1123460	DATA SHEET	LAPP
valid from: 15.01.2024	ÖLFLEX® CLASSIC 135 CH BK 0,6/1 kV	

Application

ÖLFLEX® CLASSIC 135 CH BK 0,6/1 kV are screened halogen free, highly flame retardant power and control cables designed for the European and North American market, for occasional flexible use and fixed installation subject to normal mechanical load conditions. They are also suitable for use in dry or damp areas. They are suitable for outdoor use if the indicated temperature range is observed. They are suitable for occasional, non-automated movements. The maximum tensile load is 15 N/mm² of conductor cross-section during installation and operation. Compulsory guidance is not permitted.
The screening braid protects against interference from electrical fields.

Application range:
Public buildings, plant engineering, industrial machinery, heating and air-conditioning systems and particularly where human and animal life as well as valuable property exposed to high risk of fire hazards

USE gem. UL: FRPE sheathed cable for internal wiring of appliances or external interconnection

Design

Design	acc. to UL AWM Style 21156, UL 758 based on EN 50525-3-11
Certification	UL AWM Style 21156 (File No. E63634), UL 758 EN 13501-6 and EN 50575 Classification of fire behaviour (article/dimension range see www.lappkabel.com/cpr)
Conductor	fine wire strands of bare copper, acc. to IEC 60228 resp. EN 60228, Class 5
Insulation	halogen free compound TI6, acc. to EN 50363-7, with increased requirements
Core identification code	acc. to VDE 0293-1 up to 5 cores: colour-coded acc. to HD 308 S2, with or without GN/YE ground conductor starting at 6 cores: black cores with white numbers, with or without GN/YE ground conductor, acc. to EN 50334
Stranding	cores are stranded in layers
Wrapping	plastic foil
Screen	braid of tinned copper, coverage = 85% (nominal value)
Outer sheath	halogen free compound TM7 acc. to EN 50363-8 colour: black, similar RAL 9005

Electrical properties at 20 °C

Nominal voltage	EN U_0/U: 600/1000 V UL: 1000 V
Test voltage	core / core: 4000 V AC core / screen: 3000 V AC

Mechanical and thermal properties

Minimum bending radius	occasional flexing: 20 x outer diameter fixed installation: 6 x outer diameter
Temperature range	occasional flexing (EN): -25 °C up to +70 °C max. conductor temp. occasional flexing (UL): up to +75 °C max. conductor temp. fixed installation (EN): -40 °C up to +80 °C max. conductor temp. fixed installation (UL): up to +75 °C max. conductor temp.
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2 UL: Cable flame test acc. to UL 1581 §1061 no flame-propagation acc. to IEC 60332-3-24 resp. EN 60332-3-24 or acc. to IEC 60332-3-25 resp. EN 60332-3-25
Halogen free	acc. to IEC 60754-1 resp. EN 60754-1
Corrosivity of gases	acc. to IEC 60754-2 resp. EN 60754-2
Smoke density	acc. to IEC 61034-2 resp. EN 61034-2
Toxicity	acc. to EN 50306-1 (≤ 6)

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 4892-2-2013, method A (change of colour allowed)
Ozone resistance	acc. to EN 50396, method B
Tests	acc. to IEC 60811 resp. EN 60811, EN 50395, EN 50396, UL 1581
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 in accordance with the EU-Regulation no. 305/2011 (CPR).
Environmental information	These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).