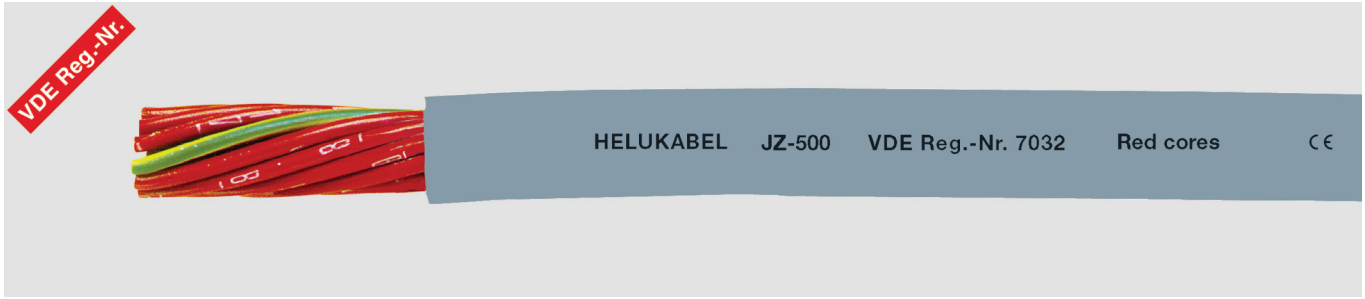
HELUKABEL® JZ-500

red cores, flexible, number coded

[2])



Technical data

- Control cables, special PVC
- Requirements adapted to DIN VDE 0245, 0281, 0293, 0295
- **Temperature range**
  flexing – 5°C to +80°C
  fixed installation –40°C to +80°C
- **Nominal voltage** U_0/U 300/500 V
- **Test voltage** 4000 V
- **Insulation resistance**
  min. 20 MOhm x km
- **Minimum bending radius**
  for permanent approx. 7,5 x cable ∅
- **Radiation resistance**
  up to 80 x 10^6 cJ/kg (up to 80 Mrad)

[2]) Cleanroom quality tested on analog type, further informations on page 7.

Cable structure

- Bare copper, fine wire conductors, according to DIN VDE 0295 cl. 5 and IEC 60228 cl. 5
- Core insulation of special PVC Z 7225
- Red cores with continuous white numbering according to DIN VDE 0293 (also available with other core colours)
- Green-yellow earth core in the outer layer (3 cores and above)
- Cores stranded in layers with optimal lay-lenght
- Outer sheath of special PVC, TM2 to DIN VDE 0281 part 1 and HD 21.1, colour grey
- PVC self-extinguishing and flame retardant, test method B according to VDE 0472 part 804 and IEC 60332-1

Application

These cables are used for flexible use for medium mechanical stresses with free movement without tensile stress or forced movements in dry, moist and wet rooms but not suitable for open air, as measuring and control cables in tool machines, conveyor belts, production lines in machinery production, in air-conditioning and in steel production. The cores have been numbered in such a way that there is no difficulty in recognising them, even if only a small piece of sheathing has been removed. The numbers have been underlined to avoid confusion. The earth core is laid in the outer layer. Selected PVC-compounds guarantee a good flexibility as well as an economic and fast installation.

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. mm²	Outer ∅ ca. mm	Cop. weight kg/km	Weight ca. kg/km	AWG-no.*)
10400 OZ	2 x 0,5	4,8	9,6	40	20
10401	3 G 0,5	5,1	14,4	46	20
10402	4 G 0,5	5,7	19,0	56	20
10403	5 G 0,5	6,2	24,0	65	20
10404	6 G 0,5	6,7	29,0	75	20
10405	7 G 0,5	7,4	33,6	80	20
10406	8 G 0,5	8,0	38,0	97	20
10407	10 G 0,5	8,8	48,0	116	20
10408	12 G 0,5	9,1	58,0	135	20
10409	14 G 0,5	9,5	67,0	150	20
10410	18 G 0,5	10,7	86,0	196	20
10411	20 G 0,5	11,2	96,0	215	20
10412	21 G 0,5	11,8	96,0	240	20
10413	25 G 0,5	13,0	120,0	270	20
10414	30 G 0,5	13,5	144,0	310	20
10415	32 G 0,5	14,0	154,0	323	20
10416	34 G 0,5	14,5	163,0	362	20
10417	40 G 0,5	15,8	192,0	434	20
10418	42 G 0,5	15,8	202,0	449	20
10419	50 G 0,5	17,3	240,0	513	20
10420	61 G 0,5	19,4	293,0	625	20
10421	65 G 0,5	19,4	312,0	682	20
10422	80 G 0,5	21,3	384,0	780	20
10423	100 G 0,5	23,7	480,0	980	20
10424 OZ	2 x 0,75	5,2	14,4	46	18
10425	3 G 0,75	5,5	21,6	54	18
10426	4 G 0,75	6,2	29,0	66	18
10427	5 G 0,75	6,8	36,0	80	18
10428	6 G 0,75	7,5	43,0	99	18
10429	7 G 0,75	8,1	50,0	110	18
10430	8 G 0,75	8,9	58,0	130	18
10431	9 G 0,75	9,5	65,0	153	18
10432	10 G 0,75	9,6	72,0	162	18
10433	12 G 0,75	9,9	86,0	179	18
10434	14 G 0,75	10,6	101,0	214	18
10435	15 G 0,75	11,2	108,0	218	18
10436	18 G 0,75	11,9	130,0	257	18
10437	20 G 0,75	12,6	144,0	286	18
10438	21 G 0,75	13,3	151,0	320	18
10439	25 G 0,75	14,5	180,0	365	18
10440	32 G 0,75	15,6	230,0	455	18
10441	34 G 0,75	16,4	245,0	510	18
10442	40 G 0,75	17,6	288,0	595	18
10443	41 G 0,75	17,6	296,0	607	18
10444	42 G 0,75	17,6	302,0	612	18

Part No.	No. cores x cross-sec. mm²	Outer ∅ ca. mm	Cop. weight kg/km	Weight ca. kg/km	AWG-no.*)
10445	50 G 0,75	19,8	360,0	735	18
10446	61 G 0,75	20,9	439,0	845	18
10447	80 G 0,75	23,6	576,0	1070	18
10448	100 G 0,75	26,2	720,0	1322	18
10449 OZ	2 x 1	5,5	19,2	60	17
10450	3 G 1	6,0	29,0	72	17
10451	4 G 1	6,6	38,4	86	17
10452	5 G 1	7,2	48,0	104	17
10453	6 G 1	8,0	58,0	125	17
10454	7 G 1	8,6	67,0	141	17
10455	8 G 1	9,4	77,0	175	17
10456	9 G 1	10,1	86,0	200	17
10457	12 G 1	10,7	115,0	230	17
10458	14 G 1	11,3	134,0	271	17
10459	16 G 1	12,0	154,0	300	17
10460	18 G 1	12,7	173,0	343	17
10461	20 G 1	13,5	192,0	375	17
10462	25 G 1	15,6	240,0	485	17
10463	34 G 1	17,4	326,0	650	17
10464	36 G 1	17,4	346,0	668	17
10465	40 G 1	18,9	384,0	755	17
10466	41 G 1	18,9	394,0	770	17
10467	42 G 1	18,9	403,0	810	17
10468	50 G 1	21,0	480,0	936	17
10469	56 G 1	21,5	538,0	920	17
10470	61 G 1	22,2	586,0	1100	17
10471	65 G 1	22,8	628,0	1180	17
10472	80 G 1	25,4	786,0	1294	17
10473	100 G 1	28,2	960,0	1644	17
10474 OZ	2 x 1,5	6,3	29,0	70	16
10475	3 G 1,5	6,7	43,0	90	16
10476	4 G 1,5	7,3	58,0	109	16
10477	5 G 1,5	8,2	72,0	131	16
10478	6 G 1,5	8,9	86,0	157	16
10479	7 G 1,5	9,8	101,0	184	16
10480	8 G 1,5	10,6	115,0	216	16
10481	9 G 1,5	11,5	130,0	259	16
10482	11 G 1,5	12,1	158,0	300	16
10483	12 G 1,5	12,1	173,0	309	16
10484	14 G 1,5	12,9	202,0	345	16
10485	16 G 1,5	13,6	230,0	386	16
10486	18 G 1,5	14,5	259,0	440	16
10487	20 G 1,5	15,2	288,0	490	16
10488	21 G 1,5	16,1	302,0	555	16

PVC cables will be changed to lead free PVC successively.
G = with green-yellow earth core
X = without green-yellow earth core (OZ)

*) **Note**
AWG sizes are approximate equivalent values.
The actual cross-section is in mm² – see page T 15.

Continuation ▶

HELUKABEL®

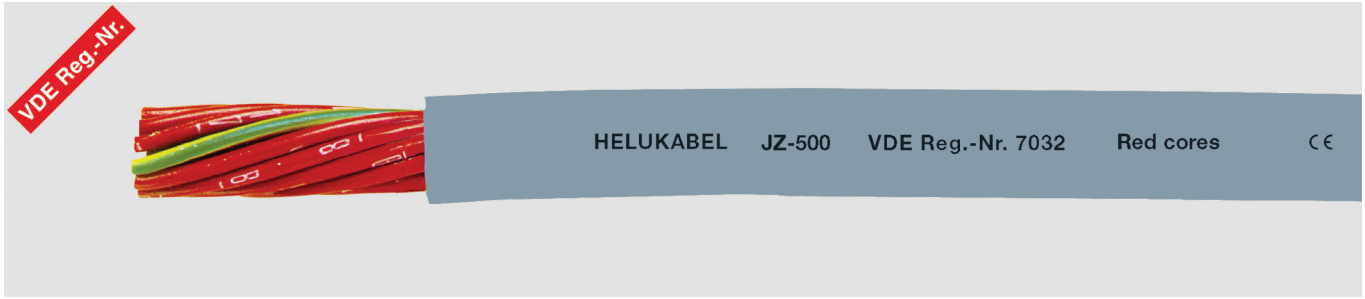
HELUKABEL® JZ-500

red cores, flexible, number coded

VDE

PG CH01

Fraunhofer IPA TESTED DEVICE [2])



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  fixed installation –40° C to +80° C
- **Nominal voltage** U_0/U 300/500 V
- **Test voltage** 4000 V
- **Insulation resistance** min. 20 MOhm x km
- **Minimum bending radius**
  for permanent approx. 7,5 x cable ∅
- **Radiation resistance**
  up to 80 x 10^6 cJ/kg (up to 80 Mrad)
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Cable structure

- Bare copper, fine wire conductors, according to DIN VDE 0295 cl. 5 and IEC 60228 cl. 5
- Core insulation of special PVC Z 7225
- Red cores with continuous white numbering according to DIN VDE 0293 (also available with other core colours)
- Green-yellow earth core in the outer layer (3 cores and above)
- Cores stranded in layers with optimal lay-lenght
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Application

These cables are used for flexible use for medium mechanical stresses with free movement without tensile stress or forced movements in dry, moist and wet rooms but not suitable for open air, as measuring and control cables in tool machines, conveyor belts, production lines in machinery production, in air-conditioning and in steel production. The cores have been numbered in such a way that there is no difficulty in recognising them, even if only a small piece of sheathing has been removed. The numbers have been underlined to avoid confusion. The earth core is laid in the outer layer. Selected PVC-compounds guarantee a good flexibility as well as an economic and fast installation.

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Part No.	No. cores x cross-sec. mm²	Outer ∅ ca. mm	Cop. weight kg/km	Weight ca. kg/km	AWG-no.*)
10489	25G1,5	17,8	360,0	620	16
10490	32G1,5	19,1	461,0	790	16
10491	34G1,5	19,8	490,0	830	16
10492	40G1,5	21,4	576,0	996	16
10493	42G1,5	21,4	605,0	1007	16
10494	50G1,5	23,7	720,0	1250	16
10495	56G1,5	24,5	806,0	1332	16
10496	61G1,5	25,3	878,0	1440	16
10497	80G1,5	29,0	1152,0	1871	16
10498	100G1,5	32,5	1440,0	2353	16
10499 OZ	2x2,5	7,6	48,0	112	14
10500	3G2,5	8,3	72,0	148	14
10501	4G2,5	9,1	96,0	178	14
10502	5G2,5	10,2	120,0	221	14
10503	7G2,5	12,1	168,0	306	14
10504	8G2,5	13,2	192,0	363	14
10505	12G2,5	15,2	288,0	498	14
10506	14G2,5	16,1	336,0	569	14
10507	18G2,5	18,1	432,0	764	14
10508	21G2,5	20,4	504,0	914	14
10509	25G2,5	22,2	600,0	1044	14
10510	34G2,5	25,1	816,0	1470	14
10511	42G2,5	27,2	1008,0	1790	14
10512	50G2,5	30,0	1200,0	2095	14
10513	61G2,5	32,0	1464,0	2750	14
10514	100G2,5	41,0	2400,0	4450	14

Part No.	No. cores x cross-sec. mm²	Outer ∅ ca. mm	Cop. weight kg/km	Weight ca. kg/km	AWG-no.*)
10515 OZ	2x4	9,2	77,0	195	12
10516	3G4	9,9	115,0	230	12
10517	4G4	11,0	154,0	295	12
10518	5G4	12,1	192,0	361	12
10519	7G4	13,3	269,0	458	12
10520	8G4	15,9	307,0	590	12
10521	12G4	18,3	461,0	790	12
10522	3G6	11,7	173,0	355	10
10523	4G6	13,0	230,0	424	10
10524	5G6	14,5	288,0	525	10
10525	7G6	16,0	403,0	625	10
10526	3G10	15,0	288,0	540	8
10527	4G10	16,8	384,0	701	8
10528	5G10	18,7	480,0	858	8
10529	7G10	20,6	672,0	1106	8
10530	4G16	19,7	614,0	1035	6
10531	5G16	21,9	768,0	1259	6
10532	7G16	24,4	1075,0	1780	6

Please note: We can also have this cable printed with your company name or emblem.

***) Note**
AWG sizes are approximate equivalent values.
The actual cross-section is in mm² – see page T 15.

[2]) Cleanroom quality tested on analog type, further informations on page 7.

Note: Important for assemblers: We supply any "desired length" of stranded cores without outer sheath, core insulation colour acc. RAL 5010 with number combination acc. customer's requirement.
PVC cables will be changed to lead free PVC successively.
G = with green-yellow earth core X = without green-yellow earth core (OZ)

Pressure cylinder Works photo: HELUKABEL®