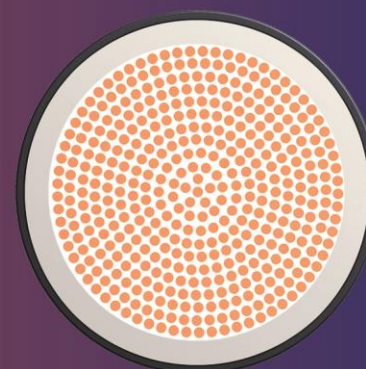
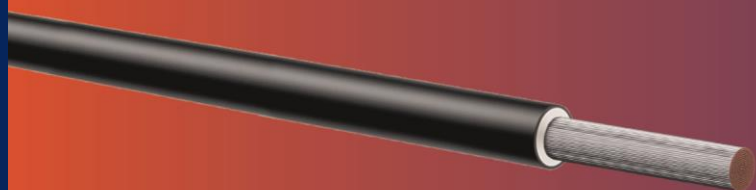


SINGLE-CORE CABLES

BETAtherm® 145 UL/cUL/CSA 3271/3820

Temperature resistant heat class B, 1000 V



Application

Typical applications are internal wiring in lamps, heating appliances, electric machines (thermal class B) switchboards and distribution boxes in apparatus, mechanical and plant engineering and inverters.

Used for laying in tubes, surface wiring, direct in plaster or underneath it, as well in conduits. May not be laid directly in cable trays, cable racks or cable troughs.

Construction

Conductor	Tinned fine copper strand acc. to VDE 0295 / IEC 60228, class 5
Insulation	Polyolefin Copolymer, electronbeam cross-linked
Core colour	green-yellow, black, light-blue, brown, red, white, grey, violet, orange, yellow, green, dark-blue. Other colours, also two-coloured upon request

Advantages

- Multi-Standard cable
- Very high resistance to temperature
- Resistance to cold down to -55 °C
- Best fire performance, halogenfree
- Electron-beam cross-linked
- Nominal voltage 600 + 1000 V



BETAtherm® 145 UL/cUL/CSA 3271/3820

Electrical properties

Rated value	U0/U	1000 / 1000 V AC
Test voltage		3.5 kV, 50 Hz / 1 min.

Thermal properties

Operating temperature	Fixed installation	-55 to + 125°C
Operating temperature	Occasionally moved	-35 to + 120°C
Max. short circuit temperature		+280°C (max. 5s)

Mechanical properties

Bending radius	Fixed installation	≥4 x Ø
Bending radius	Occasionally moved	≥6 x Ø

Material properties / Standards

Halogenfree	IEC 60754-1, EN 50267-2-1
No corrosive gases	IEC 60754-2, EN 50267-2-2
No toxic gases	NF X 70-100
Low smoke density	IEC 61034, DIN EN 61034-2, EN 50268-2
Flame retardant	EN/IEC 60332-1-2, FT2
Non-flame propagating	IEC 60332-3, DIN EN 60332-3, DIN EN 50266-2
Low fire load	DIN 51900

Approvals

UL AWM Style 3271, 125°C / 600 V, AWM Style 3820, 125 °C / 1000 V	File No. E146164
cUL AWM I A/B 125°C / 1000 V (cUL ist gleichberechtigt zur Approbation nach CSA)	File No. E146164
CSA AWM I A/B 125°C / 600 V	Zertifikat No. 1752635

Additional information

Special types upon request





BETAtherm® 145 UL/cUL/CSA 3271/3820

Construction Cross-sec.	Conductor-Ø	R ₂₀	Outer-Ø	Weight	Fire load	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.	Part no.
[mm ²]	[mm]	[mΩ/m]	[mm]	[kg/km]	[kWh/m]	Black	White	Red	Light blue	Green-yellow	Brown	Orange	Grey
0.25	0.65	77.5	2.30 ±0.1	8	0.022	311364	311870	311871	311872	*	311923	*	311869
0.33	0.75	57.2	2.35 ±0.1	10	0.024	317471	317477	*	317474	*	317472	317473	317476
0.5	0.90	40.1	2.50 ±0.1	11	0.025	310661	311366	310662	312175	*	311994	310676	311365
0.75	1.15	26.7	2.75 ±0.1	14	0.029	310663	313461	313462	310887	*	310886	*	310885
1	1.25	20.0	2.85 ±0.1	17	0.031	310664	313451	313452	313450	*	316808	*	316859
1.5	1.55	13.7	3.15 ±0.2	22	0.036	310665	313453	310941	310942	*	311302	311303	317379
2.5	2.05	8.21	3.65 ±0.2	32	0.043	310646	311605	311604	310814	*	311106	310677	311111
4	2.55	5.09	4.15 ±0.2	46	0.051	310648	310679	310817	310815	*	310701	310680	310700
6	3.10	3.39	4.70 ±0.2	65	0.060	310649	310820	310800	312235	*	315222	315010	313686
10	4.10	1.95	6.50 ±0.3	114	0.120	310651	315011	*	313611	*	317053	315012	317052
16	5.00	1.24	8.20 ±0.3	182	0.198	310652	*	*	310943	*	313697	*	313696
25	6.20	0.795	9.40 ±0.3	264	0.234	310654	*	*	*	*	*	*	*
35	7.70	0.565	10.90 ±0.4	369	0.302	310656	*	*	*	*	*	*	*
50	9.70	0.393	14.10 ±0.4	558	0.543	310658	*	*	*	*	*	*	*
70	11.20	0.277	15.60 ±0.4	747	0.621	310675	*	*	*	*	*	*	*
95	12.80	0.210	17.20 ±0.4	959	0.682	310723	*	*	*	*	*	*	*
120	14.60	0.164	19.0 ±0.4	1190	0.758	311107	*	*	*	*	*	*	*
150	16.40	0.132	20.40 ±0.4	1453	0.835	313434	*	*	*	*	*	*	*
185	17.90	0.108	22.30 ±0.4	1746	0.919	315871	*	*	*	*	*	*	*

Note:

*: Upon request