

# OB-BL-PAAR-CY outer sheath blue, intrinsic safety, EMC-preferred type, meter marking



HELUKABEL OB-BL-PAAR-CY 4x2x0.5 QMM / 14079 900 V 001042085 CE



## Technical data

- Special PVC control cable with blue outer sheath for hazardous areas to hazard type -i- for intrinsically safe installation acc. to DIN EN 60079-14 and IEC 60079-14 section 12.2.2. (VDE 0165 part 1)
- **Conductor resistance**  
at 0,5 mm<sup>2</sup> 37,8 Ohm/km  
at 0,75 mm<sup>2</sup> 25,3 Ohm/km
- **Temperature range**  
flexing -10°C to +80°C  
fixed installation -30°C to +80°C
- **Operating peak voltage**  
(not for heavy current installation purposes)  
900 V
- **Test voltage**  
core/core 2000 V  
core/screen 1000 V
- **Breakdown voltage** min. 4000 V
- **Insulation resistance**  
min. 20 MOhm x km
- **Mutual capacitance**  
core/core approx. 105 nF/km  
core/screen approx. 145 nF/km
- **Inductance**  
approx. 0,68 mH/km
- **Characteristic impedance**  
approx. 80 Ohm
- **Coupling resistance**  
max. 250 Ohm/km
- **Minimum bending radius**  
flexing 10x cable Ø  
fixed installation 5x cable Ø
- **Radiation resistance**  
up to 80x10<sup>6</sup> cJ/kg (up to 80 Mrad)

## Cable structure

- Bare copper-conductor, to DIN VDE 0295 cl.5, fine-wire, BS 6360 cl.5, IEC 60228 cl.5
- Core insulation special PVC compound type TI2 to DIN VDE 0207-363-3 / DIN EN 50363-3
- Core identification (pair) to DIN 47100
- Cores twisted in pairs
- Pairs stranded in layers with optimal lay-length
- Separating foil
- Tinned copper braided screen, approx. 85% coverage
- Outer sheath of special PVC compound type TM2 to DIN VDE 0207-363-4-1/DIN EN 50363-4-1
- Sheath colour blue (RAL 5015)
- with meter marking

## Properties

- Extensively oil resistant, oil-/chemical resistance see table Technical Informations
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

## Tests

- PVC self-extinguishing and flame retardant acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)

## Note

- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.
- Instrumentation cable RE-2Y(St)Yv with blue outer sheath see Data and Computer Cables

## Application

For hazardous areas this flexible control cable has been constructed for closed circuit systems in accordance with VDE 0165 part 1, part 12. 2. 2. 6, which covers the requirements for the special marking (blue) of this type (hazard type -i-). The paired construction and the copper screening afford a good protection against electrical interference and ensure the transmission of data signals.

**EMC** = Electromagnetic compatibility

To optimize the EMC features we recommend a large round contact of the copper braiding on both ends.

**CE** = The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

Part no.	No.pairs x cross-sec. mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.	Part no.	No.pairs x cross-sec. mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
14077	2 x 2 x 0,5	7,6	47,0	89,0	20	14089	2 x 2 x 0,75	8,6	60,0	105,0	19
14078	3 x 2 x 0,5	8,2	67,0	104,0	20	14090	3 x 2 x 0,75	9,1	80,0	128,0	19
14079	4 x 2 x 0,5	9,0	80,0	126,0	20	14091	4 x 2 x 0,75	10,1	110,0	156,0	19
14080	6 x 2 x 0,5	10,9	108,0	171,0	20	14092	6 x 2 x 0,75	12,4	142,0	216,0	19
14081	8 x 2 x 0,5	12,3	129,0	251,0	20	14093	8 x 2 x 0,75	14,2	200,0	309,0	19
14082	10 x 2 x 0,5	14,2	172,0	282,0	20	14094	10 x 2 x 0,75	16,0	238,0	355,0	19
14083	12 x 2 x 0,5	14,7	235,0	261,0	20	14095	12 x 2 x 0,75	16,8	270,0	405,0	19
14084	16 x 2 x 0,5	16,3	301,0	445,0	20	14096	16 x 2 x 0,75	18,6	342,0	560,0	19
14085	20 x 2 x 0,5	17,7	343,0	525,0	20	14097	20 x 2 x 0,75	21,2	369,0	671,0	19
14086	24 x 2 x 0,5	20,2	394,0	590,0	20	14098	24 x 2 x 0,75	22,8	451,0	795,0	19
14087	25 x 2 x 0,5	20,6	406,0	622,0	20	14099	25 x 2 x 0,75	23,2	461,0	803,0	19

Dimensions and specifications may be changed without prior notice. (RA04)