


<b>0012620</b>	<b>DATA SHEET</b>	
<b>valid from: 01.01.2019</b>	<b>UNITRONIC® EB CY (TP)</b>	

## Application

UNITRONIC® EB CY (TP) is a flexible data cable with a blue outer sheath for intrinsically safe circuits for use in explosive areas. The cable meets the requirements of IEC 60079-14 resp. EN 60079-14 resp. VDE 0165-1 where a special marking for cables of hazard protection type -i- (intrinsic safety) is specified. These cables are not allowed to use for other purposes than hazardous (explosive) areas. Cables with blue outer sheath should only be used if no confusion with intrinsically safe circuits is possible. At room temperature they are widely resistant to certain oils and resistant to acids. The cores of are twisted in pairs in order to decouple the conductor circuits and to protect them against the external capacitive influence.

## Design

Design	Design based on standard VDE 0812
Certification	Classification of fire behaviour according to EN 13501-6 and EN 50575 (article/dimension range see <a href="http://www.lappkabel.com/cpr">www.lappkabel.com/cpr</a> )
Conductor	fine wire strands of bare copper wires
Insulation	special PVC based core insulation
Core identification code	according to DIN 47100
Stranding	cores twisted to pairs, pairs are stranded in layers, wrapping with foil on the outer layer
Screen	Braiding with tinned copper wires
Outer sheath	Special PVC based compound colour: blue, similar RAL 5015

## Electrical properties at 20°C

Specific volume resistivity	> 20 G $\Omega$ x cm
Mutual capacitance	C/C: approx. 100 nF/km (at 800 Hz) C/S: approx. 140 nF/km (at 800 Hz)
Inductance	approx. 0.65 mH/km
Capacitive coupling	approx. 300 pF/100 m
Peak operating voltage	900 V (not for power applications)
Test voltage	2500 V AC

## Mechanical and thermal properties

Minimum bending radius	Flexing: 15 x cable $\emptyset$ Fixed installation: 6 x cable $\emptyset$
Temperature range	Occasional flexing: - 5 °C up to +70 °C Fixed installation: -40 °C up to +80 °C
Flammability	flame retardant acc. to IEC 60332-1-2
General requirements	These cable are conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).  These cables (see <a href="http://www.lappkabel.com/cpr">www.lappkabel.com/cpr</a> ) are classified in accordance with the EU-Regulation no. 305/2011 (CPR).

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