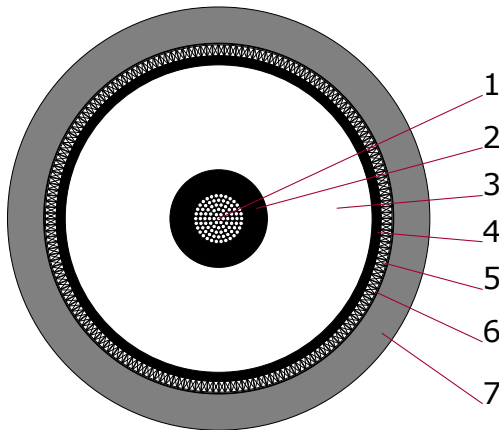


## 50kV<sub>DC</sub> / 15kV<sub>AC</sub> - AWG16 - SILICONE DIELECTRIC HIGH VOLTAGE CABLE

### PRODUCT DESCRIPTION

50kV<sub>DC</sub> / 15kV<sub>AC</sub> shielded high voltage cable optimized for low partial discharge, robustness and high flexibility even at low ambient temperatures. Semiconductive layers around the conductor and the inner dielectric assure excellent PD behavior. Silicone dielectric and a robust TPE-U / Polyurethane jacket.

### CONSTRUCTION



1. Conductor	AWG16 Cu/Sn (105xAWG36 t.p.c.)	1.33mm <sup>2</sup> Ø 1.53mm
2. Semicon	Semiconductive Silicone	Ø 2.7mm
3. Dielectric	Silicone	Ø 8.5mm
4. Semicon	Semiconductive PTFE Tape	Ø 9.0mm
5. Braid	Cu/Sn (6x24x 0.15mm t.p.c.) ≥85% Coverage	Ø 9.6mm
6. Tape	Nonwoven Separator Tape	Ø 9.7mm
7. Jacket	TPE-U	Ø 11.7mm ± 0.5mm

### TECHNICAL DATA

Rated Voltage	50kV <sub>DC</sub> / 15kV <sub>AC</sub>
Test Voltage (Conductor – Braid) (Jacket)	80kV <sub>DC</sub> / 1min 5kV <sub>AC</sub> (Spark Test)
Partial Discharge Level	≤ 20pC, U <sub>PD</sub> = 8kV <sub>AC</sub>
Conductor Resistance @ 20°C	≤ 13.6Ω/km
Braid Resistance @ 20°C	≤ 16Ω/km
Capacitance	typ. 150pF/m
min. Bend Radius	120mm (moving), 60mm (fixed)
Operating Temperature	-40°C - +90°C
RoHS Compliant	Yes
Weight	ca. 0.197kg/m
Cu-Weight	ca. 0.063kg/m
Color	black
Status	P (Preferred)

This cable can be terminated with our HC7 connector series.

All values and dimensions without given tolerances are nominal.

#### Disclaimer

The information given in this data sheet is technical data, not assured product characteristics. It has been carefully checked and is believed to be accurate; however, no responsibility is assumed for inaccuracies. The user has to ensure by adequate tests that the product is suitable for his application regarding safety and technical aspects. hivolt.de GmbH & Co. KG does not assume any liability arising out of the application or use of any product described.

#### Safety Advice

Design, installation and inspection of machinery and devices carrying high voltage require accordingly trained and qualified personnel. Appropriate safety rules and directives must be complied with. Improper handling of high voltage can mean severe injuries or death and may cause serious collateral damage!