1123200	DATA SHEET	LAPP
valid from: 01.04.2026	ÖLFLEX® CLASSIC 135 CH	

Application

ÖLFLEX® CLASSIC 135 CH are screened halogen free, highly flame retardant 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. Considering the temperature range, a temporary outdoor use is possible. 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, airports, railway stations, plant engineering and construction, air conditioning systems and particularly where human and animal life as well as valuable property are exposed to high risk of fire hazards. In the event of a fire minimal toxic and no corrosive gases occur.

USE according to UL: FRPE sheathed cable for internal wiring of appliances

Design

Design	acc. to UL 758 AWM Style 21217 based on EN 50525-3-11
Certification	AWM Style 21217 (File No. E63634) VDE tested: Supply cable with improved characteristics in the case of fire 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 IEC 60228, class 5
Insulation	halogen free compound TI6, acc. to EN 50363-7, with increased requirements
Core identification code	acc. to VDE 0293-1, with or without GN/YE ground conductor black cores with white numbers acc. to EN 50334
Cable assembly	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: Silver grey, similar RAL 7001

Electrical properties at 20 °C

Transfer impedance	max. 250 mΩ/m (at 30 MHz)
Nominal voltage	EN U_0/U: 300/500 V
Rated voltage	UL: 600 V
Test voltage	core / core: 4000 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	occasional flexing (EN): -25 °C up to +70 °C max. conductor temperature occasional flexing (UL): up to +75 °C max. conductor temperature fixed installation (EN): -40 °C up to +80 °C max. conductor temperature fixed installation (UL): up to +75 °C max. conductor temperature
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 60332-3-22 resp. EN IEC 60332-3-22 acc. to IEC 60332-3-24 resp. EN IEC 60332-3-24 or acc. to IEC 60332-3-25 resp. EN IEC 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 50620 acc. to EN ISO 4892-2-2013, method A (change of colour allowed)
Ozone resistance	acc. to EN 50396 resp., 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).