

HELUTHERM® 145 UL/CSA 600V

temperature-resistant, cross-linked



TECHNICAL DATA

Single core acc. to UL-Std. 758 (AWM) Style 3578, CSA-Std. C22.2 No. 210 - AWM I/II 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 12.5x Outer-Ø fixed 4x Outer-Ø

- 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
- Certifications:
0.5 - 50 mm²: DNV GL

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

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.

PROPERTIES

- resistant to: 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

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-weight kg/km	Weight kg/km, approx.	black (RAL 9005) Part no.	green-yellow Part no.	blue (RAL 5015) Part no.	brown (RAL 8003) Part no.	red (RAL 3000) Part no.	white (RAL 9010) Part no.	grey (RAL 7001) Part no.	purple (RAL 4005) 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

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Cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.	yellow (RAL 1021)	orange (RAL 2003)	green (RAL 6018)	pink (RAL 3015)	beige (RAL 1001)
					Part no.	Part no.	Part no.	Part no.	Part no.
0.25	24	2.3	2.4	7.0	59480	59481	59482	59483	59484
0.5	20	2.6	4.8	11.0	59494	59495	59496	59497	59498
0.75	19	2.8	7.2	14.0	59508	59509	59510	59511	59512
1	18	2.9	9.6	17.0	59522	59523	59524	59525	59526
1.5	16	3.1	14.4	22.0	59536	59537	59538	59539	59540
2.5	14	3.6	24.0	33.0	59550	59551	59552	59553	59554
4	12	4.3	38.4	53.0	59564	59565	59566	59567	59568
6	10	5.0	57.6	78.0	59578	59579	59580	59581	59582
10	8	6.4	96.0	136.0	59592	59593	59594	59595	59596
16	6	7.5	154.0	203.0	59606	59607	59608	59609	59610
25	4	9.6	240.0	300.0	59620	59621	59622	59623	59624
35	2	10.8	336.0	405.0	59634	59635	59636	59637	59638
50	1	12.6	480.0	580.0	59648	59649	59650	59651	59652