

TRUE RMS Digital Multimeter BENNING MM 7-1, MM 12

for all sophisticated measuring tasks in industry and trade

BENNING MM 7-1

with highest safety for industrial applications

- highest measuring category CAT IV 600 V for highest safety
- “AutoV” function for automatic AC/DC voltage detection and low input impedance (LoZ) to suppress reactive voltages
- the integrated Volt sensor signals non-contact phase voltages and cable breaks in cables (buzzer/LCD)
- LC display with bar graph indication and illumination
- delivery including rubber holster, case, battery, measuring leads and wire temperature sensor

BENNING MM 12

with logging function and Bluetooth®

- data logger (40000 measured values) and memory function (1000 measured values)
- Bluetooth® Low Energy 4.0 and USB interface
- PC software for further evaluation
- free IOS and Android app for data link to smartphone/tablet
- “AutoV” function with low input impedance (LoZ) to suppress reactive voltages
- highest measuring category CAT IV 600 V for highest safety
- LC display with bar graph indication and illumination
- delivery including PC software, USB data cable, rubber holster, magnetic holder, case, batteries, measuring leads, wire temperature sensor and calibration certificate



TRUE RMS Digital Multimeter

| | BENNING MM 7-1 | BENNING MM 12 |
|--------------------|------------------------------|------------------------------|
| indicating range | 6000 | 40000 |
| basic accuracy | 0,08 % | 0,5 % |
| AC voltage | 10 μ V - 1000 V | 10 μ V - 1000 V |
| DC voltage | 10 μ V - 1000 V | 10 μ V - 1000 V |
| AC current | 10 μ A - 10 A | 10 μ A - 10 A |
| DC current | 10 μ A - 10 A | 10 μ A - 10 A |
| resistance | 0,1 Ω - 40 M Ω | 0,1 Ω - 40 M Ω |
| continuity/diode | • / • | • / • |
| frequency | 0,01 Hz - 100 kHz | 0,1 Hz - 100 kHz |
| capacity | 1 nF - 10 mF | 0,01 nF - 40 mF |
| temperature | -40 °C up to +400 °C | -200 °C up to +1200 °C |
| volt sensor | • | - |
| interface | - | Bluetooth®, USB |
| software | - | PC, App |
| memory | HOLD, MAX/MIN | HOLD, PEAK, MAX/MIN, SAVE |
| Data Log function | - | 40000 measured values |
| measuring method | TRUE RMS | TRUE RMS |
| measuring category | CAT IV 600 V | CAT IV 600 V |
| item no. | 044085 | 044088 |

See page 14 for further accessories




Measuring range indications refer to ranges from highest resolution to the final measuring range value.



Simultaneous monitoring of up to 5 digital multimeters from a safe distance

Accessories for Digital Multimeter









safe – functional – indispensable

| Description | Product data | Item no. | MM F3 | MM 1-1 | MM 1-2 | MM 1-3 | MM 1 | MM 2 | MM 3 | MM 4 | MM 5-1 | MM 5-2 | MM 6-1 | MM 6-2 | MM 7-1 | MM 12 |
|--|---|----------|-------|--------|--------|--------|------|------|------|------|--------|--------|--------|--------|--------|-------|
| | | | | | | | | | | | | | | | | |
|  BENNING CC 1 AC current clamp adapter | basic accuracy: 1,9 % current: 1 A - 400 A AC output: 1 mV AC per 1 A AC | 044037 | • | • | • | | | | | | | | | | | |
|  BENNING CC 3 AC/DC current clamp adapter | basic accuracy: 1 % - 2 % current: 0,2 A - 300 A AC/DC output: 1 mV/10 mV AC/DC per 1 A AC/DC | 044038 | • | • | • | | | | | | | | | | | |
|  BENNING CFlex 1 AC current transformer | basic accuracy: 3 % current: 0,3 A - 3000 A AC output: 100 mV/10 mV/1 mV AC per 1 A AC | 044068 | • | • | • | | | | | | | | | | | |

Stand-by cases

| Description | Product data | Item no. | MM F3 | MM 1-1 | MM 1-2 | MM 1-3 | MM 1 | MM 2 | MM 3 | MM 4 | MM 5-1 | MM 5-2 | MM 6-1 | MM 6-2 | MM 7-1 | MM 12 |
|--|---|----------|-------|--------|--------|--------|------|------|------|------|--------|--------|--------|--------|--------|-------|
|  Stand-by case size S dimensions: 220 x 110 x 50 mm | with belt loop on the back, made of hard-wearing nylon fabric | 010912 | • | • | • | • | | | | | | | | | | |
|  Stand-by case size M dimensions: 240 x 180 x 70 mm | made of hard-wearing nylon fabric | 010913 | • | • | • | • | • | • | • | • | • | • | • | • | • | • |

Measuring accessories

| Description | Product data | Item no. | MM F3 | MM 1-1 | MM 1-2 | MM 1-3 | MM 1 | MM 2 | MM 3 | MM 4 | MM 5-1 | MM 5-2 | MM 6-1 | MM 6-2 | MM 7-1 | MM 12 |
|--|--|----------|-------|--------|--------|--------|------|------|------|------|--------|--------|--------|--------|--------|-------|
|  BENNING TA 1 crocodile clips, two pieces | Ø 4 mm plug-in technology, red/black, professional equipment, CAT III 1000 V | 044124 | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
|  BENNING TA 2 set of measuring leads, six pieces | Ø 4 mm plug-in technology, red/black, professional equipment, consisting of: measuring leads (silicone) CAT III 1000 V, test probes (Ø 4 mm measuring tip) CAT II 1000 V, crocodile clips CAT III 1000 V | 044125 | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
|  BENNING TA 3 set of measuring leads, eight pieces | Ø 4 mm plug-in technology, red/black, professional equipment, CAT III 1000 V, consisting of: measuring leads (silicone), test probes (slender measuring tip), claw clamps, crocodile clips | 044126 | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
|  BENNING TA 4 magnetic holder, three pieces | For attachment of multimeters to switching cabinets, machine and system parts. Consisting of: magnetic holder, adapter and belt | 044120 | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
|  Ø 4 mm safety measuring leads with 2 mm measuring tip , two pieces | Red/black, L = 1,40 m, with Ø 2 mm measuring tip (L = 18 mm), CAT IV 600 V/CAT III 1000 V (with protective caps), CAT II 1000 V (without protective caps) | 044146 | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
|  Ø 4 mm safety measuring leads with 4 mm measuring tip , two pieces | Red/black, L = 1,40 m, with Ø 4 mm measuring tip (L = 18 mm), CAT IV 600 V/CAT III 1000 V (with protective caps), CAT II 1000 V (without protective caps) | 044145 | • | • | • | • | • | • | • | • | • | • | • | • | • | • |
|  Set of measuring leads for BENNING MM 4 , Ø 4 mm plug-in technology, three pieces | Consisting of: measuring lead with Ø 2 mm measuring tip, 2 measuring probes with Ø 2 mm measuring tip | 044119 | | | | | | | | • | | | | | | |
|  Temperature probe, type K, insertion probe (V4A steel tube) | For flexible substances, liquids, gases and air. Measuring range: - 196 °C up to + 800 °C | 044121 | | | | • | | | | | | | • | • | • | • |

Ceramic fuse

| Description | Product data | Item no. | MM F3 | MM 1-1 | MM 1-2 | MM 1-3 | MM 1 | MM 2 | MM 3 | MM 4 | MM 5-1 | MM 5-2 | MM 6-1 | MM 6-2 | MM 7-1 | MM 12 |
|--|--|----------|-------|--------|--------|--------|------|------|------|------|--------|--------|--------|--------|--------|-------|
| without figure 440 mA fuses packaging unit 10 pieces | fast-acting, breaking capacity 10 kA, rated voltage 1000 V, dimensions 10 x 35 mm | 10016655 | | | | | | | | | | | | | • | • |
| without figure 1 A fuses packaging unit 10 pieces | fast-acting, rated current 1 A, rated voltage 500 V, dimensions 6.3 x 32 mm | 749669 | | | | | | • | • | | | | | | | |
| without figure 10 A fuses packaging unit 10 pieces | fast-acting, rated current 10 A, breaking capacity 50 kA, rated voltage 600 V, dimensions 10 x 38 mm | 748263 | | | • | • | | | | | | | | | | |
| without figure 11 A fuses packaging unit 10 pieces | fast-acting, rated current 11 A, breaking capacity 20 kA, rated voltage 1000 V, dimensions 10 x 38 mm | 10016656 | | | | | | | | | | | | | • | • |
| without figure 15 A fuses packaging unit 10 pieces | fast-acting, rated current 15 A, breaking capacity 50 kA, rated voltage 600 V, dimensions 10,3 x 38,1 mm | 10149447 | | | | | | | | | | • | | | | |
| without figure 16 A fuses packaging unit 10 pieces | fast-acting, rated current 16 A, rated voltage 500 V, dimensions 6.3 x 32 mm | 749770 | | | | | | • | • | | | | | | | |