



## Technical data

- Special PVC cable with increased heat-resistance adapted to DIN VDE 0285-525-2-11 / DIN EN 50525-2-11  
0,5-0,75 mm<sup>2</sup> acc. to IEC 60227/56  
1,0-2,5 mm<sup>2</sup> acc. to IEC 60227/57
- **Temperature range**  
flexing -5°C to +105°C  
fixed installation -30°C to +105°C (for short time +120°C)
- **Nominal voltage**  
0,5-1 mm<sup>2</sup> U<sub>0</sub>/U 300/500 V  
from 1,5 mm<sup>2</sup> U<sub>0</sub>/U 450/750 V
- **Spark-test** 6000 V
- **Test voltage** 2000 V
- **Breakdown voltage** min. 4000 V
- **Insulation resistance**  
min. 20 MOhm x km
- **Minimum bending radius**  
flexing 7,5x cable Ø  
fixed installation 4x cable Ø
- **Radiation resistance**  
up to 80x10<sup>6</sup> cJ/kg (up to 80 Mrad)

## Cable structure

- Bare copper-conductor, to DIN VDE 0295 cl.5, fine-wire, BS 6360 cl.5, IEC 60228 cl.5
- Core insulation of special PVC compound type T13 to DIN VDE 0207-363-3 / DIN EN 50363-3
- Core identification to DIN VDE 0293-308  
- up to 5 cores coloured  
- from 6 cores, black with continuous white numbering
- GN-YE conductor, 3 cores and above in the outer layer
- Cores stranded in layers with optimal lay-length
- Outer sheath of special PVC, heat-resistant compound type TM3 to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1
- Outer sheath black (RAL 9005), also available in other colours on request
- with meter marking

## Properties

- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

## Tests

- PVC self-extinguishing and flame retardant acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)

## Note

- G = with green-yellow conductor  
x = without green-yellow conductor
- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.
- On request  
HELUTHERM® 120 H03V2V2-F  
HELUTHERM® 120 H05V2V2-F  
HELUTHERM® 120 (H)05V2V2-F

## Application

Therm cables are ideal for use in machines, appliances or motors which are subject to direct contact with high temperatures (e. g. varnishing machines and drying towers etc.). For application in dry, moist and wet rooms and in open air.

CE= The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

| Part no. | No. cores x cross-sec. mm <sup>2</sup> | Outer Ø app. mm | Cop. weight kg / km | Weight app. kg / km | AWG-No. | Part no. | No. cores x cross-sec. mm <sup>2</sup> | Outer Ø app. mm | Cop. weight kg / km | Weight app. kg / km | AWG-No. |
|----------|--|-----------------|---------------------|---------------------|---------|----------|--|-----------------|---------------------|---------------------|---------|
| 24002    | 2 x 0,5                                | 5,0             | 9,6                 | 40,0                | 20      | 24030    | 2 x 1,5                                | 7,4             | 29,0                | 77,0                | 16      |
| 24003    | 3 G 0,5                                | 5,3             | 14,4                | 50,0                | 20      | 24031    | 3 G 1,5                                | 8,1             | 43,0                | 97,0                | 16      |
| 24004    | 4 G 0,5                                | 5,8             | 19,2                | 60,0                | 20      | 24032    | 4 G 1,5                                | 9,0             | 58,0                | 122,0               | 16      |
| 24005    | 5 G 0,5                                | 6,7             | 24,0                | 70,0                | 20      | 24033    | 5 G 1,5                                | 10,0            | 72,0                | 143,0               | 16      |
| 24006    | 7 G 0,5                                | 8,8             | 33,6                | 90,0                | 20      | 24034    | 7 G 1,5                                | 11,9            | 101,0               | 179,0               | 16      |
| 24007    | 12 G 0,5                               | 11,1            | 58,0                | 140,0               | 20      | 24035    | 12 G 1,5                               | 14,5            | 173,0               | 310,0               | 16      |
| 24008    | 18 G 0,5                               | 12,9            | 86,0                | 170,0               | 20      | 24036    | 18 G 1,5                               | 17,4            | 259,0               | 460,0               | 16      |
| 24009    | 25 G 0,5                               | 15,8            | 101,0               | 250,0               | 20      | 24037    | 25 G 1,5                               | 21,3            | 360,0               | 650,0               | 16      |
| 24011    | 2 x 0,75                               | 6,2             | 14,4                | 52,0                | 19      | 24039    | 2 x 2,5                                | 9,3             | 48,0                | 120,0               | 14      |
| 24012    | 3 G 0,75                               | 6,6             | 21,6                | 61,0                | 19      | 24046    | 3 G 2,5                                | 10,1            | 72,0                | 150,0               | 14      |
| 24013    | 4 G 0,75                               | 7,1             | 29,0                | 75,0                | 19      | 24040    | 4 G 2,5                                | 11,0            | 96,0                | 200,0               | 14      |
| 24014    | 5 G 0,75                               | 8,0             | 36,0                | 94,0                | 19      | 24041    | 5 G 2,5                                | 12,3            | 120,0               | 250,0               | 14      |
| 24015    | 7 G 0,75                               | 9,5             | 50,0                | 112,0               | 19      | 24042    | 7 G 2,5                                | 14,6            | 168,0               | 310,0               | 14      |
| 24016    | 12 G 0,75                              | 11,6            | 86,0                | 180,0               | 19      | 24044    | 2 x 4                                  | 10,6            | 77,0                | 180,0               | 12      |
| 24017    | 18 G 0,75                              | 13,9            | 130,0               | 270,0               | 19      | 24291    | 3 G 4                                  | 11,5            | 115,0               | 220,0               | 12      |
| 24018    | 25 G 0,75                              | 16,9            | 180,0               | 380,0               | 19      | 24045    | 4 G 4                                  | 12,5            | 154,0               | 300,0               | 12      |
| 24019    | 1 x 1                                  | 6,0             | 9,6                 | 50,0                | 18      | 24292    | 5 G 4                                  | 15,1            | 192,0               | 360,0               | 12      |
| 24020    | 2 x 1                                  | 6,5             | 19,2                | 60,0                | 18      |          |  |                 |                     |                     |         |
| 24021    | 3 G 1                                  | 6,9             | 29,0                | 73,0                | 18      |          |  |                 |                     |                     |         |
| 24022    | 4 G 1                                  | 7,7             | 38,0                | 88,0                | 18      |          |  |                 |                     |                     |         |
| 24023    | 5 G 1                                  | 8,4             | 48,0                | 110,0               | 18      |          |  |                 |                     |                     |         |
| 24024    | 6 G 1                                  | 9,3             | 58,0                | 121,0               | 18      |          |  |                 |                     |                     |         |
| 24025    | 7 G 1                                  | 10,0            | 67,0                | 130,0               | 18      |          |  |                 |                     |                     |         |
| 24026    | 12 G 1                                 | 12,5            | 115,0               | 223,0               | 18      |          |  |                 |                     |                     |         |
| 24027    | 18 G 1                                 | 14,7            | 173,0               | 350,0               | 18      |          |  |                 |                     |                     |         |
| 24028    | 25 G 1                                 | 17,8            | 240,0               | 485,0               | 18      |          |  |                 |                     |                     |         |

Dimensions and specifications may be changed without prior notice. (RE01)