


0046700	DATA SHEET	
valid from: 28.03.2024	ÖLFLEX® HEAT 180 C MS	

Application

ÖLFLEX® HEAT 180 C MS is an approved silicone cable for the North American market with copper screen braiding. The cables are recommended for use with high ambient temperatures or close to hot surface areas under sufficient ventilation. These cables are used for fixed indoor installation, at lamp attachments, in smelting works, steel works and hotrolling mills, in electric motor engineering, shipbuilding and aircraft construction, in sauna- and solarium production, as well as many other areas.

At room temperature ÖLFLEX® HEAT 180 C MS is generally resistant against oils, alcohol, acids, caustic solutions, salt solution and salt water, furthermore the cable is resistant against UV-radiation. The copper braiding serves as protection against electrical interference and conforms to EMC.

Use according to UL: Internal wiring and external interconnection of appliances, fixtures and electronic equipment.

Design

Design	acc. to UL 758, AWM Styles 3529 & 4476, CSA C22.2. No. 210
Certification	RU AWM Style 3529 & 4476 (File No. E63634) cRU AWM I A/B, II A/B (File No. E63634)
Conductor	Fine strands of tinned copper wires, acc. to IEC 60228 resp. EN 60228, class 5
Insulation	Silicone rubber compound acc. to UL AWM Style 3529 (UL 150°C)
Core identification code	acc. to VDE 0293-1, with or without GN/YE ground conductor up to 5 cores coloured in acc. to VDE 0293-308 starting at 6 cores: Black cores with white numbers acc. to EN 50334
Screen	plastic foil wrapping braiding of tinned copper wires, coverage 85% (nominal value) plastic foil wrapping
Outer sheath	silicone compound acc. to UL AWM Style 4476 (UL 150°C), colour: black, similar RAL 9005

Electrical properties at 20 °C

Nominal voltage	UL/CSA: 600 V IEC: 300/500 V
Test voltage	core / core: 2000 V AC core / screen: 2000 V AC

Mechanical and thermal properties

Minimum bending radius	occasional flexing: 20 x outer diameter fixed installation: 6 x outer diameter
Temperature range	UL/CSA: up to +150°C (max. conductor temperature) IEC: occasional flexing -50°C up to +180°C (max. conductor temperature) fixed installation -60°C up to +180°C (max. conductor temperature) Adequate ventilation must be ensured, since the mechanical properties of silicone cables decrease from +100°C in the absence of air.
Flammability	UL Cable Flame Test acc. to UL 1581 § 1061 CSA FT-1 acc. to CSA C22.2 No. 2256 § 9.3 flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2 after combustion a SiO ₂ -ash skeleton remains, which has still good insulation properties but has no more any mechanical stability.
Halogen free	acc. to IEC 60754-1 resp. EN 60754-1
Corrosivity of gases	acc. to IEC 60754-2 resp. EN 60754-2
UV resistance	acc. to EN 50618 acc. to EN 50620 acc. to EN ISO 4892-2-2013, method A (change of colour allowed)

General requirements

These cables are conform to the EU-Directive 2014/35/EU (Low Voltage Directive)

Environmental information

These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

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