

## HV Measuring Adapter for E-Vehicles

Work on e-vehicles with high-voltage components requires special protective measures for personnel. In order to be able to carry out maintenance work and safety-relevant tests on high-voltage systems, various HV measuring adapters have been developed.

Every HV measuring adapter consists of a HV measuring box and a connector specific HV adapter cable set.

### Available measuring box types:

- |  |                        |
|--|------------------------|
| ■ Universal HV measuring box with personal protection resistors    | article no. 7248821001 |
| ■ Universal HV measuring box without personal protection resistors | article no. 724882Z001 |
| ■ Universal HV measuring box with simulation ISO fault             | article no. 7264891001 |

# HV Measuring Adapters for E-Vehicles

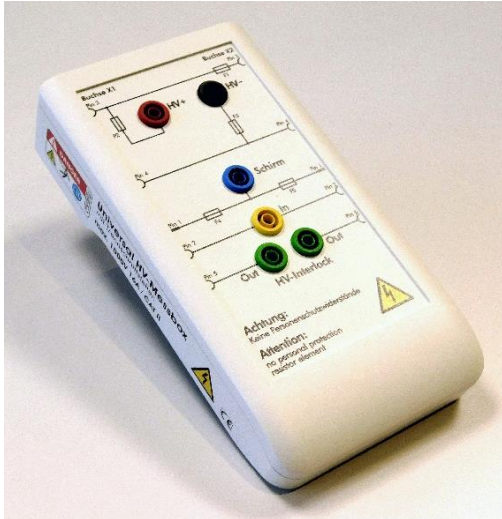


Article no. 7248821001

Universal HV measuring box with personal protection resistors

- Applications:
  - Determining / measuring the voltage-free condition in a HV system
  - Measuring the voltage in an activated HV system
  - Checking / measuring the insulation resistance in a HV system
  - Checking / measuring HV interlock or pilot line in a HV system
  - Continuity test, e. g. shield via HV components on body ground
  - Resistance measurement in HV system / on HV components
  - Simulation of insulation faults in a HV system
  - Opening / bridging HV interlock or pilot line, also partially possible on the individual adapters
  
- Measurement sockets:
  - HV+ und HV- with personal protection resistors
  - Shield
  - Pilot In (HV interlock)
  - Pilot Out (HV interlock male)
  - Pilot Out (HV interlock female)
  - Quick change interface X1 and X2 ODU Medi Snap for adapter cable set
  
- Personal protection resistors
- Measuring voltage max. 1000 V
- Measuring current max. 16 A
- Switch for simulation of insulation faults

# HV Measuring Adapters for E-Vehicles



Article no. 724882Z001

Universal HV measuring box without personal protection resistors

- Applications:
  - Determining / measuring the voltage-free condition in a HV system
  - Measuring the voltage in an activated HV system
  - Checking / measuring the insulation resistance in a HV system
  - Checking / measuring HV interlock or pilot line in a HV system
  - Continuity test, e. g. shield via HV components on body ground
  - Resistance measurement in HV system / on HV components
  - Opening / bridging HV interlock or pilot line, also partially possible on the individual adapters
  
- Measurement sockets:
  - HV+ und HV- without personal protection resistors, the measuring sockets are protected by overcurrent protection device 1 A
  - Shield
  - Pilot In (HV interlock)
  - Pilot Out (HV interlock male)
  - Pilot Out (HV interlock female)
  - Quick change interface X1 and X2 ODU Medi Snap for adapter cable set
  
- Measuring voltage max. 1000 V
- Measuring current max. 16 A

# HV Measuring Adapters for E-Vehicles



**Article no. 7264891001**

**Universal HV measuring box with simulation ISO fault**

- Applications:
  - Determining / measuring the voltage-free condition in a HV system
  - Measuring the voltage in an activated HV system
  - Checking / measuring the insulation resistance in a HV system
  - Checking / measuring HV interlock or pilot line in a HV system
  - Continuity test, e. g. shield via HV components on body ground
  - Resistance measurement in HV system / on HV components
  - Simulation of insulation faults
  - Opening / bridging HV interlock or pilot line
  
- Measurement sockets:
  - HV+ und HV- with personal protection resistors 100 kOhm
  - HV+ und HV- without personal protection resistors, the measuring sockets are protected by overcurrent protection device 1 A
  - Two measuring sockets for insulation fault simulation HV  $\pm$  240 kOhm
  - Two measuring sockets for insulation fault simulation HV  $\pm$  60 kOhm
  - Shield
  - Pilot Out (HV interlock male)
  - Pilot Out (HV interlock female)
  - Quick change interface X1 and X2 ODU Medi Snap for adapter cable set
  
- Park position jumper plug (Storage)
- Measuring voltage max. 1000 V
- Measuring current max. 16 A

Application-specific interconnections of the HV measuring boxes with a detailed specification are possible on request.

# HV Measuring Adapters for E-Vehicles

**HV adapter cable sets for the different HV connector types**

**Design:**

- Contacting by spring-loaded contact pins
- Contour designed for 0-coding, protected against rotation (reverse polarity protection)
- Locking by means of locking lever
- Connection cables in 3 different lengths incl. connector X1 or X2 ODU Medi Snap
- Measuring voltage max. 1000 V
- Measuring current max. 16 A



Connectors X1 and X2



HVA280



HPS40-2



MEB



HVA630



HVR51

# HV Measuring Adapters for E-Vehicles

Available HV adapter cable sets in three different lengths (article no.):

Connector	0.6 m	1.2 m	3.0 m
HVA280	7248822001	7254852001	7256932001
HVR50	7248823001	7254853001	7256933001
HVA630	7248824001	7254854001	7256934001
HVR51	7248825001	7254855001	7256935001
MEB*	7248826001	7254856001	7256936001
HPS40-1	7248829001	7254859001	7256939001
HPS40-2	7248827001	7254857001	7256937001
HPS40-2 without IL	724882C001	725485C001	725693C001
HPK	7248828001	7254858001	7256938001

The variety of HV adapter cable sets is constantly extended by new developments.

\* The adapter for the MEB female connector has been revised and can now adapt the connectors from the two manufacturers TE and Aptiv, previously only TE.

For customers who only have the TE variant, we can offer the single adapter for the female connector in the new design on request.

Version	Article no.
Hand adapter - MEB pin for universal measuring box 0.6m	7248826B01
Hand adapter - MEB pin for universal measuring box 1.3m	7254856B01
Hand adapter - MEB pin for universal measuring box 3m	7256936B01

## Safety check

For all listed articles we can offer you a safety check service.

We recommend carrying out the safety check once a year.