

# Measumax

## PRECISION & FRAME LEVELS

### 35-205, 35-206, 35-207 35-208

The Measumax precision spirit level is mainly used for checking the flatness of machine guide-ways, and for leveling machine tools or equipment where accuracy is required on the horizontal plain. The Measumax precision frame level is used for both horizontal and vertical leveling

Shaft Type	150mm	200mm	250mm	300mm
Frame Type	-	200mm	-	-

### OPERATION

Readings should only be taken when the bubble has ceased moving

The value as indicated on the level by the bubbles position, is the slope basic length against 1 meter long

If it is necessary to measure the real slope value of a length (L), it can be calculated by the following formula.

$$\text{Real slope value} = \text{Scale} \times L \times \text{Reading value}$$

For example:- Scale value 0.02mm/1000 , l=200mm. Reading value(bubble movement) = 2 divisions

$$\text{Real slope value} = 0.02\text{mm}/1000 \times 200 \times 2 = 0.008\text{mm}$$

### ZERO ADJUSTMENT

Place the instrument on a steady, smooth and even surface. Once the bubble has ceased moving read the bubbles position against the scale on the level.

Rotate the level 180 degrees on the horizontal plane and when the bubble has ceased moving then take the reading against the scale on the level.

If the two readings are not the same then adjust the screw on the top of the level to split the two readings. Check again and repeat until the reading is the same.

### NOTICE

1. Before using the level clean the surface of the base, and the work piece to insure the surfaces are clean
2. Temperature changes can effect the operation of the level, so it should be kept away from heat sources
3. Reading must only be taken after the bubble ceases to move.(usually 15 seconds after the level is placed on the surface)
4. Attention must be paid to the zero adjustment and the parallelism of the working surface of the level in order to avoid distortion of the level. Inspection and adjustment are necessary before measuring

