SIC MARKING

e10-P123

PRINCIPLE

The marking system **e10-p123** realises the marking of parts by using electromagnetic dot peen. This process allows reliable and unalterable marking direct in material. The marking (word, logo, Data Matrix 2D code) is defined by a dot succession realised by tungsten carbide stylus mounted in electromagnetic striker assembly. The movement of the stylus is done by stepper motors and managed by electric controller.

USE

This portable machine has a particular adaptation for identification of the heavy, big sized or difficult to access parts. In a robust and reliable conception, you will love the **e10-p123** for its flexibility and ergonomic use. The mechanic's precision allows excellent quality of marking, and is perfect, for example, for the Data matrix marking. Its powerful striker assembly allows deep marking.

Its very large marking window (120 x 25 mm or 120 x 40 mm) allows character heights for best visibility. This portable machine can easily be transformed to be a machine set with "column base option".

Its controller shows a lot of function, a big variety of extern communication mode, the advantage of large screen and an integrated industrial QWERTY keyboard.

The p123 gun marks all type of materials, from plastic to treated steel up to 62HRC. The electromagnetic stylus accepts a variety of shapes and surface finish (flat surface, concave, convex, circular, rough, machined...).

Compliance standards: CE (including RoHS)
                       CSA

DESCRIPTION

The standard machine comes with 3 distinct elements:

1- **Marking head :**
- Cast aluminium handle and body.
  - Plastic cover on handle for better grip

- Front support plate :
  - "V" form for better grip on cylindrical parts
  - Antislip coating
  - Very readily removable for the column option or specific clamping system
  - One-piece front plate module with position memory device to ensure good repeatability marking without further adjustment

- Transmission of motion by gears and belt.
- Moves made by stepper motors.
- Impacts achieved by a tungsten carbide stylus, activated by an electromagnet.
- Fully electric, no compressed air.
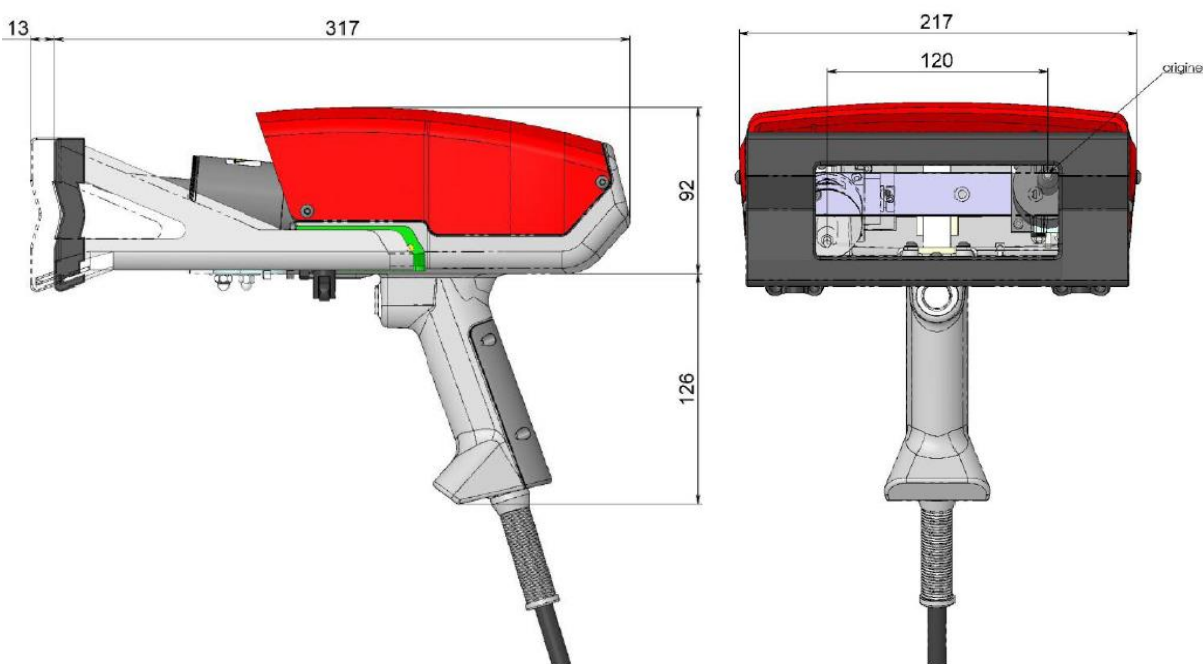- A cycle start button for marking is incorporated into the handle.

Characteristics:

- Marking window : 120x25mm or 120x40 mm
- Weight : 3.760 kg
- ON/OFF button allowing to start and stop marking
- Machine cable length : 7.5 m (10 m and 15 m in option)
- Illuminated work area using LEDs
- Removable power cable

Model with the 25mm marking window
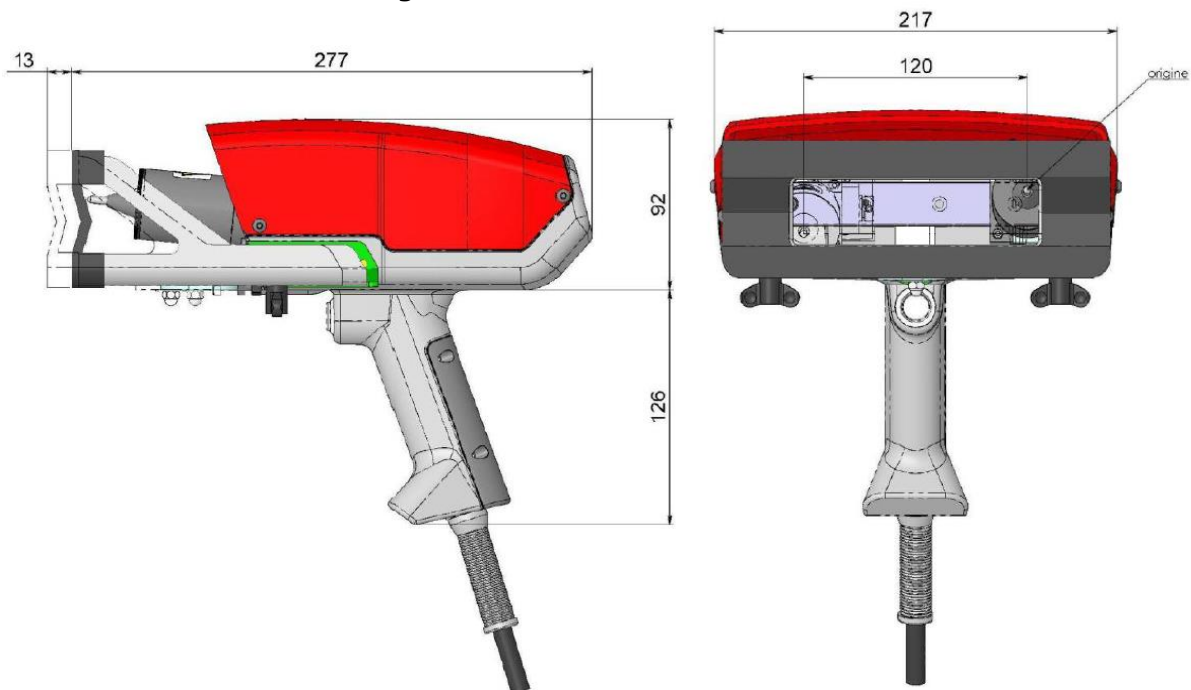
Model with the 40mm marking window

2- e10 controller :

	e10
Dimensions	**322x380x112 mm (P x l x h)**
Weight	**5 kg**
LCD display	**Colour screen 95mm x 54 mm**
Keyboard	**QWERTY integrated, membrane overlay**
Axis controlled	**2 (3rd and 4th axis card in option)**
RS232	**Yes**
RS422	**Yes**
USB	**Yes**
RS485 Profibus	**Yes (optional)**
Ethernet TCP/IP	**Yes (optional)**
External keyboard port	**Yes**
Memory	**7110 Ko**
Power	**300 Watt**
Power supply	**Single phase, 85 to 260 VAC, 50 to 60 Hz**
Temperature	**5 to 40°C**

3- e10-V6 Control software

It allows you to set from the keyboard and menu entry:

- Marking of alphanumeric character, logos and 2D codes **Data Matrix**.
- Graphical view (preview marking)
- X and y text positions
- Reading from barcode directly connected to controller
- Moving speed and impact strength (programmable from 0 to 9)
- Adjusting character size in height, width and spaces(height 0.5 to 100 mm in steps of 0.1)
- Characters font selection **OCR**, **OCR-A, Arial or Courier**
- Definition of the point density (single matrix, double, tight...)
- Straight, inclined or radiant, normal or reversed marking. Marking angle 0 to 360°
- Horizontal, vertical **mirror** marking

- Possibility of alphanumeric **variable** and alphanumeric **serial number**. Configurable increment (value, offset, step and frequency)
- Incremented global and local **variables**
- **Reset** of the serial number at change of day, month, year or week
- **Time stamp** (Year, month, n° of week and n° of day) with teams management by time slots
- Graphical view, manual approach, simulation, origin offset
- **Double or triple** impact stylus option
- **Pause** function during marking

- Software in **17 languages**
- **10 teams** managing
- **3 password levels**
- **Maintenance** menu

   - Many functions annexes allow access to those possibilities :

   ***Manual** operation mode (operator).

   *Slave mode using I/O to select marking file with dry contact (digital inputs/outputs card, 63 files without Z axis option, with 15 files option). Use of digital inputs/outputs for "start cycle, current cycle, end of marking..."

   *Slave mode using RS232, Ethernet TCP/IP, USB, RS422 or RS485 Profibus communication:
   - Selection of a file in the controller.
   - Sends of the contents of the variable to mark.
   - Transfer of the complete set of marking parameters.

   * **Backup/recovery** of marking files, logo (1000 files with one marking line) on PC.
   *Logo edition software presents in the controller and allowing logo creation and downloading with a PC.

OPTIONS

- **Maintenance kit**
  In a suitcase:
  1 complete striker assembly
  (Solenoid, core, guide, stylus, spring, resort)
  1 origin sensor

- **Hook and balancing system** allowing automatic gun holding equipped with **its hook ring**

- **Column / support plate**, allowing use in stationary

- **Cart** with or without battery **(Battery cart)** allowing marking on parts too large to be moved

- **Data Matrix reader** in portable or integrated version

- **Custom clamping system / magnetic clamping**
  The gun is held in place by an electromagnet during marking

- **Custom tools** : clamping a workpiece (contact SIC Marking for feasibility study)

- **External keyboard** compact Qwerty 120 keys

- **WINSIC software**, allows to control the marking from a PC (not supplied by SIC)