



Construction:

- 1 fine-stranded tinned or bare copper
- 2 core insulation of silicone (2G11)

Application

Silicone rubber is resistant to extreme temperature conditions, as for high (up to 180 °C, briefly even to 250 °C), so also for low (-60 °C) temperature. It has a high point (temperature) of inflammability, it is halogen-free, releases no corrosive gases at combustion, and around the conductor is formed additional insulation of silicone-oxide ashes. Due to a higher electrical resistance, tinned copper is also more suitable for higher temperatures (up to 220 °C) than bare copper. Such composition of these conductors makes them applicable in extreme temperature environment, for inst. in steel production, aircraft industry, same as in shipbuilding, cement plants and glass and ceramics factories, in electric power plants etc. They are also suitable for inner wiring of lighting, heating elements, burners, furnaces etc.

Standards

- DIN VDE 0282 part 3
- DIN VDE 0250 part 1
- HRN HD 22.3 S3
- IEC 60245-3

Construction

Conductor: tinned copper conductor, fine wired stranded, class 5 acc. to IEC 60228 / HD 383 / DIN VDE 0295

Insulation: silicone rubber

insulation colours: 

Technical data

Temperature range:

operating temp.: -60 °C up to +180 °C

short-term peak temp.: 220 °C

Nominal voltage: $U_0/U = 300/500$ V

Test voltage: 2000 V

Behaviour in fire: IEC 60332-1

Halogen-free: IEC 60754-1

Corrosiveness of combustion gases: not corrosive acc. to IEC 60754-2

Specific el. resistance of insulation: > 200 M Ω x km

Maximal tensile strength:

under normal conditions: 5 N/mm²

after ageing (240h / 200°C): 4 N/mm²

Minimal inner bending radius: 15D

DIMENSIONS

Dimensions – number of cores x conductor cross-section	Construction of individual conductor	Insulation thickness	External diameter	Conductor resistance at 20 °C	Cu weight	Cable weight	Packing*
	nominal	nominal		max.		approx.	
N x mm ²	n x mm	mm	mm	Ω /km	kg/km	kg/km	
1 x 0,25	14 x 0,15	0,8	1,8	79,3	2,4	5,5	c.100

1 x 0,34	19 x 0,15	0,8	1,9	57,1	3,3	7,1	c.100
1 x 0,5	16 x 0,20	0,8	2,1	40,1	4,8	8,6	c.100
1 x 0,75	24 x 0,20	0,8	2,4	26,7	7,2	11,0	c.100
1 x 1,0	32 x 0,20	0,8	2,5	20,0	9,6	13,6	c.100
1 x 1,5	30 x 0,25	0,8	2,8	13,7	14,4	20,3	c.100
1 x 2,5	50 x 0,25	0,9	3,4	8,21	24	32,0	c.100
1 x 4	56 x 0,30	1,0	4,2	5,09	38,4	48,5	c.100
1 x 6	84 x 0,30	1,0	5,2	3,39	57,6	71,0	c.100
1 x 10	80 x 0,40	1,2	7,0	1,95	96	124,0	c.100
1 x 16	128 x 0,40	1,2	8,0	1,24	153,6	188,0	CUT
1 x 25	200 x 0,40	1,4	9,9	0,795	240	296,0	CUT
1 x 35	280 x 0,40	1,4	11,2	0,565	336	400,0	CUT
1 x 50	400 x 0,40	1,6	13,8	0,393	480	570,0	CUT
1 x 70	356 x 0,50	1,6	14,8	0,277	672	766,0	CUT
1 x 95	485 x 0,50	1,8	18,2	0,210	912	1030,0	CUT
1 x 120	614 x 0,50	1,8	19,2	0,164	1152	1300,0	CUT
1 x 150	765 x 0,50	2,0	21,9	0,132	1440	1563,0	CUT
1 x 185	944 x 0,50	2,2	23,0	0,108	1776	1915,0	CUT
1 x 240	1225 x 0,50	2,4	26,5	0,082	2304		CUT
1 x 300	1530 x 0,50	2,4	30,0	0,065	2880		CUT

*) Packing: c.100 = coil 100 m CUT = cable in different lengths on drum or reel, possible cutting at required length