# LAPP NORWAY AS

### Single insulated silicone copper

#### Cables 1,8/3 kV

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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 wire acc. to DIN EN 13602
- surface uncoated
- wire-Ø 0,07 mm (4-16 mm²)
- wire-Ø 0,10 mm (25-300 mm<sup>2</sup>)

#### Insulation material

- silicone rubber circa 60 shore A
   free of halogen, chlorine contend
   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, U<sub>0</sub>/U 1,5/1,5 kV 10-300 mm², U<sub>0</sub>/U 1,8/3 kV
- operating temperature continuously -50° C up to +180° ( shortly +250° C up to +300° ) (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 drum

Elnr.	Art.nr	Туре	Current load at 90°C	Outer dia.	Weight kg/km
	Single insulated 1,5 / 1,5kV				
	11139326	Copper Cables 1,5/1,5kv silicone 4mm <sup>2</sup> (15014)	55 A	4,8	54 - 56
	11139327	Copper Cables 1,5/1,5kv silicone 6mm <sup>2</sup> (15016)	70 A	5,6	80 - 82
	Single insulated 1,8 / 3kV				
	11139328	Copper Cables 1,8/3kv silicone 10mm <sup>2</sup> (15020)	98 A	8,5	148 -153
	11139329	Copper Cables 1,8/3kv silicone 16mm <sup>2</sup> (15022)	132 A	10,0	216 - 218
	11139330	Copper Cables 1,8/3kv silicone 25mm <sup>2</sup> (15024)	176 A	12,0	334 - 340
	11139331	Copper Cables 1,8/3kv silicone 35mm <sup>2</sup> (15026)	218 A	13,8	437 - 450
1011794	11139332	Copper Cables 1,8/3kv silicone 50mm <sup>2</sup> (15028)	276 A	15,5	624 - 630
1011795	11139333	Copper Cables 1,8/3kv silicone 70mm <sup>2</sup> (15030)	347 A	18,0	860 - 930
1010682	11139334	Copper Cables 1,8/3kv silicone 95mm <sup>2</sup> (15032)	416 A	20,0	1100 - 1120
1011796	11139335	Copper Cables 1,8/3kv silicone 120mm <sup>2</sup> (15034)	488 A	21,5	1350 - 1430
	11139336	Copper Cables 1,8/3kv silicone 150mm <sup>2</sup> (15036)	566 A	23,5	1650 - 1740
1010683	38106989	Copper Cables 1,8/3kv silicone 185mm <sup>2</sup> (15038)	644A	26,0	1970
	62204595	Copper Cables 1,8/3kv silicone 240mm <sup>2</sup> (15040)	775A	28,5	2720

#### **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.