

Original<sup>®</sup>

# Manual Xsmart-M



**Fluid Management<sup>®</sup>**



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## About this manual

# 1 About this manual

The manual shows the information necessary to:

- install the machine
- operate the machine
- perform basic maintenance
- correct small problems.

The Xsmart-M and all its versions are referred to in the manual as the 'machine'.

This manual contains the original instructions. The original language of the manual is English.



### Note

For the unpacking and installation procedures, refer to the separate installation instruction sheets.

## 1.1 How to work with the manual

For the safe use of the machine, it is important:

- 1 To familiarize yourself with the structure and content.
- 2 To read the safety chapter in detail and make sure you understand all the instructions. See chapter § 2.
- 3 To carry out the actions completely and in the given sequence.

## 1.2 Record of changes

Edition	Editor	Check	Date	Description
1.0	PS	SG	12/2021	First edition

## 2 Safety



### **WARNING**

Read the manual before you install or use the machine. Failure to do so can result in personal injury, death or property damage.

### 2.1 Intended use

The machine is designed to dispense colorants into a can. Any other use of the machine is strictly forbidden.

### 2.2 Liability

#### 2.2.1 General liability

Our machines and accessories are compliant with their market specific safety requirements. For some markets machines need a certification to prove the machine complies with the essential requirements concerning safety. Any modification can result in not fulfilling the market-specific machine safety requirements and is therefore not allowed. Fast & Fluid Management India will not accept any responsibility in case of modifications to machines and/or accessories.

Fast & Fluid Management India is not liable if you do not follow the rules below:

- The machine is for indoors use only.
- This machine may only be used for commercial settings. The machine is not a household appliance.
- Observe all local safety regulations.
- Strictly obey the safety instructions in this manual.
- Mind the minimal requirement of the building structure of the load capacity of the floor.
- Place machine in a well-lit and well-ventilated room.
- Install and connect the machine according to the instructions in this manual.
- Connect the machine to a grounded wall socket.
- Do not use extension cords or inadequately rated power cables.
- Make sure that the power cable is freely accessible.
- Do not place objects on top of the machine.
- Keep lids, panels, and covers closed and in place whenever possible.
- Do not use a damaged machine. When you have doubts, contact your supplier. See § 5.2.
- Keep the machine in good condition.
- Clean the machine at the intervals and when dirty.
- Make sure that defective parts are immediately replaced.
- Remove spilled liquids immediately, and unplug the machine in case of large spillages (> 500mL). - Replace parts only with original Fast & Fluid Management India spare parts.

All maintenance beyond the scope of this manual must be carried out by a qualified service technician that Fast & Fluid Management India has trained and certified.

#### 2.2.2 Machine-specific liability

This machine is designed to dispense colorants into a can in non-hazardous conditions. Please consult the health & safety officer of your paint supplier and/or colorant supplier on how to avoid the emergence of hazardous situations like personal harm or the risk for fire and explosion.

- Personal harm should be avoided by strictly following the materials safety data sheets (MSDS) for colorants, (base) paint and brush liquid.
- Do not use flammable liquids in the brush container.
- The use of flammable colorants or colorants that diffuse potential explosive vapors may present fire and explosion risks.



### 2.3 User qualification for installation

Only install the machine if you have written permission from the supplier of the machine.

### 2.4 Certifications

For some markets machines need a certification to prove the machine complies with the essential requirements concerning safety. The directives that have been taken into consideration in the design are available on the website.

If applicable to your market, the machine contains the logo of the certification either as a separate sticker or on the type plate.

Logo	Certification	Website
	CE	<a href="http://www.fast-fluid.com">www.fast-fluid.com</a>
	UL	<a href="http://www.fluidman.com">www.fluidman.com</a>

## 2.5 Safety symbols on the machine



Moving parts hazard



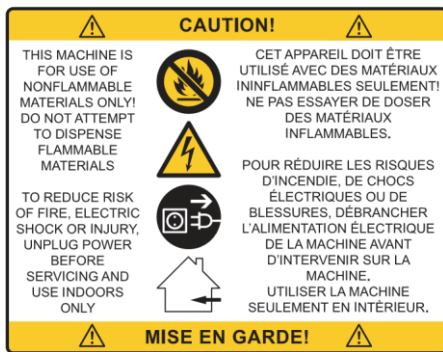
Pinch hazard



Warning



Read the manual



Safety instructions

## 2.6 Safety symbols in the manual



**WARNING Note**  
Can cause personal injury.



shows further information.



**CAUTION**  
Can cause damage to the machine.

## 2.7 Disposal of the machine

1. Sort the machine, the accessories and the packaging for environmentally friendly recycling.
2. Do not dispose of the machine into domestic waste. Dispose of the machine according to local regulations.
3. Dispose of the canisters as chemical waste, according to the local regulations.

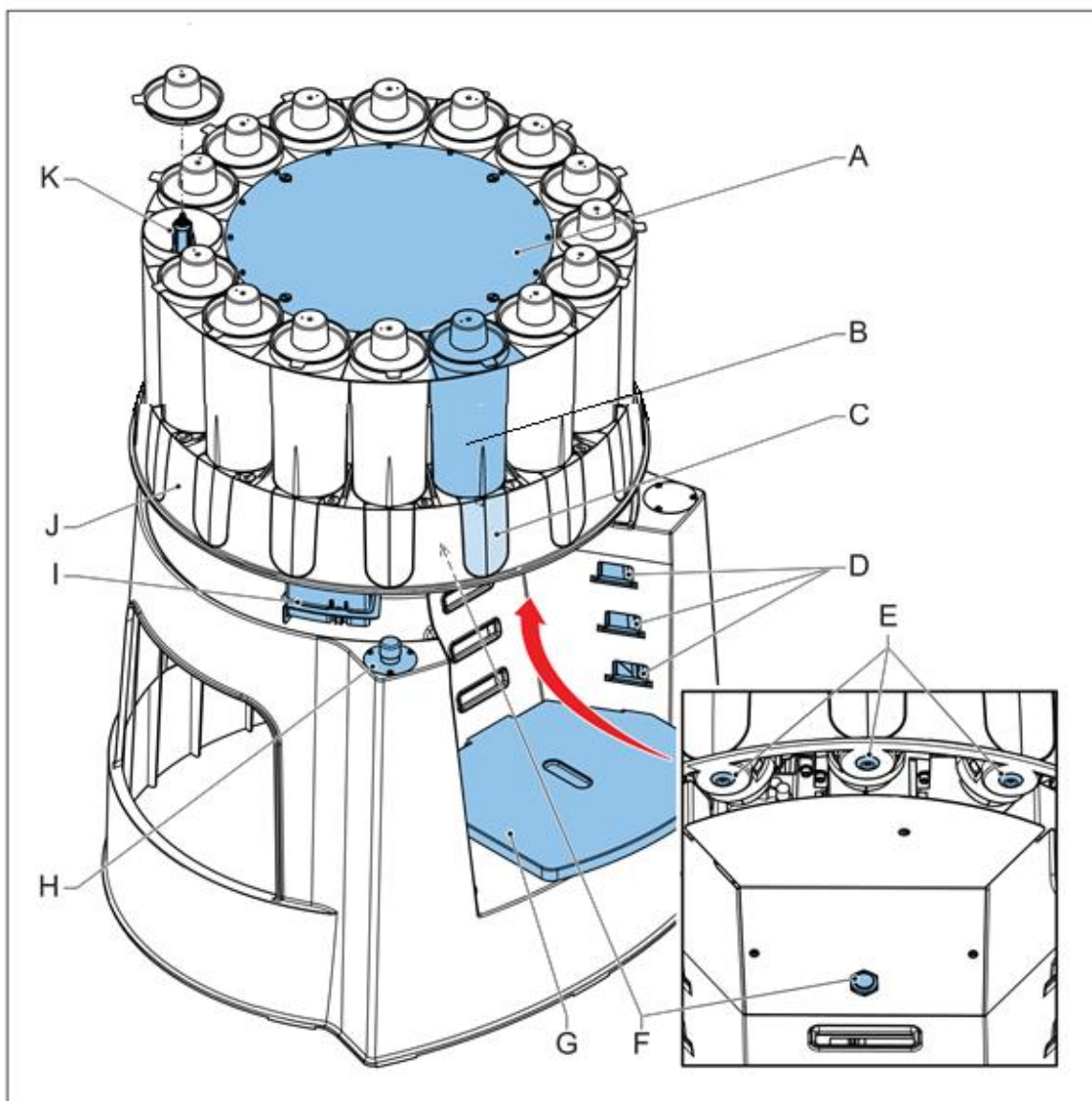




### 3 Operator manual

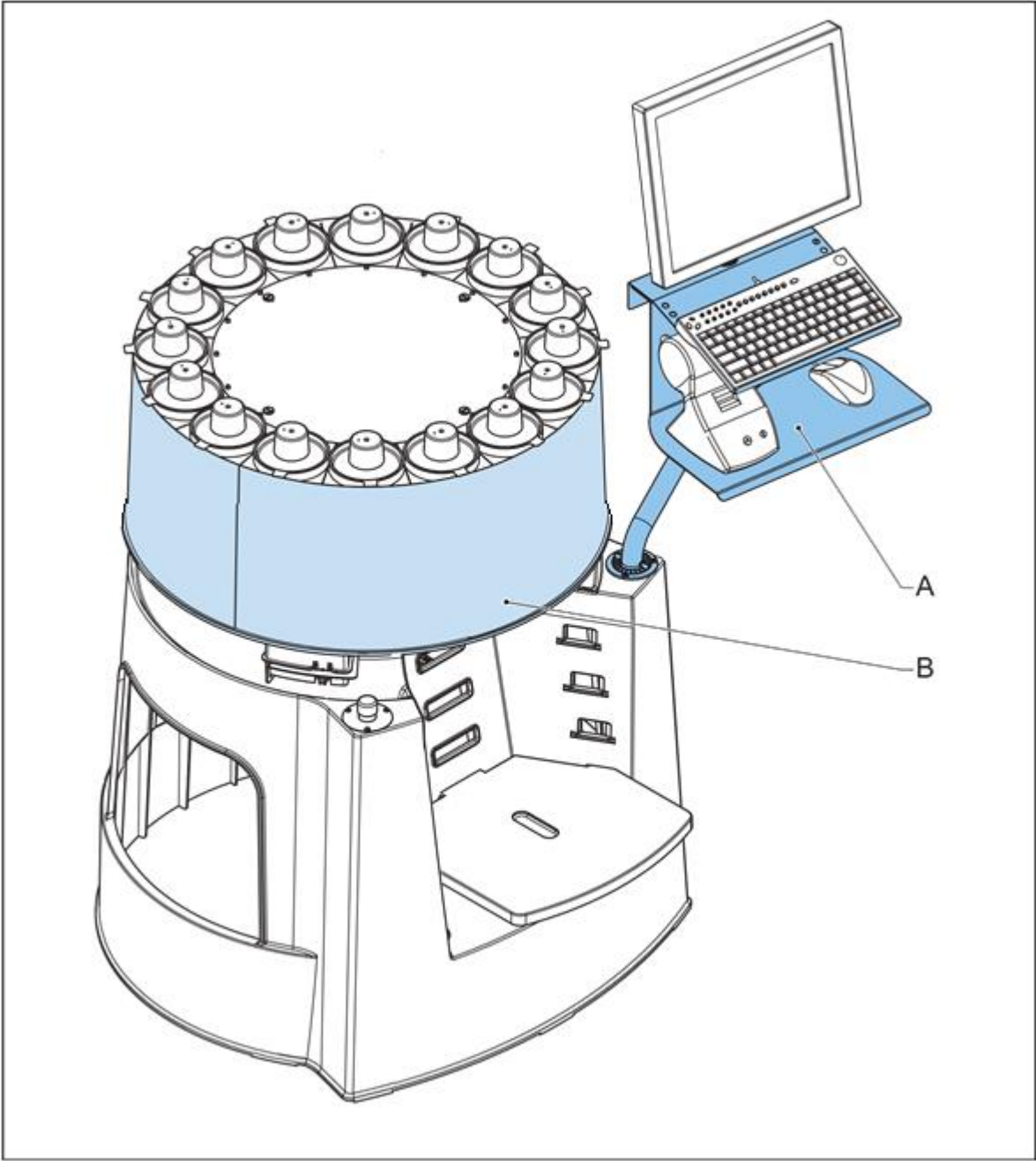
#### 3.1 Description

##### 3.1.1 Overview of the machine



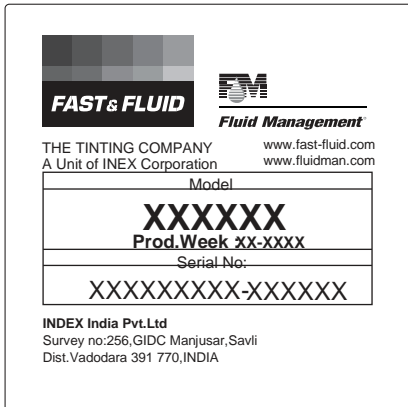
- |                                    |   |
|------------------------------------|---|
| <b>A:</b> Top cover                | <b>G:</b> Can table                                 |
| <b>B:</b> Canister                 | <b>H:</b> Emergency stop switch                     |
| <b>C:</b> Pump                     | <b>I:</b> Brush unit                                |
| <b>D:</b> Slot (for the can table) | <b>J:</b> Turntable                                 |
| <b>E:</b> Nozzle                   | <b>K:</b> Agitator (part of the stirring mechanism) |
| <b>F:</b> Can sensor               |   |

Xsmart-M

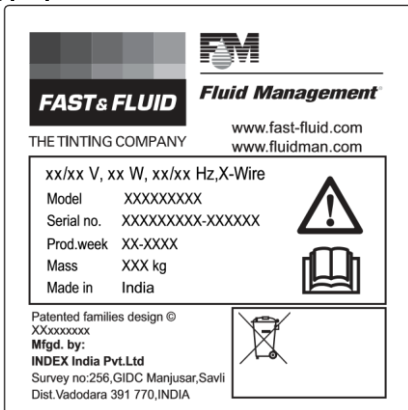


- A: Monitor Keyboard arm
- B: Wrap

### 3.1.3 Type plate: serial number



### 3.1.4 Type plate: details



## 3.2 Operation



### WARNING

Do not place objects on top of the machine.



### CAUTION

Do not remove the power from the machine. See § 4.1. The machine must stir the colorants periodically.

### 3.2.1 General dispensing procedure

For all the dispense software instructions: see the dispense software documentation.

1. Place the can table in the correct slots for the correct height. See § 3.2.2.
2. Place the can. See § 3.2.2.
3. Choose the recipe and dispense. See the dispense software documentation.
4. Remove the can.

3.2.2 Placing a can

1. Check the height of the can.



**Note**  
The correct height of the can table depends on the height of the can.

2. Place the can table (A) in the correct slots for the correct height.



**CAUTION**  
Make sure that the can table is secure.

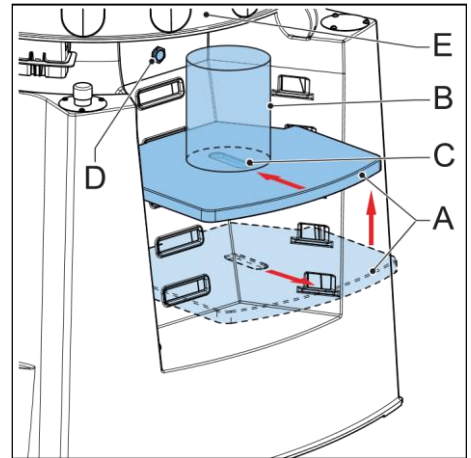
3. Place the can (B) at the center of the mark (C) on the can table.



**CAUTION**  
Make sure that the can does not touch the turntable (E). Keep enough free space.



**Note**  
Make sure that the can sensor (D) is able to detect the can.



3.2.3 Using the emergency stop switch

1. Push the emergency stop switch (A). The machine stops immediately.



**CAUTION**  
Only push the emergency stop switch in the case of a safety emergency. Do not use the emergency stop switch as an on/off function.

2. Solve the problem as quickly as possible.

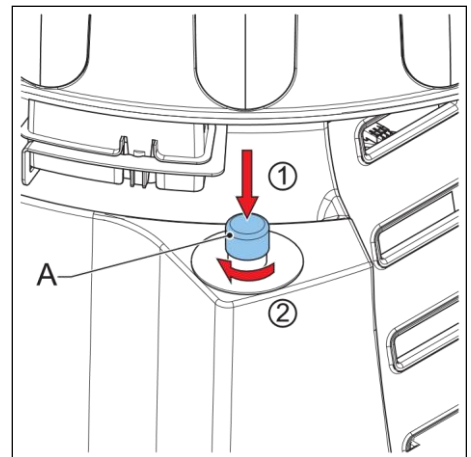


**CAUTION**  
When the machine is shut down, the stirring mechanism, which is necessary to keep the colorant in optimal condition, is also shut down.

3. Reset the emergency stop switch by turning the emergency stop switch. The machine restarts automatically.



**Note**  
After the reset, the machine is operational when you hear two 'beeps'.



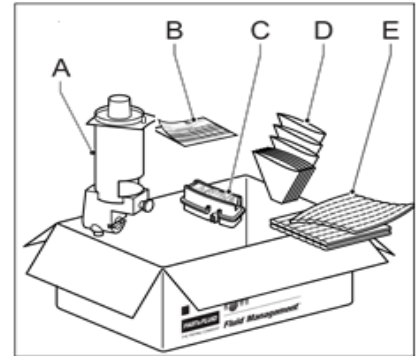
## 3.3 Maintenance

### 3.3.1 Xsmart-M Maintenance Kit

To keep your Xsmart-M M in optimal condition, we highly recommend you to use the Xsmart-M Maintenance Kit. The Xsmart-M Maintenance Kit contains everything you need to keep your machine in optimal condition for the period of 1 year.

- A:** Replacement canister with pump (1x)
- B:** Xsmart-M schedule sticker (1x)
- C:** Replacement brush unit (3x)
- D:** Paper funnel (200x)
- E:** Xsmart-M cleaning cloth (3x)

- The replacement canister with pump (A) should be used as a spare part and can be used whenever one of the canisters needs to be replaced.
- The Xsmart-M schedule sticker (B) gives you a clear overview of the maintenance tasks and a reminder to keep your machine in optimal condition.
- Replace the brush unit (C) every 4 months for optimal performance.
- Use the Xsmart-M paper funnels (D) for the clean filling and refilling of the canisters.
- Use the Xsmart-M cleaning cloth (E) with a non-organic cleaning liquid to clean the machine and the nozzles.



#### Note

The Xsmart-M Maintenance Kit is available through your machine supplier.

### 3.3.2 General cleaning: daily

1. Clean the machine with a damp Xsmart-M cleaning cloth and remove all spilled colorant or other fluids.



#### CAUTION

Do not use cleaning agents based on organic solvents to clean plastic parts of the machine.



#### Note

Remove spilled colorant and other fluids as soon as possible.



#### Note

Do not drain spilled colorant or other fluids in the sink. Observe the local regulations.

2. When the brush is too dirty and does not clean the nozzle of the canister, rinse and clean the brush. See § 3.3.3.
3. When the nozzles are too dirty, clean the nozzles individually with a damp cloth. See § 3.3.4.

### 3.3.3 Cleaning the brush unit: daily

The brush unit removes the excess colorant from the nozzles. The brush unit consists of a brush container and a removable brush that rotates. The brush unit is installed in a bracket with a click connection.

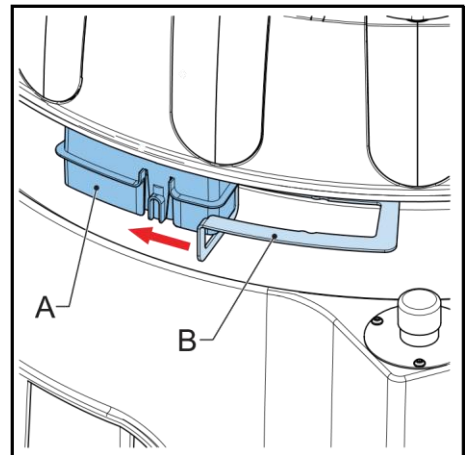
It is advised to replace the brush unit every 4 months to ensure optimal performance. Replacement brush units are provided in the Xsmart-M Maintenance Kit.



#### Note

If you do not clean these items daily, misting might occur.

1. Slide the brush unit (A) out of the bracket (B).



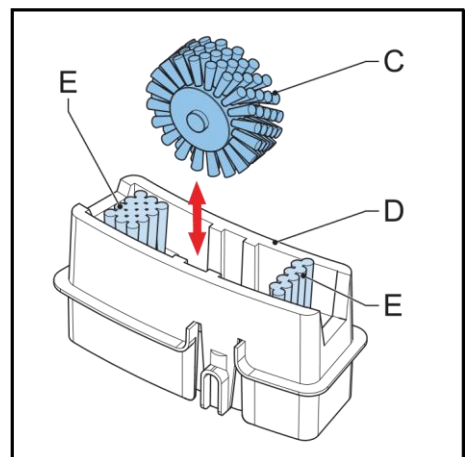
2. Remove the rotary brush (C) from the brush container (D).
3. Remove the fluids from the brush container.



#### Note

For the disposal of the fluids, follow the local regulations.

4. Rinse and clean the static brushes (E).
5. Rinse and clean the rotary brush.
6. Place the rotary brush back in the brush container.



7. Fill the brush container with fluid. This fluid must be a waterbased cleaning agent.

**WARNING**

Do not put flammable liquids in the brush container.

**Note**

Do not exceed the maximum filling height (F).

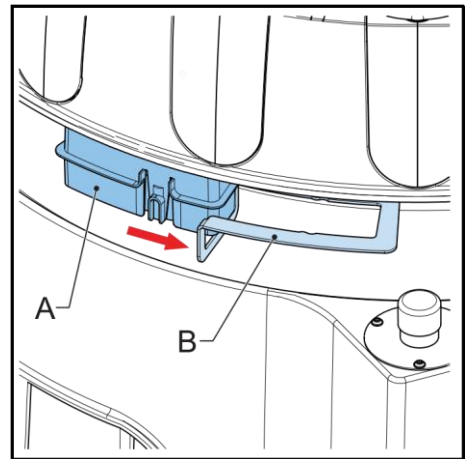
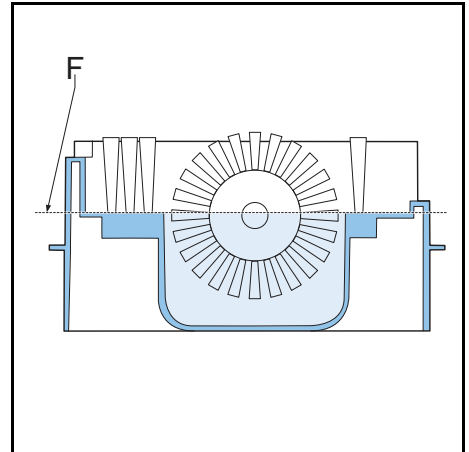
**Note**

The optimum fluid level depends on the type of colorant that is used.

8. Slide the brush unit (A) back in the bracket (B).

**Note**

The brush unit is properly connected to the bracket when you feel a snap-fit. Make sure you hear the click sound.



### 3.3.4

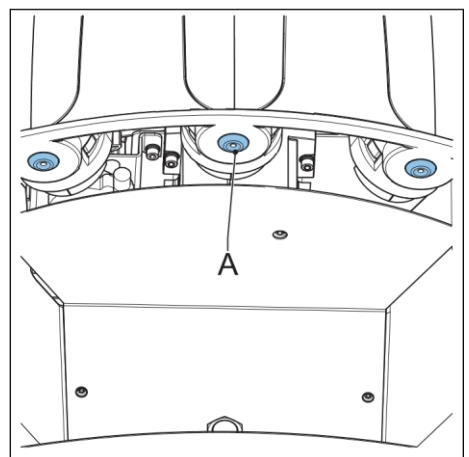
#### Cleaning the nozzles: daily

1. Examine the nozzle (A) for contamination.
2. If necessary, clean the nozzle. *Use the Xsmart-M cleaning cloth, as provided in the Xsmart-M Maintenance Kit, with a nonorganic cleaning liquid.*

**WARNING**

Do not clean the nozzles when the turntable moves.

\* Maintenance kit to be purchased separately



### 3.3.5 Refilling a canister



#### WARNING

Check the material safety data sheet (MSDS) of the colorants for the personal protection measures that are required for handling the colorant.



#### CAUTION

Make sure that the colorant level in the canister is correct. If a canister is empty, it can cause an inaccurate dispensing and/or a recipe fault.



#### Note

The dispense software checks the level of colorant in each canister. The dispense software shows when you need to refill a canister.

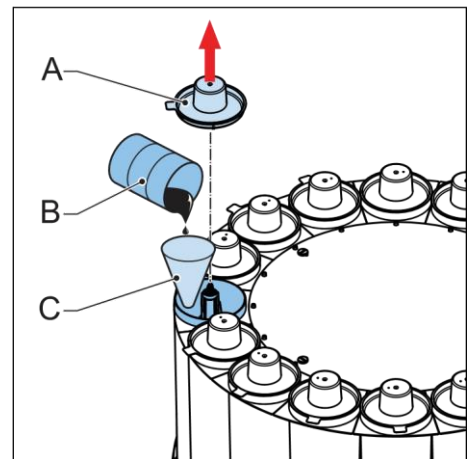
1. In the dispense software, start the fill canister command.



#### Note

The fill canister command of the dispense software controls the motor of the turntable. The turntable turns the empty canister to the front.

2. Remove the lid (A) from the canister.
3. Follow the instructions on the display.
4. Add the correct colorant (B). Do not spill. *Use an Xsmart-M paper funnel (C), which is provided in the Xsmart-M Maintenance Kit.*



#### CAUTION

Do not fill the canister to the brim. Leave at least 2.5 cm (1 inch) unfilled.



#### CAUTION

Do not pour the colorant on the agitator.

5. Place the lid back on the canister.

\* Maintenance kit to be purchased separately



## 4 Installation



**Note**

For the unpacking and installation procedures, refer to the separate installation instruction sheets.

### 4.1 Turning on the machine

1. Connect the power cable to the wall socket. When the machine is operational, you hear two 'beeps'.
2. Make sure that the emergency stop switch is released.
3. Set the computer switch to 'ON'.
4. Run the dispense software.

### 4.2 First use

1. Fill and place the brush unit. See § 3.3.3.
2. Fill the canisters correctly. See § 3.3.5.
3. Flush all air out of the pumps. See § 4.3.

### 4.3 Flushing the air out of the pump



**Note**

Before the first use it is important that all air is removed from all individual pumps.

1. Flush the air out of the pump:
  - Use the air flushing command in the dispense software.
  - If the dispense software does not have an air flushing command option or is not able to flush the air out of the pump automatically, dispense 120 ml / 3 oz. Repeat the action until all air is out of the pump.

## 5 Troubleshooting



**Note**

For all error messages on the computer: see the help topic in the dispense software.

### 5.1 General troubleshooting procedure

1. Try to solve the problem with the information in this manual. See § 5.3.
2. If it is not possible to solve the problem with the information in this manual, contact service. See § 5.2.

### 5.2 Contact service

1. Find the type plate on the plate next to the emergency stop switch. See § 3.1.4.
2. Take a note of the model number and the serial number of the machine.
3. Contact your supplier or manufacturer.  
See [www.fast-fluid.com](http://www.fast-fluid.com) (Fast & Fluid Management Europe and Asia) or [www.fluidman.com](http://www.fluidman.com) (Fluid management, U.S.A.).

### 5.3 Troubleshooting guide

Problem	Possible cause	Possible solution
Main power supply is present but the machine does not work.	The emergency stop switch is active.	Reset the emergency stop switch. See § 3.2.3.
The machine has a failure and does not respond correctly to the request from the dispense software.	The failure could be mechanically or electronically.	Push the emergency stop switch to reset the machine. Reset the emergency stop switch. See § 3.2.3. If the machine still has a failure, contact service. See § 5.2.

## 6 Technical data

### 6.1 General specifications

Parameter	Specification	
	Metric standard	Imperial standard
Model	Xsmart-M	
Number of canisters	16	
Dispensing	Sequential	
Pump type	Piston pump	
Cleaning system	Rotary brush	
Suitable for	Water and universal colorants	
Canister size [L - USgal]	1.5	0.396
Resolution [mL/step - fl oz/step]	± 0.005	± 0.000169
Maximum flow rate [L/min. - USgal/min.]	0.25	0.066
Minimum dispensing [mL - fl oz]	0.077	0.0026
Nozzle diameter [mm - in]	4	0.517

### 6.2 Dimensions and mass

Parameter	Specification	
	Metric standard	Imperial standard
Dimensions, height x width x depth [cm - in]	83 X 83 X 114	32.7 X 32.7 X 45
Packed dimensions, height x width x depth [cm - in]	88 X 88 X 114	34.5 X 34.5 X 45
Mass incl. packaging [kg - lbs]	62	137
Mass filled machine (max.) [kg - lbs]	110	242.5
Minimum requirement of load capacity of the floor according to EN 61010-1:2010 [kg - lbs]	440	970
Filling height of the canister [cm - in]	109	43
Maximum can height [cm - in]	48	18.9
Minimum can height [cm - in]	7	2.8
Can table dimensions, width x depth [cm - in]	38 x 27	15.0 x 10.6

### 6.3 Ambient conditions

Parameter	Specification	
	Metric standard	Imperial standard
Temperature [°C - °F]	+10 to +40	+50 to +104
Altitude above sea level, operational [m - ft]	-10 to 2000	-33 to 6562
Altitude above sea level, out of operation [m - ft]	-10 to 12000	-33 to 39370
Maximum Relative Humidity, without condensation [RH]	90%	

### 6.4 Noise level

Parameter	Specification
Maximum noise level [dB(A)]	< 65

### 6.5 Safety classifications

Parameter	Specification
IP (Ingress Protection) classification	32
EMC (ElectroMagnetic Compatibility) classification	Class B

### 6.6 Electrical specifications

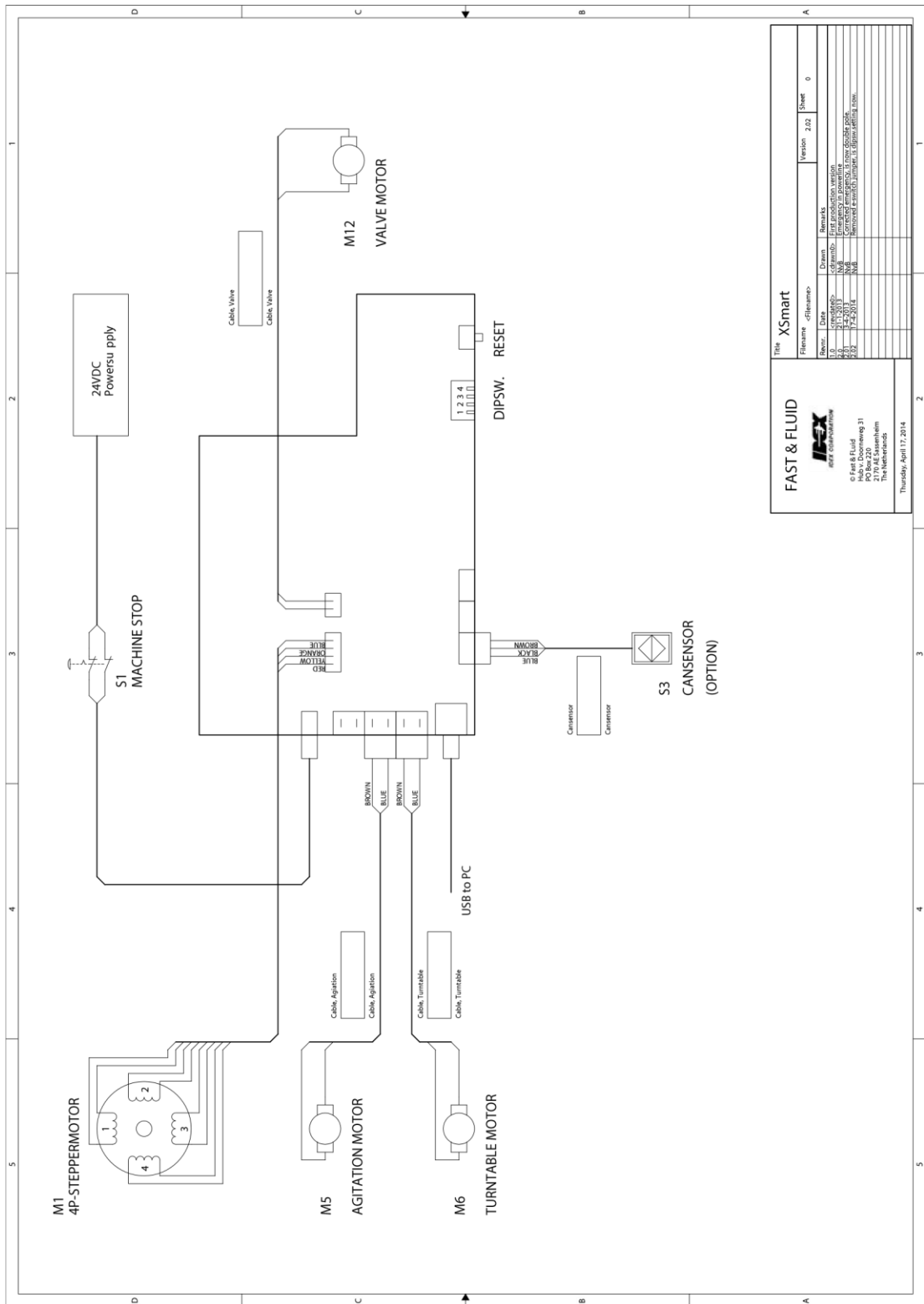
#### 6.6.1 Power supply

Parameter	Specification
Maximum power consumption [W]	85
Voltage [V AC]	90~264
Voltage [Hz]	50 / 60
Maximum leakage current [mA]	3.5
AC inlet	IEC320/C14

#### 6.6.2 Dispenser

Parameter	Specification
Maximum power consumption [W]	75
Voltage [V DC]	24

6.7 Electrical diagram



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**IFX**  
 Fluid Control Systems  
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 PO Box 2020  
 2170 Mt. Sassenheim  
 The Netherlands  
 Thursday, April 17, 2014

Title: XSmart  
 Filename: <filename>  
 Version: 2.02  
 Sheet: 0

Rev.	Date	Remarks
01	21.11.2013	Initial design
02	17.12.2013	Change of power supply
03	17.12.2013	Change of terminal block
04	17.12.2013	Change of terminal block
05	17.12.2013	Change of terminal block
06	17.12.2013	Change of terminal block
07	17.12.2013	Change of terminal block
08	17.12.2013	Change of terminal block
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47	17.12.2013	Change of terminal block
48	17.12.2013	Change of terminal block
49	17.12.2013	Change of terminal block
50	17.12.2013	Change of terminal block

Manufactured by:

IDEX India Pvt. Ltd.,  
Survey no: 256, GIDC Manjusar, Savli,  
Dist.: Vadodara 391 770, India