

# OZ-BL

for intrinsically safe systems in explosion-endangered areas



HELUKABEL® <VDE-REG 7032> OZ-BL 5x0,75 QMM / 14004 300/500 V CE

## TECHNICAL DATA

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

<b>Temperature range</b>	flexible -15°C to +80°C fixed -40°C to +80°C
<b>Nominal voltage</b>	AC U <sub>0</sub> /U 300/500 V
<b>Test voltage core/core</b>	3000 V
<b>Breakdown voltage</b>	6000 V
<b>Mutual capacitance core/core</b>	at 800 Hz, approx. 120 pF/m
<b>Inductance</b>	approx. 0.68 mH/km
<b>Minimum bending radius</b>	flexible 7.5x Outer-Ø fixed 4x Outer-Ø

## CABLE STRUCTURE

- Copper wire bare, finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Core insulation: PVC, compound type Z 7225
- Core identification acc. to DIN VDE 0293-334, black cores with consecutive labeling in white digits
- x = without protective conductor (OZ)
- Cores stranded in layers with optimal lay lengths
- 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

- resistant to: UV radiation, weathering effects
- largely resistant to: oil,  
for details, see "Technical Information"

- for outdoor use
- 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
- UV-resistant acc. to DIN EN ISO 4892-2
- weather-resistant acc. to DIN EN ISO 4892-2
- certifications and approvals:  
EAC  
VDE-Reg.-No. 7032, valid for temperature range up to +70°C

## 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.

## NOTES

- the conductor is metrically (mm<sup>2</sup>) 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. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
14001	2 x 0.75	19	5.3	14.4	46.0
14002	3 x 0.75	19	5.6	21.6	54.0
14003	4 x 0.75	19	6.3	29.0	66.0
14004	5 x 0.75	19	6.9	36.0	80.0
14075	7 x 0.75	19	7.7	52.0	110.0
14005	8 x 0.75	19	8.3	58.0	130.0
14076	12 x 0.75	19	10.1	88.0	179.0
14006	18 x 0.75	19	12.2	130.0	257.0
14007	25 x 0.75	19	14.3	180.0	365.0
14008	30 x 0.75	19	15.3	215.0	448.0
14009	34 x 0.75	19	16.7	245.0	510.0
14010	41 x 0.75	19	18.1	298.0	607.0
14011	2 x 1	18	5.6	19.0	60.0
14012	3 x 1	18	6.1	29.0	72.0
14013	4 x 1	18	6.6	38.0	86.0
14014	5 x 1	18	7.5	48.0	104.0

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
14015	7 x 1	18	8.1	67.0	141.0
14016	12 x 1	18	10.9	115.0	230.0
14017	18 x 1	18	12.9	173.0	343.0
14018	25 x 1	18	15.4	240.0	485.0
14019	2 x 1.5	16	6.4	29.0	70.0
14020	3 x 1.5	16	6.8	43.0	90.0
14021	4 x 1.5	16	7.6	58.0	109.0
14022	5 x 1.5	16	8.3	72.0	131.0
14023	7 x 1.5	16	9.2	101.0	184.0
14024	12 x 1.5	16	12.4	173.0	309.0
14025	18 x 1.5	16	14.8	259.0	440.0
14026	25 x 1.5	16	17.6	360.0	620.0
14027	30 x 1.5	16	18.6	440.0	842.0
14100	3 x 2.5	14	8.3	72.0	148.0
14101	4 x 2.5	14	9.2	96.0	178.0
14102	5 x 2.5	14	10.1	120.0	221.0