

JZ-500 HMH-C / OZ-500 HMH-C

highly flame-retardant, EMC-preferred type



HELUKABEL® JZ-500 HMH-C 4G2,5 QMM / 11746 300/500 V halogen-free CE

TECHNICAL DATA

Control and connection cable in alignment with DIN VDE 0285-525-2-51 / DIN EN 50525-2-51, DIN VDE 0285-525-3-11 / DIN EN 50525-3-11

Temperature range	flexible -25°C to +70°C fixed -40°C to +70°C
Nominal voltage	AC U ₀ /U 300/500 V
Test voltage core/core	4000 V
Test voltage core/screen	2000 V
Coupling resistance	at 30 MHz, approx. 250 Ohm/km
Minimum bending radius	flexible 12.5x Outer-Ø fixed 4x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Core insulation: halogen-free polymer acc. to DIN VDE 0207-363-7 / DIN EN 50363-7 (compound type T16)
- Core identification acc. to DIN VDE 0293-334, black cores with consecutive labeling in white digits
- Protective conductor: starting with 3 cores, G = with protective conductor GN-YE (JZ), x = without protective conductor (OZ)
- Cores stranded in layers with optimal lay lengths
- Foil wrapping
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Outer sheath: halogen-free polymer acc. to DIN VDE 0207-363-8 / DIN EN 50363-8 (compound type TM7)
- Sheath colour: grey (RAL 7001)
- Length marking: in metres

PROPERTIES

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
11656	2 x 0.5	20	5.6	35.0	46.0
11657	3 G 0.5	20	5.9	42.0	56.0
11342	3 x 0.5	20	5.9	42.0	56.0
11658	4 G 0.5	20	6.3	47.0	62.0
11343	4 x 0.5	20	6.3	47.0	62.0
11659	5 G 0.5	20	6.8	56.0	75.0
11660	7 G 0.5	20	7.3	69.0	98.0
11017510	8 x 0.5	20	8.0	80.0	115.0
11663	12 G 0.5	20	9.7	108.0	158.0
11665	18 G 0.5	20	11.3	145.0	216.0
11667	25 G 0.5	20	13.4	240.0	315.0
11678	2 x 0.75	19	6.1	40.0	60.0
11679	3 G 0.75	19	6.4	52.0	68.0
11344	3 x 0.75	19	6.4	52.0	68.0
11680	4 G 0.75	19	6.9	60.0	78.0
11345	4 x 0.75	19	6.9	60.0	78.0

- largely resistant to: oil
- halogen-free
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- corrosiveness of combustion gases acc. to DIN VDE 0482-754-2 / DIN EN 60754-2 / IEC 60754-2
- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
- bundle fire test acc. to DIN VDE 0482-332-3-24 / DIN EN 60332-3-24 / IEC 60332-3-24
- smoke density acc. to DIN VDE 0482-1034-1+2 / DIN EN 61034-1+2 / IEC 61034-1+2

APPLICATION

Control and connection cable in tool machinery, conveyor belts, production lines, plant construction, in air-conditioning devices, in metallurgical, steel and rolling mills. For fixed installation and flexible applications with occasional, not constantly recurring free movement without forced motion, without tensile stress and for medium mechanical stress. The cable is suitable for use in dry, damp and wet locations and on plaster. The high degree of screening assures an interference-free transmission of signals and pulses. EMC= Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and allround large contact area of the copper braiding.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only
- cleanroom qualification tested on analog types; please note "cleanroom qualification" in your order

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
11681	5 G 0.75	19	7.5	71.0	95.0
11346	5 x 0.75	19	7.5	71.0	95.0
11682	7 G 0.75	19	8.3	91.0	130.0
11347	7 x 0.75	19	8.3	91.0	130.0
11685	12 G 0.75	19	10.9	142.0	203.0
11687	18 G 0.75	19	12.8	212.0	290.0
11689	25 G 0.75	19	15.1	281.0	413.0
11700	2 x 1	18	6.4	50.0	66.0
11701	3 G 1	18	6.8	60.0	80.0
11348	3 x 1	18	6.8	60.0	80.0
11702	4 G 1	18	7.3	71.0	100.0
11349	4 x 1	18	7.3	71.0	100.0
11703	5 G 1	18	8.1	88.0	130.0
11704	7 G 1	18	8.7	111.0	160.0
11707	12 G 1	18	11.6	184.0	260.0
11709	18 G 1	18	13.7	260.0	382.0

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Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
11711	25 G 1	18	16.2	349.0	540.0
11722	2 x 1.5	16	7.0	63.0	88.0
11723	3 G 1.5	16	7.4	80.0	100.0
11350	3 x 1.5	16	7.4	80.0	100.0
11724	4 G 1.5	16	8.2	97.0	125.0
11725	5 G 1.5	16	8.9	119.0	158.0
11726	7 G 1.5	16	9.8	147.0	210.0
11729	12 G 1.5	16	13.2	267.0	340.0
11731	18 G 1.5	16	15.6	374.0	480.0
11733	25 G 1.5	16	18.2	526.0	702.0
11744	2 x 2.5	14	8.4	96.0	132.0
11745	3 G 2.5	14	8.9	144.0	168.0
11746	4 G 2.5	14	9.9	148.0	195.0
11747	5 G 2.5	14	10.9	181.0	222.0
11748	7 G 2.5	14	11.8	255.0	345.0
11751	12 G 2.5	14	16.1	441.0	572.0
11766	2 x 4	12	9.8	120.0	184.0
11768	3 G 4	12	10.4	174.0	238.0
11769	4 G 4	12	11.5	230.0	305.0
11770	5 G 4	12	12.7	273.0	388.0
11771	7 G 4	12	14.2	316.0	504.0
11781	2 x 6	10	11.6	173.0	270.0
11782	3 G 6	10	12.5	240.0	328.0
11783	4 G 6	10	14.1	305.0	416.0
11784	5 G 6	10	15.5	439.0	510.0
11785	7 G 6	10	17.0	505.0	670.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
11786	2 x 10	8	14.6	255.0	420.0
11787	3 G 10	8	15.7	350.0	495.0
11788	4 G 10	8	17.4	535.0	785.0
11789	5 G 10	8	19.3	592.0	855.0
11790	7 G 10	8	21.2	810.0	1308.0
11793	4 G 16	6	20.4	740.0	882.0
11794	5 G 16	6	22.4	895.0	1293.0
11812	7 G 16	6	24.8	1282.0	2149.0
11795	3 G 25	4	22.3	1070.0	1432.0
11796	4 G 25	4	24.9	1140.0	1911.0
11797	5 G 25	4	27.8	1380.0	2414.0
11798	3 G 35	2	26.2	1240.0	1914.0
11799	4 G 35	2	29.1	1576.0	2542.0
11800	5 G 35	2	32.1	1930.0	3180.0
11801	3 G 50	1	30.5	1675.0	3080.0
11802	4 G 50	1	34.5	2155.0	3550.0
11803	5 G 50	1	38.3	2794.0	4753.0
11804	3 G 70	2/0	36.0	2288.0	3840.0
11805	4 G 70	2/0	40.1	3120.0	4939.0
11806	5 G 70	2/0	44.3	3705.0	6572.0
11807	3 G 95	3/0	40.9	3010.0	5651.0
11808	4 G 95	3/0	45.6	4043.0	6690.0
11809	5 G 95	3/0	50.3	5026.0	8370.0
11810	3 G 120	4/0	45.4	3812.0	6342.0
11811	4 G 120	4/0	50.0	5069.0	8453.0
11813	4 G 185	350 kcmil	62.5	8040.0	10800.0