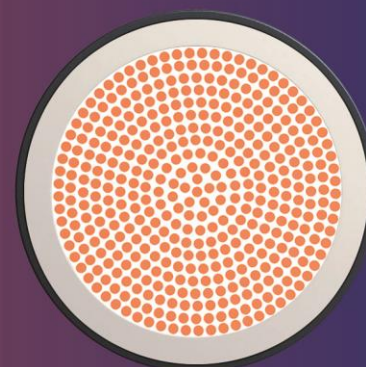
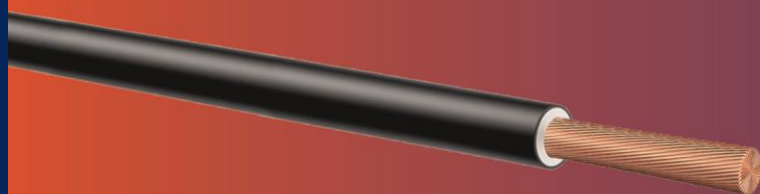


SINGLE-CORE CABLES

BETAtherm® 90

Halogenfree, flameretardant, CPR tested



BauPVo/CPR

D
ca

CCHDA0000045



Application

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.

Typical applications are internal wiring in lamps, heating applications, switchboards and distributions boxes in apparatus,

Mechanical or plant engineering.

Construction

Conductor	Bare fine copper strand acc. to VDE 0295 / IEC 60228, class 5
Insulation	Polyolefin Copolymer
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

- Best fire performance, halogenfree
- VDE permission and ESTI approval



BETAtherm® 90

Electrical properties

Rated value	U ₀ /U ≤ 1 mm ²	300 / 500 V
Rated value	U ₀ /U ≥ 1.5 mm ²	470 / 750 V
Rated value	U ₀ /U ≥ 1.5 mm ²	600 / 1000 V AC*
Rated value	U ₀ /U ≥ 1.5 mm ²	750 / 1500 V DC*
Test voltage	5.0 kV, 50 Hz / 5 min.	

Thermal properties

Operating temperature	Fixed installation	-40 to + 105°C
Operating temperature	Occasionally moved	-25 to + 90°C
Max. short circuit temperature	+160°C (max. 5s)	

Mechanical properties

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

Material properties / Standards

Halogenfree	IEC 60754-1, EN 50267-2-1	
No corrosive gases	IEC 60754-2, EN 50267-2-2	

Additional information

* fixed and protected installation

Material properties / Standards

No toxic gases	NF X 70-100	
Low smoke density	IEC 61034, DIN EN 61034, EN 50268-2	
Flame retardant	EN IEC 60332-1-2	
Non-flame propagating	IEC 60332-3, DIN EN 60332-3, EN 50266-2	
Low fire load	DIN 51900	
Fire properties acc. (CPR)		
Dca- s2, d2, a1	EN 50575, EN 13501-6	
Fire performance Dca	EN 50399	
Medium smoke emission s2	EN 50399	
Drip off behavior d2	EN 50399	
Very low corrosive gases a1	EN 60754-2	

Approvals

VDE	VDE REG No. 6505, Certificate No. 107593	
ESTI	SD7 (Security sign)	
ÖVE	CPR identification code CCHDA0000045	



BETAtherm® 90

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	0.70	75.0	1.70 ± 0.1	5	0.011	*	*	*	*	*	*	*	*
0.5	0.95	39.0	2.15 ± 0.1	9	0.017	220522	220526	220525	220523	220521	220524	221350	221351
0.75	1.20	26.0	2.4 ± 0.1	12	0.020	220528	215667	220531	220529	220527	220530	221553	221544
1	1.30	19.5	2.5 ± 0.2	14	0.021	220533	220537	220536	220534	220532	220535	220442	221545
1.5	1.60	13.3	3.0 ± 0.2	20	0.030	216245	220541	220540	220538	220437	220539	221554	221546
2.5	2.10	7.98	3.7 ± 0.2	32	0.043	220542	220545	220544	220543	220440	220906	315835	221547
4	2.50	4.95	4.1 ± 0.2	45	0.049	220547	220550	220549	220548	220546	224064	220892	222376
6	3.10	3.3	4.7 ± 0.2	63	0.058	220552	221316	221315	220553	220551	224062	*	224066
10	4.10	1.91	6.3 ± 0.3	111	0.106	220559	221258	221259	221260	220554	224068	*	224067
16	5.40	1.21	7.8 ± 0.3	173	0.150	220560	221261	221262	221263	220555	224070	*	224069
25	6.60	0.78	9.2 ± 0.3	256	0.194	220561	*	*	214150	220556	316186	*	312312
35	7.60	0.554	10.4 ± 0.4	354	0.242	220562	*	*	221541	220557	312612	*	312609
50	9.20	0.386	12.2 ± 0.4	496	0.298	220563	*	*	*	220558	*	*	317301
70	11.00	0.272	14.2 ± 0.4	707	0.454	220565	*	*	221543	*	*	*	*
95	13.00	0.206	16.4 ± 0.4	907	0.514	220565	*	*	*	*	*	*	*
120	14.80	0.161	18.4 ± 0.4	1158	0.606	224891	*	*	*	*	*	*	*
150	16.40	0.129	20.2 ± 0.4	1428	0.724	303197	*	*	*	*	*	*	*
185	18.20	0.106	22.2 ± 0.4	1711	0.762	303198	*	*	*	*	*	*	*
240	20.80	0.08	25.2 ± 0.6	2255	0.945	303200	*	*	*	*	*	*	*

Note:

*: Upon request