Drop-on-demand valvejet
4700

Complete, compact and reliable

The 4700 is a robust and intuitive case coding solution for unmatched value

Facilitate logistics with the 4700's proven drop-on-demand valvejet technology. The 4700 is quick and easy to install and operate. It offers numerous low-resolution text and logo options. Its extended ink capacity enables you to maximize production uptime while its reserve tank allows for consumable changes without stopping your line.

Your benefits

- Easy line integration
- Effortless image creation
- Improve readability and reduce logistics errors
- Print with less downtime and operator intervention
- Increase factory throughput
- Robust and reliable operations

Product features

Simply install, design, and print

- The compactness of this coder makes it the perfect solution for some of the most inaccessible production lines and environments. It easily integrates with other equipment via Ethernet, serial port, or I/O connection for message select, error output, and weigh scale integration.

- Optional 12 and 25-meter printhead cables available for specialty applications such as industrial paper rolls and those requiring added distance for safety.

- Design print jobs with Markem-Imaje **CoLOS®** or locally on the intuitive 7" color touchscreen in your local language with Latin, Arabic, Cyrillic, Chinese, Greek, Hebrew, Thai, etc. characters.

- Identify your products with static text, date, time, expiration date, shift code, counter, variable data fields and even logos, in your choice of eight font sizes.
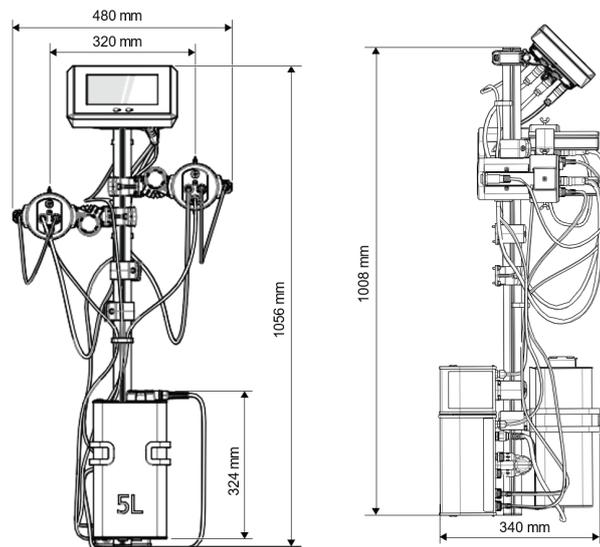
Print highly visible codes

- Use one printhead for simplicity or add a second printhead mounted on the opposite side of the case, to make the codes visible from all directions.

- With a choice of 7 or 16 nozzle printheads, print up to 56 mm high codes with a single printhead or stitch print two printheads together to create a code with up to 114 mm characters.

More productivity, less operator intervention

- 20 L ink canister allows for more product coding and the additional reservoir allows for ink replacement without stopping the line.

- Run your line up to 90 m/min to get more product out the door.

- Compliant with global safety standard IEC 62368-1, and with IP54 ingress protection which ensures safe and reliable operation even in a dusty environment and when splashed with water.

480 mm
320 mm
1056 mm
1008 mm
324 mm
5L
340 mm

Print features

- Water-based ink –for printing on porous paper, cardboard, plasterboard, or pulp
- 5 L or 20 L ink canisters, with ink level alarm, and indication of remaining ink on the screen
- One or two printheads: 7 nozzle printheads to print 1 line, maximum 24 mm
- 16 nozzle printheads to print up to 2 lines, and up to maximum 56 mm
- (2) 7 nozzle printheads print 2 independent lines, each up to maximum 24 mm
- (2) 16 nozzle printheads may print independent images, each up to maximum 56 mm
- (2) 16 nozzle printheads also print a single interconnected image up to maximum 114 mm
- Prints text, time, date, expiration dates, shift code, counters, image (png or bmp)
- Supplied from external source, prints single variable via serial port, or multiple variables, (20 in total or up to 10 per printhead) via ethernet port.
- Calendar feature for custom date formats
- Stores at least 800 messages
- Character width adjustment
- Print delay for message placement
- Top, side, opposite side, and bottom printing
- 2-20 mm print distance between the printhead and the object (<5 mm recommended for best print quality)
- Print in any direction
- Ink circuit: Internally regulated
- No adjustments needed and no plant air needed
- Character sets: Unicode capability: Latin, Arabic, Cyrillic, Chinese (simplified), Chinese (traditional), Greek, Hebrew, Japanese, Thai, etc.
- Support for TrueType and BDF-font format
- Font matrix: - 7N: 5x5, 7x5
  - 16N: 5x5, 5x7, 12x10, 16x10
  - (2) 7N: 5x5, 7x5, 12x7
  - (2) 16N: 5x5, 7x5, 12x7, 16x10, 25x19, 32x24
- Five printhead slant angles for finer resolution at reduced print heights

Software

CoLOS® Software & Packaging Intelligence Solutions

- Modular solutions for Message/Code management and Control, integration with ERPs/MES/WMS, Product inspection, Coding & Packaging integrity, Serialization & Aggregation, Production Control, Tracking and Consumer engagement.

Operations

- Start or stop printing with only one button or automatically by I/O
- Automatic print repetition on a single product
- Operator interface: intuitive icon-based WYSIWYG 7" (177.8 mm) touchscreen
- Interface available in 31 languages: Arabic, Brazilian, Bulgarian, Chinese (traditional), Croatian, Czech, Danish, Dutch, English, Farsi, Finnish, French, German, Greek, Hebrew, Hungarian, Indonesian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Slovenian, Spanish, Swedish, Thai, Turkish, Vietnamese
- 3 user levels (operator, advanced operator, and administrator)
- Full message editor included
- Instructions can be given in one language while messages can be printed in another language and/ or character set
- Import/export jobs and printer settings through USB
- Direct purge button function on controller for convenient cleaning
- Supplied as complete functional system 'out-of-the-box'

Other characteristics

- Print speed: manual set or use optional encoder for speed detection
- Multiple I/O for message select, or conveyor stoppage output on printer error, etc.
- RS232 input (DB9 connector, up to 115,200 bits per second) to support variable data update
- LAN (Ethernet, RJ45 connector, 10/100 Mbps) including Ethernet protocol support
- Optional external signal beacon
- Gregorian, Julian, and Hijri calendars
- Operating temperature: 5° to 40° C (41° to 104° F)
- Weight: Controller 1.3 kg; 7N printhead: 0.46 kg; 16N printhead 0.89 kg
- Humidity: From 10% to 90% without condensation
- Ingress protection class: IP54
- Power supply: 100/240 VAC, 50-60 Hz, 0.73-0.34 A (printer with 2 printheads consumes 70 W max)
- Included: Printer with 7" color touchscreen, support beam, printheads as ordered with brackets, 1 m printhead cable(s) and 1.5 m ink tube(s), 5 L canister holder, sensor bracket, power supply, startup kit, safety manual, installation guide, DVD with instruction and user manuals
- Accessories: Status beacon, extension arm for long-reach printhead
- Mounting and top/bottom printing, photo sensor (standard or reflective), sensor cable, pulse encoder and encoders for harsh environments, remote interlock cable for conveyor output, stainless steel printhead stand

Services and support

- Markem-Imaje offers the sector's most comprehensive array of digital, remote and on-site services to further empower our customers to maximize the return on their investment in our solutions. The portfolio of maintenance services is tailored according to user needs, skills and available resources.

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