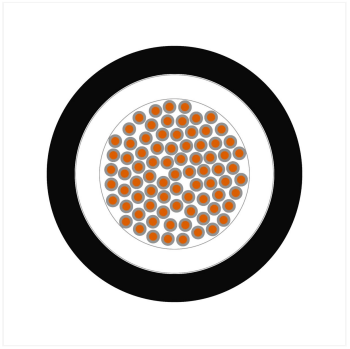
ÖLFLEX® SOLAR H1 BUR 1X4 BK

Article No.: 38115806

Solar cable; 1X4; black; U_0/U: 1/1 kV; Cross-linked polyethylene; Fixed installation; Halogen-free



Details

Benefits

- Halogen-free core insulation and sheath compound to comply with special fire safety requirements.
- Cross-linked insulation and sheathing materials promote longevity at high temperatures or at high current loads, and ensure a high dielectric strength and a high short circuit temperature.
- IEC certification allows international use of the product in countries in which the IEC standards are applicable.
- Available in three different outer sheath colours so that the DC conductor can be identified externally.

Application

- For interconnecting solar modules.
- For direct current applications up to 1.8 kV.
- For fixed installation and occasional movement, if necessary freely hanging.
- Can be installed in closed installation ducts, under plaster and in devices.

Notes

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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.

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

The absence of PWIS raw materials does not protect against the potential risk of contamination with substances that interfere with the paint wetting during subsequent handling of the product(s) during transport, storage or further processing after delivery.

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

Remarks

Technical Data

General information

Brand	ÖLFLEX®
Product type	Solar cable
Weight	66 kg/km
Copper index	38.4 kg/km
Industry segment	Power Grids HVAC Processing Industries Robotics Renewable Energy: Solar Building Automation
customs code	85446010

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

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Short-circuit temperature [5s]	250 °C
Max. conductor resistance at 20°C	5.09 Ω/km

Product design

Harmonised design	H1Z2Z2-K
Cable dimensions	1X4
Nominal conductor cross-section (metric)	4 mm²
Conductor material	Tin-plated copper
Conductor design	IEC 60228 class 5: fine-wire
Including protective earth	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
Cable shape	Round
Core insulation basic material	Cross-linked polyethylene
Core insulation basic material, short form	XLPE
Insulation colour	white
Basic material of outer sheath	Cross-linked polyethylene
Basic material of outer sheath, short form	XLPE
Outer sheath 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

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Minimum bending radius, stationary	3 x outer diameter
Minimum bending radius in mm, fixed installation	17.7 mm
Minimum bending radius, occasionally flexing	4 x outer diameter
Minimum bending radius in mm, occasionally flexing	23.6 mm
Temperature, fixed installation	-40 °C to 120 °C max. conductor temperature according to IEC
Temperature, fixed installation max	120 °C
Temperature, fixed installation min	-40 °C
max. conductor temperature, occasionally moved	-25 °C to 120 °C max. conductor temperature according to IEC
Temperature, occasionally moved max	120 °C
Temperature, occasionally moved min	-25 °C
Installation temperature min.	-25 °C
Storage temperature min.	-40 °C
Max. storage temperature	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
Halogen-free	Yes
Halogen-free according to	EN 50525-1 Annex B IEC 60754-1 EN 50267-2-1 IEC 60754-2 EN 50267-2-2
Oil-resistant	No

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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 marking	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

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Article No.	Name	Nominal conductor cross-section (metric)	Outer sheath colour	Nominal outer diameter	Copper index	Weight
38115805	ÖLFLEX® SOLAR H1 BUR 1X2,5 BK	2.5 mm²	black	5 mm	24 kg/km	50 kg/km
38115806	ÖLFLEX® SOLAR H1 BUR 1X4 BK	4 mm²	black	5.6 mm	38.4 kg/km	66 kg/km
38115807	ÖLFLEX® SOLAR H1 BUR 1X6 BK	6 mm²	black	6.2 mm	57.6 kg/km	89 kg/km
38115808	ÖLFLEX® SOLAR H1 BUR 1X10 BK	10 mm²	black	7.4 mm	96 kg/km	134 kg/km
38115809	ÖLFLEX® SOLAR H1 BUR 1X16 BK	16 mm²	black	8.4 mm	153.6 kg/km	208 kg/km
38115810	ÖLFLEX® SOLAR H1 BUR 1X25 BK	25 mm²	black	10.5 mm	240 kg/km	315 kg/km
38115811	ÖLFLEX® SOLAR H1 BUR 1X35 BK	35 mm²	black	11.8 mm	336 kg/km	430 kg/km
38115812	ÖLFLEX® SOLAR H1 BUR 1X2,5 RD	2.5 mm²	red	5 mm	24 kg/km	50 kg/km
38115813	ÖLFLEX® SOLAR H1 BUR 1X4 RD	4 mm²	red	5.6 mm	38.4 kg/km	66 kg/km
38115814	ÖLFLEX® SOLAR H1 BUR 1X6 RD	6 mm²	red	6.2 mm	57.6 kg/km	89 kg/km
38115815	ÖLFLEX® SOLAR H1 BUR 1X10 RD	10 mm²	red	7.4 mm	96 kg/km	134 kg/km
38115816	ÖLFLEX® SOLAR H1 BUR 1X16 RD	16 mm²	red	8.4 mm	153.6 kg/km	208 kg/km
38115817	ÖLFLEX® SOLAR H1 BUR 1X25 RD	25 mm²	red	10.5 mm	240 kg/km	315 kg/km
38115818	ÖLFLEX® SOLAR H1 BUR 1X35 RD	35 mm²	red	11.8 mm	336 kg/km	430 kg/km
38115819	ÖLFLEX® SOLAR H1 BUR 1X2,5 BU	2.5 mm²	blue	5 mm	24 kg/km	50 kg/km
38115820	ÖLFLEX® SOLAR H1 BUR 1X4 BU	4 mm²	blue	5.6 mm	38.4 kg/km	66 kg/km
38115821	ÖLFLEX® SOLAR H1 BUR 1X6 BU	6 mm²	blue	6.2 mm	57.6 kg/km	89 kg/km
38115822	ÖLFLEX® SOLAR H1 BUR 1X10 BU	10 mm²	blue	7.4 mm	96 kg/km	134 kg/km
38115823	ÖLFLEX® SOLAR H1 BUR 1X16 BU	16 mm²	blue	8.4 mm	153.6 kg/km	208 kg/km
38115824	ÖLFLEX® SOLAR H1 BUR 1X25 BU	25 mm²	blue	10.5 mm	240 kg/km	315 kg/km
38115825	ÖLFLEX® SOLAR H1 BUR 1X35 BU	35 mm²	blue	11.8 mm	336 kg/km	430 kg/km

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V1.1

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