



Multicote

Electronic comparator for gauging probes





The electronic gauging unit Multicote allows to check dimensions from 1 to 8 gauging probes (inductive HBT or LVDT, digital probes or linear encoders, instrument sor analogue inputs).

Dimensions can be measured simultaneously or shared out on several stations

Up to 8 measurement characteristics can be stored in its memory.

The Multicote is fitted with an analogical 7 segment display that indicates the dimension position compared with the tolerance limits and a 16 keys keyboard. 2 LEDs indicate the part status and 3

LEDs by characteristic indicate the position of the dimension against the tolerance limits keyboard. 2 LEDs indicate the part status and 3 LEDs by characteristic indicate the position of the dimension against the tolerance limits



Functions

Many functions can be selected with the keyboard or by remote control through the RS 232 port or Ethernet:

- Nominal dimension, tolerance limits , dimension of the master part (reference piece)
- Calculation of the dimension from probes
- Calibration mode and calibration checking
- Duration of validity of the calibration
- Gears measuring mode
- Keyboard locking
- Measuring mode (maxi-mini, maxi, mini, average, median).
- Display resolution (2 to 4 decimals)
- Metric or imperial measurements (mm or inches)
- Measurement hold
- Choice between 8 measurement configurations (8 characteristics)

Measurement modes

Le Multicote permet le choix entre 5 modes de mesure :

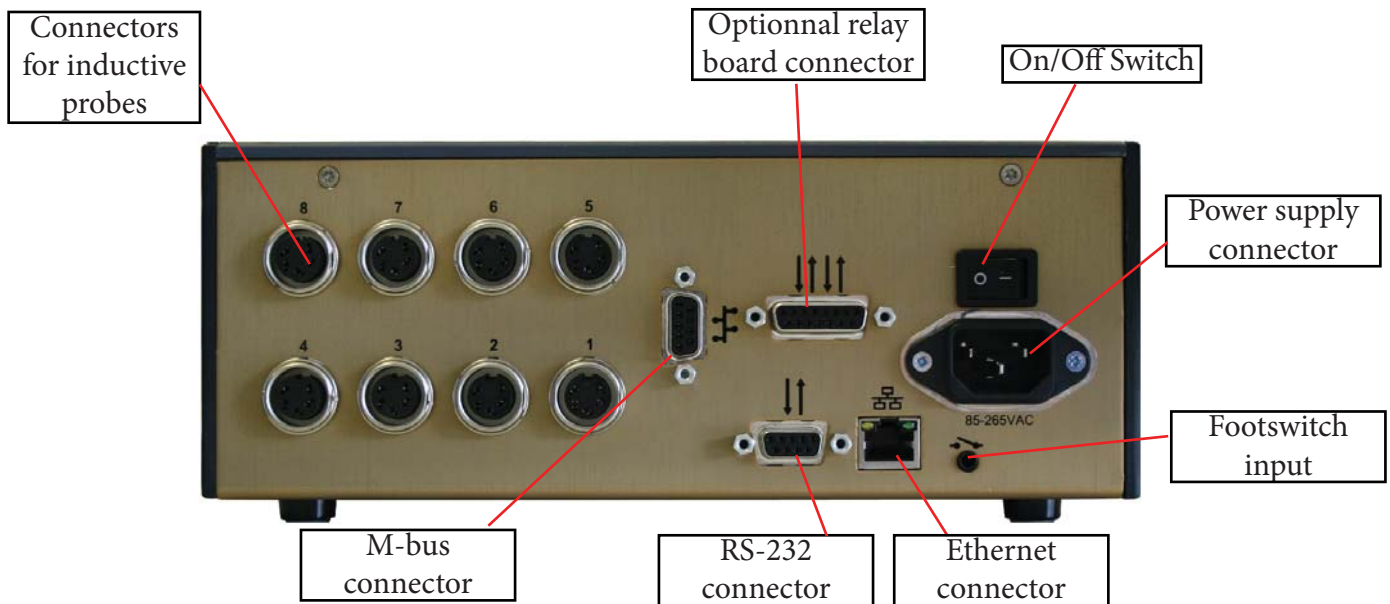
- Direct measurement : The displayed value is the measured value
- Minimum : The displayed value is the minimum value recorded from the beginning of the measurement.
- Maximum : The displayed value is the maximum value recorded from the beginning of the measurement.
- Average : The displayed value is the median or the average value from the beginning of the measurement.
- Difference : The displayed value is the difference between the maximum and the minimum values from the beginning of the measurement.

Compatible probes

The Multicote is designed for the following probes technologies:

- Inductives (Metro, Tesa compatible, Mahr)
- Incremental linear encoders (Metro)
- Digitals (Metro)

Rear view



Mechanical dimensions



Communication Interfaces

- RS 232

A serial RS232 interface enables the measurement reading as well as to download all the parameters of the Monocote in ASCII or Modbus RTU.

- Ethernet

An Ethernet port enables the measurement reading as well as to download all the parameters of the Monocote in ASCII or Modbus TCP.

Optionnal boards

- Relay board

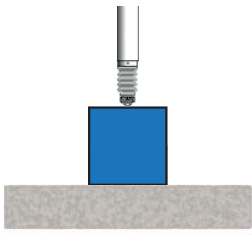
Two relays give the state of the tolerance indicator lights. The functions can be selected by remote control during dynamic measurements thanks to 4 optocoupled inputs.

- Multi-functions boards

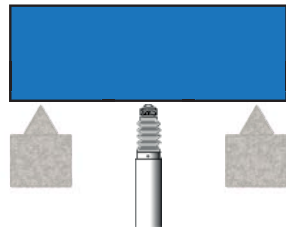
Two relays give the state of the tolerance indicator lights. Two analog outputs give a 0-10 Volts and 4-20 mA signal which indicates the dimension position compared with two programmable thresholds. The functions can be selected by remote control during dynamic measurements thanks to 4 optocoupled inputs. 8 programmable opto-coupled outputs (open collector type) give the individual status of each dimension.

Measurement examples

Simple measurement with 1 probe

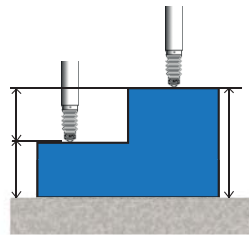


Depth

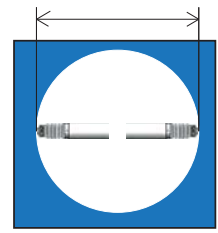


Straightness

Combined measurement with 2 probes

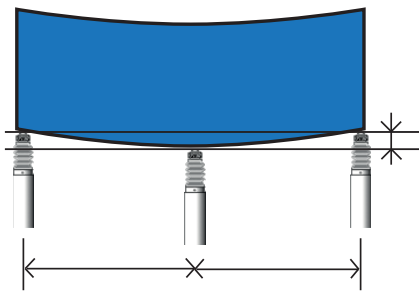


Upset

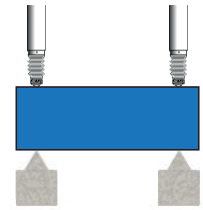


Width or bore

Combined measurement with 3 probes

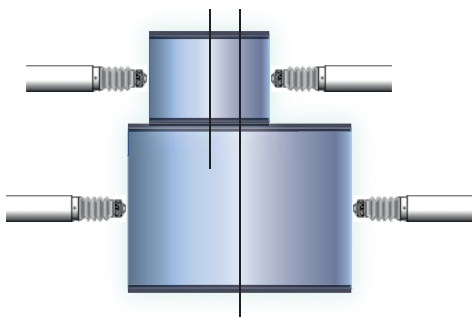


Straightness

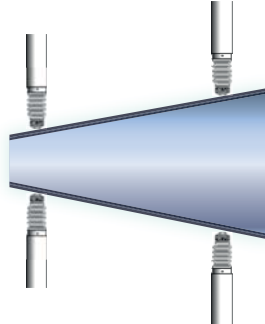


Parallelism

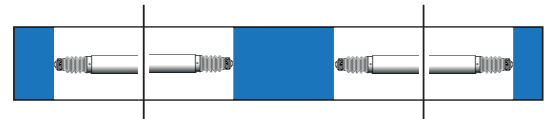
Combined measurement with 4 probes



Concentricity



Taper ratio



Center distance

References

Item	Reference
Multicote for 8 inductive probes and M-bus extension	40500
Optional relay board	24135
Optional multifunction board	24145



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