

# ASM6090 - Hi-speed noiseless scribe marker

**Marking area 60x90mm / 0.9x3.5"**



- **High quality at higher speed**
- **Very LOW NOISE compared to Dot Peen markers**
- **COMPACT marking unit**
- **Easy integration with PLCs and Host Computers**
- **TTF, 2D codes, arcs and logos**
- **Unlimited range of stored marking programs**

## System overview

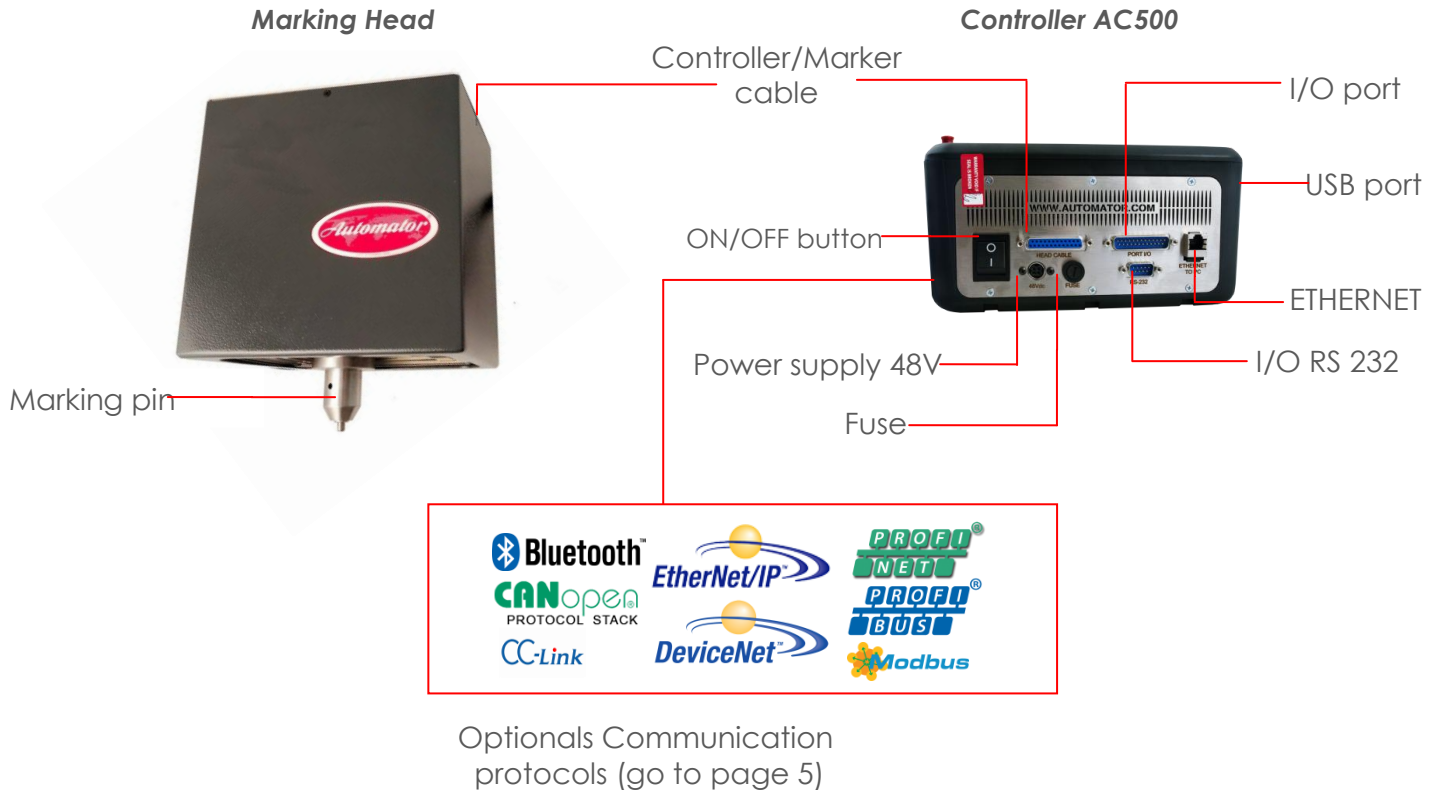
The new Scribe Marker ASM6090 is the ultimate solution for silent and fast marking on metals and plastics. It provides a very large marking area in a very compact head. **Our proprietary piston designs** against the material to be marked, marks in fully formed, continuous mark. The shape, the size and the position of the engraved characters are determined by the user via the AC500 software.

## The system consists of

- Marking head, with pin/cartridge and 4m controller-marker cable
- Universal Controller AC500
- Air Filter
- Power supply adaptor and cable

## ASM 6090 - Small Scribe Marker

### System Scheme



### Marking Head

#### Marking Head - Technical data

<b>Overall dimensions: LxWxH (mm   inches):</b>	170x200x194   6.7x7.9x7.6"
<b>Weight (kg   lbs):</b>	6   13.2
<b>Marking area (mm   inches):</b>	60x90 0.9x3.5
<b>Power supply (V):</b>	110/220 to 48
<b>Air supply (Bar):</b>	6.0
<b>IP certification of the Cover:</b>	52
<b>Working temperature (°C - °F):</b>	0 - +49   32 - 120
<b>Stock temperature (°C - °F):</b>	-10 - +59   14 - 138
<b>Humidity (%):</b>	30 - 80 not condensed
<b>Cartridge available:</b>	Scribe only
<b>Pins available</b>	Scribe only
<b>Connectivity:</b>	Power supply, ethernet port, USB port, RS 232/485, I/O

#### Marking head - Marker/Controller cable

Super flexible cable for continuous marking applications, which connects the controller to the marking head. Available in different lengths.

## ASM 6090 - Small Scribe Marker

### Marking head - Marking speed

The speed depends on various factors, such as the font height, the scribe depth, the desired quality and so on. With standards fonts height, the system can mark 3 characters per second.

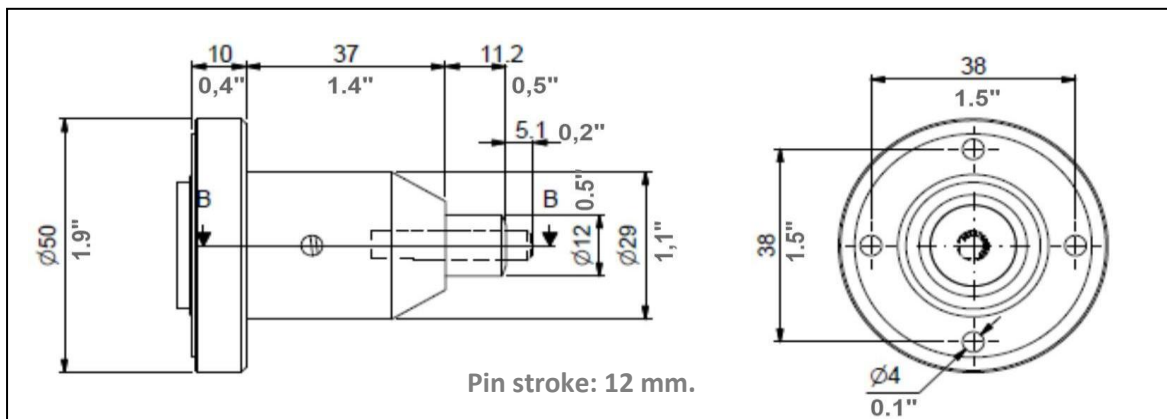
### Marking head - Marking depth

The depth of mark depends on the drive air pressure and on the material of the item to be marked. On aluminum with a thickness of about 1 mm | 0.40", a marking depth of 0.083 mm | 0.003" it's possible. In thinner materials, the marking depth may increase.

### Marking head - Pin

The Automator scribe pin is made of Widia/Carboloy, which shows hardness's similar to diamond tipped pins with improved durability. The average life of the pin may vary depending on numerous factors, such as the material of the piece to be marked and the depth. Generally, for a hardness of 47 Rockwell C, with a minimum depth of 0.127 mm. (should explain longevity of the pin).

### Marking head - Pin drawings



### Marking head - Noise

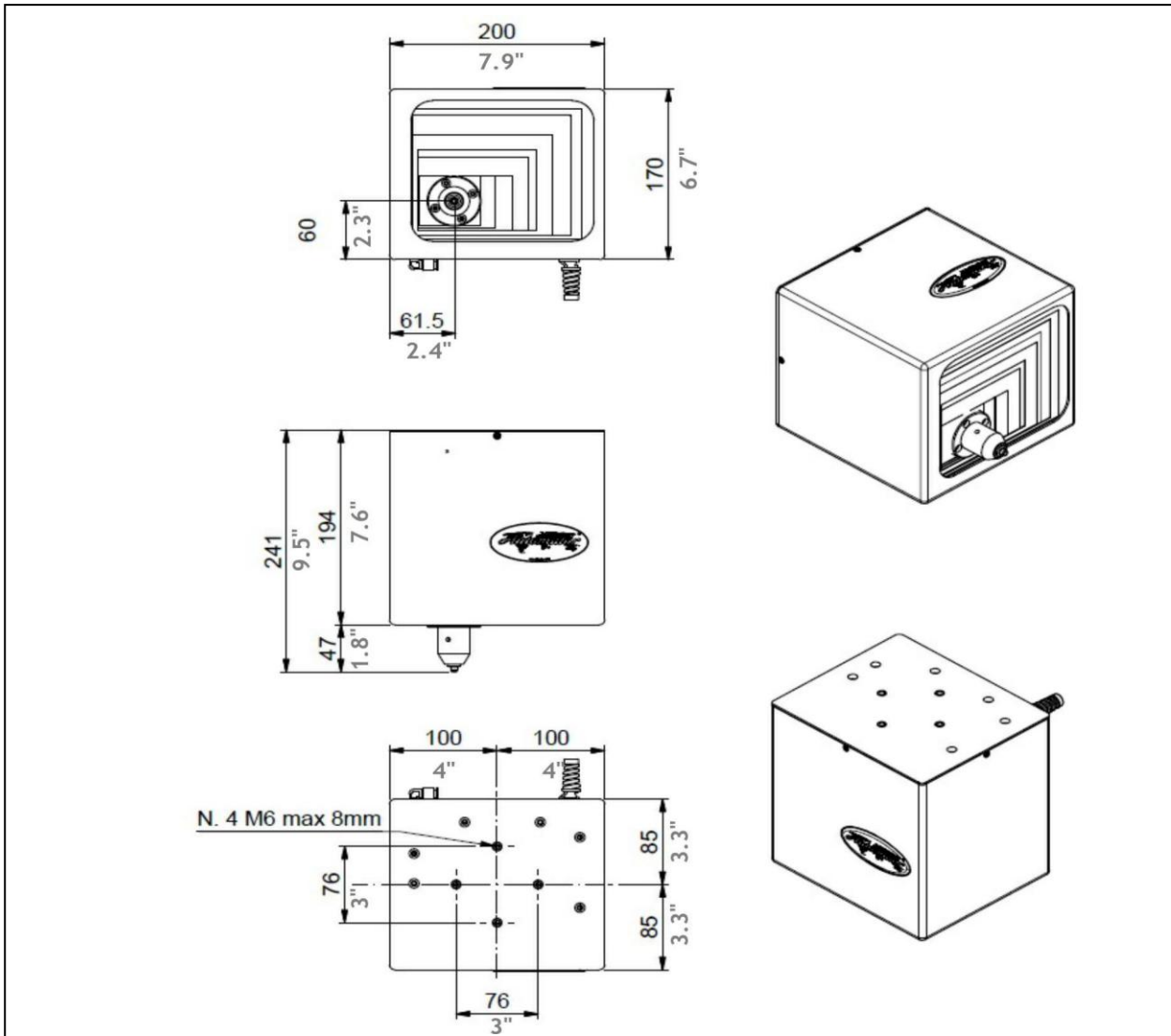
The system work always below the 74.6 dB (using the measurement system "time-weighted average PPROACH that is based on an exposure of about 8 consecutive hours). The measured noise level refers to tests driven in controlled, similar to an industrial working environment. Conditions such as type, shape, material and rigidity of the surface to be marked can alter the measured values.

### Marking head - Options

- Marking Head Extension Cables up to 8m



**Marking Head - Technical drawings**



**Universal Controller AC500**

**Controller AC500**

The **Automator Universal Controller AC500**, with a 7" touch screen display, allows an easy and intuitive navigation in the software program, thanks to its stylus pen. Equipped with Serial port, USB interface and I / O connector, located on the rear, the controller is available in both bench and panel version for integrations.



**Controller AC500 - Technical Data**

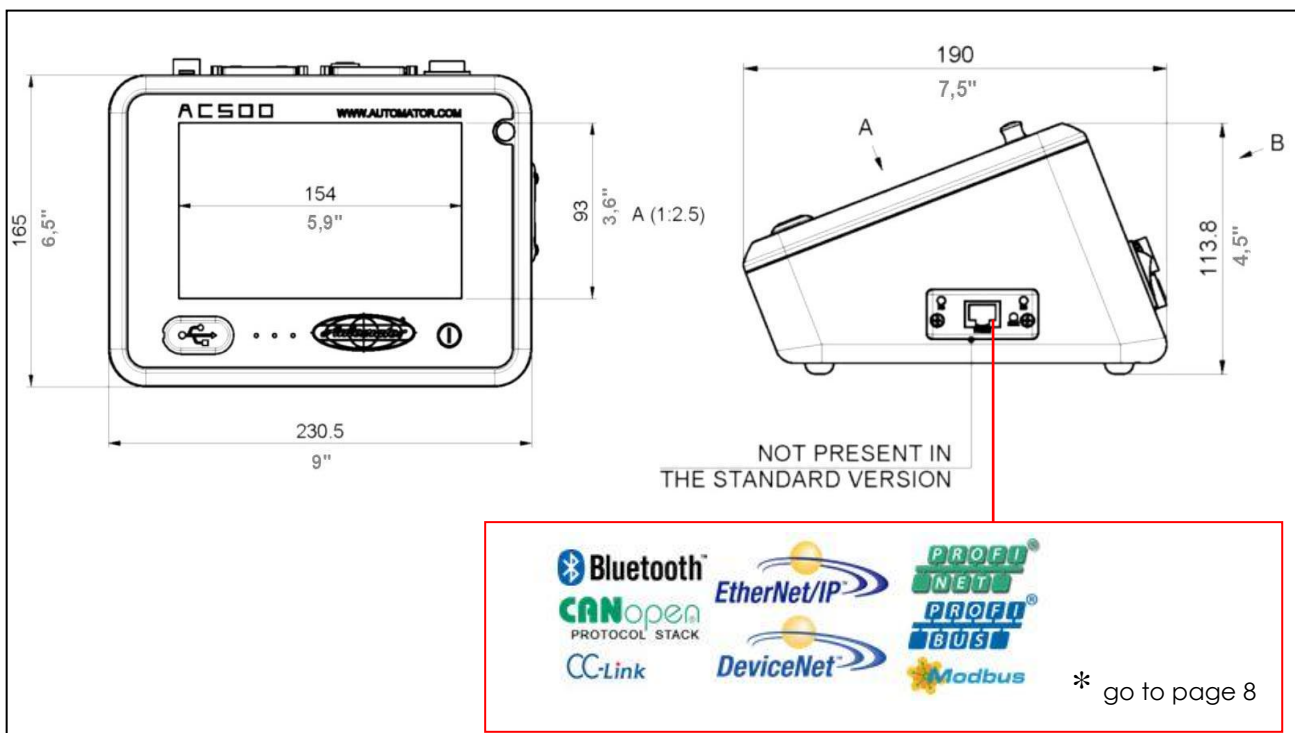
<b>Overall dimensions LxWxH (mm   inches):</b>	230x165x110   9x6.5x4.3"
<b>Weight (kg   lbs):</b>	2,3   5
<b>Material of the cover:</b>	Special fire proof resin material
<b>IP certification of the cover:</b>	42
<b>Power supply (V):</b>	48Vdc
<b>External power supply:</b>	110/220V 90-230V 50 - 60Hz
<b>Humidity (%):</b>	10-79 Not Condensed
<b>Working temperature (°C   °F):</b>	0-45   32 - 113 Not condensed
<b>Fixed Memory Card (MB)</b>	64
<b>Connectivity:</b>	RS232, RS485, Ethernet, Usb, I/O

**Controller AC500 - External power supply**

EC external power supply, UL, CSA to connect the controller to the machine. The power supply must be stabilized for work in a free of electromagnetic fields environments. It complies with the directives 2007 EISA (Energy and Independence and Security Act)

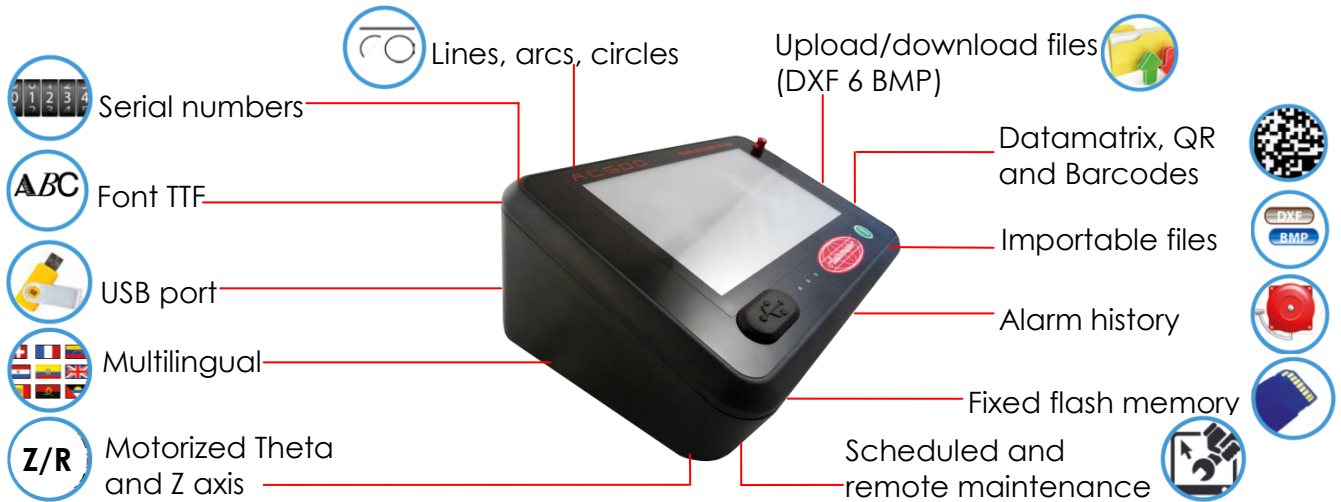

**Controller AC500 - Filter**

Pressure regulator with filter for drive air

**Controller AC500 - Technical Drawings**


## ASM 6090 - Small Scribe Marker

### Controller AC500 - Scheme



### Controller AC500 - Optionals

- Bar Code Scanners and 2D Code Readers
- Foot Start/stop button
- Logo and font generator software

### WARNING

**Do not block air vents on the side of the case. The marking system must be electrically isolated from any other device that may generate electromagnetic interference.**

### Universal Controller Software

The AC500 coupled with our Automator software allows an intuitive user interface with absolute graphic flexibility. Thanks to the touch screen graphic display, it is easy to navigate and to create messages to be marked and parameters.

The preview allows to represent exactly what will be marked and any change in the message will be displayed instantly. The software provides for the creation of messages with the date in various formats, fix or variable texts, codes, serial numbers, Datamatrix and logos. Possible the creation of the programs on the PC (running Windows operating systems), which can be easily transferred to the AC500 controller with USB stick or USB connection.



## Host Communications

The AC500 software allows you to set the communication parameters to share data with a host computer, supporting RS-232 and RS-485 serial communication protocols and Ethernet TCP/IP interface. The software provides two different communication protocol modes:

- Programmable Protocol
- Extended Protocol

The serial RS-232 communications interface is available for remote devices: host computers, terminals, or scanners/readers.

The Ethernet (TCP/IP) interface is available for host computers working over a LAN (Local Area Network).

The RS-485 interface is available for multi-drop networks or long transmission distances or of up to 31 AC500 controllers.

## Programmable Protocol

The programmable protocol is available for QR, barcodes and Datamatrix readers:

- no error checking or alarm/messages about data to be marked
- Starting character defines where the software begins to count character positions
- Terminating Character defines the end of the data to be read
- Character Position counted from the starting character independently by all the previous characters
- Variable length messages available

## Extended Protocol

The extended protocol is bidirectional and available for marking applications that need serial communications. It includes error checking/alarm and a range of transmission messages Types: SOH, TYPE, [##] , STX, [DATA], ETX, BCC, CR

- SOH (ASCII) - The AC500 controller ignores all characters received before the SOH.
- TYPE (printable ASCII character) - It defines the types and content of the message from the host

Type 1 - It overwrites a field in the loaded marking with data from the Host.

Type P - It specifies the marking name to be loaded

Type Q - It updates the marking to be printed with new infos from the host to be placed in the Query table

Type V - It updates the variable text in a field of the current marking with infos from the Host.

Type O - It sends the marker to the online position

Type G - It sends a start print command for the current marking program

Type I - It returns a status hexadecimal code

- [##] - It specifies the Station ID of the AC500 for multi-drop network applications (Range: 00-31)

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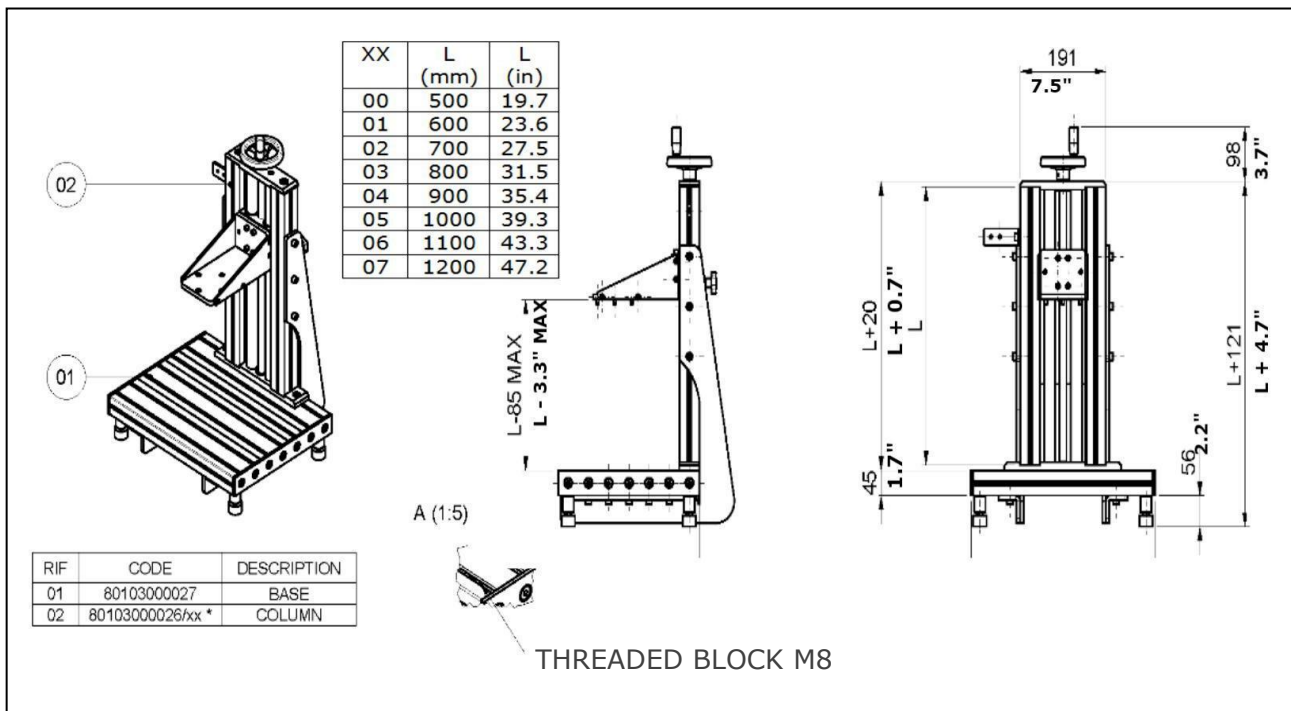
- STX (ASCII Start of Text Character: 002H)
- ETX – (ASCII text ending character: 003H)
- [DATA] - Optional character string for message types like Type 1, P, Q, and V
- BCC - Optional Block Check Code to improve link reliability by providing fault detection

### Configurations

In addition with the production lines integration mode, ASM6090 can be set on a toolstand for workstation marking applications

#### Benchtop configuration

Aluminum toolstand with Z axis adjustment knob adjustable for the surface to be marked.



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