

HELUPOWER® THERMFLEX® 145



conductor stranded with optimal lay lengths, temperature-resistant, improved behaviour in case of fire



TECHNICAL DATA

Sheathed single core cable

Temperature range	flexible -40°C to +120°C fixed -55°C to +145°C
Short circuit temperature at the conductor	+250°C
Nominal voltage	AC U ₀ /U 600/1000 V
Max. permissible operating voltage	alternating current (AC) conductor/earth 700 V three-phase alternating current (AC) conductor/conductor 1200 V direct current (DC) conductor/earth 900 V direct current (DC) conductor/conductor 1800 V
Test voltage	4000 V
Minimum bending radius	flexible 12.5x Outer-Ø fixed 4x Outer-Ø

- for outdoor use
- halogen-free
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers
- reduced fire propagation, no release of corrosive and toxic gases, low smoke development

TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- corrosiveness of combustion gases acc. to DIN VDE 0482-754-2 / DIN EN 60754-2 / IEC 60754-2
- bundle fire test acc. to DIN VDE 0482-332-3-22 / DIN EN 60332-3-22 / IEC 60332-3-22
- smoke density acc. to DIN VDE 0482-1034-1+2 / DIN EN 61034-1+2 / IEC 61034-1+2
- oil-resistant acc. to DIN VDE 0473-811-404 / DIN EN 60811-404 / IEC 60811-404, IRM 902 4h at +70°C

APPLICATION

This cable is used as a generator connection cable in wind power plants and wherever a high current carrying capacity is required and a reduced outer diameter is beneficial due to limited installation space. Other areas of application: connection cable of thermal class B (130°C) for motors, transformers, relays, coils, magnets; power unit connections in the automotive industry; halogen-free wiring of switch and control cabinets; connecting cable for heating devices; supply cable for high-performance luminaires in industrial areas, sports facilities and traffic infrastructure; wiring of charging stations and pantographs within e-Mobility applications.

CABLE STRUCTURE

- Copper wire tinned, finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Core insulation: cross-linked polyolefin
- Core identification: black
- x = without protective conductor
- Outer sheath: cross-linked polyolefin
- Sheath colour: black

PROPERTIES

- resistant to: oil, UV radiation, ozone, weathering effects
- abrasion-resistant, notch-resistant

NOTES

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

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
17001667	1 x 50	1	16.0	480.0	711.0
17001668	1 x 70	2/0	18.5	672.0	902.0
17001669	1 x 95	3/0	20.0	912.0	1028.0
17001670	1 x 120	4/0	21.0	1152.0	1515.0
17001671	1 x 150	250 kcmil	25.0	1440.0	1913.0

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
17001672	1 x 185	350 kcmil	28.5	1776.0	2243.0
17001673	1 x 240	400 kcmil	32.5	2304.0	2912.0
17001674	1 x 300	500 kcmil	35.0	2880.0	4089.0
17001675	1 x 400	750 kcmil	42.5	3840.0	5067.0