P1DME

THE SIMPLEST IN-PROCESS SOLUTION FOR ID AND OD MEASUREMENT ON MACHINE TOOL

MARPOSS

Description

Production optimization, quality and real time process control are key elements for a successful industrial process. The new Marposs gauge P1dME with Marposs measuring heads represent an economic, compact, practical and reliable solution for grinding machine.

The P1dME when connected to Marposs measuring heads controls the part dimensions during grinding process. It is a flat and compact gauge with cover lens touch screen that can be easily installed on any grinding machine for smooth part control. The new human interface is intuitive in order to make easier the operator daily work.

P1dME is able to withstand the harsh process while being in direct contact with abrasive grit, metallic particles, cutting oils and aggressive coolants.

Benefits

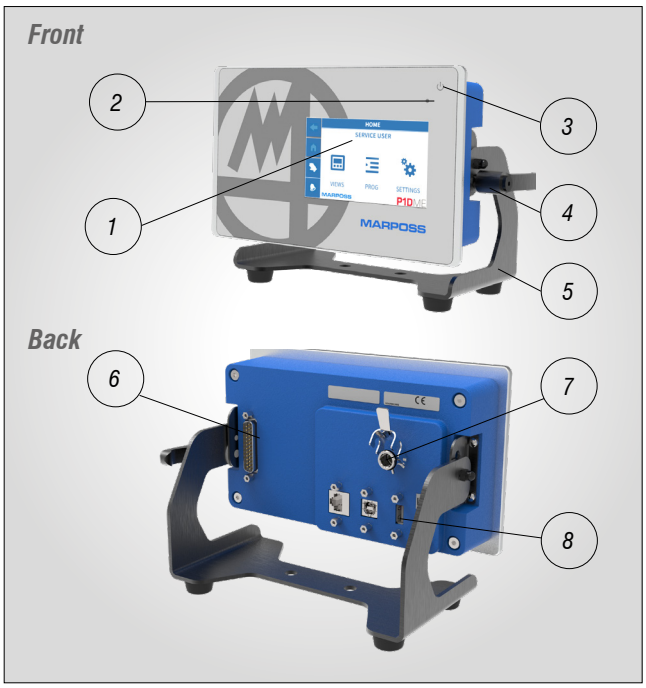
- Assures part production within the tolerance
- Helps to optimize the cycle time
- Helps in assuring and maintaining a constant productivity
- Compensation of the grinding wheel wear

Typical applications

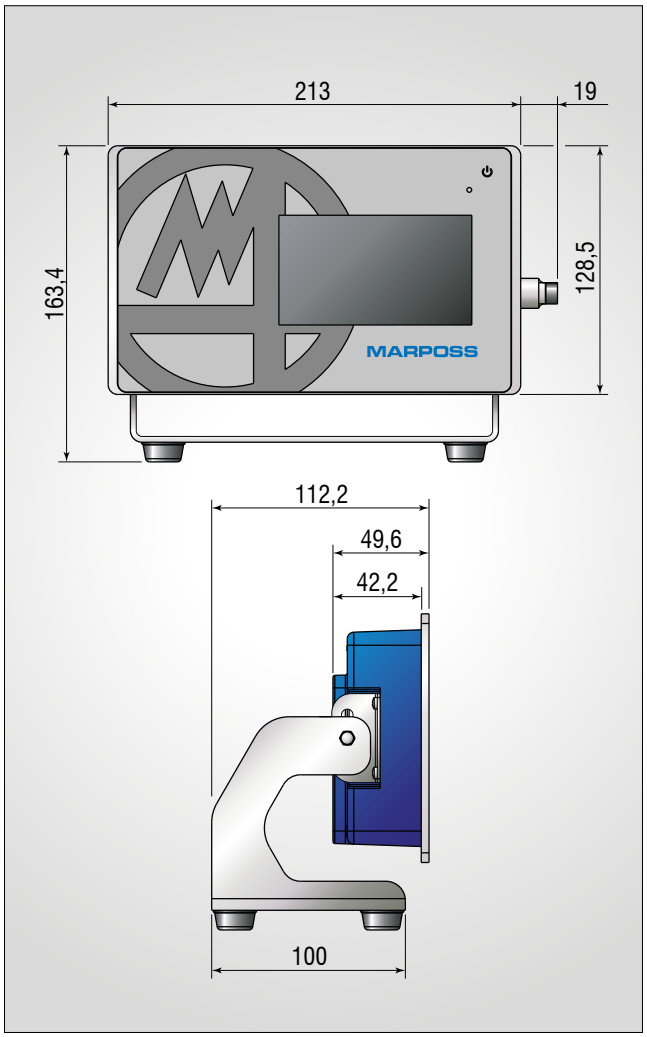
- Designed for OD, ID grinders for smooth parts
- Marposs analog P1 upgrade

P1dME unit

Flat screen, friendly human interface and sturdiness are P1dME main features. The unit can be installed stand-alone or integrated inside operator panel.



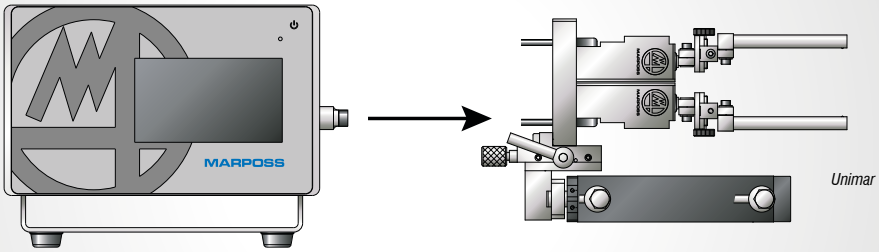
1	4,3" touch screen panel
2	Status LED
3	Power on button
4	Angular position regulator
5	Stand-alone support
6	I/O - Power supply
7	Measuring head connector
8	Service connections



STRUCTURE	Stand alone or rack*
DISPLAY	LCD 4,3" (480 x 272) capacitive
CHANNELS *LVDT or HBT Marposs heads*	1 or 2 channels
MEASURING CYCLES	In-process grinding control
MEASURING RANGE *In-process cycle*	According to measuring head: ±250 µm ±500 µm ±1000 µm
POWER SUPPLY *On 25 pins Cannon connector*	24 Vdc *(-15% / +20% with 5% ripple - EN 61131-2)*
POWER CONSUMPTION	• 8 W w/o retraction option • 32 W with retraction option
STATUS LED	On front panel
OPERATING TEMPERATURE	5° ÷ 45° C (41° F ÷ 113° F)
STORAGE TEMPERATURE	-20° ÷ 70° C (-4° F ÷ 158° F)
WEIGHT	1,2 Kg
PROTECTION DEGREES *IEC 60529*	• Stand alone version: IP40 • Rack version: IP40, IP54 frontal • Kit IP54 version: IP54 *(optional)*
MACHINE CNC CONTROL (I/O)	25 pins Cannon connector 24 Vdc optoinsulated
I/O SIGNALS	• Sink or Source • Input current 5 mA • Output current 100 mA
ELECTRIC SAFETY STANDARDS	EN 61010-1
EMC STANDARDS	EN 61326-1

(*) = Frame dimensions: 114 (h) x 202 (l) mm

Application example



P1dME can be connected also to other Marposs Measuring Heads, for example Micromar 3, MiniAlsar and Idmar

Accessories

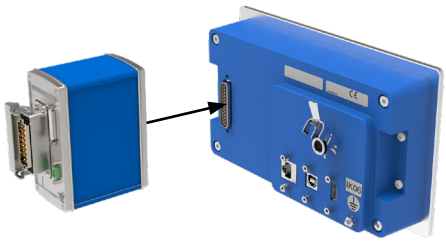
Upgrade I/O BOX (Optional)

I/O module for upgrading obsolete Marposs units via P1dME.

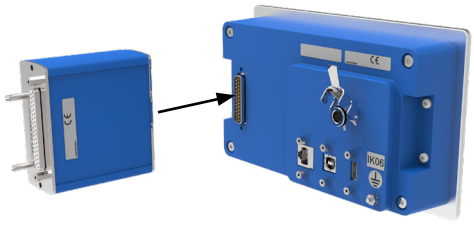
Expansion I/O BOX (Optional)

I/O module for expanding standard P1dME I/Os.
Typically used to output measure in BCD mode.

Upgrade I/O BOX Connection example



Expansion I/O BOX Connection example



For a full list of address locations, please consult the Marposs official website

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Marposs has an integrated system for Company quality, environmental and safety management, with ISO 9001, ISO 14001 and OHSAS 18001 certification.

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