

User's Manual AYE 4019, AYE 4769

Micrometer

AYE 4019 for Inductive Tracers
AYE 4769 for DMS and Inductive Tracers

Contents:

1. Power Supply
2. Connecting Tracers
3. Measuring Range
4. Positioning inductive Tracers
5. Positioning DMS Tracers
6. Tolerance Module
7. Operating Mode

1. Power Supply

Connect the measuring equipment via the power cable (europ. Standard) to a power supply of 230 V, 50-60 Hz and turn the power switch at the back into ON position. Up to ten measuring equipments can be chained to one power cable. To avoid influence of temperature the measuring equipment should be turned on ten minutes before the first measurement. The lowest segment of the display is always illuminated.

2. Connecting Tracers

Corresponding to the application the tracers should be connected to the jacks A, -A, (or B, -B too, when AYE 4019). The inputs A and B are positive i.e. the measured value will be positive when the tracer is pushed. The input -A (also -B when AYE 4019) is negative. The DMS tracer should be connected to the jack DMS (AYE 4769 only).

3. Measuring Range

The measuring range of +/-10, 30, 100, 300 or 1000 um can be selected in accordance with the application. The measured value can be read on the corresponding scale.
Left scale (100-0-100) for measuring range +/-10, 100, 1000um
Right scale (30-0-30) for measuring range +/-30, 300 um

4. Positioning inductive Tracers

- Put the switch "Meßstelle/Taster" into position "Taster".
- Disconnect the tracers.
- Adjust the display to zero by using the zero point potentiometer below the switch "Meßstelle/Taster".
- Connect the tracers and put the reference master into the measuring unit.
- Set the tracers, that the reference value is approximately shown on the display.
- Use the zero point potentiometer to adjust the exact value of the reference master.
- If the application requires two tracers, set the first tracer approximately to half the value of the reference master. Connect the second tracer and set it, that the display shows approximately the reference value. The fine adjustment is done with the potentiometer as described above.

5. Positioning DMS Tracers (AYE 4769 only)

- Put the switch "Meßstelle/Taster" in position "Taster".
- Disconnect the DMS tracer.
- Adjust the display to zero by using the zero point potentiometer below the switch "Meßstelle/Taster".
- Connect the DMS Tracer and release it from any force or torque (corresponding to the application) .
- Use the zero point potentiometer to adjust the display to zero.

6. Tolerance Module

An optional tolerance module can be added to the measuring equipment. The switching levels can be read on the scale after toggling the switch. The settings can be done by the potentiometers.

upper limit -- switch upwards -- upper potentiometer

lower limit -- switch downwards -- lower potentiometer

The tolerance limits must be adjusted ascending i.e. the lowest tolerance limit must have the lowest value and the highest tolerance limit must have the highest value.

The tolerance limits will change by changing the measuring range, i.e. The tolerances are adjusted to a segment on the display.

The tolerance markers on the front can be used to show the tolerance limits beside the scale.

7. Operating Mode

The operating mode is defined by the application specific program.

In any case the switch "Taster/Meßstelle" has to be in position "Meßstelle".