

## HV measuring cable (AC)

for AC voltage measurement



Marking for HV connecting cable 38339813:

SAB BRÖCKSKES · D-VIERSEN · HV-Messleitung (3x1,50mm²) · CE

**Application range:** The high voltage measuring cable is used in the development of electric vehicles where scoop-proof testing and measuring of up to 1800 V DC operating voltage and application in the HV environment of electromobility take place. Examples of applications are HV power electronics, HV batteries, electric motors, inverters, etc. High voltage measuring cables are used on the test benches and in test vehicles.

### Construction:

<b>Conductor:</b>	tinned copper strands, extra fine wires
<b>Core insulation:</b>	FEP
<b>Colour code:</b>	brown, black, grey
<b>Stranding:</b>	together with tinned copper drain wire, AWG 24
<b>Screen:</b>	alu foil and tinned copper braiding
<b>Inner sheath:</b>	FEP - blue acc. to RAL 5024
<b>Outer sheath:</b>	PUR
<b>Sheath colour:</b>	orange with black vertical stripes

### Outstanding features:



- temperature resistance up to +150 °C (up to 3000 hours)
- high flexibility
- high abrasion resistance
- easy harnessing

### Technical data:

<b>Scoop-proof:</b>	1000 V DC over blue inner sheath
<b>Testing voltage:</b>	5000 V AC over blue inner sheath
<b>Operating voltage:</b>	core/core 1800 V DC core/core 1000 V ASC
<b>Testing voltage:</b>	core/core 5000 V AC core/screen 5000 V AC
<b>Min. bending radius</b>	
fixed laying:	5 x d
flexible application:	10 x d
<b>Temperature range</b>	
fixed laying:	-50/+125 °C
flexible application:	-40/+125 °C
short time use:	+150 °C (up to 3000 h)
<b>Temperature range of cores:</b>	up to +180 °C (short time use up to +205 °C)
<b>Oil resistance:</b>	very good - TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
<b>Absence of harmful substances:</b>	acc. to RoHS directive of the European Union

item no.	no. of cores x cross section n x mm <sup>2</sup>	outer-ø approx. mm	copper figure kg/km	cable weight ≈ kg/km	ohmic resistance max. Ω/km
38339820	3 x 0,25	6,8	25,5	66	80,0
38339816	3 x 0,34	7,0	28,3	71	58,8
38339815	3 x 0,50	7,4	34,5	81	40,1
38339814	3 x 1,00	8,1	53,3	106	20,0
38339813	3 x 1,50	8,8	71,7	130	13,7

Other dimensions and colours are possible on request.

### Possible on request:

As harnessed measuring cable  
with connected lab plugs  
to collect the voltage at HV components  
- see next page -

