OB-BL-PAAR-CY

for intrinsically safe systems in explosion-endangered areas, EMC-preferred type



TECHNICAL DATA

PVC control cable in alignment with DIN VDE 0285-525-2-51 / DIN EN 50525-2-51

Temperature range	flexible -10°C to +80°C fixed -30°C to +80°C
Peak operating voltage	900 V (not for high power current installation purposes)
Test voltage core/core	2000 V
Test voltage core/screen	1000 V
Breakdown voltage	4000 V
Mutual capacitance core/core	at 800 Hz, approx. 105 pF/m
Mutual capacitance core/screen	at 800 Hz, approx. 145 pF/m
Characteristic impedance	80 Ohm, (approx. value)
Inductance	approx. 0.68 mH/km
Coupling resistance	at 30 MHz, approx. 250 Ohm/km
Minimum bending radius	flexible 10x Outer-Ø fixed 5x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Core insulation: PVC acc. to DIN VDE 0207-363-3 / DIN EN 50363-3 (compound type TI2)
- Core identification acc. to DIN 47100 (paired stranding), colour coded
- x = without protective conductor
- Cores stranded in pairs with optimal lay lengths, Pairs stranded in layers with optimal lay lengths
- Foil wrapping
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Outer sheath: PVC acc. to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM2)
- Sheath colour: blue (RAL 5015)
- Length marking: in metres

PROPERTIES

- largely resistant to: oil, for details, see "Technical Information"
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
- certifications and approvals: EAC

APPLICATION

Used for flexible applications involving medium mechanical stress with free movement, without tensile stress and without forced motion control. For explosion-endangered areas marked as intrinsically safe (blue) (ignition protection type -i-) flexible control or measurement cable for intrinsically safe systems in measurement and control technology. These systems are not earthed and have a separate power circuit. These cables are not suitable for burial in the ground. The screening guarantees an exact data transmission. EMC= Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only
- with blue sheathing for the installation of intrinsically safe systems (ignition protection type -i-) in explosion-endangered areas according to DIN VDE 0165-1 / DIN EN 60079-14 / IEC 60079-14, Section 16.2.2

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
14077	2 x 2 x 0.5	20	7.6	47.0	89.0
14078	3 x 2 x 0.5	20	8.2	67.0	104.0
14079	4 x 2 x 0.5	20	9.0	80.0	126.0
14080	6 x 2 x 0.5	20	10.9	108.0	171.0
14081	8 x 2 x 0.5	20	12.3	129.0	251.0
14082	10 x 2 x 0.5	20	14.2	172.0	282.0
14083	12 x 2 x 0.5	20	14.7	235.0	361.0
14084	16 x 2 x 0.5	20	16.3	301.0	445.0
14085	20 x 2 x 0.5	20	17.7	343.0	525.0
14086	24 x 2 x 0.5	20	20.2	394.0	590.0
14087	25 x 2 x 0.5	20	20.6	406.0	622.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
14089	2 x 2 x 0.75	19	8.6	60.0	105.0
14090	3 x 2 x 0.75	19	9.1	80.0	128.0
14091	4 x 2 x 0.75	19	10.1	110.0	156.0
14092	6 x 2 x 0.75	19	12.4	142.0	216.0
14093	8 x 2 x 0.75	19	14.2	200.0	309.0
14094	10 x 2 x 0.75	19	16.0	238.0	355.0
14095	12 x 2 x 0.75	19	16.8	270.0	405.0
14096	16 x 2 x 0.75	19	18.6	342.0	560.0
14097	20 x 2 x 0.75	19	21.2	369.0	671.0
14098	24 x 2 x 0.75	19	22.8	451.0	795.0
14099	25 x 2 x 0.75	19	23.2	461.0	803.0

17.10.2024 / We reserve the right to make technical changes; the imprint in the image is purely exemplary