

M4038 Collective display

Contents:	Page
Front view	2
Back view	3
1. Connection and power supply	4 - 5
2. Set-up of measuring task	6
3. Technical data	6
Attention: Note security instructions acc. to VDE 0411	7

The collective display M4038 is part of the A&V micrometer M4000 series. It facilitates the evaluation of tolerance classes of column micrometers of the A&V M4000 series. The 5 classes upper tolerance limit (UL), upper control limit (UCL), GOOD, lower control limit (LCL) and lower tolerance limit (LL) are displayed by a set of coloured lamps.

Front view:



Back view:



1. Connection and power supply

Via the 6-pole socket X3, the collective display M4038 is connected to the plug X3 of the A&V micrometer by the included adapter 1451.600.

Interface:

- X3 Control Input (Optocoupler plus-switching)
- 1 - Input supply voltage +12...24VDC
 - 2 - Input classification LL
 - 3 - Input classification LCL
 - 4 - Input classification GOOD
 - 5 - Input classification UCL
 - 6 - Input classification UL

The included external 24V mains plug disposes of two 8-pole connectors. The 8-pole connector at the short end of the cable is connected to the input socket X8 of the collective display M4038, the other is connected to the input socket X8 of the A&V micrometer. Connect the power supply to 230V, 50Hz. Subsequently, a self-test of the units is carried out. This takes a few seconds. To avoid influence of temperature, the units should be switched on ten minutes before the first measuring.

Front view of A&V micrometer and collective display M4038:



Back view of A&V micrometer and collective display M4038:



2. Set-up of measuring task

The set-up of the measuring task and the setting of tolerance limits is done at the A&V micrometer. Please refer to the respective user's manual.

The classification is done corresponding to the measuring value display on the A&V micrometer. The meaning of the 5 lamps at the front of the collective display is as follows

Orange:	overstepping of upper tolerance limit (UL)
White top:	overstepping of upper control limit (UCL)
Green:	measuring value GOOD, i. e. within the tolerance limits
White bottom:	undercutting of lower control limit (LCL)
Red:	undercutting of lower tolerance limit (LL)

3. Technical data

Power consumption: approx. 0,5W

Measurements HxWxD: 255mm x 65mm x 160mm

Weight: approx. 1,3 kg

Protection classification: IP20

Working range: +10 - + 45 degrees Celsius, max. rel. atmospheric humidity 75%.

2 x fixing holes at the back with M4 thread

Security instructions according to VDE 0411

Technical data

time for warming up	10 minutes
temperature	0...+40 degrees C
atmospheric humidity	up to 75% rel.
frequency	50/60 Hz
power supply voltage	230V +10%, -15%
security	according to VDE 0411, protection class 1

This unit is built and checked under DIN 57411 part 1/VDE 0411 part 1 and left the factory in a safe and perfect condition. To preserve this condition and to guarantee a safe working, the user has to follow the comments and warnings which are given in these instructions. Before turning on the power, you have to make sure that the voltage of operation and the mains voltage correspond. The mains plug may only be inserted into a socket with ground contact. The safety effect may not be abolished by an extension lead without ground connection. The opening of covers or removing of components, except if it is possible to do by hand, might uncover parts or connections under dangerous voltage. Racks may only be used inside a cover. If an adjustment, maintenance or repair at the opened unit under voltage is unavoidable, it may be done only by a qualified employee, who is well acquainted with the dangers involved.

ATTENTION:

After the end of those works, the unit has to be checked according to VDE 0411, part 1. You have to make sure, that only fuses of the given type and values are taken for replacement. The use of mended fuses or short-circuiting them is inadmissible. If it is presumed, that a safe work is not possible, you have to take this unit out of work.

A safe work may not be possible, if

- there are visible damages at the unit.
- the unit does not work.
- after longer storage under unfavourable circumstances.
- after heavy stress of transport.