

DATASHEET | Order-no.: 15780-15802

Highly flexible silicone-insulated, shielded copper cables 10-300 mm², 1.8/3 kV



Standard design with tinned copper shielding braid.



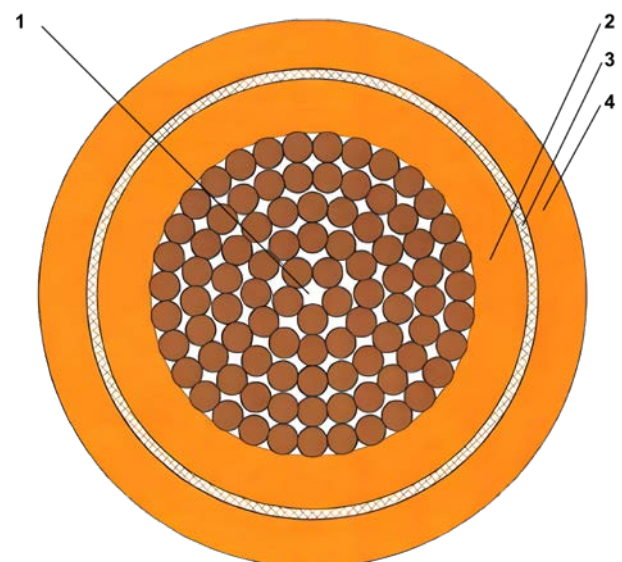
Optional design with additional foil for improved shielding.

Cable construction:

- No. 1: Highly flexible conductor, bare copper, single wires 0.07 or 0.10 mm Ø
- No. 2: Silicone, orange coloured
- No. 3: Shielding, tinned copper braid, single wires 0.15/0.20 or 0.25 mm Ø
- No. 4: Silicone, orange coloured with print

Product advantages:

- Highly flexible
- Halogen-free and self-extinguishing
- Operating temperature range -50 °C to 180 °C
- REACH and RoHS compliant



On request, all designs are also available with reduced insulation wall thickness for other voltage ranges, e.g. 0.6/1 kV, etc.

Silicone-insulated shielded copper cables 10-300 mm², 1.8/3 kV

Highly flexible, halogen-free and self-extinguishing

Electrical connection technology:

We also supply cable lugs and processing tools that are dimensionally matched to our highly flexible, shielded silicone cables.

For detailed information, please refer to our catalog 1 "Professional installation and electrical cable connection technology for trade, industry, and high-current applications," which we will be happy to send you free of charge upon request.

Technical data:

Electrical conductor:

- Round stranded Cu-ETP1 wires according to DIN EN 13602
- Soft annealed, uncoated
- Single wire 0.07 mm Ø (10-16 mm²)
- Single wire 0.10 mm Ø (25-300 mm²)

Shielding:

- Tinned copper braid
- Single wire Ø 0.15 mm (10/16 mm²)
- Single wire Ø 0.20 mm (25-150 mm²)
- Single wire Ø 0.25 mm (185-300 mm²)
- ≥ 85 % coverage ratio

Insulation:

- Silicone rubber approx. 60 Shore A
- Orange coloured
- Free of halogen: IEC 60754-1/VDE 0482-754-1
- Hardly inflammable, self-extinguishing DIN IEC 60332-1-2 / VDE 0482-332-1-2
- Operating voltage: 1.8/3 kV
- Test voltage, core: 10 kV AC (spark test)
- Test voltage shield: 10 kV AC (spark test)
- Test voltage core/shield: 7.0 kV AC
- Operating temperature: - 50°C to + 180°C
- Short circuit resistance SiR + 350 °C

Complete cable

- REACH (1907/2006/EG) and RoHS (2015/863/EU) compliant
- Bending radius: fixed 5 x D / free movement 10 x D

Standard colour: Orange.
Other colours available on request

Part-No	Technical data							
	cross-section mm ²	dimensions ca. mm		current load in dependence of the conductor heat in °C				
		conductor structure	outer-Ø	45 °C	80 °C	90 °C	100 °C	130 °C
15780	10.0	2562 x 0.07	11.2	50 A	90 A	98 A	107 A	120 A
15782	16.0	4116 x 0.07	12.5	70 A	125 A	132 A	143 A	160 A
15784	25.0	3234 x 0.10	14.5	95 A	160 A	176 A	187 A	215 A
15786	35.0	4508 x 0.10	16.0	115 A	200 A	218 A	230 A	260 A
15788	50.0	6468 x 0.10	17.8	145 A	245 A	276 A	287 A	325 A
15790	70.0	8967 x 0.10	21.0	175 A	305 A	347 A	352 A	400 A
15792	95.0	12201 x 0.10	23.7	215 A	370 A	416 A	425 A	485 A
15794	120.0	15435 x 0.10	26.0	245 A	425 A	488 A	495 A	560 A
15796	150.0	19404 x 0.10	27.4	285 A	490 A	566 A	575 A	640 A
15798	185.0	23580 x 0.10	31.6	320 A	555 A	644 A	655 A	730 A
15800	240.0	30600 x 0.10	34.1	380 A	650 A	775 A	790 A	855 A
15802	300.0	38200 x 0.10	38.6	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 of 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. Orange colour is standard but on request it is also possible to manufacture cables with colours like black, red, blue, nature colour 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 consideration with cable lugs acc. to DIN 46234/DIN 46341 and druseidt tubular cable lugs for fine stranded cables.