



Polygraphische innovative Technik Leipzig

OPERATING INSTRUCTION Packing Gauge S

Instrument for measuring the height of the blanket or the printing plate over the bearer or measuring ring for cylinders shorter than 350mm

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Purpose of use

Measurement of the packing height of the blanket or the printing plate over the bearer or measuring ring for cylinders shorter than 350mm.

Measuring principle

- Two contact plates aligned in one plane on the bottom of the device serve to trace the surface of the cylinder.
- A sensor movably arranged against this plane scans the height of the bearer or the measuring ring. The difference in height is captured by an electronic measuring system and digitally displayed.
- This means: No setting to zero during the measuring operation. You just set the gauge on the cylinder and read the measured value.

Algebraic signs

- The packing heights measured by the device are displayed with the common algebraic signs.
- The surface of the bearer ring is the reference plane for the gauge to display the correct algebraic sign.
- Packing heights above the bearer ring are positive values (no algebraic sign is shown).
- Packing heights below the bearer ring are negative values (the value is displayed with the minus sign).



Operating instructions

Stand by

The device does not need to be switched on or off. It is always ready for use.

How to hold the gauge

- During the measurement the gauge is held with one hand. Depending on where the measurement is carried out, both the left or the right hand may be used.
- For 2 reasons the device must be held with your thumb in the position marked with a red dot:
 - In this position the contact pressure has the lowest influence on the measured value.
 - The stop/go button can be activated In this position.
- The device shall be held using the three finger method, meaning using the thumb (on the red dot on one side), forefinger and ring finger (left and right of the red dot on the other side).
- The tip of the middle finger shall be placed above the stop/go button so that it can always be operated.



Red Dot = Contact pressure compensation point
Operating Position = Position for compensating
the contact pressure, i.e. the contact pressure
here has the lowest effect on the measured value

Setting the gauge on the cylinder

With slight contact pressure you set the gauge parallel to the cylinder axis in such a way that the sensor touches the bearer or the measuring ring. To check parallelism your eye will do.

Display of the measured value

While the gauge rests on the cylinder the way described, the measured value appears on the display and can be read. In case of poor view on the gauge or e.g. if the measuring point on the other side of the printing unit can only be reached with your extended arm the measured value can be fixed on the display with the stop/go button. With the first push of this button you hold the measured value (an "H" appears on the display) and with a second push you delete this value (the "H" disappears from the display).

As unit of measurement you can choose millimetre or inch. With a pointed object you push the mm/inch button until the desired unit of measurement appears on the display.

Calibration

- Since the gauge works on the basis of inter-acting planes it is possible to set the absolute zero. This zero position is meant for a condition in which all sensoring areas are aligned in one plane and it is set by the manufacturer prior to the delivery of the device.
 Therefore, it is not necessary to operate the o.oo button during the measuring operation.
- However, it is recommended to regularly check the zero position of the display. For this purpose the device can be set on any plane or even support such as calibration plates, cylinders in the printing unit, rollers, straight-edges etc. with a flatness or straightness of <1/100 mm.</p>
- Deviations from the zero position can be corrected as follows: While the device rests on the support the o.oo button must be pushed with a pointed object for at least 1 second. The zero position thus corrected will remain stored until the next correction is made (also when the battery is changed, provided the change will not take more than 20 seconds). The protected position of the button in a bore hole in the cover of the device and the long activation time of at least 1 second exclude an accidental setting of the gauge to zero.

Battery change

- The device has a power requirement of only 0.005 mA. Therefore the battery will normally have a life time of several years. The display will show a "B" when a battery change is necessary.
- To replace the battery the round battery lid at the end of the device must be turned until the slot in the lid is in a horizontal position and the lid is pushed out by the spring-loaded battery. The lid can easily be turned with a coin in the slot. The plus pole of the new 1.5 V Mignon (AA) battery shows outwards.

Maintenance

Clearly visible dirt on the scanning areas of the device should immediately be removed.

Technical Data/Functions

Measuring range	-2.5 2.5mm
Measuring uncertainty	± 1/100mm
Sensor distance	sensor area – contact area: 42mm
Dimensions	30 x 55 x 175mm
Weight	300g
Operating temperature	15°C 30°C
Storage temperature	5°C 40°C
Voltage supply	1.5V battery, Mignon type (AA)
Current requirement	0.005 mA only, therefore device always in "on" mode
Battery control	battery change if "B" appears in the display
Hold Function	with stop/go button ("H" appears in the display)
Unit of measurement	with mm/inch button (use a pointed object to press the button)
Zero position	with the 0.00 button (use a pointed object to press the button, activation time at least one second)