

JZ-500-FC-PUR / OZ-500-FC-PUR

EMC-preferred type, without an inner sheath



HELUKABEL® JZ-500-FC-PUR 4G2,5 QMM / 23475 300/500 V CE

TECHNICAL DATA

PUR control and connection cable in alignment with DIN VDE 0285-525-1 / DIN EN 50525-1

Temperature range	flexible -10°C to +80°C fixed -40°C to +80°C
Nominal voltage	AC U ₀ /U 300/500 V
Test voltage core/core	3000 V
Breakdown voltage	6000 V
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 T12)
- Core identification acc. to DIN VDE 0293-334, black cores with consecutive labeling in white digits
- Protective conductor: starting with 3 cores, G = with protective conductor GN-YE, in the outer layer, x = without protective conductor (OZ)
- Cores stranded in layers with optimal lay lengths
- Foil wrapping
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Fleece wrapping
- Outer sheath: Special grade of full polyurethane acc. to DIN VDE 0207-363-10-2 / DIN EN 50363-10-2 (compound type TMPU)
- Sheath colour: grey (RAL 7001)
- Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation, ozone, oxygen, weathering effects, hydrolysis, microbes, coolants, hydraulic fluids, acids, alkalis, greases, seawater and wastewater
- highly abrasion-resistant, notch-resistant, tear-resistant, cut-resistant, wear-resistant, low adhesion
- 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

- oil-resistant acc. to DIN VDE 0473-81 1-404 / DIN EN 60811-404 / IEC 60811-404
- UV-resistant acc. to DIN EN ISO 4892-2
- weather-resistant acc. to DIN EN ISO 4892-2
- certifications and approvals: EAC

APPLICATION

Highly abrasion-resistant, notch-resistant and therefore extremely robust control cable; for flexible use involving medium mechanical stress and free movement without tensile stress and without forced movement in dry, damp and wet rooms as well as outdoors. For use in machine, tool and plant construction, in rolling mills and steelworks. Can be installed quickly and safely thanks to its good flexibility. The high shielding density enables interference-free transmission of signals and pulses. 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

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
23414	2 x 0.5	20	5.6	35.0	47.0
23415	3 G 0.5	20	5.9	42.0	57.0
23416	3 x 0.5	20	5.9	42.0	57.0
23417	4 G 0.5	20	6.4	47.0	60.0
23418	4 x 0.5	20	6.4	47.0	60.0
23419	5 G 0.5	20	6.9	56.0	75.0
23420	5 x 0.5	20	6.9	56.0	75.0
23421	7 G 0.5	20	7.6	69.0	97.0
23422	7 x 0.5	20	7.6	69.0	97.0
23423	10 G 0.5	20	9.5	94.0	133.0
23424	12 G 0.5	20	9.8	108.0	158.0
23425	18 G 0.5	20	11.5	145.0	218.0
23426	25 G 0.5	20	13.5	240.0	315.0
23427	34 G 0.5	20	15.5	312.0	420.0
23428	42 G 0.5	20	16.9	355.0	487.0
23429	2 x 0.75	19	6.1	40.0	60.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
23430	3 G 0.75	19	6.4	52.0	67.0
23431	3 x 0.75	19	6.4	52.0	67.0
23432	4 G 0.75	19	7.0	60.0	76.0
23433	4 x 0.75	19	7.0	60.0	76.0
23434	5 G 0.75	19	7.6	71.0	92.0
23435	5 x 0.75	19	7.6	71.0	92.0
23436	7 G 0.75	19	8.2	91.0	131.0
23437	7 x 0.75	19	8.2	91.0	131.0
23438	10 G 0.75	19	10.3	137.0	180.0
23439	12 G 0.75	19	10.6	142.0	204.0
23440	18 G 0.75	19	12.7	212.0	290.0
23441	25 G 0.75	19	15.2	281.0	413.0
23442	34 G 0.75	19	17.8	345.0	492.0
23443	42 G 0.75	19	19.3	407.0	624.0
23444	2 x 1	18	6.5	50.0	66.0
23445	3 G 1	18	6.9	60.0	82.0

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Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
23446	3 x 1	18	6.9	60.0	82.0
23447	4 G 1	18	7.4	71.0	100.0
23448	4 x 1	18	7.4	71.0	100.0
23449	5 G 1	18	8.0	88.0	128.0
23450	5 x 1	18	8.0	88.0	128.0
23451	7 G 1	18	8.8	111.0	157.0
23452	7 x 1	18	8.8	111.0	157.0
23453	10 G 1	18	11.3	150.0	230.0
23454	12 G 1	18	11.7	184.0	262.0
23455	18 G 1	18	13.8	260.0	381.0
23456	25 G 1	18	16.3	349.0	535.0
23457	34 G 1	18	18.6	486.0	740.0
23458	42 G 1	18	20.4	545.0	867.0
23459	50 G 1	18	22.2	625.0	1027.0
23460	2 x 1.5	16	7.1	63.0	87.0
23461	3 G 1.5	16	7.5	80.0	102.0
23462	3 x 1.5	16	7.5	80.0	102.0
23463	4 G 1.5	16	8.1	97.0	127.0
23464	4 x 1.5	16	8.1	97.0	127.0
23465	5 G 1.5	16	9.0	119.0	159.0
23466	5 x 1.5	16	9.0	119.0	159.0
23467	7 G 1.5	16	9.9	147.0	207.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
23468	7 x 1.5	16	9.9	147.0	207.0
23469	12 G 1.5	16	13.1	267.0	340.0
23470	18 G 1.5	16	15.5	374.0	480.0
23471	25 G 1.5	16	18.1	526.0	704.0
23472	30 G 1.5	16	19.5	555.0	817.0
23473	2 x 2.5	14	8.5	96.0	131.0
23474	3 G 2.5	14	9.0	144.0	168.0
23475	4 G 2.5	14	9.8	148.0	194.0
23476	5 G 2.5	14	10.8	181.0	222.0
23477	7 G 2.5	14	11.9	255.0	345.0
23478	12 G 2.5	14	16.0	441.0	570.0
23479	4 G 4	12	11.6	230.0	310.0
23480	5 G 4	12	12.8	273.0	386.0
23481	7 G 4	12	14.3	316.0	498.0
23482	4 G 6	10	14.2	305.0	414.0
23483	5 G 6	10	15.4	439.0	510.0
23484	7 G 6	10	17.0	505.0	673.0
23485	4 G 10	8	17.3	535.0	591.0
23486	5 G 10	8	19.0	592.0	768.0
23487	7 G 10	8	21.1	810.0	976.0
23488	4 G 16	6	20.3	740.0	1196.0