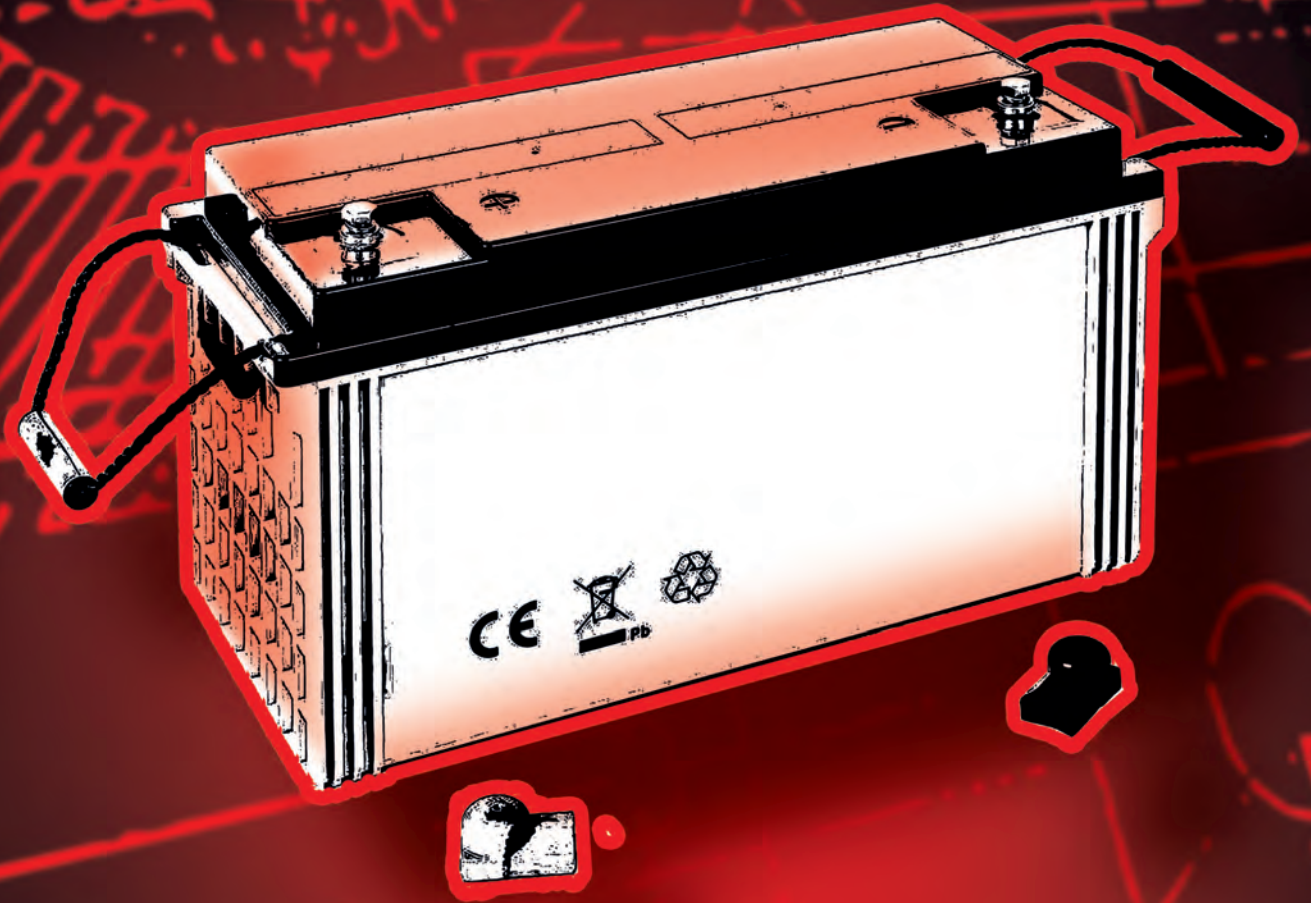


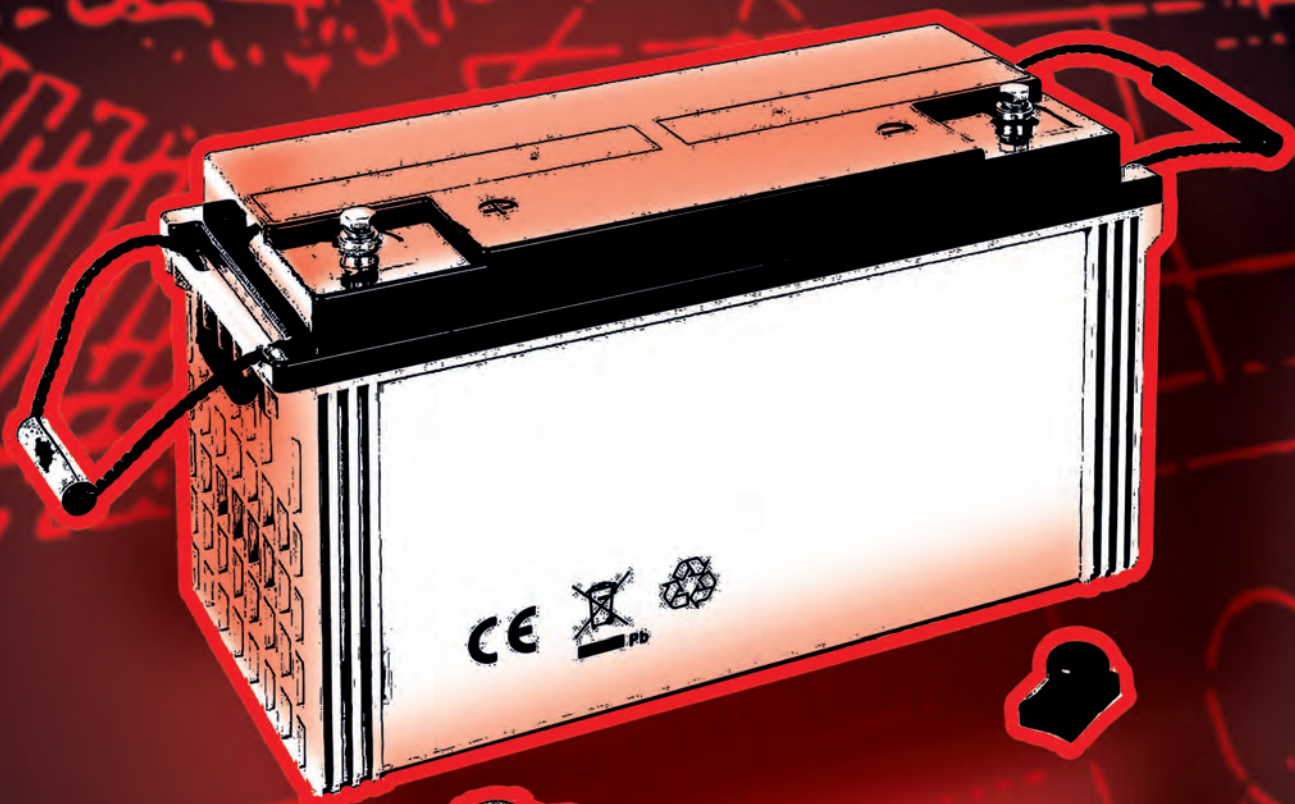
# K15



**KS TOOLS**







Innovation is  
our mission!



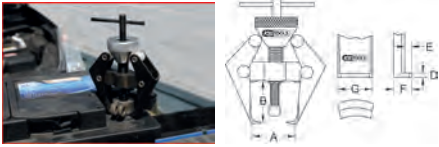
	PAGE
<b>POLE TERMINAL EXTRACTOR</b>	388
<b>POLE TERMINAL CLEANING</b>	388
<b>BATTERY PLUG TOOLS</b>	389
<b>BATTERY CELL FILLING</b>	389 - 390
<b>BATTERY CARRYING HANDLES</b>	390
<b>VEHICLE POWER SUPPLY VOLTAGE RETAINER</b>	390
<b>BATTERY TESTER</b>	390 - 393
<b>SURGE PROTECTION</b>	393
<b>BATTERY CHARGERS</b>	393 - 394
<b>JUMP LEADS</b>	394
<b>BOOSTER</b>	395
<b>ACCESSORIES FOR RECHARGEABLE-BOOSTER PACKS</b>	395



**POLE TERMINAL EXTRACTOR**

**QuickGrip 2-jaw pole terminal extractor with t-bar**

- 2-jaw
- Ideally suited for removing the battery pole terminal
- With t-bar
- With conical tensioning screw for proportional distribution of the clamping force
- Self-centring extraction hook
- Extremely robust spindle with inductively hardened thread
- Special steel



	A mm	B mm	max t	mm	D mm	E mm	F mm	G mm	g
700.1190	15	32	1,2	M8 x 50	2,5	9	10,5	11	300

**Pole clamp 2-jaw puller**

- 2-jaw
- Ideally suited for removing the battery pole terminal
- Independent pressure of the hook
- Extremely robust spindle with inductively hardened thread
- Screwed
- Sturdy hook
- Special steel



	A mm	B mm	max t	mm	D mm	E mm	F mm	G mm	g	
620.3101	10-60	40	1	M8x85	10	1	5	12	8	160
620.3102	10-70	44/74	1,2	M8x85	10	1	5	12	8	200
620.3103	10-90	84	2	M10x105	12	1,8	10	20	12	340

**2-jaw pole terminal extractor with t-bar**

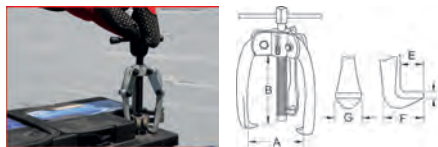
- 2-jaw
- Ideally suited for removing the battery pole terminal
- With t-bar
- Independent pressure of the hook
- Extremely robust spindle with inductively hardened thread
- Screwed
- Sturdy hook
- Special steel



	A mm	B mm	max. t	mm	D mm	E mm	F mm	G mm	g
700.1164	10-60	40	0,5	M10 x 60	2,6	5,5	12,8	10,0	145
700.1165	10-60	60	0,5	M10 x 80	3,7	5,8	12,4	10,1	173
700.1166	10-70	80	0,5	M10 x 100	4,0	9,2	16,8	14,0	245

**3-jaw pole terminal extractor with t-bar**

- 3-jaw
- Ideally suited for removing the battery pole terminal
- With t-bar
- Independent pressure of the hook
- Extremely robust spindle with inductively hardened thread
- Screwed
- Sturdy hook
- Special steel



	A mm	B mm	max. t	mm	D mm	E mm	F mm	G mm	g
700.1167	10-60	40	0,75	M10 x 60	2,3	5,5	12,3	10,0	181
700.1168	10-60	60	1,0	M10 x 80	3,0	5,5	12,5	10,0	215
700.1169	10-70	80	1,0	M10 x 100	3,0	8,0	15,2	14,1	323

**POLE TERMINAL CLEANING**

**Battery pole and clamp cleaning brush**

- For the removal of contact corrosion and acid deposits on battery poles and pole terminals
- Can be used for internal and external cleaning of the poles
- Improves contacts
- Reduces the susceptibility of start-up difficulties
- External brush diameter equates to 20 mm
- Internal brush diameter equates to 18 mm
- Bristles made of metal
- Plastic housing



	Length mm	g
700.1197	120,0	64



**Battery pole and terminal cleaning mill cross**

- For milling contact corrosion and acid deposits on battery poles and pole terminals
- Can be used for internal and external cleaning of the poles
- Improves contacts
- Reduces the susceptibility of start-up difficulties
- Conical milling insert made of steel
- Cast light alloy body material



	g
700.1195	Battery pole and terminal cleaning mill cross 150

**BATTERY PLUG TOOLS**

**Battery plug turner**

- For the damage-free screwing in and out of battery plugs
- Special slot profile for battery plug
- Universal application also with short overall height
- With dual component handle
- Chrome plated and mirror polished
- Chrome vanadium



	mm	L mm	g
550.1681	14,5 x 1,7	95.0	72

**Battery plug turner with T-handle**

- For the damage-free screwing in and out of battery plugs
- Special slot profile for battery plug
- Universal application also with short overall height
- With T-handle
- Chrome plated and mirror polished
- Chrome vanadium



	mm	L mm	g
550.1682	14,5 x 1,7	95.0	62

**Battery plug turner with t-bar**

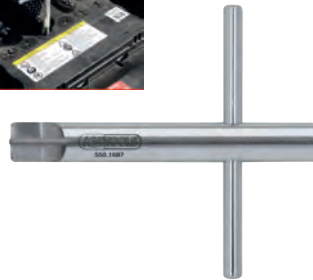
- For the damage-free screwing in and out of battery plugs
- Special cross profile
- Universal application also with short overall height
- With t-bar
- Chrome plated and mirror polished
- Chrome vanadium



	Blade thickness mm	shank Ø mm	Blade height mm	Length mm	g
550.1686	1.3	12.0	13.0	90.0	87

**Battery plug turner with t-bar**

- For the damage-free screwing in and out of battery plugs
- Special cross profile
- Universal application also with short overall height
- With t-bar
- Chrome plated and mirror polished
- Chrome vanadium



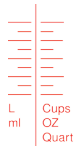
	Blade thickness mm	shank Ø mm	Blade height mm	Length mm	g
550.1687	1.8	12.0	13.0	90.0	87

**BATTERY CELL FILLING**

**Measuring cup set**

- Configuration of practical measuring cup sizes
- Versatile application possibilities
- Transparent
- Break-proof
- Red primed scale division
- Resistant to oil, petrol and acid
- With handle and spout
- PE (polyethylene)

Scales: L/ml, cups, Oz, quart



			g
150.9205	3 pcs	250 - 500 - 1.000 ml	227

**Funnel set**

- Configuration of practical funnel sizes
- Versatile application possibilities
- Red
- Break-proof
- Resistant to oil, petrol and acid
- Grip strap for convenient use
- HDPE (high density polyethylene)



			g
150.9240	5 pcs	Ø 50 - Ø 75 - Ø 95 - Ø 115 - Ø 150 mm	251

**Battery cell filler**

- Ideal aid for the drip-free filling or aspiration of battery acid
- Suitable for battery acid and distilled water
- With rubber ball and rubber tube
- Special plastic
- Resistant to oil, petrol and acid



	L1 mm	L2 mm	g
160.0738	245.0	130.0	92

**Battery filler bottle**

- Ideal aid for drip-free filling
- Suitable for battery acid and distilled water
- Acid-resistant
- With flexible rubber tube
- Special plastic



		g
550.1701	1 l	300

**Automatic battery cell filler, 2 litres**

- Ideal aid for drip-free filling
- Stops automatically if the optimal filling level is reached
- With automatic closure
- The built-in special valve in the cylinder head automatically stops the flow when the fill level is reached
- Suitable for battery acid and distilled water
- Acid-resistant
- Special plastic



		g
550.1683	2 l	300



### Mini transfer pump

- Ideal aid for transferring in emergencies
- Suitable for battery acid, fuels, oils and distilled water
- The hoses are attached to the balloon holder using supplied hose clamps
- Acid-resistant
- Special plastic



	Tube inner Ø mm	tube length mm	g
150.1665	8.0	2 x 900	320

### Transfer pump

- Ideal aid for easy transferring and pumping
- Suitable for battery acid, fuels, oils and distilled water
- Acid-resistant
- With high quality pump body and reinforced pump handle
- Special plastic



	Tube inner Ø mm	tube length mm	g
150.1660	12.0	2 x 1.300	465

### BATTERY CARRYING HANDLES

#### Battery carrying handle

- Allows for the easy removal and carrying of all batteries
- With rubber-coated clamping jaws
- Size adjustable clamp
- Ergonomic weight distribution
- With rubber grip



	Span width mm	g
700.1196	120 - 190	560

### VEHICLE POWER SUPPLY VOLTAGE RETAINER

#### 12V OBD II Electrical system suspense keeper

- Supplies the vehicle with voltage while replacing the battery so that various settings, such as radio codes, seat memory, etc., are preserved
- Prevents data loss in the on-board electronics while replacing the battery
- Connection takes place via the OBD II bushing and cigarette lighter connection of a battery-powered start-up aid
- Readiness indicator checks and indicates safe connection establishment



	Cable length mm	g
550.1705	2300	200

#### 12V OBD II Electrical system suspense keeper

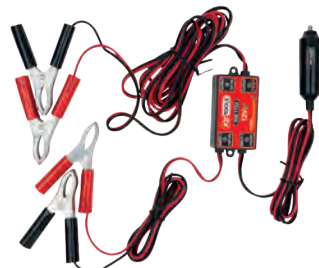
- Supplies the vehicle with voltage while replacing the battery so that various settings, such as radio codes, seat memory, etc., are preserved
- Prevents data loss in the on-board electronics while replacing the battery
- The connection takes place via the OBD II bushing and crocodile pole clamps of an external battery
- Readiness indicator checks and indicates safe connection establishment



	Cable length mm	g
550.1706	5000	350

#### 12V vehicle power supply voltage retainer

- Supplies the vehicle with voltage while replacing the battery so that various settings, such as radio codes, seat memory, etc., are preserved
- Prevents data loss in the on-board electronics while replacing the battery
- Dual connection option via cigarette lighter connection or battery terminals
- Includes surge protection at the outlet
- Audible voltage spike indicator
- Display in the event of polarity confusion
- Readiness indicator checks and indicates safe connection establishment



	Cable length mm	g
550.1723	3600	540

### BATTERY TESTER

#### Acidimeter for battery fluid

- For the inspection of the acidity of the battery fluid
- Easy to use: Suction, read, release
- Glass cylinder length is 11 cm
- With suction bellows
- Acid density can be read directly with a hydrometer



	L mm	g
550.1680	280.0	107

#### Refractometer - optical tester for battery fluid and antifreeze

- For the quick and accurate testing of acidity in the battery fluid and the antifreeze content
- Can also be used for coolant and windscreen wiper fluid
- Adjustable eye piece with rubber viewing rest
- With automatic temperature compensation (ATC)
- Also suitable in ambient temperatures of less than 10°C
- Reading correction function by means of bimetallic measurement
- High quality design made from aluminium
- Good readability due to defined dividing lines
- Recalibration possible
- Includes calibration screwdriver and pipette
- In practical plastic case



#### Technical data:

Battery acid:	acid density (measuring range 1.1 to 1.4 kg/l)
Coolant water Propylene:	temperature resistance (measuring range 0° to -50° C)
Coolant water Ethylene:	temperature resistance (measuring range 0° to -50° C)
Windscreen water:	antifreeze (measuring range 0° to -40° C)

	D mm	L mm	Glass face mm	g
550.1290	40.0	149.0	40 x 13	630

#### AdBlue refractometer - optical tester for battery fluid, antifreeze and AdBlue additives

- For the quick and accurate testing of the acidity of the battery fluid, the antifreeze content and the AdBlue additives
- Can also be used for coolant and windscreen wiper fluid
- Adjustable eye piece with rubber viewing rest
- With automatic temperature compensation (ATC)
- Also suitable in ambient temperatures of less than 10°C
- Reading correction function by means of bimetallic measurement
- High quality design made from aluminium
- Good readability due to defined dividing lines
- Recalibration possible
- Includes calibration screwdriver and pipette
- In practical plastic case



#### Technical data:

Battery acid:	acid density (measuring range 1.1 to 1.3 kg/l)
Coolant water Propylene:	temperature resistance (measuring range -25° to -50° C)
Coolant water Ethylene:	temperature resistance (measuring range -25° to -50° C)
Windscreen water:	antifreeze (measuring range -10° to -40° C)
AdBlue (VRA):	urea content (measuring range 30% - 35%)

	D mm	L mm	Glass face mm	g
550.1285	40.0	160.0	40 x 13	480

**Digital Multimeter incl. test probes**

- Specially developed professional multimeter for automotive and commercial electrics and electronics
- With enhanced function for rpm measurement
- Dual LCD display with digital display and bar diagram display (32 segment bar graph)
- With automatic overflow and polarity indication
- With safety mechanism for V,  $\mu\text{A}/\text{mA}/\text{A}$ , therefore incorrect connection is impossible
- Central 23-digit rotary switch
- Large LCD display with 3.1/2-digit, high-contrast display with background lighting
- With integrated glass fuse 250V (500 mA) – 20 x 5 mm to protect the circuits
- Includes measuring line set with test prods, crocodile clamps, inductive clamp and temperature probe
- With on/off switch and automatic temperature shutdown
- With fold-out, two-way adjustable pedestal
- Sturdy plastic housing
- With rubber protective capping

**Functions:**

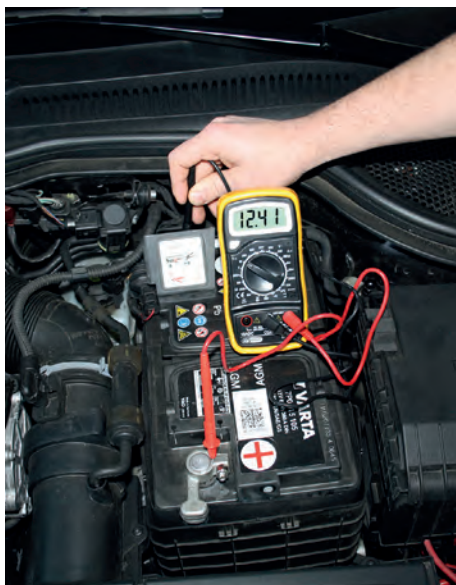
- DC and AC voltage measurement
- DC and AC current measurement
- Resistance measurement
- Dwell
- Diode test (with acoustic signal)
- RPM measurement
- Frequency measurement
- Battery check indicator



**Technical data:**

Co-current flow:	200 mA - 10 A
DC voltage:	200 mV - 600 V
AC voltage:	200 V - 600 V
Resistance measurement:	200 - 2000 ohm
Temperature accuracy :	23° C $\pm$ 5° C
Power requirement:	9V block battery
Fuse protection S1 (fine flow):	200mA/250V (20x5mm)
Storage temperature:	-10° to +50° C (14° to 122° F)
Working temperature:	0° to +40° C (32° to 104° F)

	B mm	L mm	Depth mm	
150.1495	69.0	138.0	31	342



**Digital multimeter, including test prods and crocodile clamps**

- Specially developed high quality multimeter for automotive and commercial electrics and electronics
- Dual LCD display with digital display and bar diagram display (32 segment bar graph)
- With automatic overflow and polarity indication
- With safety mechanism for V,  $\mu\text{A}/\text{mA}/\text{A}$ , therefore incorrect connection is impossible
- Central 11-digit rotary switch
- With automatic area selection
- Large LCD display with 3.1/2-digit, high-contrast display with background lighting
- With integrated glass fuse 250V (500 mA) – 20 x 5 mm to protect the circuits
- Includes double measuring line set with test prods and crocodile clamps
- With fold-out, two-way adjustable pedestal
- Sturdy plastic housing
- With rubber protective capping

**Functions:**

- DC and AC voltage measurement
- DC and AC current measurement
- Resistance measurement
- Continuity test (with acoustic signal)
- Transistor measurement
- Diode test (with acoustic signal)
- Capacity measurement
- Frequency measurement
- Data hold function
- Automatic measurement range selection



**Technical data:**

Co-current flow:	326 $\mu\text{A}$ - 10 A
Alternating current :	326 $\mu\text{A}$ - 10 A
DC voltage:	326 mV - 1000 V
AC voltage:	3,26 V - 750 V
Resistance measurement:	32 - 32000 ohm
Capacity measurement:	326 nF - 32,6 $\mu\text{F}$
Frequency measurement:	32,60 - 200kHz
Temperature accuracy :	23° C $\pm$ 5° C
Power requirement:	9V block battery
Fuse protection S1 (fine flow):	300mA/250V (20x5mm)
Fuse protection S2 (power-test socket) :	10A/250V (30x5mm)
Storage temperature:	-10° to +50° C (14° to 122° F)
Working temperature:	0° to +40° C (32° to 104° F)
Working temperature:	0° to +40° C (32° to 104° F)

	B mm	L mm	Depth mm	
150.1480	91.0	189.0	31.5	834



**Multimeter, including test prods, crocodile clamps, inductive clamp and temperature probe**

- Specially developed high quality multimeter for automotive and commercial electrics and electronics
- Dual LCD display with digital display and bar diagram display (32 segment bar graph)
- With automatic overflow and polarity indication
- With safety mechanism for V,  $\mu\text{A}/\text{mA}/\text{A}$ , therefore incorrect connection is impossible
- Central 11-digit rotary switch
- With automatic area selection
- Large LCD display with 3.1/2-digit, high-contrast display with background lighting
- With integrated glass fuse 250V (500 mA) – 20 x 5 mm to protect the circuits
- Includes double measuring line set with test prods and crocodile clamps
- With fold-out, two-way adjustable pedestal
- Sturdy plastic housing
- With rubber protective capping

**Functions:**

- DC and AC voltage measurement
- DC and AC current measurement
- Resistance measurement
- Dwell
- Diode test (with acoustic signal)
- RPM measurement
- Frequency measurement
- Battery check indicator



**Technical data:**

Co-current flow:	326 $\mu\text{A}$ - 10 A
Alternating current :	326 $\mu\text{A}$ - 10 A
DC voltage:	326 mV - 1000 V
AC voltage:	3,26 V - 750 V
Resistance measurement:	32 - 32000 ohm
Frequency measurement:	32,60 - 200 kHz
Speed measurement:	300 - 12000 rpm
Temperature accuracy :	23° C $\pm$ 5° C
Power requirement:	9V block battery
Fuse protection S1 (fine flow):	500mA/350V (20x5mm)
Fuse protection S2 (power-test socket) :	10A/250V (30x5mm)
Storage temperature:	-10° to +50° C (14° to 122° F)
Working temperature:	0° to +40° C (32° to 104° F)
Temperature measurement:	-20° C bis 760° C (-4° F bis 1400° F)

	B mm	L mm	Depth mm	
150.2040	91.0	189.0	31.5	500



### 6 + 12V Battery tester

- Suitable for 6 and 12 volt batteries (lead acid, gel, wet cell, MF, VRLA, calcium, AGM and deep cycle batteries)
- For the quick and simple determination of battery efficiency
- With verification function for the starter battery, starter and load circuit measurement
- With on/off toggle switch
- Connection to the battery takes place via two plastic-coated crocodile pole clamps
- Verification possible, even with prevailing load
- Measurement results are displayed via a precise analogue measuring element
- Scale for various battery sizes and types
- Analogue display 0-16 volts
- Suitable for starter batteries from 30 Ah (12 V) and 15 Ah (6 V)
- Support for pole terminals on the device
- Sturdy steel plate housing



	Load current 12 V	Load current 6 V	
550.1690	100 Ampere	50 Ampere	500

### 12V Digital battery tester

- Suitable for 12 volt batteries (lead acid, gel, wet cell, MF, VRLA, calcium, AGM and deep cycle batteries)
- For the quick and simple determination of battery efficiency
- Automatic control of the entire testing process after one-time actuation of the start button
- The connection to the battery takes place via two plastic-coated crocodile pole clamps
- With verification function for the starter battery, starter and load circuit measurement
- A verification is possible, even with prevailing load
- The measurement results are shown via an accurate 3-digit LCD display
- The result can be read via the digital LCD display after 10 seconds
- Suitable for starter batteries from 30 Ah (12 V)
- Support for crocodile pole terminals on the device
- Sturdy steel plate housing



	Load current 12 V	
550.1685	100 Ampere	500



### 12V Digital Battery-Analyzer

- Suitable for 12 volt batteries (lead acid, gel, wet cell, MF, VRLA, calcium, AGM and deep cycle batteries)
- Automatic control of the entire test procedure through menu navigation
- For the quick and simple determination of battery efficiency while taking the temperature compensation into account
- Checks the battery condition, charge status, internal resistance, cold start current value
- With verification function for the starter battery
- The measurement results are shown via an accurate LCD display
- The connection to the battery takes place via two plastic-coated crocodile pole clamps
- Avoidance of an overload of the battery through too long of a measurement time
- Illuminated and very easy to read LCD display
- 1.4 metre long cable allows for flexible work
- Resistant rubber cup casing
- In sturdy plastic case



- Technical data:**
- SAE operation range: 200-900 CCA
  - DIN operation range: 120-550 CCA
  - IEC operation range: 120-550 CCA
  - EN operation range: 200-900 CCA
  - CCA operation range: 200-850 CCA
  - Voltage range: 7,6-17 V
  - Operating temperature: -18°C up to 55°C
  - Display accuracy: +/- 0,5 mΩ
  - Frequency range: 100

	Measuring range	
550.1648	7,6-17 V	1.00

### 12V Battery-, Charging- and Starting System Analyzer

- Suitable for 12 volt batteries (lead acid, gel, wet cell, MF, VRLA, calcium, AGM and deep cycle batteries)
- Automatic control of the entire test procedure through menu navigation
- For the quick and simple determination of battery efficiency while taking the temperature compensation into account
- Checks the battery condition, charge status, internal resistance, cold start current value
- With verification function for the starter battery, starter and load circuit measurement
- The measurement results are shown via an accurate 5-digit LCD display
- In addition, the measurement results are displayed via coloured symbols: OK, OK and charge and poor
- The connection to the battery takes place via two plastic-coated crocodile pole clamps
- Avoidance of an overload of the battery through too long of a measurement time
- Illuminated and very easy to read LCD display
- 1.4 metre long cable allows for flexible work
- Resistant rubber cup casing
- In sturdy plastic case



**Technical data:**

- SAE operation range: 100-1400 CCA
- DIN operation range: 100-800 CCA
- IEC operation range: 100-800 CCA
- EN operation range: 100-1400 CCA
- CCA operation range: 100-1400 CCA
- Voltage range: 7,6-17 V
- Operating temperature: -18°C up to 55°C
- Display accuracy: +/- 0,5 mΩ
- Frequency range: 100

	Measuring range	
550.1645	7,6-17 V	1.00





**12V Battery-, Charging- and Starting System Analyzer with integrated printer**

- Suitable for 12 volt batteries (lead acid, gel, wet cell, MF, VRLA, calcium, AGM and deep cycle batteries)
- Menu-driven, intuitive operation
- With integrated thermal printer
- Automatic control of the entire test procedure through menu navigation
- For the quick and simple determination of battery efficiency while taking the temperature compensation into account
- Checks the battery condition, charge status, internal resistance, cold start current value
- Battery selection takes place quickly and precisely via printing protocol
- With verification function for the starter battery, starter and load circuit measurement
- Printing protocol supports the argumentation for workshop customers
- The connection to the battery takes place via two plastic-coated crocodile pole clamps
- Avoidance of an overload of the battery through too long of a measurement time
- Illuminated and very easy to read digital display
- 1.4 metre long cable allows for flexible work
- Includes thermal paper roll
- Resistant rubber cup casing
- In sturdy plastic case



**Technical data:**  
 SAE operation range: 50-1.400 CCA  
 DIN operation range: 50-800 CCA  
 IEC operation range: 50-800 CCA  
 EN operation range: 50-1.400 CCA  
 CCA operation range: 50-1.400 CCA  
 Voltage range: 1,5-17 V  
 Operating temperature: -18 °C up to 55 °C  
 Display accuracy: +/- 0,5 mΩ  
 Frequency range: 100 Hz

	Measuring range	Spare thermal roll	
550.1646	1,5-17 V	550.1647	1.50



**SURGE PROTECTION**

**Electronic surge protection**

- Constantly suppresses emerging voltage peaks to safe levels and therefore protects the vehicle power supply against overvoltages
- Prevents damage to the on-board electronics when charging the built-in battery or even during welding work
- Maximum load 200 A (8/20 μs)
- With fuse protection
- Visibility and tone signal in the event of voltages peaks
- With reverse polarity protection
- The connection to the battery takes place via two plastic-coated crocodile pole clamps
- Sturdy workshop design



	⚡	Cable length mm	
150.3080	12 V	195	480
150.3045	12/24V	195	480

**BATTERY CHARGERS**

**12V SMARTcharger high-frequency battery charger 2A**

- Designed for continuous long-term use, even with built-in battery
- For lead acid, gel, wet cell, MF, VRLA, calcium, AGM and deep cycle batteries
- Fully automatic 3-stage charging cycle
- With integrated overload and reverse polarity protection against misuse
- Pulse charge preservation
- Splash water protected according to IP44
- Includes 3 connection cables (cigarette lighter, M6 ring eyelet contact, crocodile pole terminals)
- Connection cable can be changed via plug connection
- LED display
- The latest technology for the highest demands
- Impact resistant polyethylene housing

**Application areas:** Motorcycles, passenger cars, vans and boats



**Technical data:**  
 Voltage range: 220-240V AC, 50/60HZ  
 Charging voltage: 14,4V - 2A (12V)  
 Battery capacity: 3 - 40 Ah  
 Cable: H03VVH2-F 2x0,5mm<sup>2</sup>

	Length mm	Width mm	Height mm	
550.1730	134.5	74.4	40.1	560

**6V + 12V High-Frequency Battery charger 4A**

- Can be switched between 6 and 12 volts
- Designed for continuous long-term use, even with built-in battery
- For lead acid, gel, wet cell, MF, VRLA, calcium, AGM and deep cycle batteries
- Precise load control with microprocessor prevents overcharging and automatically switches to preservation mode after a completed charge process and prevents a "swelling" or even "explosion" of the battery
- Allows regeneration and recovery of deeply discharged batteries
- Fully automatic 9-stage charging cycle
- With integrated overload and reverse polarity protection against misuse
- Pulse charge preservation
- Splash water protected according to IP44
- Includes 3 connection cables (cigarette lighter, M6 ring eyelet contact, crocodile pole terminals)
- Connection cable can be changed via plug connection
- LED display
- The latest technology for the highest demands
- Impact resistant polyethylene housing

**Application areas:** Motorcycles, passenger cars, vans and boats



**Technical data:**  
 Voltage range: 220-240V AC, 50/60HZ  
 Charging voltage: 7,2V - 4A / 14,4V - 1A / 14,4V - 4A / 14,7V - 4A (6V/12V)  
 Battery capacity: 3 - 80 Ah  
 Cable: H03VVH2-F 2x0,5mm<sup>2</sup>

	Length mm	Width mm	Height mm	
550.1735	165.5	74.4	40.1	700

**SMARTcharger quick contact cable with crocodile pole terminals**

- With plug connection
- With 2 crocodile pole terminals for a quick connection



	Length mm	
550.1730-1	375.0	70

**SMARTcharger quick contact cable with 2 ring eyelets**

- With plug connection
- With M6 ring eyelets



	Length mm	
550.1730-2	325.0	15

### SMARTcharger quick contact cable with cigarette lighter plug

- With plug connection
- With cigarette lighter plug
- Only in function if the cigarette lighter is switched to steady plus



	Length mm	
550.1730-3	415.0	40

### 12V + 24V SMARTcharger High frequency battery charger 25A/12,5A

- Can be switched between 12 and 24 volts
- Designed for continuous long-term use, even with built-in battery
- For lead acid, gel, wet cell, MF, VRLA, calcium, AGM and deep cycle batteries
- Precise load control with microprocessor prevents overcharging and automatically switches to preservation mode after a completed charge process and prevents a "swelling" or even "explosion" of the battery
- With integrated supply function for the power supply when the battery is removed
- Perfect charging and charge preservation
- Allows regeneration and recovery of deeply discharged batteries
- Fully automatic 9-stage charging cycle
- With integrated overload and reverse polarity protection against misuse
- Pulse charge preservation
- Splash water protected according to IP20
- With crocodile pole terminals
- With temperature sensor to take the temperature compensation into consideration
- 3-digit LED display
- The latest technology for the highest demands
- Impact resistant polyethylene housing

**Application areas:** Motorcycles, passenger cars, vans, caravans, boats, forklifts, commercial vehicles and agricultural machinery



#### Technical data:

Voltage range: 220-240V AC, 50/60HZ  
 Charging voltage: 14.4V - 25A (12V), 28.8V - 12.5A (24V)  
 Battery capacity: 12V: 75-500Ah - 24V: 45-250Ah  
 Cable: H05RN-F 2x1,0 mm<sup>2</sup>

	Length mm	Width mm	Height mm	
550.1745	420.0	405.0	280.0	2.00

### 12V + 24V SMARTcharger Dual high frequency battery charger 10A/5A

- 2-channel charger for application on one or two batteries simultaneously
- Applicable with 2 x 12V independently or 1 x 24V with series connection
- Also ideal for simultaneous use with the starter and service battery
- Designed for continuous long-term use, even with built-in battery
- For lead acid, gel, wet cell, MF, VRLA, calcium, AGM and deep cycle batteries
- Precise load control with microprocessor prevents overcharging and automatically switches to preservation mode after a completed charge process and prevents a "swelling" or even "explosion" of the battery
- Perfect charging and charge preservation
- Fully automatic 9-stage charging cycle
- With integrated overload and reverse polarity protection against misuse
- Pulse charge preservation
- Splash water protected according to IP65
- With crocodile pole terminals
- LED display
- The latest technology for the highest demands
- Impact resistant polyethylene housing

**Application areas:** Motorcycles, passenger cars, vans, caravans, boats, forklifts, commercial vehicles and agricultural machinery



#### Technical data:

Voltage range: 220-240V AC, 50/60HZ  
 Charging voltage: 14.7V - 10A (12V), 29.4V - 5A (24V)  
 Battery capacity: 12V: 75-500Ah - 24V: 45-250Ah  
 Cable: H03VVH2-F 2x0,5mm<sup>2</sup>

	Length mm	Width mm	Height mm	
550.1750	680.0	334.0	200.0	2.16



### JUMP LEADS

#### Jump leads set

- High quality design for tough daily use in a workshop
- Suitable for 12 and 24 volts
- Ideal for petrol and diesel engines in passenger cars and commercial cars
- With insulated stable battery terminals for optimal conductivity
- CCA (copper-coated aluminium)
- The handy carrying case allows for easy storage after use

**Application areas:** Motorcycles, passenger cars, vans, caravans, boats, forklifts, commercial vehicles and agricultural machinery



	Cross Section mm <sup>2</sup>	Cable length m	Max. usage 30 sec.	EN ISO	Petrol max. cm <sup>3</sup>	Diesel max. cm <sup>3</sup>	
550.1751	16.0	3.0	220 A	72553	2500	2000	1.40
550.1752	25.0	3.5	350 A	72553	5500	3000	2.10
550.1753	35.0	4.5	480 A	72553	7000	4000	3.40
550.1754	25.0	4.0	350 A	-	5500	3000	2.40
550.1755	35.0	4.5	490 A	-	7000	4000	3.40
550.1756	50.0	5.0	1.000 A	-	10000	5500	5.30

#### Jump leads set with surge protection

- The surge protection constantly suppresses emerging voltage peaks to safe levels and therefore protects the vehicle power supply against overvoltages
- High quality design for tough daily use in a workshop
- Suitable for 12 and 24 volts
- Ideal for petrol and diesel engines in passenger cars and commercial cars
- With insulated stable battery terminals for optimal conductivity
- CCA (copper-coated aluminium)
- The handy carrying case allows for easy storage after use

**Application areas:** Motorcycles, passenger cars, vans, caravans, boats, forklifts, commercial vehicles and agricultural machinery



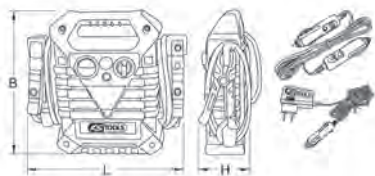
	Cross Section mm <sup>2</sup>	Cable length m	Max. usage 30 sec.	EN ISO	Petrol max. cm <sup>3</sup>	Diesel max. cm <sup>3</sup>	
550.1757	16.0	3.0	220 A	72553	2500	2000	1.60
550.1758	25.0	3.5	350 A	72553	5500	3000	2.30
550.1759	35.0	4.5	480 A	72553	7000	4000	3.60



**BOOSTER**

**12 V battery booster - mobile starting aid 700 A**

- Ideal for IC and diesel engines from passenger cars to transporters
- Fully insulated terminal clamps (1000 A)
- Integrated electronics protection
- Charge control indicator at press of button
- Acoustic warning if polarity is reversed
- 1.6 m cable length
- With sturdy 35 mm<sup>2</sup> cable diameter
- Current-free cable connection to the vehicle battery
- Charger and cable set included in scope of supply
- Cable can be conveniently stored on the housing
- Impact-resistant housing with rubberised base area



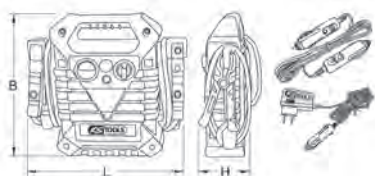
**Technical data:**

Battery: 12 Volt / 22 Ah  
 Starting current: 700 A  
 Peak voltage: 2200 A  
 Cable diameter: 35 mm<sup>2</sup>  
 Battery charger: 12V DC / 4 A

	L mm	B mm	H mm	Charger spare	Charging cable	
550.1710	405.0	380.0	120.0	550.1711	550.1712	10.00

**12 V + 24 V battery booster - mobile starting aid 1400 A**

- Ideal for IC and diesel engines from passenger cars to HGV < 12 t
- Fully insulated terminal clamps (1000 A)
- Integrated electronics protection
- Charge control indicator at press of button
- Acoustic warning if polarity is reversed
- 1.6 m cable length
- With sturdy 35 mm<sup>2</sup> cable diameter
- Current-free cable connection to the vehicle battery
- Automatic mains charger and cable set included in scope of supply
- Cable can be conveniently stored on the housing
- Impact-resistant housing with rubberised base area



**Technical data:**

Battery: 2 x 12 Volt / 22 Ah  
 Starting current: 1400 / 700 A  
 Peak voltage: 4400 / 2200 A  
 Cable diameter: 35 mm<sup>2</sup>  
 Battery charger: 12V DC / 4 A

	L mm	B mm	H mm	Charger spare	Charging cable	
550.1720	405.0	380.0	180.0	550.1721	550.1712	18.00

**12 V + 24 V Battery Booster - mobile starting aid 3400 A**

- Ideal for petrol and diesel engines in passenger cars or commercial vehicles
- Fully insulated battery clips (1000A)
- Integral electronics protection (voltage peak protected)
- Heavy-duty copper cable, cross-section 75 mm<sup>2</sup>
- 2.0 m cable length
- Intelligent, fully-integrated 3-stage automatic charging unit
- Multi-function display with coloured LED bars
- Intelligent protective circuits
- Polarity protection optical/acoustic
- Current-free cable connection to the vehicle battery
- Robust, wheeled housing with cable storage compartments
- Delivery scope includes vehicle charging cable



**Technical data:**

Battery: 2 x 12 Volt / 50 Ah  
 Starting current: 3000 / 1500 A  
 Peak voltage: 7200 / 3400 A  
 Cable diameter: 75 mm<sup>2</sup>

	L mm	B mm	H mm	
550.1725	450.0	300.0	750.0	47.00

**ACCESSORIES FOR RECHARGEABLE BOOSTER PACKS**

**Battery charger for battery booster**

- Designed for continuous usage
- Integrated automatic safety switching off
- Impact resistant polyethylene housing



		Input current	Output current	
550.1711	550.1710	220 - 240 V	12 V / 4 A	439
550.1721	550.1720	220 - 240 V	24 V / 4 A	439

**Car charger lead**

- For temporary charge
- No safety switching off
- 1.6 mm cable diameter
- 2.0 m cable length
- With double connector



550.1712	→ 550.1710 + 550.1720	62

**12V OBD II Electrical system suspense keeper**

- Supplies the vehicle with voltage while replacing the battery so that various settings, such as radio codes, seat memory, etc., are preserved
- Prevents data loss in the on-board electronics while replacing the battery
- Connection takes place via the OBD II bushing and cigarette lighter connection of a battery-powered start-up aid
- Readiness indicator checks and indicates safe connection establishment



	Cable length mm	
550.1705	2300	200

**12V OBD II Electrical system suspense keeper**

- Supplies the vehicle with voltage while replacing the battery so that various settings, such as radio codes, seat memory, etc., are preserved
- Prevents data loss in the on-board electronics while replacing the battery
- The connection takes place via the OBD II bushing and crocodile pole clamps of an external battery
- Readiness indicator checks and indicates safe connection establishment



	Cable length mm	
550.1706	5000	350