

ÖLFLEX® SOLAR H1 BUR 1X4 BK

Article No.: 38115806

Solar cable; 1X4; black; U_0/U : 1 / 1 kV; Cross-linked polyethylene; Fixed Installation; Halogenfree



Details

Benefits

- Halogen free core insulation and sheath compound to meet special fire safety requirements.
- Classified fire behaviour according to EU Directive 305/2011 (BauPVO/CPR) with article number selection on the LAPP website.
- A laterally waterproof cable allows permanent submersion in shallow, uncontaminated water: AD8 in accordance with IEC 60364-5-51 and IEC 62440.
- Due to its increased mechanical strength, suitable for underground installation in a cable trench with a sand bed, tested using the "Impact-Resistance Test" and "Crushing-Resistance Test" according to UL 854.
- Cross-linked insulation and sheath materials promote durability at high temperatures or at high current load, ensure a high dielectric strength and a high short circuit temperature.
- IEC certification allows international use of the product in countries where IEC standards apply.
- Expected service life of 25 years in accordance with EN 50618 for H1Z2Z2-K-compliant application.
- Available in three different outer sheath colours so that the DC conductor can be identified externally.
- Excellent price-performance ratio thanks to smart material selection.

Application

- For unprotected connection of solar modules and inverters in earthed and non-earthed photovoltaic systems according to EN 50618.
- For interconnecting solar modules.
- For direct current applications up to 1.8 kV.
- For use with the solar connectors of the EPIC® SOLAR series.
- For fixed installation and occasional flexing, if necessary freely hanging.
- Underground installation in protective cable conduits only with drainage of accumulated water.
- Underground installation in a cable trench with a sand bed based on VDE 0891-6 and DIN EN 50174-3.
- Can be installed in closed installation ducts, under plaster and in devices.

Notes

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

If applicable, the prices are solid metal prices without surcharges and VAT. Sales only to business customers.

Unless specified otherwise, the product values shown are rated values at room temperature. You can receive further values, such as tolerances, upon request if they are available and have been released for publication.

Technical Data

General information

| | |
|--------------|-------------|
| Brand | ÖLFLEX® |
| Product type | Solar cable |
| Copper index | 38.4 kg/km |

Electrical parameters

| | |
|--------------------------|---|
| Nominal voltage | U_0/U : 1 /1 kV AC rms according to IEC |
| | U_0/U : 1,5/1,5 kV DC according to IEC |
| Operating voltage (max.) | 1,8 kV DC |
| Test voltage | 6.5 kV |

| | |
|--------------------------------|--|
| Current rating according to | EN 50618 HD 60364-5-52 IEC 62930 IEC 60364-5-52 |
| Short-circuit temperature [5s] | 250 °C |

Product design

| | |
|--|------------------------------|
| Harmonised design | H1Z2Z2-K |
| Cable dimension | 1X4 |
| Conductor cross-section (mm ²) | 4 mm ² |
| Conductor material | Tin-plated Copper |
| Conductor design | IEC 60228 class 5: fine-wire |
| Including protective conductor | No |
| Number of cores | 1 |
| With armouring | No |
| With inner sheath | No |
| Nominal core diameter | 3.8 mm |
| Min. outer diameter | 5.3 mm |
| Nominal outer diameter | 5.6 mm |
| Max. outer diameter | 5.9 mm |
| Shape of cable | Round |
| Core insulation base material | Cross-linked polyethylene |
| Core insulation base material, shortname | XLPE |
| Insulation colour | white |
| Base material of outer sheath | Cross-linked polyethylene |
| Base material of outer sheath, shortname | XLPE |
| Cable insulation colour | black |

Product features

| | |
|---------------------------------------|--|
| Application area | Fixed Installation Flexible Outdoor Suspension |
| Suitable for underground installation | in cable trench in protective cable conduit |

| | |
|--|--|
| Impact resistance test according to | UL 854 |
| Crushing resistance test according to | UL 854 |
| Minimum bending radius, fixed installation | 4 x outer diameter |
| Minimum bending radius in mm, stationary | 23.6 mm |
| Minimum bending radius, occasionally moved | 15 x outer diameter |
| Minimum bending radius in mm, occasionally flexing | 88.5 mm |
| temperature, fixed installation | -40 °C to 120 °C according to IEC |
| Temperature, occasionally moved | -25 °C to 120 °C according to IEC |
| Installation temperature min. | -25 °C |
| Storage temperature min. | -40 °C |
| Storage temperature max. | 45 °C |
| Flame-retardant | Yes |
| Flame retardance according to | IEC 60332-1-2 |
| Low smoke density according to | IEC 61034-2 |
| corrosiveness of combustion gases according to | IEC 60754-2 |
| UV-resistant | Yes |
| UV-resistant according to | EN 50618 |
| weather resistant | Yes |
| weather resistant according to | EN 50618 |
| Ozone resistant | Yes |
| Ozone-resistant according to | EN 50396, method B |
| Chemical resistant | Yes |
| Halogenfree | Yes |
| Zero halogen according to | EN 50525-1 Annex B IEC 60754-1 IEC 60754-2 |
| Oil-resistant | No |
| PWIS-free | Yes |
| PWIS-free according to | VDMA 24364-B2-L |
| Water resistant | Yes |
| Permanently immersible in water | Yes |

| | |
|--|------|
| Permanent underwater use up to | 10 m |
| For installations according to ÖVE R11-1 | No |

Certifications and standards

| | |
|---|-----------|
| CE marked | Yes |
| HAR-certified | No |
| Product standard DIN / EN | EN 50618 |
| Product standard according to IEC | IEC 62930 |
| TÜV certified | Yes |
| CPR fire class | Dca |
| Flame retardance tested according to UN /ECE-R118 | No |

ÖLFLEX® SOLAR H1 BUR

| Article No. | Name | Conductor cross-section (mm ²) | Cable insulation colour | Nominal outer diameter | Copper index | Weight |
|-------------|------------------------------|--|-------------------------|------------------------|--------------|--------|
| 38115806 | ÖLFLEX® SOLAR H1 BUR 1X4 BK | 4 mm ² | black | 5.6 mm | 38.4 kg/km | |
| 38115807 | ÖLFLEX® SOLAR H1 BUR 1X6 BK | 6 mm ² | black | 6.2 mm | 57.6 kg/km | |
| 38115808 | ÖLFLEX® SOLAR H1 BUR 1X10 BK | 10 mm ² | black | 7.4 mm | 96 kg/km | |
| 38115813 | ÖLFLEX® SOLAR H1 BUR 1X4 RD | 4 mm ² | red | 5.6 mm | 38.4 kg/km | |
| 38115814 | ÖLFLEX® SOLAR H1 BUR 1X6 RD | 6 mm ² | red | 6.2 mm | 57.6 kg/km | |
| 38115815 | ÖLFLEX® SOLAR H1 BUR 1X10 RD | 10 mm ² | red | 7.4 mm | 96 kg/km | |
| 38115820 | ÖLFLEX® SOLAR H1 BUR 1X4 BU | 4 mm ² | blue | 5.6 mm | 38.4 kg/km | |
| 38115821 | ÖLFLEX® SOLAR H1 BUR 1X6 BU | 6 mm ² | blue | 6.2 mm | 57.6 kg/km | |
| 38115822 | ÖLFLEX® SOLAR H1 BUR 1X10 BU | 10 mm ² | blue | 7.4 mm | 96 kg/km | |