

HELUTHERM® 400-MULTI

for high temperature applications



TECHNICAL DATA

Control and connection cable acc. to company specifications

Temperature range	fixed -60°C to +400°C
Nominal voltage	AC U ₀ /U 300/500 V
Test voltage (spark test)	2000 V
Minimum bending radius	flexible 15x Outer-Ø fixed 5x Outer-Ø

CABLE STRUCTURE

- Copper wire nickel plated, finely stranded
- Core insulation: glass silk braid with heat-resistant impregnation, 2 layers
- Core identification: see table; identification by coloured helix
- Cores stranded
- Outer sheath: glass silk braid with heat-resistant impregnation
- Sheath colour: white

PROPERTIES

- halogen-free
- asbestos-free

- cadmium-free

TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- certifications and approvals: EAC

APPLICATION

For applications with extremely high connection and ambient temperatures, e.g. in metallurgical, steel and rolling mills, foundries, glass and ceramics factories, furnace and power plant construction, thermoplastic forming; use only in dry environments.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only
- At temperatures above 200°C during the first commissioning, the impregnating varnish may degrade and leave only pure glass fibers remaining as insulation. This can be observed as evaporation.

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer-Ø min - max mm	Current carrying capacity*	Cu-weight kg/km	Weight kg/km, approx.	Core identification
51741	2 x 0.5	20	5.1 - 5.9	3.3	10.0	47.0	BU, BN
51742	3 G 0.5	20	5.4 - 6.2	3.1	15.0	50.0	GN-YE, BU, BN
11024199	3 x 0.5	20	5.4 - 6.2	3.1	15.0	50.0	BK, BU, BN
51743	4 G 0.5	20	6.2 - 7.0	3.0	19.0	70.0	GN-YE, BK, BU, BN
11024200	4 x 0.5	20	6.2 - 7.0	3.0	19.0	70.0	BK, BU, BN, WH
51744	5 G 0.5	20	7.0 - 7.8	2.9	25.0	81.0	GN-YE, BK, BU, BN, WH
11024201	5 x 0.5	20	7.0 - 7.8	2.9	25.0	81.0	BK, BU, BN, WH, RD
51745	6 G 0.5	20	7.2 - 8.0	2.8	30.0	97.0	GN-YE, BK, BU, BN, WH, RD
11024202	6 x 0.5	20	7.2 - 8.0	2.8	30.0	97.0	BK, BU, BN, WH, RD, GY
51746	7 G 0.5	20	7.7 - 8.5	2.7	34.0	105.0	GN-YE, BK, BU, BN, WH, RD, GY
11024203	7 x 0.5	20	7.7 - 8.5	2.7	34.0	105.0	BK, BU, BN, WH, RD, GY, GN
51747	2 x 0.75	19	5.7 - 6.5	5.1	14.4	55.0	BU, BN
51748	3 G 0.75	19	6.1 - 6.9	5.1	21.6	66.0	GN-YE, BU, BN
11024204	3 x 0.75	19	6.1 - 6.9	5.1	21.6	66.0	BK, BU, BN
51749	4 G 0.75	19	6.8 - 7.6	4.9	29.0	86.0	GN-YE, BK, BU, BN
11024205	4 x 0.75	19	6.8 - 7.6	4.9	29.0	86.0	BK, BU, BN, WH
51750	5 G 0.75	19	7.6 - 8.4	4.7	36.0	103.0	GN-YE, BK, BU, BN, WH
11024206	5 x 0.75	19	7.6 - 8.4	4.7	36.0	103.0	BK, BU, BN, WH, RD
51751	6 G 0.75	19	7.9 - 8.7	4.5	43.0	119.0	GN-YE, BK, BU, BN, WH, RD
11024207	6 x 0.75	19	7.9 - 8.7	4.5	43.0	119.0	BK, BU, BN, WH, RD, GY
51752	7 G 0.75	19	8.5 - 9.3	4.4	50.0	130.0	GN-YE, BK, BU, BN, WH, RD, GY
11024208	7 x 0.75	19	8.5 - 9.3	4.4	50.0	130.0	BK, BU, BN, WH, RD, GY, GN
51753	2 x 1	18	5.7 - 6.5	7.0	19.0	63.0	BU, BN
51754	3 G 1	18	6.2 - 7.0	6.7	29.0	82.0	GN-YE, BU, BN
11024209	3 x 1	18	6.2 - 7.0	6.7	29.0	82.0	BK, BU, BN
51755	4 G 1	18	6.9 - 7.7	6.4	38.0	98.0	GN-YE, BK, BU, BN
11024210	4 x 1	18	6.9 - 7.7	6.4	38.0	98.0	BK, BU, BN, WH
51756	5 G 1	18	7.8 - 8.6	6.2	48.0	119.0	GN-YE, BK, BU, BN, WH

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Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer-Ø min - max mm	Current carrying capacity*	Cu-weight kg/km	Weight kg/km, approx.	Core identification
11024211	5 x 1	18	7.8 - 8.6	6.2	48.0	119.0	BK, BU, BN, WH, RD
51757	6 G 1	18	8.0 - 8.8	6.0	58.0	138.0	GN-YE, BK, BU, BN, WH, RD
11024212	6 x 1	18	8.0 - 8.8	6.0	58.0	138.0	BK, BU, BN, WH, RD, GY
51758	7 G 1	18	8.6 - 9.4	5.8	67.0	150.0	GN-YE, BK, BU, BN, WH, RD, GY
11024213	7 x 1	18	8.6 - 9.4	5.8	67.0	150.0	BK, BU, BN, WH, RD, GY, GN
51759	2 x 1.5	16	6.7 - 7.5	9.4	29.0	87.0	BU, BN
51760	3 G 1.5	16	6.9 - 7.7	9.0	43.0	103.0	GN-YE, BU, BN
11024214	3 x 1.5	16	6.9 - 7.7	9.0	43.0	103.0	BK, BU, BN
51761	4 G 1.5	16	7.7 - 8.5	8.6	58.0	128.0	GN-YE, BK, BU, BN
11024215	4 x 1.5	16	7.7 - 8.5	8.6	58.0	128.0	BK, BU, BN, WH
51762	5 G 1.5	16	9.0 - 9.8	8.3	72.0	150.0	GN-YE, BK, BU, BN, WH
11024216	5 x 1.5	16	9.0 - 9.8	8.3	72.0	150.0	BK, BU, BN, WH, RD
51763	6 G 1.5	16	9.3 - 10.1	8.0	88.0	175.0	GN-YE, BK, BU, BN, WH, RD
11024217	6 x 1.5	16	9.3 - 10.1	8.0	88.0	175.0	BK, BU, BN, WH, RD, GY
51764	7 G 1.5	16	10.0 - 10.8	7.8	101.0	190.0	GN-YE, BK, BU, BN, WH, RD, GY
11024218	7 x 1.5	16	10.0 - 10.8	7.8	101.0	190.0	BK, BU, BN, WH, RD, GY, GN
51765	2 x 2.5	14	7.4 - 8.2	12.2	48.0	135.0	BU, BN
51766	3 G 2.5	14	7.9 - 8.7	11.6	72.0	153.0	GN-YE, BU, BN
11024219	3 x 2.5	14	7.9 - 8.7	11.6	72.0	153.0	BK, BU, BN
51767	4 G 2.5	14	8.8 - 9.6	11.2	96.0	190.0	GN-YE, BK, BU, BN
11024220	4 x 2.5	14	8.8 - 9.6	11.2	96.0	190.0	BK, BU, BN, WH
50060	5 G 2.5	14	9.9 - 10.7	10.8	120.0	230.0	GN-YE, BK, BU, BN, WH
11024221	5 x 2.5	14	9.9 - 10.7	10.8	120.0	230.0	BK, BU, BN, WH, RD
50061	6 G 2.5	14	10.3 - 11.1	10.4	144.0	270.0	GN-YE, BK, BU, BN, WH, RD
11024222	6 x 2.5	14	10.3 - 11.1	10.4	144.0	270.0	BK, BU, BN, WH, RD, GY
50062	7 G 2.5	14	11.0 - 11.8	10.1	168.0	295.0	GN-YE, BK, BU, BN, WH, RD, GY
11024223	7 x 2.5	14	11.0 - 11.8	10.1	168.0	295.0	BK, BU, BN, WH, RD, GY, GN
50063	2 x 4	12	9.1 - 9.9	16.0	77.0	191.0	BU, BN
50064	3 G 4	12	9.7 - 10.5	15.3	115.0	224.0	GN-YE, BU, BN
11024224	3 x 4	12	9.7 - 10.5	15.3	115.0	224.0	BK, BU, BN
50065	4 G 4	12	10.9 - 11.7	14.6	154.0	285.0	GN-YE, BK, BU, BN
11024225	4 x 4	12	10.9 - 11.7	14.6	154.0	285.0	BK, BU, BN, WH
50066	5 G 4	12	12.2 - 13.0	14.1	192.0	360.0	GN-YE, BK, BU, BN, WH
11024226	5 x 4	12	12.2 - 13.0	14.1	192.0	360.0	BK, BU, BN, WH, RD
50067	7 G 4	12	13.5 - 14.7	13.3	270.0	485.0	GN-YE, BK, BU, BN, WH, RD, GY
11024227	7 x 4	12	13.5 - 14.7	13.3	270.0	485.0	BK, BU, BN, WH, RD, GY, GN
50068	3 G 6	10	11.5 - 12.3	20.0	173.0	340.0	GN-YE, BU, BN
11024228	3 x 6	10	11.5 - 12.3	20.0	173.0	340.0	BK, BU, BN
50069	4 G 6	10	12.8 - 13.8	19.0	230.0	442.0	GN-YE, BK, BU, BN
11024229	4 x 6	10	12.8 - 13.8	19.0	230.0	442.0	BK, BU, BN, WH
50070	5 G 6	10	14.3 - 15.4	18.0	288.0	535.0	GN-YE, BK, BU, BN, WH
11024230	5 x 6	10	14.3 - 15.4	18.0	288.0	535.0	BK, BU, BN, WH, RD
50071	4 G 10	8	14.2 - 15.3	26.0	384.0	710.0	GN-YE, BK, BU, BN
11024231	4 x 10	8	14.2 - 15.3	26.0	384.0	710.0	BK, BU, BN, WH

*) Current carrying capacity in amperes at +340°C