

the team to trust ■ ■ ■

catalog

accessories - spare parts ■ ■ ■

9020

9030

9030 IP65



A35262-D

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User Documentation Department



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For information





Général

For information



For information



■ Security

en

Before starting work, please read these instructions and the materials safety data sheet (MSDS) for the consumables used.

Disconnect the printer from the electrical source before opening it or changing any of its components.

Liability

Markem-Imaje shall not be held responsible if the safety instructions are not followed, nor more generally if elementary safety rules are not applied when using and servicing Markem-Imaje equipment.

This equipment is certified to comply with the department of labour regulations in force on the date of manufacture.

Any consequences of modifications or repairs shall be the sole responsibility of the person carrying them out.

The same applies to use not complying with Markem-Imaje specifications.

All Markem-Imaje printers have safety labels that meet the safety standards governing printer use compliant with Markem-Imaje recommendations.

Any modification carried out may be counter to printer compliance and the relevant safety standards.

Therefore, Markem-Imaje cannot be held liable for any malfunction or damage caused by any modification of the use recommended by Markem-Imaje or for any incident arising from use of the printer for any purposes other than those for which it is designed. It is the sole responsibility of the user to take the precautions required by any use to which he or she puts the printer.

Health / Hygiene

Please read the safety data sheet (MSDS) for the consumables used.

For certain consumables:

- ☐ Wearing contact lenses when handling these consumables is strictly prohibited.
- ☐ Ink-resistant gloves and safety goggles are recommended during filling and cleaning operations.

Max. noise level < 60 dB A.

Fire prevention

It is essential to comply with the instructions on the safety data sheet (MSDS) for the consumables used.

For continued protection against possible fire, use only the following ink/solvent mixture: KETONE / ALCOHOL / WATER / ESTER.

If your printer uses flammable ink or make-up:

- ☐ Never leave containers containing ink, make-up or cleaning products, or ink-soaked rags (even dry) near the printer.
- ☐ Install a foam, CO2 or powder extinguisher immediately adjacent to the printer (maximum 10 meters).
- ☐ Never smoke near the printer. Affix a sign "NO SMOKING, FLAMMABLE INK" near the printer.
- ☐ Ensure that the printer is kept particularly clean, as dried ink deposits remain highly flammable.
- ☐ Drums of ink, make-up and cleaning solution must be closed and stored in a ventilated room.



Environment

Operating temperature: On S7 and S8 lines: +5°C to +45°C (+41°F to +113°F)
On 9020-9030 printers: +5°C to +40°C (+41°F to +104°F).

Humidity: 0 - 90% RH with no condensation. The use of certain inks may limit the temperature and humidity ranges (see the ink specification sheet).

The printer must not be used in explosive atmospheres.

Installation

The printer must be installed in a ventilated location, away from any source of heat, flames or sparks.

The printer and the print heads must be secured firmly in place with fastening devices.

The printer installation on the production line must not generate any risks for staff.

The operator's work station faces the printer.

The printer must be connected to a single phase mains electricity network with earth ground, using the cable supplied with the printer. The standard plug on this cable must be easily accessible.

The electrical and pneumatic installations upline of the printer must comply with applicable regulations. Machine electrical specifications: refer to the specification plate located near the power receptacle (S7 and S8 lines) or inside the door near the consumables (9020-9030 printers).

When the printer or a part thereof is attached to a stand, the stand must be connected to earth ground.

Earth ground all conducting parts not at a voltage reference and which are related to or close to the printer (metal frames, protective guards, etc.).

For information on fastening a Markem-Imaje accessory, refer to the assembly instructions delivered with it.

Use

The printer is designed for contact-free printing by projecting ink. Any other use of the printer is prohibited, and any consequences shall be under the entire responsibility of the user.

Consumables (inks, make-ups, cleaning products, servicing products) not produced by Markem-Imaje must not be used, and any consequences shall be under the entire responsibility of the user.

Other types of Markem-Imaje consumables should not be used without Markem-Imaje's prior approval, and any consequences shall be under the entire responsibility of the user.

Handling

When the printer contains consumables, it should not be tilted and should only be moved vertically.

Totally drain the printer before moving it to a non-vertical position.

Servicing

Disconnect the printer from the mains before any operations requiring components to be removed or exchanged.

Use appropriate tools for any work on the electrical and hydraulic circuits.

After each maintenance operation, the waste receptacles used should be emptied and cleaned. Do not leave rags soaked with consumables near the printer.

We recommend that repairs be carried out only by staff who have received technical training from Markem-Imaje.



■ Recycling



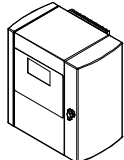
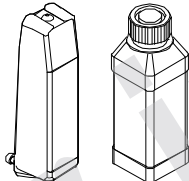
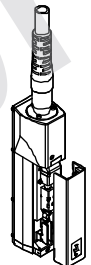
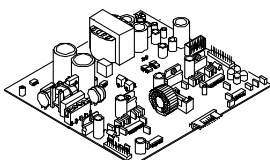
The equipment described below is industrial equipment.

For this reason it cannot be recycled or recovered in household waste sites but in specialized sites as indicated by the logo below:

The sites mentioned above allow for having a non-exhaustive view of the recycling of the machine at the end of its life. They are given by way of indication.

When dismantling cannot be carried out on site, this instandardion should be passed on to the provider responsible for this operation.

For further information, do not hesitate to contact your Markem-Imaje representative.

| Recycled parts | | Site |
|----------------|---|---|
| 1 |  | Stainless steel cabinet. 100 % recyclable material at any metal site. |
| 2 |  | Consumables containers and ink circuit. This assembly is made up of plastic, metal, impregnated composite materials or materials containing ink. Recommended site: <input type="checkbox"/> energy recovery |
| 3 |  | Conduit and print head. Recommended site: <input type="checkbox"/> energy recovery, <input type="checkbox"/> recovery of electrical material, <input type="checkbox"/> recovery of metals. ATTENTION: Presence of an electronic board (Cf. 4). |
| 4 |  | Electronic boards, display and electric cables Recommended site: <input type="checkbox"/> recovery and processing of electronic waste (computers, television, etc.) |

The accumulators and batteries present in the equipment contain no mercury, lead, cadmium or chromium VI. Once used, they should be treated at specialized sites.



■ How to use this catalog

Part Exchange Program

Replacement parts are available under the Markem-Imaje Part Exchange Program.

These are reconditioned parts, all worn or damaged parts have been replaced.

These parts are identified in the catalog by a specific reference prefix ENR, e.g.:

| | Part number |
|-------------------------|-------------|
| New Part | ENM35336 |
| Replacement Part | ENR35336 |

Replacement parts are available under the following conditions:

- a reconditioned part contains recycled components,
- the defective original part is returned to Markem-Imaje and becomes the property of Markem-Imaje,
- the defective original part has not been modified or damaged and no component has been removed,
- proper use has been made of the defective original part and the maintenance instructions have been complied with,
- cleaning and draining procedures for the defective original part have been followed.

How to order

Orders may be sent by mail, fax or telephone. Written confirmation is required in the case of telephone orders.

To order parts, contact the Markem-Imaje representative.

The following information should be shown on orders for replacement parts or accessories:

- part reference number,
- description,
- quantity required,
- required delivery date,
- delivery instructions,
- purchase order number.



Documentation

For information





For information



Documentation

Cdrom

This CD-ROM includes the entire range of documentation for 9020 and 9030 printers in PDF format, i.e. User manual, Quick guide, Spare parts catalog, Manual for serial and parallel interfaces, Instructions for accessories and space floor plans in DXF format.

| Part number | Description |
|-------------|-----------------------|
| A35276 | Cdrom – All languages |

Instructions Manual

The Instructions Manual complies with European Directive 98/37/EC, and is translated into all EU languages, as well as into Japanese, Chinese and Taiwanese.

| Reference | Designation |
|-----------|---------------------|
| A19919 | Instructions Manual |

User manual

This manual describes all user functions, technical characteristics and preventive maintenance for 9020 and 9030 printers.

| Part number | Description |
|-------------|--------------------------|
| A35250 | User manual - French |
| A35251 | User manual - English |
| A35252 | User manual - Spanish |
| A35253 | User manual - German |
| A35254 | User manual - Italian |
| A35255 | User manual - Portuguese |
| A35256 | User manual - Dutch |
| A35257 | User manual - Brazilian |
| A35258 | User manual - Chinese |
| A35259 | User manual - Japanese |
| A35260 | User manual - Korean |

Quick guide

This document provides a quick reference describing the basic functions of 9020 and 9030 printers.

| Part number | Description |
|-------------|--------------------------|
| A35231 | Quick Guide - French |
| A35232 | Quick Guide - English |
| A35233 | Quick Guide - Spanish |
| A35234 | Quick Guide - German |
| A35235 | Quick Guide - Italian |
| A35236 | Quick Guide - Portuguese |
| A35237 | Quick Guide - Finnish |



Documentation

| | |
|--------|--------------------------|
| A35238 | Quick Guide - Dutch |
| A35239 | Quick Guide - Swedish |
| A35240 | Quick Guide - Danish |
| A35241 | Quick Guide - Greek |
| A35242 | Quick Guide - Russian |
| A35243 | Quick Guide - Hungarian |
| A35244 | Quick Guide - Polish |
| A35245 | Quick Guide - Slovenian |
| A35246 | Quick Guide - Czech |
| A35247 | Quick Guide - Norwegian |
| A35248 | Quick Guide - Croatian |
| A35249 | Quick Guide - Bulgarian |
| A35266 | Quick Guide - Arabic |
| A35267 | Quick Guide - Hebrew |
| A35268 | Quick Guide - Farsi |
| A35269 | Quick Guide - Chinese |
| A35270 | Quick Guide - Taiwanese |
| A35271 | Quick Guide - Korean |
| A35272 | Quick Guide - Thai |
| A35273 | Quick Guide - Vietnamese |
| A35274 | Quick Guide - Indonesian |
| A35275 | Quick Guide - Turkish |
| A35912 | Quick Guide - Brazilian |
| A35913 | Quick Guide - Japanese |

Manual for serial and parallel interfaces

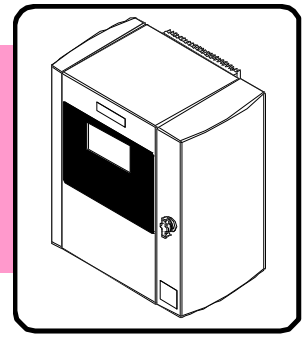
This manual describes the operation of the serial and parallel links (V24/RS232C and RS422) on 9020 and 9030 printers.

| Part number | Description |
|-------------|---|
| A35264 | Manual for serial and parallel interfaces - French |
| A35265 | Manual for serial and parallel interfaces - English |

Catalog: accessories, spare parts

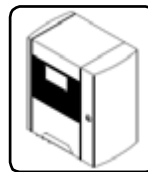
This catalog includes all spare parts and accessories for 9020 and 9030 printers.

| Part number | Description |
|-------------|-------------------|
| A35261 | Catalog - French |
| A35262 | Catalog - English |
| A35263 | Catalog - Spanish |



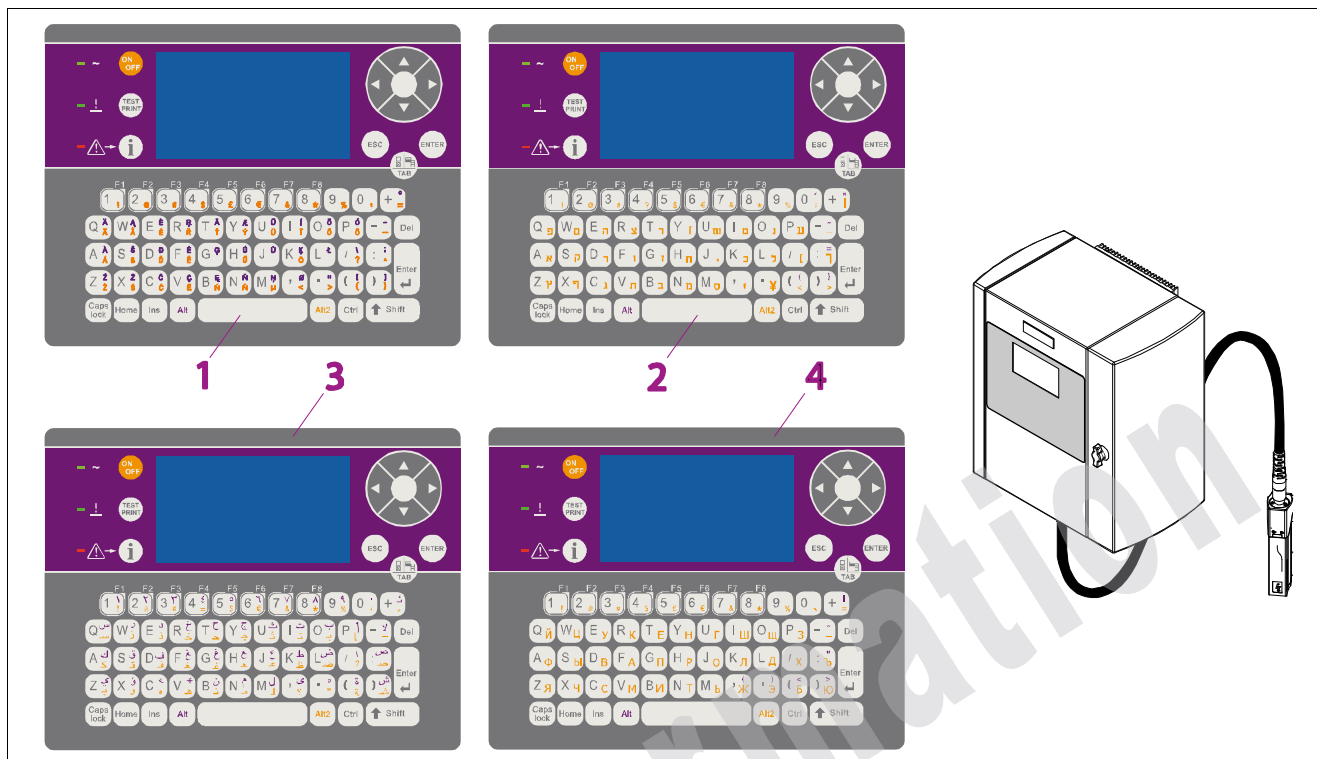
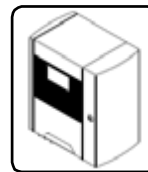
Man - machine interface

For information



For information

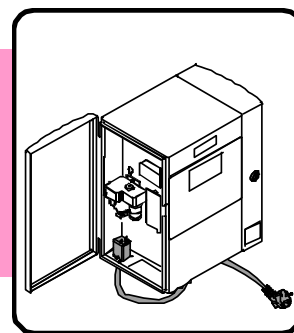
Man - machine interface



| Item | Part number | Description |
|------|-------------|---------------------|
| 1 | ENM28240 | Keyboard - Latin |
| 2 | ENM35216 | Keyboard - Hebrew |
| 3 | ENM35217 | Keyboard - Arabic |
| 4 | ENM35218 | Keyboard - Cyrillic |

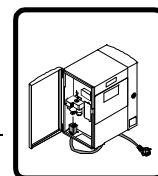
For information



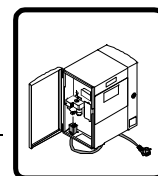


Power supply - Electronic compartment

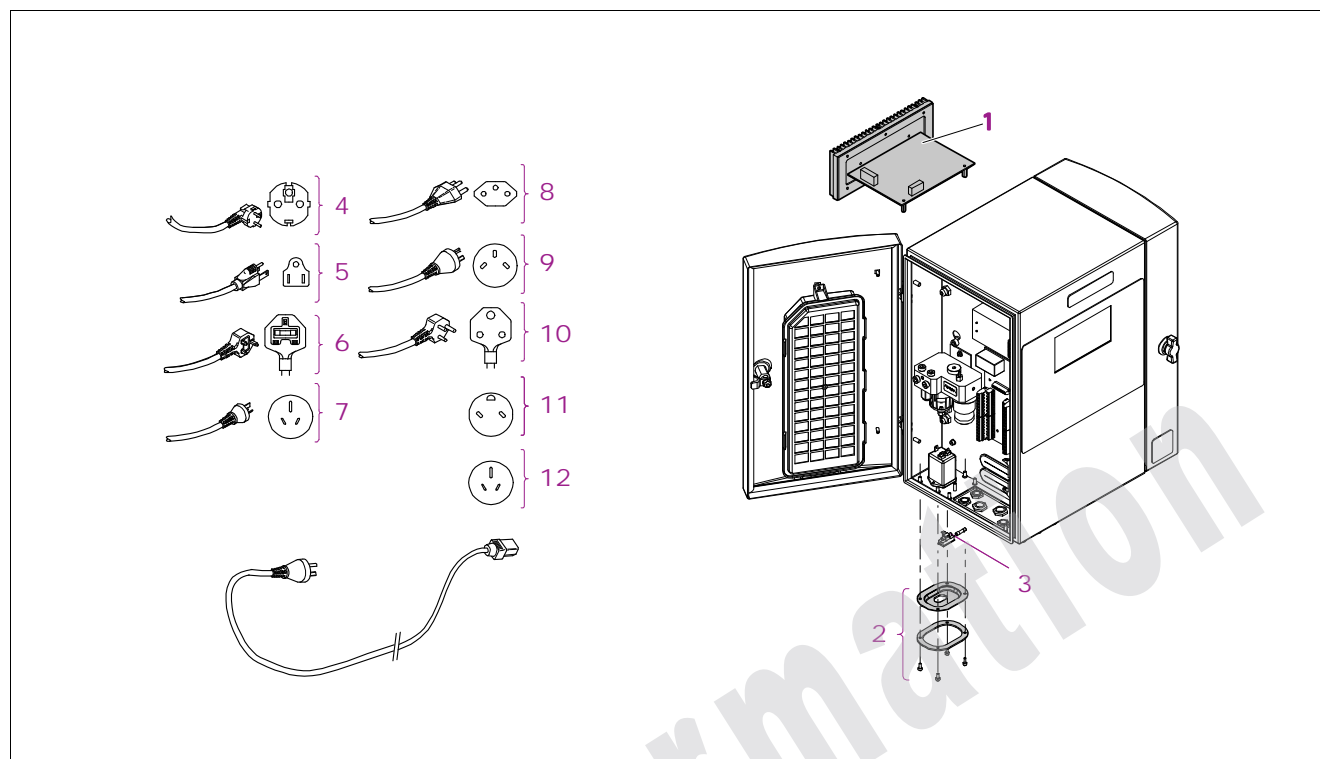




For information

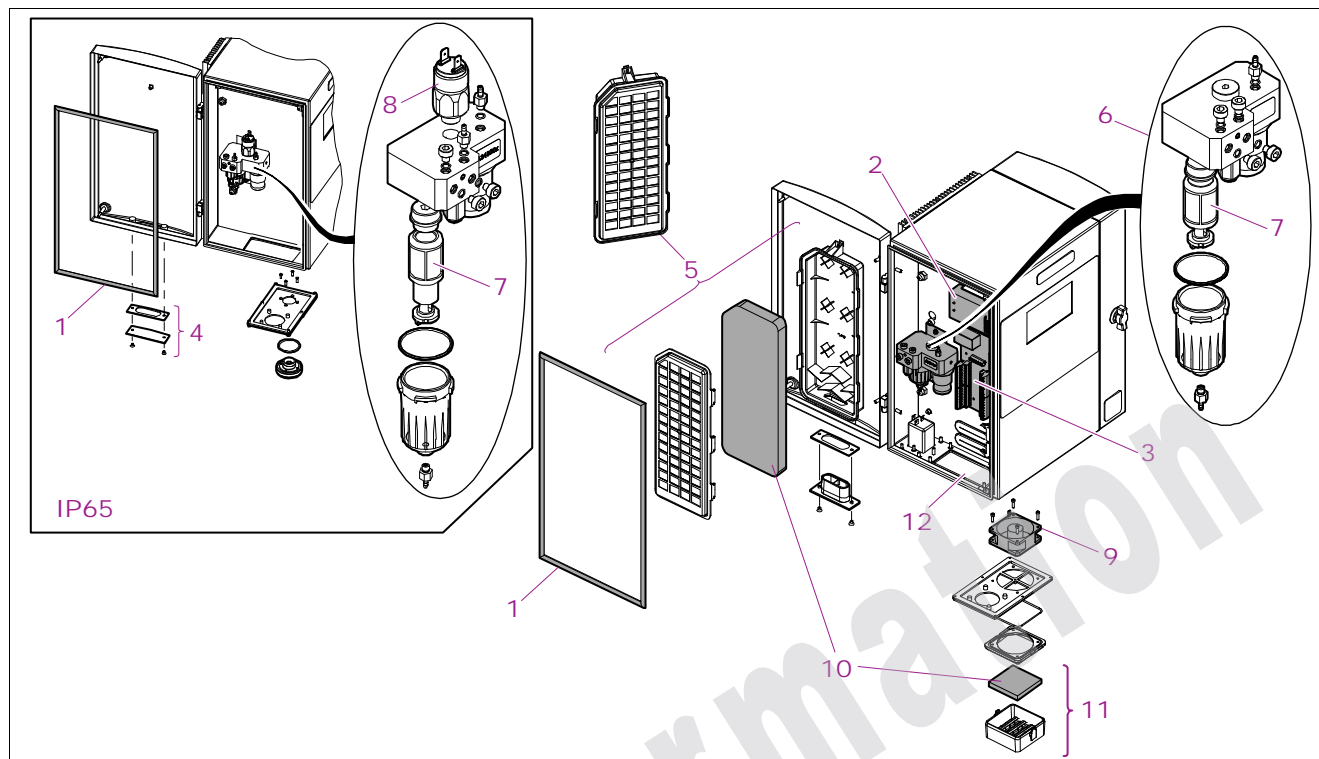
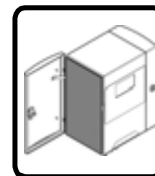


Power supply - Electronic compartment

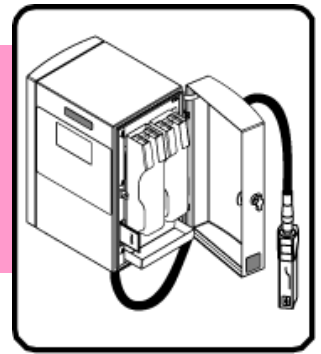


| Item | Part number | Description |
|------|-------------|--|
| 1 | ENM36522 | Board - power supply - 110 V / 220 V - with cables - with heatsink |
| 2 | ENM27331 | Power cord protection kit |
| 3 | ENM5844 | Fuse (x10) - 1,25A slow blow |
| 4 | A35319 | Power cord - CEE standard |
| 5 | A35320 | Power cord - US standard |
| 6 | A35321 | Power cord - UK standard |
| 7 | A35322 | Power cord - Oceanic standard |
| 8 | A35323 | Power cord - Israeli standard |
| 9 | A35324 | Power cord - Swiss standard |
| 10 | A35325 | Power cord - India & South African standard |
| 11 | A35326 | Power cord - Danish standard |
| 12 | A35327 | Power cord - Chinese standard |

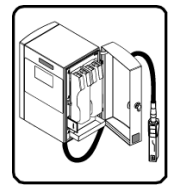
Power supply - Electronic compartment



| Item | Part number | Description |
|------|-------------|---|
| 1 | ENM28949 | Seal (x2) - doors |
| 2 | ENM10298 | EHT block |
| 3 | ENM28247 | Industrial interface board - without ethernet |
| 3 | ENM35808 | Industrial interface board - with ethernet |
| 4 | ENM34956 | Plate - tightness door - IP65 |
| 5 | ENM35334 | Filter housing assembly - IP54 |
| 6 | ENM34801 | Air treatment unit - with hose - IP54 |
| 7 | ENM16203 | Filter cartridge - 0.1µm - with seal |
| 8 | ENM16215 | Pressure detection switch - IP65 |
| 9 | ENM28370 | Wired fan |
| 10 | A36022 | Air filter kit - IP54 |
| 11 | ENM35212 | Output filter housing |
| 12 | ENM35952 | Cable gland plate - without ethernet |
| 12 | ENM35953 | Cable gland plate - with ethernet and sub D25 |



Ink circuit compartment - Print module



Ink circuit compartment - Print module

■ Precautions to be taken when ordering

Each ink circuit or print module uses a different type of ink.

It is highly inadvisable to change a printer's ink type.

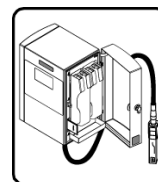
When an ink circuit and a print module have been used with one type of ink, it is not advisable to use them with another type of ink.

What ink circuit or print module should I order for the ink my printer uses?

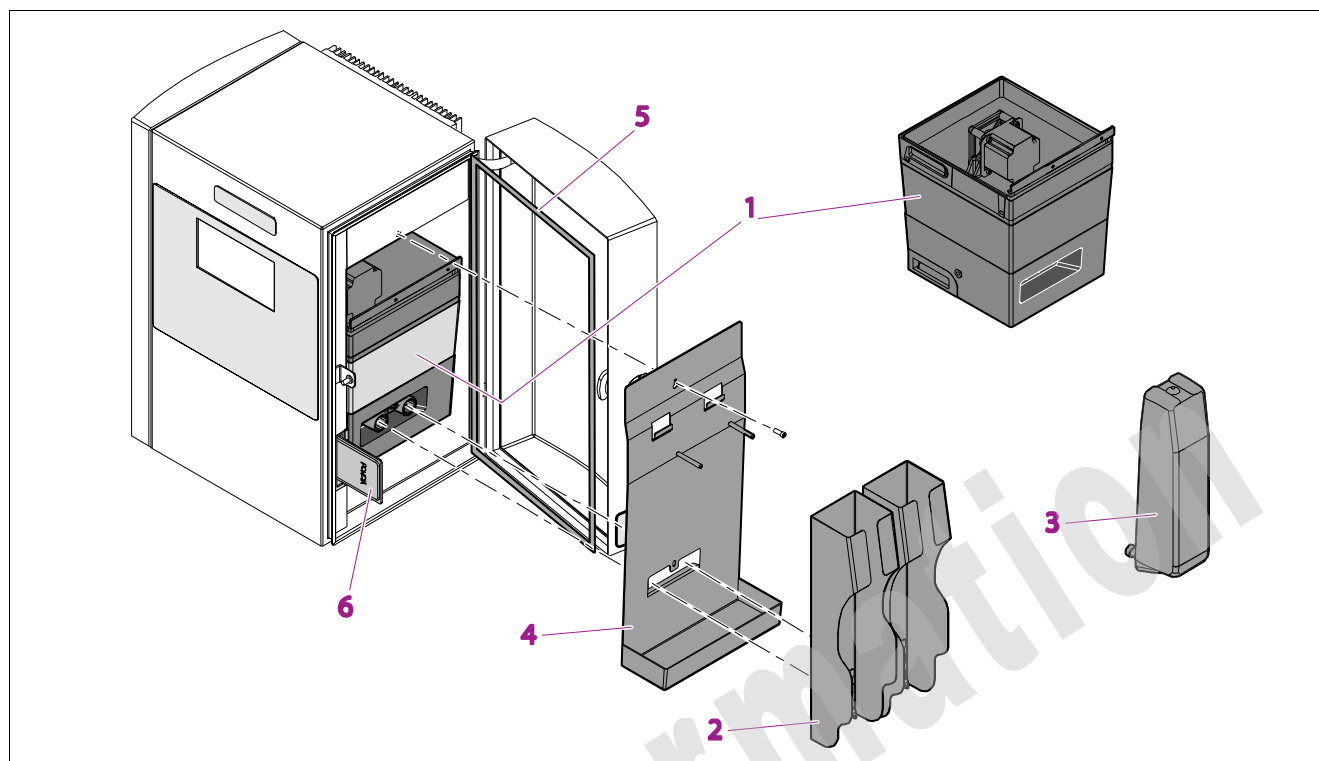
The ink running specifications sheet indicate the reference of the ink circuit or the print module that you should order.

This sheet, SP xxxx (xxxx being the ink reference), is available from your Markem-Imaje representative.

For information



Ink circuit compartment - Print module



For all the printers build after JULY 2006

| Item | Part number | Description |
|------|----------------------|------------------------------|
| 1 | ENM37251 (ENR35336)* | Ink circuit - IC60 - type E1 |
| 1 | ENM37252 (ENR35337)* | Ink circuit - IC60 - type C2 |
| 1 | ENM37253 (ENR35338)* | Ink circuit - IC60 - type C7 |

For all the printers build before JULY 2006

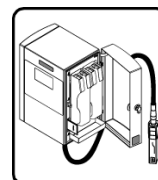
| Item | Part number | Description |
|------|-------------|------------------------------|
| 1 | ENR35336* | Ink circuit - IC60 - type E1 |
| 1 | ENR35337* | Ink circuit - IC60 - type C2 |
| 1 | ENR35338* | Ink circuit - IC60 - type C7 |

For all the printers

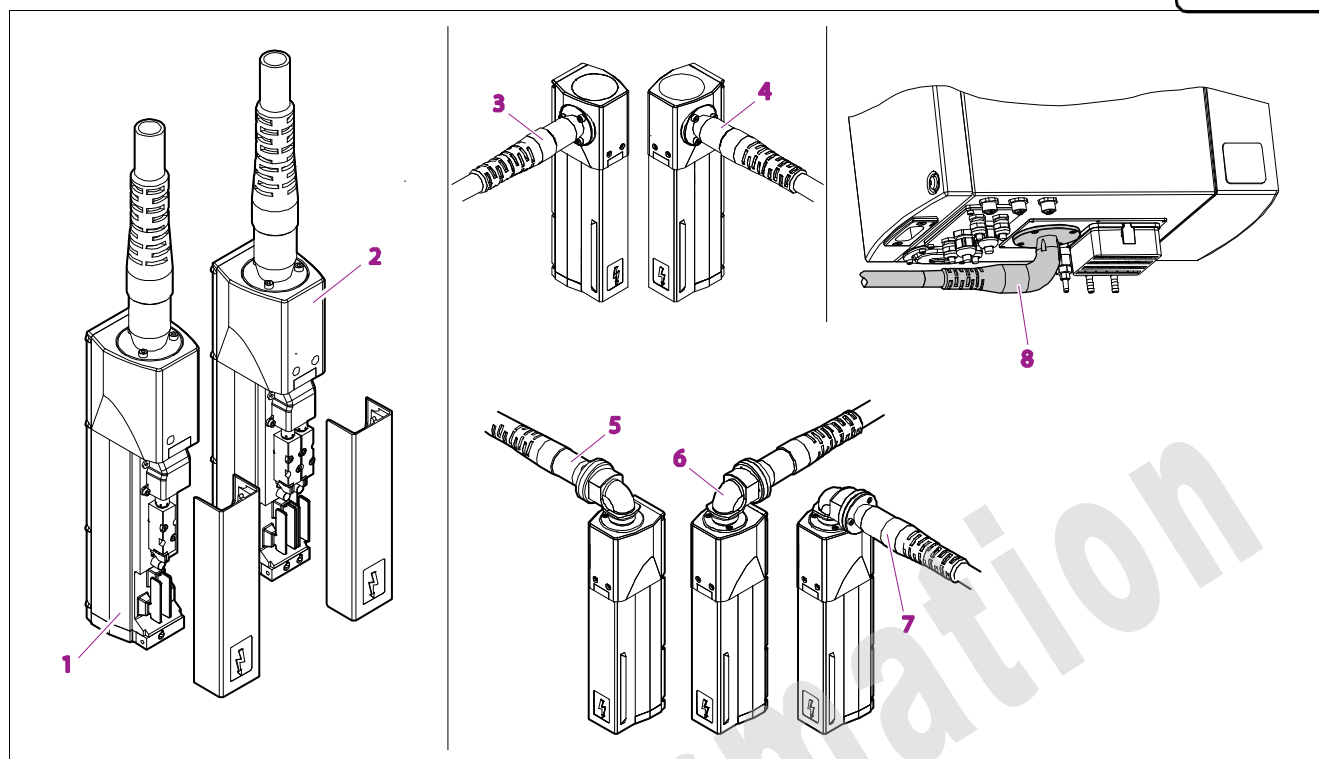
| Rep. | Référence | Désignation |
|------|-----------|----------------------------------|
| 2 | ENM35289 | Cartridge holder (x2) |
| 3 | 9002-4 | Cartridge - empty - depressed |
| 4 | ENM28975 | Support plate - cartridge holder |
| 5 | ENM28949 | Seal (x2) - doors |
| 6 | A27126 | Board - PCMCIA - ATA (16MB) |

NOTE :

When ordering an ink circuit, please indicate the reference of the ink your printer uses. See ink running specifications sheet



Ink circuit compartment - Print module

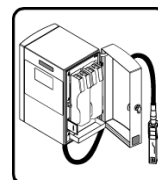


For all the printers build after JULY 2006

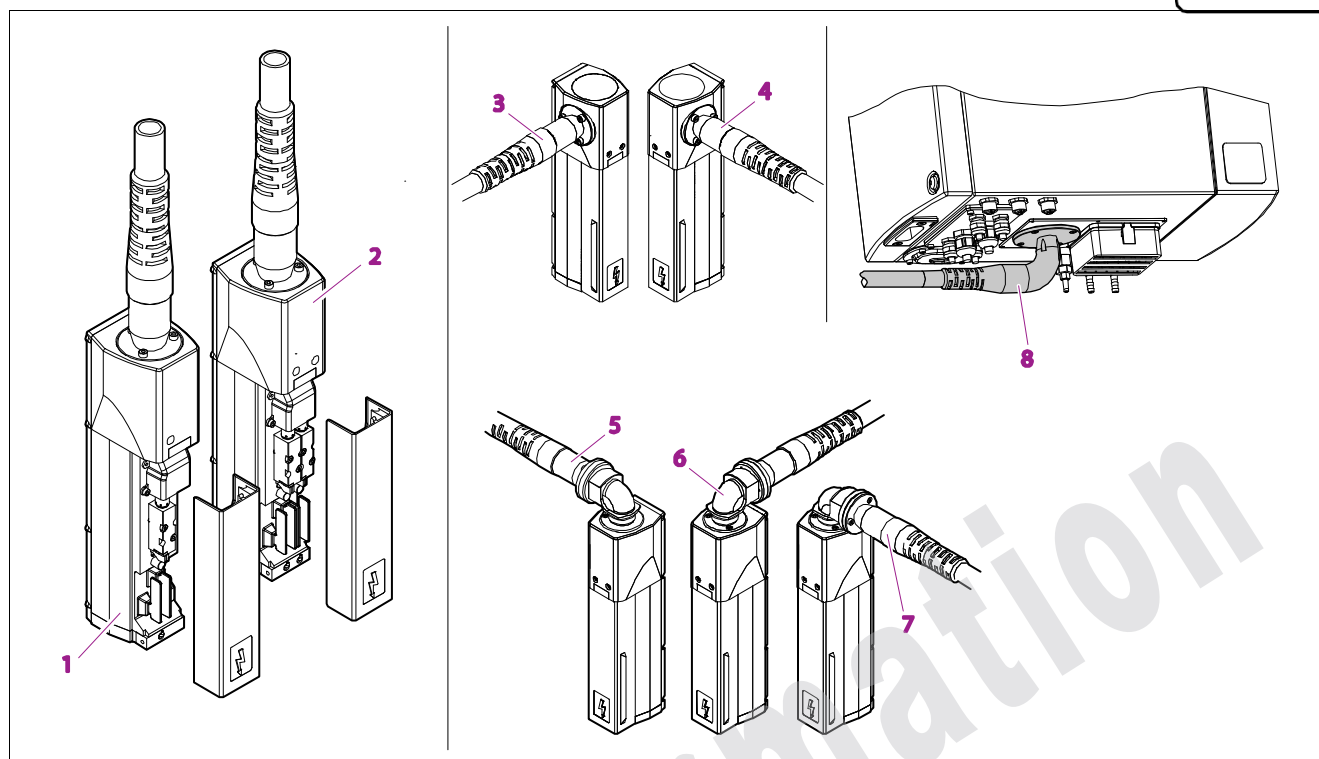
| Item | Part number | Description |
|------|----------------------|---|
| 1 | ENM37198 (ENR37198)* | Print module - G head - single jet - S type |
| 1 | ENM37199 (ENR37199)* | Print module - G head - single jet - T type |
| 1 | ENM37203 (ENR37203) | Print module - G head - single jet - W type |
| 1 | ENM37207 (ENR37207)* | Print module - M head - single jet - S type |
| 1 | ENM37208 (ENR37208)* | Print module - M head - single jet - T type |
| 1 | ENM37209 (ENR37209)* | Print module - M head - single jet - W type |
| 2 | ENM37204 (ENR37204)* | Print module - G head - twinjet - S type |
| 2 | ENM37205 (ENR37205)* | Print module - G head - twinjet - T type |
| 2 | ENM37206 (ENR37206)* | Print module - G head - twinjet - W type |
| 2 | ENM37213 (ENR37213)* | Print module - M head - twinjet - S type |
| 2 | ENM37214 (ENR37214)* | Print module - M head - twinjet - T type |
| 2 | ENM37215 (ENR37215)* | Print module - M head - twinjet - W type |
| 3 | A35440 | Option - head output - left |
| 4 | A35441 | Option - head output - right |
| 5 | A35437 | Option - angled conduit - left - head side |
| 6 | A35439 | Option - angled conduit - rear - head side |
| 7 | A35438 | Option - angled conduit - right - head side |
| 8 | A35442 | Option - angled conduit - printer side |

*** Note :**

When ordering a print module, please indicate the reference of the ink your printer uses. See ink running specifications sheet.



Ink circuit compartment - Print module

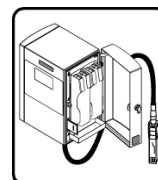


For all the printers build before JULY 2006

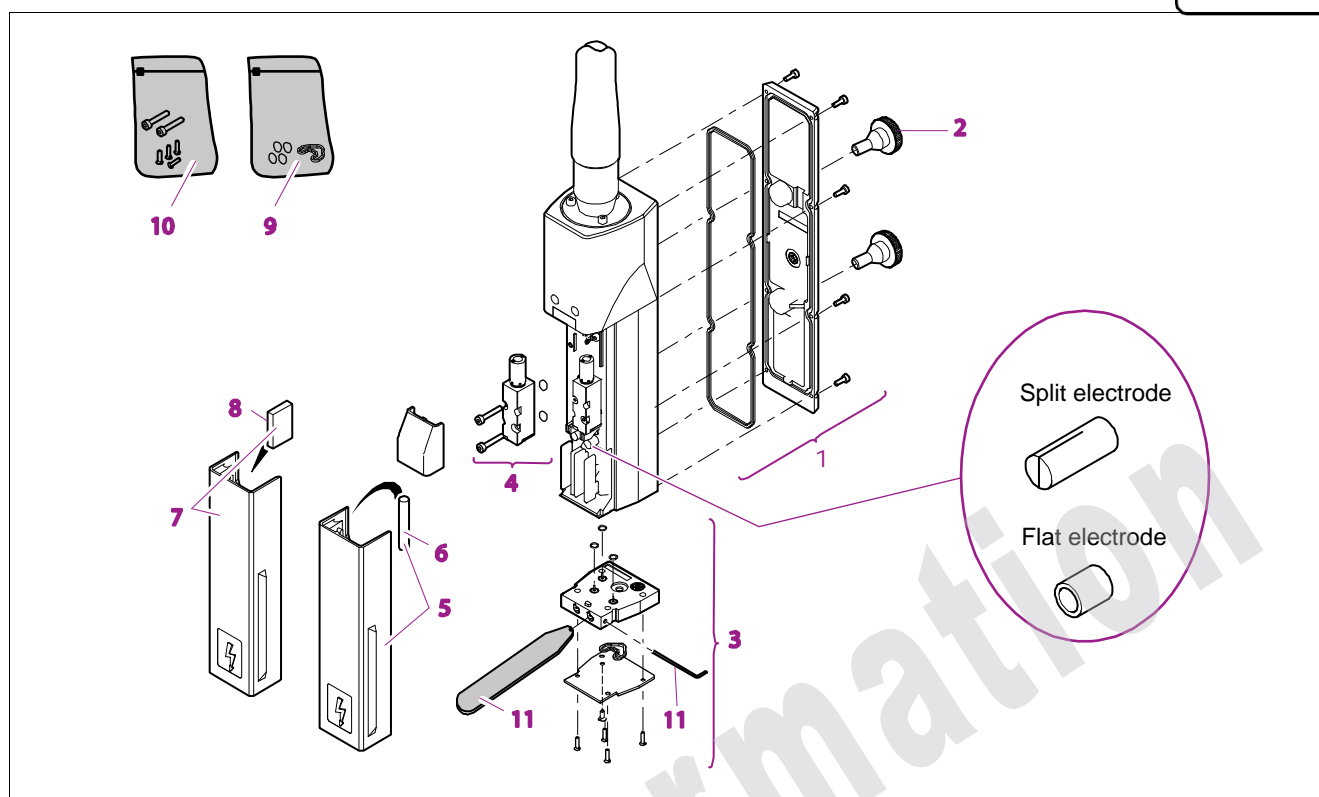
| Item | Part number | Description |
|------|-------------|---|
| 1 | ENR35881* | Print module - G head - single jet - S type |
| 1 | ENR35882* | Print module - G head - single jet - T type |
| 1 | ENR35883* | Print module - G head - single jet - W type |
| 1 | ENR35887* | Print module - M head - single jet - S type |
| 1 | ENR35888* | Print module - M head - single jet - T type |
| 1 | ENR35889* | Print module - M head - single jet - W type |
| 2 | ENR35884* | Print module - G head - twinjet - S type |
| 2 | ENR35885* | Print module - G head - twinjet - T type |
| 2 | ENR35886* | Print module - G head - twinjet - W type |
| 2 | ENR35890* | Print module - M head - twinjet - S type |
| 2 | ENR35891* | Print module - M head - twinjet - T type |
| 2 | ENR35892* | Print module - M head - twinjet - W type |
| 3 | A35440 | Option - head output - left |
| 4 | A35441 | Option - head output - right |
| 5 | A35437 | Option - angled conduit - left - head side |
| 6 | A35439 | Option - angled conduit - rear - head side |
| 7 | A35438 | Option - angled conduit - right - head side |
| 8 | A35442 | Option - angled conduit - printer side |

*** Note :**

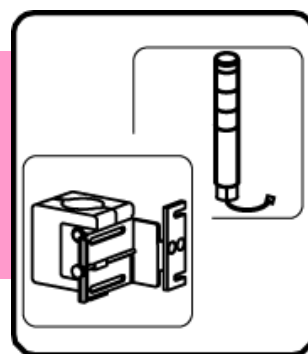
When ordering a print module, please indicate the reference of the ink your printer uses. See ink running specifications sheet.



Ink circuit compartment - Print module

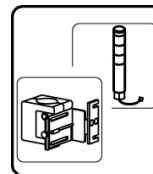


| Item | Part number | Description |
|------|-------------|--|
| 1 | ENM28676 | Rear cover - screw CHc M2x6 - seals |
| 2 | ENM6206 | Screw (x10) - head mounting - aluminium |
| 3 | ENM28591 | Gutter assembly - single jet - with screw, seals, wrench and adjustment tool |
| 3 | ENM28592 | Gutter assembly - twinjet - with screw, seals, wrench and adjustment tool |
| 4 | ENM28270 | Modulation assembly - G head - with screw, seals, wrench and adjustment tool |
| 4 | ENM28646 | Modulation assembly - M head - with screw, seals, wrench and adjustment tool |
| 5 | ENM5257 | Head cover - split electrode |
| 6 | ENM6930 | Magnet (x10) - cylindrical - split electrode |
| 7 | ENM15886 | Head cover - M head - flat electrode |
| 7 | ENM15885 | Head cover - G head - flat electrode |
| 8 | ENM16713 | Square magnet - 10x10 - flat electrode |
| 9 | ENM36056 | Seals kit |
| 10 | ENM36066 | Fasteners kit |
| 11 | ENM34438 | Gutter tube adjustment tool and Allen key 0.9 mm |



Accessories

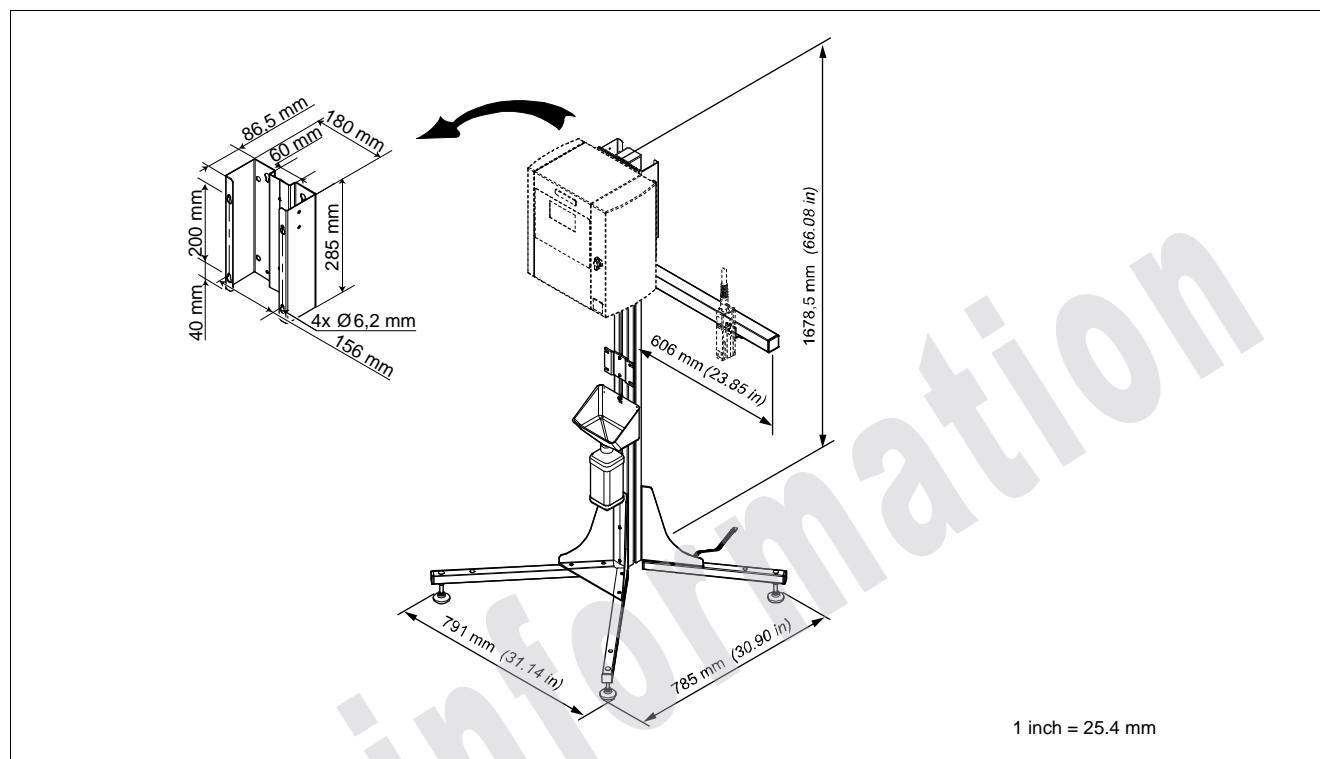
For information

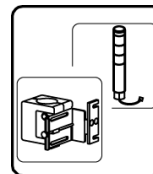


Accessories

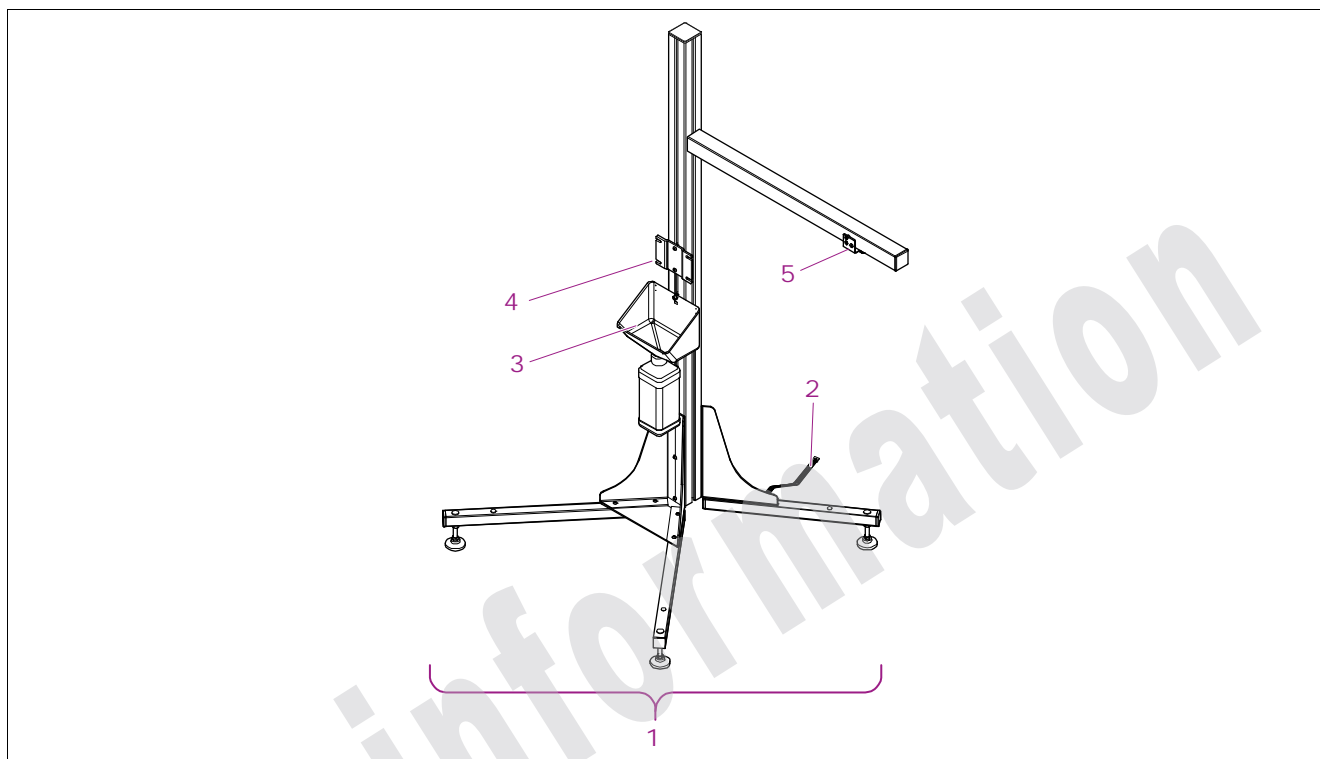
■ Aluminium stand

Aluminium stand dimensions

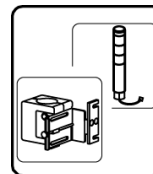




Part number – Aluminium stand

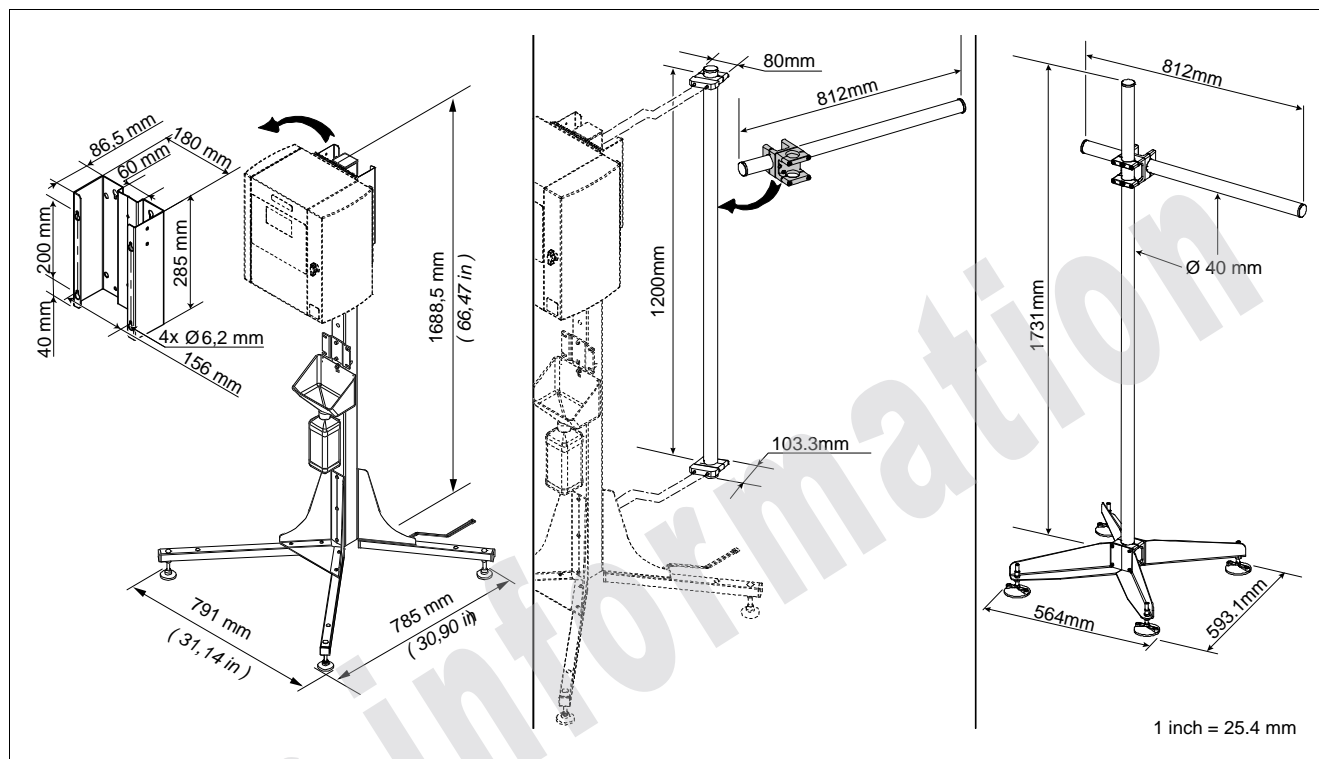


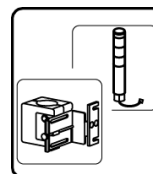
| Item | Part number | Description |
|------|-------------|-----------------------------------|
| 1 | A36418 | Stand - Printer/Head - Aluminium |
| 2 | A28453 | Ground strap kit |
| 3 | EN6450 | Maintenance tray |
| 4 | EN10013 | Head support - Servicing position |
| 5 | A17974 | Head support |



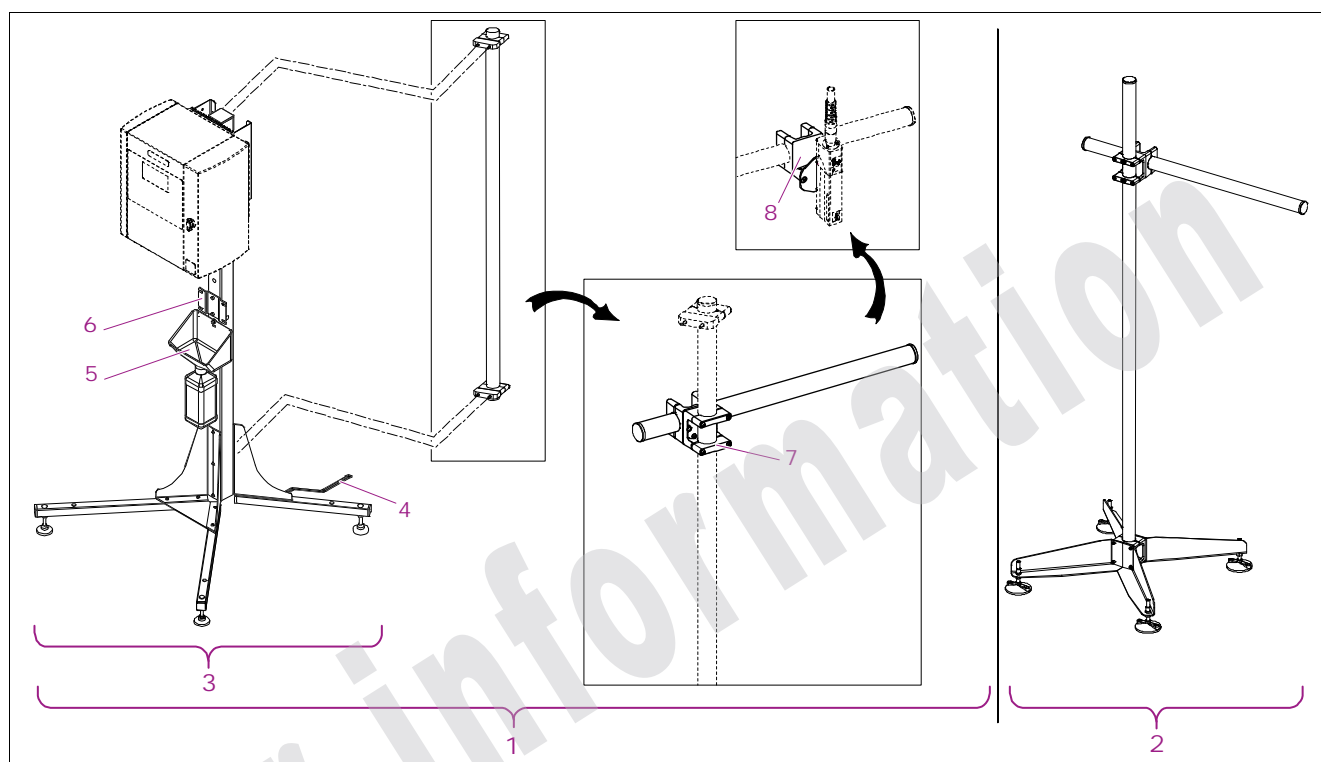
■ Stainless steel stand

Stainless steel stand dimensions

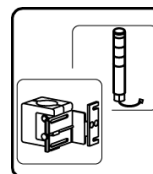




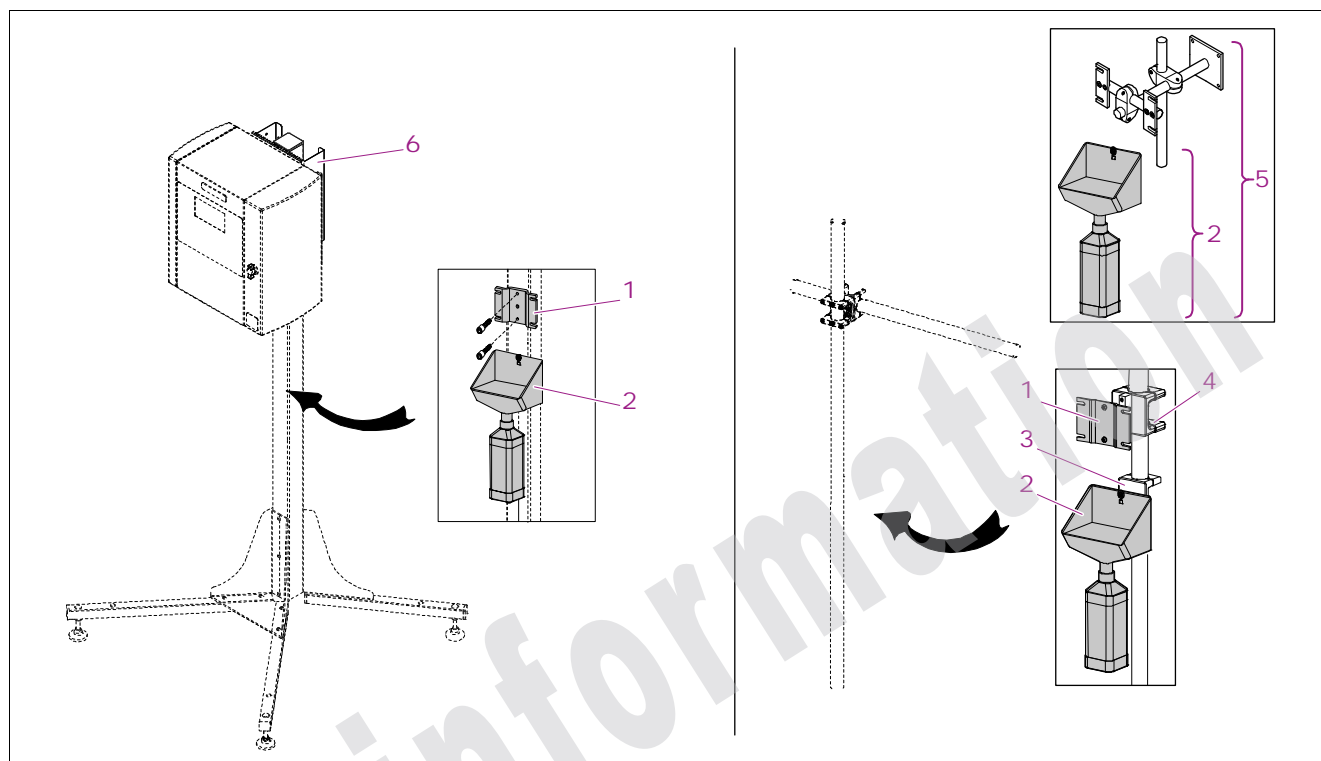
Part number – Stainless steel stand



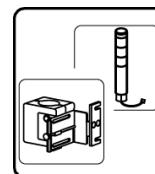
| Item | Part number | Description |
|------|-------------|--|
| 1 | A36416 | Stand - Printer/Head - Stainless steel |
| 2 | A28473 | Stand - Head - Stainless steel |
| 3 | A36415 | Stand - Printer - Stainless steel |
| 4 | A28453 | Ground strap kit |
| 5 | EN6450 | Maintenance tray |
| 6 | EN10013 | Head support - servicing position |
| 7 | A28459 | Adjustable bracket |
| 8 | A28481 | Mounting kit – head support |



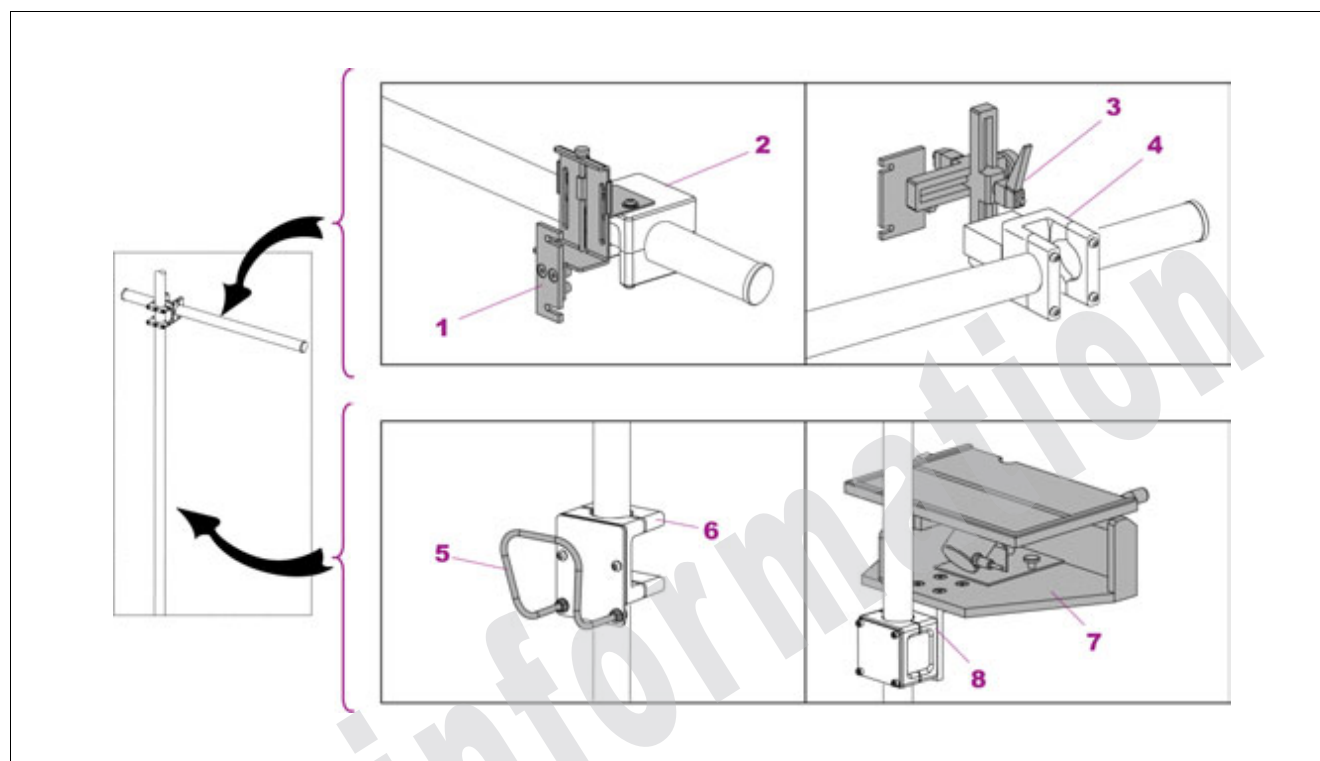
■ Maintenance tray - Wall mounting bracket



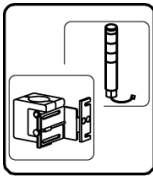
| Item | Part number | Description |
|------|-------------|---|
| 1 | EN10013 | Head support - servicing position |
| 2 | EN6450 | Maintenance tray |
| 3 | A28457 | Mounting kit - maintenance tray - With ground strap kit |
| 4 | A34798 | Kit fixation - Support de tête - position entretien |
| 5 | EN6163 | Mounting kit - head support - servicing position |
| 6 | ENM34023 | Wall mounting bracket |



■ Head adjustment supports, marking table



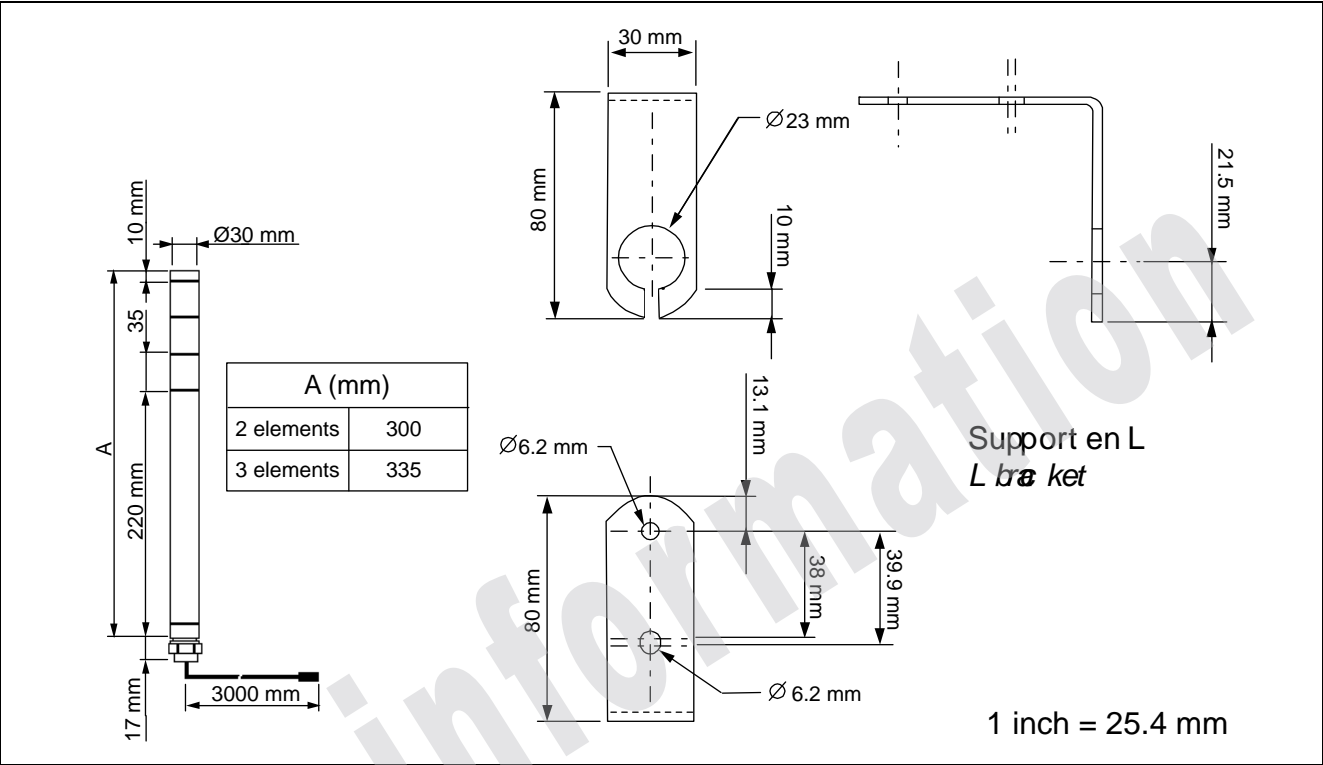
| Item | Part number | Description |
|------|-------------|---|
| 1 | EN10012 | Head support - 1 axis precision adjustment |
| 2 | A28479 | Mounting kit - head support - 1 axis precision adjustment |
| 3 | EN4735 | Head support - 2 axis precision adjustment |
| 4 | A28480 | Mounting kit - head support - 2 axis precision adjustment |
| 5 | ENM10163 | Conduit support |
| 6 | A28460 | Mounting kit - conduit support |
| 7 | EN6051 | Marking table |
| 8 | A28463 | Mounting kit - marking table |



Accessories

■ Alarm lights

Dimensions

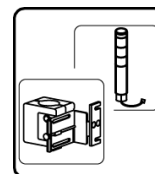


Technical specifications

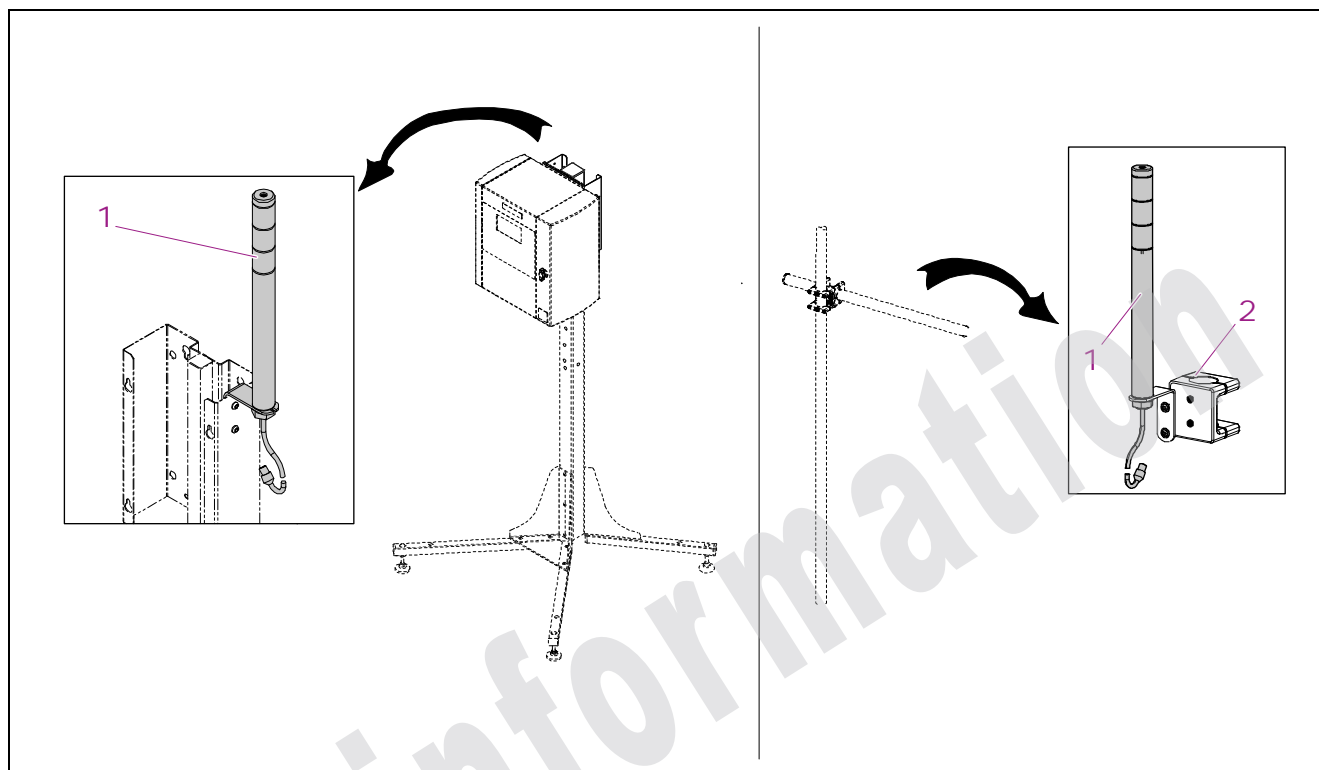
| Model | Rated Voltage | Power consumption | Mass | Wire type/diameter |
|--------|---------------|-------------------|--------|--------------------|
| A34791 | 24V AC/DC | 1.4W | 0.23kg | UL1007/AWG22 |
| A34792 | 24V AC/DC | 2.0W | 0.25kg | UL1007/AWG22 |

External contact capacity

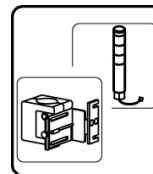
| | | |
|-------------------------|---------------------|---|
| LED module [1-light] | Current consumption | Red - orange: 30mA / Green - blue - white: 25mA |
| | Contact capacity | Is ≥ 50mA VS ≥ 35 VAC |
| Supply | Current consumption | 200mA (MAX) |
| | Contact capacity | Is ≥ 200mA Vs ≥ 35 VAC |



Part number



| Item | Part number | Description |
|------|-------------|--|
| 1 | A34791 | Alarm - illuminated - 24 V - 2 elements (Red / Orange) |
| 1 | A34792 | Alarm - illuminated - 24 V - 3 elements (Red / Green / Orange) |
| 2 | A28466 | Mounting kit - alarm - illuminated |

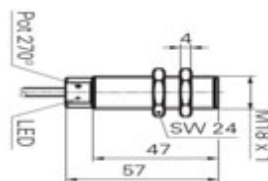


Accessories

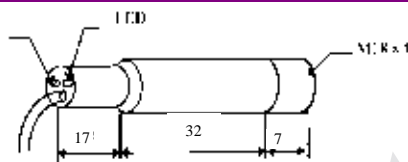
■ Photocells

Dimensions

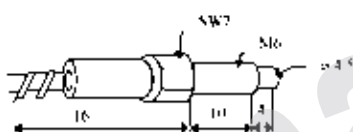
Reflex photocell



Proximity photocell



Fiber optic

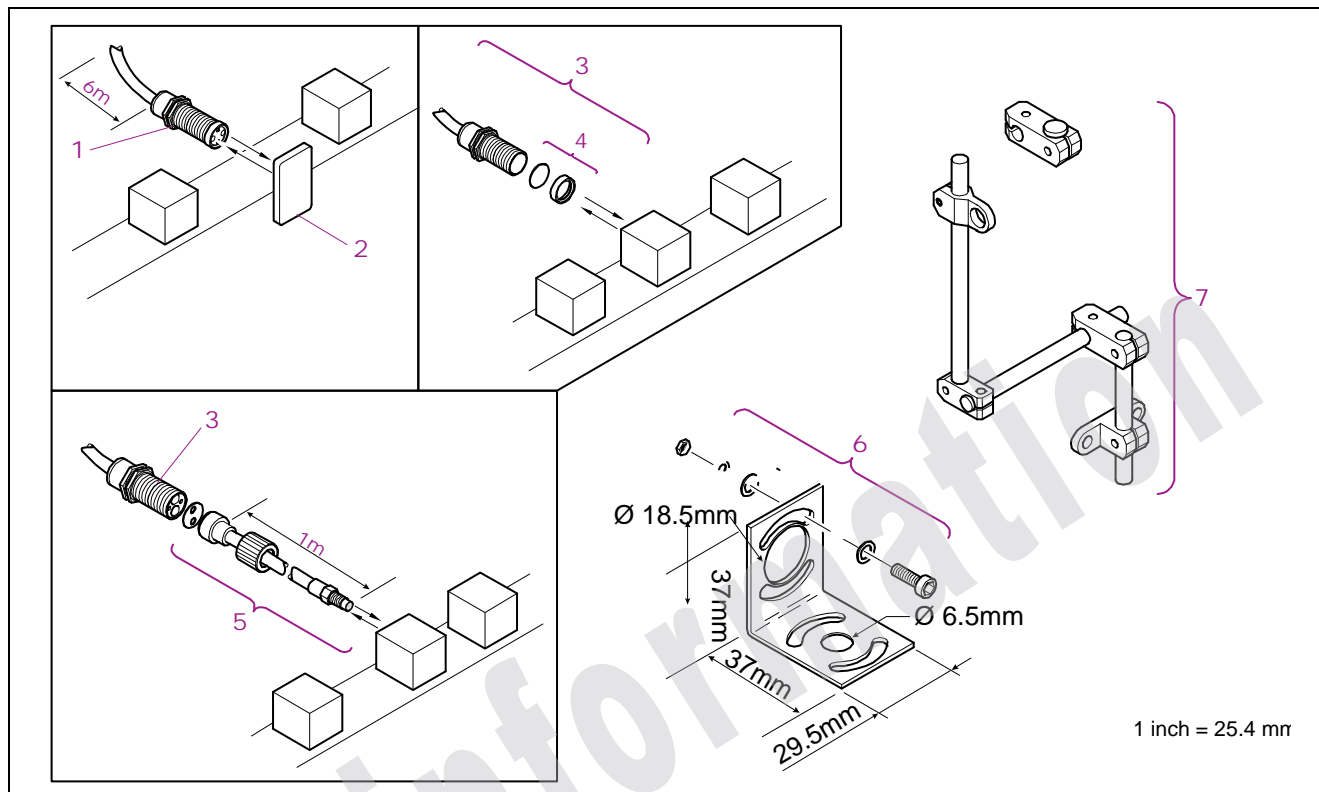
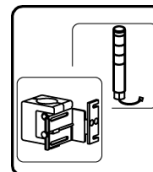


Unit : mm
1inch = 25.4 mm

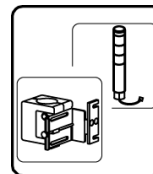
Technical specifications

| | Reflex photocell | Proximity photocell | Optic fiber |
|---------------------------------------|---------------------|---------------------|--------------------|
| Ajustable range | 0 -1,70 m | 0 -200 mm | 0 -55 mm |
| Voltage range | 10 -30 VDC | 10 -30 VDC | |
| Curent consumption | ≤ 35 mA | ≤ 30 mA | |
| Max. load current | 200 mA | 200 mA | |
| Activation time | ≤ 1ms | ≤ 0,5ms | |
| Desactivation time | ≤ 1ms | ≤ 0,5ms | |
| Protection class | IP65 | IP65 | IP65 |
| Cable length | 6 m | 6 m | Fiber = 1 m |
| Case material | Nickel plated brass | Nickel plated brass | Chrom plated metal |
| Output | PNP | PNP | |
| Commutation | Dark | Light | |
| Protected against short circuits | Yes | Yes | |
| Protected against polarity inversions | Yes | Yes | |
| Temperature range | - 25° C / + 65° C | - 25° C / + 65° C | - 25° C / + 65° C |

Accessories



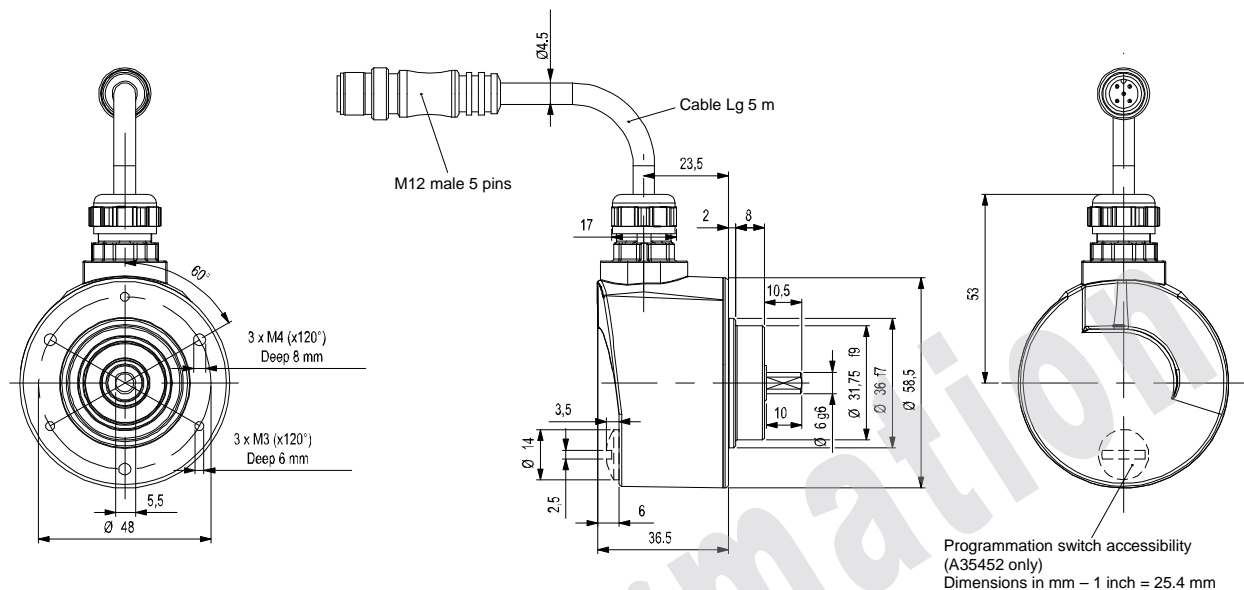
| Item | Part number | Description |
|------|-------------|---|
| 1 | A35433 | Photocell - Reflex - With connector |
| 2 | A16540 | Reflector |
| 3 | A35355 | Photocell - Proximity - With connector |
| 4 | A16541 | Glass protector |
| 5 | A16470 | Optical cable (used with proximity photocell) |
| 6 | A16538 | Mounting bracket - Photocell/optical cable |
| 7 | A16539 | Support - Photocell |



Accessories

■ Shaft encoders

Dimensions



Mechanical specifications

Material

Cover : zinc alloy

Body: aluminium

Shaft : Stainless steel

Maximal loads

Axial : 50 N

Radial : 100 N

Acceleration

Max $1.10^5 \text{ rad.s}^{-2}$

Continuous speed

Max 9000 tr/min (*rpm*)

Weight

300 g

Relative humidity

98 % (without condensation)

IP (EN 60529)

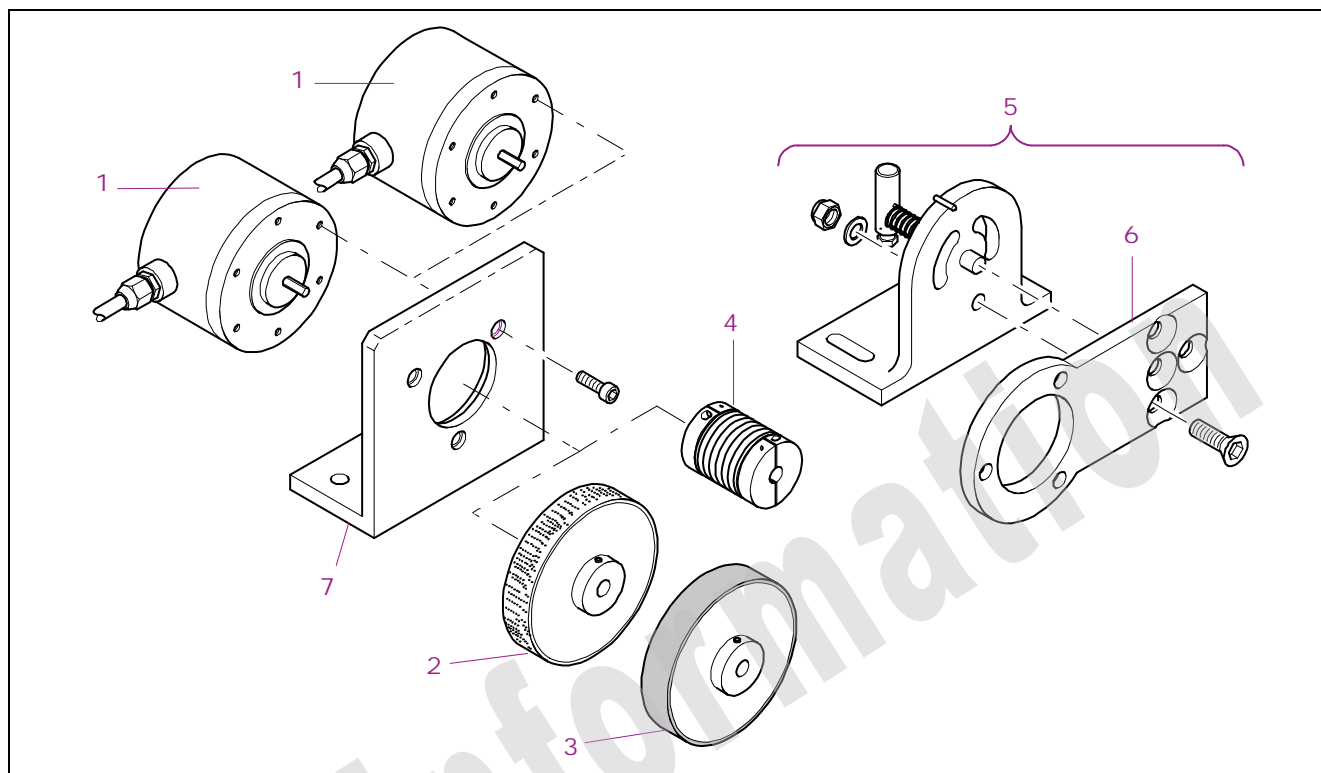
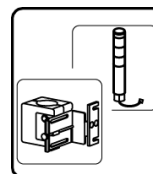
IP 65

Cable length

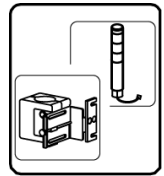
5 m

Electrical specifications

| | A35356 | A35452 |
|-------------------------------------|-----------------|--------------------------|
| Supply | 5 to 30 VDC | 5 to 30 VDC |
| Consumption | 75mA | 75mA |
| Intensity per channel | 40mA | 40mA |
| Protection against short circuits | yes | yes |
| Protection against reverse polarity | yes | yes |
| Operating temperature | -30°C to 100°C | -30°C to 70°C |
| Resolution | 5000 pulses/rev | 2500 to 40000 pulses/rev |



| Item | Part number | Description |
|------|-------------|--|
| 1 | A35356 | Shaft encoder - 5000 pulses/rev - with connector |
| 1 | A35452 | Programmable shaft encoder - With connector |
| 2 | A10530 | Encoder wheel - Spiked - 200 mm (8 in.) |
| 3 | A11169 | Encoder wheel - Smooth - 200 mm (8 in.) |
| 4 | A11168 | Flexible coupling |
| 5 | EN6367 | Mounting bracket - encoder - With spring |
| 6 | ENM6363 | Bracket - Shaft encoder |
| 7 | ENM11166 | Mounting bracket - Encoder - Fixed |



■ Head protection, antistatic brush, air blade kit

Head protection

Description

The stainless steel head protector is used to protect the head against splashes of water, dust, electromagnetic interference and mechanical shocks.

Installation

A magnetic plate covers the jet output slot to ensure that the head is completely sealed when idle or while the production line is being cleaned.

A sleeve supplied with the head protector is mounted to the Markem-Imaje stand when the head is being serviced.

Anti-static brush

Description

Certain printing applications, such as blister packs, plastic film or cables, can produce electrostatic charges that may disperse the drops ink, which will reduce print quality. Use an anti-static brush to prevent this.

Installation

The brush, which is 70 mm (2.76 in.) long, is mounted crosswise 50 mm (1.97 in.) in front of the head. It should never be more than 1mm (0.04 in.) from the object and should preferably be in contact with the object. It must also be grounded.

Air blade kit

Description

The air blade is used to dry:

- The substrate prior printing
- The ink after printing

Installation

Blades are available in two lengths: 6" (153 mm) and 18" (457 mm).

The space between the blade and the object may be adjusted (between 0.4 and 2 in.) (10 and 60 mm).

The air blade kit includes the blade, filters and a bar to remove the head and couplings necessary for installation.

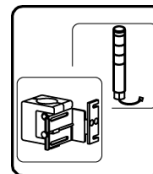
The connector on the kit's inlet is 1/2" G female or 1/2" BSP 10 mm.

Use the cross-shaped bars to attach the air blade to the Markem-Imaje stand.

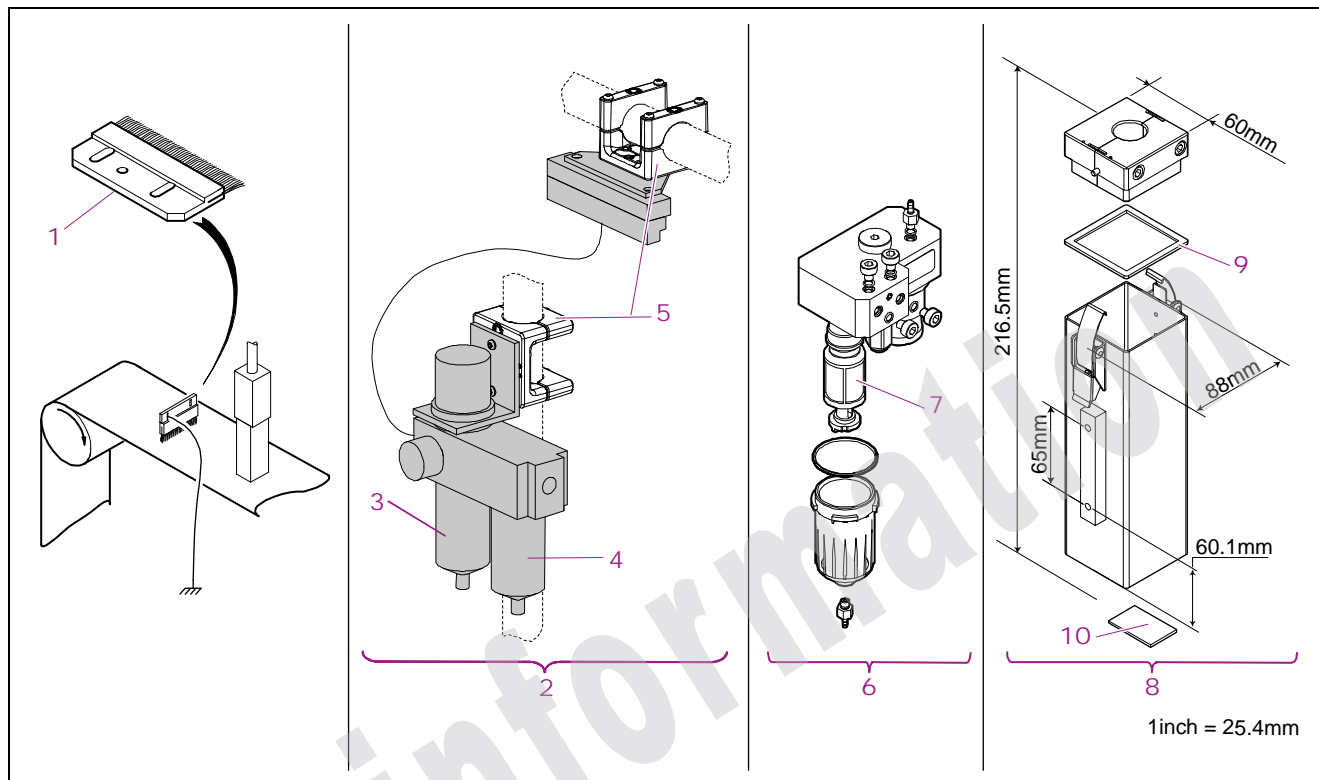
Check your plant air for the following characteristics:

- 6" blade (153 mm): air flow and pressure at the kit's input must be at least 300 l/min. (10.5 scfm) at 1.8 bar (26.1 PSI).
- 18" blade (457 mm): air flow and pressure at the kit's input must be at least 800 l/min. (28.25 scfm) at 1.8 bar (26.1 PSI).
- Pressure at the kit's input must be at least 3 bar (43.5 PSI).
- Operating temperature must be between 14°F and 167°F (-10°C and +75°C).
- The air must be clean, dry and oil free. It must contain at the most: 0.12 grams of water/m³ (0.15 ounce of water/cubic foot), 1PPM of oil and size of particle <5 µm.

Accessories



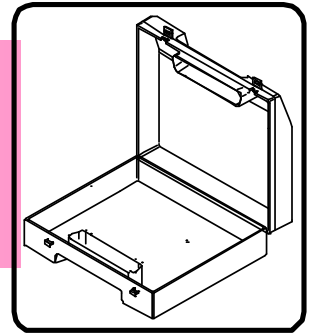
Part number



| Item | Part number | Description |
|------|-------------|---|
| 1 | A13939 | Antistatic brush |
| 2 | A17287 | Air blade kit - 457 mm (18 in.) |
| 2 | A17796 | Air blade kit - 153 mm (6 in.) |
| 3 | ENM17562 | Filter - air blade - main filter - 5 µm |
| 4 | ENM17563 | Filter - air blade - secondary filter - 0.01 µm |
| 5 | A34371 | Mounting kit – air blade kit |
| 6 | ENM34801 | Air treatment unit - IP54 |
| 7 | ENM16203 | Filter cartridge - 0.1µm - with seal |
| 8 | A35948 | Head protection kit |
| 9 | ENM35474 | Seal - head protection kit |
| 10 | ENM16508 | Magnet (x5) - head protection kit |

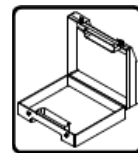
For information



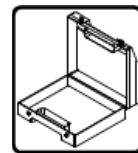


Safety and maintenance parts

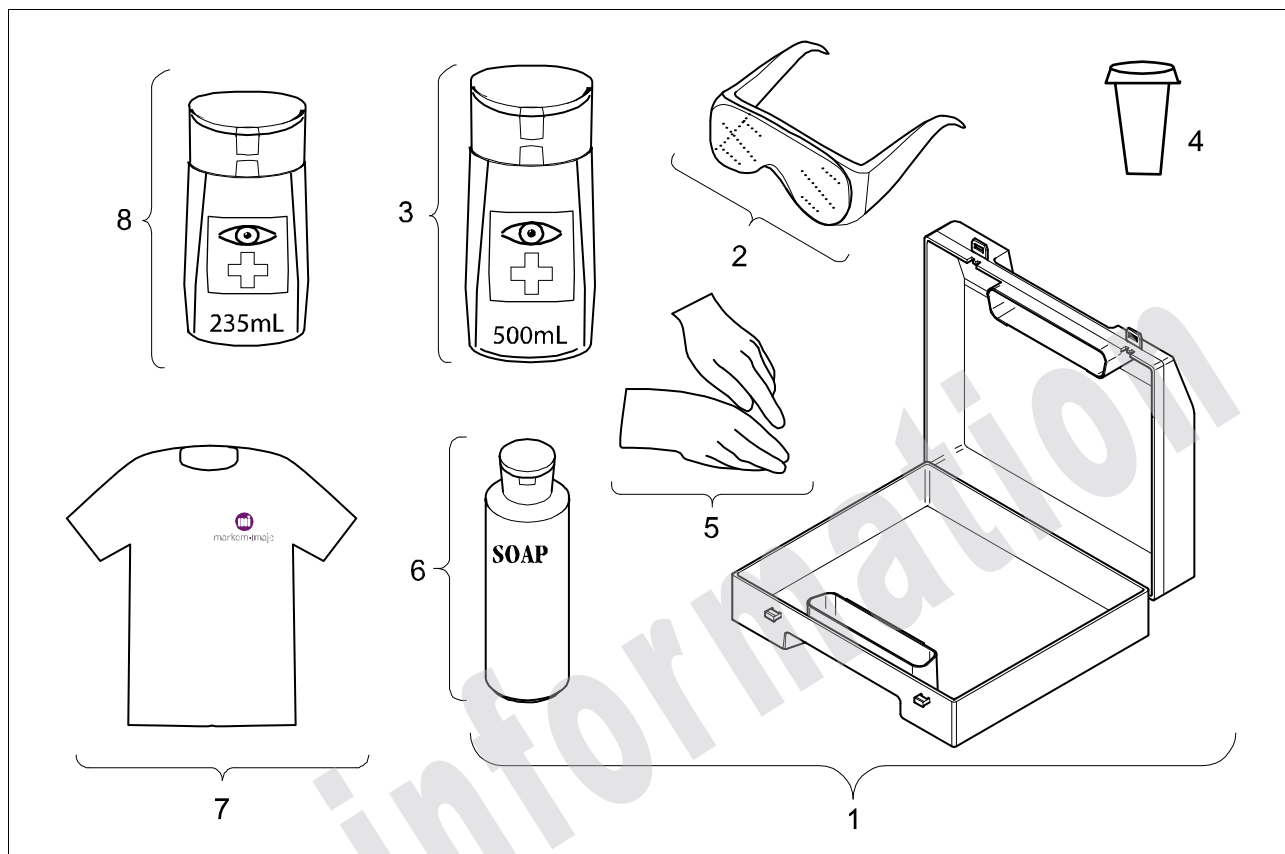
For information



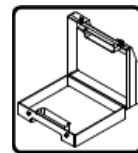
For information



■ Safety kit

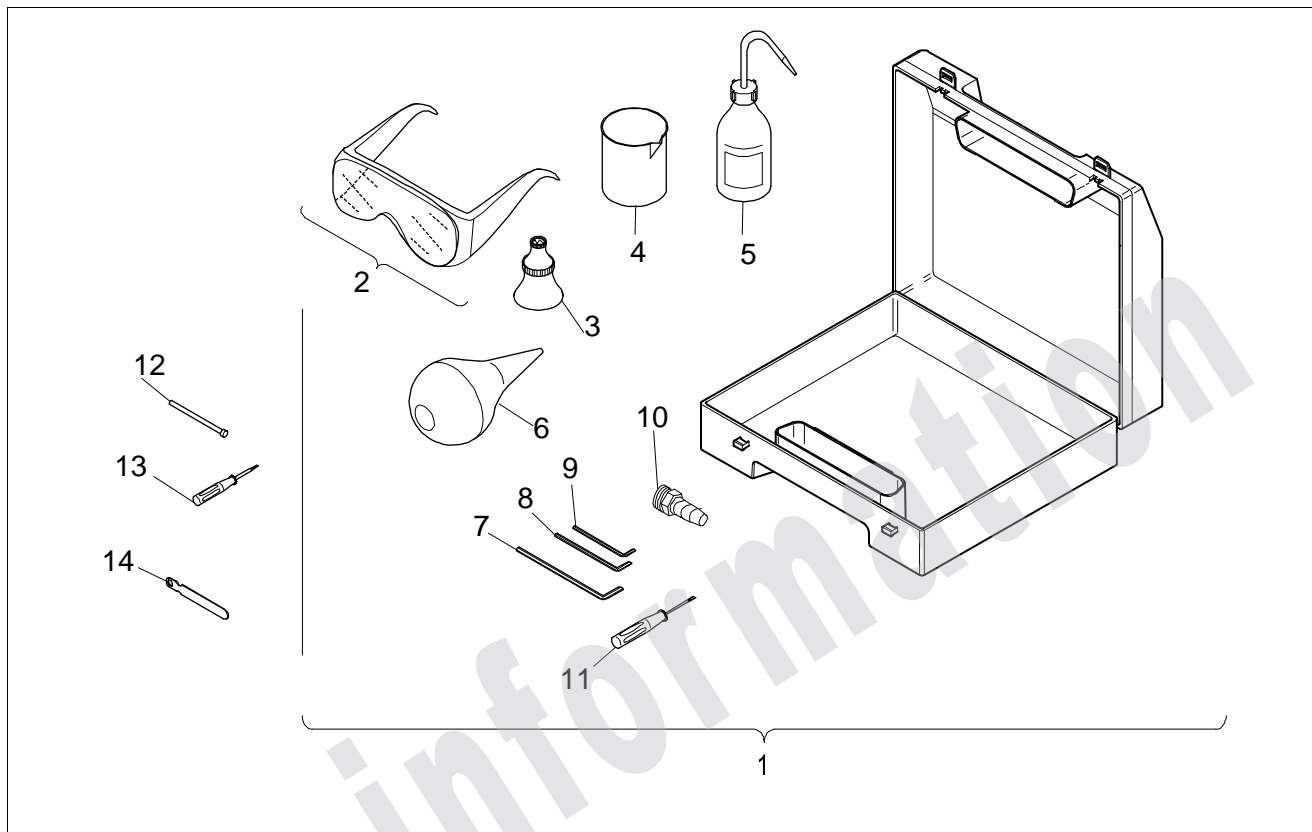


| Item | Part number | Description |
|---|-------------|---|
| 1 | A17538 | Safety kit (includes 2,3,4,5,6) |
| Referenced materials in the safety kit may be ordered separately | | |
| 2 | A17955 | Safety glasses |
| 3 | A38254 | Eye wash - Hand held - 500 mL |
| 4 | | Eye - Cup - Individual |
| 5 | ENM4491 | Gloves (x 20) - Latex |
| 6 | | Hand cleaner - Liquid - 125 ml |
| 7 | A20872 | Tee shirt - Black - Markem-Imaje - Size M |
| 7 | A20873 | Tee shirt - Black - Markem-Imaje - Size L |
| 7 | A20874 | Tee shirt - Black - Markem-Imaje - Size XL |
| 7 | A20875 | Tee shirt - Black - Markem-Imaje - Size XXL |
| 8 | A38255 | Eye wash - Hand held - 235 mL |



■ Tools

Part number



| Item | Part number | Description |
|---|-------------|--|
| 1 | A27831 | Suitcase-user |
| Referenced materials in the suitcase-user may be ordered separately (see list below) | | |
| 2 | A17955 | Safety glasses |
| 3 | A10413 | Magnifier - Magnification x12 |
| 4 | A11007 | Beaker - 250 ml |
| 5 | ENM6317 | Cleaning flask |
| 6 | A10864 | Head dryer |
| 7 | | Allen wrench - 3/32" |
| 8 | A18631 | Allen wrench - 2 mm |
| 9 | | Allen wrench - 1.5 mm |
| 10 | | Connector - Ringed - M6 - 1/8 - Teflon |
| 11 | A12027 | Screwdriver - 2.5 x 50 |
| 12 | ENM5932 | Adjustment tool - Cannon - Punch - Ø 0.95 |
| 13 | | Screwdriver - Flat 1.5 - Cannon holder cam |
| 14 | ENM14434 | Wrench - Cannon - Hexagonal key - 5mm |



Revision

9020/9030 Catalog

Instructions update

- The revision A index corresponds to the first edition of this manual.
- The revision index changes with each update.

| Date published | Revision index documentation | Software index |
|----------------|------------------------------|----------------|
| 06/2005 | A | C10 |
| 05/2006 | B | C11 |
| 07/2006 | C | C11 |
| 06/2008 | D | C16 |

For information

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