

HELUTHERM® 120

temperature-resistant



HELUKABEL® HELUTHERM® 120 3G1 QMM / 24021 300/500 V CE

TECHNICAL DATA

PVC control and connection cable in alignment with DIN VDE 0285-525-2-11 / DIN EN 50525-2-11

Temperature range	flexible -5°C to +105°C fixed -30°C to +105°C
Nominal voltage	0.5 - 1 mm²: AC U ₀ /U 300/500 V 1.5 - 4 mm²: AC U ₀ /U 450/750 V
Test voltage core/core	2000 V
Breakdown voltage	4000 V
Minimum bending radius	flexible 7.5x 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: PVC acc. to DIN VDE 0207-363-3 / DIN EN 50363-3 (compound type T13)
- Core identification acc. to DIN VDE 0293-308,
1 core(s): black
2 - 5 core(s): colour coded
6 - 25 core(s): 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
- Outer sheath: PVC acc. to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM3)
- Sheath colour: black (RAL 9005)
- Length marking: in metres

PROPERTIES

- for outdoor use
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2

APPLICATION

For flexible application with medium mechanical stress and free movement without tensile stress and without forced movement guidance in dry, damp and wet rooms as well as outdoors; as control and connection cable for machines, devices, systems, motors or transformers in whose immediate vicinity increased temperatures occur (e.g. painting and drying lines).

NOTES

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

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
24002	2 x 0.5	20	4.8	9.6	40.0
24003	3 G 0.5	20	5.1	14.4	50.0
24004	4 G 0.5	20	5.5	19.2	60.0
24005	5 G 0.5	20	6.2	24.0	70.0
24006	7 G 0.5	20	6.7	33.6	90.0
24007	12 G 0.5	20	9.0	58.0	140.0
24008	18 G 0.5	20	10.7	86.0	170.0
24009	25 G 0.5	20	12.6	101.0	250.0
24011	2 x 0.75	19	5.3	14.4	52.0
24012	3 G 0.75	19	5.6	21.6	61.0
24013	4 G 0.75	19	6.3	29.0	75.0
24014	5 G 0.75	19	6.9	36.0	94.0
24015	7 G 0.75	19	7.7	50.0	112.0
24016	12 G 0.75	19	10.0	86.0	180.0
24017	18 G 0.75	19	12.2	130.0	270.0
24018	25 G 0.75	19	14.3	180.0	380.0
24019	1 x 1	18	3.5	9.6	50.0
24020	2 x 1	18	5.6	19.2	60.0
24021	3 G 1	18	6.1	29.0	73.0
24022	4 G 1	18	6.6	38.0	88.0
24023	5 G 1	18	7.5	48.0	110.0
24024	6 G 1	18	8.1	58.0	121.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
24025	7 G 1	18	8.1	67.0	130.0
24026	12 G 1	18	10.8	115.0	223.0
24027	18 G 1	18	12.9	173.0	350.0
24028	25 G 1	18	15.4	240.0	485.0
24030	2 x 1.5	16	7.2	29.0	77.0
24031	3 G 1.5	16	7.8	43.0	97.0
24032	4 G 1.5	16	8.5	58.0	122.0
24033	5 G 1.5	16	9.6	72.0	143.0
24034	7 G 1.5	16	10.6	101.0	179.0
24035	12 G 1.5	16	14.1	173.0	310.0
24036	18 G 1.5	16	17.0	259.0	460.0
24037	25 G 1.5	16	20.2	360.0	650.0
24039	2 x 2.5	14	8.6	48.0	120.0
24046	3 G 2.5	14	9.3	72.0	150.0
24040	4 G 2.5	14	10.4	96.0	200.0
24041	5 G 2.5	14	11.4	120.0	250.0
24042	7 G 2.5	14	12.6	168.0	310.0
24044	2 x 4	12	10.0	77.0	180.0
24291	3 G 4	12	10.8	115.0	220.0
24045	4 G 4	12	12.0	154.0	300.0
24292	5 G 4	12	13.4	192.0	360.0