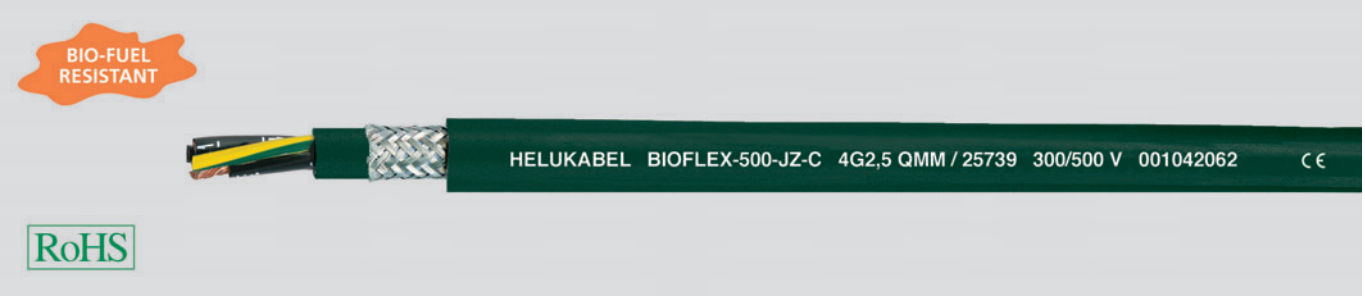
BIOFLEX-500®-JZ-C Bio-fuel resistant, abrasion resistant, recyclable

environment friendly, bio-oil resistant[1], Cu-screened, EMC-preferred type, meter marking



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** U_0/U 300/500 V
- **Test voltage** 3000 V
- **Insulation resistance**
  min. 20 MOhm x km
- **Minimum bending radius**
  flexing 20x cable ø
  fixed installation 6x cable ø
- **Coupling resistance**
  max. 250 Ohm/km
- **Radiation resistance**
  up to 100x10⁶cJ/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 inner sheath
- Screen of Cu braid, tinned coverage approx. 85%
- Fleece separator, ensure good dismantling ability
- Special outher 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.
- unscreened analogue type:
  BIOFLEX-500®-JZ, see page A 84

Application

HELUKABEL® BIOFLEX-500-JZ-C 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 inner sheaths of those cables raise the mecanical stress. 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). [1] For the critical applications we advise for consultation.

EMC = Electromagnetic compatibillity

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 2006/95/EG.

Part no.	No.cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
25691	2 x 0,5	6,6	41,0	68,0	20
25692	3 G 0,5	7,1	45,0	84,0	20
25693	4 G 0,5	7,6	54,0	95,0	20
25694	5 G 0,5	8,2	66,0	107,0	20
25695	7 G 0,5	9,4	79,0	135,0	20
25696	10 G 0,5	11,2	107,0	170,0	20
25697	12 G 0,5	11,3	137,0	195,0	20
25698	14 G 0,5	11,9	142,0	222,0	20
25699	18 G 0,5	12,9	156,0	278,0	20
25700	25 G 0,5	15,9	250,0	406,0	20
25701	2 x 0,75	7,2	46,0	88,0	18
25702	3 G 0,75	7,7	57,0	98,0	18
25703	4 G 0,75	8,2	63,0	112,0	18
25704	5 G 0,75	8,8	76,0	130,0	18
25705	7 G 0,75	10,1	100,0	185,0	18
25706	10 G 0,75	12,2	140,0	270,0	18
25707	12 G 0,75	12,3	175,0	294,0	18
25708	14 G 0,75	13,0	190,0	317,0	18
25709	18 G 0,75	14,6	240,0	357,0	18
25710	25 G 0,75	17,8	306,0	510,0	18
25711	41 G 0,75	21,5	403,0	951,0	18
25712	42 G 0,75	22,0	410,0	975,0	18

Part no.	No.cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
25713	2 x 1	8,1	54,0	98,0	17
25714	3 G 1	8,5	64,0	102,0	17
25715	4 G 1	9,0	76,0	145,0	17
25716	5 G 1	9,9	89,0	170,0	17
25717	7 G 1	11,6	114,0	220,0	17
25718	10 G 1	14,0	156,0	330,0	17
25719	12 G 1	14,4	186,0	350,0	17
25720	14 G 1	15,0	198,0	402,0	17
25721	18 G 1	17,0	284,0	515,0	17
25722	25 G 1	20,6	387,0	690,0	17
25723	41 G 1	25,0	578,0	1070,0	17
25724	42 G 1	25,5	590,0	1096,0	17
25725	2 x 1,5	8,5	64,0	130,0	16
25726	3 G 1,5	8,9	82,0	152,0	16
25727	4 G 1,5	9,7	99,0	167,0	16
25728	5 G 1,5	10,8	123,0	203,0	16
25729	7 G 1,5	12,5	148,0	305,0	16
25730	10 G 1,5	15,1	198,0	422,0	16
25731	12 G 1,5	15,5	274,0	435,0	16
25732	14 G 1,5	16,1	294,0	480,0	16
25733	18 G 1,5	18,6	386,0	642,0	16
25734	25 G 1,5	22,1	531,0	803,0	16

Continuation ▸

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Part no.	No.cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
25735	41 G 1,5	27,2	840,0	1360,0	16
25736	42 G 1,5	27,5	890,0	1375,0	16
25737	2 x 2,5	10,6	110,0	180,0	14
25738	3 G 2,5	11,1	148,0	215,0	14
25739	4 G 2,5	12,1	169,0	268,0	14
25740	5 G 2,5	13,2	220,0	349,0	14
25741	7 G 2,5	15,9	284,0	406,0	14
25742	12 G 2,5	19,5	470,0	720,0	14
25743	2 x 4	12,6	124,0	300,0	12
25744	3 G 4	13,4	178,0	340,0	12
25745	4 G 4	15,0	234,0	408,0	12
25746	5 G 4	16,4	284,0	504,0	12
25747	3 G 6	15,2	245,0	453,0	10

Part no.	No.cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
25748	4 G 6	17,0	316,0	560,0	10
25749	5 G 6	18,6	442,0	700,0	10
25750	3 G 10	19,5	367,0	750,0	8
25751	4 G 10	21,5	549,0	1023,0	8
25752	5 G 10	23,9	604,0	1114,0	8
25753	4 G 16	24,6	807,0	1385,0	6
25754	5 G 16	27,3	940,0	1550,0	6
25755	4 G 25	30,6	1169,0	1894,0	4
25756	4 G 35	36,9	1680,0	2395,0	2
25757	4 G 50	41,3	2370,0	3312,0	1
25758	4 G 70	48,8	3257,0	4605,0	2/0
25759	4 G 95	61,8	4060,0	6055,0	3/0
25760	4 G 120	65,7	5231,0	7318,0	4/0

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