


0012420	DATA SHEET	
valid from: 13.11.2024	ÖLFLEX® EB	

Application

ÖLFLEX® EB cables 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.

ÖLFLEX® EB cables 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:

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
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

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

Mechanical and thermal properties

Minimum bending radius	occasional flexing: 15 x outer diameter fixed installation: 4 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 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).

AbN
automation

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Inductance and mutual capacitance

Part number	Cable type	Dimension	Inductance [mH/km]	Mutual capacitance core/core [nF/km]
0012420	ÖLFLEX® EB	2X0.75	0.688	96
0012421	ÖLFLEX® EB	3X0.75	0.688	105
0012430	ÖLFLEX® EB	4X0.75	0.688	111
0012422	ÖLFLEX® EB	5X0.75	0.688	119
0012423	ÖLFLEX® EB	7X0.75	0.688	119
0012425	ÖLFLEX® EB	12X0.75	0.688	119
0012427	ÖLFLEX® EB	18X0.75	0.688	119
0012429	ÖLFLEX® EB	25X0.75	0.688	119
0012440	ÖLFLEX® EB	2X1	0.669	100
0012441	ÖLFLEX® EB	3X1	0.669	111
00124481	ÖLFLEX® EB	3G1	0.669	111
0012443	ÖLFLEX® EB	5X1	0.669	125
00124482	ÖLFLEX® EB	5G1	0.669	125
0012444	ÖLFLEX® EB	7X1	0.669	125
00124483	ÖLFLEX® EB	7G1	0.669	125
0012446	ÖLFLEX® EB	12X1	0.669	125
0012571	ÖLFLEX® EB	12G1	0.669	125
0012448	ÖLFLEX® EB	18X1	0.669	125
00124480	ÖLFLEX® EB	25G1	0.669	125
0012401	ÖLFLEX® EB	2X1.5	0.639	107
0012402	ÖLFLEX® EB	3X1.5	0.639	119
0012501	ÖLFLEX® EB	3G1.5	0.639	119
0012403	ÖLFLEX® EB	4X1.5	0.639	127
0012502	ÖLFLEX® EB	4G1.5	0.639	127
0012503	ÖLFLEX® EB	5G1.5	0.639	137
0012404	ÖLFLEX® EB	5X1.5	0.639	137
0012504	ÖLFLEX® EB	7G1.5	0.639	137
0012505	ÖLFLEX® EB	12G1.5	0.639	137
0012506	ÖLFLEX® EB	18G1.5	0.639	137
0012507	ÖLFLEX® EB	25G1.5	0.639	137
0012508	ÖLFLEX® EB	3G2.5	0.639	119
0012509	ÖLFLEX® EB	7G2.5	0.639	137

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

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