Application

ÖLFLEX® CLASSIC 115 CH SF (TP) cables are halogen-free, oil resistant, highly flame retardant, screened, twisted pair data cable for low frequency applications.
They are also suitable for use in dry, damp or wet areas. They are suitable for outdoor use if the indicated temperature range is observed.
ÖLFLEX® CLASSIC 115 CH SF (TP) cables are suitable for free and limited continuously recurring movement without tensile load or compulsory guidance. The maximum tensile load is 15 N/mm^2 of conductor cross-section during installation and operation.
The screening braid protects against interference from electrical fields.

Design

Design	based on standard VDE 0812
Approvals	EN 45545-2: Hazard Level HL1; HL2; HL3
Conductor	extra fine wire strands of bare copper, acc. to IEC 60228 resp. VDE 0295, Class 6
Core isolation	halogen free compound TI6, polyolefin based, acc. to EN 50363-7 resp. VDE 0207-363-7,with increased requirements
Core identification	acc. to DIN 47100
Stranding	cores twisted to pairs, pairs are stranded in layers
Wrapping	Taping over stranding
Screen	Braid of tinned copper wires
Outer sheath	halogen free compound HM2, polyolefin based, acc. to DIN VDE 0250-214, with increased requirements Colour: Black, similar RAL 9005

Electrical properties at 20°C

Specific insulation resistance	> 20 G Ω x cm
Peak working voltage	500 V (not for power applications) *based on VDE 0812, table 4
Test voltage	1200 V

Mechanical and thermal properties

Min. bending radius	occasional flexing: 15 x cable diameter fixed installation: 6 x cable diameter
Power chain	Min. bending radius 15 x cable diameter Travelling distance up to 5 m 200.000 – 500.000 bending cycles
Temperature range	occasional flexing: -30 °C up to +70 °C max. conductor temp. fixed installation: -40 °C up to +80 °C max. conductor temp.
Flammability	flame retardant acc. to IEC 60332-1-2 resp. VDE 0482-332-1-2 flame propagation acc. to d ≥ 12 mm: IEC 60332-3-24 resp. VDE 0482-332-3-24 (Cat. C) or 6mm < d < 12 mm: IEC 60332-3-25 resp. VDE 0482-332-3-25 (Cat. D) resp. EN 50305, 9.1.1 d ≤ 6mm: EN 50305, 9.1.2

Halogen-free	acc. to IEC 60754-1; EN 60754-1
Ozone resistance	acc. to EN 50396 resp. VDE 0473-396, method B
UV resistance	acc. to EN 50620 resp. VDE 0285-620 acc. to EN ISO 4892-2-2013, method A (change of colour allowed)
Oil resistance	acc. to EN 50363-4-1 resp. VDE 0207-363-4-1, TM5
Transfer impedance at 30 MHz	≤ 250 mΩ/m acc. to EN 50395 resp. VDE 0481-395
Smoke density	acc. to IEC 61034-2; EN 61034-2
Toxicity (≤ 3)	acc. to NES 713 part 3, EN 50306-1
Low corrosivity	acc. to IEC 60754-2; EN 60754-2
Tests	acc. to IEC 60811, EN 50395, EN 50396
EU directive	These cables are conform to the EU-Directive 2011/65/EU regarding Restriction of the use of certain hazardous substances (RoHS).