

10kV_{DC} / 1kV_{AC} - 0.18mm² - FEP DIELECTRIC HIGH VOLTAGE CABLE

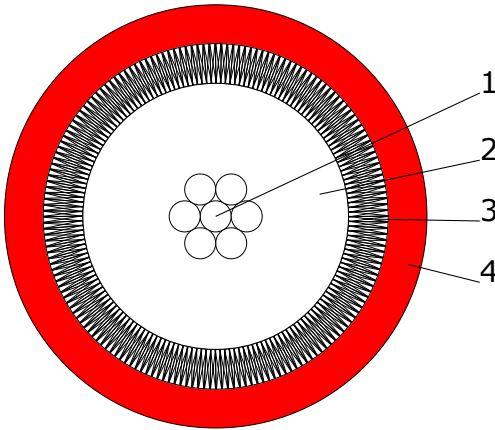
PRODUCT DESCRIPTION

10kV_{DC} coaxial high voltage cable suitable to replace standard 50Ω RG316 type coaxial cable in high voltage applications. Very flexible due to a small diameter of 2.45mm only and thus ideal for applications in limited space. The dimensions are identical to standard RG316.

It is compatible with our HC55P-316 SHV type coaxial connector.

Stranded silver plated copper conductor and a braid of silver plated copper wires. Using FEP dielectric and an FEP jacket, the cable can be operated at temperatures of -65 to +200°C. It shows excellent chemical and abrasion resistance.

CONSTRUCTION



1. Conductor	Cu/Ag (7xAWG33 s.p.c.)	0.18mm ² Ø 0.54mm
2. Dielectric	FEP	Ø 1.54mm ± 0.05mm
3. Braid	Cu/Ag (0.10mm s.p.c.)	Ø 2.0mm
4. Jacket	FEP	Ø 2.45mm ± 0.15mm

TECHNICAL DATA

Rated Voltage	10kV _{DC} / 1kV _{AC}
Test Voltage	20kV _{DC} / 60s (conductor / braid) 15kV _{AC} (Spark Test, core) 5kV _{AC} (Spark Test, jacket) 20kV _{DC} / 24h (Type Test)
Conductor Resistance @ 20°C	≤ 110Ω/km
Insulation Resistance @ 20°C	> 5000MΩ*km
Impedance	50Ω ±3Ω
Capacitance	typ. 94pF/m; max. 105pF/m
min. Bend Radius	25mm (moving), 10mm (fixed)
Operating Temperature	-65°C - +200°C
Oil Resistance	Yes
Flame Retardance	Yes
Low Smoke	Yes
Halogen-free	No
RoHS Compliant	Yes
Weight	ca. 0.014kg/m
Color	red
Status	P (Preferred)

This cable can be terminated with our SHV connector HC55P-316.

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!