POLYCAB

IDEAS. CONNECTED.

EVERYTHING UNDER THE SUN

Cables | DC MCB | Cable Harness | Dowells

- Compact size for easy installation
- Highly Reliable and efficient Indian brand
- More Power with low start up voltage
- Wide MPPT Voltage Range

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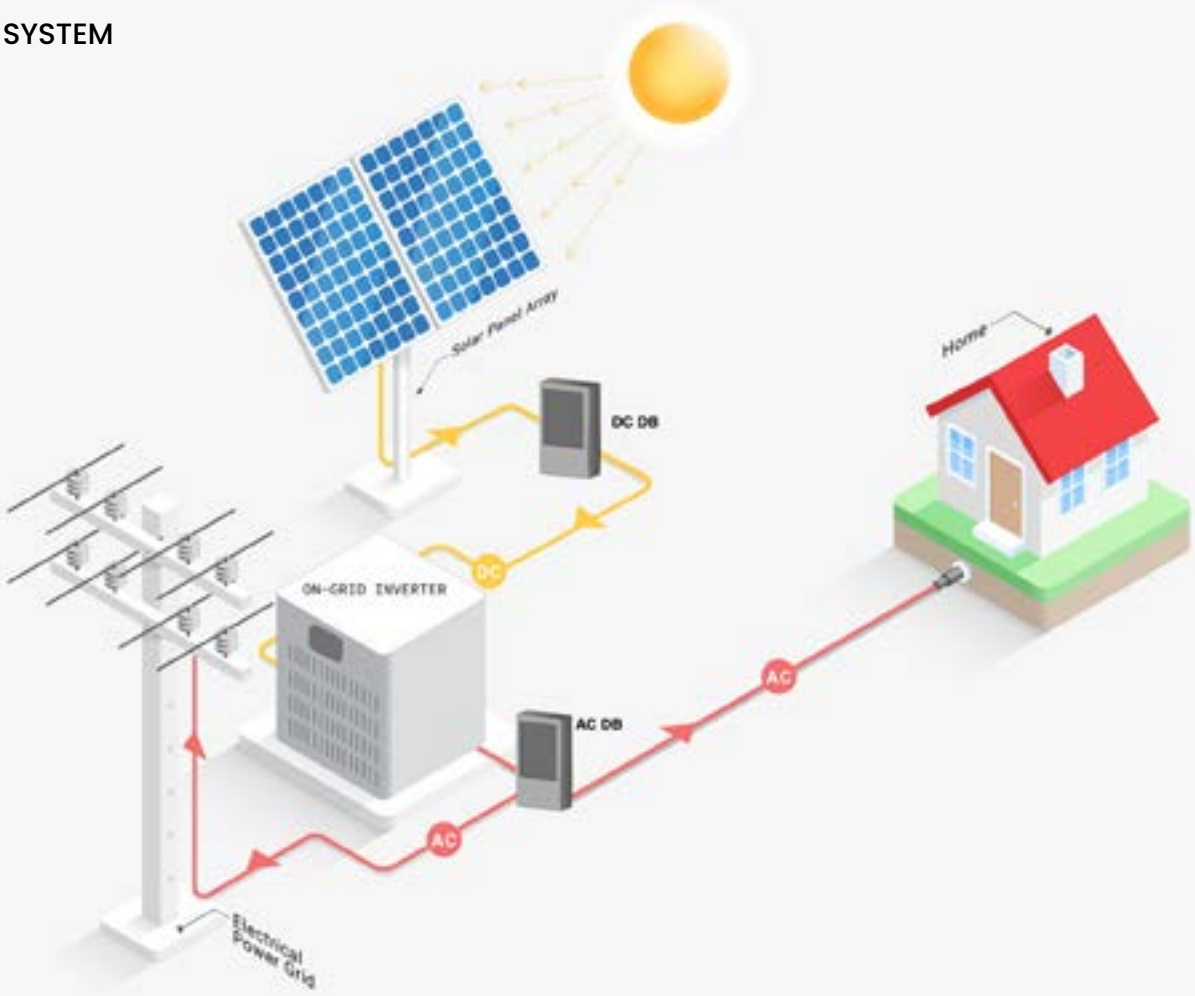
OFF-GRID SOLAR SYSTEM

ON-GRID SOLAR SYSTEM



POLYCAB
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INDEX

ABOUT US

Polycab is India's largest manufacturer of wires and cables, manufacturing around 3.9 million kilometers of cables every year. Underpinning our leadership position are our solid business fundamentals, which include multi-location manufacturing with a high degree of backward integration, a comprehensive product portfolio, strong brand positioning, robust distribution network, and experienced management. Polycab's wide range of wires & cables helps the company bond with millions of satisfied customers, riding on key differentiators like product innovation, superior quality and ready availability. Our clientele includes market leaders in sectors like utilities, power generation, transmission and distribution, petroleum and oil refineries, original equipment manufacturers, EPC contractors, steel, metal, cement, chemicals, atomic energy, railways and nuclear power industries among others.

Apart from a stellar lineup of wires and cables, we have made inroads into the highly competitive FMEG market, with products like fans, LED lighting and luminaires, switches and switchgears, home appliances, solar products and conduits and accessories. Polycab's corporate advantage includes its extensive base of expertise, proven technological capabilities, and the comprehensive skills of its human resources.

SOLAR-The Infinite Source of Power

We at Polycab ventured into Solar in 2012 with manufacturing of Solar DC Cables. International accreditation from TUV Rheinland was secured for our Solar DC cables subsequently, initially for 2Pfg 1169/08.2007 standard and then for EN 50618 for sizes 1.5sq.mm to 300sq.mm. which is also certified by IEC 62930

We have successfully supplied Solar DC as well as AC Cables to large EPC players, Distributors pan India as well as to many of our International Clients all over the Globe. Repeat orders have been forthcoming out of confidence in our product quality and supply capabilities.

Extending our foray into Solar field we added Solar On-Grid Inverters in our Product Basket in 2016.

Polycab Solar Grid-Tie String Inverters have already captured the hearts of Solar Roof-Top System Integrators pan India through product performance and prompt after Sales-Services provided by Polycab. Polycab On-Grid Inverters are IEC Certified with all relevant IEC Tests conducted and certified by TUV for the full range of Inverters from 1kW to 110kW.
Our success story of On-Grid Inverters in short span of 4 years is worth mentioning. We have already supplied 225MW+ in capacity and 25000+ Inverters in quantity. All these Inverters are already installed and running successfully in the field. We are sure to capture good market share

We have also added Solar DC MCBs, Solar Cable Connectors (MC4) in all its variants, Solar Cable Harnesses, Solar Off-Grid Inverters with Batteries (both Tubular Lead-Acid and Lithium Ferro Phosphate) to our product basket.

Our goal to become a one stop shop for all the major components needed by Solar Roof-Top System Integrator is now nearing reality and we are now poised to offer all our products to International Markets.

The sun provides us with ample energy than we could ever use and no one can monopolise the sunlight. Sun light is free and can be used to convert into electrical energy which is referred as Solar PV system. Solar electricity is green renewable energy and doesn't release any harmful carbon dioxide or other pollutants. A typical home solar PV system could save around 1.3 to 1.6 tonnes of carbon per year.

With the continuously increasing demand for electric power, the significantly high price of oil and the growing concern for the environment, many businesses are in the process of implementing alternative sources of energy. Among the renewable energy sources, solar energy is a sustainable choice and that can be used in various applications. Many businesses are now extracting this alternative source of energy, hoping to benefit from its numerous advantages.

To make an ecological awareness and safe use of renewable energy Polycab has brought complete Solar energy solution in Indian and overseas market. Polycab Solar equipment meet the high expectation that are demanded from the Solar system.

Polycab has brought the environmentally friendly E-Beam Technology that meets the demand of sustainable product in line with worldwide market trends and ecological awareness.

Polycab has a comprehensive product range in Solar PV system. The products are manufactures in latest state of the art machines and tested in well equipped laboratory. These are highly suitable in rough climatic condition as well as guaranteed for more than 25 year of use.

POLYCAB ROHS CERTIFICATE

RoHs

TÜVINDIA

TC-5298

Test Report

Report No : TUV(I)/20360/23-24/0022406267
Date : 29 Feb 2024
ULR-TC529824000006888F

Name and address of customer	:	POLYCAB INDIA LIMITED UNIT-6,Plot No. 79/1-3, 80/1-2, Baska Ujeti Road, Village: Baska, Tal: Halol, Panchmahal Pincode-389352
Reg No.	:	20360/23-24
CA No.	:	0022406267
Name of the sample	:	**SOLAR INSULATION (GRADE – POLYRAD EBXL 1000)**
Batch No./ Code no.	:	7Z240216
Discipline	:	Chemical
Product Category	:	Miscellaneous
Date of sample receipt	:	19 Feb 2024
Date(s) of analysis	:	20 Feb 2024 - 29 Feb 2024
Objectives of Examination	:	As per RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU
Test Requirement	:	RoHS 10E

Results Summary:

Based on the performed tests on submitted sample(s), the results of Cadmium, Lead, Mercury, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) **comply** with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

Authorized by
Atulkumar Rajage
Manager - Instrumentation Department

TUV India Private Limited
Registered & Head Office : 801, Raheja Plaza-1, L.B.S. Marg, Ghatkopar (W), Mumbai - 400 086 . CIN : U74140MH1999PTC052930
Laboratory Address: TUV India House, Survey No: 42, 3/1 & 3/2,Sus, Tal. Mulshi, Dist. Pune - 411 021
Phone : (020) 67900000 / 01 ● Toll free : 1800-209-0902 ● E-mail : pune@tuv-nord.com ● URL: www.tuv-nord.com/in

TÜVNORDGROUP

RoHs

TÜVINDIA

TC-5298

Test Report

Report No : TUV(I)/20360/23-24/0022406268
Date : 29 Feb 2024
ULR-TC529824000006889F

Name and address of customer	:	POLYCAB INDIA LIMITED UNIT-6,Plot No. 79/1-3, 80/1-2, Baska Ujeti Road, Village: Baska, Tal: Halol, Panchmahal Pincode-389352
Reg No.	:	20360/23-24
CA No.	:	0022406268
Name of the sample	:	**SOLAR SHEATH (GRADE – POLYRAD EBXL 1001 ATR)**
Batch No./ Code no.	:	5Z240216
Discipline	:	Chemical
Product Category	:	Miscellaneous
Date of sample receipt	:	19 Feb 2024
Date(s) of analysis	:	20 Feb 2024 - 29 Feb 2024
Objectives of Examination	:	As per RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU
Test Requirement	:	RoHS 10E

Results Summary:

Based on the performed tests on submitted sample(s), the results of Cadmium, Lead, Mercury, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) **comply** with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

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TÜVNORDGROUP

POLYCAB INTERNATIONAL PRESENCE

Polycab offers solar cables for the complete solar projects in both AC as well as DC international markets. Medium Voltage in – 33 / 35 / 36 KV is manufactured for US, European and Australian / New Zealand as per their standards in sizes 185 – 630 sq.mm

DC feeder cables are manufactured for Australian and European markets as per their standards in sizes 120 – 630 sq.mm.

DC string cables with & without anti-termite layer for the Australian market and without anti-termite layer for the rest of the world are manufactured in sizes such as single core, two core as well twin parallel 4sq.m – 16sq.mm. All the DC string cables are insulated and sheathed with Electron Beam Rubberised Polyolefin Halogen free compounds. These DC string cables are **AD7 / AD8** compliant.

POLYCAB
IDEAS. CONNECTED.

SOLAR CABLES

LEADING FEATURES

- Electron beam cross linked compound
- UV, ozone, temperature & Water resistant (AD8)
- Flame retardant, low smoke
- Excellent encapsulation
- Very long service life >25 years

Polycab Solar DC String Cable BS EN 50618, IEC 62930 & AS NZS 5000.1

Photovoltaic Solar DC Cable, Halogen Free, Flame Retardant, Anti Termite

Application

POLYCAB low smoke, halogen free, flexible single core cable with electron beam cross linked insulation and sheathing is designed for use in Photovoltaic installation on DC side. These cables are suitable for permanent outdoor use under variable climatic condition.

Salient Features

- Halogen free
- Electron Beam Cross-linked
- Flame retardant
- Long life
- Flexibility
- UV, Ozone resistant
- Water resistant
- High temperature resistant
- Termite Resistant

Voltage Rating

Nominal Voltage : 1500 V DC between conductors as well as conductor and earth. Max permitted voltage : 1800 V

Operation Temperature

Fixed : -40˚C to +90˚C
Maximum operating conductor temperature : +120˚C for Maximum 20,000 hrs

Standard and References

EN/IEC 60228 | EN 50618
IEC 60332-1-2 | AS/NSZ 5000.1 | IEC 62930

Test Voltage

6.5kV AC 50Hz

Identification

Insulation : (-ve) Black & (+ve) Red
Sheath : (-ve) Black & (+ve) Black (70%) with red Strip (30%)

Bending Radius

For fixed installation - > 4D
For occasional movement - > 5D (Without nylon)

Construction

- Conductor : Tinned copper conductor as per IEC 60228, class 5.
- Insulation : E-Beam cross linked halogen free and flame-retardant compound (XLPO)
- Anti Termite Layer : Polyamide (Nylon 12)(wherever required), Colour :Black
- Sheath : E-Beam cross linked halogen free and flame-retardant compound (XLPO)

Compliance

Fire Performance	EN 60332-1
Smoke Emission	IEC 61034/ EN 50268-2
Halogen free material	EN 50267-2-1 / IEC 60754-2
Resistance to ozone	EN 50396
Weathering / UV	HD 605/A1 or DIN 53667
Life Expectancy	IEC 60216
Water Resistance	{Category **(AD7/AD8)**}
Approval	IEC 60364-5-51

DIMENSIONAL AND ELECTRICAL CHARACTERISTICS

Single Core Cross sectional Area	Nominal insulation thickness	Minimum Nylon Thickness	Nominal Sheath thickness	Approx. Overall Diameter	Max. DC Resistance at 20° C
mm2	mm	mm	mm	mm	Ω/km
4.0	0.7	0.2	0.8	6.5	5.09
6.0	0.7	0.2	0.8	7.5	3.39
10	0.7	0.2	0.8	8.0	1.95
16	0.7	0.2	0.9	9.5	1.24

Nominal Cross sectional Area	Current Carrying Capacity according to method of installation		
	Single Cable Free in air	Single Cable on a surface	Two loaded cables touching on the surface
mm2	A	A	A
4	55	52	44
6	70	67	57
10	98	93	79
16	132	125	107

*Current Ratings are based on EN 50618 at Max. Conductor Temperature 120°C and Ambient Air temperature 60°C.

Note: the expected period of use at maximum conductor temperature at 120° C is limited to 20,000 hours

Current rating / de-rating factors other than 60°C ambient temperature.

up to 60°C	70°C	80°C	90°C
1.00	0.92	0.84	0.75

Note: These cables can be provided with twisted formation, If required.

POLYCAB SOLAR H1Z2Z2 -K BS EN 50618 - TWIN

Photovoltaic Solar DC Cable

Application

POLYCAB low smoke, halogen free, flexible twin flat parallel cable with electron beam cross linked insulation and sheath is designed to use for Photovoltaic installation at the DC side. These cables are suitable for permanent outdoor use under variable climatic condition.

Salient Features

- Halogen free
- Electron Beam Cross-linked
- Flame retardant
- Long life
- Flexibility
- UV, Ozone resistant
- Water resistant
- High temperature resistant

Voltage Rating

Nominal Voltage : 1500 V DC between conductors as well as conductor and earth.
Max permitted voltage : 1800 V DC

Operation Temperature

Fixed : -40˚C to +90˚ C
Maximum conductor temperature : +120˚ C for Maximum 20,000 hrs

Standard and References

EN/IEC 60228 | EN 50618
IEC 60332-1-2 | IEC 62930

Test Voltage

6.5kV AC 50Hz

Identification

Insulation : (-ve) Black & (+ve) Red
Sheath : (-ve) Black & (+ve) Black (70%) with red Strip(30%)

Bending Radius

For fixed installation - > 4D
For occasional movement - > 5D

Construction

- Conductor : Tinned copper conductor as per IEC 60228, class 5.
- Insulation : E-Beam cross linked halogen free and flame-retardant compound (XLPO)
- Sheath : E-Beam cross linked halogen free and flame-retardant compound (XLPO)

Compliance

Fire Performance	EN 60332-1
Smoke Emission	IEC 61034/ EN 50268-2
Halogen free material	EN 50267-2-1 / IEC 60754-2
Toxicity	EN 50305
Resistance to ozone	EN 50396
Weathering / UV	EN 50618
Life Expectancy	IEC 60216
Water Resistance	{Category **(AD7/AD8)**}
Approval	IEC 60364-5-51

DIMENSIONAL & ELECTRICAL CHARACTERISTICS

Cross sectional Area	Nominal insulation thickness	Nominal Sheath thickness	Approx. Overall Diameter	Max. DC Resistance at 20° C	Current Carrying Capacity according to method of installation		
					Single cable free in air	Single cable on a surface	Two loaded cables touching on a surface
n x mm2	mm	mm	mm x mm	Ω/km	Amp.	Amp.	Amp.
2 x 1C x 2.5	0.7	0.8	5.5 x 11.2	8.21	41	39	33
2 x 1C x 4	0.7	0.8	6.0 x 12.2	5.09	55	52	44
2 x 1C x 6	0.7	0.8	6.5 x 13.2	3.39	70	67	57
2 x 1C x 10	0.7	0.8	7.5 x 15.2	1.95	98	93	79
2 x 1C x 16	0.7	0.9	8.5 x 17.2	1.24	132	125	107

*Current Ratings are based on EN 50618 at Max. Conductor Temperature 120 °C and Ambient Air temperature 60 °C.

Current rating/de-rating factors other than 60 °C ambient temperature.

up to 60 °C	70 °C	80 °C	90 °C
1.00	0.92	0.84	0.75

Note: These cables can be provided with Anti Termite Nylon Layer, If Required.

POLYCAB SOLAR UL 4703 – AL Alloy

Photovoltaic Wire, Halogen free, Flame Retardant

Application

POLYCAB PV halogen free flame-retardant Al Alloy conductor E-Beam crosslinked Polyolefins insulated Wire is designed to use in Outdoor Solar application as per NEC 690 in wet & dry location. The cable is rated direct burial, Sunlight resistant and weatherproof.

Salient Features

- Halogen free
- Electron Beam Cross-linked
- Flame retardant
- Long life
- Flexibility
- UV, Ozone resistant
- Water resistant

Voltage Rating
Max Voltage : 2000 V

Operation Temperature
Fixed : -40˚C to +90˚ C

Standard and References
ASTM B801 | UL 44
UL 4703 | UL 854

Test Voltage
As per UL 44
Max. Short circuit temp: 250˚ C

Identification
(-Ve)Black, (+ve)Red

Bending Radius
Fixed installation – 8-10 D

Construction
Conductor : 8000 Series Stranded (Class B)
Aluminium Alloy conductor as per ASTM B801.
Insulation : Halogen free flame retardant
E-Beam crosslinked Polyolefins.

Compliance
UL 854 for USE-2
UL 44 for Type RHW-2
UL 4703 for Type PV
UL 44

Approval UL 4703

DIMENSIONAL AND ELECTRICAL CHARACTERISTICS

Conductor Size (AWG/MCM)	No. of Strands (Nos.)	Conductor Dia. Compact (mm)	Max. D.C. Resistance at 20 Deg. C. (Ohm/km)	Nominal Insulation Thickness (mm)	Approx Overall Dia. (mm)
8	7	3.40	3.52	2.15	8.0
6	7	4.29	2.21	2.15	8.9
4	7	5.41	1.39	2.15	10.0
2	7	6.81	0.875	2.15	11.4
1	19	7.59	0.693	2.66	13.2
1/0	19	8.53	0.550	2.66	14.2
2/0	19	9.55	0.436	2.66	15.2
3/0	19	10.70	0.346	2.66	16.3
4/0	19	12.10	0.274	2.66	17.7
250	37	13.20	0.232	3.04	19.6
300	37	14.50	0.194	3.04	20.9
350	37	15.60	0.166	3.04	22.0
400	37	16.70	0.145	3.04	23.1
500	37	18.70	0.116	3.04	26.0
600	61	20.70	0.0967	3.43	28.9
700	61	22.30	0.0829	3.43	30.5
750	61	23.10	0.0774	3.43	31.3
800	61	23.80	0.0725	3.43	32.0
900	61	25.40	0.0645	3.43	33.6
1000	61	26.90	0.058	3.43	35.1

POLYCAB SOLAR UL 4703 – COPPER

Photovoltaic Wire, Halogen free, Flame Retardant

Application

POLYCAB PV halogen free flame-retardant copper conductor E-Beam crosslinked Polyolefins insulated Wire is designed to use in Outdoor Solar application as per NEC 690 in wet & dry location. The cable is rated direct burial, Sunlight resistant and weatherproof.

Salient Features

- Halogen free
- Electron Beam Cross-linked
- Flame retardant
- Long life
- Flexibility
- UV, Ozone resistant
- Water resistant
- High temperature resistant

Voltage Rating

Rated Voltage : 2000 V

Operation Temperature

Fixed : -40˚C to +90˚ C

Standard and References

ASTM B8 | UL 44

UL 4703 | UL 854

Test Voltage

As per UL 44

Max. Short circuit temp : 250˚ C

Identification

(-Ve)Black, (+ve)Red

Bending Radius

Fixed installation – 8-10 D

Construction

Conductor : Stranded (Class B) Bare or Tinned Copper conductor as per ASTM B8

Insulation : Halogen free Flame retardant E-Beam crosslinked Polyolefins

Compliance

UL 854 for USE-2

UL 44 for Type RHW-2

UL 4703 for Type PV

UL 44

Approval UL 4703 Certified

DIMENSIONAL AND ELECTRICAL CHARACTERISTICS

Conductor Size (AWG/MCM)	No. of Strands (Nos.)	Conductor Dia. Compact (mm)	Max. D.C. Resistance at 20 Deg. C. (Ohm/km) (Bare Conductor)	Nominal Insulation Thickness (mm)	Approx Overall Dia. (mm)
12 AWG	7	2.32	5.43	1.90	6.4
10 AWG	7	2.95	3.41	1.90	7.0
8 AWG	7	3.71	2.14	2.15	8.3
7 AWG	7	4.17	1.70	2.15	8.7
6 AWG	7	4.67	1.35	2.15	9.2
5 AWG	7	5.23	1.071	2.15	9.8
4 AWG	7	5.89	0.848	2.15	10.5
3 AWG	7	6.60	0.673	2.15	11.2
2 AWG	7	7.42	0.534	2.15	12.0
1 AWG	19	8.43	0.423	2.66	14.1
1/0 AWG	19	9.47	0.335	2.66	15.1
2/0 AWG	19	10.64	0.266	2.66	16.3
3/0 AWG	19	11.94	0.211	2.66	17.6
4/0 AWG	19	13.41	0.167	2.66	19.0
250 MCM	37	14.61	0.142	3.04	21.0
300 MCM	37	16.00	0.118	3.04	22.4
350 MCM	37	17.30	0.101	3.04	23.7
400 MCM	37	18.49	0.0885	3.04	24.9
500 MCM	37	20.65	0.0708	3.04	28.0
600 MCM	61	22.68	0.0590	3.43	30.8
700 MCM	61	24.49	0.0506	3.43	32.6
750 MCM	61	25.35	0.0472	3.43	33.5
800 MCM	61	26.19	0.0443	3.43	34.3
900 MCM	61	27.79	0.0393	3.43	35.9
1000 MCM	61	29.26	0.0354	3.43	37.4

POLYCAB SOLAR H1Z2Z2 -K BS EN 50618

Photovoltaic Solar DC Cable, Halogen Free, Flame Retardant

Application

POLYCAB low smoke, halogen free, flexible single core cable with electron beam cross linked insulation and sheath is designed to use for Photovoltaic installation at the DC side. These cables are suitable for permanent outdoor use under variable climatic condition.

Salient Features

- Halogen free
- Electron Beam Cross-linked
- Flame retardant
- Long life
- Flexibility
- UV, Ozone resistant
- Water resistant
- High temperature resistant

Voltage Rating

Nominal Voltage : 1500 V DC between conductors as well as conductor and earth. Max permitted voltage: 1800 V

Operation Temperature

Fixed : -40˚C to +120˚C

Maximum operating conductor temperature : +120˚C

Standard and References

EN/IEC 60228 | EN 50618

IEC 60332-1-2

Test Voltage

6.5kV AC 50Hz

Identification

Insulation : (-ve) Black & (+ve) Red

Sheath : (-ve) Black & (+ve) Black (70%) with red Strip (30%)

Bending Radius

For fixed installation - > 4D

For occasional movement - > 5D

Construction

- Conductor : Tinned copper conductor as per IEC 60228, class 5.
- Insulation : E-Beam cross linked halogen free and flame-retardant compound (XLPO)
- Sheath : E-Beam cross linked halogen free and flame-retardant compound (XLPO)

Compliance

Fire Performance	EN 60332-1
Smoke Emission	IEC 61034/ EN50268-2
Halogen free material	EN 50267-2-1 /IEC 60754-2
Resistance to ozone	EN 50396
Weathering / UV	HD 605/A1 or DIN 53667
Life Expectancy	IEC 60216
Water Resistance -	Category {**(AD7/AD8)**}
Approval	IEC 60364-5-51 | TUV

DIMENSIONAL CHARACTERISTICS

Single Core Cross sectional Area	Nominal insulation thickness	Nominal Sheath thickness	Approx. Overall Diameter	Max. DC Resistance at 20° C
mm2	mm	mm	mm	Ω/km
1.5	0.7	0.8	5.0	13.7
2.5	0.7	0.8	5.5	8.21
4.0	0.7	0.8	6.0	5.09
6.0	0.7	0.8	6.5	3.39
10	0.7	0.8	7.5	1.95
16	0.7	0.9	8.5	1.24
25	0.9	1.0	10.5	0.795
35	0.9	1.1	12.0	0.565
50	1.0	1.1	14.0	0.393
70	1.1	1.2	16.0	0.277
95	1.1	1.3	18.0	0.210
120	1.2	1.3	19.5	0.164
150	1.4	1.4	21.5	0.132
185	1.6	1.6	24.5	0.108
240	1.7	1.7	27.0	0.0817

CURRENT RATINGS

Nominal Cross sectional Area	Current Carrying Capacity according to method of installation		
	Single Cable Free in air	Single Cable on a surface	Two loaded cables touching, on a surface
mm2	A	A	A
1.5	30	29	24
2.5	41	39	33
4	55	52	44
6	70	67	57
10	98	93	79
16	132	125	107
25	176	167	142
35	218	207	176
50	276	262	221
70	347	330	278
95	416	395	333
120	488	464	390
150	566	538	453
185	644	612	515
240	775	736	620
300	895	850	713

*Current Ratings are based on EN 50618 at Max. Conductor Temperature 120°C and Ambient Air temperature 60°C.

Note: the expected period of use at maximum conductor temperature at 120° C is limited to 20,000 hours

Current rating / de-rating factors other than 60°C ambient temperature.

Up to 60°C	70°C	80°C	90°C
1.00	0.92	0.84	0.75

POLYCAB SOLAR HALOGEN FREE LOW SMOKE IEC 62930

Photovoltaic Solar DC Cable, Halogen Free, Flame Retardant

Application

POLYCAB low smoke, halogen free, flexible single core cable with electron beam cross linked insulation and sheathing is designed for use in Photovoltaic installation on DC side. These cables are suitable for permanent outdoor use under variable climatic condition.

Salient Features

- Halogen free
- Electron Beam Cross-linked
- Flame retardant
- Long life
- Flexibility
- UV, Ozone resistant
- Water resistant
- High temperature resistant

Voltage Rating

Nominal Voltage : 1500 V DC between conductors as well as conductor and earth. Max permitted voltage: 1800 V

Operation Temperature

Fixed : -40˚C to +90˚C

Maximum operating conductor temperature: +120˚C

Standard and References

EN/IEC 60228 | IEC 62930

IEC 60332-1-2

Test Voltage

6.5kV AC 50Hz

Identification

Insulation : (-ve) Black & (+ve) Red

Sheath : (-ve) Black & (+ve) Black (70%) with red Strip (30%)

Bending Radius

For fixed installation - > 4D

For occasional movement - > 5D

Construction

- Conductor : Tinned copper conductor as per IEC 60228, class 5 & class 2 (Class 5 : For cables that is directly connected to the PV Module. Class 2 : For cables intended for fixed installation and not directly connected to the PV Modules.)
- Insulation : E-Beam cross linked halogen free and flame-retardant compound (XLPO)
- Sheath : E-Beam cross linked halogen free and flame-retardant compound (XLPO)

Compliance

Fire Performance	EN 60332-1
Smoke Emission	IEC 61034/ EN50268-2
Halogen free material	EN 50267-2-1 / IEC 60754-2
Resistance to ozone	EN 50396
Weathering / UV	HD 605/A1 or DIN 53667
Life Expectancy	IEC 60216
Water Resistance	{Category **(AD7/AD8)**}
Approval	IEC 60364-5-51

DIMENSIONAL & ELECTRICAL CHARACTERISTICS FOR CLASS 5 CONDUCTOR CABLES

Single Core Cross sectional Area	Nominal insulation thickness	Nominal Sheath thickness	Approx. Overall Diameter	Max. DC Resistance at 20° C
mm2	mm	mm	mm	Ω/km
1.5	0.7	0.8	5.0	13.7
2.5	0.7	0.8	5.5	8.21
4.0	0.7	0.8	6.0	5.09
6.0	0.7	0.8	6.5	3.39
10	0.7	0.8	7.5	1.95
16	0.7	0.9	8.5	1.24
25	0.9	1.0	10.5	0.795
35	0.9	1.1	12.0	0.565
50	1.0	1.1	14.0	0.393
70	1.1	1.2	16.0	0.277
95	1.1	1.3	18.0	0.210
120	1.2	1.3	19.5	0.164
150	1.4	1.4	21.5	0.132
185	1.6	1.6	24.5	0.108
240	1.7	1.7	27.0	0.0817
300	1.8	1.8	30.0	0.0654
400	2.0	2.0	34.5	0.0495

FOR CLASS 2 CONDUCTOR CABLE

Single Core Cross sectional Area	Nominal insulation thickness	Nominal Sheath thickness	Approx. Overall Diameter	Max. DC Resistance at 20° C
mm2	mm	mm	mm	Ω/km
16	0.7	0.9	8.0	1.16
25	0.9	1.0	10.0	0.734
35	0.9	1.1	11.5	0.529
50	1.0	1.1	13.0	0.391
70	1.1	1.2	14.5	0.270
95	1.1	1.3	16.5	0.195
120	1.2	1.3	18.0	0.154
150	1.4	1.4	20.0	0.126
185	1.6	1.6	22.5	0.100
240	1.7	1.7	25.5	0.0762
300	1.8	1.8	28.0	0.0607
400	2.0	2.0	31.5	0.0475

CURRENT RATINGS

Nominal Cross sectional Area	Current Carrying Capacity according to method of installation		
	Single Cable Free in air	Single Cable on a surface	Two loaded cables touching, on a surface
mm2	A	A	A
1.5	31	30	24
2.5	42	40	33
4	57	54	45
6	72	69	58
10	98	96	80
16	132	130	107
25	183	174	138
35	227	215	171
50	287	273	209
70	361	344	269
95	433	411	328
120	508	483	382
150	590	560	441
185	671	638	506
240	808	767	599
300	913	866	693
400	1098	1041	825

*Current Ratings are based on IEC 62930 at Max. Conductor Temperature 90°C and Ambient Air temperature 30°C.

Current rating / de-rating factors other than 30°C ambient temperature.

0	10°C	20°C	30°C	40°C	50°C	60°C	70°C
1.22	1.15	1.08	1.00	0.91	0.82	0.71	0.58

POLYCAB SOLAR DC FEEDER CABLE IEC 60502 -1 (XZ1 AL)

Photovoltaic DC Feeder Cable

Application

POLYCAB, single core cable with cross linked polyethylene insulation is designed to use for Photovoltaic installation at the DC side. These cables are suitable for permanent outdoor use under variable climatic condition.

Salient Features

- Long life
- UV, Ozone resistant
- Water resistant

Voltage Rating

Nominal Voltage : 1500 V DC between conductors as well as conductor and earth.

Operation Temperature

Fixed : -40˚C to +90˚ C

Maximum operating conductor temperature : +90˚ C

Standard and References

IEC 60228 | IEC 60502-1

Test Voltage

3.5kV AC 49Hz to 61Hz

Identification

(- ve) - Black & (+ ve) - Black (70%) with red (30%) Strip

Bending Radius

For fixed installation - > 15D

For occasional movement - > 15D

Construction

- Conductor : Aluminium conductor as per IEC 60228
- Insulation : cross linked polyethylene material, Colour: Black (Longitudinal water blocking Tape can be provided, If required)
- Sheath : HDPE

Compliance

UV resistance ASTM G-154

Note : These cables can be provided with twisted formation, If required.

DIMENSIONAL AND ELECTRICAL CHARACTERISTICS

Single Core Cross sectional Area	Nominal insulation thickness	Nominal Sheath thickness	Approx. Overall Diameter	Max. DC Resistance at 20° C	Current Rating capacity		
					In Ground	In Duct	In Air
mm2	mm	mm	mm	Ω/km	Amp.	Amp.	Amp.
120	1.2	1.5	18.0	0.253	230	206	276
150	1.4	1.6	20.0	0.206	256	229	314
185	1.6	1.6	22.0	0.164	290	258	366
240	1.7	1.7	24.5	0.125	335	298	434
300	1.8	1.8	27.5	0.100	376	333	500
400	2.0	1.9	30.5	0.0778	429	378	589
500	2.2	2.0	34.5	0.0605	485	426	685
630	2.4	2.2	38.5	0.0469	546	477	793

*Current Ratings are based on IEC 60364-5-52 std, Max. Conductor Temperature at 90°C, Ambient temperature at 30°C in Air, Ambient temperature at 20®C in Ground, Soil thermal resistivity 2.5 k.m/W, Depth of Laying 0.8m.

Current rating / de-rating factors for other than 30°C ambient air temperature.

10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C	80°C
1.15	1.12	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71	0.65	0.58	0.50	0.41

Current rating / de-rating factors for other than 20°C ground temperature.

10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C	80°C
1.07	1.04	1.00	0.96	0.93	0.89	0.85	0.80	0.76	0.71	0.65	0.60	0.53	0.46	0.38

POLYCAB SOLAR DC FEEDER CABLE AS NZS 5000.1 – ANTI TERMITE

Photovoltaic DC Feeder Cable

Application

POLYCAB, single core cable with cross linked polyethylene insulation is designed to use for Photovoltaic installation at the DC side. These cables are suitable for permanent outdoor use under variable climatic condition.

Salient Features

- Long life
- UV, Ozone resistant
- Water resistant
- Termite Resistant

Voltage Rating

Nominal Voltage : 1500 V DC between conductors as well as conductor and earth.

Operation Temperature

Fixed : -40˚C to +90˚ C

Maximum operating conductor temperature : +90˚ C

Standard and References

AS/NZS 1125 | AS/NZS 5000.1

AS/NZS 3808

Test Voltage

6.5kV AC 50Hz

Identification

(- ve) - Black & (+ ve) - Black with red Strip

Bending Radius

For fixed installation - > 20D

For occasional movement - > 30D

Construction

- Conductor : Aluminium conductor as per AS-NZS 1125
- Insulation : cross linked polyethylene material, Colour: Black (Longitudinal water blocking Tape can be provided, If required)
- Anti -Termite Layer : Polyamide (Nylon 12)
- Sheath : HDPE

Compliance

UV resistance	ASTM G-154
Water resistance Category	
Approval	IEC 60364-5-51(**AD8**)

Note : These cables can be provided with twisted formation, If required.

DIMENSIONAL & ELECTRICAL CHARACTERISTICS

Single Core Cross sectional Area	Nominal insulation thickness	Minimum Nylon Jacket thickness	Nominal Sheath thickness	Approx. Overall Diameter	Max. DC Resistance at 20° C	Current Rating capacity		
						Two cables touching in air unenclosed spaced from surface	Two cable touching in air on surface	Two cable touching in enclosure Underground
mm2	mm	mm	mm	mm	Ω/km	Amp.	Amp.	Amp.
120	1.2	0.2	1.5	19.5	0.253	305	253	252
150	1.4	0.2	1.6	21.5	0.206	350	291	283
185	1.6	0.2	1.6	24.0	0.164	406	340	329
240	1.7	0.2	1.7	26.5	0.125	485	408	388
300	1.8	0.2	1.8	29.0	0.100	562	473	440
400	2.0	0.2	1.9	32.5	0.0778	660	559	516
500	2.2	0.2	2.0	36.6	0.0605	772	656	590
630	2.4	0.2	2.2	40.5	0.0469	904	772	695

*Current Ratings are based on AS/NZS 3008 std, Max. Conductor Temperature at 90°C, Ambient temperature at 40°C in Air, Ambient temperature at 25°C in Ground, Soil thermal resistivity 1.2 k.m/W, Depth of Laying 0.5m.

Current rating / de-rating factors for other than 40°C ambient air temperature.

15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C	65°C	70°C	75°C	80°C	85°C
1.26	1.20	1.15	1.10	1.05	1.00	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34	0.19

Current rating / de-rating factors for other than 25°C ground temperature.

10°C	15°C	20°C	25°C	30°C	35°C	40°C
1.11	1.07	1.03	1.00	0.97	0.93	0.89

POLYCAB SOLAR IEC 60502 -2 MV XLPE (RH5Z1-OL)

Photovoltaic MV Cable

Application

POLYCAB, single core cable with cross linked insulation is designed to use for Photovoltaic installation. These cables are suitable for direct burial application.

Salient Features

- Long life
- UV, Ozone resistant
- Water resistant

Voltage Rating

Voltage : 18/30 (36) kV

Operation Temperature

Fixed : -40˚C to +90˚C
Maximum operating conductor temperature : +90˚C
Short Circuit conductor temperature : 250˚C

Standard and References

IEC 60228: 2004 | IEC 60502-2: 2014

Test Voltage

63kV AC 50Hz

Bending Radius

For fixed installation - > 15D

For occasional movement - > 20D

Construction

- Conductor : Aluminium conductor, Class-2 as per IEC 60502-2
- Conductor Screen : Extruded Semi-conducting compound
- Insulation : Cross linked Polyethylene as per IEC 60502-2
- Insulation Screen : Extruded Semi-conducting compound
- Tape Screen : Polyethylene laminated Aluminium foil (Water blocking tape is applied under tape screen, If Required)
- Outer Sheath: High Density Polyethylene as per IEC 60502-2, Colour: Black

Compliance

IEC 60502-2

DIMENSIONAL CHARACTERISTICS

No. of Cores	Cross sectional Area	Nom. insulation thickness	Approx. Overall Diameter
No.	mm2	mm	mm
1	70	8.0	33.0
1	95	8.0	35.0
1	120	8.0	36.0
1	150	8.0	38.0
1	185	8.0	40.0
1	240	8.0	42.0
1	300	8.0	44.0
1	400	8.0	48.0
1	500	8.0	51.0
1	630	8.0	55.0

ELECTRICAL CHARACTERISTICS

No. of Cores	Cross- sectional area	Max. Conductor Resistance		Impedance of Cable	Approx. Cable Capacitance	Approx. Cable Reactance
		at 20°C DC	at 90°C AC	at 90°C		
No.	mm2	Ohm/km	Ohm/km	mfd/km	Ohm/km	
1	70	0.443	0.568	0.587	0.15	0.149
1	95	0.320	0.411	0.431	0.17	0.131
1	120	0.253	0.325	0.348	0.18	0.125
1	150	0.206	0.265	0.291	0.19	0.122
1	185	0.164	0.211	0.241	0.21	0.117
1	240	0.125	0.161	0.196	0.23	0.112
1	300	0.100	0.130	0.169	0.25	0.108
1	400	0.0778	0.101	0.146	0.27	0.105
1	500	0.0605	0.0799	0.128	0.30	0.100
1	630	0.0469	0.0631	0.117	0.33	0.098

CURRENT RATINGS

No. of Cores	Core Cross sectional Area	Buried direct in the ground 20°C		In single way ducts 20°C		In Air 30°C		
		Trefoil	Flat Spaced	Trefoil ducts	Flat touching ducts	Trefoil	Flat touching	Flat spaced
No.	mm2	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.
1	70	186	192	176	178	230	236	278
1	95	221	229	210	213	280	287	338
1	120	252	260	240	242	324	332	391
1	150	281	288	267	271	368	376	440
1	185	317	324	303	307	424	432	504
1	240	367	373	351	356	502	511	593
1	300	414	419	397	402	577	586	677
1	400	470	466	451	457	673	676	769
1	500	530	546	504	537	773	776	919
1	630	600	646	554	617	883	886	1089

*Current Ratings are based on IEC 60502-2 & IEC 60287, Max. Conductor Temperature at 90®C, Ambient temperature at 30®C in Air / at 20®C in Ground, Thermal resistivity of Soil 1.5 k.m/W & for earthenware ducts 1.2k.m/W and Depth of Laying 0.8m.

Current rating de-rating factors for other than 30°C ambient air temperature.

20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71

Current rating de-rating factors for other than 20°C ground temperature.

10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
1.07	1.04	1.00	0.96	0.93	0.89	0.85	0.80	0.76

Polycab Solar MV - HD 620 & UNE 211620

Photovoltaic MV Cable

Application

POLYCAB, single core cable with cross linked insulation is designed to use for Photovoltaic installation. These cables are suitable for direct burial application.

Salient Features

- Long life
- UV, Ozone resistant
- Water resistant

Voltage Rating

Voltage : 18/30 (36) kV

Operation Temperature

Fixed : -40˚C to +90˚C
Maximum Operating conductor temperature : +90˚C
Short Circuit conductor temperature: 250˚C

Standard and References

HD 620 | UNE 211620

Test Voltage

63kV AC 50Hz

Bending Radius

For fixed installation - > 15D

For occasional movement - > 20D

Construction

- Conductor : Aluminium conductor, Class-2 as per EN 60228
- Conductor Screen : Extruded Semi-conducting compound
- Insulation : XLPE as per HD 620-1
- Insulation Screen : Extruded Strippable Semi-conducting compound
- Tape Screen : Polyethylene laminated Aluminium foil
  (Water blocking tape is applied under tape screen, If Required)
- Outer Sheath : High Density Polyethylene
- Colour: Black

DIMENSIONAL CHARACTERISTICS

No. of Cores	Cross sectional Area	Nom. insulation thickness	Approx. Overall Diameter
No.	mm2	mm	mm
1	70	8.0	35.0
1	95	8.0	37.0
1	120	8.0	38.0
1	150	8.0	40.0
1	185	8.0	42.0
1	240	8.0	44.0
1	300	8.0	46.0
1	400	8.0	50.0
1	500	8.0	53.0
1	630	8.0	57.0

ELECTRICAL CHARACTERISTICS

No. of Cores	Cross- sectional area	Max. Conductor Resistance		Impedance of Cable	Approx. Cable Capacitance	Approx. Cable Reactance
		at 20°C DC	at 90°C AC	at 90°C		
No.	mm2	Ohm/km	Ohm/km	mfd/km	Ohm/km	
1	70	0.443	0.568	0.587	0.15	0.149
1	95	0.320	0.411	0.431	0.17	0.131
1	120	0.253	0.325	0.348	0.18	0.125
1	150	0.206	0.265	0.291	0.19	0.122
1	185	0.164	0.211	0.241	0.21	0.117
1	240	0.125	0.161	0.196	0.23	0.112
1	300	0.100	0.130	0.169	0.25	0.108
1	400	0.0778	0.101	0.146	0.27	0.105
1	500	0.0605	0.0799	0.128	0.30	0.100
1	630	0.0469	0.0631	0.117	0.33	0.098

CURRENT RATINGS

No. of Cores	Core Cross sectional Area	Buried direct in the ground 20°C		In single way ducts 20°C		In Air 30°C		
		Trefoil	Flat Spaced	Trefoil ducts	Flat touching ducts	Trefoil	Flat touching	Flat spaced
No.	mm2	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.
1	70	186	192	176	178	230	236	278
1	95	221	229	210	213	280	287	338
1	120	252	260	240	242	324	332	391
1	150	281	288	267	271	368	376	440
1	185	317	324	303	307	424	432	504
1	240	367	373	351	356	502	511	593
1	300	414	419	397	402	577	586	677
1	400	470	466	451	457	673	676	769
1	500	530	546	504	537	773	776	919
1	630	600	646	554	617	883	886	1089

*Current Ratings are based on IEC 60502-2 & IEC 60287, Max. Conductor Temperature at 90®C, Ambient temperature at 30®C in Air / at 20®C in Ground, Thermal resistivity of Soil 1.5 k.m/W & for earthenware ducts 1.2k.m/W and Depth of Laying 0.8m.

Current rating de-rating factors for other than 30°C ambient air temperature.

20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71

Current rating de-rating factors for other than 20°C ground temperature.

10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
1.07	1.04	1.00	0.96	0.93	0.89	0.85	0.80	0.76

POLYCAB SOLAR AS NZS 1429 MV XLPE
Photovoltaic MV Cable

Application

POLYCAB, single core cable with cross linked insulation is designed to use for Photovoltaic installation. These cables are suitable for direct burial application.

Salient Features

- Long life
- UV, Ozone resistant
- Water resistant
- Termite Resistant (optional)

Voltage Rating

Voltage : 19/33 (36) kV

Operation Temperature

Fixed : -40˚C to +90˚C
Maximum operating conductor temperature : +90˚C
Short Circuit conductor temperature : 250˚C

Standard and References

AS/NZS 1125: 2001 | AS/NZS 3808: 2000
AS/NZS 1429.1: 2006

Test Voltage

63kV AC 50Hz

Bending Radius

For fixed installation - > 20D
For occasional movement - > 30D

Construction

- Conductor : Aluminium conductor, Class-2 as per AS/NZS 1125
- Conductor Screen : Extruded Semi-conducting compound
- Insulation : Cross linked Polyethylene as per AS/NZS 3808 (Tree Retardant XLPE can be provided, If Required)
- Insulation Screen : Extruded Strippable Semi-conducting compound
- Metallic Screen : Copper Wires and Open Helix Copper Tape (Earth Fault current capacity 3kA/sec. & 10kA/sec.) (Water blocking tape is applied under and over screen, If Required)
- Composite Sheath : Inner Layer : Extruded PVC 5V-90 Anti Termite Layer (optional) : Polyamide (Nylon 12)

Outer Layer : High Density Polyethylene as per AS/NZS 3808, Colour : Black

Compliance

Termite Protection — Anti-Termite Polyamide (Nylon) Layer (Optional)

Note: These cables can be provided with Twisted Triplex Formation, If Required

DIMENSIONAL CHARACTERISTICS

No. of Cores	Core Cross sectional Area	Nom. insulation thickness	Approx. Overall Diameter	
			3kA/sec.	10kA/sec.
No.	mm2	mm	mm	mm
1	70	8.0	35.0	36.0
1	95	8.0	37.0	37.0
1	120	8.0	38.0	39.0
1	150	8.0	40.0	40.0
1	185	8.0	41.0	42.0
1	240	8.0	44.0	44.0
1	300	8.0	46.0	47.0
1	400	8.0	49.0	50.0
1	500	8.0	53.0	53.0
1	630	8.0	57.0	57.0

ELECTRICAL CHARACTERISTICS

No. of Cores	Single Core Cross Sectional Area	Max. DC Resistance at 20˚C	Max. AC Resistance at 90˚C	Approx. Cable Capacitance	Approx. Cable Reactance	Impedance of Cable at 90˚C
No.	mm2	Ω/km	Ω/km	mfd/km	Ohm/km	Ohm/km
1	70	0.443	0.568	0.15	0.149	0.587
1	95	0.320	0.411	0.17	0.143	0.434
1	120	0.253	0.325	0.18	0.137	0.353
1	150	0.206	0.265	0.19	0.133	0.297
1	185	0.164	0.211	0.21	0.129	0.247
1	240	0.125	0.161	0.23	0.123	0.203
1	300	0.100	0.129	0.25	0.119	0.176
1	400	0.0778	0.101	0.27	0.114	0.153
1	500	0.0605	0.080	0.30	0.110	0.137
1	630	0.0469	0.062	0.33	0.107	0.125

CURRENT RATINGS

No. of Cores	Core Cross sectional Area	Buried direct in the ground 20°C		In single way ducts 20°C		In Air 30°C		
		Trefoil	Flat Spaced	Trefoil ducts	Flat touching ducts	Trefoil	Flat touching	Flat spaced
No.	mm2	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.	Amp.
1	70	186	192	176	178	230	236	278
1	95	221	229	210	213	280	287	338
1	120	252	260	240	242	324	332	391
1	150	281	288	267	271	368	376	440
1	185	317	324	303	307	424	432	504
1	240	367	373	351	356	502	511	593
1	300	414	419	397	402	577	586	677
1	400	470	466	451	457	673	676	769
1	500	530	546	504	537	773	776	919
1	630	600	646	554	617	883	886	1089

*Current Ratings are based on IEC 60502-2 & IEC 60287, Max. Conductor Temperature at 90°C, Ambient temperature at 30°C in Air / at 20°C in Ground, Thermal resistivity of Soil 1.5 k.m/W & for earthenware ducts 1.2k.m/W and Depth of Laying 0.8m.

Current rating / de-rating factors for other than 30°C ambient air temperature.

20°C	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71

Current rating / de-rating factors for other than 20°C ground temperature.

10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
1.07	1.04	1.00	0.96	0.93	0.89	0.85	0.80	0.76

POLYCAB SOLAR UL 1072 MV 105 TR -XLPE

Photovoltaic MV Cable

Application

POLYCAB, single core cable with Tree Retardant cross linked Polyethylene insulation is designed to use for Photovoltaic installation. These cables are intended for use in wet or dry locations for distribution of single or three phase medium-voltage power. These cables may be installed in ducts or direct buried.

Salient Features

- Long life
- UV, Ozone resistant

Voltage Rating

Voltage : 35 kV

Test Voltage

69kV AC 50Hz

Operation Temperature

Fixed : -40˚C to +105˚C
Maximum operating conductor temperature : 105˚C
*Emergency conductor temperature : 140˚C
Short Circuit conductor temperature : 350˚C
(*Operation at the emergency overload temperature shall not exceed 1500 hours cumulative during the lifetime of the cable.)

Standard and References

ASTM B-231 | AEIC CS8
ICEA S-94-649 | ICEA T-31-610
ICEA T-34-664 (As applicable for TRXLPE insulated concentric neutral cable)
UL 1072 MV-105

Bending Radius

For fixed installation - > 15D
For occasional movement - > 15D

Construction

- Conductor : Filled (i. e. Water Blocked) Stranded Aluminium Alloy 1350 conductor, Class B as per ASTM B-231
- Conductor Screen : Extruded Semi-conducting compound
- Insulation : Tree-Retardant Cross-linked Polyethylene (TRXLPE) - 100% insulation level.
- Insulation Screen : Extruded Strippable Semi-conducting compound
- Metallic Screen : Concentric Copper Wire Screening.
- Water Blocking Agent : Shall be applied around the neutral wires to resist longitudinal water penetration.
- Outer Sheath : Extruded-to-fill non-conducting cross-linked polyethene jacket, Colour: Black Colour with three longitudinal extruded red stripes.

DIMENSIONAL AND ELECTRICAL CHARACTERISTICS

Conductor Cross sectional Area (AWG/ MCM)	Conductor Diameter (inch)	Conductor DC Resistance @ 20°C (ohm/km)	Nominal Insulation Thickness (mils)	Concentric Neutral			Nominal Thickness of Jacket (mils)	Approx. Overall Diameter (inch)	Ampacity Direct Buried	
				Size	No.of Wires	Size of Wires (AWG)			Flat (Amp)	Trefoil (Amp)
1500	1.299	0.0380	345	1/6	14	14	60	2.56	892	934
1500	1.299	0.0380	345	1/6	19	14	60	2.56	892	934
1500	1.299	0.0380	345	1/6	18	12	60	2.56	892	934
1500	1.299	0.0380	345	1/6	24	12	60	2.56	892	934
1500	1.299	0.0380	345	1/6	22	10	60	2.60	892	934
1250	1.184	0.0453	345	1/12	12	14	60	2.44	836	863
1250	1.184	0.0453	345		17	14	60	2.44	836	863
1250	1.184	0.0453	345		11	12	60	2.44	836	863
1250	1.184	0.0453	345	1/6	15	12	60	2.44	836	863
1250	1.184	0.0453	345	1/3	18	10	60	2.52	836	863
1000	1.117	0.0568	345	1/12	10	14	60	2.36	761	772
1000	1.117	0.0568	345		12	14	60	2.36	761	772
1000	1.117	0.0568	345		15	14	60	2.36	761	772
1000	1.117	0.0568	345		10	12	60	2.40	761	772
1000	1.117	0.0568	345	1/6	12	12	60	2.40	761	772
1000	1.117	0.0568	345	1/3	23	12	60	2.40	761	772
1000	1.117	0.0568	345	1/2	22	10	60	2.44	761	772

DIMENSIONAL AND ELECTRICAL CHARACTERISTICS

Conductor Cross sectional Area (AWG/ MCM)	Conductor Diameter (inch)	Conductor DC Resistance @ 20°C (ohm/km)	Nominal Insulation Thickness (mils)	Concentric Neutral			Nominal Thickness of Jacket (mils)	Approx. Overall Diameter (inch)	Ampacity Direct Buried	
				Size	No.of Wires	Size of Wires (AWG)			Flat (Amp)	Trefoil (Amp)
750	0.968	0.0758	345	1/6	15	16	60	2.17	638	648
750	0.968	0.0758	345		13	14	60	2.20	638	648
750	0.968	0.0758	345	1/6	14	14	60	2.20	638	648
750	0.968	0.0758	345		8	12	60	2.24	638	648
750	0.968	0.0758	345	1/3	18	12	60	2.24	638	648
750	0.968	0.0758	345	1/2	17	10	60	2.28	638	648
500	0.789	0.114	345	1/6	10	14	60	2.01	530	533
500	0.789	0.114	345	1/3	12	14	60	2.01	530	533
500	0.789	0.114	345	1/3	12	12	60	2.05	530	533
500	0.789	0.114	345	1/2	18	12	60	2.05	530	533
500	0.789	0.114	345	2/3	23	12	60	2.05	530	533
350	0.616	0.162	345	1/6	11	16	45	1.77	431	434
350	0.616	0.162	345		11	14	45	1.81	431	434
350	0.616	0.162	345	1/3	13	14	45	1.81	431	434
350	0.616	0.162	345	1/2	20	14	45	1.81	431	434
350	0.616	0.162	345		7	12	45	1.81	431	434
350	0.616	0.162	345	2/3	16	12	45	1.81	431	434
250	0.558	0.228	345	2/3	8	16	45	1.65	361	363
250	0.558	0.228	345	1/3	10	14	45	1.65	361	363
250	0.558	0.228	345	1/2	14	14	45	1.65	361	363
250	0.558	0.228	345	2/3	19	14	45	1.65	361	363

Conductor Cross sectional Area (AWG/ MCM)	Conductor Diameter (inch)	Conductor DC Resistance @ 20degC (ohm/km)	Nominal Insulation Thickness (mils)	Concentric Neutral			Nominal Thickness of Jacket (mils)	Approx. Overall Diameter (inch)	Ampacity Direct Buried	
				Size	No.of Wires	Size of Wires (AWG)			Flat (Amp)	Trefoil (Amp)
4/0	0.512	0.269	345	1/3	8	14	45	1.65	327	328
4/0	0.512	0.269	345	1/2	12	14	45	1.65	327	328
4/0	0.512	0.269	345	2/3	15	14	45	1.65	327	328
4/0	0.512	0.269	345	Full	23	14	45	1.65	327	328
3/0	0.423	0.338	345	1/3	11	16	45	1.54	285	286
3/0	0.423	0.338	345	1/2	15	16	45	1.54	285	286
3/0	0.423	0.338	345	2/3	13	14	45	1.54	285	286
3/0	0.423	0.338	345		15	14	45	1.54	285	286
3/0	0.423	0.338	345	Full	19	14	45	1.54	285	286
3/0	0.423	0.338	345		7	12	45	1.57	285	286
2/0	0.405	0.427	345	1/3	9	16	45	1.50	250	251
2/0	0.405	0.427	345	1/2	12	16	45	1.50	250	251
2/0	0.405	0.427	345	2/3	16	16	45	1.50	250	251
2/0	0.405	0.427	345	Full	15	14	45	1.54	250	251
1/0	0.336	0.538	345	1/3	7	16	45	1.42	216	217
1/0	0.336	0.538	345	1/2	10	16	45	1.42	216	217
1/0	0.336	0.538	345	2/3	13	16	45	1.42	216	217
1/0	0.336	0.538	345	Full	15	16	45	1.42	216	217
1/0	0.336	0.538	345	Full	12	14	45	1.46	216	217
1/0	0.336	0.538	345		16	14	45	1.46	216	217
1/0	0.336	0.538	345		6	14	45	1.46	216	217
1/0	0.336	0.538	345	2/3	11	14	50	1.46	216	217
1/0	0.336	0.538	345	Full	16	14	50	1.46	216	217

*Ampacities based on cables operating in a 3-phase installation with one cable per phase, flat spaced and touching, earth rho of 90°C-cm/W, earth ambient of 20°C, neutral wires grounded at both ends, 75% load factor, conductor temperature of 105°C, and 36" depth of burial.

POLYCAB SOLAR UL 1072 MV 90 TR-XLPE

Photovoltaic AC Cable

Application

POLYCAB, single core cable with Tree Retardant cross linked Polyethylene insulation is designed to use for Photovoltaic installation. These cables are intended for use in wet or dry locations for distribution of single or three phase medium-voltage power. These cables may be installed in ducts or direct buried.

Salient Features

- Long life
- UV, Ozone resistant

Voltage Rating

Voltage : 35 kV

Test Voltage

69kV AC 50Hz

Operation Temperature

Fixed : -40˚C to +90˚C
Maximum operating conductor temperature : 90˚C
*Emergency conductor temperature : 130˚C
Short Circuit conductor temperature : 250˚C(*Operation at the emergency overload temperature shall not exceed 1500 hours cumulative during the lifetime of the cable.)

Standard and References

ASTM B-231 | AEIC CS8
ICEA S-94-649 | ICEA T-31-610
ICEA T-34-664 (As applicable for TRXLPE insulated concentric neutral cable)
UL 1072 MV-90

Bending Radius

For fixed installation - > 12D
For occasional movement - > 15D

Construction

- Conductor : Filled (i. e. Water Blocked) Stranded Aluminium Alloy 1350 conductor, Class B as per ASTM B-231
- Conductor Screen : Extruded Semi-conducting compound
- Insulation : Tree-Retardant Cross-linked Polyethylene (TRXLPE) - 100% insulation level.
- Insulation Screen : Extruded Strippable Semi-conducting compound
- Metallic Screen : Concentric Copper Wire Screening.
- Water Blocking Agent : Shall be applied around the neutral wires to resist longitudinal water penetration.
- Outer Sheath : Extruded-to-fill non-conducting linear low density polyethene jacket.
- Colour: Black Colour with three longitudinal extruded red stripes.

DIMENSIONAL AND ELECTRICAL CHARACTERISTICS

Conductor Cross sectional Area (AWG/ MCM)	Conductor Diameter (inch)	Conductor DC Resistance @ 20degC (ohm/km)	Nominal Insulation Thickness (mils)	Concentric Neutral			Nominal Thickness of Jacket (mils)	Approx. Overall Diameter (inch)	Ampacity Direct Buried	
				Size	No.of Wires	Size of Wires (AWG)			Flat (Amp)	Trefoil (Amp)
1500	1.299	0.038	345	1/12	19	14	80	2.56	892	934
1500	1.299	0.038	345	1/6	24	12	80	2.56	892	934
1500	1.299	0.038	345	1/3	24	9	80	2.64	892	934
1250	1.184	0.0453	345	1/12	16	14	80	2.44	836	863
1250	1.184	0.0453	345	1/8	15	12	80	2.44	836	863
1250	1.184	0.0453	345	1/6	20	12	80	2.44	836	863
1250	1.184	0.0453	345	1/6	22	12	80	2.44	836	863
1250	1.184	0.0453	345	1/3	25	10	80	2.52	836	863
1250	1.184	0.0453	345	1/2	30	9	80	2.52	836	863
1000	1.117	0.0568	345	1/12	13	14	80	2.36	761	772
1000	1.117	0.0568	345	1/6	16	12	80	2.40	761	772
1000	1.117	0.0568	345	1/3	22	12	80	2.40	761	772
1000	1.117	0.0568	345	1/3	20	10	80	2.44	761	772
1000	1.117	0.0568	345	1/2	30	10	80	2.44	761	772
750	0.968	0.0758	345	1/12	10	14	80	2.20	638	648
750	0.968	0.0758	345	1/6	19	14	80	2.20	638	648
750	0.968	0.0758	345	1/3	22	12	80	2.24	638	648
750	0.968	0.0758	345	1/3	24	12	80	2.24	638	648
750	0.968	0.0758	345	1/2	23	10	80	2.28	638	648

DIMENSIONAL AND ELECTRICAL CHARACTERISTICS

Conductor Cross sectional Area (AWG/ MCM)	Conductor Diameter (inch)	Conductor DC Resistance @ 20degC (ohm/km)	Nominal Insulation Thickness (mils)	Concentric Neutral			Nominal Thickness of Jacket (mils)	Approx. Overall Diameter (inch)	Ampacity Direct Buried	
				Size	No.of Wires	Size of Wires (AWG)			Flat (Amp)	Trefoil (Amp)
500	0.789	0.114	345	1/12	10	16	80	1.97	530	533
500	0.789	0.114	345	1/6	13	14	80	2.01	530	533
500	0.789	0.114	345	1/3	16	12	80	2.05	530	533
500	0.789	0.114	345	1/2	24	12	80	2.05	530	533
500	0.789	0.114	345	2/3	20	10	80	2.09	530	533
350	0.616	0.162	345	1/12	7	16	80	1.77	431	434
350	0.616	0.162	345	1/6	9	14	80	1.81	431	434
350	0.616	0.162	345	1/3	18	14	80	1.81	431	434
350	0.616	0.162	345	1/2	17	12	80	1.81	431	434
350	0.616	0.162	345	2/3	22	12	80	1.81	431	434
350	0.616	0.162	345	Full	16	9	80	1.89	431	434
250	0.558	0.228	345	1/12	6	16	50	1.65	361	363
250	0.558	0.228	345	1/6	10	16	50	1.65	361	363
250	0.558	0.228	345	1/3	13	14	50	1.65	361	363
250	0.558	0.228	345	1/2	16	12	50	1.69	361	363
250	0.558	0.228	345	2/3	21	12	50	1.69	361	363
250	0.558	0.228	345	Full	16	10	50	1.73	361	363

Conductor Cross sectional Area (AWG/ MCM)	Conductor Diameter (inch)	Conductor DC Resistance @ 20degC (ohm/km)	Nominal Insulation Thickness (mils)	Concentric Neutral			Nominal Thickness of Jacket (mils)	Approx. Overall Diameter (inch)	Ampacity Direct Buried	
				Size	No.of Wires	Size of Wires (AWG)			Flat (Amp)	Trefoil (Amp)
4/0	0.512	0.269	345	1/6	6	14	50	1.65	327	328
4/0	0.512	0.269	345	1/3	11	14	50	1.65	327	328
4/0	0.512	0.269	345	1/2	16	14	50	1.65	327	328
4/0	0.512	0.269	345	2/3	21	14	50	1.65	327	328
4/0	0.512	0.269	345	Full	20	12	50	1.65	327	328
3/0	0.423	0.338	345	1/6	7	16	50	1.54	285	286
3/0	0.423	0.338	345	1/3	9	14	50	1.54	285	286
3/0	0.423	0.338	345	1/2	13	14	50	1.54	285	286
3/0	0.423	0.338	345	2/3	17	14	50	1.54	285	286
3/0	0.423	0.338	345	Full	16	12	50	1.57	285	286
3/0	0.423	0.338	345	1.17	19	12	50	1.57	285	286
2/0	0.405	0.427	345	1/6	6	16	50	1.50	250	251
2/0	0.405	0.427	345	1/3	7	14	50	1.54	250	251
2/0	0.405	0.427	345	1/2	10	14	50	1.54	250	251
2/0	0.405	0.427	345	2/3	14	14	50	1.54	250	251
2/0	0.405	0.427	345		20	14	50	1.54	250	251
2/0	0.405	0.427	345	Full	13	12	50	1.57	250	251
1/0	0.336	0.538	345	1/6	6	16	50	1.42	216	217
1/0	0.336	0.538	345	1/3	9	16	50	1.42	216	217
1/0	0.336	0.538	345	1/3	6	14	50	1.46	216	217
1/0	0.336	0.538	345	1/3	8	14	50	1.46	216	217
1/0	0.336	0.538	345	2/3	11	14	50	1.46	216	217
1/0	0.336	0.538	345	Full	16	14	50	1.46	216	217

*Ampacities based on cables operating in a 3-phase installation with one cable per phase, flat spaced and touching, earth rho of 90°C-cm/W, earth ambient of 20°C, neutral wires grounded at both ends, 75% load factor, conductor temperature of 90°C, and 36" depth of burial.

POLYCAB SOLAR UL 1072 MV 105 TR -XLPE

Photovoltaic MV Cable

Application

POLYCAB, single core cable with Tree Retardant cross linked Polyethylene insulation is designed to use for Photovoltaic installation. These cables are intended for use in wet or dry locations for distribution of single or three phase medium-voltage power. These cables may be installed in ducts or direct buried.

Salient Features

- Long life
- UV, Moisture resistant
- High Dielectric strength
- Low dielectric loss
- Excellent resistance to treeing

Voltage Rating

Voltage : 35 kV

Test Voltage

69kV AC 50Hz

Operation Temperature

Fixed : -40˚C to +105˚C
Maximum operating conductor temperature : 105˚C
*Emergency conductor temperature : 140˚C
Short Circuit conductor temperature : 350˚C
(*Operation at the emergency overload temperature shall not exceed 1500 hours cumulative during the lifetime of the cable.)

Standard and References

ASTM B-231 | AEIC CS8
ICEA S-97-682 | ICEA T-31-610
ICEA T-34-664 (As applicable for TRXLPE insulated concentric neutral cable)
UL 1072 MV-105

Bending Radius

For fixed installation - > 12D
For occasional movement - > 15D

Construction

- Conductor : Filled (i. e. Water Blocked) Stranded Aluminium Alloy 1350 conductor, Class B as per ASTM B-231
- Conductor Screen : Extruded Semi-conducting compound
- Insulation : Tree-Retardant Cross-linked Polyethylene (TRXLPE) - 100% insulation level.
- Insulation Screen : Extruded Strippable Semi-conducting compound
- Metallic Screen : Copper Tape Screening with 25% Overlap.
- Outer Sheath : Extruded non-conducting PVC jacket, Colour: Black

DIMENSIONAL AND ELECTRICAL CHARACTERISTICS

Conductor Cross sectional Area (AWG/ MCM)	Conductor Diameter (inch)	Conductor DC Resistance @ 20°C (ohm/km)	Nominal Insulation Thickness (mils)	Copper Tape Size (mil)	Nominal Thickness of Jacket (mils)	Approx. Overall Diameter (inch)	Ampacity Direct Buried (Amp)	Ampacity Direct in Duct (Amp)
1000	1.117	0.0568	345	5	110	2.24	745	615
750	0.968	0.0758	345	5	110	2.09	640	525
500	0.789	0.114	345	5	110	1.93	510	410
350	0.616	0.162	345	5	80	1.73	415	340
250	0.558	0.228	345	5	80	1.61	345	275
4/0	0.512	0.269	345	5	80	1.57	310	250
3/0	0.423	0.338	345	5	80	1.46	275	220
2/0	0.405	0.427	345	5	80	1.46	240	190
1/0	0.336	0.538	345	5	80	1.38	210	170

*Ampacities based on earth thermal resistivity of 90 °C-cm/W, earth ambient of 20°C,metallic shield grounded at each ends, 75% load factor, conductor temperature of 105°C, and 36" depth of burial. Values are based on one three-phase circuit, one conductor per phase, in flat adjacent configuration (direct Buried).

POLYCAB
IDEAS. CONNECTED.

CABLE HARNESS

LEADING FEATURES

- Cost reductions and scale efficiencies
- Increasing operational electricity yield
- Reducing Operation and Maintenance costs
- Flexibility, ease of Installation and Safety
- Strive for excellence, develop for innovation
- Seamless transition between cable and plug
- PV Connector standard IEC/EN 62852 compliant
- PV Cable DC standard as per EN 50618 compliant

TYPES

4 String I 3 String I 2 String I Jumper Wire

Advantages of 1500V DC Cabling

The DC cables are the 'life veins'of every PV system. They have to defy extreme weather conditions for many years and reliably safeguard the electricity yields

- Wiring harness solutions reduce /eliminate the use of DC combiner boxes
- High quality connection points, 1500V DC and optimized plug connections reduce DC power losses
- Wiring harness cabling system saves up to 50% solar cable than typical single array solutions
- Sturdy construction ensures service life operation under extreme climatic conditions
- Efficient and easy to integrate modular system with protective accessories like 1500V inline fuses and diodes

☑ **Polycab's strength in offering the highest quality products, competitive prices, and excellent customer service is what sets us apart from our competitors.**
Polycab PV cable harnesses offers completely bundled, labeled and packaged assemblies of PV cable and connectors tailormade as per customer requirements. The PV cable harness acts as a pre combiner to connect strings of PV panels as input to Polycab Combiner Boxes. DC Cables from the individual strings are bundled into a harness and then terminated to either a male or female MC4 or equivalent connector which then terminates in Polycab String Combiner Box, thus providing a laborsaving integrated plug and play solution.

☑ **Delivering convenience and quality in harnesses customize to your specifications**
Our customized harness assemblies are configured using Polycab TUV approved DC Cable and Connectors. All components used provide durability and deliver long-term reliability and service life.

☑ **Sophisticated solar constructions require clever solutions**
An efficient layout of a solar cables with connectors effectively consume optimum length of cables and connectors suiting the layout thus providing high performance with increased returns for service life of the system.

☑ **Engineered solutions designed specifically for each individual job**
Intelligent cabling solutions engineered for specific layouts to provide the best overall value and design flexibility to get the job done efficiently.

☑ **Polycab has a long legacy of providing high reliability connectivity solutions in extremely harsh environments. Our solar products were developed to deliver outstanding value and reliability that we are known for to the solar industry.**
Manufactured in controlled conditions utilizing high efficiency equipment, reducing job site risk and potential warranty claims. Quick and easy solar system installation reduces project costs. Harness assemblies are made to order in customized configurations to meet the most stringent application requirements.

POLYCAB
IDEAS. CONNECTED.

DC MCB

LEADING FEATURES

- Easy Installation
- Quick in tripping off when current exceeds
- Low maintenance
- High Relability
- Commandable short circuit protection
- Ease of operations
- Suitable for industrial as well as residential operations
- indian safety standards tested
- Maintenance Free Operations

Technical Specifications	
Standard Compliance	IS/IEC 60947 - Part 2, CE Marking
Rated Current (In)	0.5A, 1A, 2A, 3A, 4A, 5A, 6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A
Tripping Curve	C Type (7In - 14In)
No of. Poles & Rated Voltages	1P: 250VDC, 2P: 500VDC, 4P: 1000VDC
Rated Ultimate Short Circuit Breaking Capacity (ICU)	6000A
Rated Service Short Circuit Breaking Capacity (ICU)	6000A
Rated Impulse Withstand Voltage (Uimp)	4kV
Utilization Category	A
Rated Insulation Voltage (Ui)	690V
Electrical Life	>2000 Nos
Mechanical Life	>10000 Nos
Contact	Anti Weld Silver Graphic Contacts
Ambient Temperature	-5 to + 50 C
Terminal	Box Type, 35 Sq.mm.
Protection Class	IP 20
ON - OFF Indication	Positive indication as ON (RED), & OFF (GREEN)
Connections	Dual Connection level (Bus Bar + Cable)
Mechanism	Trip free Mechanism
Mounting	Din rail mounting. (35mm x 7.5mm)
Lable Holder	Integrated label Holder

dowell's®

POLYCAB
IDEAS. CONNECTED.

SYMBOL OF QUALITY

Pioneers in Solderless Terminals, Crimping Tools & Cable Glands

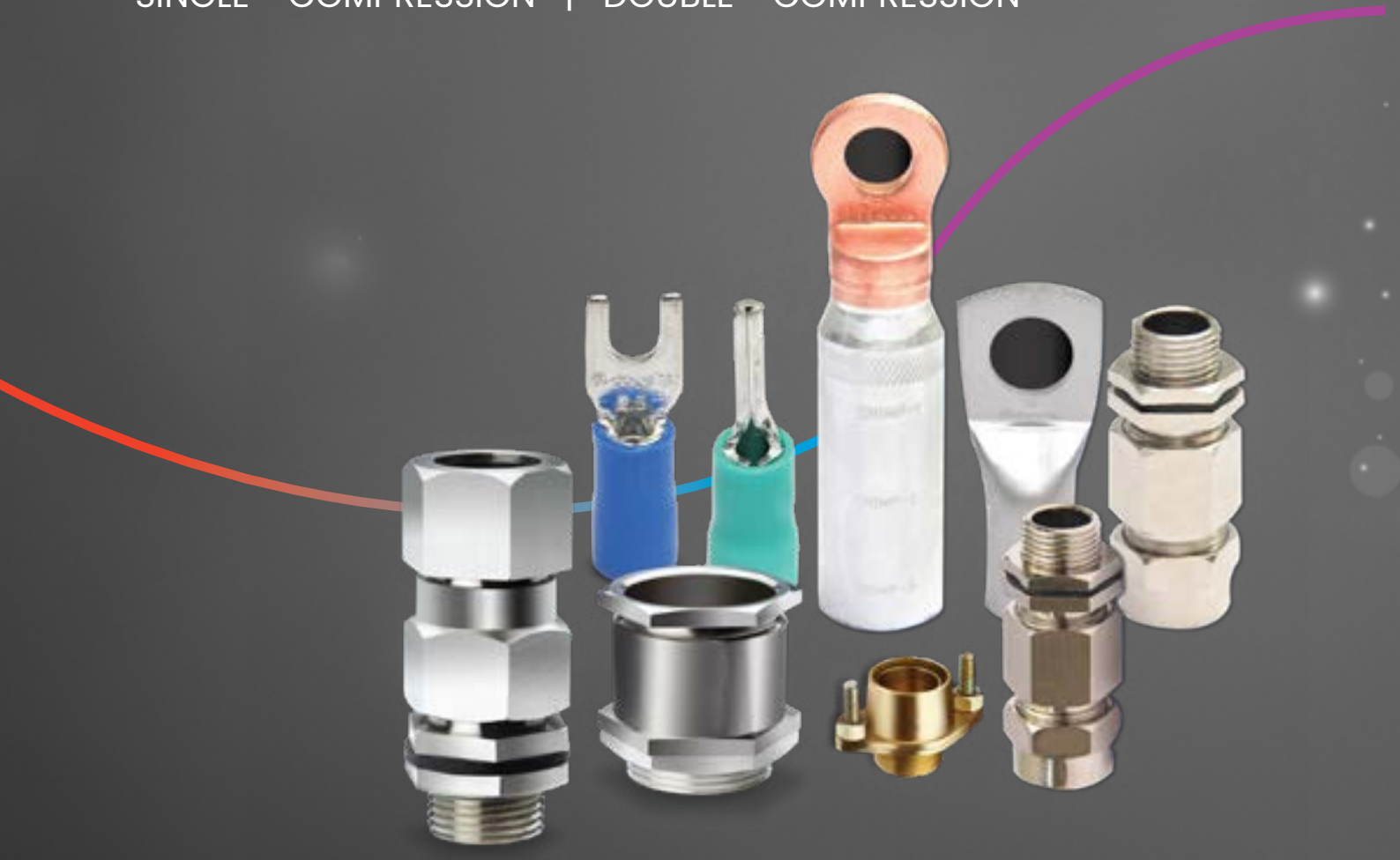
HOUSE OF DESIGNERS & MAKERS OF TERMINALS, TOOLS & CABLES

CABLE LUGS | CRIMPING TOOLS

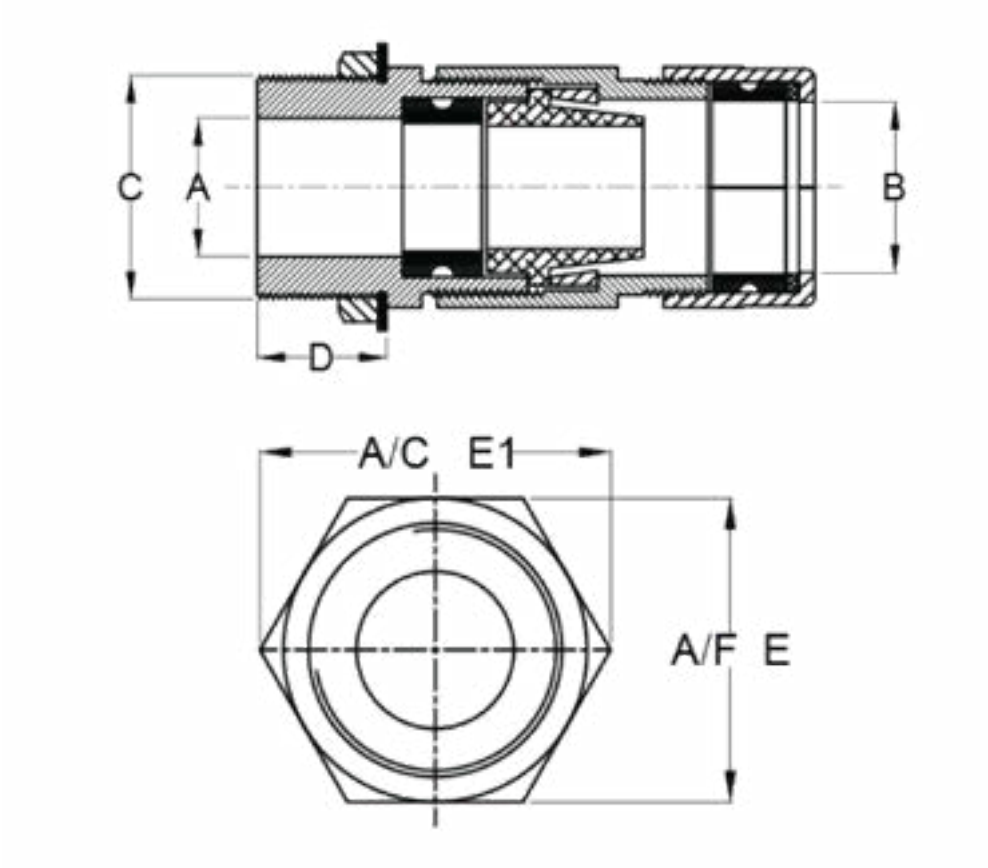
GLANDS | CONNECTORS | TERMINALS

HYDRAULIC NON - HYDRAULIC | DYES

SINGLE - COMPRESSION | DOUBLE - COMPRESSION



DOWELL'S MAKE DOUBLE COMPRESSION WEATHER AND FLAME PROOF CABLE GLANDS SUITABLE FOR SOLAR APPLICATION



TECHNICAL DATA

1. **Material** - Brass as per IS-319 / IS-12943 / BS-2874

   (Aluminium, S.S. and M.S. also available)

2. **Finish** - Nickel Coated (Tin, Chrome and Cadmium also available)

3. **Coating Thickness** - 3 microns (minimum)

4. **Entry Thread** - BSC/ET (NPT and Metric also available)

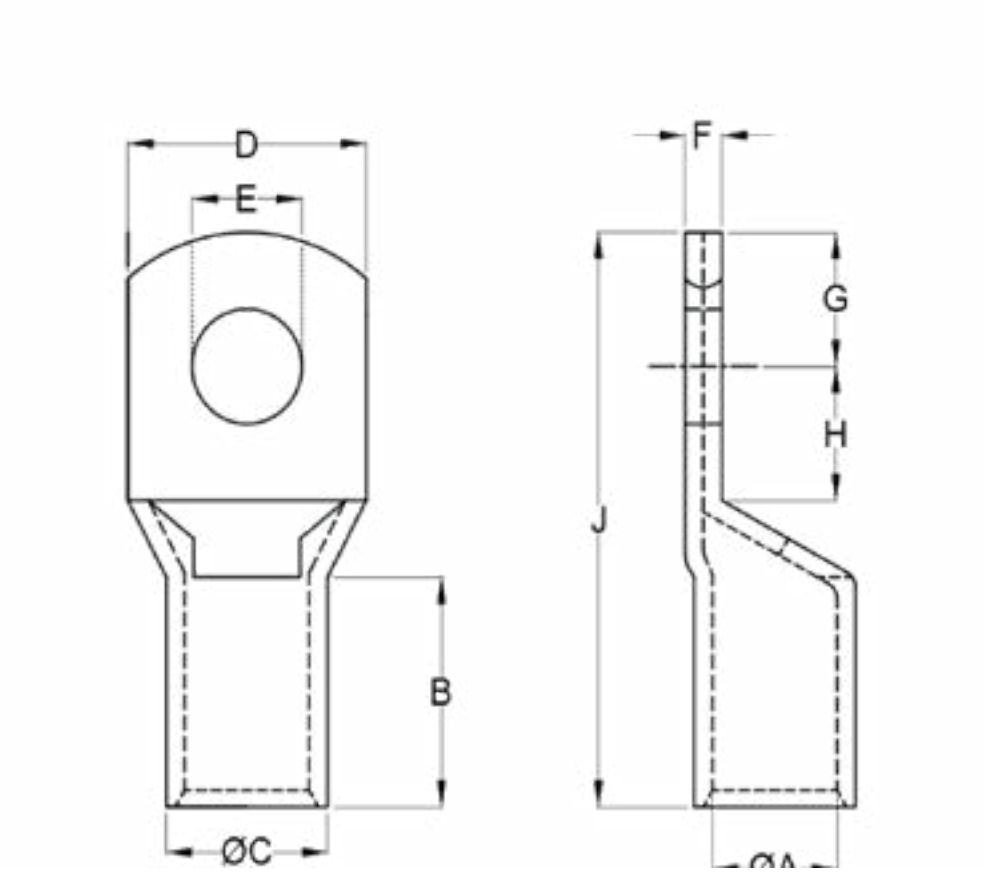
4. **Type Test** - Tested as per BS 6121:1989

5. **Flame Proof Test** - IEC 60079-1:2007

6. **Weather Proof Test** - IEC 60529:2001 for IP-66

SUITABLE OVER ALL DIAMETER	DBW SERIES	D (mm)	DBF SERIES	D (mm)	A (mm)	B (mm)	C (inch)	E A/F	E1 A/C
6.0 - 12.5	DBW 01SS	13	DBF 01SS	25	12.5	13.0	3/4	21.0	24.0
12.0 - 16.5	DBW 01S	15	DBF 01S	25	14.5	18.0	3/4	25.0	29.0
16.5 - 18.5	DBW 01	15	DBF 01	25	14.5	19.0	3/4	27.5	31.5
16.5 - 18.5	DBW 01A	15	DBF 01A	25	14.5	19.0	1	27.5	31.5
18.5 - 20.0	DBW 02	15	DBF 02	25	18.0	21.0	1	30.0	34.5
18.5 - 20.0	DBW 02A	15	DBF 02A	25	14.5	21.0	3/4	30.0	34.5
20.0 - 23.0	DBW 03	15	DBF 03	25	19.0	23.5	1	31.5	36.0
23.0 - 26.0	DBW 04	15	DBF 04	25	20.5	27.0	1	36.0	41.5
23.0 - 26.0	DBW 04A	15	DBF 04A	25	22.0	27.0	1.1/4	36.0	41.5
26.0 - 30.0	DBW 05	15	DBF 05	25	25.5	31.0	1.1/4	41.0	47.0
26.0 - 30.0	DBW 05A	15	DBF 05A	25	27.0	31.0	1.1/2	41.0	47.0
30.0 - 33.0	DBW 06	15	DBF 06	25	31.0	34.5	1.1/2	47.0	54.0
30.0 - 33.0	DBW 06A	15	DBF 06A	25	27.0	34.5	1.1/4	47.0	54.0
33.0 - 37.0	DBW 07	15	DBF 07	25	32.0	38.0	1.1/2	50.0	57.0
37.0 - 41.0	DBW 08	15	DBF 08	25	38.5	42.5	2	56.0	64.0
41.0 - 46.0	DBW 09	15	DBF 09	25	40.0	47.0	2	59.0	67.0
46.0 - 52.0	DBW 010	20	DBF 010	25	44.0	53.0	2	67.0	77.0
46.0 - 52.0	DBW 010A	20	DBF 010A	25	48.0	53.0	2.1/2	67.0	77.0
52.0 - 54.0	DBW 011A	20	DBF 011A	25	51.0	57.0	2.1/2	80.0	92.0
54.0 - 61.0	DBW 011	20	DBF 011	25	56.5	62.0	2.1/2	80.0	92.0
61.0 - 66.0	DBW 012	20	DBF 012	25	64.0	68.0	3	85.0	98.0
66.0 - 72.0	DBW 013A	20	DBF 013A	25	67.0	73.0	3	99.0	113.0
72.0 - 78.0	DBW 013	20	DBF 013	25	74.0	80.0	3.1/4	99.0	113.0
78.0 - 84.0	DBW 014	20	DBF 014	25	78.0	85.0	3.1/2	105.0	121.0
84.0 - 94.0	DBW 015	20	DBF 015	25	90.5	97.0	4	114.0	132.0
94.0 - 104.0	DBW 016	20	DBF 016	25	101.0	106.0	4.1/2	130.0	149.0

DOWELL'S MAKE COPPER HEAVY DUTY CABLE TERMINALS SUITABLE FOR SOLAR APPLICATION



TECHNICAL DATA

1. **Description** - Copper Heavy Duty series recommended/suitable for compact circular cable for solar application
2. **Range** - 2.5 sq-mm to 400 sq-mm
3. **Material** - Grade Cu-ETP as per IS-191 / BS EN-13600 (type HC C101)
4. **Finish** - Electro Tinned Coated
5. **Coating Thickness** - 10 microns (minimum)
6. **Operating Temperature** - 1100 C (maximum)
7. **Type Test** - Tested as per BS 4579 (Part 1) : 1970

CATALOG NO.	SIZE (sq-mm)	STUD	E	ØA	ØC	D	F	B	H	G	J	Recommended Crimping Tool
CUS-388	2.5	M4	4.2	2.4	4.0	8	1.0	7	5	4	18	
CUS-389	4	M5	5.2	3.1	4.8	10	1.0	7	6	5	20	SYT-2
CUS-390	6	M5	5.2	3.8	5.5	10	1.2	9	6	5	23	
CUS-353	10	M6	6.5	4.5	6.2	12	1.2	9	7	6	25	
CUS-354	16	M6	6.5	5.4	7.1	12	1.4	12	7	7	30	
CUS-355	25	M6	6.5	6.8	8.8	13	2.0	12	7	7	30	
CUS-356	35	M8	8.4	8.2	10.6	15	2.4	12	9	9	35	SYB-95
CUS-357	50	M8	8.4	9.5	12.4	18	2.9	16	11	10	43	
CUS-358	70	M10	10.5	11.2	14.7	21	3.5	18	13	12	50	
CUS-359	95	M10	10.5	13.5	17.4	25	3.9	20	13	13	55	
CUS-241	120	M12	13.0	15.0	19.4	28	4.4	22	14	14	60	
CUS-242	150	M12	13.0	16.5	21.2	30	4.7	26	16	16	69	
CUS-243	185	M16	17.0	18.5	23.5	34	5.0	32	17	17	78	
CUS-244	240	M16	17.0	21.0	26.5	38	5.5	38	20	20	92	SYD-20B
CUS-245	300	M16	17.0	23.5	30	43	6.5	42	22	22	101	
CUS-246	400	M16	17.0	26.8	34.8	50	8.0	44	26	26	114	

POLYCAB

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