Power, Energy & Special Cables

We offer a whole range for low voltage (0.6/1 kV) of power cables, which are with PVC, XLPE, and rubber or LSZH material for insulation or sheath. Some of the power cables are with steel wire armoring for better protection for outdoor uses.

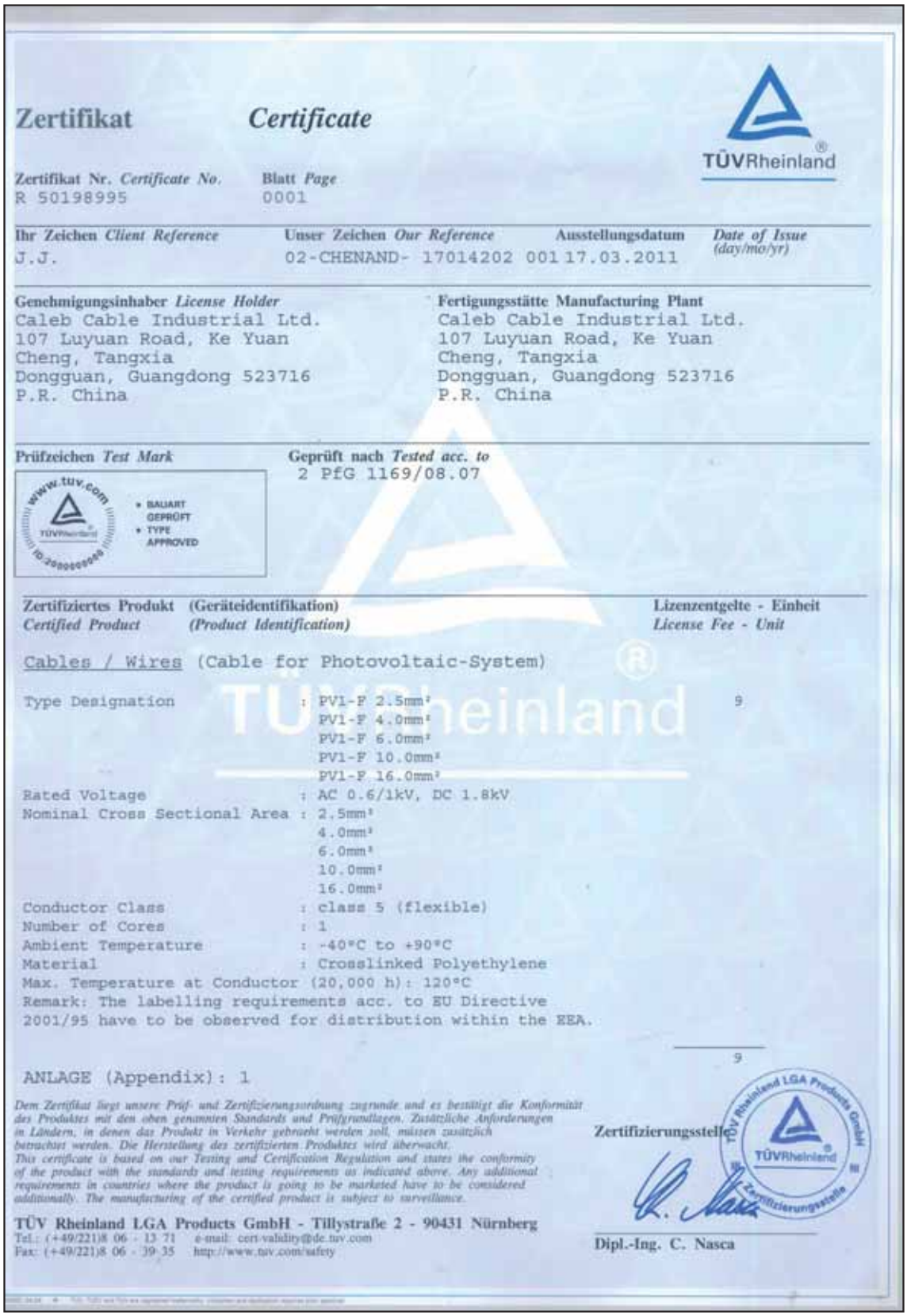
We also provide a solution for the new energy power sector with our solar and wind power cables. Our solar cable is with double layers of XLPE (XL-LSZH) as insulation and sheath and has both UL and TUV certificate.

Special cables, including marine cable, flat cable and spiral cable, can also be produced.

Power, Energy & Special Cables

Description Page

Certificates



Zertifikat *Certificate*

TÜVRheinland

Zertifikat Nr. *Certificate No.* R 50198995 — Blatt *Page* 0001

Ihr Zeichen *Client Reference* J.J. — Unser Zeichen *Our Reference* 02-CHENAND- 17014202 001 — Ausstellungsdatum *Date of Issue (day/mo/yr)* 17.03.2011

Genehmigungsinhaber *License Holder*
Caleb Cable Industrial Ltd.
107 Luyuan Road, Ke Yuan
Cheng, Tangxia
Dongguan, Guangdong 523716
P.R. China

Fertigungsstätte *Manufacturing Plant*
Caleb Cable Industrial Ltd.
107 Luyuan Road, Ke Yuan
Cheng, Tangxia
Dongguan, Guangdong 523716
P.R. China

Prüfzeichen *Test Mark* — www.tuv.com ID 2000000000 — BAUART GEPRÜFT • TYPE APPROVED

Geprüft nach *Tested acc. to* 2 PfG 1169/08.07

Zertifiziertes Produkt (Geräteidentifikation) *Certified Product (Product Identification)* — Lizenzentgelte - Einheit *License Fee - Unit*

Cables / Wires (Cable for Photovoltaic-System)

Type Designation	: PV1-F 2.5mm²	9
	PV1-F 4.0mm²	
	PV1-F 6.0mm²	
	PV1-F 10.0mm²	
	PV1-F 16.0mm²	
Rated Voltage	: AC 0.6/1kV, DC 1.8kV	
Nominal Cross Sectional Area	: 2.5mm²	
	4.0mm²	
	6.0mm²	
	10.0mm²	
	16.0mm²	
Conductor Class	: class 5 (flexible)	
Number of Cores	: 1	
Ambient Temperature	: -40°C to +90°C	
Material	: Crosslinked Polyethylene	

Max. Temperature at Conductor (20,000 h): 120°C
Remark: The labelling requirements acc. to EU Directive 2001/95 have to be observed for distribution within the EEA.

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ANLAGE (Appendix): 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

Zertifizierungsstelle — TÜV Rheinland LGA Products GmbH Zertifizierungsstelle

Dipl.-Ing. C. Nasca

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg
Tel.: (+49/221)8 06 - 13 71 e-mail: cert-validity@de.tuv.com
Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

Certificates

ONLINE CERTIFICATIONS DIRECTORY

ZKLA.E335355
Photovoltaic Wire

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Photovoltaic Wire

See General Information for Photovoltaic Wire

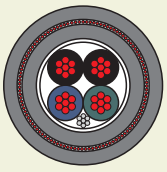
CALEB CABLE INDUSTRIAL LTD E335355
ROOM 806
LANDMARK NORTH
39 LUNG SUM AVE
SHEUNG SHUI N T, HONG KONG

Type PV wire.

Last Updated on 2011-04-07

Questions? Print this page Notice of Disclaimer Page Top

BS 5308 Instrumentation Cable



Technical data

- **Temperature range**
  Fixed: -30 °C to + 70 °C
  Flexing: -5 °C to + 50 °C
- **Nominal voltage**: 300/500 V

Cable structure

- **Conductor**: stranded bare copper
- **Insulation**: PE/XLPE
- **Drain wire**: tinned copper
- **Filler Core**: Unspecified material
- **Screen**: Al-PET
- **Bedding**: PE
- **Armoring**: Steel wire armoring
- **Sheath**: PVC/ LSZH

Application

BS 5308 instrumentation cable is used the connecting cables for the instruments and other electrical equipment. The shielded feature makes it suitable for the voice and data transmission. And the armoring version is suitable for outdoor usage.

BS 5308 PT1 TY1 collectively screened

NO. Pairs x Cross-sec. mm^2	Conductor Construction NO. x mm	Outer Diameter mm	Cable Weight kg/km
1 x 0.50	16 x 0.20	7.0	60
1 x 0.75	24 x 0.20	7.3	75
1 x 1.00	1 x 1.30	7.4	85
1 x 1.50	7 x 0.53	8.3	100
2 x 0.50	16 x 0.20	7.9	80
2 x 0.75	24 x 0.20	8.3	100
2 x 1.00	1 x 1.13	8.4	115
2 x 1.50	7 x 0.53	9.7	150
5 x 0.50	16 x 0.20	13.1	210
5 x 0.75	24 x 0.20	14.3	250
5 x 1.00	1 x 1.13	14.2	290
5 x 1.50	7 x 0.53	16.4	360
10 x 0.50	16 x 0.20	17.2	340
10 x 0.75	24 x 0.20	18.7	450
10 x 1.00	1 x 1.13	18.4	500
10 x1.50	7 x 0.53	21.6	690
20 x 0.50	16 x 0.20	22.3	570
20 x 0.75	24 x 0.20	24.5	920
20 x 1.00	1 x 1.13	24.4	950
20 x 1.50	7 x 0.53	28.5	1230

BS 5308 Instrumentation Cable

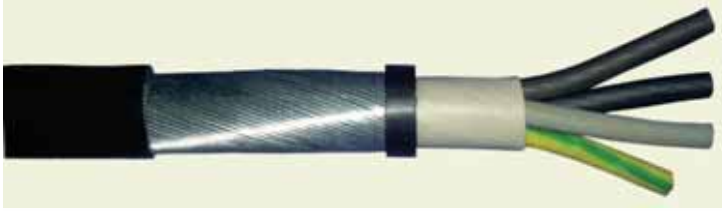
BS 5308 PT1 TY1 individually and collectively screened

NO. Pairs x Cross-sec. mm^2	Conductor Construction NO. x mm	Outer Diameter mm	Cable Weight kg/km
2 x 0.50	16 x 0.20	12.0	100
2 x 0.75	24 x 0.20	12.8	190
2 x 1.00	1 x 1.30	12.8	200
2 x 1.50	7 x 0.53	14.7	250
5 x 0.50	16 x 0.20	15.2	250
5 x 0.75	24 x 0.20	16.3	270
5 x 1.00	1 x 1.13	16.2	290
5 x 1.50	7 x 0.53	18.8	460
10 x 0.50	16 x 0.20	21.1	480
10 x 0.75	24 x 0.20	22.6	550
10 x 1.00	1 x 1.13	22.6	580
10 x1.50	7 x 0.53	26.5	760
20 x 0.50	16 x 0.20	27.3	780
20 x 0.75	24 x 0.20	29.8	960
20 x 1.00	1 x 1.13	29.8	1010
20 x 1.50	7 x 0.53	34.4	1350

BS 5308 PT1 TY2 individually and collectively screened, armored

NO. Pairs x Cross-sec. mm^2	Conductor Construction NO. x mm	Armor Diameter mm	Outer Diameter mm	Cable Weight kg/km
2 x 0.50	16 x 0.20	12.0	16.8	460
2 x 0.75	24 x 0.20	12.8	17.6	500
2 x 1.00	1 x 1.13	12.8	17.6	510
2 x 1.50	7 x 0.53	14.7	20.4	730
5 x 0.50	16 x 0.20	15.2	20.9	760
5 x 0.75	24 x 0.20	16.3	22.0	920
5 x 1.00	1 x 1.13	16.2	21.9	950
5 x 1.50	7 x 0.53	18.8	25.4	1180
10 x 0.50	16 x 0.20	21.1	27.9	1300
10 x 0.75	24 x 0.20	22.6	29.5	1610
10 x 1.00	1 x 1.13	22.6	29.4	1330
10 x 1.50	7 x 0.53	26.5	33.5	1820
20 x 0.50	16 x 0.20	27.3	34.3	1870
20 x 0.75	24 x 0.20	29.8	37.8	2420

BS 5467 Power Cable



Technical data

- Special power cable acc. to british standard 5467
- **Temperature range**
  flexing -10 ℃ to +90 ℃
  fixed installation -15 ℃ to +90 ℃
- **Nominal voltage** 0.6/1 kV
- **Minimum bending radius**
  6 x cable diameter

Cable structure

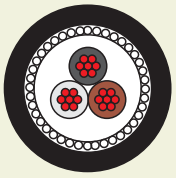
- Conductor: Stranded plain annealed copper
- Insulation: XLPE
- Bedding: PVC
- Armoring: Steel wire armor
- Sheath: PVC

Application

BS 5467 power cable is used as for industrial control and power application. The armoring feature makes it suitable for outdoor usage and in the area that requires the mechanical protection, such as under the earth application.

AWG-no.	NO. Cores x Cross-sec. mm^2	Insulation Diameter mm	Outer Diameter mm	Cable Weight kg/km
16	2 x 1.5	2.8	12.0	293
16	3 x 1.5	2.8	12.9	325
16	4 x 1.5	2.8	13.7	368
16	5 x 1.5	2.8	14.2	380
16	7 x 1.5	2.8	15.6	464
16	8 x 1.5	2.8	16.7	500
16	10 x 1.5	2.8	18.5	750
16	12 x 1.5	2.8	20.1	792
16	19 x 1.5	2.8	23.2	1030
16	27 x 1.5	2.8	27.7	1420
16	37 x 1.5	2.8	30.3	1750
16	48 x 1.5	2.8	32.5	2100
6	2 x 16	6.9	20.0	900
6	3 x 16	6.9	22.0	1100
6	4 x 16	6.9	23.6	1350
6	5 x 16	6.9	25.9	1750
6	7 x 16	6.9	28.5	2150

BS 6724 Power Cable



Technical data

- **Temperature range** 0 ℃ to +90 ℃
- **Nominal voltage** 600/1000 V
- **Bending radius**

  1.5mm^2 -16mm^2: 6 x cable diameter

  25mm^2 and above: 8 x cable diameter

Cable structure

- Conductor: stranded bare copper
- Insulation: XLPE
- Bedding: LSZH
- Armoring: steel wire armoring
- Sheath: LSZH

Standards

- BS6724

Application

BS 6724 power cable is used as for industrial control and power application. The armoring feature makes it suitable for outdoor usage and in the area that requires the mechanical protection, such as under the earth application. And the LSZH sheath makes it suitable for usage where there is requirement for flame-resistance, low smoke emission and no toxic fumes when the cable are burnt in the event of fire.

BS 6724 XLPE/LSZH/SWA/LSZH

SWA Cable - BS6724 steel wire armored LSZH

NO. Cores x Cross-sec. mm^2	Insulation Thickness mm	Armor Diameter mm	Outer Diameter mm	Cable Weight kg/km
2 x 1.5	0.6	7.3	12.1	302
2 x 2.5	0.7	8.5	13.6	346
2 x 4.0	0.7	9.4	14.7	410
2 x 6.0	0.7	10.5	15.9	499
2 x 10.0	0.7	12.3	18.0	648
2 x 16.0	0.7	14.3	20.4	978
2 x 25.0	0.9	14.7	20.4	1290
2 x 35.0	0.9	16.8	23.3	1500
2 x 50.0	1.0	19.0	25.8	1890
2 x 70.0	1.1	22.0	29.0	2450
2 x 95.0	1.1	25.1	33.1	3300
2 x 150.0	1.4	30.9	39.3	4750
3 x 1.5	0.6	7.8	12.6	330
3 x 2.5	0.7	9.2	14.1	390
3 x 4.0	0.7	10.0	15.3	464
3 x 6.0	0.7	11.2	16.6	568
3 x 10.0	0.7	13.1	19.5	866
3 x 16.0	0.7	15.3	25.5	1152
3 x 25.0	0.9	18.9	21.6	1800
3 x 35.0	0.9	21.3	28.0	2230
3 x 50.0	1.0	21.7	28.5	2490
3 x 70.0	1.1	25.2	32.2	3290
3 x 95.0	1.1	28.8	37.0	4440

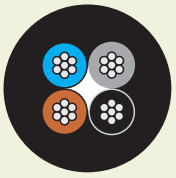
BS 6724 Power Cable

BS 6724 XLPE/LSZH/SWA/LSZH

SWA Cable - BS6724 steel wire armored LSZH

NO. Cores x Cross-sec. mm^2	Insulation Thickness mm	Armor Diameter mm	Outer Diameter mm	Cable Weight kg/km
4 x 1.5	0.6	8.5	13.5	365
4 x 2.5	0.7	9.9	15.0	438
4 x 4.0	0.7	11.0	16.4	532
4 x 6.0	0.7	12.3	18.7	764
4 x 10.0	0.7	14.5	21.1	1013
4 x 16.0	0.7	17.0	22.9	1360
4 x 25.0	0.9	21.0	27.6	2160
4 x 35.0	0.9	23.6	30.4	2690
4 x 50.0	1.0	25.0	32.0	3130
4 x 70.0	1.1	29.5	37.7	4500
4 x 95.0	1.1	33.3	41.7	5600
4 x 120.0	1.2	37.5	47.1	7400
4 x 150.0	1.4	41.6	51.4	8780
4 x 185.0	1.6	46.4	56.6	10630
4 x 240.0	1.7	52.6	63.0	13390
5 x 1.5	0.6	9.7	14.3	410
5 x 2.5	0.7	11.7	16.3	470
5 x 4.0	0.7	13.0	17.8	710
5 x 6.0	0.7	14.5	20.0	876
5 x 10.0	0.7	17.2	22.9	1165
5 x 16.0	0.7	20.0	26.6	1742
5 x 25.0	0.9	24.7	31.5	2323
5 x 35.0	0.9	27.8	34.8	2932
5 x 50.0	1.0	32.4	40.4	4192
7 x 1.5	0.6	10.2	15.2	470
7 x 2.5	0.7	12.3	17.1	600
12 x 1.5	0.6	13.7	19.4	780
12 x 2.5	0.7	16.3	22.4	1000
19 x 1.5	0.6	16.2	22.2	1000
19 x 2.5	0.7	19.9	26.6	1540
27 x 1.5	0.6	20.0	26.7	1500
27 x 2.5	0.7	24.0	30.7	1950
37 x 1.5	0.6	22.3	29.0	1800
37 x 2.5	0.7	26.9	33.8	2350

Aluminum Power Cable



Technical data

- Aluminum power and control cable
- **Temperature range**
  flexing -5 ℃ to +50 ℃
  fixed installation -40℃ to +70℃
- **Nominal voltage** 600/1000 V
- **Test voltage** 4000 V
- **Minimum bending radius**
  15 x cable diameter

Cable structure

- Conductor: aluminum
- Insulation: PVC/XLPE
- Sheath: PVC

Properties

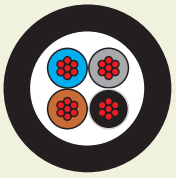
- PVC self-extinguishing and flame retardant according to 60332-1

Application

Aluminum power cable is used as power supplied cables. It can be installed in open air and in cable ducts.

AWG-No.	NO. Cores x Cross-sec. mm^2	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
2	1 x 35	13.0	102.0	240.0
1	1 x 50	15.0	145.0	360.0
2/0	1 x 70	16.5	203.0	410.0
3/0	1 x 95	19.0	276.0	570.0
4/0	1 x 120	20.5	348.0	691.0
6	4 x 16	23.0	186.0	750.0
4	4 x 25	26.0	290.0	950.0
2	4 x 35	28.5	406.0	1120.0
1	4 x 50	30.0	580.0	1151.0
2/0	4 x 70	35.0	812.0	1549.0
3/0	4 x 95	39.5	1102.0	2030.0
4/0	4 x 120	44.0	1392.0	2400.0

NYY Power Cable



Technical data

- NYY power and control cable
- **Temperature range**
  flexing -5 ℃ to +50 ℃
  fixed installation -40 ℃ to +70 ℃
- **Nominal voltage** 600/1000 V
- **Test voltage** 4000 V
- **Minimum bending radius**
  for single core 15 x cable diameter
  for multi-core 12 x cable diameter

Cable structure

- Conductor: plain copper
- Insulation: PVC
- Cores stranded concentrically
- Sheath: PVC

Properties

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

Application

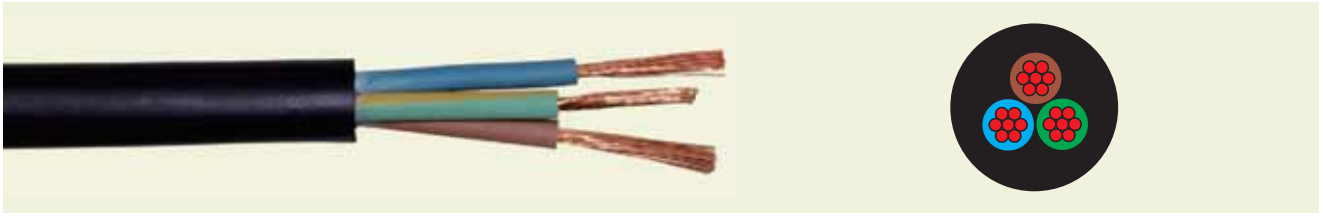
NYY power cable is used as power supplied cables. It can be installed in open air and in cable ducts.

AWG-No.	NO. Cores x Cross-sec. mm^2	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
12	1 x 4	9.0	38.0	115.0
10	1 x 6	9.5	58.0	135.0
8	1 x 10	10.0	96.0	179.0
6	1 x 16	11.0	154.0	245.0
4	1 x 25	12.0	240.0	360.0
2	1 x 35	13.0	336.0	470.0
1	1 x 50	15.0	480.0	620.0
2/0	1 x 70	16.5	672.0	810.0
3/0	1 x 95	19.0	912.0	1110.0
4/0	1 x 120	20.5	1152.0	1360.0

NYY Power Cable

AWG-No.	NO. Cores x Cross-sec. mm^2	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
16	2 x 1.5	11.2	29.0	175.0
14	2 x 2.5	12.0	48.0	215.0
12	2 x 4	14.0	77.0	295.0
10	2 x 6	15.0	115.0	370.0
8	2 x 10	16.5	192.0	495.0
6	2 x 16	18.5	307.0	670.0
4	2 x 25	23.5	480.0	960.0
16	3 x 1.5	11.5	43.0	195.0
14	3 x 2.5	12.5	72.0	250.0
12	3 x 4	14.0	115.0	340.0
10	3 x 6	15.0	173.0	430.0
8	3 x 10	17.0	288.0	590.0
6	3 x 16	19.0	461.0	820.0
4	3 x 25	24.0	720.0	1320.0
2	3 x 35	25.0	1008.0	1450.0
1	3 x 50	26.5	1440.0	1850.0
16	4 x 1.5	12.0	58.0	230.0
14	4 x 2.5	13.5	96.0	300.0
12	4 x 4	15.0	154.0	410.0
10	4 x 6	16.5	230.0	520.0
8	4 x 10	18.5	384.0	730.0
6	4 x 16	21.5	614.0	1045.0
4	4 x 25	26.0	960.0	1640.0
2	4 x 35	27.5	1344.0	1760.0
1	4 x 50	30.0	1920.0	2350.0
16	5 x 1.5	13.0	72.0	270.0
14	5 x 2.5	14.5	120.0	360.0
12	5 x 4	16.5	192.0	490.0
10	5 x 6	18.0	288.0	600.0
8	5 x 10	20.0	480.0	890.0
6	5 x 16	22.5	768.0	1255.0
4	5 G 25	28.0	1200.0	1960.0
2	5 G 35	34.0	1680.0	2400.0
1	5 G 50	40.0	2400.0	3500.0
16	7 x 1.5	15.5	101.0	310.0
14	7 G 2.5	16.5	168.0	450.0
12	7 G 4	18.5	269.0	640.0
10	7 x 6	20.0	403.0	850.0
8	7 x 10	23.5	672.0	1200.0
16	10 x 1.5	18.0	144.0	380.0
14	10 G 2.5	19.5	240.0	520.0
16	12 x 1.5	19.0	173.0	420.0
14	12 G 2.5	20.5	288.0	600.0
16	14 x 1.5	20.0	202.0	470.0
14	14 G 2.5	21.0	336.0	680.0

H05RR-F
Light duty rubber cable



Technical data

- **Specific insulation resistance**
  1 GOhm x cm
- **Temperature range**
  -25 ℃ to +60 ℃
- **Nominal voltage** 300/500 V
- **Test voltage** 2000 V
- **Minimum bending radius**
  6 x cable diameter
- G = with protective conductor
- X = without protective conductor

Cable structure

- Bare copper wire according to HAR
- Core insulation: rubber
- Sheath: rubber

Application

H05RR-F light duty rubber cable is used as a power supplied cables. It can be used either in dry or damp areas and suitable for outdoor application.

NO. Cores x Cross-sec. mm^2	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
2 x 0.75	5.7 - 7.4	14.4	61
3 G 0.75	6.2 - 8.1	21.6	75
2 x 1.00	6.1 - 8.0	19.0	73
3 G 1.00	6.5 - 8.5	29.0	86
4 G 1.00	7.1 - 9.3	38.0	105
2 x 1.50	7.6 - 9.8	29.0	115
3 G 1.50	8 - 10.4	43.0	135
4 G 1.50	9 - 11.6	58.0	165
5 G 1.50	9.8 - 12.7	72.0	190
2 x 2.50	9 - 11.6	48.0	160
3 G 2.50	9.6 - 12.4	72.0	190
4 G 2.50	10.7 - 13.8	96.0	235
5 G 2.50	11.9 - 15.3	120.0	285

H05RN-F
Medium duty rubber cable

Technical data

- **Specific insulation resistance**
  1 GOhm x cm
- **Temperature range**
  -25 ℃ to +60 ℃
- **Nominal voltage** 300/500 V
- **Test voltage** 2000 V
- **Minimum bending radius**
  6 x cable diameter
- G = with protective conductor
- X = without protective conductor

Cable structure

- Bare copper wire according to HAR
- Core insulation: rubber
- Sheath: rubber

Application

H05RN-F medium duty rubber cable is used as a power supplied cables. It can be used either in dry or damp areas and suitable for outdoor application.

NO. Cores x Cross-sec. mm^2	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
2 x 0.75	5.7 - 7.4	14.4	80
3 G 0.75	6.2 - 8.1	21.6	95
4 G 0.75	6.8 - 8.8	30.0	105
2 x 1.00	6.1 - 8.0	19.0	95
3 G 1.00	6.5 - 8.5	29.0	115

H07RN-F
Heavy duty rubber cable

Technical data

- **Specific insulation resistance**
  1 GOhm x cm
- **Temperature range**
  -25 ℃ to +60 ℃
- **Nominal voltage** 450/750 V
- **Test voltage** 2500 V
- **Minimum bending radius**
  6 x cable diameter
- G = with protective conductor
- X = without protective conductor

Cable structure

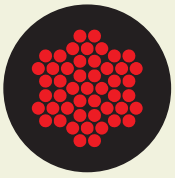
- Bare copper wire according to HAR
- Core insulation: rubber
- Sheath: rubber

Application

H07RN-F heavy duty rubber cable is used as a power supplied cables. It can be used either in dry or damp areas and suitable for outdoor application.

NO. Cores x Cross-sec. mm^2	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
3 G 1.0	8.3 - 10.7	29	130
2 x 1.5	8.5 - 11	29	135
3 G 1.5	9.2 - 11.9	43	165
4 G 1.5	10.2 - 13.1	58	200
5 G 1.5	11.2 - 14.4	72	240
7 G 1.5	14 - 17.5	101	385
12 G 1.5	17.6 - 22.4	173	516
19 G 1.5	20.7 - 26.3	274	800
24 G 1.5	24.3 - 30.7	346	882
25 G 1.5	25.1 - 25.9	360	920
2 x 2.5	10.2 - 13.1	48	195
3 G 2.5	10.9 - 14	72	235
4 G 2.5	12.1 - 15.5	96	290
5 G 2.5	13.3 - 17	120	294
7 G 2.5	16.5 - 20	168	520

H01N2-D
Rubber sheathed welding cable



Technical data

- **Specific insulation resistance**
  1 GOhm x cm
- **Temperature range**
  -25 ℃ to +85 ℃
- **Nominal voltage** 100 V
- **Test voltage** 1000 V
- **Minimum bending radius**
  12 x cable diameter

Cable structure

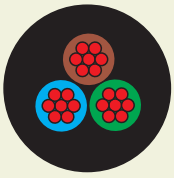
- Bare copper wire according to HAR
- Outer jacket of rubber

Application

H01N2-D rubber sheathed welding cable is used as a connecting cable for transmission of high currents between the welding device and welding tools. It can be used either in dry or damp areas and suitable for outdoor application.

Cross-sec. mm^2	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
10	7.7 - 9.7	96	171
16	8.8 - 11	154	198
25	10.1 - 12.7	240	305
35	11.4 - 14.2	336	415
50	13.2 - 16.5	480	555
70	15.3 - 19.2	672	765
95	17.1 - 21.4	912	1010
120	19.2 - 24	1152	1262
150	21.2 - 26.4	1440	1610
240	25 - 29.5	2304	2520

H07RN8-F
Rubber sheathed submersible pump cable



Technical data

- **Specific insulation resistance**
  1 GOhm x cm
- **Temperature range**
  Flexible: -25 °C to +60 °C
  Static: -40 °C to +60 °C
  Max. water temp.: +40°C
- **Nominal voltage** 450/750 V
- **Test voltage** 2500 V
- **Minimum bending radius**
  6 x cable diameter
- G = with protective conductor
- X = without protective conductor

Cable structure

- Bare copper wire according to HAR
- Core insulation: rubber
- Sheath: rubber

Application

H07RN8-F rubber sheathed submersible pump cable is used as a connecting cable for the electrical equipment in water. It can be used either in dry or damp areas and suitable for outdoor application.

NO. Cores x Cross-sec. mm^2	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
1 x 4	7.2 - 9	38	100
1 x 6	7.9 - 9.8	58	120
1 x 10	9.5 - 11.9	96	200
1 x 25	12.7 - 15.8	240	400
3 G 1,5	9.2 - 11.9	43	170
4 G 1,5	10.2 - 13.1	58	205
7 G 1,5	14 - 17.5	101	385
3 G 2,5	10.9 - 14	72	210
4 G 2,5	12.1 - 15.5	96	260
7 G 2,5	16.5 - 20	168	520
4 G 4	14 - 17.9	154	356
4 G 6	15.7 - 20	230	475
4 G 10	20.9 - 26.5	384	837
4 G 16	23.8 - 30.1	614	1220
4 G 25	28.9 - 36.6	960	1770
4 G 35	32.5 - 41.1	1344	2304

H07BN4-F
Torsion resistant rubber cable

Technical data

- **Specific insulation resistance**
  1 GOhm x cm
- **Temperature range**
  Flexible use: -15 °C to +90 °C
  Wind energy: -40 °C to +90 °C
  Fixed installation: -40°C to +90 °C
- **Nominal voltage** 450/750 V
- **Test voltage** 2500 V
- **Minimum bending radius**
  Flexible use: 6 x outer diameter
  Fixed installation: 5 x outer diameter

Cable structure

- Bare copper wire according to HAR
- Outer jacket of rubber

Properties

- Flame retardant according to IEC 60332-1-2
- Torsion-resistant
- Oil resistant to most transmission oils
- Abrasion- and cut-resistant; cold-flexible; ozone-resistant according to HD 22, EN 60811-2-1 and EN 50396-8.1.3

Application

H07BN4-F torsion resistant rubber cable is used as a connecting cable for windmill. It can be used either in dry or damp areas and suitable for outdoor application.

Cross-sec. mm^2	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
95	20.8 - 23.5	912	1300
120	22.8 - 25.0	1152	1500
150	25.2 - 27.8	1440	1850
185	27.6 - 30.1	1776	2200
240	30.6 - 33.9	2304	2900
300	33.5 - 36.7	2880	3400
400	37.4 - 46.8	3840	4400

Solar Cable

Technical data

- **Nominal voltage** 600/1000 V
  Test voltage 4000 V
- **Temperature range** -40 °C to +125 °C
  Ambient temperature
- >25 years(TÜV)
  -40 °C to +90 °C
- **Max. short circuit temperature** 280 °C
  Minimum bending radius
  5 x cable diameter

Cable structure

- Conductor: Finely stranded tinned copper
- Insulation: XL-LSZH
- Sheath: XL-LSZH

Properties

- Electron-beam cross-linked compounds
- UV and ozone resistant
- Hydrolysis resistant
- High temperature resistant; the materials do not melt or flow
- Good cold flexibility
- Very long life cycle: 25 years guarantee
- Compatible to all popular connectors
- **UL listed (UL File No. E335355)**
- **TÜV Approval (Certificate No. R 50198995 001)**

Standards

- **Fire performance**
  IEC 60332-1; UL 1581; VW - 1
- **Smoke emission**
  IEC 61034: EN 50268-2
- **Low fire load**
  DIN 51900
- **Approvals** TÜV 2Pfg 1169/08.2007 PV1-F, UL 4703 PV wire
- **Application standards**
  NEC 2008/UL PV wire

Application

Solar cables (PV Cables) are used for the photovoltaic power supply system. It can be used indoor and outdoor.

Solar Cable

AWG-no.	NO. Cores x cross section mm^2	Outer Diameter mm	Cable Weight kg/km	Sheath color
14	1 x 2.5	5.8	55	Black
14	1 x 2.5	5.8	55	Red
14	1 x 2.5	5.8	55	Blue
12	1 x 4	6.7	85	Black
12	1 x 4	6.7	85	Red
12	1 x 4	6.7	85	Blue
10	1 x 6	7.6	95	Black
10	1 x 6	7.6	95	Red
10	1 x 6	7.6	95	Blue
8	1 x 10	9.6	110	Black
8	1 x 10	9.6	110	Red
8	1 x 10	9.6	110	Blue
6	1 x 16	11.0	170	Black
6	1 x 16	11.0	170	Red
6	1 x 16	11.0	170	Blue
4	1 x 25	13.1	295	Black
4	1 x 25	13.1	295	Red
4	1 x 25	13.1	295	Blue
2	1 x 35	14.1	395	Black
2	1 x 35	14.1	395	Red
2	1 x 35	14.1	395	Blue
1	1 x 50	17.4	630	Black
1	1 x 50	17.4	630	Red
1	1 x 50	17.4	630	Blue

Solar Connector

Plug

Socket

Technical data

- **Nominal voltage** 1000V (IEC), 600V (UL)
- **Temperature range** -40 °C to +90 °C
- **Rated current** 22A (2.5mm^2); 30A (4mm^2, 6mm^2)
- **Protection degree** IP67
- **Protection class** Class Ⅱ
- **Test voltage** 6 kV
- **Contact resistance** <5mOhm
- **Contact material** tinned copper
- **Insulation material** PPO
- **Cable types** 2.5mm^2 (14AWG), 4.0mm^2 (12AWG), 6.0mm^2 (10AWG)

Properties

- Quick and easy secure snap lock mating
- UV- and ozone resistant
- Protection mode IP67 in mated condition
- The connector design has got the patent

Application

Solar connector is used for the easy and reliable connection of the solar cables to the photovoltaic system.

Wind Power Cable

Technical data

- **Temperature range**
  -45 °C to +90 °C
- **Nominal voltage** 450/750 V
- **Minimum bending radius**
  6 x cable diameter

Cable structure

- Finely strand bare copper
- Insulation: EPR Rubber
- Core identification: according to DIN VDE0293(HD 308)
- Sheath: PCP rubber or other equivalent compound with property of oil resistance, low temperature flexible and weather resistance.
- Sheath color: black

Properties

- UV-resistance
- Flame retardant
- Oil resistance
- Water proof
- Chemical resistant
- Torsion resistant

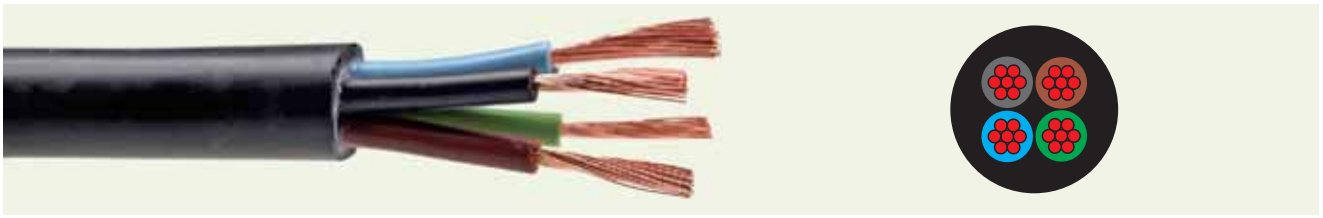
Type: H07RN-F

Application

Wind power cable is used as a connecting cable between wind generator and other equipment. The torsion-resistant feature makes it ideal for the windmill application.

NO. Cores x Cross-sec. mm^2	Conductor Diameter mm	Cable Diameter mm	Current Capacity A
1 x 1.5	1.5	5.7-7.1	28
1 x 2.5	1.95	6.3 -7.9	38
1 x 4	2.5	7.2 - 9.0	51
1 x 6	3.0	7.9 - 9.8	66
1 x 10	3.9	9.5 - 11.9	92
1 x 16	5.0	10.8 - 13.4	120
1 x 25	6.4	12.7 - 15.8	163
1 x 35	7.7	14.3 - 17.9	205
1 x 50	9.2	16.5 - 20.6	247
1 x 70	11.0	18.6 - 23.3	311
1 x 95	12.5	20.8 - 26.0	375
1 x 120	14.2	22.8 - 28.6	438
1 x 150	15.8	25.2 - 31.4	509

Wind Control Cable



Technical data

- **Temperature range**
  flexing: -35 ℃ to +90 ℃
  fixed installation: -40 ℃ to +90 ℃
- **Bending radius** 10 x cable diameter
- **Nominal voltage** 600/1000 V
- **Test Voltage** 3000 V
- **Torsion application:** +/-90°/ m

Cable structure

- Conductor: finely stranded bare copper
- Insulation: flexible PVC
- Screen: tinned copper wrapped
- Sheath: flexible PVC

Properties

- Torsion resistant
- UV-resistant and ozone
- Flame restardant
- Oil resistant and water proof
- Chemical resistant

Standards

- **Conductor stranding:** DIN VDE 0295 class 5 and IEC 60228 class 5
- **Fire performance:** VDE0472 804B & IEC 60332-1,FT1,FT4
- **Oil resistance:** EN60811-2-1

Application

Wind control cables are specifically designed for use in wind turbines.

NO. Cores x Cross-sec. mm^2	AWG/ MCM	Outer Diameter mm	Cable Weight kg/km
1 x 70	2/0	19.8	950.0
1 x 95	3/0	22.5	1280.0
1 x 120	4/0	25.0	1570.0
1 x 150	300	27.8	2000.0
4 x 0.5	20	8.0	105.0
5 x 0.75	18	9.0	145.0
7 x 1.5	16	11.9	195.0
12 x 2.5	14	18.2	638.0
12 x 4	12	20.0	806.0
2 x 2 x0.25	24	8.9	90.0
4 x 2 x 0.5	20	11.5	190.0
8 x 2 x 0.75	18	17.1	410.0

Marine Cables

Ships Power

Marine Telecommunication

Technical data

- **Conductor operating temperature** max. +85 ℃
- **Nominal voltage** 0.6/1 kV
- **Minimum bending radius** 4 x cable diameter

Cable structure

- Conductor: bare copper
- Insulation: XLPE
- Cores wrapping in foil
- Screen: copper braiding
- Sheath: PO basis-compound

Technical data

- **Conductor operating temperature** max. +85 ℃
- **Nominal voltage** 250 V
- **Minimum bending radius** 5 x cable diameter

Cable structure

- Conductor: bare copper
- Insulation: EPR
- Cores quad twisting
- Filling compound covering all cores
- Screen: copper braiding
- Polyester foil taping
- Sheath: chloroprene

Application

Marine cable is for the fixed installation on marine craft and below decks. Some are for power application and some are for the communication purpose.

Properties

- Halogen free
- Flame retardant

Ships Power

AWG-no.	NO. Cores x Cross-sec. mm^2	Outer Diameter mm	Copper Weight kg/km	Cable Weight kg/km
12	1x4	7.3	81	105
10	1x6	7.8	104	130
8	1x10	8.9	149	180
6	1x16	9.8	214	250
4	1x25	11.7	311	380
2	1x35	12.7	416	480
1	1x50	14.8	572	660
16	2x1.5	3.9	105	130
14	2x2.5	10.2	132	160
12	2x4	11.4	170	205
10	2x6	12.6	217	290
8	2x10	14.8	400	307

Marine Telecommunication

18	2 x 2 x 0.75	9.0	89	110
18	4 x 2 x 0.75	12.5	142	190
18	6 x 2 x 0.75	14.5	189	260
18	8 x 2 x 0.75	15.5	225	310
18	10 x 2 x 0.75	17.0	272	380
18	14 x 2 x 0.75	18.5	338	465
18	16 x 2 x 0.75	20.0	373	520

Flat Cable

Technical data

- **Temperature range**
  flexible -5 ℃ to +70 ℃
  fixed installation -40 ℃ to 80 ℃
- **Nominal voltage**
  up to 1mm² 300/500 V
  ≥ 1.5mm² 450/750V
- **Test voltage**
  up to 1mm² 2000 V
  ≥ 1.5mm² 2500 V
- **Minimum bending radius**
  10 x cable diameter

Cable structure

- Conductor: bare copper
- Insulation: PVC
- Cores laying parallel
- Green-yellow earth core
- PVC/PUR/LSZH/Rubber Sheath

Properties

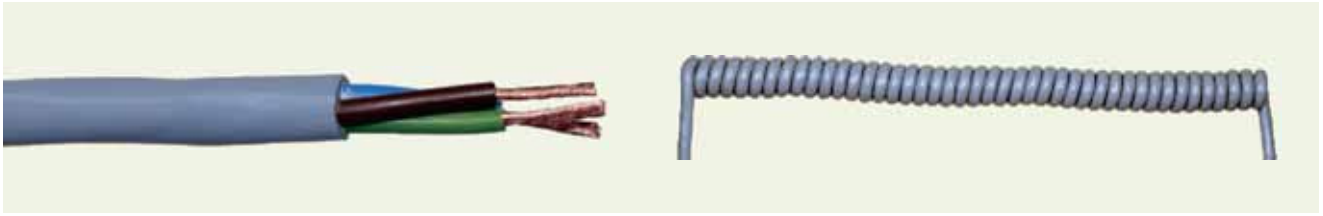
- Extensive oil resistant
- Chemical resistant
- Extremely small bending radius
- High Flexibility
- Minimum waste of space

Application

Flat cables are used mainly as trailing cable for crane installations, floor conveyer system and self control units.

AWG-no.	No. Cores x Cross-sec. mm²	Outer Diameter mm	Copper weight kg/km	Cable Weight kg/km
18	4 G 0.75	4.3 x 12.6	28.8	90
18	5 G 0.75	4.3 x 16.1	36.0	115
18	6 G 0.75	4.3 x 19.4	43.2	141
18	9 G 0.75	4.3 x 26.4	64.8	198
18	10 G 0.75	4.3 x 30.1	72.0	224
18	12 G 0.75	4.3 x 33.8	84.4	258
18	16 G 0.75	4.3 x 44.4	115.2	340
18	18 G 0.75	4.3 x 49.2	129.6	380

Spiral Cable



Technical data

- **Temperature range**
  -20 ℃ to +80 ℃
- **Nominal voltage** 300/500 V
- **Min. insulation DC resistance**
  ≥200 MOhm x km)

Cable structure

- Conductor: bare copper
- Insulation: PVC
- Filler: chalk
- PVC/PUR

Properties

- Good retraction force
- Flame retardant: IEC60332-1

Application

Spiral cables are widely used in telephone, lamp and motor vehicle industry.

No. Cores x Cross-sec. mm^2	Conductor Construction NO. x mm	Insulation Diameter mm	Outer Diameter mm	Spiral Diameter mm
3 x 0.25	0.10 x 30	1.3	4.2	14.5
3 x 0.75	0.10 x 90	2.4	6.5	20.0
3 x 1.00	0.15 x 52	2.5	7.2	24.0
3 x 1.50	0.15 x 80	3.0	8.2	28.0