

blasting  
machines

mining  
ohmmeters

lightning  
protection

testing  
devices

# TRIO

*safe simple reliable*

*Dual range, Ex-proof genral purpose  
blasting ohmmeter*

## OM 2000M/M™

*Blasting ommeter for quick and reliable EBC  
selection and network continuity and  
resistance check.*



### Features

The OM 2000M/M™ features two measuring ranges. The first measuring range (from 0,0 to 19,9  $\Omega$ ) is designed for testing and selecting a single EBC, while the second measuring range (from 0 to 1999  $\Omega$ ) is designed for a blasting circuit check. The selection of the measuring range is made automatically.

The device is turned ON/OFF by means of a magnetic key. The terminals are equipped with circular pads for quick EBC selection.

### Display and accuracy

The reading is carried out through a 3½ digit, 7 segment LCD display with a decimal comma. The digits are 13 mm high, so reading the display is unproblematic even in low light environments. The display includes a battery low indication.

The rated accuracy of the OM 2000M/M within the first

measuring range is 0,1  $\Omega$  and 1% (or 1  $\Omega$ ) within the second measuring range. The actual accuracy is much higher.

### Safety

The OM 2000M/M incorporates safety features for usage in hazardous areas



#### General purpose:

- EBC selection
- Mining circuit check
- Commercial or military
- Underground coal mining



such as gassy mines, as well as against unintentional activation of any type of blasting cap.

The type and level of explosion protection of OM 2000M/M means that it can be used in the underground mining and that it fulfills the most demanding requirements of intrinsic safety protection.

The maximum measuring current in short circuited terminals is less than 1,5 mA, while the maximum measuring current in the worst case scenario of two simultaneous independent theoretical faults does not exceed 8 mA – significantly less than “non fire” rating of any type of EBC.

### Mechanical protection

The mechanical protection of the OM 2000M/M is designed so as to have extreme underground working conditions in mind. The top casing is made of thick transparent polycarbonate, the same material that military

jet cockpits are made of. The clearance between the display and the casing makes it safe from the impact-deflections of the casing. The casing is water-proof sealed and tested up to an IP 67 level of ingress protection, while the electronic circuitry is cast in a monolithic block using a hard casting compound.

### Maintenance and the battery life

The OM 2000M/M requires no maintenance, except the occasional cleaning of coal dust and mud from the terminals and visual check. The current consumption of the device is very low — a single 9 V alkaline battery provides more than 100000 (one hundred thousand!) measurements and therefore the battery is replaced only when it's shelf life expires.

The OM 2000M/M is ATEX certified and fully complies to the requirements of the EN 13763-26: Definitions, methods, and requirements for devices and accessories for reliable and safe functioning of detonators and relays.

## OM 2000M/M technical characteristics

Display:	3 ½ LCD
First measuring range:	0,00 — 19,90 Ω
Second measuring range:	20 — 1999 Ω
Accuracy in the 1 <sup>st</sup> measuring range:	0,1 Ω
Accuracy in the 2 <sup>nd</sup> measuring range <sup>1</sup> :	1,0 % or 1 digit
Max. measuring voltage:	0,6 V
Max. measuring current:	< 1,5 mA
Power supply source <sup>2</sup> :	9 V, alkaline
Operating temperature range:	-20 °C to + 50 °C
Storage temperature range:	-40 °C do +70 °C
Size:	155 x 95 x 37 mm
Weight:	ca. 630 g
Ex. protection:	I M1 Ex ia I Ma
Mechanical protection <sup>3</sup> :	IP 65

- 1) whichever is greater
- 2) 6LR61 6LF22 types. See the detailed instructions for approved battery types
- 3) Rated value. Tested to comply to IP 67



By inserting the magnetic key into the slot and using terminal pads, EBC selection becomes a quick and easy task with the OM 2000M/M.



If you have any questions, or need further information, please contact us:

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