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

ME01

A

Technical data

- Special PVC control cable with blue outer jacket for hazardous areas to hazard type -i- for intrinsically safe installation according to DIN EN 60079-14 and IEC 60079-14 section 12.2.2. (VDE 0165 part 1)
- **Conductor resistance**
  at 0,5 mm² ≤37,8 Ohm/km
  at 0,75 mm² ≤25,3 Ohm/km
- **Temperature range**
  flexing -5°C to +80°C
  fixed installation -30°C to +80°C
- **Nominal voltage** 900 V
  (not for power installation)
- **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
- **Minimum bending radius**
  flexing 10x cable Ø
  fixed installation 5x cable Ø
- **Radiation resistance**
  up to 80x10⁶ cJ/kg (up to 80 Mrad)
- **Coupling resistance**
  max. 250 Ohm/km

Cable structure

- Bare copper, fine wire conductors, bunch stranded to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Special PVC core insulation YI2, to DIN VDE 0207 part 4
- Cores colour coded according to DIN 47100
- Cores twisted in pairs
- Pairs stranded in layers with optimal lay-length
- Foil taped
- Tinned copper braided screening, approx. 80% coverage
- Special PVC outer sheath YM2, to DIN VDE 0207 part 5
- Colour blue RAL 5015
- with meter marking, change-over in 2009

Properties

- Extensively oil resistant
  Chemical Resistance - see table Technical Informations
- PVC self-extinguishing and flame retardant according to VDE 0482-332-1-2, DIN EN 60332-1-2/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Note

- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- Instrumentation cable RE-2Y(St)Yv with blue outer jacket see catalog part B.

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 compatibillity
To optimise 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/EG.

Part No.	No.pairs x cross-sec. mm²	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
14077	2 x 2 x 0,5	8,0	47,0	89,0	20
14078	3 x 2 x 0,5	8,4	67,0	104,0	20
14079	4 x 2 x 0,5	9,1	80,0	126,0	20
14080	6 x 2 x 0,5	10,7	108,0	171,0	20
14081	8 x 2 x 0,5	13,0	129,0	251,0	20
14082	10 x 2 x 0,5	14,2	172,0	282,0	20
14083	12 x 2 x 0,5	14,4	235,0	261,0	20
14084	16 x 2 x 0,5	17,7	301,0	445,0	20
14085	20 x 2 x 0,5	19,2	343,0	525,0	20
14086	24 x 2 x 0,5	20,7	394,0	590,0	20
14087	25 x 2 x 0,5	20,9	406,0	622,0	20

Part No.	No.pairs x cross-sec. mm²	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
14089	2 x 2 x 0,75	8,7	60,0	105,0	18
14090	3 x 2 x 0,75	9,2	80,0	128,0	18
14091	4 x 2 x 0,75	10,0	110,0	156,0	18
14092	6 x 2 x 0,75	11,1	142,0	216,0	18
14093	8 x 2 x 0,75	14,6	200,0	309,0	18
14094	10 x 2 x 0,75	16,0	238,0	355,0	18
14095	12 x 2 x 0,75	16,4	270,0	405,0	18
14096	16 x 2 x 0,75	20,0	342,0	560,0	18
14097	20 x 2 x 0,75	21,6	369,0	671,0	18
14098	24 x 2 x 0,75	24,3	451,0	795,0	18
14099	25 x 2 x 0,75	24,4	461,0	803,0	18

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