HV measuring cable (DC)

for DC voltage measurement

Marking for HV connecting cable 38339800:
SAB BRÖCKSKES · D-VIERSEN · HV-Messleitung (2x0,25mm²)

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:

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

Scoop-proof:	1000 V DC over blue inner sheath
Testing voltage:	5000 V AC over blue inner sheath
Operating voltage Uo:	1000 V DC
Operating voltage U:	1800 V DC
Testing voltage:	core/core 5000 V AC core/screen 5000 V AC
Min. bending radius fixed laying: flexible application:	 5 x d 10 x d
Temperature range fixed laying: flexible application: short time use:	 -50/+125 °C -40/+125 °C +150 °C (up to 3000 h)
Absence of harmful substances:	acc. to RoHS directive of the European Union

item no.	no. of cores x cross section n x mm²	outer-ø approx. mm	copper figure kg/km	cable weight ≈ kg/km	ohmic resistance max. Ω/km
3833-9800	2 x 0,25	6,5	21,3	58	80,0
3833-9819	2 x 0,34	6,7	24,9	63	58,8
3833-9801	2 x 0,50	7,1	28,1	70	40,1
3833-9802	2 x 1,00	7,8	42,5	90	20,0
3833-9803	2 x 1,50	8,4	55,8	108	13,7

Other dimensions and colours are possible on request.

Possible on request:

As harnessed measuring cable with connected lab plugs to collect the tension at HV components

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