0014150	DATA SHEET	LAPP
valid from: 01.01.2019	ÖLFLEX® CLASSIC 100 H	

Application

ÖLFLEX® CLASSIC 100 H are halogen free, highly flame retardant, oil resistant power cables for occasional flexible use and fixed installation subject to medium mechanical load conditions. They are among others designed for use in dry and humid conditions. If using outdoors, observe the indicated temperature range and use with UV protection.
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.
Application range:
Public buildings, airport, railway station, plant engineering, industrial machinery, heating and air-conditioning systems and particularly where human and animal life as well as valuable property are exposed to high risk of fire hazards.

Design

Design	based on EN 50525-3-11 resp. VDE 0285-525-3-11, EN 50525-2-31 resp. VDE 0285-525-2-31, EN 50525-2-51 resp. VDE 0285-525-2-51
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 up to 5 cores: coloured acc. to VDE 0293-308 resp. HD 308 S2
Stranding	cores are stranded in layers
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:	450 / 750 V
	fixed and protected installation:	600 / 1000 V
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:	-30 °C up to +70 °C max. conductor temp.
	fixed installation:	-40 °C up to +80 °C max. conductor temp.
Torsional stress	in WTG: TW-0 (5.000 cycles at ≥ + 5°C) TW-2 (2.000 cycles at ≥ -40°C) ± 150°/m at 1 revolution per minute	
Flammability	acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2 no flame-propagation 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)	
Ozone resistance	acc. to EN 50396 resp. VDE 0473-396, method B	
Oil resistance	acc. to EN 50363-4-1 resp. VDE 0207-363-4-1 (TM5)	
Tests	acc. to IEC 60811, EN 50395, EN 50396	
General requirements	These cables are conform to the EU-Directive 2014/35/EU (Low Voltage Directive).	