# Air Pen Marking Machine
# VM3710A
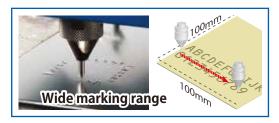
VM3711A
Mechanical Unit

VM3712A
Control Unit

*Marking Stand (a mount for the marking machine) is sold separatery

VM3710A Air Pen Marking Machine delivers semi-permanent marking on a wide range of metals, including steel, stainless-steel and aluminum, as well as plastics and other nonmetallic metals. It is designed to handle marking needs for production management, quality assurance, product-liability countermeasures, ISO measures, distribution management and more.

**Wide marking range**

ABCDEFGHIJK
123456789

100mm

100mm

## Wide marking range (100×100mm)

VM3710A can mark characters on 100×100mm area, which is the largest in our lineup. Two or more strings can be marked in the large marking area of workpiece at a time.

The pen unit moves up and down according to the height of workpiece surface.

## Available on curved surfaces

The air pen shifts vertically according to surface heights ("Floating Mechanism"). However the workpiece shape is spherical or rounded, the stylus can be pressed on workpiece with adequate force.

Operating Unit

Mount

## Various options and extentions

We prepare not only main bodies of making machine, but many optional units such as handy operating unit (VM7891), styli of various angle, mounts, etc.
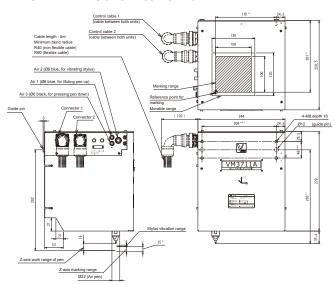
## Specifications

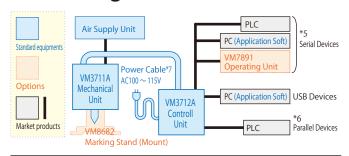| | |
|---|---|
| Pen type | Air Pen |
| Marking range (X×Y) | 100 ×100 mm |
| Pen stroke | Approx.19mm (Z-axis Marking Range: 15mm) |
| Marking speed | 100~12000mm/min (in increments 100mm/min) |
| Available characters | Alphabet  Uppercase  26 types<br>Alphabet  Lowercase  26 types<br>Symbol  18 types<br>Number  10 types |
| Character size (=height) | 1~100 mm (in increments 0.1mm) |
| Font | 3 types |
| Job registered number (J No.) | 512 jobs (J1~J512) |
| Sequence registered number (S No.) | 512 sequences (S1~S512) |
| String length | 1~36 characters |
| Marking function | |
| - Increment | 1~10 digits |
| - Calendar | Year. Month. Day. Hour. Minute. Second<br>(E.g. 11. 02. 28. 12. 10. 16) |
| - Circular arc marking | Available |
| - Special character | Supported (by using PC software) |
| Interface | I/O (Parallel)：50pin, NPN/PNP connect<br>RS- 232C (Serial)：25pin<br>USB 2.0 (for operation by PC)： USB B |
| Power supply | Single-phase AC100V~115V(+15%,-10%)<br>50 / 60 Hz, approx. 550VA |
| Air supply | 0.3~0.5MPa, 60 L / min（A.N.R.)*1<br>Dry clean air (below atmospheric dew point -17℃) |
| Environmental Condition | Operating temperature: 0~40 ℃<br>Storage temperature: -5 ~ +50 ℃<br>Relative humidity: 90%RH or less (no condensation) |
| Dimensions (W×H×D) | Mechanical Unit: approx. 244×279×250.5 mm *2<br>Control Unit: approx. 265×270×260mm *3 |
| Weight | Mechanical Unit: approx. 12kg<br>Control Unit: approx. 7kg |
| Mounting orientation | Mechanical Unit: Gravity direction~holizontal direction<br>Control Unit: Vertical layout |
| Structure | Mechanical Unit - Control Unit separate type |
| Option | VM8682 Marking Stand (Mount)<br>VM7891 Operating Unit |
| Accessories | - Application Software<br>（for Windows XP/7/8/8.1/10, CD-ROM) *4<br>- Manual |

*1  The rate varies according to character size, font and marking speed settings.
For details, please consult our sales deperpment.

*2  Pen units and connectors are not included.

*3  Connectors are not included.

*4  Windows XP, Windows 7, Windows 8.1, WIndows 8 and Windows 10  are either
registered trademarks of Microsoft Corporation in United States and other countries.

## External Dimensions (Unit: mm)

### VM3711A Mechanical Unit



## Block Diagram



*5    Spec. of serial (RS-232C) cable is as follows.
Vector's VM7873 Cable (5m) meets the specifications.

Marking Machine — (Reverse cable) — External devices
D−sub25P        D−sub9P

*6    Spec. of parallel (I/O) cable is as follows.
Vector's VM8679 Cable (5m) meets the specifications.

Marking Machine — (50-conductor) — External devices
D−sub 50P

*7    Attached power cable is available in Japan only.
To use the marking machine out of Japan, please use the compatible cable.

■  Specifications and design are subject to modify without notice.
■  This product (incl. technologies) is a target of catch-all controls. Export of this product out of Japan may require permission of minister of economy, trade and industry pursuant to foreign exchange law.