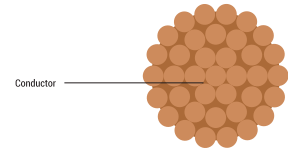
Minimum Bending Radius

6 X Cable Diameter

Sheath Color

Normally White, but other colours available on request

BARE COPPER CONDUCTOR - SOFT DRAWN - BS 6360



Application

To be used as ground conductor, un insulated hook up and jumpers.

Standards

IEC 60228, BS EN 60228, BS 6360

Description

Bare annealed copper, soft drawn.

Construction

The conductor consists of copper wires which are stranded together.

The construction of the conductor is according to the international standard of IEC 60220 / BS EN 60228 / BS 6360

Voltage Rating

1100V

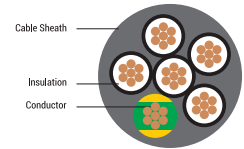
Packing

In wooden drums

Table - Construction Details of Bare Soft Drawn Copper

Nominal Cross Section Sq. mm	No. of strands	Approx Strand diameter mm	Approx Conductor Diameter mm	Max DC Conductor Resistance at 20°C	Approx net Weight Kg/ Km
16	7	1.68	5.0	1.15	139.0
25	7	2.13	6.4	0.727	224.0
35	7	2.52	7.6	0.524	314.0
50	19	1.78	8.9	0.387	427.0
70	19	2.14	10.7	0.268	617.0
95	19	2.52	12.2	0.193	856.0
120	37	2.04	14.2	0.153	1097.0
150	37	2.25	15.7	0.124	1335.0
185	37	2.47	17.1	0.0991	1610.0
240	61	2.23	19.5	0.0754	2162.0
300	61	2.47	22.0	0.0601	2652.0

CONTROL CABLES - YSLY



Conductor

Plain annealed class 5 copper flexible stranded circular conductor to BS EN 60228:2005 (earlier BS 6360)

Outer Sheath

PVC insulation complying with BS EN 50363-3 requirements for type T12

Voltage Rating

1100 V

Application

Used as interconnecting cable for measuring, controlling or regulation in control equipment.

Suitable for fixed installation or for flexible use in conditions of light mechanical stress.

Dimensions

Size Reference	No. of Conductors x Section (Sq. mm)	Cable Outer Diameter (mm) / Nominal	Weight Approx (kg/km)
YSLY-OZ 2x0.5	2x0.5	4.60	32
YSLY-JZ 3G0.5	3G0.5	4.90	40
YSLY-JZ 4G0.5	4G0.5	5.30	48
YSLY-JZ 5G0.5	5G0.5	5.70	57
YSLY-JZ 7G0.5	7G0.5	6.40	74
YSLY-JZ 12G0.5	12G0.5	8.50	129
YSLY-JZ 18G0.5	18G0.5	10.0	184
YSLY-JZ 19G0.5	19G0.5	10.0	187
YSLY-JZ 25G0.5	25G0.5	12.30	270
YSLY-JZ 27G0.5	27G0.5	12.25	275
YSLY-JZ 30G0.5	30G0.5	12.70	300
YSLY-JZ 34G0.5	34G0.5	13.30	333
YSLY-JZ 40G0.5	40G0.5	14.50	394

Note: Also available with Halogen Free (LSOH) insulation & sheath.

Insulation

PVC insulation complying with BS 7655 requirements of type Tm2

Sheath Color

Grey RAL 7001

Temperature Rating

-15° C TO +70° C

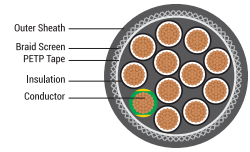
Also available with Halogen Free (LSOH) insulation & sheath.

Dimensions

Size Reference	No. of Conductors x Section (Sq. mm)	Cable Outer Diameter (mm) / Nominal	Weight Approx (kg/km)
YSLY-OZ 2x0.75	2x0.75	5.00	40
YSLY-JZ 3G0.75	3G0.75	5.30	50
YSLY-JZ 4G0.75	4G0.75	5.70	60
YSLY-JZ 5G0.75	5G0.75	6.50	77
YSLY-JZ 7G0.75	7G0.75	7.00	96
YSLY-JZ 12G0.75	12G0.75	9.50	172
YSLY-JZ 18G0.75	18G0.75	11.20	247
YSLY-JZ 19G0.75	19G0.75	11.20	253
YSLY-JZ 25G0.75	25G0.75	13.70	358
YSLY-JZ 27G0.75	27G0.75	13.70	370
YSLY-JZ 30G0.75	30G0.75	14.10	400
YSLY-JZ 34G0.75	34G0.75	14.70	442
YSLY-JZ 42G0.75	42G0.75	16.00	534
YSLY-JZ 50G0.75	50G0.75	17.90	653
YSLY-JZ 61G0.75	61G0.75	19.80	798
YSLY-OZ 2x1	2x1	5.40	49
YSLY-JZ 3G1	3G1	5.70	60
YSLY-JZ 4G1	4G1	6.40	78
YSLY-JZ 5G1	5G1	7.00	94
YSLY-JZ 7G1	7G1	7.80	123



JZ CY - TINNED COPPER BRAIDED CONTROL CABLE



Application

For use as a data cable in control circuits, in tool-making and machine industries as well as a signal cable in computer systems and electronics. The more usual PVC inner sheath has been removed in the cable, thus reducing the total diameter of the cables considerably and thereby reducing the bending radius, total weight etc. The high covering percentage of the copper screening offers interference-free signal transfer etc. The dense screening assures disturbance-free transmission of all signals and impulses.

Standard

Adapted to DIN VDE 0245, 0281 Part 13.

Technical Data

Voltage Rating : 1100V

Insulation Resistance : Min. 20 GΩ x cm

Temperature Range : Flexing -5°C to +70°C. Fixed installation -30°C to +70°C

Minimum Bending Radius : Flexing 10 x cable ø. Fixed installation 5 x cable ø

Test Voltage : Core/core 4000V. Core/screen 2000V

Breakdown Voltage : Min. 8000V

Cable Construction

Bare copper, fine wire conductors, to EN 60228 Cl.5.

Core insulation of special PVC T12, EN 50363-3.

Black Core with continuous white numbering to DIN VDE 0293.

Green/yellow earth core in outer layer (3 cores and above).

Cores stranded in layers with optimal lay-length.

Tinned copper, braided screen, approx 85% coverage.

Outer Sheath of Special PVC, TM2 to DIN/BS EN 50363-4.1.

Colour grey (RAL 7001).

Properties

PVC self-extinguishing and flame retardant according to EN 60332-1-2.

JZ-CY grey (RAL 7001) is available in oil resistant variant as JZ-CY OR. The outer sheath provided here is of special PVC TM5 to BS EN 50363 -4.1.

For Oil Resistant sheath kindly add 'OR' after the part nos.

Mutual capacitance according to different cross-sections 0.5Sq. mm to 2.5Sq. mm core/core approx. 150 nF/km core/screen approx. 270 nF/km.

Coupling resistance : Max. 250 Ω/km.

EMC : Electromagnetic compatibility : To optimise the EMC features we recommend a large round contact of the copper braiding on both ends.

Cable Design Parameters

Part Number	No. of Cores and Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
031200201050	2 x 0.5	5.8	18.8	44.9
031200311050	3G 0.5	6.1	24.7	55.0

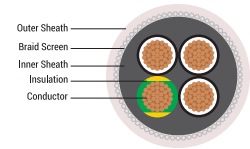
Part Number	No. of Cores and Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
031200301050	3 x 0.5	6.1	24.7	55.0
031200411050	4G 0.5	6.5	29.2	63.4
031200401050	4 x 0.5	6.5	29.2	63.4
031200511050	5G 0.5	7	34.6	73.9
031200501050	5 x 0.5	7	34.6	73.9
031200711050	7G 0.5	7.5	45.1	90.6
031200701050	7 x 0.5	7.5	45.1	90.6
031201211050	12G 0.5	9.9	71.4	149.1
031201201050	12 x 0.5	9.9	71.4	149.1
031201811050	18G 0.5	11.5	100.1	205.6
031201801050	18 x 0.5	11.5	100.1	205.6
031202511050	25G 0.5	13.4	134.1	271.7
031202501050	25 x 0.5	13.4	134.1	271.7
031200201075	2 x 0.75	6.2	25.0	53.2
031200311075	3G 0.75	6.5	31.3	64.0
031200301075	3 x 0.75	6.5	31.3	64.0
031200411075	4G 0.75	7.0	39.0	77.0
031200401075	4 x 0.75	7.0	39.0	77.0
031200511075	5G 0.75	7.7	47.2	93.4
031200501075	5 x 0.75	7.7	47.2	93.4
031200711075	7G 0.75	8.3	62.0	116.4
031200701075	7 x 0.75	8.3	62.0	116.4
031201211075	12G 0.75	10.9	98.9	189.7
031201811075	18G 0.75	12.7	141.0	265.0
031202511075	25G 0.75	14.8	210.6	363.6
031202501075	25 x 0.75	14.8	210.6	363.6
031200200001	2 x 1	6.5	29.5	59.7
031200310001	3G 1	6.8	38.9	73.6
031200300001	3 x 1	6.8	38.9	73.6
031200410001	4G 1	7.3	49.1	89.0
031200400001	4 x 1	7.3	49.1	89.0
031200510001	5G 1	8.1	58.4	108.1
031200500001	5 x 1	8.1	58.4	108.1
031200710001	7G 1	8.8	77.2	136.8
031200700001	7 x 1	8.8	77.2	136.8
031201210001	12G 1	11.5	125.5	223.3

Part Number	No. of Cores and Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
031201810001	18G 1	13.9	180.0	328.9
031202510001	25G 1	15.9	266.1	439.8
031200201105	2 x 1.5	7.1	39.4	73.9
031200311105	3G 1.5	7.5	51.7	92.7
031200301105	3 x 1.5	7.5	51.7	92.7
031200411105	4G 1.5	8.2	66.2	115.9
031200401105	4 x 1.5	8.2	66.2	115.9
031200511105	5G 1.5	8.9	80.9	138.7
031200501105	5 x 1.5	8.9	80.9	138.7
031200711105	7G 1.5	9.9	108.0	182.3
031200701105	7 x 1.5	9.9	108.0	182.3
031201211105	12G 1.5	13.0	175.1	298.0
031201811105	18G 1.5	15.6	276.0	450.8
031202511105	25G 1.5	17.9	377.6	596.4
031203411105	34G 1.5	20.8	488.3	787.3
031200311205	3G 2.5	8.9	80.9	136.6
031200411205	4G 2.5	9.9	102.9	174.0
031200511205	5G 2.5	11.0	125.0	213.7
031200711205	7G 1.5	11.9	168.4	272.9
031201211205	12G 2.5	16.0	301.0	477.1
031201811205	18G 2.5	19.0	433.3	688.1
031202511205	25G 2.5	22.2	588.0	924.6
031200410004	4G 4	11.6	153.4	250.4
031200710004	7G 4	14.4	256.1	412.1
031200410006	4G 6	14.2	222.7	370.5
031200710006	7G 6	17.0	396.3	600.0
031200410010	4G 10	17.2	384.1	589.2
031200510010	5G 10	19.5	475.8	748.2
031200410016	4G 16	20.2	616.3	877.4
031200510016	5G 16	22.6	760.4	1093.1
031200410025	4G 25	25.1	937.4	1347.6
031200510025	5G 25	28.0	1160.0	1676.0
031200410035	4G 35	28.0	1300.4	1769.2

Note :

*G = With green/yellow earth core
X = Without green/yellow earth core

JZ SY - STEEL WIRE BRAIDED CONTROL CABLE



Application

These cables are used as measuring and control cables in tool machinery, plant installation, power stations and in data equipment. The braided screen offers best possible protection against mechanical damage. The galvanised coating on the steel wire braiding not only helps protect against corrosion, but also notably improves the soldering performance.

Standard

Adapted to DIN VDE 0245, 0281, 0293, 0295.

Technical Data

Voltage Rating : 1100V

Insulation Resistance : Min. 20 GΩ x cm

Temperature Range : Flexing -5°C to +70°C. Fixed installation -30°C to +70°C

Minimum Bending Radius : Flexing 20 x cable ø. Fixed installation 6 x cable ø

Test Voltage : 4000V

Breakdown Voltage : Min. 8000V

Cable Construction

Bare copper, fine wire conductors, to EN 60228 Cl.5.

Core insulation of PVC TI2, EN 50363-3.

Black Core with continuous white numbering to DIN VDE 0293.

Green/Yellow earth core in outer layer (3 cores and above).

Cores stranded in layers with optimal lay-length.

Special PVC inner jacket.

Galvanized steel wire screening.

Special PVC outer jacket.

Colour transparent (also available in grey).

Properties

The clear transparent PVC outer sheath accentuates the optical view of the tinned copper braid.

PVC self-extinguishing and flame retardant according to EN 60332-1-2

JZ-YSY Grey(RAL 7001) is also available in oil resistant variant as JZ-YSY OR. The outer sheath provided here is of special PVC TM5 to BS EN 50363 -4.1.

Cable Design Parameters

Please complete the part numbers for these cables by adding the suffix (in place of 'z') for the sheath colour required : 1 - transparent, 2 - grey (RAL 7001). For oil resistant sheath (grey), kindly add 'OR' after the part nos.

Part Number	No. of Cores and Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
03110101021z	2 x 0.5	7.8	8.4	91
03110102011z	3G 0.5	8.1	12.6	100
03110103011z	4G 0.5	8.5	16.8	111
03110104011z	5G 0.5	9.2	21.0	139

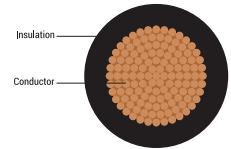
Part Number	No. of Cores and Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
03110105011z	7G 0.5	9.7	29.4	155
03110106011z	10G 0.5	11.6	42.0	223
03110107011z	12G 0.5	11.9	50.4	237
03110108011z	14G 0.5	12.5	58.8	261
03110109011z	18G 0.5	13.9	75.5	319
03110110011z	21G 0.5	14.9	88.1	360
03110111011z	25G 0.5	15.6	104.9	397
03110112011z	30G 0.5	16.5	125.9	445
03110113011z	40G 0.5	18.8	167.9	588
03110114011z	61G 0.5	21.9	256.0	801
03110115021z	2 x 0.75	8.2	12.6	99
03110116011z	3G 0.75	8.5	18.9	111
03110117011z	4G 0.75	9.2	25.2	142
03110118011z	5G 0.75	9.7	31.5	157
03110119011z	7G 0.75	10.3	44.1	179
03110120011z	9G 0.75	12.4	56.7	254
03110121011z	12G 0.75	12.9	75.5	282
03110122011z	15G 0.75	14.1	94.4	335
03110123011z	18G 0.75	14.9	113.3	389
03110124011z	25G 0.75	17.0	157.4	512
03110125011z	34G 0.75	19.3	214.0	650
03110126011z	50G 0.75	22.8	314.8	905
03110127021z	2 x 1	8.5	16.8	109
03110128011z	3G 1	8.8	25.2	135
03110129011z	4G 1	9.5	33.6	155
03110130011z	5G 1	10.1	42.0	173
03110131011z	7G 1	11.0	58.8	207
03110132011z	8G 1	12.5	67.1	265
03110133011z	9G 1	13.2	75.5	291
03110134011z	12G 1	13.9	100.7	333
03110135011z	14G 1	14.4	117.5	362
03110136011z	18G 1	15.9	151.1	452
03110137011z	20G 1	16.8	167.9	500
03110138011z	25G 1	18.1	209.8	597
03110139011z	34G 1	20.5	285.4	761
03110140011z	41G 1	22.2	344.1	896
03110141011z	50G 1	24.2	419.7	1070
03110142011z	65G 1	27.2	545.6	1355

Part Number	No. of Cores and Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
03110143021z	2 x 1.5	9.3	24.1	143
03110144011z	3G 1.5	9.7	36.1	161
03110145011z	4G 1.5	10.2	48.2	181
03110146011z	5G 1.5	11.1	60.2	213
03110147011z	7G 1.5	11.9	84.3	265
03110148011z	8G 1.5	14.0	96.3	330
03110149011z	12G 1.5	15.4	144.5	430
03110150011z	14G 1.5	15.9	168.5	469
03110151011z	18G 1.5	17.6	216.7	574
03110152011z	25G 1.5	20.3	300.9	771
03110153011z	32G 1.5	22.1	385.2	926
03110154011z	41G 1.5	24.9	493.6	1174
03110155011z	50G 1.5	27.1	601.9	1403
03110156011z	3G 2.5	11.1	60.2	211
03110157011z	4G 2.5	12.1	80.3	267
03110158011z	5G 2.5	13.2	100.3	314
03110159011z	7G 2.5	14.3	140.4	392
03110160011z	12G 2.5	18.2	240.8	626
03110161011z	18G 2.5	21.4	361.1	875
03110162011z	25G 2.5	24.4	501.6	1159
03110163011z	3G 4	12.7	95.7	295
03110164011z	4G 4	14.0	127.6	358
03110165011z	5G 4	15.1	159.5	420
03110166011z	7G 4	16.4	223.3	530
03110167011z	4G 6	16.2	191.4	498
03110168011z	5G 6	17.7	239.3	593
03110169011z	7G 6	19.2	335.0	749
03110170011z	4G 10	19.4	325.9	745
03110171011z	5G 10	21.5	407.3	908
03110172011z	7G 10	23.4	570.3	1147
03110173011z	4G 16	22.4	542.8	1086
03110174011z	5G 16	24.6	678.5	1324
03110175011z	4G 25	28.9	844.4	1704
03110176011z	5G 25	31.8	1055.5	2093
03110177011z	4G 35	32.2	1189.0	2247

Note :

*G = With green/yellow earth core
X = Without green/yellow earth core

BATTERY CABLE - THERMOPLASTIC ELASTOMER VULCANIZATE



Construction

Bare copper strands as per IEC 60228, IS 8130, Class 6 Conductor Construction types : Flexible & extra flexible (Super Flex)

Voltage Rating

1100V

Static Temperature

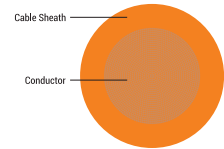
-40°C to +90°C

Dimensions

Nominal Size Sq. mm	Max. Diameter of Wires	Insulation Thickness min.	Nominal Outer Diameter +0.4 / -0 mm	Max. Cond. Resistance at 20°C (Ω/km)
25	0.2	2.2	11.1	0.780
35	0.2	2.5	12.8	0.554
50	0.2	2.3	13.9	0.386
70	0.2	2.4	16.0	0.272
95	0.2	2.55	18.0	0.206
120	0.2	2.55	19.7	0.161



WELDEX - SI (SINGLE INSULATED)



Feature

The cable has high flexibility subjected to light, ozone, oxygen, inert gas, and oil, and it is also resistant to the effects of cold, heat, and fire. Suitable for use in open air, in dry as well as damp interiors. The high degree of flexibility does not form knots on the cable which could lead to Internal break of conductors.

Voltage Rating

1100V

Minimum Bending Radius

5 x cable diameter

Application

The Welding Cable is specially designed for the transmission of high currents from the electric welding machine to the welding tool. It is suitable for flexible use under rugged conditions, on assembly lines and conveyor systems, in machine tool and motor car manufacturing, shipbuilding, for welding machines.

Dimensions

No. of Cores x Nominal Cross Sectional Area Sq. mm	Max. Strand Diameter (mm)	Max. CR (Spec) Ω /km	Nominal Insulation Thickness mm	Nominal Cable Diameter mm	Approx Weight kg/km
10	0.31	1.91	2.0	8.2	140
16	0.31	1.21	2.0	9.2	200
25	0.31	0.78	2.0	10.5	285
35	0.31	0.554	2.0	11.5	375
50	0.31	0.386	2.2	13.6	540
70	0.31	0.272	2.4	15.6	740
95	0.31	0.206	2.6	18.0	1000
120	0.31	0.161	2.8	19.5	1230
150	0.31	0.129	3.0	21.3	1500

Cable Construction

Superfine strands of bare Copper with single elastomeric PVC insulation.

Test Voltage

3000 V

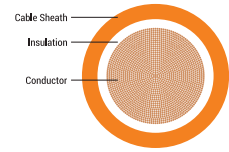
Outdoor Installation

Permanent

Temperature Range

0°C to +70°C

WELDEX - DI (DOUBLE INSULATED)



Feature

PVC double insulated cable, for welding machines. Used to conduct secondary voltage in secondary side connection to MMA welding power sources. Stranded, red copper conductor wire.

Voltage Rating

1100V

Minimum Bending Radius

5 x cable diameter

Application

The welding cable is specially designed for the transmission of high currents from the electric welding machine to the welding tool. It is suitable for flexible use under rugged conditions, on assembly lines and conveyor systems, in machine tool and motor car manufacturing, shipbuilding, for welding machines.

Dimensions

No. of Cores x Nominal Cross Sectional Area Sq. mm	Max. Strand Diameter (mm)	Max. CR (Spec) Ω/km	Nominal Insulation Thickness mm	Nominal Sheath thickness mm	Nominal Cable Diameter mm	Approx Weight kg/km
10	0.30	1.91	2.0	1.2	10.6	180
16	0.30	1.21	2.0	1.2	11.7	250
25	0.30	0.78	2.0	1.4	13.3	350
35	0.30	0.554	2.0	1.6	14.7	460
50	0.30	0.386	2.2	1.8	17.2	650
70	0.30	0.272	2.4	2.0	19.6	880
95	0.30	0.206	2.6	2.1	22.4	1170
120	0.30	0.161	2.8	2.3	24.2	1430
150	0.30	0.129	3.0	2.4	26.1	1720

Cable Construction

Superfine strands of plain copper with double elastometric PVC insulation.

Test Voltage

3000 V

Outdoor Installation

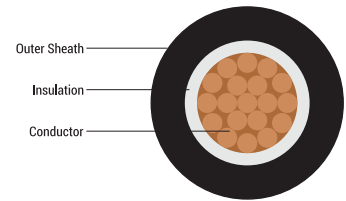
Permanent

Temperature Range

0°C to +70°C

UNARMoured CABLE A2XY/2XY-1 CORE

REACH | RoHS



Cable Construction

1.1 kV, 1 cores CU conductor, XLPE insulated, unarmoured cables as per IS 7098 Part - 1.

Conductor : CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm & above stranded round or stranded compact Cl. 2 as per IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red or yellow or blue or black or natural

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option: FR Type / FRLS Type)

Cable Color : Black (Options: Any other color as per requirement)

Voltage Rating

1100V

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type Copper and class of conductor (Cl. 1 or 2).

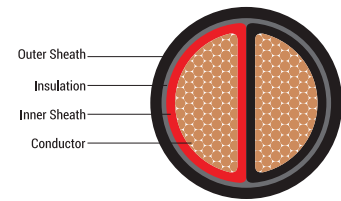
Sheath Type - PVC Type ST - 2 (FR or FRLS).

Colour from above technical details.

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Nominal Thickness of Insulation (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Net Wt. of Cable (kg/km)
					CU Cable 2XY
111300100016	16	0.7	1.8	11	225
111300100025	25	0.9	1.8	12	330
111300100035	35	0.9	1.8	13	425
111300100050	50	1.0	1.8	15	550
111300100070	70	1.1	1.8	16	750
111300100095	95	1.1	1.8	18	1000
111300100120	120	1.2	1.8	20	1250
111300100150	150	1.4	2.0	22	1520
111300100185	185	1.6	2.0	24	1880
111300100240	240	1.7	2.0	27	2415
111300100300	300	1.8	2.0	30	2980
111300100400	400	2.0	2.2	33	3800
111300100500	500	2.2	2.2	36	4815
111300100630	630	2.4	2.2	40	6150
111300100800	800	2.6	2.4	47	7840
111300101000	1000	2.8	2.6	51	9800

UNARMoured CABLE A2XY/2XY-2 CORE

REACH | RoHS



Cable Construction

1.1 kV, 2 cores CU conductor, XLPE insulated, unarmoured cables as per IS 7098 Part - 1.

Conductor : CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded round Cl. 2 as per IS:8130. 10 Sq. mm conductor is stranded round or stranded compact conductor Cl. 2 as per IS 8130

Above 10 Sq. mm conductor are stranded round or compact round or compacted shaped Cl. 2 as per : IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red, black

Inner Sheath : PVC / PVC tape as per IS 7098 (P - 1)

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Voltage Rating

1100V

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

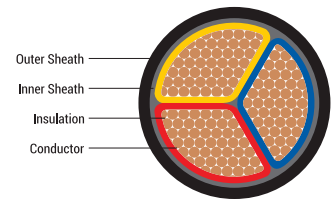
Conductor Type Copper and class of conductor (class 1 or 2).

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Net Wt. of Cable (kg/km)
						CU Cable 2XY
111400200004	4	0.7	0.3	1.8	13	235
111400200006	6	0.7	0.3	1.8	14	300
111400200010	10	0.7	0.3	1.8	17	400
111400200016	16	0.7	0.3	1.8	17	440
111400200025	25	0.9	0.3	2.0	19	650
111400200035	35	0.9	0.3	2.0	20	840
111400200050	50	1.0	0.3	2.0	22	1090
111400200070	70	1.1	0.3	2.0	25	1500
111400200095	95	1.1	0.4	2.2	28	2010
111400200120	120	1.2	0.4	2.2	31	2500
111400200150	150	1.4	0.4	2.2	33	3060
111400200185	185	1.6	0.5	2.4	37	3840
111400200240	240	1.7	0.5	2.6	41	4970
111400200300	300	1.8	0.6	2.8	44	6160
111400200400	400	2.0	0.6	3.0	48	7830
111400200500	500	2.2	0.7	3.4	54	9990
111400200630	630	2.4	0.7	3.6	62	12840

UNARMoured CABLE A2XY/2XY-3 CORE

REACH | RoHS



Cable Construction

1.1 kV, 3 Cores CU conductor, XLPE insulated, unarmoured cables as per IS 7098 Part - 1.

Conductor : CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm conductor is stranded Cl. 2 round as per IS 8130. Above 10 Sq. mm conductor are stranded compacted shaped Cl. 2 as per IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red, yellow, blue

Inner Sheath : PVC / PVC tape as per IS 7098 (P - 1)

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Voltage Rating

1100V

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

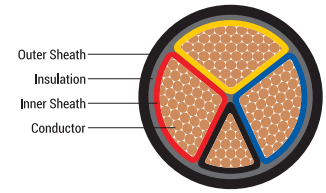
Conductor Type Copper and class of conductor (Cl. 1 or 2).

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Over all Diameter (mm)	Approx. Net Wt. of Cable (kg/km)
						CU Cable 2XY
111500300004	4	0.7	0.3	1.8	14	240
111500300006	6	0.7	0.3	1.8	16	300
111500300010	10	0.7	0.3	1.8	18	430
111500300016	16	0.7	0.3	1.8	18	600
111500300025	25	0.9	0.3	2.0	21	920
111500300035	35	0.9	0.3	2.0	22	1210
111500300050	50	1.0	0.3	2.0	25	1590
111500300070	70	1.1	0.4	2.2	30	2200
111500300095	95	1.1	0.4	2.2	32	2980
111500300120	120	1.2	0.4	2.2	35	3720
111500300150	150	1.4	0.5	2.4	39	4550
111500300185	185	1.6	0.5	2.6	43	5700
111500300240	240	1.7	0.6	2.8	49	7390
111500300300	300	1.8	0.6	3.0	53	9190
111500300400	400	2.0	0.7	3.2	59	11700
111500300500	500	2.2	0.7	3.6	66	14940
111500300630	630	2.4	0.7	3.8	73	19230

UNARMoured CABLE A2XY/2XY-3.5 CORE

REACH | RoHS



Cable Construction

1.1 kV, 3.5 Cores CU Conductor, XLPE Insulated, Unarmoured Cables as per IS:7098 Part-1.

Conductor : CU Stranded compact shaped conductor as per Cl. 2, IS:8130

Insulation : Crosslinked polyethylene (XLPE)

Phase Core Color : Red, yellow, blue

Neutral Core Color : Black

Inner Sheath : PVC / PVC tape as per IS:7098 (P-1)

Outer Sheath : PVC Type ST-2 as per IS:5831 (Option: FR Type / FRLS Type)

Cable Color : Black (Options: Any other color as per requirement)

Voltage Rating

1100V

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

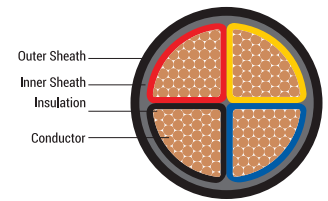
Conductor Type Copper and class of conductor (Cl. 1 or 2).

Sheath Type - PVC Type ST-2 (FR or FRLS).

Part Number	Size Cores x Sq. mm + Neutral (mm ²)	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Net Wt. of Cable (kg/km)
						CU Cable 2XY
111601010211	3 x 25 + 16	0.9/0.7	0.3	2.0	22	1125
111601020211	3 x 35 + 16	0.9/0.7	0.3	2.0	24	1425
111601030211	3 x 50 + 25	1.0/0.9	0.3	2.0	27	1980
111601040211	3 x 70 + 35	1.1/0.9	0.4	2.2	31	2680
111601050211	3 x 95 + 50	1.1/1.0	0.4	2.2	34	3580
111601060211	3 x 120 + 70	1.2/1.1	0.4	2.2	38	4480
111601070211	3 x 150 + 70	1.4/1.1	0.5	2.4	43	5485
111601080211	3 x 185 + 95	1.6/1.1	0.5	2.6	46	6785
111601090211	3 x 240 + 120	1.7/1.2	0.6	2.8	52	8675
111601100211	3 x 300 + 150	1.8/1.4	0.6	3.0	57	10780
111601110211	3 x 400 + 185	2.0/1.6	0.7	3.4	65	13980
111601120211	3 x 500 + 240	2.2/1.7	0.7	3.6	73	17425
111601130211	3 x 630 + 300	2.4/1.8	0.7	4.0	82	21970

UNARMoured CABLE A2XY/2XY-4 CORE

REACH | RoHS



Cable Construction

1.1 kV, 4 cores CU conductor, XLPE insulated, unarmoured cables as per IS 7098 Part - 1.

Conductor : CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl.2 as per IS 8130. 10 Sq. mm conductor is stranded Cl. 2 round as per IS 8130. Above 10 Sq. mm conductor are stranded compacted shaped Cl. 2 as per IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red, yellow, blue, black

Inner Sheath : PVC / PVC tape as per IS 7098 (P - 1)

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Voltage Rating

1100V

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type Copper and class of conductor (Cl. 1 or 2).

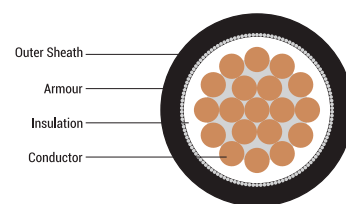
Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Nominal Cross - Sectional Area (Sq. mm)	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Nominal Thickness of Outer Sheath (mm)	Approx. Overall Diameter (mm)	Approx. Net Wt. of Cable (kg/km)
						CU Cable 2XY
111700400004	4	0.7	0.3	1.8	16	340
111700400006	6	0.7	0.3	1.8	17	480
111700400010	10	0.7	0.3	1.8	19	640
111700400016	16	0.7	0.3	1.8	20	840
111700400025	25	0.9	0.3	2.0	24	1290
111700400035	35	0.9	0.3	2.0	26	1685
111700400050	50	1.0	0.3	2.0	29	2190
111700400070	70	1.1	0.4	2.2	34	3090
111700400095	95	1.1	0.4	2.2	37	3980
111700400120	120	1.2	0.5	2.4	41	5130
111700400150	150	1.4	0.5	2.6	45	6230
111700400185	185	1.6	0.5	2.8	50	7830
111700400240	240	1.7	0.6	3.0	56	9980
111700400300	300	1.8	0.7	3.2	63	12030
111700400400	400	2.0	0.7	3.6	70	15980
111700400500	500	2.2	0.7	3.8	79	19985
111700400630	630	2.4	0.7	4.0	88	25985

ARMOURED CABLE

A2XFaY/2XFaY-A2XWaY/2XWaY - 1 CORE

REACH | RoHS



Cable Construction

1.1 kV, 1 cores CU conductor, XLPE insulated, aluminum strip / wire armoured cables as per IS 7098 Part - 1.

Conductor : CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm & above stranded round or stranded compact Cl. 2 as per IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red or yellow or blue or black

Armouring : Single armouring of aluminum strip or aluminum wire as per IS 7098 P - 1

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Voltage Rating

1100V

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type Copper and class of conductor (Cl. 1 or 2).

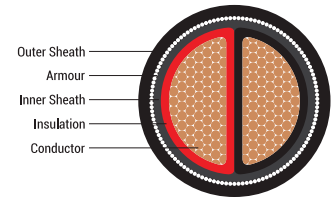
Sheath Type - PVC Type ST - 2 (FR or FRLS).

Colour from above technical details.

Part Number	Nominal Cross-Sectional Area (Sq. mm)	Nominal Thickness of Insulation (mm)	Armouring with flat strip (A2XFaY/ 2XFaY)				Armouring with Round Wire (AYWaY/YWaY)			
			Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx Net Wt. of Cable (kg/km)	Nominal Diameter of Wire (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx Net Wt. of Cable (kg/km)
						CU Cable 2XFaY				CU Cable YWaY
111800100016	16	1.0	N/A	N/A	N/A	N/A	1.4	1.24	13	300
111800100025	25	1.2	N/A	N/A	N/A	N/A	1.4	1.24	14	455
111800100035	35	1.2	N/A	N/A	N/A	N/A	1.4	1.24	15	567
111800100050	50	1.3	N/A	N/A	N/A	N/A	1.4	1.24	17	730
111800100070	70	1.4	N/A	N/A	N/A	N/A	1.4	1.24	19	954
111800100095	95	1.4	0.8	1.40	21	1195	1.6	1.4	22	1235
111800100120	120	1.5	0.8	1.40	23	1450	1.6	1.4	24	1494
111800100150	150	1.7	0.8	1.40	24	1730	1.6	1.4	25	1780
111800100185	185	1.9	0.8	1.40	26	2100	1.6	1.4	28	2147
111800100240	240	2.0	0.8	1.40	30	2690	1.6	1.4	30	2738
111800100300	300	2.1	0.8	1.56	32	3270	1.6	1.56	33	3360
111800100400	400	2.4	0.8	1.56	36	4230	2.0	1.56	38	4380
111800100500	500	2.6	0.8	1.56	39	5250	2.0	1.56	41	5450
111800100630	630	2.8	0.8	1.72	44	6610	2.0	1.72	46	6806
111800100800	800	3.1	0.8	1.72	48	8320	2.0	1.88	51	8560
111800101000	1000	3.3	0.8	1.88	54	10300	2.5	2.04	56	10800

ARMoured CABLE A2XFY/2XFY-A2XWY/2XWY-2 CORE

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Cable Construction

1.1 kV, 2 cores CU conductor, XLPE insulated, galvanised steel strip / wire armoured cables as per IS 7098 Part - 1.

Conductor : CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded round Cl. 2 as per IS 8130. 10 Sq. mm conductor is stranded round or stranded compact conductor Cl. 2 as per IS 8130

Above 10 Sq. mm conductor are stranded round or compact round or compacted shaped Cl. 2 as per IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red, black

Inner Sheath : PVC / PVC tape as per IS 7098 (P-1)

Armouring : Single armouring of galvanised steel strip / wire as per IS 3975

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Voltage Rating

1100V

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

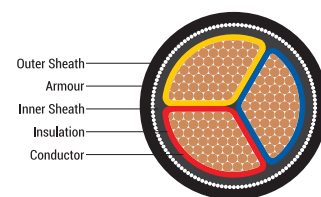
Conductor Type Copper and class of conductor (Cl. 1 or 2).

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Nominal Cross-Sectional Area (Sq. mm)	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath (mm)	Armouring with flat strip (A2XFY/ 2XFY)				Armouring with round wire (A2XWY/ 2XWY)			
				Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	Nominal Diameter of Wire (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)
111900200004	4	0.7	0.3	N/A	N/A	N/A	N/A	1.4	1.24	15	550
111900200006	6	0.7	0.3	N/A	N/A	N/A	N/A	1.4	1.24	16	600
111900200010	10	0.7	0.3	N/A	N/A	N/A	N/A	1.4	1.24	18	770
111900200016	16	0.7	0.3	N/A	N/A	N/A	N/A	1.4	1.40	19	900
111900200025	25	0.9	0.3	0.8	1.40	20	950	1.6	1.40	21	1150
111900200035	35	0.9	0.3	0.8	1.40	21	1200	1.6	1.40	23	1400
111900200050	50	1.0	0.3	0.8	1.40	23	1500	1.6	1.40	25	1700
111900200070	70	1.1	0.3	0.8	1.56	26	1950	1.6	1.56	28	2250
111900200095	95	1.1	0.4	0.8	1.56	29	2500	2.0	1.56	31	3000
111900200120	120	1.2	0.4	0.8	1.56	31	3100	2.0	1.56	34	3600
111900200150	150	1.4	0.4	0.8	1.72	34	3750	2.0	1.72	37	4300
111900200185	185	1.6	0.5	0.8	1.72	37	4500	2.0	1.88	40	5200
111900200240	240	1.7	0.5	0.8	1.88	42	5800	2.5	2.04	45	6800
111900200300	300	1.8	0.6	0.8	2.04	45	7000	2.5	2.20	49	8200
111900200400	400	2.0	0.6	0.8	2.36	50	9050	2.5	2.36	52	10300
111900200500	500	2.2	0.7	0.8	2.52	55	11000	3.2	2.68	60	13300
111900200630	630	2.4	0.7	0.8	2.68	63	14000	3.2	2.84	66	16300

ARMoured CABLE A2XFY/2XFY-A2XWY/2XWY-3 CORE

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Cable Construction

1.1 kV, 3 cores CU conductor, XLPE insulated, galvanised steel strip / wire armoured cables as per IS 7098 Part - 1.

Conductor : CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm conductor is stranded Cl. 2, round as per IS 8130. Above 10 Sq. mm conductor are stranded compacted shaped Cl. 2 as per IS 8130.

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red, yellow, blue

Inner Sheath : PVC / PVC tape as per IS 7098 (P - 1)

Armouring : Single armouring of galvanised steel strip / wire

Outer Sheath : PVC Type ST - 2 as per IS 5831. (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Voltage Rating

1100V

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

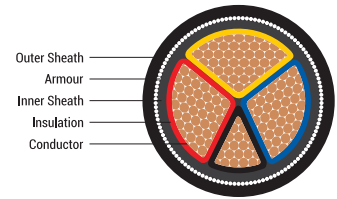
Conductor Type Copper and class of conductor (Cl. 1 or 2).

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Nominal Cross-Sectional Area (Sq. mm)	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath (mm)	Armouring with flat strip (A2XFY/ 2XFY)				Armouring with round wire (A2XWY/ 2XWY)			
				Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	Nominal Diameter of Wire (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)
112000300004	4	0.7	0.3	N/A	N/A	N/A	N/A	1.4	1.24	18	510
112000300006	6	0.7	0.3	N/A	N/A	N/A	N/A	1.4	1.24	19	600
112000300010	10	0.7	0.3	N/A	N/A	N/A	N/A	1.4	1.24	20	750
112000300016	16	0.7	0.3	0.8	1.24	19	890	1.6	1.40	20	1020
112000300025	25	0.9	0.3	0.8	1.40	21	1190	1.6	1.40	23	1400
112000300035	35	0.9	0.3	0.8	1.40	23	1490	1.6	1.40	25	1750
112000300050	50	1.0	0.3	0.8	1.40	26	1990	1.6	1.56	29	2180
112000300070	70	1.1	0.4	0.8	1.56	29	2690	2.0	1.56	32	3070
112000300095	95	1.1	0.4	0.8	1.56	32	3490	2.0	1.56	35	3950
112000300120	120	1.2	0.4	0.8	1.56	35	4190	2.0	1.72	39	4840
112000300150	150	1.4	0.5	0.8	1.72	42	5200	2.0	1.88	43	6150
112000300185	185	1.6	0.5	0.8	1.88	44	6300	2.5	2.04	48	7160
112000300240	240	1.7	0.6	0.8	2.04	49	8190	2.5	2.20	53	8870
112000300300	300	1.8	0.6	0.8	2.20	54	10000	2.5	2.36	58	11380
112000300400	400	2.0	0.7	0.8	2.52	60	12990	3.2	2.68	65	14410
112000300500	500	2.2	0.7	0.8	2.68	66	15990	3.2	2.84	72	18490
112000300630	630	2.4	0.7	0.8	2.84	74	19990	4.0	3.00	81	22560

ARMoured CABLE A2XFY/2XFY-A2XWY/2XWY-3.5 CORE

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Cable Construction

1.1 kV, 3.5 cores CU conductor, XLPE insulated, galvanised steel strip / wire armoured Cables as per IS 7098 Part -1.

Conductor : CU stranded compact shaped conductor as per Cl. 2, IS 8130.

Insulation : Crosslinked polyethylene (XLPE)

Phase Core Color : Red, yellow, blue

Neutral Core Color : Black

Inner Sheath : PVC / PVC tape as per IS 7098 (P - 1)

Armouring : Single armouring of galvanised steel strip / wire

Outer Sheath : PVC Type ST - 2 as per IS 5831. (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Voltage Rating

1100V

Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type Copper and class of conductor (Cl. 1 or 2).

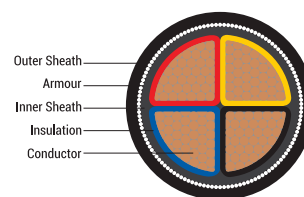
Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Size Cores x Sq. mm + Neutral (Sq. mm)	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Armouring with flat strip (A2XFY/ 2XFY)				Armouring with round wire (A2XWY/ 2XWY)					
				Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)		Nominal Diameter of Wire (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	
							CU Cable 2XFY					CU Cable 2XWY	
112101010211	3 x 25 + 16	0.9/0.7	0.3	0.8	1.40	23	1400	1.6	1.40	25	1685		
112101020211	3 x 35 + 16	0.9/0.7	0.3	0.8	1.40	25	1800	1.6	1.40	27	1980		
112101030211	3 x 50 + 25	1.0/0.9	0.3	0.8	1.40	28	2300	1.6	1.56	30	2685		
112101040211	3 x 70 + 35	1.1/0.9	0.4	0.8	1.56	32	3200	2.0	1.56	35	3690		
112101050211	3 x 95 + 50	1.1/1.0	0.4	0.8	1.56	35	4100	2.0	1.56	38	4585		
112101060211	3 x 120 + 70	1.2/1.1	0.4	0.8	1.72	39	5100	2.0	1.72	42	5680		
112101070211	3 x 150 + 70	1.4/1.1	0.5	0.8	1.72	43	6000	2.0	1.88	46	6790		
112101080211	3 x 185 + 95	1.6/1.1	0.5	0.8	1.88	47	7400	2.5	2.04	51	8615		
112101090211	3 x 240 + 120	1.7/1.2	0.6	0.8	2.04	53	9500	2.5	2.20	56	10485		
112101100211	3 x 300 + 150	1.8/1.4	0.6	0.8	2.20	57	11500	2.5	2.36	60	12990		
112101110211	3 x 400 + 185	2.0/1.6	0.7	0.8	2.52	66	14500	3.2	2.68	71	16980		
112101120211	3 x 500 + 240	2.2/1.7	0.7	0.8	2.68	74	18000	3.2	2.84	79	21485		
112101130211	3 x 630 + 300	2.4/1.8	0.7	0.8	3.00	82	23000	4.0	3.00	88	27985		

ARMoured CABLE

A2XFY/2XFY-A2XWY/2XWY-4 CORE

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Cable Construction

1.1 kV, 4 cores CU conductor, XLPE insulated, galvanised steel strip / wire armoured cables as per IS 7098 Part - 1.

Conductor : CU 4 & 6 Sq. mm conductor are solid Cl. 1 or stranded Cl. 2 as per IS 8130. 10 Sq. mm conductor is stranded Cl. 2, round as per IS 8130. Above 10 Sq. mm conductor are stranded compacted shaped Cl. 2 as per IS 8130

Insulation : Crosslinked polyethylene (XLPE)

Core Color : Red, yellow, blue, black

Inner Sheath : PVC / PVC tape as per IS 7098 (P - 1)

Armouring : Single armouring of galvanised steel strip / wire

Outer Sheath : PVC Type ST - 2 as per IS 5831 (Option : FR Type / FRLS Type)

Cable Color : Black (Options : Any other color as per requirement)

Voltage Rating

1100V

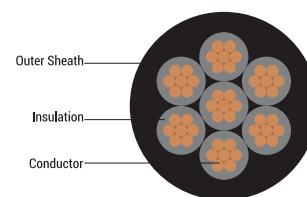
Cable Design Parameters

While ordering, in addition to the part number the following details shall also be advised:

Conductor Type Copper and Class of conductor (Cl. 1 or 2).

Sheath Type - PVC Type ST - 2 (FR or FRLS).

Part Number	Nominal Cross-Sectional Area (Sq. mm)	Nominal Thickness of Insulation (mm)	Minimum Thickness of Inner Sheath (mm)	Armouring with flat strip (A2XFY/ 2XFY)				Armouring with round wire (A2XWY/ 2XWY)			
				Nominal Thickness of Arm. Strip (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)	Nominal Diameter of Wire (mm)	Minimum Thickness of Outer Sheath (mm)	Approx. Overall Dia. (mm)	Approx. Net Wt. of Cable (kg/km)
112200400004	4	0.7	0.3	N/A	N/A	N/A	N/A	1.4	1.24	18	640
112200400006	6	0.7	0.3	N/A	N/A	N/A	N/A	1.4	1.24	19	760
112200400010	10	0.7	0.3	N/A	N/A	N/A	N/A	1.4	1.40	21	940
112200400016	16	0.7	0.3	0.8	1.40	20	1100	1.6	1.40	22	1280
112200400025	25	0.9	0.3	0.8	1.40	24	1500	1.6	1.40	26	1750
112200400035	35	0.9	0.3	0.8	1.40	27	2000	1.6	1.40	28	2185
112200400050	50	1.0	0.3	0.8	1.56	30	2500	1.6	1.56	32	2830
112200400070	70	1.1	0.4	0.8	1.56	34	3400	2.0	1.56	37	3980
112200400095	95	1.1	0.4	0.8	1.56	37	4400	2.0	1.72	40	5130
112200400120	120	1.2	0.5	0.8	1.72	41	5600	2.0	1.88	44	6285
112200400150	150	1.4	0.5	0.8	1.88	46	6800	2.5	2.04	49	7980
112200400185	185	1.6	0.5	0.8	2.04	51	8300	2.5	2.20	54	9680
112200400240	240	1.7	0.6	0.8	2.20	57	10500	2.5	2.36	65	11985
112200400300	300	1.8	0.7	0.8	2.36	63	13000	3.2	2.52	68	15385
112200400400	400	2.0	0.7	0.8	2.68	71	17000	3.2	2.84	76	19480
112200400500	500	2.2	0.7	0.8	2.84	79	21000	4.0	3.00	86	24985
112200400630	630	2.4	0.7	0.8	3.00	88	27000	4.0	3.00	94	30485



Application

Power cables for energy supply are installed in open air, in underground, in water, indoors, in cable ducts, power stations, for industry and distribution boards as well as in subscriber networks, where mechanical damages are not to be expected.

Technical Data

Power and control cable to IEC 60502-1

Temperature Range : Flexing - 5°C to + 50°C. Fixed installation -20°C to +70°C

Nominal Voltage : 1100V

Test Voltage : 4 kV

Max. permissible tensile stress with cable grip for CU-conductor : 50 N/mm²

Minimum Bending Radius : For single core approx. 15 x cable ø. For multi core approx. 12 x cable ø.

Cable Construction

Plain copper conductor, to DIN VDE 0295.

Cl. 1 or Cl. 2 solid or stranded type, BS 6360.

Cl. 1 or Cl.2, IEC 60228 and HD 383.

PVC core insulation, DIV4 to HD 603.1.

Cores stranded concentrically.

Colour coded to DIN VDE 0293 - 308, 0276 part 603 or HD 186.

Core colour for 3 + 1/2 conductor.

J-type : gnyl (1/2) bn, bk, gy.

O-type : bu (1/2) bn, bk, gy.

PVC outer jacket, DMV5 to HD 603.1.

Sheath Colour : Black.

Properties

Flame propagation test according to IEC 60332 - 1 - 2.

Cable Design Parameters

Kindly complete the part numbers for these cables by adding the suffix (in place of 'xx') for the type required: 01 - J - Type, 02 - O - Type.

Part Number	No. of Cores and Nominal Cross-Section Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Weight Cable (kg/km)
112500101xx11	1 x 4 re	6.5	34	80
112500102xx11	1 x 6 re	7.0	51	102
112500103xx11	1 x 10 re	7.9	86	147
112500104xx11	1 x 16 re	8.9	137	210
112500105xx11	1 x 25 rm	11.3	217	335
112500106xx11	1 x 35 rm	12.5	301	439
112500107xx11	1 x 50 rm	14.3	408	587
112500108xx11	1 x 70 rm	16.2	589	807
112500109xx11	1 x 95 rm	18.6	818	1100
112500110xx11	1 x 120 rm	20.3	1031	1357
112500111xx11	1 x 150 rm	22.4	1273	1665
112500112xx11	1 x 185 rm	24.8	1592	2067
112500113xx11	1 x 240 rm	28.0	2093	2686
112500114xx11	1 x 300 rm	30.9	2626	3341
112500115xx11	1 x 400 rm	34.5	3357	4231
112500116xx11	1 x 500 rm	38.5	4311	5379
112500117xx11	1 x 630 rm	42.7	5576	6846
112500118xx11	2 x 1.5 re	10.5	26.1	156.1
112500119xx11	2 x 2.5 re	11.3	42.6	191.5
112500120xx11	2 x 4 re	13.1	68.5	268.5
112500121xx11	2 x 6 re	14.2	102.5	332.4
112500122xx11	2 x 10 re	15.9	172.5	454.4
112500123xx11	2 x 16 re	17.9	274.4	621.1
112500124xx11	2 x 25 rm	24.2	441.9	1089.2
112500125xx11	3 x 1.5 re	11.0	39.1	180
112500126xx11	3 x 2.5 re	11.9	63.9	225
112500127xx11	3 x 4 re	13.9	102.7	320
112500128xx11	3 x 6 re	15.0	153.7	403
112500129xx11	3 x 10 re	16.9	258.7	564
112500130xx11	3 x 16 re	19.0	411.6	785
112500131xx11	3 x 25 rm	24.2	662.8	1270
112500132xx11	3 x 35 sm	22.6	901.4	1382
112500133xx11	3 x 50 sm	25.7	1220.5	1829
112500134xx11	3 x 70 sm	28.7	1762.5	2487
112500135xx11	3 x 95 sm	33.3	2447.4	3410

Part Number	No. of Cores and Nominal Cross-Section Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Weight Cable (kg/km)
112500136xx11	3 x 120 sm	35.9	3087.2	4171
112500137xx11	3 x 150 sm	39.5	3809.3	5107
112500138xx11	3 x 185 sm	44.0	4766.4	6372
112500139xx11	3 x 240 sm	49.3	6264.6	8234
112500140xx11	4 x 1.5 re	11.8	52.2	214
112500141xx11	4 x 2.5 re	12.8	85.2	271
112500142xx11	4 x 4 re	15.0	136.9	390
112500143xx11	4 x 6 re	16.3	204.9	496
112500144xx11	4 x 10 re	18.4	344.9	701
112500145xx11	4 x 16 re	20.7	548.9	986
112500146xx11	4 x 25 rm	26.7	883.7	1604
112500147xx11	4 x 35 sm	27.1	1201.9	1813
112500148xx11	4 x 50 sm	30.9	1627.4	2404
112500149xx11	4 x 70 sm	35.3	2350.0	3324
112500150xx11	4 x 95 sm	40.5	3263.2	4512
112500151xx11	4 x 120 sm	44.3	4116.3	5582
112500152xx11	4 x 150 sm	48.8	5079.0	6833
112500153xx11	4 x 185 sm	54.3	6355.2	8520
112500154xx11	4 x 240 sm	61.0	8352.7	11016
112500155xx11	5 x 1.5 re	12.7	65.2	251
112500156xx11	5 x 2.5 re	13.8	106.5	321
112500157xx11	5 x 4 re	16.3	171.1	467
112500158xx11	5 x 6 re	17.7	256.2	597
112500159xx11	5 x 10 re	20.0	431.1	851
112500160xx11	5 x 16 re	22.7	686.1	1203
112500161xx11	5 x 25 rm	29.3	1104.6	1966
112500162xx11	5 x 35 rm	32.9	1532.6	2602
112500163xx11	5 x 50 rm	37.9	2075.1	3482
112500164xx11	7 x 1.5 re	13.6	91.3	295
112500165xx11	7 x 2.5 re	14.9	149.1	384
112500166xx11	7 x 4 re	17.6	239.6	564
112500167xx11	7 x 6 re	19.2	358.6	731
112500168xx11	7 x 10 re	21.8	603.6	1058
112500169xx11	10 x 1.5 re	18.5	130.4	477
112500170xx11	10 x 2.5 re	18.4	213.0	543

Part Number	No. of Cores and Nominal Cross-Section Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Weight Cable (kg/km)
112500171xx11	12 x 1.5 re	17.3	156.5	466
112500172xx11	12 x 2.5 re	19.0	255.5	616
112500173xx11	14 x 1.5 re	18.1	182.6	524
112500174xx11	14 x 2.5 re	19.9	298.1	696
112500175xx11	16 x 1.5 re	19.0	208.7	584
112500176xx11	16 x 2.5 re	20.9	340.7	779
112500177xx11	19 x 1.5 re	20.0	247.8	667
112500178xx11	19 x 2.5 re	22.0	404.6	895
112500179xx11	21 x 1.5 re	21.0	273.9	731
112500180xx11	21 x 2.5 re	23.2	447.2	983
112500181xx11	24 x 1.5 re	23.1	273.9	779
112500182xx11	24 x 2.5 re	25.6	511.1	1133
112500183xx11	30 x 1.5 re	24.4	391.2	999
112500184xx11	30 x 2.5 re	27.0	638.9	1354
112500185xx11	40 x 1.5 re	27.4	521.6	1282
112500186xx11	40 x 2.5 re	30.8	851.8	1782
112500187xx11	52 x 2.5 re	34.6	1107.4	2268
112500188xx11	61 x 1.5 re	33.1	795.5	1905

3 + 1/2 - Conductors

Part Number	No. of Cores and Nominal Cross-Section Area (Sq. mm)	Approx. Cable Diameter (mm)	Copper Weight (kg/km)	Weight Cable (kg/km)
112500189xx11	3 x 25 / 16 rm	23.6	786.6	200
112500190xx11	3 x 35 / 16 sm	25.4	1038.3	225
112500191xx11	3 x 50 / 25 sm	29.3	1437.1	281
112500192xx11	3 x 70 / 35 sm	33.3	2063.0	346
112500193xx11	3 x 95 / 50 sm	38.1	2854.2	433
112500194xx11	3 x 120 / 70 sm	41.7	3674.7	503
112500195xx11	3 x 150 / 70 sm	45.4	4396.8	580
112500196xx11	3 G 185 / 95 sm	50.6	5582.2	698
112500197xx11	3 x 240 / 120 sm	56.8	7293.6	854
112500198xx11	3 x 300 / 150 sm	62.7	9129.1	1013

Note :

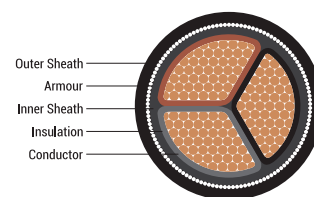
re = round conductor, single-wire; rm = round conductor, multiply-wire; sm = stranded, sectional core.

***In respect to 3 + 1/2 conductors**

Whereby only one conductor is allowed to contain a smaller cross-section (as per DIN VDE 0276 part 603 table 5) and permitted to place as insulated core (Green/Yellow and Blue as 1/2-conductor) stranded in layer.

ARMoured CABLE-BS 5467

REACH | RoHS | CE



Application

Industrial wiring and mains distribution. Can be laid direct in the ground, or in ducts, clipped to surface, on trays or in free air. May be embedded in concrete.

Standard

BS 5467

Technical Data

Voltage Rating : 1100V

Minimum Bending Radius : 15 x Cable diameter

Maximum Conductor Temperature : 90°C

Cable Construction

Single, two, three, four and five core cables. Stranded plain copper conductors, XLPE insulated, cores laid up, extruded PVC bedding, galvanised steel wire armoured (Aluminium wires for single cores) and PVC sheathed.

Core colours:

Single core : Brown or blue.

Two core : Brown, blue.

Three core : Brown, black, grey.

Four core : Brown, black, grey, blue.

Five core : Brown, black, grey, green/yellow, blue.

(There is the option for core colour as per customer requirement).

Sheath Colour : Black (Other colour as per customer requirement)

Note : Where a conductor operates at a temperature exceeding 70°C it shall be ascertained that the equipment connected to the conductor is suitable for the conductor operating temperature (see regulation 512-1-2 of BS 7671, the 17th Edition of IEE Wiring Regulations).

Cables with reduced Flame Propagation and designs with alternative core identification are available to order.

Cables up to 1 x 300 Sq. mm, 2...4 x 400 Sq. mm BASEC Certified.

Cable Design Parameters

	Part Number	Nominal Cross - Sectional Area (Sq. mm)	Insulation Thickness (mm)	Armour Wire Diameter (mm)	Approx. Dia. under Armour (mm)	Approx Overall Diameter (mm)	Approx Cable Weight (kg/km)	Maximum Resistance of Cable		Reactance at 50 Hz (Ω/km)	Impedance AC at 90°C (Ω/km)	Star Capacitance (μF/km)	Maximum Armour Resistance (Ω/km)
								DC at 20°C (Ω/km)	AC at 90°C (Ω/km)				
Single Core Aluminium Wire Armour	112600100050	50	1.0	0.9	12.7	17.5	800	0.387	0.4938	0.104	0.505	0.41	1.3
	112600100070	70	1.1	1.25	14.7	20.2	960	0.268	0.341	0.101	0.356	0.46	0.75
	112600100095	95	1.1	1.25	16.6	22.3	1240	0.193	0.2469	0.097	0.265	0.53	0.67
	112600100120	120	1.2	1.25	18.5	24.2	1510	0.153	0.1962	0.094	0.217	0.56	0.61
	112600100150	150	1.4	1.6	20.8	27.4	1900	0.124	0.1594	0.095	0.186	0.52	0.42
	112600100185	185	1.6	1.6	23.2	30.0	2320	0.0991	0.128	0.093	0.158	0.54	0.38
	112600100240	240	1.7	1.6	26.0	32.8	2930	0.0754	0.0985	0.09	0.134	0.59	0.34
	112600100300	300	1.8	1.6	28.6	35.6	3580	0.0601	0.0797	0.088	0.119	0.63	0.31

	Part Number	Nominal Cross - Sectional Area (Sq. mm)	Insulation Thickness (mm)	Armour Wire Diameter (mm)	Approx. Dia. under Armour (mm)	Approx Overall Diameter (mm)	Approx Cable Weight (kg/km)	Maximum Resistance of Cable		Reactance at 50 Hz (Ω/km)	Impedance AC at 90°C (Ω/km)	Star Capacitance (µF/km)	Maximum Armour Resistance (Ω/km)
								DC at 20°C (Ω/km)	AC at 90°C (Ω/km)				
	112600100400	400	2.0	2	32.4	40.4	4600	0.047	0.0635	0.089	0.109	0.62	0.22
	112600100500	500	2.2	2	36.0	44.2	5770	0.0366	0.0513	0.087	0.101	0.66	0.2
	112600100630	630	2.4	2	40.4	48.8	7250	0.0283	0.0419	0.085	0.095	0.7	0.18
	112600100800	800	2.6	2.5	45.6	55.4	9381	0.0221	0.0349	0.087	0.094	0.85	0.13
	112600101000	1000	2.8	2.5	50.6	60.6	11540	0.0176	0.0303	0.085	0.09	0.87	0.12
Two Core Steel Wire Armour	112600201105	1.5	0.6	0.9	7.3	12.1	302	12.1	15.428	0.104	15.428	0.23	10.2
	112600201205	2.5	0.7	0.9	8.5	13.6	346	7.41	9.448	0.101	9.449	0.25	8.8
	112600200004	4	0.7	0.9	9.4	14.7	410	4.61	5.878	0.099	5.879	0.27	7.9
	112600200006	6	0.7	0.9	10.5	15.9	499	3.08	3.927	0.094	3.928	0.3	7
	112600200010	10	0.7	0.9	12.3	18.0	648	1.83	2.333	0.093	2.335	0.32	6
	112600200016	16	0.7	1.25	14.3	20.4	978	1.15	1.466	0.088	1.469	0.35	3.7
	112600200025	25	0.9	1.25	14.7	20.4	1290	0.727	0.926	0.082	0.93	0.38	3.7
	112600200035	35	0.9	1.6	16.8	23.3	1500	0.524	0.6685	0.077	0.673	0.42	2.6
	112600200050	50	1.0	1.6	19.0	25.8	1890	0.387	0.494	0.076	0.5	0.45	2.3
	112600200070	70	1.1	1.6	22.0	29.0	2450	0.268	0.3412	0.075	0.349	0.49	2
	112600200095	95	1.1	2	25.1	33.1	3300	0.193	0.2471	0.074	0.258	0.55	1.4
	112600200120	120	1.2	2	27.9	36.1	4020	0.153	0.1964	0.072	0.209	0.57	1.3
	112600200150	150	1.4	2	30.9	39.3	4750	0.124	0.1597	0.073	0.176	0.57	1,20
	112600200185	185	1.6	2.5	34.9	44.7	6180	0.0991	0.1284	0.073	0.148	0.55	0.82
	112600200240	240	1.7	2.5	39.0	49.0	7570	0.0754	0.0989	0.072	0.122	0.6	0.73
	112600200300	300	1.8	2.5	43.3	53.5	9180	0.0601	0.0801	0.072	0.107	0.62	0.67
	112600200400	400	2.0	2.5	48.4	59.0	10500	0.047	0.0641	0.071	0.096	0.64	0.59
Three Core Steel Wire Armour	112600301105	1.5	0.6	0.9	7.8	12.6	330	12.1	15.428	0.104	15.428	0.23	9.5
	112600301205	2.5	0.7	0.9	9.2	14.1	390	7.41	9.448	0.101	9.449	0.25	8.2
	112600300004	4	0.7	0.9	10.0	15.3	464	4.61	5.878	0.099	5.879	0.27	7.5
	112600300006	6	0.7	0.9	11.2	16.6	568	3.08	3.927	0.094	3.928	0.3	6.7
	112600300010	10	0.7	1.25	13.1	19.5	866	1.83	2.333	0.093	2.335	0.32	4
	112600300016	16	0.7	1.25	15.3	21.6	1152	1.15	1.466	0.088	1.469	0.35	3.5
	112600300025	25	0.9	1.6	18.9	25.5	1800	0.727	0.926	0.082	0.93	0.37	2.5
	112600300035	35	0.9	1.6	21.3	28.0	2230	0.524	0.6685	0.077	0.673	0.42	2.3
	112600300050	50	1.0	1.6	21.7	28.5	2490	0.3870	0.494	0.076	0.5	0.45	2
	112600300070	70	1.1	1.6	25.2	32.2	3290	0.268	0.3412	0.075	0.349	0.49	1.8
	112600300095	95	1.1	2	28.8	37.0	4440	0.193	0.2471	0.074	0.258	0.55	1.3
	112600300120	120	1.2	2	32.0	40.4	5470	0.153	0.1964	0.072	0.209	0.57	1.2
	112600300150	150	1.4	2.5	35.9	45.5	6930	0.124	0.1597	0.073	0.176	0.55	0.78
	112600300185	185	1.6	2.5	40.0	49.8	8350	0.0991	0.1284	0.073	0.148	0.55	0.71
	112600300240	240	1.7	2.5	44.9	55.1	10400	0.0754	0.0989	0.072	0.122	0.6	0.63
	112600300300	300	1.8	2.5	49.8	60.2	12600	0.0601	0.0801	0.072	0.107	0.62	0.58
	112600300400	400	2.0	2.5	55.8	66.6	14600	0.047	0.0641	0.071	0.096	0.64	0.52

	Part Number	Nominal Cross - Sectional Area (Sq. mm)	Insulation Thickness (mm)	Armour Wire Diameter (mm)	Approx. Dia. under Armour (mm)	Approx Overall Diameter (mm)	Approx Cable Weight (kg/km)	Maximum Resistance of Cable		Reactance at 50 Hz (Ω/km)	Impedance AC at 90°C (Ω/km)	Star Capacitance (μF/km)	Maximum Armour Resistance (Ω/km)
								DC at 20°C (Ω/km)	AC at 90°C (Ω/km)				
Four Core Steel Wire Armour	112600401105	1.5	0.6	0.9	8.5	13.5	365	12.1	15.428	0.104	15.428	0.23	8.8
	112600401205	2.5	0.7	0.9	9.9	15.0	438	7.41	9.448	0.101	9.449	0.25	7.7
	112600400004	4	0.7	0.9	11.0	16.4	532	4.61	5.878	0.099	5.879	0.27	6.8
	112600400006	6	0.7	1.25	12.3	18.7	764	3.08	3.927	0.094	3.928	0.3	4.3
	112600400010	10	0.7	1.25	14.5	21.1	1013	1.83	2.333	0.093	2.336	0.32	3.7
	112600400016	16	0.7	1.25	17.0	22.9	1360	1.15	1.466	0.088	1.469	0.35	3.1
	112600400025	25	0.9	1.6	21.0	27.6	2160	0.727	0.926	0.082	0.93	0.37	2.3
	112600400035	35	0.9	1.6	23.6	30.4	2690	0.524	0.6685	0.077	0.673	0.42	2.0
	112600400050	50	1.0	1.6	25.0	32.0	3130	0.387	0.494	0.076	0.5	0.45	1.8
	112600400070	70	1.1	2	29.5	37.7	4500	0.268	0.3412	0.075	0.349	0.48	1.2
	112600400095	95	1.1	2	33.3	41.7	5600	0.193	0.2471	0.074	0.258	0.55	1.1
	112600400120	120	1.2	2.5	37.5	47.1	7400	0.153	0.1964	0.072	0.209	0.55	0.76
	112600400150	150	1.4	2.5	41.6	51.4	8780	0.124	0.1597	0.073	0.176	0.55	0.68
	112600400185	185	1.6	2.5	46.4	56.6	10630	0.0991	0.1284	0.073	0.148	0.55	0.61
	112600400240	240	1.7	2.5	52.6	63.0	13390	0.0754	0.0989	0.072	0.122	0.58	0.54
	112600400300	300	1.8	2.5	58.0	68.8	16290	0.0601	0.0801	0.072	0.107	0.62	0.49
112600400400	400	2.0	3.15	65.4	78.1	19800	0.047	0.0641	0.071	0.096	0.63	0.35	
Five Core Steel Wire Armour	112600501105	1.5	0.6	0.9	9.7	14.3	410	12.1	15.428	0.104	15.428	0.23	8.2
	112600501205	2.5	0.7	0.9	11.7	16.3	470	7.41	9.448	0.101	9.449	0.25	6.8
	112600500004	4	0.7	0.9	13.0	17.8	710	4.61	5.878	0.099	5.879	0.27	6.2
	112600500006	6	0.7	1.25	14.5	20.0	876	3.08	3.927	0.094	3.928	0.3	3.9
	112600500010	10	0.7	1.25	17.2	22.9	1165	1.83	2.333	0.093	2.336	0.32	3.4
	112600500016	16	0.7	1.6	20.0	26.6	1742	1.15	1.466	0.088	1.469	0.35	2.2
	112600500025	25	0.9	1.6	24.7	31.5	2323	0.727	0.926	0.082	0.93	0.37	1.8
	112600500035	35	0.9	1.6	27.8	34.8	2932	0.524	0.6685	0.077	0.673	0.42	1.6
	112600500050	50	1.0	2	32.4	40.4	4192	0.387	0.494	0.076	0.5	0.45	1.1
	112600500070	70	1.1	2	37.9	46.3	5336	0.268	0.3412	0.075	0.349	0.48	0.9



MULTICORE CONTROL CABLE STANDARD: BS 5467

Application

Industrial wiring for remote control and telemetry circuits etc. Can be laid direct in the ground, or in ducts, clipped to surface, on trays or in free air. May be embedded in concrete.

Technical Data

Voltage Rating : 1100V

Cable Construction

Multicore Cables : Stranded plain copper conductors, XLPE insulated, cores laid up, extruded PVC bedding, galvanised steel wire armoured and PVC sheathed

Core Colours : White with black numerals

Sheath Colour : Black. (Other Colour As per customer requirement)

Minimum Bending Radius : 12 x Cable Diameter

Maximum Conductor Temperature : 90°C

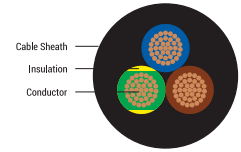
Note: Where a conductor operates at a temperature exceeding 70°C it shall be ascertained that the equipment connected to the conductor is suitable for the conduct or operating temperature (see regulation 512 - 1 - 2 of BS 7671, the 17th Edition of IEE Wiring Regulations).

BASEC Certified up to and including 48 x 4 Sq. mm.

Cable Design Parameters

Part Number	Number of Cores	Nominal Cross - Sectional Area (Sq. mm)	Approx. Diameter Under Armour (mm)	Approx. Diameter Over Armour (mm)	Approx. Overall Diameter (mm)	Approx. Net Weight (kg/km)
112600701105	7	1.5	10.2	12.1	15.2	470
112600701205	7	2.5	12.3	14.1	17.1	600
112600700004	7	4	14.0	16.5	19.7	890
112601201105	12	1.5	13.7	16.2	19.4	780
112601201205	12	2.5	16.3	18.8	22.4	1000
112601200004	12	4	19.1	22.2	25.7	1410
112601901105	19	1.5	16.2	18.7	22.2	1000
112601901205	19	2.5	19.9	23.1	26.6	1540
112601900004	19	4	22.5	25.7	29.3	1830
112602701105	27	1.5	20.0	23.2	26.7	1500
112602701205	27	2.5	24.0	27.2	30.7	1950
112602700004	27	4	27.5	30.7	34.4	2500
112603701105	37	1.5	22.3	25.5	29.0	1800
112603701205	37	2.5	26.9	30.1	33.8	2350
112603700004	37	4	31.0	35.0	39.2	3100
112604801105	48	1.5	25.4	28.6	32.7	2050
112604801205	48	2.5	31.0	35.0	39.3	3100
112604800004	48	4	35.3	39.3	44.1	4100

RV-K CABLE (CU / XLPE / PVC) FLEXIBLE



Standards

UNE 21123-2, IEC 60502-1, EN 50265, IEC 60332-1

Conductor

Class 5 flexible plain to BS EN 60228:2005

Insulation

XLPE (Cross-Linked Polyethylene)

Voltage Rating

1100V

Core Identification

2 Cores : Blue, Brown

3 Cores including Earth Core : Blue, Brown, Green/Yellow

4 Cores including Earth Core : Brown, Black, Grey, Green/Yellow

5 Cores including Earth Core : Brown, Black, Grey, Green/Yellow

Blue

Dimensions

No. of Cores x Nominal Cross Sectional Area Sq. mm	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight Kg/Km
2 x 1.5	0.70	9.4	127
3 x 1.5	0.70	9.9	129
4 x 1.5	0.70	10.6	154
5 x 1.5	0.70	11.4	180
2 x 2.5	0.70	10.7	160
3 x 2.5	0.70	10.8	169
4 x 2.5	0.70	11.7	204
5 x 2.5	0.70	12.6	243
2 x 4.0	0.70	12.6	232
3 x 4.0	0.70	12.8	230
4 x 4.0	0.70	13.0	281
5 x 4.0	0.70	14.1	338
2 x 6.0	0.70	13.9	298
3 x 6.0	0.70	14.3	304
4 x 6.0	0.70	14.5	376
5 x 6.0	0.70	15.8	454
3 x 10.0	0.70	15.3	443
4 x 10.0	0.70	16.7	554
5 x 10.0	0.70	18.2	674
3 x 16.0	0.70	17.5	646
4 x 16.0	0.70	19.2	816
5 x 16.0	0.70	21.0	998

Application

A flexible power and control cable designed for fixed applications Manufactured with flexible conductors in order to facilitate easy installations Suitable for the distribution of low voltage power, indoors and outdoors. The high flexibility of this cable makes it particularly suitable for difficult layouts and the ease of handling saves time during installation.

Sheathing

PVC (Polyvinyl Chloride) Type St2

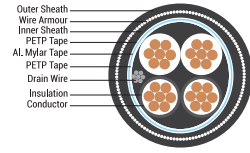
Temperature Rating

- 15°C to +90°C

Minimum Bending Radius

5 x Overall diameter

INSTRUMENTATION CABLE - PAS 5308 PART 2



Conductor

Annealed copper wires according to class 1 or 2 or 5 of BS EN 60228

Insulation

PVC type TI 51 according to BS EN 50290-2-21

Pairs

Twisted

Identification Pairs

Blue & White. Blue cores indicate pair identification.

Individual Screen

Aluminium/polyster tape 0.024 mm in electrical contact 0.5 Sq. mm polyester tape 0.023 mm

Assembly

Concentric layers

Minimum Bending Radius

For Type I-12D & Type II-14D

Applicable Identification Codes :

Conductor : F - Round Flexible conductor
R - Round Rigid Conductor

Insulation : R - PVC insulation

Assembly : O - Laid up pair, X-twisted paris

Metallic Screen : H - Aluminum tape Screen

Overall Screen

Aluminium/polyster tape 0.024 mm in electrical contact with tinned annealed copper wires of a total section Insulation of 0.5 Sq. mm, polyester tape 0.023 mm

Bedding

PVC type TM51 according to BS EN 50290-2-22

Armour

Galvanized steel wire

Cable Sheath

PVC type TM51 according to BS EN 50290-2-22

Voltage Rating

1100V

Applicable Standards

PAS 5308 - 2 Design guidelines

IEC 60332-1 Flammability test

Armour : F - Steel wire armour

Cable Sheath : R - PVC sheath
n - no. of pairs
m - twisted pairs
a - cross sectional area

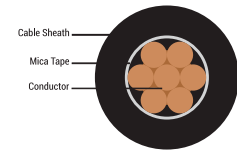
Table 1: Dimensions

Nominal Cross Section Sq. mm	Indicative Configuration	Class of Conductor	DC Conductor Resistance at 20° C. Max		Approx Diameter Over Insulation mm	Mutual Capacitance Max. pF/m at 1 kHz	Capacitance Between any Core and core screen Max. pF/m at 1 kHz	L/R Ratio Max. μH/Ω
			Multicore Ω/km	Multipair Ω/km				
0.5	16 / 0.2 mm	5	39.0	39.7	2.1			25
0.75	24 / 0.2 mm	5	26.0	26.5	2.3	250	450	25
1.5	7 / 0.53 mm	2	12.1	12.3	2.95			40

Table 2: Dimensions

Cross Sectional area Sq. mm	Diameter over assembly Plastic tape (mm)	Overall Shielded PVC / PVC			Overall Shielded Armoured PVC / PVC					Weight of Cable Approx (kg/km)		
		Type	Outer Diameter Approx mm	Weight of Cable Approx mm	Type	Diameter Inner Sheath mm	Diameter of Armour Wires (mm)	Diameter Over Armour (mm)	Diameter Inner Sheath mm			
1 x 2 x 0.5	4.4	FRXHR	6.0	40	FRXHRFR	6.0	0.9	7.8	10.4	198		
2 x 2 x 0.5	5.7	FRXOHR	7.3	62	FRXOHRFR	7.3	0.9	9.1	11.7	250		
3 x 2 x 0.5	6.9		8.5	83		8.5	0.9	10.3	12.9	300		
4 x 2 x 0.5	8.0		9.6	104		9.6	0.9	11.4	14.0	346		
5 x 2 x 0.5	8.9		10.9	134		10.9	0.9	12.7	15.7	421		
6 x 2 x 0.5	9.8		11.8	155		11.8	1.25	14.3	17.3	546		
8 x 2 x 0.5	11.3		13.3	196		13.3	1.25	15.8	18.8	634		
10 x 2 x 0.5	12.6		14.8	243		14.8	1.25	17.3	20.5	737		
12 x 2 x 0.5	13.8		16.0	283		16.0	1.6	19.2	22.4	928		
15 x 2 x 0.5	15.5		17.9	350		17.9	1.6	21.1	24.5	1077		
16 x 2 x 0.5	16.0		18.4	370		18.4	1.6	21.6	25.0	1116		
18 x 2 x 0.5	17.0		19.4	409		19.4	1.6	22.6	26.0	1193		
20 x 2 x 0.5	17.9		20.5	458		20.5	1.6	23.7	27.3	1298		
25 x 2 x 0.5	20.0		22.6	555		22.6	1.6	25.8	29.4	1479		
1 x 2 x 0.75	4.8		FRXHR	6.4		47	FRXHRFR	6.4	0.9	8.2	10.8	215
2 x 2 x 0.75	6.2		FRXOHR	7.8		75	FRXOHRFR	7.8	0.9	9.6	12.4	280
3 x 2 x 0.75	7.6	9.2		102	9.2	0.9		11.0	13.8	340		
4 x 2 x 0.75	8.7	10.3		128	10.3	0.9		12.1	14.9	394		
5 x 2 x 0.75	9.7	11.7		165	11.7	1.25		14.2	17.2	556		
6 x 2 x 0.75	10.7	12.7		192	12.7	1.25		15.2	18.2	611		
8 x 2 x 0.75	12.3	14.3		244	14.3	1.25		16.8	19.8	714		
10 x 2 x 0.75	13.8	16.2		310	16.2	1.6		19.4	22.8	971		
12 x 2 x 0.75	15.1	17.5		362	17.5	1.6		20.7	24.1	1074		
15 x 2 x 0.75	16.9	19.5		448	19.5	1.6		22.7	26.1	1237		
16 x 2 x 0.75	17.4	20.0		474	20.0	1.6		23.2	26.8	1296		
18 x 2 x 0.75	18.5	21.1		525	21.1	1.6		24.3	27.9	1389		
20 x 2 x 0.75	19.5	22.3		586	22.3	1.6		25.5	29.3	1511		
1 x 2 x 1.5	6.1	RRXHR		7.7	72	RRXHRFR		7.7	0.9	9.5	12.3	275
2 x 2 x 1.5	7.9	RRXOHR		9.7	125	RRXOHRFR		9.7	0.9	11.5	14.3	375
3 x 2 x 1.5	9.6			11.4	174			11.4	0.9	13.2	16.0	466
4 x 2 x 1.5	11.1		12.9	223	12.9		0.9	14.7	17.5	549		
5 x 2 x 1.5	12.4		14.6	283	14.6		1.3	17.1	20.3	771		
6 x 2 x 1.5	13.6		15.8	332	15.8		1.3	18.3	21.5	857		
8 x 2 x 1.5	15.7		17.9	427	17.9		1.3	20.4	23.6	1017		
10 x 2 x 1.5	17.5		20.1	539	20.1		1.6	23.3	26.9	1365		
12 x 2 x 1.5	19.2		21.8	633	21.8		1.6	25.0	28.6	1525		

FIRE RESISTANT POWER CABLE - BS 7211 + BS 6387



Application

These cables are designed for installations in trunking and conduits where a fire situation may pose a major hazard. Circuit integrity is maintained. To achieve optimum performance such cables should be installed in metal conduits.

Operating Temperature

-20 to +90° C. the cable should not be flexed when the temperature is below 0° C

Minimum Bending Radius

8 x Overall diameter

Flame Propagation

IEC 60332-1, BS EN 50265, IEC 60332-3, BS EN 50266

All basic colors available including green/yellow. Sheathed version also available. Details available on request.

Conductors

Stranded class 2 plain annealed copper

Dimensions

Nominal Area of Conductor Sq. mm	Insulation Thickness mm	Max. Overall Diameter mm	Approx Weight of cable kg/km	DC Conductor Resistance Max at 20°C Ω/km
1.5	0.7	3.8	32	12.1
2.5	0.8	4.5	43	7.41
4	0.8	5.0	55	4.61
6	0.8	5.5	85	3.08
10	1.0	7.0	146	1.83
16	1.0	8.0	198	1.15
25	1.2	9.7	320	0.727
35	1.2	10.8	410	0.524
50	1.4	13.3	549	0.387
70	1.4	15.1	770	0.268
95	1.6	17.5	1140	0.193
120	1.6	19.2	1425	0.153
150	1.8	21.2	1720	0.124
185	2.0	23.6	2155	0.0991

Insulation

Mica-glass fire resistant tape covered by an extruded layer of cross-linked Zero Halogen, Low Smoke insulating compound

Circuit Integrity

BS 6387 categories C, W & Z (when applied to a single cable) Exceeds IEC 60331 - 3 hours at 750°C - when the test temperature was increased to 950°C, equivalent to BS 6387 Category C

Acid Gas Emission

IEC 60754-1, BS EN 50267-2-1

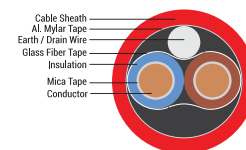
Smoke Emission

IEC 61034, BS EN 50268

Voltage Rating

1100V

FIRE ALARM CABLE



The standard for building safety now calls for various safety gadgets to detect and relate any threat to the master control rooms. Hence, the advent of fire alarm cable designed to meet the requirements of circuit integrity under flame. Low smoke and emission under fire condition are the hallmarks of such cables designed. Such cables function even under prolonged exposure to flame. The construction of such being from inorganic material aids for resistance to flame, hence survives the harshest fire conditions.

Fire-alarm cables comply with the requirements of the following:

BS 7629 - 1: 2008 - 1100 V Fire resistant electric cables having low emission of smoke and corrosive gases when affected by fire. BS 6387 Specification for performance requirements for cable required to maintain circuit conditions. Integrity standard fire resistant cables as described in Clause 26 2d BS 5839 - 1:2002 +A2:2008 fire detection and fire alarm system for buildings. Class ph30 and ph60 when tested in accordance with BS EN 50200 - method of test for resistance to fire of unprotected small cables for use in emergency circuits.

Conductor

Plain annealed copper to BS 6360 Solid (Class - 1)

Earth Conductor

Tinned annealed copper to BS EN 60228 (Drain wire for multicore cables)

Sheath

Thermoplastic Zero halogen, Low smoke, Flame retardant, abrasion resistant Type LTS3 to 7655 section 6.1

Insulation

High performance Silicone rubber EI 2 to BS 7655 Section 1.1

Dimensions

Electrostatic Screen

Aluminium / Polyester tape min. 20% overlap

Temperature Range

-20°C to +70°C

Min. Bending Radius

6D

Halogen Free Fire Performance

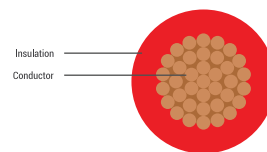
BS EN 50265-2-1, BS EN 50265-2-4

Voltage Rating

1100V

No. of Conductors x Section (Sq. mm)	Size of Cond. (no./mm)	Mean overall Diameter mm	Maximum Conductor Resistance at 20°C ohms/km	Current rating DC of single phase AC Enclosed Amps	Current rating DC of single phase AC clipped direct Amps	Volt drop DC or single phase AC mV/A/m
2 x 1.0	1/1.13	7.2	18.1	13	15	44
2 x 1.5	1/1.38	8.1	12.1	16.5	20	29
3 x 1.0	1/1.13	7.6	18.1	13	15	44
3 x 1.5	1/1.38	8.5	12.1	16.5	20	29
4 x 1.0	1/1.13	8.3	18.1	13	15	44
4 x 1.5	1/1.38	9.4	12.1	16.5	20	29

AUTO CABLE - FLY



Conductor

Soft annealed electrolytic copper Cu-ETP according to DIN EN 13602, bare. Conductor construction according to ISO 6722

Insulation

Plasticized PVC with properties according to ISO 6722, Class B, lead free

Standards

ISO 6722

Temperature Rating

-40°C to +105°C

Dimensions

Nominal cross sectional area Sq. mm	No. of strands	Diameter of single wire Max. mm	Diameter of conductor Nom. mm	DC Conductor resistance at 20°C Ω/km, Max.	Wall thickness mm. Nom.	Overall Diameter	
						(Min.)	(Max.)
0.5	16	0.21	1.0	37.1	0.6	2.0	2.3
0.75	24	0.21	1.2	24.7	0.6	2.2	2.5
1	32	0.21	1.35	18.5	0.6	2.4	2.7
1.5	30	0.26	1.7	12.7	0.6	2.7	3.0
2	40	0.26	2.0	9.42	0.6	2.9	3.3
2.5	50	0.26	2.2	7.6	0.7	3.3	3.6
3	60	0.26	2.4	6.15	0.7	3.5	3.9
4	56	0.31	2.75	4.71	0.8	4.0	4.4
6	84	0.31	3.3	3.14	0.8	4.6	5.0
10	80	0.41	4.5	1.82	1.0	6.0	6.5
16	126	0.41	6.3	1.16	1.0	7.0	8.3
25	196	0.41	7.8	0.743	1.3	8.7	10.2
35	276	0.41	9.0	0.527	1.3	10.0	10.7
50	400	0.41	10.5	0.368	1.5	11.9	13.0
70	560	0.41	12.5	0.259	1.5	14.0	15.0
95	740	0.41	14.8	0.196	1.6	15.4	16.2
120	960	0.41	16.5	0.153	1.6	18.7	19.7

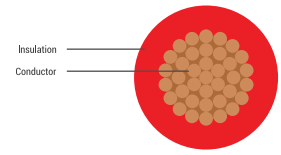
Properties

Conductors with cross-sections > 6 Sq. mm area also suitable as battery cables

Voltage Rating

1100V

AUTO CABLE - FLYY



Conductor

Soft annealed electrolytic copper Cu-ETP according to DIN EN 13602, bare. Conductor construction according to ISO 6722

Insulation

Plasticized PVC with properties according to ISO 6722, Class B, lead free

Dimensions

Standards

ISO 6722

Temperature Rating

-40°C to +105°C

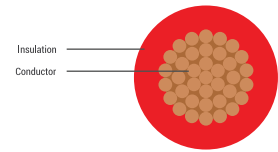
Voltage Rating

1100V

Nominal cross sectional area Sq. mm	No. of strands	Diameter of single wire Max. mm	Diameter of conductor Nom. mm	DC Conductor resistance at 20°C Ω/km, Max.	Wall thickness mm. Nom.	Diameter of core mm	Sheath wall thickness mm	Overall Diameter	
								(Min.)	(Max.)
0.5	16	0.21	1.0	37.1	0.6	2.1	0.4	2.7	3.1
0.75	24	0.21	1.2	24.7	0.6	2.3	0.4	3	3.3
1	32	0.21	1.35	18.5	0.6	2.5	0.4	3.2	3.6
1.5	30	0.26	1.7	12.7	0.6	2.8	0.5	3.7	4.1
2	40	0.26	2.0	9.42	0.6	3.0	0.5	3.9	4.3
2.5	50	0.26	2.2	7.6	0.7	3.5	0.5	4.3	4.8



AUTO CABLE - FLRY - A



Conductor

Soft annealed electrolytic copper Cu-ETP according to DIN EN 13602, bare. Conductor construction according to ISO 6722.

(Concentric construction)

Insulation

Plasticized PVC with properties according to ISO 6722, Class B, lead free

Standards

DIN VDE 72 551 Part 5 & 6

ISO 6722

Dimensions

Nominal cross sectional area Sq. mm	No. of strands	Diameter of single wire Max. mm	Diameter of conductor Nom. mm	DC Conductor Resistance at 20°C Ω/km, Max.		Wall thickness mm. Nom.	Overall Diameter (Nom.)
				Bare/Tinned Min.	Bare/Tinned Max.		
0.22	7	0.21	0.7	77.9 /-	84.8/86.5	0.2	1.2
0.35	7	0.26	0.8	47.8 /-	52.0/54.5	0.2	1.3
0.5	19	0.19	1.0	34.1 /-	37.1/38.2	0.22	1.6
0.75	19	0.23	1.2	22.7 /-	24.7/25.4	0.24	1.9
1	19	0.26	1.35	17.0 /-	18.5/19.1	0.24	2.1
1.5	19	0.32	1.7	11.7 /-	12.7/13.0	0.24	2.4
2	19	0.37	2.0	8.66 /-	9.42/9.69	0.28	2.8
2.5	19	0.41	2.2	7.0 /-	7.60 /7.80	0.28	3

Temperature Rating

-40°C to +105°C

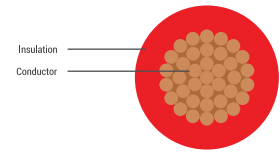
Properties

Concentric conductor (type A) and thin wall insulation

Voltage Rating

1100V

AUTO CABLE - FLRY - B



Conductor

Soft annealed electrolytic copper Cu-ETP according to DIN EN 13602, bare. Conductor construction according to ISO 6722

Standards

DIN VDE 72 551 Part 5 & 6
ISO 6722

Insulation

Plasticized PVC with properties according to ISO 6722, Class B, lead free

Temperature Rating

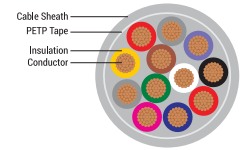
-40°C to +105°C

Voltage Rating

1100V

Dimensions

Nominal cross sectional area Sq. mm	No. of strands	Diameter of single wire Max. mm	Diameter of conductor Nom. mm	DC Conductor Resistance at 20°C Ω/km, Max.		Wall thickness mm. Nom.	Overall Diameter (Nom.)
				Bare/Tinned Min.	Bare/Tinned Max.		
0.35	12	0.21	0.9	47.8 / -	52.0/54.5	0.2	1.4
0.5	16	0.21	1.0	34.1 / -	37.1/38.2	0.22	1.6
0.75	24	0.21	1.2	22.7 / -	24.7/25.4	0.24	1.9
1	32	0.21	1.35	17.0 / -	18.5/19.1	0.24	2.1
1.5	30	0.26	1.7	11.7 / -	12.7/13.0	0.24	2.4
2	30	0.31	2.0	8.6 / -	9.42/9.69	0.28	2.8
2.5	50	0.26	2.2	7.0 / -	7.60 / 7.80	0.28	3
3	45	0.31	2.4	5.8 / -	6.15 / 6.36	0.28	3.2
4	56	0.31	2.75	4.32 / -	4.7 / 4.8	0.32	3.7
6	84	0.31	3.3	2.85 / -	3.1 / 3.2	0.32	4.3
10	80	0.41	4.5	- / -	1.82 / 1.85	0.48	6
16	126	0.41	6.3	- / -	1.16 / 1.18	0.52	7.9
25	196	0.41	7.8	- / -	0.743 / 0.757	0.52	9.4



Application

These are special PVC data cables used for flexible use with free movement without tensile stress of forced movements in dry, moist and wet rooms but not suitable for open air, wherever the construction requirements call for a minimum outer diameter.

Technical Data

Standard : Based on VDE 0812

Voltage Rating : 1100 V

Insulation Resistance : Min. 20 GΩ x cm

Temperature Range : Flexing -5°C to +70°C. Fixed installation -30°C to +70°C

Minimum Bending Radius : For flexible use 10 x cable ø

Test Voltage : Up to 0.25 Sq. mm = 1500 V. From 0.34 Sq. mm = 2000 V

Breakdown Voltage : Up to 0.25 Sq. mm = 2400 V. From 0.34 Sq. mm = 4000 V

Cable Construction

Bare copper, fine wire conductors, bunch stranded DIN VDE 0295 cl. 5, EN 60228 cl. 5.

Special PVC core insulation T12, to EN 50363-3.

Conductor make-up for

0.14 Sq. mm = 8 x 0.10 mm.

0.25 Sq. mm = 14 x 0.15 mm.

0.34 Sq. mm = 19 x 0.15 mm.

Core colours as per DIN 47100.

Cores stranded in layers with optimal lay-length.

Special PVC outer sheath TM2, to EN 50363-4.1.

Colour grey (RAL 7032).

Properties

PVC self-extinguishing and flame retardant according to EN 60332-1-2.

Capacitance (approx. Value)

up to 0.5 Sq. mm - 120 nF/km

above 0.5 Sq. mm - 160 nF/km.

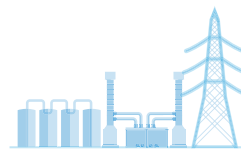
Inductance approx. 0.65 mH/km.

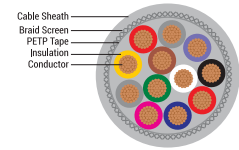
Cable Design Parameters

Part Number	No. of Cores & Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
050100201014	2 x 0.14	3.3	2.6	15.0
050100301014	3 x 0.14	3.4	3.9	17.4
050100401014	4 x 0.14	3.7	5.2	20.8
050100501014	5 x 0.14	4.0	6.5	24.5
050100701014	7 x 0.14	4.6	9.1	32.4
050100801014	8 x 0.14	5.0	10.6	38.6
050101001014	10 x 0.14	5.5	13.2	48.0
050101201014	12 x 0.14	5.7	15.9	52.5
050101401014	14 x 0.14	6.0	18.5	58.4
050101601014	16 x 0.14	6.3	21.1	65.1

Part Number	No. of Cores & Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
050102001014	20 x 0.14	6.9	26.7	80.3
050102501014	25 x 0.14	7.6	33.4	98.1
050103601014	36 x 0.14	8.7	48.0	131.8
050103701014	37 x 0.14	8.7	49.4	134.1
050104001014	40 x 0.14	9.0	53.4	142.8
050105001014	50 x 0.14	9.9	66.7	174.4
050105601014	56 x 0.14	10.4	74.7	193.9
050100201025	2 x 0.25	4.1	4.5	23.5
050100301025	3 x 0.25	4.3	6.8	27.6
050100401025	4 x 0.25	4.7	9.1	33.5
050100501025	5 x 0.25	5.1	11.3	40.0
050100701025	7 x 0.25	5.8	15.9	52.9
050100801025	8 x 0.25	6.3	18.5	63.7
050101001025	10 x 0.25	7.1	23.1	80.3
050101201025	12 x 0.25	7.3	27.7	88.2
050101401025	14 x 0.25	7.7	32.4	98.6
050101601025	16 x 0.25	8.1	37.0	110.4
050101801025	18 x 0.25	8.5	42.0	123.6
050102001025	20 x 0.25	9.0	46.7	137.5
050102501025	25 x 0.25	10.0	58.4	169.3
050103001025	30 x 0.25	10.5	70.0	193.8
050103201025	32 x 0.25	11.0	74.7	208.5
050103601025	36 x 0.25	11.4	84.0	229.6
050103701025	37 x 0.25	11.5	86.4	233.6
050104001025	40 x 0.25	11.9	93.4	249.3
050105001025	50 x 0.25	13.1	116.7	306.2
050100201034	2 x 0.34	4.2	6.2	25.8
050100301034	3 x 0.34	4.4	9.2	30.8
050100401034	4 x 0.34	4.8	12.3	37.6
050100501034	5 x 0.34	5.2	15.4	45.1
050100701034	7 x 0.34	5.7	21.5	57.0
050100801034	8 x 0.34	6.5	25.1	72.0
050101001034	10 x 0.34	7.3	31.4	90.8
050101201034	12 x 0.34	7.6	37.7	100.3
050101401034	14 x 0.34	7.9	43.9	112.5
050101601034	16 x 0.34	8.4	50.2	126.2
050101801034	18 x 0.34	8.8	57.0	141.6
050102001034	20 x 0.34	9.3	63.4	157.6
050102101034	21 x 0.34	9.3	66.5	160.3
050102501034	25 x 0.34	10.3	79.2	195.1
050103001034	30 x 0.34	10.9	95.0	223.3
050103601034	36 x 0.34	11.8	114.1	265.0
050104001034	40 x 0.34	12.2	126.7	288.2
050105001034	50 x 0.34	13.5	158.4	354.7
050100201050	2 x 0.5	4.8	9.2	35.2
050100301050	3 x 0.5	5.1	13.8	42.4
050100401050	4 x 0.5	5.5	18.4	52.2
050100501050	5 x 0.5	6.0	23.0	63.0
050100601050	6 x 0.5	6.6	27.6	75.0
050100701050	7 x 0.5	6.7	32.2	80.3
050100801050	8 x 0.5	7.6	37.6	101.1
050101001050	10 x 0.5	8.6	47.0	128.2
050101201050	12 x 0.5	8.9	56.4	142.2
050101401050	14 x 0.5	9.3	65.8	160.0

Part Number	No. of Cores & Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
050101601050	16 x 0.5	9.8	75.2	179.9
050102001050	20 x 0.5	11.0	94.9	225.6
050102501050	25 x 0.5	12.2	118.6	280.3
050103001050	30 x 0.5	12.9	142.3	321.8
050104001050	40 x 0.5	14.6	189.7	416.8
050100201075	2 x 0.75	5.1	13.8	42.8
050100301075	3 x 0.75	5.4	20.7	52.5
050100401075	4 x 0.75	5.9	27.6	65.2
050100501075	5 x 0.75	6.5	34.5	79.1
050100701075	7 x 0.75	7.2	48.4	101.8
050100801075	8 x 0.75	8.1	56.4	127.1
050101001075	10 x 0.75	9.2	70.5	161.4
050101201075	12 x 0.75	9.5	84.6	180.4
050101601075	16 x 0.75	10.6	112.7	229.7
050102001075	20 x 0.75	11.8	142.3	288.5
050102501075	25 x 0.75	13.2	177.9	359.2
050100200001	2 x 1	5.6	18.4	53.4
050100300001	3 x 1	6.0	27.6	66.0
050100500001	5 x 1	7.2	46.1	100.3
050100201105	2 x 1.5	6.7	27.0	75.7
050100301105	3 x 1.5	7.1	40.5	93.9
050100401105	4 x 1.5	7.8	54.0	117.4





Technical Data

Standard : Based on VDE 0812

Voltage Rating : 1100 V

Insulation Resistance : Min. 20 GΩ x cm

Temperature Range : Flexing -5°C to +70°C. Fixed installation -30°C to +70°C

Minimum Bending Radius : Flexing 15 x cable ø. Fixed installation 6 x cable ø

Test Voltage : 0.14 Sq. mm : 1500 V; > 0.14 Sq. mm : 2000 V.

Capacitance (approx. Value)

Up to 0.5 Sq. mm

C/C = 120 nF/km. C/S = 160 nF/km.

0.75 Sq. mm to 1.5 Sq. mm

C/C = 160 nF/km. C/S = 240 nF/km.

Inductance : Approx. 0.65 mH/km

Cable Construction

Bare copper, fine wire conductors, to DIN/BS EN 60228 cl.5.

Special PVC core insulation T12, to EN 50363-3.

Conductor make-up for

0.14 Sq. mm = 18 x 0.1 mm.

0.25 Sq. mm = 14 x 0.15 mm.

0.34 Sq. mm = 19 x 0.15 mm.

Colour coded to DIN 47100.

Cores stranded in layers with optimal lay-length.

Tinned copper braided screen, approx 85% coverage.

Special PVC outer sheath TM2, to EN 50363-4.1.

Colour grey (RAL 7032).

Properties

Overall braid minimizes electrical interference.

Flame retardant to EN 60332-1-2.

Smaller dimension screened cables are suitable for use in computer systems, instrumentation technology office equipment, balance, etc.

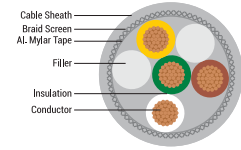
Cable Design Parameters

Part Number	No. of Cores & Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
050300201014	2 x 0.14	4.0	9.38	14.2
050300301014	3 x 0.14	4.1	10.73	15.7
050300401014	4 x 0.14	4.4	12.52	17.9
050300501014	5 x 0.14	4.6	15.00	21.0
050300701014	7 x 0.14	5.0	18.24	24.9
050300801014	8 x 0.14	5.4	20.80	28.2
050301001014	10 x 0.14	6.0	25.05	33.6
050301201014	12 x 0.14	6.2	28.05	36.9
050301401014	14 x 0.14	6.4	31.45	40.8
050301501014	15 x 0.14	6.7	33.50	43.5

Part Number	No. of Cores & Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
050301601014	16 x 0.14	6.7	34.66	44.7
050301801014	18 x 0.14	7.0	38.41	49.0
050302001014	20 x 0.14	7.5	42.18	54.0
050302101014	21 x 0.14	7.5	43.39	55.2
050302501014	25 x 0.14	8.2	51.24	64.5
050302801014	28 x 0.14	8.6	55.66	69.8
050303001014	30 x 0.14	8.6	58.27	72.4
050303201014	32 x 0.14	8.9	61.82	76.6
050303601014	36 x 0.14	9.2	67.85	83.5
050304001014	40 x 0.14	9.5	74.06	90.3
050304401014	44 x 0.14	10.2	81.35	99.2
050305001014	50 x 0.14	10.4	89.63	107.9
050300201025	2 x 0.25	4.9	14.92	22.4
050300301025	3 x 0.25	4.9	15.81	23.4
050300401025	4 x 0.25	5.3	19.47	27.9
050300501025	5 x 0.25	5.7	22.48	31.9
050300701025	7 x 0.25	6.2	28.32	38.8
050300801025	8 x 0.25	6.8	32.23	44.1
050301001025	10 x 0.25	7.6	39.10	52.9
050301201025	12 x 0.25	7.8	44.27	58.6
050301401025	14 x 0.25	8.1	50.02	65.2
050301501025	15 x 0.25	8.6	53.10	69.3
050301601025	16 x 0.25	8.6	55.36	71.6
050301801025	18 x 0.25	9.0	61.57	78.9
050302001025	20 x 0.25	9.6	67.53	86.6
050302101025	21 x 0.25	9.6	69.81	88.9
050302501025	25 x 0.25	10.5	82.36	104.0
050302801025	28 x 0.25	11.1	90.24	113.4
050303001025	30 x 0.25	11.1	94.82	118.0
050303201025	32 x 0.25	11.5	100.42	124.7
050303601025	36 x 0.25	12.0	109.27	134.9
050304001025	40 x 0.25	12.4	121.11	147.9
050305001025	50 x 0.25	13.6	147.73	177.9
050306101025	61 x 0.25	14.8	176.02	209.6
050300201034	2 x 0.34	5.0	15.27	22.9
050300301034	3 x 0.34	5.0	18.52	26.3
050300401034	4 x 0.34	5.4	22.72	31.4
050300501034	5 x 0.34	5.8	26.70	36.3
050300701034	7 x 0.34	6.3	34.45	45.2
050300801034	8 x 0.34	6.9	39.20	51.4
050301001034	10 x 0.34	7.8	47.64	61.8
050301201034	12 x 0.34	8.0	54.48	69.2
050301401034	14 x 0.34	8.4	61.93	77.5
050301501034	15 x 0.34	8.8	65.90	82.6
050301601034	16 x 0.34	8.8	68.97	85.6
050301801034	18 x 0.34	9.2	77.21	95.0
050302001034	20 x 0.34	9.8	84.65	104.2
050302101034	21 x 0.34	9.8	87.76	107.3
050302501034	25 x 0.34	10.8	102.99	125.3
050302801034	28 x 0.34	11.4	113.92	137.7
050303001034	30 x 0.34	11.4	120.13	143.9
050303201034	32 x 0.34	11.9	127.76	152.7
050303601034	36 x 0.34	12.4	139.20	165.5
050304001034	40 x 0.34	12.8	155.20	182.7

Part Number	No. of Cores & Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
050305001034	50 x 0.34	14.1	189.54	220.7
050300201050	2 x 0.5	5.8	20.13	30.6
050300301050	3 x 0.5	5.8	25.08	35.8
050300401050	4 x 0.5	6.3	30.85	42.8
050300501050	5 x 0.5	6.8	36.84	50.1
050300601050	6 x 0.5	7.3	43.13	57.8
050300701050	7 x 0.5	7.4	47.71	62.6
050300801050	8 x 0.5	8.1	54.24	71.1
050301001050	10 x 0.5	9.1	66.98	86.6
050301201050	12 x 0.5	9.4	76.60	97.1
050301401050	14 x 0.5	9.9	87.26	109.0
050301601050	16 x 0.5	10.4	97.91	121.1
050301801050	18 x 0.5	10.9	109.29	134.1
050301901050	19 x 0.5	10.9	113.91	138.7
050302001050	20 x 0.5	11.8	120.19	148.8
050302401050	24 x 0.5	13.0	142.32	174.8
050302501050	25 x 0.5	13.1	146.98	179.5
050302701050	27 x 0.5	13.3	156.84	190.2
050303001050	30 x 0.5	13.8	172.11	206.9
050300201075	2 x 0.75	6.4	25.98	38.5
050300301075	3 x 0.75	6.5	32.85	45.6
050300401075	4 x 0.75	7.0	41.37	55.6
050300501075	5 x 0.75	7.5	49.35	65.1
050300701075	7 x 0.75	8.2	64.96	82.7
050300801075	8 x 0.75	9.0	74.16	94.2
050301001075	10 x 0.75	10.1	91.35	114.6
050301201075	12 x 0.75	10.4	106.17	130.4
050301801075	18 x 0.75	12.0	153.48	182.8
050302501075	25 x 0.75	14.0	207.72	243.5
050303001075	30 x 0.75	14.8	244.37	282.6
050300200001	2 x 1	7.0	31.67	46.6
050300300001	3 x 1	7.0	41.39	56.6
050300400001	4 x 1	7.6	51.91	68.9
050300500001	5 x 1	8.2	62.76	81.7
050300700001	7 x 1	9.0	83.12	104.4
050301000001	10 x 1	11.1	117.31	145.4
050301200001	12 x 1	11.5	136.90	166.2
050301800001	18 x 1	13.3	199.05	234.6
050302500001	25 x 1	15.6	270.56	314.0
050300201105	2 x 1.5	7.7	42.16	60.4
050300301105	3 x 1.5	7.8	55.88	74.5
050300401105	4 x 1.5	8.5	71.49	92.3
050300501105	5 x 1.5	9.2	86.50	109.6
050300601105	6 x 1.5	10.0	101.92	127.6
050300701105	7 x 1.5	10.1	115.53	141.6
050300801105	8 x 1.5	11.1	131.75	161.4
050301001105	10 x 1.5	12.5	163.84	198.4
050301201105	12 x 1.5	12.9	191.62	227.6
050301401105	14 x 1.5	13.5	220.60	258.9
050301601105	16 x 1.5	14.3	249.79	290.8
050301901105	19 x 1.5	15.0	294.69	338.5
050302401105	24 x 1.5	17.8	394.72	448.7
050302701105	27 x 1.5	18.2	437.24	492.7
050303701105	37 x 1.5	20.6	583.86	648.9

Li2YCY



Application

These data cables with twisted pairs are used in particular for the interference-free transmission of data and signals over longer distances. The high transmission rate are suitable for RS 422 and RA 485 interfaces. These cables are suitable for fixed installations as well as for flexing Application, for free movement without forced motion and without tensile stress, in dry and moist environments, though not for outdoor Application (sheath colour grey).

The version ... Yv, colour black with reinforced outer sheath, is suitable for installation in the ground.

Technical Data

Standard : Based on VDE 0812

Voltage Rating : 1100 V

Insulation Resistance : Min. 5000 GΩ x cm

Mutual Capacitance : Max. 60 nF/km

Characteristic Impedance : 100 Ohm ±15

Cross-talk Attenuation : Upto 1 MHz min. 50 dB. Upto 10 MHz min. 40 dB

Inductance : Approx. 0.65 mH/km

Temperature Range : Flexing -5°C to +70°C. Fixed installation -30°C to +70°C

Minimum Bending Radius : Flexing 15 x cable Ø. Fixed installation 6 x cable Ø

Cable Construction

Bare copper stranded wires, 7-wires

Conductor make-up for

0.22 Sq. mm = 7 x 0.20 mm

0.34 Sq. mm = 7 x 0.25 mm

0.5 Sq. mm = 7 x 0.30 mm

Conductor resistance (loop) at 20°C

0.22 Sq. mm = 186 Ω/km (max.)

0.34 Sq. mm = 115 Ω/km (max.)

0.5 Sq. mm = 78.5 Ω/km (max.)

Metal coated copper is also offered on request.

Core insulation of PE (Polyethylen).

Core colours as per DIN 47100.

Cores stranded in pair with optimal lay-length.

Pair stranded in layers with optimal lay-length.

Plastic coated aluminium foil wrap.

Tinned copper braided screen, approx 85% coverage.

Special PVC outer sheath TM2, to EN 50363-4.1.

Sheath colour grey (RAL 7032).

Type Yv with reinforced outer sheath of PVC for underground laying.

Also available in armour on request.

Properties

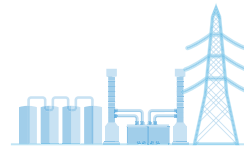
Flame retardant to EN 60332-1-2.

The twisted-pair lay-up prevents electrical unbalances within the cable and this thus effectively suppresses cross-talking effects.

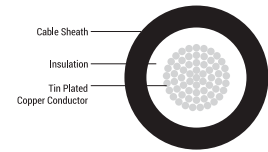
Cable Design Parameters

	Part Number	No. of Pairs & Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
Li-2YCY (TP) Grey	050500221022	2 x 2 x 0.22	8.1	25.0	67
	050500321022	3 x 2 x 0.22	8.2	29.1	77
	050500421022	4 x 2 x 0.22	9.2	36.0	93
	050500821022	8 x 2 x 0.22	12.0	60.7	154
	050501021022	10 x 2 x 0.22	13.2	71.8	182
	050500121034	2 x 2 x 0.34	8.6	31.7	78
	050500221034	3 x 2 x 0.34	8.7	37.6	90
	050500321034	4 x 2 x 0.34	9.7	46.4	110
	050500421034	8 x 2 x 0.34	12.9	81.7	185
	050500821034	10 x 2 x 0.34	14.1	96.7	219
	050500221050	2 x 2 x 0.5	9.1	38.9	89
	050500321050	3 x 2 x 0.5	9.2	48.1	105
	050500421050	4 x 2 x 0.5	10.3	59.9	129
	050500821050	8 x 2 x 0.5	13.7	106.6	221
	050501021050	10 x 2 x 0.5	15.0	127.9	263
	050500221075	2 x 2 x 0.75	9.7	50.1	106
	050500321075	3 x 2 x 0.75	9.9	63.5	127
	050500421075	4 x 2 x 0.75	11.1	80.8	158
	050500821075	8 x 2 x 0.75	14.8	145.2	274
	050501021075	10 x 2 x 0.75	16.3	178.3	331
050500220001	2 x 2 x 1	10.4	60.2	122	
050500320001	3 x 2 x 1	10.6	81.8	152	
050500420001	4 x 2 x 1	11.9	103.0	189	
050500820001	8 x 2 x 1	15.9	189.1	333	
050501020001	10 x 2 x 1	17.5	229.1	401	
Li-2YCYv (TP) Black	050600221022	2 x 2 x 0.22	8.4	25.0	73
	050600321022	3 x 2 x 0.22	8.5	29.1	83
	050600421022	4 x 2 x 0.22	9.5	36.0	100
	050600821022	8 x 2 x 0.22	12.3	60.7	163
	050601021022	10 x 2 x 0.22	13.5	71.8	191
	050600221034	2 x 2 x 0.34	8.9	31.7	84
	050600321034	3 x 2 x 0.34	9.0	37.6	96
	050600421034	4 x 2 x 0.34	10.0	46.4	117
	050600821034	8 x 2 x 0.34	13.2	81.7	195
	050601021034	10 x 2 x 0.34	14.4	96.7	229

	Part Number	No. of Pairs & Nominal Cross Sectional Area (Sq. mm)	Approx. Cable Diameter (mm)	Approx. Copper Weight (kg/km)	Approx. Cable Weight (kg/km)
Li-2YCYv (TP) Black	050600221050	2 x 2 x 0.5	9.4	38.9	96
	050600321050	3 x 2 x 0.5	9.5	48.1	112
	050600421050	4 x 2 x 0.5	10.6	59.9	137
	050600821050	8 x 2 x 0.5	14.0	106.6	231
	050601021050	10 x 2 x 0.5	15.3	127.9	274
	050600221075	2 x 2 x 0.75	10.0	50.1	113
	050600321075	3 x 2 x 0.75	10.2	63.5	134
	050600421075	4 x 2 x 0.75	11.4	80.8	166
	050600821075	8 x 2 x 0.75	15.1	145.2	285
	050601021075	10 x 2 x 0.75	16.6	178.3	343
	050600220001	2 x 2 x 1	10.7	60.2	129
	050600320001	3 x 2 x 1	10.9	81.8	160
	050600420001	4 x 2 x 1	12.2	103.0	198
	050600820001	8 x 2 x 1	16.2	189.1	345
	050601020001	10 x 2 x 1	17.8	229.1	414



SOLAR CABLE



Application

Solar cables are intended for use in photovoltaic power supply systems and similar applications as free hanging, movable, fixed installation and buried in ground in constructional covered systems. The cables can be used indoor, outdoor, in hazard explosion areas, in industry and agriculture. They are suitable for applications in equipment with protective insulation (protecting Class 2).

Standard

Adapted to PV systems, 2 Pfg 1169 / 08.2007.

Voltage Rating

1100V

Thermal parameters

Max. Permissible Ambient Temperature : +90°C (stationary and in motion)

Max. Permissible Operating Temperature of The Conductor :

+120°C, Interpretation according to IEC 60216 : permanent temperature.

120°C for 20,000 h (= 2.3 years), at max. 90°C permanent temperature (= 30 years).

Short - Circuit Temperature : +200°C

(at the conductor max. 5 sec.)

Damp - Heat Test : According to EN 60068 - 2 - 78. 1,000h at 90°C and 85% humidity.

Min. Permissible Ambient Temperature : -40°C

(stationary and in motion)

Resistance to Cold :

Bending test at low temperature according to DIN EN 60811 - 1 - 4, Impact test similar to DIN EN 50305.

Minimum Bending Radius : Fixed Installation approx. 4 x cable Ø

Mechanical Parameters

Tensile Load : 15 N / Sq. mm in operation. 50 N/Sq. mm during installation

Shrinkage Test : According to EN 60811 - 1 - 3

Shore-Hardness : 85 shore A according to DIN EN 53505

Pressure Test at High Temperature : According to EN 60811 - 3 - 1

Dynamic Penetration Test : According to requirements for cables for PV systems, DKE / VDE 411.2.3

Chemical Parameters

Mineral Oil Resistance : 24h, 100°C according to DIN VDE 0473 - 811 - 2 - 1, DIN EN 60811 - 2 - 1

Acid and Alkaline Resistance : According to EN 60811 - 2 - 1

7 days, 23°C (N-Oxalic Acid, N-Sodium Hydroxide)

Ammonia Resistance : 30 days in saturated ammonia atmosphere (internal testing)

Weather Resistance : Ozone resistance according to DIN EN 50396 test Type B, HD 22.2 test Type B UV - resistance according to UL 1581 (Xenon - Test), ISO 4892 - 2 (Method A) and HD 506/A1 - 2.4.20

Absorption of water (gravimetric) according to DIN VDE 0473-811-1-3, DIN EN 60811 - 1 - 3.

Behavior in Case of Fire :

Flame propagation.

Single cable according to DIN VDE 0482 Part 332 - 1 - 2, DIN EN 60332 - 1 - 2.

Multiple cable according to DIN VDE 0482 Part 266 - 2 - 5, DIN EN 50305 - 9.

Low smoke emission according to DIN VDE 0482 Part 268 - 2.

DIN EN 50268-2 (light transmittance > 70%).

Corrosivity according to DIN EN 50267 - 2 - 2.

Toxicity according to DIN EN 50305, ITC - index < 3.

Cable Construction

Conductor : Annealed tinned copper, fine wire conductors, bunch stranded EN 60228 Cl. 5

Insulation : Crosslinked polyolefin (XLPO)

Core Identification : Red, black or natural

Sheath : Crosslinked polyolefin (XLPO)

Cable Colour : Black

Please complete the part numbers for these cables by adding the suffix (in place of 'xx') for the insulation colour required as per the list:
02 - black, 03 - red, 13 - natural.

Cable Design Parameters

Part Number	Nominal Cross-Sectional (Sq. mm)	Conductor Diameter (mm)	Approx. Cable Diameter (mm)	Approx. Cable weight (kg/km)	Current Carrying Capacity at 60°C Ambient Temp. (free in air) [A]	Max. Conductor Resistance at 20°C, (Ω/Km)
12010101xx01	1.5	1.5	4.7	33	30	13.7
12010102xx01	2.5	1.9	5.1	47	41	8.21
12010103xx01	4	2.4	5.6	64	55	5.09
12010104xx01	6	3.0	6.2	91	70	3.39
12010105xx01	10	3.9	7.1	141	98	1.95
12010106xx01	16	5.0	8.3	217	132	1.24
12010107xx01	25	6.2	9.5	298	176	0.795
12010108xx01	35	7.4	10.7	418	218	0.565
12010109xx01	50	8.8	15.3	590	276	0.393
12010110xx01	70	10.5	17.0	786	347	0.277
12010111xx01	95	12.1	19.1	1024	416	0.210
12010112xx01	120	13.7	22.7	1358	488	0.164
12010113xx01	150	15.2	25.5	1692	566	0.132
12010114xx01	185	16.9	28.3	2093	644	0.108
12010115xx01	240	19.2	30.0	2545	775	0.0817





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The technical data mentioned in this book has been derived to have the best products in place. Having known that Innovation has always been the base for R R Kabel products, the technical data would vary from time to time. Hence, current details should always be checked with R R Kabel for accuracy.

ISO = International Organization for Standardization | EQM = EQM Certified Products
TUV = Technischer Überwachungsverein (Technical Inspection Association)
VDE = Verband der Elektrotechnik, Elektronik und Informationstechnik
SABS = South African Bureau of Standards | BASEC = British Approvals Service for Cables
PSB = Singapore Productivity and Standards Board | UL = Underwriters Laboratories Inc.
CSA = Canadian Standards Association
DEMKO = National Body for testing of electrical products to the appropriate European or International safety standards.