

1024400	DATA SHEET	
valid from: 01.01.2019	ÖLFLEX® HEAT 125 C MC	

Application

ÖLFLEX® HEAT 125 C MC are heat resistant, highly flame retardant, halogen-free, multi core screened cables with a cross-linked polyolefin copolymer compound for occasional flexible use and fixed installation subject to medium mechanical load conditions. Further special features: wide temperature range, ozone-, UV-light- and oil resistant.

These cables are halogen-free, and with low toxicity and smoke density in case of fire. It´s possible to use the cables where human and animal life as well as valuable property are exposed to high risk of fire hazards.

The screen is a protection against electrical interference.

Application range:

For safety in areas with high density of people, public buildings; airport, railway station, for the wiring and connection of lighting, heating appliances, control cabinets, and distributors in mechanical and plant engineering, heating and air conditioning systems, for use in traffic regulation systems and outdoors.

Design

Design	based on EN 50525-3-41 (VDE 0285-525-3-41) and EN 50525-3-21 (VDE 0285-525-3-21)
Certification	DNV GL Certificate No: TAE00001M0
Conductor	fine wire strands of non-porous tinned copper acc. to IEC 60228 resp. VDE 0295, Class 5
Insulation	electron beam cross-linked polyolefin copolymer compound, halogen-free and highly flame retardant
Core identification code	acc. to VDE 0293-1, with or without GN/YE protective conductor up to 5 cores (2 different article variations): coloured acc. to HD 308 S2 resp. VDE 0293-308 or black cores with white numbers acc. to DIN EN 50334 (VDE 0293-334) starting at 6 cores: black cores with white numbers acc. to DIN EN 50334 (VDE 0293-334)
Taping	plastic foil
Screen	braid of tinned copper, coverage = 85% (nominal value)
Outer sheath	electron beam cross-linked polyolefin copolymer compound, halogen-free and highly flame retardant Colour: black, similar RAL 9005

Electrical properties at 20°C

Transfer impedance	at 30 MHz: max. 250 mΩ/m acc. To DIN EN 50525-2-51 resp. VDE 0285-525-2-51
Rated voltage	U ₀ /U: 0.5 mm ² to 1.0 mm ² : 300 / 500 V > 1.5 mm ² : 450 / 750 V > 1.5 mm ² for fixed and protected installation: 0.6 / 1 kV
Test voltage	core/core: 4000 V AC core/screen: 2500 V AC

Mechanical and thermal properties

Minimum bending radius	occasional flexing: 15 x cable diameter fixed installation: 4 x cable diameter
Temperature range	occasional flexing: -35 °C up to +120 °C max. conductor temp. (20.000 h, IEC 60216) fixed installation: -55 °C up to +125 °C max. conductor temp. temporary up to +145 °C max. conductor temp. (3.000 h) Short circuit temperature: +200° C
Flammability	flame retardant acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2 NF C 32-070 (C1), Class C acc. to NF-F 16-101 flame propagation acc. to IEC 60332-3-24 resp. VDE 0482-332-3-24, Cat. C or IEC 60332-3-25 resp. VDE 0482-332-3-25, Cat. D (cables with OD < 12.0 mm) IEC 60332-3-22, resp. VDE 0482-332-3-22, Cat. A
Halogen free	acc. to IEC 60754-1, EN 60754-1 EN 60684-2 (Fluorine)
Corrosivity of gases	acc. to IEC 60754-2, EN 60754-2
Smoke density	acc. to IEC 61034-2

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Toxicity	acc. to NES 02-713 (< 3), NF X 70-100 EN 50264-1 resp. VDE 0260-264-1
UV resistance	EN 50525-1 resp. VDE 0285-525-1. Cables with black sheath are suitable for a permanent outdoor use. acc. to EN ISO 4892-2-2013, method A (change of colour allowed)
Ozone resistance	acc. to EN 50396 resp. VDE 0473-396, method B
Oil resistance	acc. to IEC 60227-1, ST9 EN 50264-1 (VDE 0260-264-1), EM 104
Fuel resistance	acc. to EN 50264-1 (VDE 0260-264-1), EM 104
Tests	acc. to IEC 60811 resp. VDE 0473 part 811, VDE 0472, EN 50395, EN 50396
General requirements	These cables are conform to the EU-Directive 2014/35/EU (Low Voltage Directive)

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