0012640	DATA SHEET	LAPP
valid from: 13.11.2024	ÖLFLEX® EB CY	

Application

ÖLFLEX® EB CY are PVC control cables with blue outer sheath for occasional flexible use and fixed installation in intrinsically safe circuits. 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. 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:
Installation of intrinsically safe circuits, where a special cable marking for hazard area type " i " – intrinsic safety is specified; The cables meet the requirements of EN 60079-14 (VDE 0165-1), section 16.2.2 potentially explosive atmosphere.

Design

Design	based on EN 50525-2-51
Conductor	fine wire strands of bare copper, acc. to IEC 60228 resp. EN IEC 60228, class 5
Insulation	LAPP special PVC compound P8/1 TI2 acc. to EN 50363-3 with increased requirements acc. to LAPP specification
Core identification code	acc. to VDE 0293-1, with or without GN/YE ground conductor black cores with white numbers acc. to EN 50334
Wrapping	plastic foil
Screen	braid of tinned copper, coverage = 85% (nominal value)
Outer sheath	PVC compound TM2 acc. to EN 50363-4-1 with increased requirements acc. to LAPP specification colour: blue, similar RAL 5015

Electrical properties at 20 °C

Transfer impedance	max. 250 mΩ/m (at 30 MHz)
Nominal voltage	U_0/U: 300 / 500 V
Operating voltage	< 50 V AC resp. < 75 V DC in intrinsically safe circuits
Test voltage	core / core: 3000 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: -5 °C up to +70 °C max. conductor temperature fixed installation: -40 °C up to +80 °C max. conductor temperature
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2
UV resistance	acc. to EN 50618 acc. to EN 50620 acc. to EN ISO 4892-2-2013, method A (change of colour allowed)
Tests	acc. to IEC 60811 resp. EN 60811, EN 50395, EN 50396
General requirements	These cables are conform to the EU Directive 2014/35/EU (Low Voltage Directive)
Environmental information	These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

Inductance and mutual capacitance

Part number	Cable type	Dimension	Inductance [mH/km]	Mutual capacitance core/core [nF/km]	Mutual capacitance core/screen [nF/km]
0012640	ÖLFLEX® EB CY	2X0.75	0.688	151	234
0012677	ÖLFLEX® EB CY	2X0.75	0.688	151	234
0012641	ÖLFLEX® EB CY	3X0.75	0.688	127	197
0012678	ÖLFLEX® EB CY	4X0.75	0.688	125	194
0012642	ÖLFLEX® EB CY	4X0.75	0.688	125	194
0012643	ÖLFLEX® EB CY	5X0.75	0.688	125	194
0012644	ÖLFLEX® EB CY	7X0.75	0.688	121	188
0012645	ÖLFLEX® EB CY	12X0.75	0.688	121	188
0012646	ÖLFLEX® EB CY	18X0.75	0.688	121	188
0012647	ÖLFLEX® EB CY	25X0.75	0.688	121	188
0012650	ÖLFLEX® EB CY	2X1	0.669	162	251
0012651	ÖLFLEX® EB CY	3X1	0.669	133	206
0012652	ÖLFLEX® EB CY	5X1	0.669	131	203
0012653	ÖLFLEX® EB CY	7X1	0.669	128	198
0012654	ÖLFLEX® EB CY	12X1	0.669	128	198
0012655	ÖLFLEX® EB CY	18X1	0.669	128	198
0012656	ÖLFLEX® EB CY	25X1	0.669	128	198
0012406	ÖLFLEX® EB CY	2X1.5	0.639	182	282
0012660	ÖLFLEX® EB CY	2X1.5	0.639	182	282
0012661	ÖLFLEX® EB CY	3X1.5	0.639	143	222
0012662	ÖLFLEX® EB CY	5X1.5	0.639	143	222
0012663	ÖLFLEX® EB CY	7X1.5	0.639	139	215
0012664	ÖLFLEX® EB CY	12X1.5	0.639	139	215
0012666	ÖLFLEX® EB CY	25X1.5	0.639	139	215

Please note that these are theoretically calculated values, valid for 800 Hz, which may differ in practice, depending on the application. They are not guaranteed product characteristics