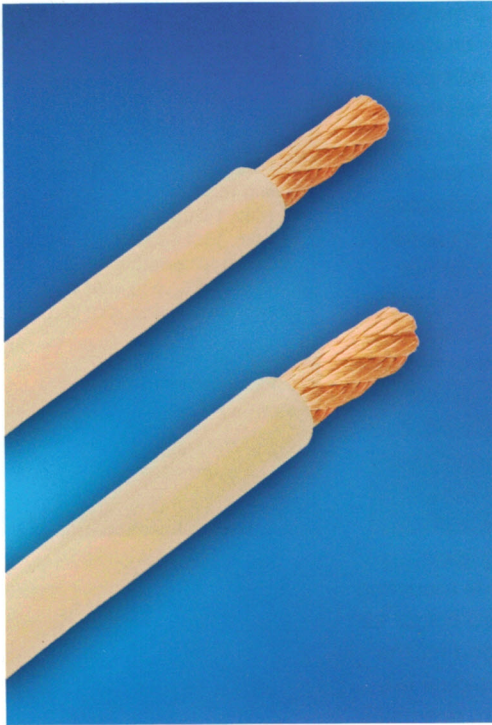


Single insulated silicone copper cables 1,8/3 kV

highly flexible, free of halogen, flame retardant and UL-listed



Construction and application

Highly flexible heat resistant cables with stabilized insulation thickness and a good UV and ozone stability. Excellently suitable for high current connections inside switchgears, switchboards or other electro technical installations.

Because the electro technical industry develops switchgears with great power but smaller and smaller dimensions, extremely flexible high current connectors are needed. Our silicone insulated copper cables offer an excellent possibility for high current connections inside multifarious applications.

The heat resistance combined with the great surface of the conductors caused by the small single wire-Ø of 0,07 or 0,10 mm enable a bigger current load compared with PVC or normal rubber insulated conductors. The stabilized insulation which is free of halogen, flame retardant and self-extinguishing offer also multifarious applications inside of the railway or military field. Additionally applications as earthing tapes, high current conducting wires or as flexible heat resistance cables for hand operated welding devices are imaginable too.

Technical data

Conductor

- round stranded copper cables made out of annealed CU-ETP1 wires acc. to DIN EN 13602
- surface uncoated
- wire-Ø 0,07 mm (4-16 mm²)
- wire-Ø 0,10 mm (25-300 mm²)

Insulation material

- silicone rubber circa 60 shore A
- free of halogen, chlorine content < 4 ppm acc. to VDE 0472 part 813 and 814 as well as IEC 754
- hardly inflammable
- self-extinguishing
- tensile strength before growing old 8,3 MPa
- breaking elasticity 300 %
- testing voltage 10 kV
- dielectric strength 20 kV/mm
- short circuit resistance SiR +350° C acc. to VDE 0298 part 3 and 4
- operating voltage
4-6 mm², U₀/U 1,5/1,5 kV
10-300 mm², U₀/U 1,8/3 kV
- operating temperature
continuously -50° C up to +180° C
shortly +250° C up to +300° C
(by touching with a soldering-iron)

General attributes

- UL-listed
- excellent electric-arc and tracking resistance
- good UV and ozone stability

Delivery

- in rings, on spools or wooden drums

	Part-No.	technical data								
		cross-section mm ²	diameter and number of wires	dimensions mm		current load in dependence of the conductor heat in ° Celsius				
				outer-Ø, ca.	insulation thickness, ca.	45°	80°	90°	100°	130°
1,5/1,5	15014	4,0	1036 x 0,07	4,8	1,1	30 A	50 A	55 A	60 A	70 A
	15016	6,0	1568 x 0,07	5,6	1,1	40 A	65 A	70 A	78 A	90 A
1,8/3 kV, single insulated	15020	10,0	2562 x 0,07	8,5	2,0	50 A	90 A	98 A	107 A	120 A
	15022	16,0	4116 x 0,07	10,0	2,0	70 A	125 A	132 A	143 A	160 A
	15024	25,0	3234 x 0,10	12,0	2,3	95 A	160 A	176 A	187 A	215 A
	15026	35,0	4508 x 0,10	13,8	2,5	115 A	200 A	218 A	230 A	260 A
	15028	50,0	6468 x 0,10	15,5	2,5	145 A	245 A	276 A	287 A	325 A
	15030	70,0	8967 x 0,10	18,0	2,5	175 A	305 A	347 A	352 A	400 A
	15032	95,0	12201 x 0,10	20,0	2,5	215 A	370 A	416 A	425 A	485 A
	15034	120,0	15435 x 0,10	21,5	2,5	245 A	425 A	488 A	495 A	560 A
	15036	150,0	19404 x 0,10	23,5	2,5	285 A	490 A	566 A	575 A	640 A
	15038	185,0	23580 x 0,10	26,0	2,5	320 A	555 A	644 A	655 A	730 A
	15040	240,0	30600 x 0,10	28,5	2,5	380 A	650 A	775 A	790 A	855 A
	15042	300,0	38200 x 0,10	32,5	2,5	435 A	750 A	898 A	915 A	985 A

Remark:

All information about current load are approximate values in consideration of the cables heat for single laying of air cooled cables and ambient temperature +30° C. The values by a conductor heat of +90° C are in accordance with VDE 0298 part 4 table 15.

By changing the ambient temperature or the kind of laying reducing factors are to be considered. Nature colour is standard but on request it is also possible to manufacture cables with

colours like black, red, blue, yellow/green etc. or with reduced insulation thickness and other operating voltages. Minimum quantity on request. The outside diameter of our highly flexible copper conductors are

manufactured in coordination with cable lugs acc. to DIN 46234/DIN 46341 and druseidt tubular cable lugs for fine stranded cables.