

# BIOFLEX-500® -JZ-HF-C

Bio-fuel resistant, abrasion resistant,  
recyclable environment friendly, bio-oil resistant<sup>1)</sup>, cable for drag chains, Cu-screened,  
EMC-preferred type



## Technical data

- Bio-oil resistant, abrasion resistant special high flexible control cable in adapted to DIN VDE 0245, 0281
- **Temperature range**  
flexing -20°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
- **Insulation resistance**  
min. 20 MΩm x km
- **Minimum bending radius**  
flexing 15x cable Ø  
fixed installation 4x cable Ø
- **Coupling resistance**  
max. 250 Ωm/km
- **Radiation resistance**  
up to 100x10<sup>6</sup> cJ/kg (up to 100 Mrad)

## Cable construction

- Bare copper, extra fine wire conductors, bunch stranded to DIN VDE 0295 cl. 6, BS 6360 cl. 6 and IEC 60228 cl. 6
- Special polymer core insulation, for better sliding abilities
- Black cores with continuous white figure imprint to DIN VDE 0293
- Green-yellow earth core in the outer layer (3 cores and above)
- Cores stranded in layers with optimal selected lay-length
- Core wrapping with fleece
- Special inner sheath
- Copper braided screening approx. 85% coverage
- Fleece separator, ensure good dismantling ability
- Special outer sheath polymer compound
- Colour dark green

## Properties

- **Resistant to**  
Bio-fuel (diesel and petrol), highly resistant to biologically decomposable oils, Oxygene, Ozone, Hydrolysis and Microbes
- Low adhesion

## Note

- G = with green-yellow earth core;  
x = without green-yellow earth core (0Z).
- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.

## Application

HELUKABEL® BIOFLEX-HF-500-C is an extremely robust and high flexible control cable with high abrasion and tear resistant properties. Due to its high resistance to Bio-fuel, Bio-oil and coolant emulsions. It is especially suited for use in the machine, tool making and plant industries as well as in the steel industry for difficult and problem areas. Suitable in combination with cable trays in dry, moist and wet rooms and outdoor installation. The high flexibility of this cable type makes it quick and easy to install. Suitable for outdoor lying. These screened cables are particularly suitable for the interference-free transmission in instrumentation and control engineering applications (electromagnetic compatibility). For the critical applications we advise for consultation. For applications which go beyond standard solutions (for example for composting appliances or high shelf conveyors with extremely high processing speeds etc.) we recommend for our especially developed enquiry sheet for energy guiding systems. Before installation in cable trays please read the instructions. Further technical details see selection table for drag chain cables, see lead text.

**EMC** = Electromagnetic compatibility

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 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.
25826	2 x 0,5	7,5	47,0	90,0	20
25827	3 G 0,5	7,8	52,0	104,0	20
25828	4 G 0,5	8,2	55,0	123,0	20
25829	5 G 0,5	9,9	65,0	131,0	20
25830	7 G 0,5	10,0	84,0	172,0	20
25831	10 G 0,5	11,3	115,0	230,0	20
25832	12 G 0,5	12,5	117,0	250,0	20
25833	14 G 0,5	13,2	148,0	280,0	20
25834	18 G 0,5	14,5	157,0	321,0	20
25835	25 G 0,5	16,8	227,0	445,0	20
25836	2 x 0,75	8,3	53,0	106,0	18
25837	3 G 0,75	8,5	62,0	120,0	18
25838	4 G 0,75	9,5	77,0	150,0	18
25839	5 G 0,75	10,8	86,0	158,0	18
25840	7 G 0,75	11,5	107,0	205,0	18
25841	10 G 0,75	13,1	148,0	290,0	18
25842	12 G 0,75	14,0	156,0	304,0	18
25843	14 G 0,75	15,3	214,0	380,0	18
25844	18 G 0,75	17,3	235,0	418,0	18
25845	25 G 0,75	18,7	313,0	578,0	18

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.
25846	2 x 1	10,0	60,0	116,0	17
25847	3 G 1	10,2	70,0	135,0	17
25848	4 G 1	11,0	86,0	178,0	17
25849	5 G 1	11,8	99,0	188,0	17
25850	7 G 1	12,7	125,0	235,0	17
25851	10 G 1	14,6	178,0	340,0	17
25852	12 G 1	15,5	186,0	358,0	17
25853	14 G 1	16,7	250,0	415,0	17
25854	18 G 1	18,0	280,0	500,0	17
25855	25 G 1	21,0	378,0	678,0	17
25856	2 x 1,5	10,5	79,0	141,0	16
25857	3 G 1,5	10,8	94,0	164,0	16
25858	4 G 1,5	11,5	113,0	220,0	16
25859	5 G 1,5	12,5	129,0	233,0	16
25860	7 G 1,5	13,2	170,0	323,0	16
25861	8 G 1,5	14,4	226,0	369,0	16
25862	10 G 1,5	14,9	258,0	461,0	16
25863	12 G 1,5	16,2	280,0	481,0	16
25864	14 G 1,5	18,1	340,0	561,0	16
25865	18 G 1,5	20,3	395,0	672,0	16
25866	21 G 1,5	21,7	461,0	780,0	16

Dimensions and specifications may be changed without prior notice.

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