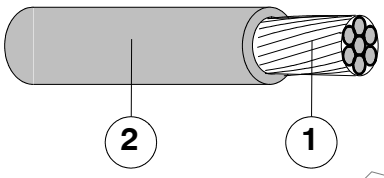
RADOX 125
Connecting leads

GENERAL PROPERTIES :
Electron beam crosslinked Isolation; excellent high temperature, low temperature, ozone, weathering and abrasion resistance, small amount of smoke, halogen free, flamm- retardant, soldering iron resistant, easy to strip and process, flexible.

APPLICATION :
For protected and fixed installation inside electrical equipment, especially suitable for the connection of motor windings, switchboards, magnets and transformers.



1. Conductor : Stranded tin plated copper, EN 60228 / IEC 60228 cl. 5
2. Insulation : RADOX 125
   Type EI5 modified, EN 50363- 5
   Type HF90 modified, IEC 60092- 360
   extruded irradiation crosslinked polyolefin
   Colours : see Tables 1+2

TECHNICAL DATA

Temperature range		- 40 +125	°C
Maximum permitted operating temperatur of the conductor EN50565/IEC 60092		+ 90	°C
Short circuit temperatur rating of the conductor EN50565/IEC 60092		+ 250	°C
Minimum bending radius	Outer diameter ≤ 12 mm		3 x D
	Outer diameter > 12 mm		4 x D

Cross- section 0.25 - 0.75 mm²

Rated voltage	U_0/U	300/500	V AC
Maximum permitted operating voltage cond.- earth		320	V AC
Maximum permitted operating voltage cond.- cond.	U_m	550	V AC
Maximum permitted operating voltage cond.- earth	V_0	410	V DC
Maximum permitted operating voltage cond.- cond.		820	V DC
Test voltage		2000(5000)	V AC (V DC)

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Cross- section 1 - 300 mm²

Rated voltage	U_0/U	600/1000	V AC
Maximum permitted operating voltage cond.- earth		720	V AC
Maximum permitted operating voltage cond.- cond.	U_m	1200	V AC
Maximum permitted operating voltage cond.- earth	V_0	900	V DC
Maximum permitted operating voltage cond.- cond.		1500	V DC
Test voltage		3500(8400)	V AC (V DC)

Marking : < HUBER+SUHNER RADOX 125 1X[cross section] [prod. place] > 0.6/1 KV HF90 IEC 60332- 3- 22

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TABLE 1: Uo/U=300/500V

Cross section nom. mm^2	**Conductor construction** nom. n x mmØ	**Conductor diameter** max. mm	**Insulation thickness** nom. mm	**Core diameter D** mm	**R_{20} IEC 60228** max. Ω / km	**Weight** nom. kg / 100m	**Colour**	**H+S** Part Nr.
0.25	19 x 0.13	0.61	0.4	1.3 ± 0.10	85.9	0.4	BK WH BU BN GY RD YE VT GN OG GNYE	12519496 12516294 12521082 12519497 12518105 12521067 12519498 12516141 12521066 12521081 12521088
0.34	19 x 0.16	0.77	0.4	1.5 ± 0.10	52.1	0.6	BK WH BU BN GY RD YE GN	12536857 12558211 12537922 85030117 85030122 85030121 85030119 85030120
0.5	19 x 0.18	0.90	0.6	2.0 ± 0.10	40.1	0.9	BK WH BU BN GY RD YE VT GN OG GNYE	12516088 12516080 12521075 12515803 12516087 12516089 12521076 12521069 12516086 12521074 12516091
0.75	24 x 0.20	1.13	0.6	2.25 ± 0.10	26.7	1.2	BK WH BU BN GY RD YE VT GN OG GNYE	12530436 12535952 12530433 12530432 12515493 12515490 12515491 12536734 12515492 12552231 12530434

TABLE 2: Uo/U=600/1000V

Cross section nom. mm^2	Conductor construction nom. n x mmØ	Conductor diameter max. mm	Insulation thickness nom. mm	Core diameter D mm	R_{20} IEC 60228 max. Ω / km	Weight nom. kg / 100m	Colour	H+S Part Nr.
1	32 x 0.20	1.28	0.7	2.6 ± 0.10	20.0	1.6	BK WH BU BN GY RD YE VT GN OG GNYE	12534452 12012040 12012060 12012050 12505624 12012080 12012090 12505621 12536735 12505622 12012070
1.5	30 x 0.25	1.52	0.7	2.85 ± 0.10	13.7	2.1	BK WH BU BN GY RD YE VT GN OG GNYE	12535840 12528958 12534453 12534455 12534454 12535703 12536736 12536739 12536738 12538161 12536737
2.5	48 x 0.25	2.06	0.7	3.35 ± 0.10	8.21	3.0	BK WH BU BN GY RD YE VT GN OG GNYE	12534456 12535681 12535682 12535684 12535843 12535521 12535714 12538836 12536740 12536516 12535683
4	56 x 0.30	2.64	0.7	3.95 ± 0.10	5.09	4.6	BK WH BU BN GY RD YE GN OG GNYE	12534457 12535911 12536742 12536741 12536745 12536743 12536744 12535912 84093193 12528959
6	82 x 0.30	3.30	0.7	4.65 ± 0.15	3.39	6.5	BK WH BU BN GY RD YE VT GNYE	12560235 12560236 12560230 12560231 12586519 12560234 12560232 84148202 12560233

TABLE 2: Uo/U=600/1000V

Cross section nom. mm²	Conductor construction nom. n x mmØ	Conductor diameter max. mm	Insulation thickness nom. mm	Core diameter D mm	R_{20} IEC 60228 max. Ω / km	Weight nom. kg / 100m	Colour	H+S Part Nr.
10	78 x 0.40	4.25	0.7	5.6 ± 0.15	1.95	10.6	BK WH BU BN RD YE GNYE	12560242 12560243 12560238 12582444 12560241 12560239 12560240
16	119 x 0.40	5.40	0.7	6.75 ± 0.15	1.24	15.6	BK WH BU BN GY RD YE GNYE	12560249 12560250 12560244 12584353 12560247 12560248 12560245 12560246
25	182 x 0.40	6.70	0.9	8.5 ± 0.2	0.795	24.2	BK GY RD GN OG GNYE	12560254 85077070 12560253 12581282 84142287 12560252
35	266 x 0.40	7.90	0.9	9.7 ± 0.20	0.565	34.3	BK GY RD GN GNYE	12560256 85077062 85082446 12582833 12560255
50	378 x 0.40	9.30	1.1	11.4 ± 0.20	0.393	46.1	BK WH RD GNYE	12560260 12560261 12560259 12560258
70	348 x 0.50	11.50	1.1	13.8 ± 0.25	0.277	66.2	BK GY RD GNYE	12560265 85076956 12560264 12560263
95	456 x 0.50	13.00	1.1	15.3 ± 0.25	0.210	85.3	BK OG GNYE	12560269 85028249 12560268
120	570 x 0.50	14.70	1.2	17.2 ± 0.30	0.164	108.3	BK GNYE	12560273 12560272
150	722 x 0.50	16.20	1.4	19.1 ± 0.30	0.132	135.3	BK	12560275
185	874 x 0.50	18.00	1.6	21.3 ± 0.30	0.108	166.8	BK GNYE	12560276 84124746
240	1147 x 0.50	21.00	1.7	24.5 ± 0.30	0.0817	216.3	BK	12560277
300	1443 x 0.50	23.20	1.8	27.1 ± 0.40	0.0654	269.2	BK	85102782

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The cables are in conformity with :

Fire protection in ships 1-300 mm²	**Fulfilled**	**IEC 60092**
Vertical flame spread of a single cable	50 < L ≤ 540 mm	IEC 60332-1-2
Vertical flame spread of bunched cables	L ≤ 2.5 m	IEC 60332-3-22
Smoke density	T ≥ 60 %	IEC 61034-2
Corrosivity of combustion gases	pH ≥ 4.3, C ≤ 10 µS/mm	IEC 60754-2
Amount of halogen acid gas	HCl+HBr ≤ 0.5%	IEC 60754-1

Fire protection on railway vehicles, hazard level	**HL1 - HL3**	**EN 45545**
Vertical flame spread	50 < L ≤ 540 mm	EN 60332-1-2
Vertical flame spread, bunched, D ≤ 6mm	L ≤ 1.5 m	EN 50305, 9.1.2
Vertical flame spread, bunched, 6 < D < 12 mm	L ≤ 2.5 m	EN 50305, 9.1.1
Vertical flame spread, bunched, D ≥ 12 mm	L ≤ 2.5 m	EN 60332-3-24
Smoke density	T ≥ 70 %	EN 61034-2
Toxicity	ITC ≤ 6	EN 50305, 9.2

Fire protection on building products , hazard level

Cross-section 0.5 - 6 mm²	**Eca**	**EN 13501-6**
Flame spread	H ≤ 425 mm	EN 60332-1-2
Cross-section 10 - 300 mm²	**B2ca - s1a, d2, a1**	**EN 13501-6**
Flame spread	H ≤ 425 mm	EN 60332-1-2
Flame spread	FS ≤ 1.5 m	EN 50399
Total heat release	THR ≤ 15 MJ	
Heat release rate	Peak-HRR ≤ 30 kW	
Fire growth rate index	FIGRA ≤ 150 W/s	
Total smoke production	TSP ≤ 50 m2	
Smoke production rate	Peak-SPR ≤ 0.25 m2/s	
Flaming droplets/particles	No requirement	
Smoke density	T ≥ 80 %	EN 61034-2
Acidity	C < 2.5 µS/mm,pH > 4.3	EN 60754-2

Approvals :

DNV (Det Norske veritas)	TAE00003GH
CPR (Construction Product regulation)	according to EN50575 Eca ≤ 6mm2, B2ca-s1a-d2-a1 > 6mm2