

HELUTHERM® 400-MULTI-ES

for high temperature applications, Stainless steel braiding



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
- Stainless steel braiding, approx. coverage 80%

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
52018	2 x 0.5	20	5.9 - 6.7	3.3	10.0	84.0	BU, BN
52019	3 G 0.5	20	6.2 - 7.0	3.1	15.0	89.0	GN-YE, BU, BN
11024233	3 x 0.5	20	6.2 - 7.0	3.1	15.0	89.0	BK, BU, BN
52020	4 G 0.5	20	7.0 - 7.8	3.0	19.0	111.0	GN-YE, BK, BU, BN
11024234	4 x 0.5	20	7.0 - 7.8	3.0	19.0	111.0	BK, BU, BN, WH
52021	5 G 0.5	20	7.8 - 8.6	2.9	25.0	126.0	GN-YE, BK, BU, BN, WH
11024235	5 x 0.5	20	7.8 - 8.6	2.9	25.0	126.0	BK, BU, BN, WH, RD
52022	6 G 0.5	20	8.0 - 8.8	2.8	30.0	146.0	GN-YE, BK, BU, BN, WH, RD
11024236	6 x 0.5	20	8.0 - 8.8	2.8	30.0	146.0	BK, BU, BN, WH, RD, GY
52023	7 G 0.5	20	8.5 - 9.3	2.7	34.0	158.0	GN-YE, BK, BU, BN, WH, RD, GY
11024237	7 x 0.5	20	8.5 - 9.3	2.7	34.0	158.0	BK, BU, BN, WH, RD, GY, GN
52024	2 x 0.75	19	6.5 - 7.3	5.1	14.4	95.0	BU, BN
52025	3 G 0.75	19	6.9 - 7.7	5.1	21.6	109.0	GN-YE, BU, BN
11024238	3 x 0.75	19	6.9 - 7.7	5.1	21.6	109.0	BK, BU, BN
52026	4 G 0.75	19	7.6 - 8.4	4.9	29.0	131.0	GN-YE, BK, BU, BN
11024239	4 x 0.75	19	7.6 - 8.4	4.9	29.0	131.0	BK, BU, BN, WH
52027	5 G 0.75	19	8.4 - 9.2	4.7	36.0	157.0	GN-YE, BK, BU, BN, WH
11024240	5 x 0.75	19	8.4 - 9.2	4.7	36.0	157.0	BK, BU, BN, WH, RD
52028	6 G 0.75	19	8.7 - 9.5	4.5	43.0	177.0	GN-YE, BK, BU, BN, WH, RD
11024241	6 x 0.75	19	8.7 - 9.5	4.5	43.0	177.0	BK, BU, BN, WH, RD, GY
52029	7 G 0.75	19	9.3 - 10.1	4.4	50.0	190.0	GN-YE, BK, BU, BN, WH, RD, GY
11024242	7 x 0.75	19	9.3 - 10.1	4.4	50.0	190.0	BK, BU, BN, WH, RD, GY, GN
52030	2 x 1	18	6.5 - 7.3	7.0	19.0	105.0	BU, BN
52031	3 G 1	18	7.0 - 7.8	6.7	29.0	126.0	GN-YE, BU, BN
11024243	3 x 1	18	7.0 - 7.8	6.7	29.0	126.0	BK, BU, BN

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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
52032	4 G 1	18	7.7 - 8.5	6.4	38.0	148.0	GN-YE, BK, BU, BN
11024244	4 x 1	18	7.7 - 8.5	6.4	38.0	148.0	BK, BU, BN, WH
52033	5 G 1	18	8.6 - 9.4	6.2	48.0	174.0	GN-YE, BK, BU, BN, WH
11024245	5 x 1	18	8.6 - 9.4	6.2	48.0	174.0	BK, BU, BN, WH, RD
52034	6 G 1	18	8.8 - 9.6	6.0	58.0	198.0	GN-YE, BK, BU, BN, WH, RD
11024246	6 x 1	18	8.8 - 9.6	6.0	58.0	198.0	BK, BU, BN, WH, RD, GY
52035	7 G 1	18	9.4 - 10.2	5.8	67.0	212.0	GN-YE, BK, BU, BN, WH, RD, GY
11024247	7 x 1	18	9.4 - 10.2	5.8	67.0	212.0	BK, BU, BN, WH, RD, GY, GN
52036	2 x 1.5	16	7.5 - 8.3	9.4	29.0	132.0	BU, BN
52037	3 G 1.5	16	7.7 - 8.5	9.0	43.0	153.0	GN-YE, BU, BN
11024248	3 x 1.5	16	7.7 - 8.5	9.0	43.0	153.0	BK, BU, BN
52038	4 G 1.5	16	8.5 - 9.3	8.6	58.0	183.0	GN-YE, BK, BU, BN
11024249	4 x 1.5	16	8.5 - 9.3	8.6	58.0	183.0	BK, BU, BN, WH
52039	5 G 1.5	16	9.8 - 10.6	8.3	72.0	212.0	GN-YE, BK, BU, BN, WH
11024250	5 x 1.5	16	9.8 - 10.6	8.3	72.0	212.0	BK, BU, BN, WH, RD
52040	6 G 1.5	16	10.1 - 10.9	8.0	88.0	241.0	GN-YE, BK, BU, BN, WH, RD
11024251	6 x 1.5	16	10.1 - 10.9	8.0	88.0	241.0	BK, BU, BN, WH, RD, GY
52041	7 G 1.5	16	10.8 - 11.6	7.8	101.0	259.0	GN-YE, BK, BU, BN, WH, RD, GY
11024252	7 x 1.5	16	10.8 - 11.6	7.8	101.0	259.0	BK, BU, BN, WH, RD, GY, GN
52042	2 x 2.5	14	8.2 - 9.0	12.2	48.0	191.0	BU, BN
52043	3 G 2.5	14	8.7 - 9.5	11.6	72.0	213.0	GN-YE, BU, BN
11024253	3 x 2.5	14	8.7 - 9.5	11.6	72.0	213.0	BK, BU, BN
52044	4 G 2.5	14	9.6 - 10.4	11.2	96.0	256.0	GN-YE, BK, BU, BN
11024254	4 x 2.5	14	9.6 - 10.4	11.2	96.0	256.0	BK, BU, BN, WH
52045	5 G 2.5	14	10.7 - 11.5	10.8	120.0	307.0	GN-YE, BK, BU, BN, WH
11024255	5 x 2.5	14	10.7 - 11.5	10.8	120.0	307.0	BK, BU, BN, WH, RD
52046	6 G 2.5	14	11.1 - 11.9	10.4	144.0	359.0	GN-YE, BK, BU, BN, WH, RD
11024256	6 x 2.5	14	11.1 - 11.9	10.4	144.0	359.0	BK, BU, BN, WH, RD, GY
52047	7 G 2.5	14	11.8 - 12.6	10.1	168.0	388.0	GN-YE, BK, BU, BN, WH, RD, GY
11024257	7 x 2.5	14	11.8 - 12.6	10.1	168.0	388.0	BK, BU, BN, WH, RD, GY, GN
52048	2 x 4	12	9.9 - 10.7	16.0	77.0	260.0	BU, BN
52049	3 G 4	12	10.5 - 11.3	15.3	115.0	303.0	GN-YE, BU, BN
11024258	3 x 4	12	10.5 - 11.3	15.3	115.0	303.0	BK, BU, BN
52050	4 G 4	12	11.7 - 12.5	14.6	154.0	378.0	GN-YE, BK, BU, BN
11024259	4 x 4	12	11.7 - 12.5	14.6	154.0	378.0	BK, BU, BN, WH
52051	5 G 4	12	13.0 - 13.8	14.1	192.0	458.0	GN-YE, BK, BU, BN, WH
11024260	5 x 4	12	13.0 - 13.8	14.1	192.0	458.0	BK, BU, BN, WH, RD
52052	7 G 4	12	14.3 - 15.5	13.3	270.0	593.0	GN-YE, BK, BU, BN, WH, RD, GY
11024261	7 x 4	12	14.3 - 15.5	13.3	270.0	593.0	BK, BU, BN, WH, RD, GY, GN
52053	3 G 6	10	12.3 - 13.1	20.0	173.0	442.0	GN-YE, BU, BN
11024262	3 x 6	10	12.3 - 13.1	20.0	173.0	442.0	BK, BU, BN
52054	4 G 6	10	13.6 - 14.6	19.0	230.0	567.0	GN-YE, BK, BU, BN
11024263	4 x 6	10	13.6 - 14.6	19.0	230.0	567.0	BK, BU, BN, WH
52055	5 G 6	10	15.1 - 16.2	18.0	288.0	671.0	GN-YE, BK, BU, BN, WH
11024264	5 x 6	10	15.1 - 16.2	18.0	288.0	671.0	BK, BU, BN, WH, RD
52056	4 G 10	8	15.0 - 16.1	26.0	384.0	866.0	GN-YE, BK, BU, BN
11024265	4 x 10	8	15.0 - 16.1	26.0	384.0	866.0	BK, BU, BN, WH

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