HELUTHERM® 400



Single core, nickel conductor, stranded, for high temperature applications



TECHNICAL DATA

Single core

Temperature range Nominal voltage Test voltage (spark test) Minimum bending radius fixed -60°C to +400°C AC U_0/U 300/500 V 2000 V flexible 15x Outer-Ø

fixed 7.5x Outer-Ø

CABLE STRUCTURE

- Ni conductor, stranded
- Core insulation: glass silk braid with heat-resistant impregnation
- Core identification by coloured helix, see table

PROPERTIES

· halogen-free

APPLICATION

Single core with a wide temperature range; especially suited for use in the aviation and aerospace industry, in power stations, in engine design as well as in chemical, steel and metallurgical plants. For critical applications, for example involving mechanical stress, we recommend to contact us.

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.

| | | | | | | · · | | | | | | |
|-------------------|---------------------------|-----------------|--------------------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|
| | | | | black | green-yellow | blue | brown | red | white | grey | violet | yellow |
| Cross-sec. mm² | Outer Ø mm, approx. | AWG, approx. | Ni-weight kg/km | Part no. | Part no. | Part no. | Part no. | Part no. | Part no. | Part no. | Part no. | Part no. |
| 0.5 | 2.3 | 20 | 4.8 | 50901 | 50900 | 50902 | 50903 | 50904 | 50905 | 50906 | 50907 | 50908 |
| 0.75 | 2.5 | 19 | 7.2 | 50915 | 50914 | 50916 | 50917 | 50918 | 50919 | 50920 | 50921 | 50922 |
| 1 | 2.7 | 18 | 9.6 | 50929 | 50928 | 50930 | 50931 | 50932 | 50933 | 50934 | 50935 | 50936 |
| 1.5 | 3.0 | 16 | 14.4 | 50943 | 50942 | 50944 | 50945 | 50946 | 50947 | 50948 | 50949 | 50950 |
| 2.5 | 3.4 | 14 | 24.0 | 50957 | 50956 | 50958 | 50959 | 50960 | 50961 | 50962 | 50963 | 50964 |
| 4 | 4.5 | 12 | 38.0 | 50971 | 50970 | 50972 | 50973 | 50974 | 50975 | 50976 | 50977 | 50978 |
| 6 | 4.9 | 10 | 58.0 | 50985 | 50984 | 50986 | 50987 | 50988 | 50989 | 50990 | 50991 | 50992 |
| 10 | 5.8 | 8 | 96.0 | 50890 | 50209 | 50891 | 50892 | 50893 | 50894 | 50895 | 50896 | 50897 |
| 16 | 7.4 | 6 | 154.0 | 51564 | 51563 | 51565 | 51566 | 51567 | 51568 | 51569 | 51570 | 51571 |
| 25 | 9.6 | 4 | 240.0 | 51578 | 51577 | 51579 | 51580 | 51581 | 51582 | 51583 | 51584 | 51585 |

| | | | | orange | pink | beige |
|-------------------|---------------------------|-----------------|--------------------|----------|----------|----------|
| Cross-sec. mm² | Outer Ø mm, approx. | AWG, approx. | Ni-weight kg/km | Part no. | Part no. | Part no. |
| 0.5 | 2.3 | 20 | 4.8 | 50909 | 50911 | 50912 |
| 0.75 | 2.5 | 19 | 7.2 | 50923 | 50925 | 50926 |
| 1 | 2.7 | 18 | 9.6 | 50937 | 50939 | 50940 |
| 1.5 | 3.0 | 16 | 14.4 | 50951 | 50953 | 50954 |
| 2.5 | 3.4 | 14 | 24.0 | 50965 | 50967 | 50968 |
| 4 | 4.5 | 12 | 38.0 | 50979 | 50981 | 50982 |
| 6 | 4.9 | 10 | 58.0 | 50993 | 50995 | 50996 |
| 10 | 5.8 | 8 | 96.0 | 50898 | 51560 | 51561 |
| 16 | 7.4 | 6 | 154.0 | 51572 | 51574 | 51575 |
| 25 | 9.6 | 4 | 240.0 | 51586 | 51588 | 51589 |

