

# HELUTHERM® 145 UL/CSA 600V

temperature-resistant, crosslinked



**TECHNICAL DATA**

Single core acc. to UL-Std. 758 (AWM) Style 3578, CSA-Std. C22.2 No. 210 - AWM I A/B

**Temperature range** flexible -35°C to +120°C  
fixed -55°C to +145°C  
UL (AWM) flexible -35°C to +105°C  
UL (AWM) fixed -55°C to +105°C

**Nominal voltage** UL (AWM) AC 600 V

**Test voltage** 3000 V

**Minimum bending radius** flexible 8x Outer-Ø  
fixed 4x Outer-Ø

- 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: see table

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

- no fire propagation

- 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
  - flame-retardant acc. to CSA FT1
  - bundle fire test acc. to DIN VDE 0482-332-3-24 / DIN EN 60332-3-24 / IEC 60332-3-24
  - 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
  - certifications and approvals:  
0.5 - 50 mm²: DNV

- APPLICATION**
- Temperature resistant single core for the internal wiring of lighting fixtures, heaters, electrical machinery, switching systems and distributors in industrial equipment as well as plant and machinery construction; suitable for laying in tubes, on and under plaster as well as closed installation ducts. Not suitable for direct laying in cable ladders and cable trays.

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

Cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.	black (RAL 9005)	green-yellow	blue (RAL 5015)	brown (RAL 8003)	red (RAL 3000)	white (RAL 9010)	grey (RAL 7001)	violet (RAL 4005)
					Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	
0.25	24	2.3	2.4	7.0	59473	59472	59474	59475	59476	59477	59478	59479
0.5	20	2.6	4.8	11.0	59487	59486	59488	59489	59490	59491	59492	59493
0.75	19	2.8	7.2	14.0	59501	59500	59502	59503	59504	59505	59506	59507
1	18	2.9	9.6	17.0	59515	59514	59516	59517	59518	59519	59520	59521
1.5	16	3.1	14.4	22.0	59529	59528	59530	59531	59532	59533	59534	59535
2.5	14	3.6	24.0	33.0	59543	59542	59544	59545	59546	59547	59548	59549
4	12	4.3	38.4	53.0	59557	59556	59558	59559	59560	59561	59562	59563
6	10	5.0	57.6	78.0	59571	59570	59572	59573	59574	59575	59576	59577
10	8	6.4	96.0	136.0	59585	59584	59586	59587	59588	59589	59590	59591
16	6	7.5	154.0	203.0	59599	59598	59600	59601	59602	59603	59604	59605
25	4	9.6	240.0	300.0	59613	59612	59614	59615	59616	59617	59618	59619
35	2	10.8	336.0	405.0	59627	59626	59628	59629	59630	59631	59632	59633
50	1	12.6	480.0	580.0	59641	59640	59642	59643	59644	59645	59646	59647

07.04.2025 / We reserve the right to make technical changes; the imprint in the image is purely exemplary

# HELUTHERM® 145 UL/CSA 600V



temperature-resistant, crosslinked

Cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.	yellow	orange	green	pink	beige
					(RAL 1021) Part no.	(RAL 2003) Part no.	(RAL 6018) Part no.	(RAL 3015) Part no.	(RAL 1001) Part no.
0.25	24	2.3	2.4	7.0	<b>59480</b>	<b>59481</b>	<b>59482</b>	<b>59483</b>	<b>59484</b>
0.5	20	2.6	4.8	11.0	<b>59494</b>	<b>59495</b>	<b>59496</b>	<b>59497</b>	<b>59498</b>
0.75	19	2.8	7.2	14.0	<b>59508</b>	<b>59509</b>	<b>59510</b>	<b>59511</b>	<b>59512</b>
1	18	2.9	9.6	17.0	<b>59522</b>	<b>59523</b>	<b>59524</b>	<b>59525</b>	<b>59526</b>
1.5	16	3.1	14.4	22.0	<b>59536</b>	<b>59537</b>	<b>59538</b>	<b>59539</b>	<b>59540</b>
2.5	14	3.6	24.0	33.0	<b>59550</b>	<b>59551</b>	<b>59552</b>	<b>59553</b>	<b>59554</b>
4	12	4.3	38.4	53.0	<b>59564</b>	<b>59565</b>	<b>59566</b>	<b>59567</b>	<b>59568</b>
6	10	5.0	57.6	78.0	<b>59578</b>	<b>59579</b>	<b>59580</b>	<b>59581</b>	<b>59582</b>
10	8	6.4	96.0	136.0	<b>59592</b>	<b>59593</b>	<b>59594</b>	<b>59595</b>	<b>59596</b>
16	6	7.5	154.0	203.0	<b>59606</b>	<b>59607</b>	<b>59608</b>	<b>59609</b>	<b>59610</b>
25	4	9.6	240.0	300.0	<b>59620</b>	<b>59621</b>	<b>59622</b>	<b>59623</b>	<b>59624</b>
35	2	10.8	336.0	405.0	<b>59634</b>	<b>59635</b>	<b>59636</b>	<b>59637</b>	<b>59638</b>
50	1	12.6	480.0	580.0	<b>59648</b>	<b>59649</b>	<b>59650</b>	<b>59651</b>	<b>59652</b>