

Halogen Free, Low Smoke, High Temperature, Flame Retardant Cables

BETatherm® 145 & BETAflam® 145 Tinned Copper Flexible



Application:

Wiring of switchboards, control, instrumentation, marine and communication equipment

Benefits	
Low Smoke	Reduced smoke emission in a fire situation
Low Toxicity	Reduced toxicity in a fire situation
Non-Corrosive	No corrosive gas emission in a fire situation
High Temperature Rating	High temperature rating can allow reduced sizes, saving space and weight
High Flexibility	Class 5 flexible conductor stranding
Heavy Duty	Exceptional mechanical strength, impact and abrasion resistance
Flame Retardant	Flame retardant, low fire load and non-flame propagating
Marine Approved	Marine class approvals – Lloyds, BV, DNV, GL, VDE & Gost R
Features	
✓	Tinned copper strands for corrosion protection
✓	145°C halogen free insulation for high ambient temperature applications
✓	Tinned copper for high conductivity soldered connection
✓	Fine stranded conductors for high flexing
✓	RoHS compliant to European standards
✓	Marine class approvals: Lloyd's Register, DNV, BV and GL
✓	Electron beam crosslinked polyolefin copolymer for enhanced mechanical strength
Construction	
Conductor	Tinned annealed copper wire, class 5
Insulation	Electron beam crosslinked polyolefin copolymer halogen free 145°C
Ratings	
Temperature	-55°C to +145°C
Voltage	$U_0/U \leq 1 \text{ mm}^2 \text{ 300 / 500 V}$ $U_0/U \geq 1.5 \text{ mm}^2 \text{ 450 / 750 V}$ For fixed and protected installation $U_0/U \geq 1.5 \text{ mm}^2 \text{ 600 / 1000 V}$
Applicable Standards	IEC 60332-1, IEC 60332-3, IEC 60228, DIN 51900



Flexible Conductor:
Class 5



Tinned Copper
for Corrosion Resistance



Minimum Service
Temperature:
-55°C



Maximum Service
Temperature:
145°C



Maximum Short Circuit
Temperature:
280°C (Max 5s)



Impact Resistant



Abrasion Resistant
Excellent



Grease and Mineral
Oil Resistant



Chemical & Oil Resistant



Flame Non-Propagation



Low Temperature
Resistance: Excellent



Low Smoke
Zero Halogen



Minimum Recommended
Bend Radius Fixed 4 x OD

SYDNEY (Head Office)
102 Old Pittwater Road
Brookvale NSW 2100
Phone: 02 9938 5622
Fax: 02 9938 3973

BRISBANE
2/284 Musgrave Road
Coopers Plains QLD 4108
Phone: 07 3277 5811
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MELBOURNE
9/24-26 Carrick Drive
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NEWCASTLE
64 Orlando Road
Lambton NSW 2299
Phone: 02 4956 2044
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WESTERN AUSTRALIA
1 Karratha St
Welshpool WA 6106
Phone: 08 9351 9966
Fax: 08 9356 2522

BETAtherm® 145 - Single Core

Bambach Item Code	Conductor CSA mm ²	Conductor Stranding No. of Strands/mm	Nom Ø mm	Current Rating* Amps	Weight kg/km
13137A	0.25	14 /0.15	1.6	11	5
13246A	0.5	16/0.20	1.9	15	9
13247A	0.75	24/0.20	2.2	20	13
13248A	1	32/0.20	2.4	25	15
13245A	1.5	30/0.25	3.0	31	22
13249A	2.5	50/0.25	3.7	41	34
13251A	4	56/0.30	4.2	56	47
13252A	6	84/0.30	4.7	72	72
13253A	10	80/0.40	6.1	100	120
13139A	16	126/0.40	7.5	132	190
13140A	25	196/0.40	9.0	174	290
13141A	35	280/0.40	10.1	215	400
13142A	50	399/0.40	12.7	264	550
13143A	70	570/0.40	14.7	340	770
13144A	95	475/0.50	16.4	415	1010

Sizes up to 630mm² available on request.

Ship and offshore approvals

VDE permission no. 9887

Germanischer Lloyd (GL) certificate no. 96630 - 94 HH

Lloyd's Register (LR) certificate no. 03 / 20056

BUREAU VERITAS (BV) certificate no. 13349 / BO BV

DNV certificate no. E-7684

Gost R: Certificate no. 83 B 00 682

BETAflam® 145 Flex - Multi-Core

Bambach Item Code	Conductor CSA mm ²	Conductor Stranding No. of Strands/mm	Nom Ø mm	Current Rating* Amps	Weight kg/km
13060A	2 x 1.5	30/0.25	7.6	23	71
13206A	3 x 1	32/0.20	6.8	19	66
13270A	3 x 1.5	30/0.25	8.1	23	96
13268A	3 X 2.5	50/0.25	9.8	31	145
13064A	3 x 6	84/0.30	12.4	53	309
13266A	4 x 1.5	30/0.25	8.8	23	123
13264A	4 x 2.5	50/0.25	10.8	31	189
13263A	4 x 4	56/0.30	12.2	41	260
13262A	4 x 6	84/0.30	13.8	53	375
13066A	4 x 10	80/0.40	17.5	72	627
13061A	5 x 1.5	30/0.25	9.8	23	156
13271A	5 X 2.5	50/0.25	12.0	31	235
13065A	5 X 6	84/0.30	15.4	53	494
13261A	7 x 1.5	30/0.25	12.0	23	224
13062A	10 X 1.5	30/0.25	14.6	23	314
13258A	12 X 1.5	30/0.25	14.6	23	346
13257A	16 X 1.5	30/0.25	16.2	23	452

Other sizes & screened versions available on request. *Current ratings based on ambient temperature of 40°C as per IEC 60287

Ship and offshore approvals

Germanischer Lloyd (GL) certificate no. 96627-94HH

Lloyd's Register (LR) certificate no. 03/20057

BUREAU VERITAS (BV) certificate no. 13348/BO BV

DET Norske Veritas (DNV) certificate no. E-8948/8950

Gost R certificate no. 83 B 00 682

Current ratings based on ambient temperature of 40°C as per IEC 60287

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