

MEGAFLEX® 500-C

oil resistant, highly flame-retardant, EMC-preferred type



HELUKABEL® MEGAFLEX® 500-C 7G1,5 QMM / 13552 300/500 V E170315 AWM
STYLE 20939 cUL AWM I/II A/B 80°C 600 V FT1 halogen-free FRNC oil resistant CE

TECHNICAL DATA

Control and connection cable acc. to UL-Std. 758 (AWM)
Style 20939, in alignment with DIN VDE 0285-525-3-11 /
DIN EN 50525-3-11

Temperature range	flexible -30°C to +80°C fixed -40°C to +80°C
Nominal voltage	AC U ₀ /U 300/500 V UL (AWM) AC 600 V
Test voltage core/core	3000 V
Coupling resistance	at 30 MHz, approx. 250 Ohm/ km
Minimum bending radius	flexible 10x 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
- 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,
x = without protective conductor
- 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
- Sheath colour: grey (RAL 7001)
- Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation, ozone, weathering effects, hydrolysis, greases
- abrasion-resistant, wear-resistant
- for outdoor use
- flexible

- 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
- toxicity of combustion gases acc. to NF X 70-100
- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2, CSA FT1
- 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
- ozone-resistant acc. to DIN VDE 0473-811-403 / DIN EN 60811-403
- hydrolysis-resistant acc. to DIN VDE 0349-1 / DIN EN 61234-1 / IEC 61234-1
- alternate bending test acc. to DIN VDE 0473-396 / DIN EN 50396
- certifications and approvals:
EAC

APPLICATION

For fixed installation or flexible applications with non-recurring free movement, without forced movement control and without tensile stress; for heavy mechanical load in dry, damp and wet rooms as well as outdoors. Can be used as a connecting and control cable in machine and plant construction, HVAC technology, warehousing and materials handling technology, shipbuilding, renewable energy sector such as wind turbine construction. 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.
13500	2 x 0.5	20	5.9	35.0	46.0
13501	3 G 0.5	20	6.1	42.0	56.0
13502	3 x 0.5	20	6.1	42.0	56.0
13503	4 G 0.5	20	6.6	47.0	62.0
13504	4 x 0.5	20	6.6	47.0	62.0
13505	5 G 0.5	20	7.3	56.0	75.0
13506	5 x 0.5	20	7.3	56.0	75.0
13507	7 G 0.5	20	8.4	69.0	98.0
13508	8 G 0.5	20	9.1	80.0	116.0
13509	10 G 0.5	20	9.9	94.0	135.0
13510	12 G 0.5	20	10.4	108.0	158.0
13511	16 G 0.5	20	11.4	129.0	210.0
13512	18 G 0.5	20	12.1	145.0	216.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
13514	20 G 0.5	20	12.7	172.0	240.0
11021527	24 x 0.5	20	14.5	222.0	292.0
13515	25 G 0.5	20	14.5	240.0	315.0
13516	2 x 0.75	19	6.1	40.0	60.0
13517	3 G 0.75	19	6.3	52.0	68.0
13518	3 x 0.75	19	6.3	52.0	68.0
13519	4 G 0.75	19	6.8	60.0	78.0
13520	4 x 0.75	19	6.8	60.0	78.0
13521	5 G 0.75	19	7.5	71.0	95.0
13522	5 x 0.75	19	7.5	71.0	95.0
13523	7 G 0.75	19	8.7	91.0	130.0
13524	7 x 0.75	19	8.7	91.0	130.0
13525	8 G 0.75	19	9.5	110.0	145.0

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Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
13526	10 G 0.75	19	10.5	137.0	180.0
13527	12 G 0.75	19	10.8	142.0	203.0
13528	16 G 0.75	19	12.0	200.0	275.0
13529	18 G 0.75	19	12.6	212.0	290.0
13530	20 G 0.75	19	13.5	238.0	320.0
13531	25 G 0.75	19	15.1	281.0	413.0
13532	2 x 1	18	6.4	50.0	66.0
13533	3 G 1	18	6.7	60.0	80.0
13534	3 x 1	18	6.7	60.0	80.0
13535	4 G 1	18	7.4	71.0	100.0
13536	4 x 1	18	7.4	71.0	100.0
13537	5 G 1	18	8.0	88.0	118.0
11021565	5 x 1	18	8.0	88.0	118.0
11021357	6 x 1	18	8.6	100.0	145.0
13538	7 G 1	18	9.5	111.0	160.0
11021358	7 x 1	18	9.5	111.0	160.0
13539	8 G 1	18	10.1	127.0	197.0
13540	10 G 1	18	11.1	150.0	232.0
13541	12 G 1	18	11.7	184.0	260.0
13542	16 G 1	18	13.1	209.0	346.0
13543	18 G 1	18	13.8	260.0	382.0
13544	20 G 1	18	14.7	317.0	440.0
13545	25 G 1	18	16.3	349.0	540.0
13546	2 x 1.5	16	7.5	63.0	88.0
13547	3 G 1.5	16	7.9	80.0	100.0
13548	3 x 1.5	16	7.9	80.0	100.0
13549	4 G 1.5	16	8.5	97.0	125.0
11021528	4 x 1.5	16	8.5	97.0	125.0
13550	5 G 1.5	16	9.5	119.0	158.0
11021529	6 x 1.5	16	10.5	133.0	184.0
13552	7 G 1.5	16	11.2	147.0	210.0
11021530	7 x 1.5	16	11.2	147.0	210.0
13554	8 G 1.5	16	12.3	170.0	244.0
13556	10 G 1.5	16	13.6	193.0	315.0
13557	12 G 1.5	16	14.0	267.0	340.0
11021356	12 x 1.5	16	14.0	267.0	340.0
13558	16 G 1.5	16	15.8	315.0	424.0
13559	18 G 1.5	16	16.6	374.0	477.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
11021590	18 x 1.5	16	16.6	374.0	477.0
13560	20 G 1.5	16	17.6	396.0	545.0
13561	25 G 1.5	16	20.0	526.0	702.0
13562	2 x 2.5	14	8.7	96.0	132.0
13563	3 G 2.5	14	9.3	144.0	168.0
11021531	3 x 2.5	14	9.3	144.0	168.0
13565	4 G 2.5	14	10.3	148.0	198.0
11021591	4 x 2.5	14	10.3	148.0	198.0
13566	5 G 2.5	14	11.3	181.0	256.0
13567	7 G 2.5	14	13.7	255.0	345.0
13568	8 G 2.5	17	14.9	285.0	390.0
13569	10 G 2.5	14	16.4	340.0	482.0
13570	12 G 2.5	14	17.1	441.0	572.0
13571	2 x 4	12	11.1	120.0	220.0
13572	3 G 4	12	11.9	174.0	251.0
13573	4 G 4	12	13.2	230.0	305.0
13574	5 G 4	12	14.7	273.0	388.0
13575	7 G 4	12	17.6	316.0	504.0
13576	2 x 6	10	11.4	173.0	270.0
13577	3 G 6	10	12.2	240.0	351.0
13578	4 G 6	10	13.6	305.0	464.0
13579	5 G 6	10	15.1	439.0	546.0
13580	7 G 6	10	18.3	505.0	670.0
13581	2 x 10	8	15.2	255.0	461.0
13582	3 G 10	8	16.2	350.0	574.0
13583	4 G 10	8	17.9	535.0	785.0
13584	5 G 10	8	20.3	592.0	914.0
13585	7 G 10	8	24.4	810.0	1308.0
13586	2 x 16	6	17.6	422.0	670.0
13587	3 G 16	6	18.8	585.0	911.0
13588	4 G 16	6	21.1	740.0	1105.0
13589	5 G 16	6	23.6	895.0	1293.0
13590	7 G 16	6	28.7	1282.0	2149.0
13591	4 G 25	4	26.7	1140.0	1911.0
13592	4 G 35	2	29.5	1576.0	2542.0
13593	4 G 50	1	34.4	2155.0	3550.0
13594	4 G 70	2/0	40.9	3120.0	4939.0