

## 120kV<sub>DC</sub> / 30kV<sub>AC</sub> – EPR DIELECTRIC HIGH VOLTAGE MEASUREMENT CABLE

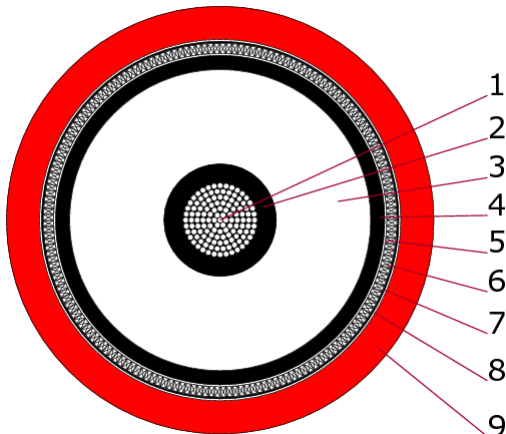
### ▪ PRODUCT DESCRIPTION

Shielded high voltage cable optimized for low partial discharge, robustness and flexibility. Halogen free design with EPR dielectric and a robust flame retardant EVA jacket. Semiconductive layers around the center conductor and the dielectric assure excellent PD behavior.

This cable is intended and designed for short term measurement applications.

The following must be taken into account: insulation wall thickness and test voltage are not in line with common standards requirements. Special care and attention is necessary when using the cable.

### ▪ CONSTRUCTION



<b>1 Conductor</b>	Cu/Sn (t.p.c.) (class 5 acc. DIN EN 60228)	6mm <sup>2</sup> Ø 2.9mm
<b>2 Semicon</b>	Semiconductive EPR	Ø 4.5mm
<b>3 Dielectric</b>	EPR 3GI3	Ø 13.4mm
<b>4 Semicon</b>	Semiconductive NBR Rubber	Ø 14.8mm
<b>5 Tape</b>	Semiconductive Tape	
<b>6 Braid</b>	Cu	Ø 16.1mm > 6mm <sup>2</sup>
<b>7 Tape</b>	PET Tape	
<b>8 Tape</b>	Nonwoven Separator Tape	
<b>9 Jacket</b>	Cross linked EVA EM8	Ø 20.6mm ± 0.8mm

### ▪ TECHNICAL DATA

<b>Rated Voltage</b>	120kV <sub>DC</sub> 30kV <sub>AC</sub>
<b>Test Voltage (routine test)</b>	150kV <sub>DC</sub> / 3min
<b>Test Voltage (type test)</b>	150kV <sub>DC</sub> / 30min 50kV <sub>AC</sub> / 3min
<b>Insulation Resistance</b>	> 20MΩ*km
<b>Capacitance (Conductor – Braid)</b>	t.b.s.
<b>Conductor Resistance @ 20°C</b>	t.b.s. Ω/km
<b>Braid Resistance</b>	t.b.s. mΩ/m
<b>max. Permissible Pulling Force</b>	15N/mm <sup>2</sup>
<b>min. Bend Radius</b>	214mm (during installation or occasional movements in operation) 214mm (fixed installed operation)
<b>Operating Temperature</b>	-20°C - +60°C (moving) -40°C - +80°C (stationary)
<b>Oil Resistance</b>	according to DIN EN 60811-404
<b>Flame propagation, single cable</b>	according to DIN EN 60332-1-2
<b>Weight</b>	0.535kg/m
<b>Cu-Weight</b>	0.166kg/m
<b>Color</b>	red

<b>RoHS Compliant</b>	Yes
<b>Halogen Free</b>	Yes
<b>Status</b>	Y (Preliminary)

#### 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!