

1024323	DATA SHEET	 LAPP
valid from: 14.01.2026	ÖLFLEX® HEAT 125 MC 450/750 V	

Application

ÖLFLEX® HEAT 125 MC 450/750 V cables are heat resistant, highly flame retardant, halogen-free, multi core 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 is possible to use the cables where human and animal life as well as valuable property are exposed to high risk of fire hazards.

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 and EN 50525-3-21
Certification	DNV Certificate TAE00001KY EN 13501-6 and EN 50575 Classification of fire behaviour (article/dimension range see www.lappkabel.com/cpr)
Conductor	fine wire strands of non-porous tinned copper acc. to IEC 60228 resp. EN IEC 60228, 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: coloured acc. to HD 308 S2 resp. VDE 0293-308 starting at 6 cores: black cores with white numbers, acc. to DIN EN 50334
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

Nominal voltage	U ₀ /U: 450/750 V for fixed and protected installation: 0.6/1 kV
Test voltage	core/core: 4000 V AC

Mechanical and thermal properties

Minimum bending radius	occasional flexing: 15 x outer diameter fixed installation: 4 x outer diameter
Temperature range	occasional flexing: -35 °C up to +120 °C max. conductor temperature (20.000 h, IEC 60216) fixed installation: -55 °C up to +125 °C max. conductor temperature temporary up to +145 °C max. conductor temperature (3.000 h) Short circuit temperature: +200 °C
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2 NF C 32-070 (C1), Class C acc. To NF-F 16-101 flame propagation acc. to IEC 60332-3-24 resp. EN IEC 60332-3-24 or IEC 60332-3-25 resp. EN IEC 60332-3-25 (cables with OD ≤ 12.0 mm) IEC 60332-3-22 resp. EN IEC 60332-3-22
Halogen free	acc. to IEC 60754-1 resp. EN 60754-1 EN 60684-2 (Fluorine)
Corrosivity of gases	acc. to IEC 60754-2 resp. EN 60754-2
Smoke density	acc. to IEC 61034-2
Toxicity	acc. to EN 50305; EN 50264-1 max. 3
UV resistance	acc. to EN 50525-1 cables with black sheath are suitable for permanent outdoor use acc. to EN 50618 acc. to EN 50620 acc. to EN ISO 4892-2, method A (change of colour allowed)

AbN
automation

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Ozone resistance	acc. to EN 50396, method B
Oil resistance	acc. to IEC 60227-1, ST9 EN 50264-1, EM 104
Fuel resistance	acc. to EN 50264-1, EM 104
MUD resistance	acc. to NEK TS 606 and IEC 60092-360, annex C + D

Tests acc. to IEC 60811 resp. EN 60811, EN 50395, EN 50396

General requirements These cables are conform to the EU-Directive 2014/35/EU (Low Voltage Directive).
A part of these cables (see www.lappkabel.com/cpr) are classified
acc. to the EU-Regulation no. 305/2011 (CPR).

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

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