

HELUCONTROL® JZ-510-HMH-C UL/CSA

halogen-free, highly flame-retardant, EMC-preferred type



HELUCONTROL® JZ-510-HMH-C 25G1,5 QMM / 11029776
E170315 AWM Style 21217 AWM I/II A/B 75°C 600V CE

TECHNICAL DATA

Control and connection cable acc. to UL-Std. 758 (AWM),
UL-Std. 758 (AWM) Style 10615, UL-Std. 758 (AWM) Style
21217, CSA-Std. C22.2 No. 210 - AWM I/II A/B

Temperature range	flexible -25°C to +75°C fixed -40°C to +80°C
Nominal voltage	AC U ₀ /U 300/500 V UL (AWM) AC 600 V
Test voltage	4000 V
Minimum bending radius	flexible 12.5x Outer-Ø fixed 4x Outer-Ø

CABLE STRUCTURE

- Copper wire tinned, 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, in the outer layer (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: black (RAL 9005)
- Length marking: in metres

PROPERTIES

- resistant to: UV radiation, ozone
- 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
- oil-resistant acc. to DIN VDE 0473-811-404 / DIN EN 60811-404 / IEC 60811-404
- UV-resistant acc. to DIN EN ISO 4892-2

APPLICATION

UL/CSA approved, halogen-free flexible control cable (up to 600 V) for machine, tool and plant construction. Suitable for medium mechanical stress with free movement, without tensile stress and without forced motion control in dry, damp and wet rooms, however, not suitable for outdoor use. EMC = Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11029741	2 x 0.5	20	5.5	22.4	43.7
11029742	3 G 0.5	20	5.8	27.3	52.3
11029743	4 G 0.5	20	6.3	36.6	67.4
11029744	5 G 0.5	20	6.9	41.7	79.1
11029745	7 G 0.5	20	7.5	56.1	99.6
11029746	12 G 0.5	20	9.7	90.1	160.3
11029747	18 G 0.5	20	11.5	123.6	224.3
11029748	25 G 0.5	20	13.4	177.8	308.1
11029749	34 G 0.5	20	15.7	229.3	407.3
11029750	2 x 0.75	19	5.9	31.6	55.7
11029751	3 G 0.75	19	6.3	39.0	67.5
11029752	4 G 0.75	19	6.9	46.4	81.2
11029753	5 G 0.75	19	7.5	58.5	100.7
11029754	7 G 0.75	19	8.2	73.3	122.8
11029755	12 G 0.75	19	10.7	118.9	198.2
11029756	18 G 0.75	19	12.6	171.4	286.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11029757	25 G 0.75	19	14.8	246.1	394.3
11029758	34 G 0.75	19	17.3	319.2	522.7
11029759	2 x 1	18	6.3	36.6	62.6
11029760	3 G 1	18	6.7	46.3	76.7
11029761	4 G 1	18	7.3	60.7	98.1
11029762	5 G 1	18	8.0	70.8	116.9
11029763	7 G 1	18	8.7	95.1	148.3
11029764	12 G 1	18	11.4	152.4	237.7
11029765	18 G 1	18	13.7	230.6	357.1
11029766	25 G 1	18	15.8	306.1	465.9
11029767	34 G 1	18	18.5	409.0	628.6
11029768	2 x 1.5	16	6.9	46.5	76.4
11029769	3 G 1.5	16	7.4	65.6	101.0
11029770	4 G 1.5	16	8.1	80.4	123.8
11029771	5 G 1.5	16	8.9	99.9	153.6
11029772	7 G 1.5	16	9.8	133.3	195.3

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Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11029773	12 G 1.5	16	12.8	214.6	315.0
11029774	18 G 1.5	16	15.4	325.3	474.6
11029775	24 G 1.5	16	17.7	420.0	605.1
11029776	25 G 1.5	16	17.8	442.6	630.8
11029777	34 G 1.5	16	20.9	580.5	841.1
11029778	2 x 2.5	14	8.3	71.0	111.8
11029779	3 G 2.5	14	8.9	99.9	148.1
11029780	4 G 2.5	14	9.8	128.5	188.7
11029781	5 G 2.5	14	10.8	152.5	227.7
11029782	7 G 2.5	14	11.8	205.2	291.3
11029783	12 G 2.5	14	15.9	354.1	498.9
11029784	18 G 2.5	14	18.8	514.6	727.4
11029785	3 G 4	12	10.5	147.7	210.6
11029786	4 G 4	12	11.5	190.8	269.6
11029787	5 G 4	12	12.8	233.8	333.6
11029788	7 G 4	12	14.3	326.6	442.5

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11029789	3 G 6	10	12.3	214.6	297.6
11029790	4 G 6	10	13.8	288.2	396.0
11029791	5 G 6	10	15.3	354.1	490.8
11029792	4 G 10	8	17.1	458.4	616.8
11029793	5 G 10	8	19.1	562.6	766.2
11029794	4 G 16	6	19.9	705.3	893.4
11029795	5 G 16	6	22.2	867.2	1111.0
11029796	4 G 25	4	24.6	1075.7	1358.5
11029797	4 G 35	2	27.9	1468.0	1803.1
11029798	4 G 50	1	35.0	2085.3	2663.6
11029799	4 G 70	2/0	40.0	2886.3	3579.1
11029800	4 G 95	3/0	41.9	3915.1	4488.0
11029801	4 G 120	4/0	46.7	4913.4	5623.0
11029802	4 G 150	300 kcmil	52.1	6172.4	7024.0
11029803	4 G 185	350 kcmil	57.2	7543.8	8542.0