

# JZ 500-FC-PUR

EMC-preferred type, tear and coolant resistant,  
screened, without inner sheath



HELUKABEL JZ-500-FC-PUR 4G 2,5 QMM / 23475 300/500V 001051019



## Technical data

- Special polyurethane sheathed cable adapted to DIN VDE 0245 part 201 to 1,5 mm<sup>2</sup>, adapted to DIN VDE 0245 part 102 from 2,5 mm<sup>2</sup>
- **Temperature range**  
flexing -5°C to +80°C  
fixed installation -40°C to +80°C
- **Nominal voltage** U<sub>0</sub>/U 300/500 V
- **Test voltage** 3000 V
- **Breakdown voltage**  
min. 6000 V
- **Minimum bending radius**  
flexing 10x cable Ø  
fixed installation 5x cable Ø
- **Radiation resistance**  
up to 100x10<sup>6</sup> cJ/kg (up to 100 Mrad)
- **Coupling resistance**  
max. 250 Ohm/km

## Cable construction

- Bare copper conductor, fine wire to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and/or IEC 60228 cl. 5
- Core insulation of special PVC Z7225
- Black cores with continuous white numbering according to DIN VDE 0293
- Green-yellow earth core in the outer layer (3 cores and above)
- Cores stranded in layers with optimal lay-length
- Separating foil
- Tinned copper braided screening, coverage approx. 85%
- Core wrapping from fleece guarantees good stripping capability
- Outer sheath from special **full polyurethane** TMPU acc. to DIN VDE 0282 part 10, appendix A
- Sheath colour grey (RAL 7001)
- Also available in other sheath colours

## Properties

- **Resistant to**  
UV-radiation  
Oxygen  
Ozone  
Hydrolyse  
Microbes
- self-extinguishing and flame retardant according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ 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

- G = with green-yellow earth core;  
x = without green-yellow earth core (OZ).

## Application

Extremely robust cable noted for its good abrasion resistance and notch resistance. Due to its resistance to coolant emulsions, this cable is well suited for use in mechanical engineering, tool making, and systems engineering, and in steel mills and rolling mills in particularly critical areas. Good flexibility means that installation is quick and easy. Suitable for medium mechanical stresses with free movement without tensile stress or forced movements in dry, moist and wet rooms, and in open air (fixed installation). The dense screening assures interference-free transmission of all signals and impulses. An ideal interference-free control cable for the above applications.

**EMC** = Electromagnetic compatibility

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

**CE** = The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
23414	2 x 0,5	5,3	29,0	47,0	20
23416	3 x 0,5	5,6	38,0	57,0	20
23415	3 G 0,5	5,6	38,0	57,0	20
23417	4 G 0,5	6,2	46,0	60,0	20
23418	4 x 0,5	6,2	46,0	60,0	20
23420	5 x 0,5	6,5	51,0	75,0	20
23419	5 G 0,5	6,5	51,0	75,0	20
23421	7 G 0,5	7,5	68,0	97,0	20
23422	7 x 0,5	7,5	68,0	97,0	20
23423	10 G 0,5	9,0	93,0	133,0	20
23424	12 G 0,5	9,2	118,0	158,0	20
23425	18 G 0,5	10,9	155,0	218,0	20
23426	25 G 0,5	13,3	251,0	315,0	20
23427	34 G 0,5	15,0	302,0	420,0	20
23428	42 G 0,5	16,2	347,0	487,0	20

Part No.	No. cores x cross-sec. mm <sup>2</sup>	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
23429	2 x 0,75	5,8	38,0	60,0	18
23431	3 x 0,75	6,1	50,0	67,0	18
23430	3 G 0,75	6,1	50,0	67,0	18
23432	4 G 0,75	6,5	58,0	76,0	18
23433	4 x 0,75	6,5	58,0	76,0	18
23435	5 x 0,75	7,1	70,0	92,0	18
23434	5 G 0,75	7,1	70,0	92,0	18
23436	7 G 0,75	8,3	96,0	131,0	18
23437	7 x 0,75	8,3	96,0	131,0	18
23438	10 G 0,75	10,1	141,0	180,0	18
23439	12 G 0,75	10,3	151,0	204,0	18
23440	18 G 0,75	12,1	207,0	290,0	18
23441	25 G 0,75	14,9	278,0	413,0	18
23442	34 G 0,75	16,6	350,0	492,0	18
23443	42 G 0,75	17,9	402,0	624,0	18

Dimensions and specifications may be changed without prior notice.

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