1123200	DATA SHEET	LAPP
valid from: 01.01.2019	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.
ÖLFLEX® CLASSIC 135 CH cables are particularly used in areas, 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.

Application range: Public buildings, airports, railway stations, plant engineering and construction, air conditioning systems

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

Design

Design	acc. to UL AWM 758 based on EN 50525-3-11 resp. VDE 0285-525-3-11 EN 50525-2-51 resp. VDE 0285-525-2-51
Certification	UL AWM Style 21217* (File No. E63634), UL 758 GL-Germanischer Lloyd (Certificate No. TAE00002RK) VDE certified: 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) *Style change: UL Style 21089 replaced by Style 21217 (approx. February 2018)
Conductor	fine wire strands of bare copper, acc. to IEC 60228 resp. VDE 0295, Class 5
Insulation	halogen free compound TI6 acc. to EN 50363-7 resp. VDE 0207-363-7
Core identification code	acc. to VDE 0293-1, with or without GN/YE ground conductor black cores with white numbers acc. to DIN EN 50334 resp. VDE 0293-334
Stranding	cores are stranded in layers
Taping	plastic foil
Screen	braid of tinned copper, coverage = 85% (nominal value)
Outer sheath	halogen free compound TM7 acc. to EN 50363-8 resp. VDE 0207-363-8 Colour: Silver grey, similar RAL 7001

Electrical properties at 20°C

Rated voltage	VDE U_0/U: 300/500 V 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 (VDE): -25˚C up to +70˚C max. conductor temp. occasional flexing (UL): up to +75˚C max. conductor temp. fixed installation (VDE): -40˚C up to +80˚C max. conductor temp. fixed installation (UL): up to +75˚C max. conductor temp.
Flammability	acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2 no flame-propagation acc. to IEC 60332-3-22 resp. VDE 0482-332-3-22 acc. to IEC 60332-3-24 resp. VDE 0482-332-3-24 or acc. to IEC 60332-3-25 resp. VDE 0482-332-3-25
Halogen free	acc. to IEC 60754-1 resp. VDE 0482-754-1
Corrosivity of gases	acc. to IEC 60754-2 resp. VDE 0482-754-2
Smoke density	acc. to IEC 61034-2 resp. EN 61034-2
Toxicity	acc. to NES 713-3, EN 50306-1 (≤ 3)

UV resistance	acc. to EN 50620 resp. VDE 0285-620 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
Tests	acc. to IEC 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).