

BIOFLEX-500®-JZ Bio-fuel resistant, abrasion resistant, recyclable environment friendly, bio-oil resistant¹⁾, meter marking

A



Technical data

- Bio-oil resistant, abrasion resistant special control cable in adapted to DIN VDE 0281
- **Temperature range**
flexing -20 °C to +80 °C
fixed installation -40 °C to +80 °C
- **Nominal voltage** U₀/U 300/500 V
- **Test voltage** 3000 V
- **Insulation resistance**
min. 20 MOhm x km
- **Minimum bending radius**
flexing 15x cable ø
fixed installation 4x cable ø
- **Radiation resistance**
up to 100x10⁶ cJ/kg (up to 100 Mrad)

Cable structure

- Bare copper, fine wire conductors, bunch stranded to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Special polymer core insulation
- 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 lay-length
- Special outer sheath, polymer compound
- Colour dark green
- with meter marking, change-over in 2011

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 (OZ).
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- **screened analogue type:**
BIOFLEX-500®-JZ-C, see page A 85

Application

HELUKABEL® BIOFLEX-500-JZ is an extremely robust 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. The high flexibility of this cable type makes it quick and easy to install. Suitable for outdoor lying.

¹⁾ For the critical applications we advise for consultation.

CE= The product is conformed with the EC Low-Voltage Directive 2006/95/EG.

| Part no. | No. cores x cross-sec. mm ² | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. | Part no. | No. cores x cross-sec. mm ² | Outer Ø approx. mm | Cop. weight kg / km | Weight approx. kg / km | AWG-No. |
|----------|--|--------------------|---------------------|------------------------|---------|----------|--|--------------------|---------------------|------------------------|---------|
| 25620 | 2 x 0,5 | 5,4 | 9,6 | 45,0 | 20 | 25654 | 2 x 1,5 | 7,2 | 29,0 | 68,0 | 16 |
| 25621 | 3 G 0,5 | 5,9 | 14,4 | 55,0 | 20 | 25655 | 3 G 1,5 | 7,6 | 43,0 | 87,0 | 16 |
| 25622 | 4 G 0,5 | 6,3 | 19,0 | 65,0 | 20 | 25656 | 4 G 1,5 | 8,2 | 58,0 | 106,0 | 16 |
| 25623 | 5 G 0,5 | 6,9 | 24,0 | 75,0 | 20 | 25657 | 5 G 1,5 | 9,0 | 72,0 | 131,0 | 16 |
| 25624 | 7 G 0,5 | 7,8 | 33,6 | 90,0 | 20 | 25658 | 7 G 1,5 | 10,7 | 101,0 | 173,0 | 16 |
| 25625 | 10 G 0,5 | 9,6 | 48,0 | 120,0 | 20 | 25659 | 10 G 1,5 | 13,0 | 144,0 | 245,0 | 16 |
| 25626 | 12 G 0,5 | 10,0 | 58,0 | 135,0 | 20 | 25660 | 12 G 1,5 | 13,4 | 173,0 | 293,0 | 16 |
| 25627 | 14 G 0,5 | 10,3 | 67,0 | 170,0 | 20 | 25661 | 14 G 1,5 | 14,5 | 202,0 | 347,0 | 16 |
| 25628 | 18 G 0,5 | 11,5 | 86,0 | 205,0 | 20 | 25662 | 18 G 1,5 | 16,0 | 259,0 | 454,0 | 16 |
| 25629 | 25 G 0,5 | 13,6 | 120,0 | 270,0 | 20 | 25663 | 25 G 1,5 | 19,5 | 360,0 | 641,0 | 16 |
| 25630 | 2 x 0,75 | 5,4 | 14,4 | 44,0 | 18 | 25664 | 42 G 1,5 | 23,8 | 605,0 | 1100,0 | 16 |
| 25631 | 3 G 0,75 | 6,2 | 21,6 | 53,0 | 18 | 25665 | 2 x 2,5 | 8,6 | 48,0 | 110,0 | 14 |
| 25632 | 4 G 0,75 | 6,7 | 29,0 | 64,0 | 18 | 25666 | 3 G 2,5 | 9,3 | 72,0 | 146,0 | 14 |
| 25633 | 5 G 0,75 | 7,3 | 36,0 | 76,0 | 18 | 25667 | 4 G 2,5 | 10,3 | 96,0 | 183,0 | 14 |
| 25634 | 7 G 0,75 | 8,8 | 50,0 | 96,0 | 18 | 25668 | 5 G 2,5 | 11,5 | 120,0 | 222,0 | 14 |
| 25635 | 10 G 0,75 | 10,5 | 72,0 | 140,0 | 18 | 25669 | 7 G 2,5 | 13,4 | 168,0 | 293,0 | 14 |
| 25636 | 12 G 0,75 | 11,0 | 86,0 | 170,0 | 18 | 25670 | 12 G 2,5 | 17,0 | 288,0 | 512,0 | 14 |
| 25637 | 14 G 0,75 | 11,4 | 101,0 | 202,0 | 18 | 25671 | 18 G 2,5 | 20,0 | 432,0 | 740,0 | 14 |
| 25638 | 18 G 0,75 | 12,6 | 130,0 | 260,0 | 18 | 25672 | 25 G 2,5 | 24,1 | 600,0 | 940,0 | 14 |
| 25639 | 25 G 0,75 | 15,2 | 180,0 | 282,0 | 18 | 25673 | 2 x 4 | 10,4 | 77,0 | 147,0 | 12 |
| 25640 | 41 G 0,75 | 18,0 | 296,0 | 600,0 | 18 | 25674 | 3 G 4 | 11,2 | 115,0 | 228,0 | 12 |
| 25641 | 42 G 0,75 | 18,5 | 310,0 | 620,0 | 18 | 25675 | 4 G 4 | 12,5 | 154,0 | 291,0 | 12 |
| 25642 | 2 x 1 | 6,6 | 19,0 | 53,0 | 17 | 25676 | 5 G 4 | 13,8 | 192,0 | 355,0 | 12 |
| 25643 | 3 G 1 | 7,0 | 29,0 | 63,0 | 17 | 25677 | 3 G 6 | 13,0 | 173,0 | 362,0 | 10 |
| 25644 | 4 G 1 | 7,6 | 38,0 | 75,0 | 17 | 25678 | 4 G 6 | 14,7 | 230,0 | 468,0 | 10 |
| 25645 | 5 G 1 | 8,2 | 48,0 | 89,0 | 17 | 25679 | 5 G 6 | 16,0 | 288,0 | 570,0 | 10 |
| 25646 | 7 G 1 | 9,6 | 67,0 | 115,0 | 17 | 25680 | 3 G 10 | 16,7 | 288,0 | 555,0 | 8 |
| 25647 | 10 G 1 | 11,6 | 96,0 | 166,0 | 17 | 25681 | 4 G 10 | 18,3 | 384,0 | 720,0 | 8 |
| 25648 | 12 G 1 | 12,0 | 115,0 | 201,0 | 17 | 25682 | 5 G 10 | 20,5 | 480,0 | 894,0 | 8 |
| 25649 | 14 G 1 | 13,2 | 134,0 | 230,0 | 17 | 25683 | 4 G 16 | 21,1 | 614,0 | 1063,0 | 6 |
| 25650 | 18 G 1 | 14,5 | 173,0 | 289,0 | 17 | 25684 | 5 G 16 | 23,6 | 768,0 | 1400,0 | 6 |
| 25651 | 25 G 1 | 17,6 | 240,0 | 380,0 | 17 | 25685 | 4 G 25 | 29,4 | 960,0 | 1590,0 | 4 |
| 25652 | 41 G 1 | 21,1 | 394,0 | 720,0 | 17 | 25686 | 4 G 35 | 32,8 | 1344,0 | 2200,0 | 2 |
| 25653 | 42 G 1 | 21,5 | 403,0 | 740,0 | 17 | 25687 | 4 G 50 | 38,9 | 1920,0 | 2400,0 | 1 |
| | | | | | | 25688 | 4 G 70 | 44,7 | 2688,0 | 4400,0 | 2/0 |
| | | | | | | 25689 | 4 G 95 | 59,6 | 3648,0 | 6000,0 | 3/0 |
| | | | | | | 25690 | 4 G 120 | 64,5 | 4608,0 | 7400,0 | 4/0 |

Dimensions and specifications may be changed without prior notice. (RA05)