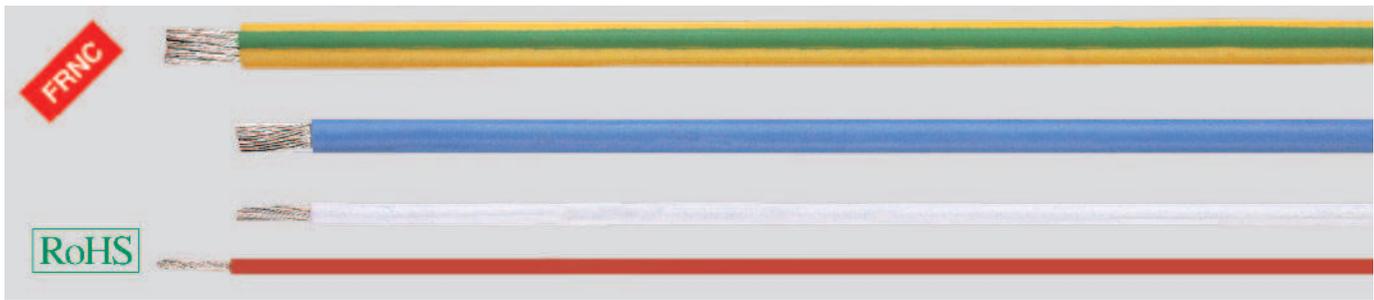


HELUTHERM® 145 flexible, electron beam cross-linked, halogen-free



Technical data

- Halogen-free single cores with increased heat resistance
- **Temperature range**
flexing -35°C to +120°C
fixed installation -45°C to +145°C
- **Nominal voltage**
U₀/U 300/500 V up to 1 mm²
U₀/U 450/ 750 V from 1,5 mm²
for fixed and protected installation
U₀/U 600/1000 V from 1,5 mm²
- **Test voltage** 3500 V
- **Minimum bending radius**
flexing 12,5x cable Ø
fixed installation 4x cable Ø
- **Caloric load values**
see Technical Informations
- **Power ratings table**
see Technical Informations

Cable construction

- Tinned Cu wires, according to DIN VDE 0295 cl. 5, BS 6360 cl. 5 and IEC 60228 cl. 5
- Core insulation of polyolefin-copolymer, electron beam cross-linked
- Core colours see table

Tests

- **Flame test** to DIN VDE 0482 part 266-2/ HD 405.3, BS 4066 part 3/ EN 50266-2/ IEC 60332-3 (equivalent DIN VDE 0472 part 804 test method C)
- **Corrosiveness of combustion gases** according to DIN VDE 0482 part 267/ EN 50267-2-2/ IEC 60754-2 (equivalent DIN VDE 0472 part 813)
- **Halogen-free** according to DIN VDE 0482 part 267/ EN 50267-2-1/ IEC 60754-1 (equivalent DIN VDE 0472 part 815)
- **Smoke density** to VDE 0482 part 268-1 and 2, test method C, IEC 61034-1/61034-2, HD 606 and BS 7622 part 1 and 2 (DIN VDE 0472 part 815)

Properties

- Halogen-free, no liberation of corrosive or toxic vapours, in that way this helps saving valuable time when trying to evacuate a building in a disciplined manner and prevents unnecessary loss of life
- Lower propagation of fire
- Low development of smoke and fumes
- Good abrasion and notch resistance
- Good resistance to oils and weathering
- Resistant to UV radiation and ozone
- Resistant to soldering temperatures
- Thermal class B
- These single-core cables are resistant to melting, even when in contact with a soldering iron at temperatures of between 300°C and 380°C, because of the electron-beam cross-linking for the insulation material
- Due to the high temperature profile the cross-section of conductor can under certain circumstances be reduced, hereby enabling a saving in space requirement and weight
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Note

- AWG sizes are approximate equivalent values. The actual cross-section is in mm².

Application

These temperature resistant single-core cables are used for the internal wiring of lighting fixtures, heaters, electrical machinery, switching systems and distributors in equipment and plant and machinery, suitable for installation on, in and beneath plaster, in closed installation ducts, as well as for traffic systems and outdoor applications. These cables are not approved for direct routing on racks, gutters or tanks. For a protected installation, these cables may be used at a nominal voltage of up to 1000 V alternating current or a direct current up to 750 V when earthed. The maximum operating d.c. voltage used in rail vehicles shall not exceed 900 V when earthed. These halogen-free single core cables are characterised by their amazingly high long-time resistance to temperature and feature among the leading halogen-free, flame resistant products in the world. These single core cables significantly contribute to safety and the environment.

CE = The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

Cross-sec. mm ² ca. RAL	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	black	gn-ye	brown	red	white	grey	vio	dk-bu	ye	beige	lt-bu	og	green	2-col.
				9005	50998	8003	3000	1013	7000	4005	5010	1021	1001	5015	2003	6018	
Part No. 0,25	1,6	2,4	4,0	50999	50998	51071	51072	51073	51074	51075	51079	51076	51164	51070	51077	51078	51165
Part No. 0,33	1,7	3,2	5,0	51167	51166	51169	51170	51171	51172	51173	51177	51174	51178	51168	51175	51176	51179
Part No. 0,5	1,9	4,8	7,0	51281	51280	51283	51284	51285	51286	51287	51291	51288	51292	51282	51289	51290	51293
Part No. 0,75	2,2	7,2	11,0	51295	51294	51297	51298	51299	51300	51301	51305	51302	51306	51296	51303	51304	51307
Part No. 1	2,5	9,6	14,0	51309	51308	51311	51312	51313	51314	51315	51319	51316	51320	51310	51317	51318	51321
Part No. 1,5	2,9	14,4	20,0	51323	51322	51325	51326	51327	51328	51329	51333	51330	51334	51324	51331	51332	51335
Part No. 2,5	3,5	24,0	30,0	51337	51336	51339	51340	51341	51342	51343	51347	51344	51348	51338	51345	51346	51349
Part No. 4	4,3	38,0	47,0	51351	51350	51353	51354	51355	51356	51357	51361	51358	51362	51352	51359	51360	51363
Part No. 6	5,4	58,0	72,0	51365	51364	51367	51368	51369	51370	51371	51375	51372	51376	51366	51373	51374	51377

Dimensions and specifications may be changed without prior notice.

Continuation ►