

# <sup>®</sup> EB

## Application

ÖLFLEX<sup>®</sup> 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<sup>®</sup> EB cables are suitable for occasional, non-automated movements. The maximum tensile load is 15 N/mm<sup>2</sup> 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 DIN EN 60079-14(VDE 0165-1), section 16.2.2 potentially explosive atmosphere.

#### Design

| Design              | based on<br>DIN 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  |
| Core isolation      | LAPP special PVC compound P8/1<br>PVC compound TI2 acc. to DIN EN 50363-3 resp. VDE 0207-363-3 with increased<br>Requirements acc. to Lapp specification |
| Core identification | 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                        |
| Outer sheath        | PVC compound TM2 acc. to DIN EN 50363-4-1 resp. VDE 0207-363-4-1 with increased requirements acc. to Lapp specification colour: blue, similar RAL 5015   |

## Electrical properties at 20°C

| Nominal voltage   | U <sub>0</sub> / U: 300 / 500 V                             |
|-------------------|---|
| Operating voltage | < 50 V AC resp.<br>< 75 V DC in intrinsically safe circuits |
| Test voltage      | core / core: 3000 V AC                                      |

### Mechanical and thermal properties

| Min. bending radius | occasional flexing: 15 x outer diameter<br>fixed installation: 4 x outer diameter   |
|---------------------|---|
| Temperature range   | occasional flexing: -5 °C up to +70 °C max. conductor temp.<br>fixed installation: -40 °C up to +80 °C max. conductor temp.                   |
| Flammability        | flame retardant in acc. with IEC 60332-1-2 resp. VDE 0482-332-1-2   |
| UV-resistance       | acc. to EN 50618 resp. VDE 0283-618<br>acc. to EN 50620 resp. VDE 0285-620<br>acc. to EN ISO 4892-2-2013, method A (change of colour allowed) |
| Tests               | acc. to IEC 60811 resp. VDE 0473-811, VDE 0472, EN 50395, EN 50396  |
| EU Directives       | These cables are conform to the EU Directive 2014/35/EU (Low Voltage Directive)   |