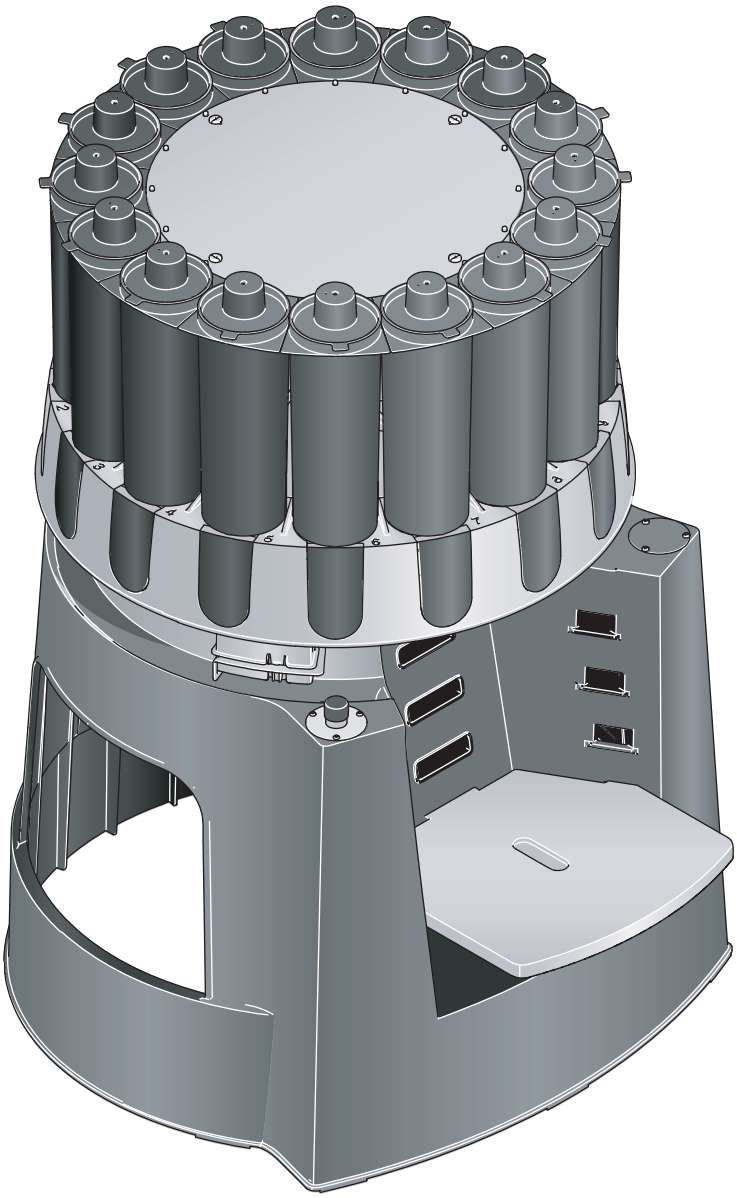
IDEX DISPENSING

Original

Manual X-Smart®



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www.fluidman.com

V 1.2

FAST & FLUID
THE TINTING COMPANY
www.fast-fluid.com

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1 About this manual

The manual shows the information necessary to:
- install the machine
- operate the machine
- perform basic maintenance
- correct small problems.

The X-Smart 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

1. Familiarize yourself with the structure and content.
2. Read the safety chapter in detail and make sure you understand all the instructions. See *§ 2*.
3. Carry out the actions completely and in the given sequence.

1.2 Record of changes

Edition	Editor	Check	Date	Description
1.0	ET	TB	02/2013	First edition
1.1	ET	TB	06/2013	X-Smart Maintenance Kit added
1.2	ET	TB	06/2014	Certification and other changes

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

Our machines and accessories are fully compliant with the CE regulations. Any modification can result in not fulfilling the CE safety requirements and is therefore not allowed. Fast & Fluid Management B.V. will not accept any responsibility in case of modifications to machines and/or accessories.

Fast & Fluid Management B.V. 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.
- Do not use a damaged machine. When you have doubts, contact your supplier. See *§ 5.1*.
- Install and connect the machine according to the instructions on the installation instructions sheets.
- Observe all local safety regulations.
- Place the machine in a well-lit and well-ventilated room.
- Make sure that the load capacity of the floor meets the minimal requirements. Refer to *§ 6.2*.
- Connect the machine to a grounded wall socket.
- Do not use extension cords.
- Make sure that the machine is installed as prescribed in the installation instruction sheets.
- Keep the machine in good condition. Make sure that defective parts are immediately replaced.
- Replace parts only with original Fast & Fluid Management B.V. spare parts.

WARNING
Do not place objects on top of the machine.

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

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 proove 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 seperate sticker or on the type plate.

Logo	Certification	Website
CE	CE	www.fast-fluid.com
ETL	ETL (includes specific UL and CSA directives)	www.fluidman.com

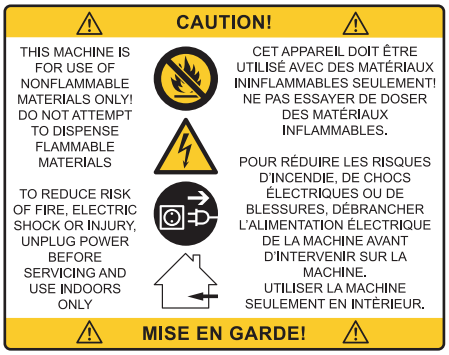
2.5 Safety symbols on the machine

Moving parts hazard

Pinch hazard

Warning

Read the manual



Safety instructions

2.6 Safety symbols in the manual

WARNING
Can cause personal injury.

Note
Shows further information.

CAUTION
Can cause damage to the machine.

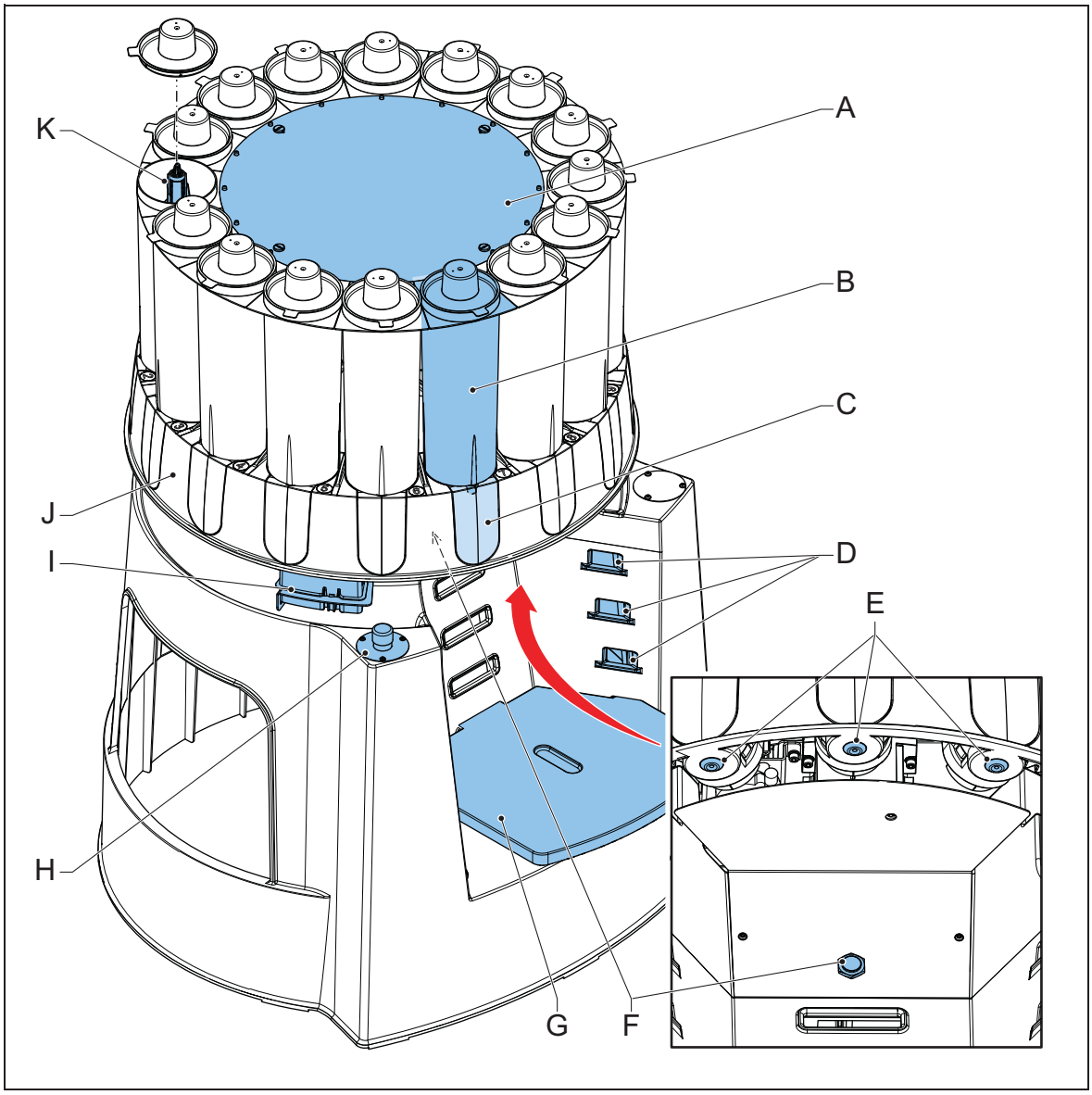
2.7 Disposal of the machine

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



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

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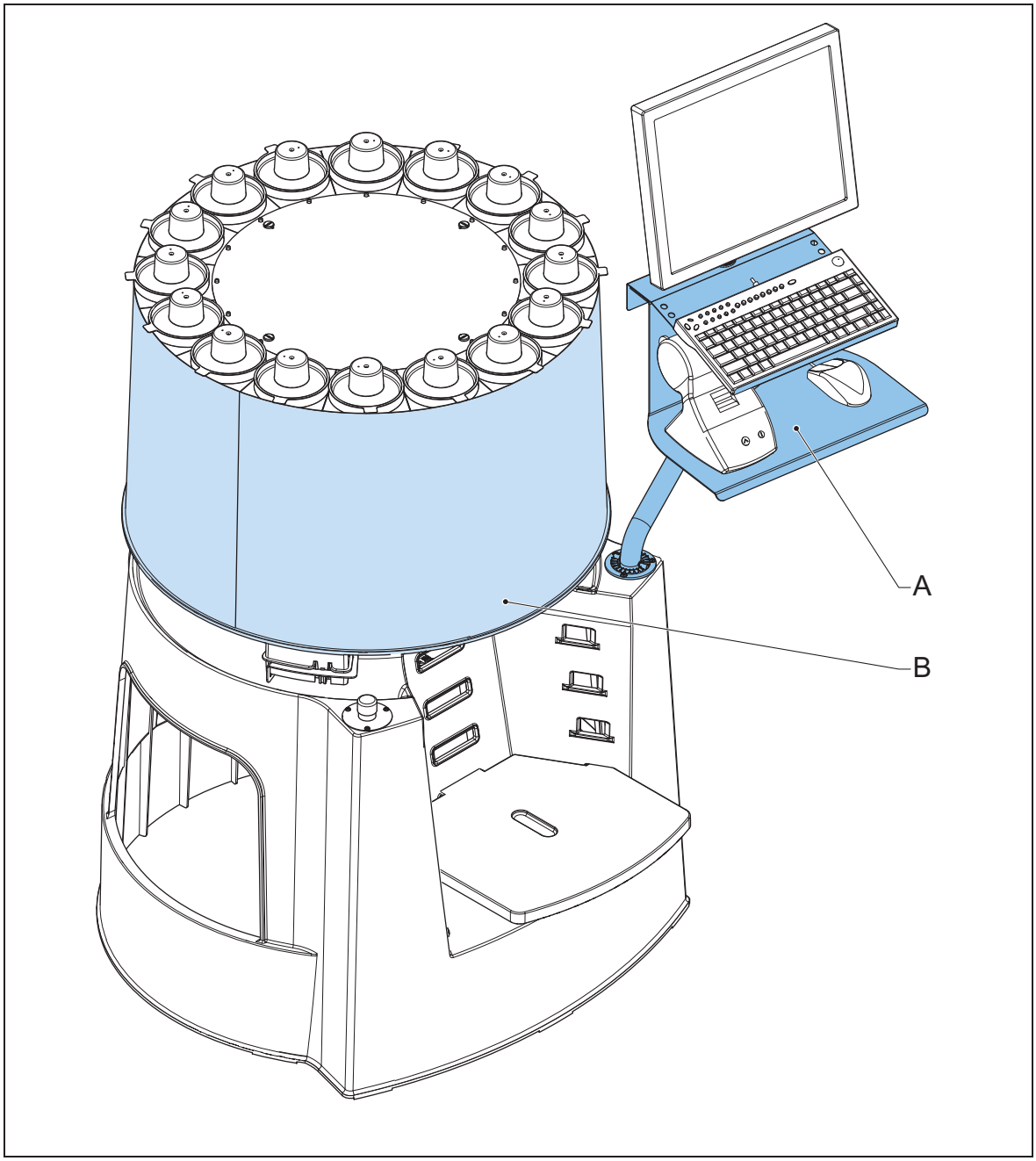
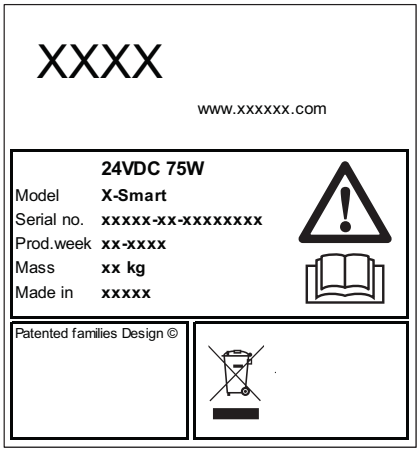
3.1.2 Overview of the available optional parts



A: Monitor Keyboard arm
B: Wrap

3.1.3 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.

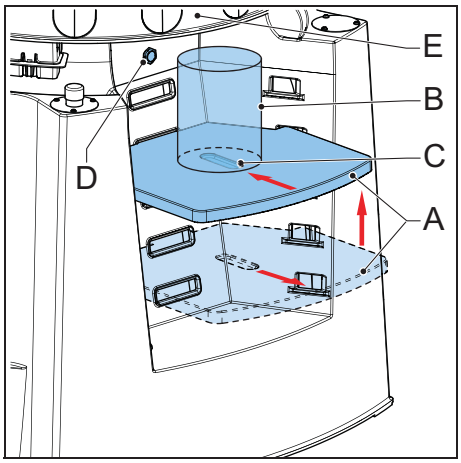
3.2.1 General dispensing procedure

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.

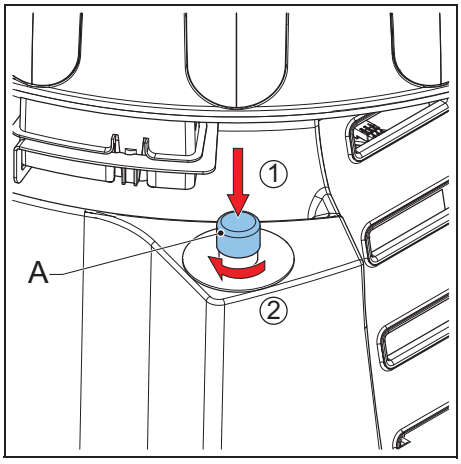
3. Place the can (B) at the center of the mark (C) on the can table.

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.

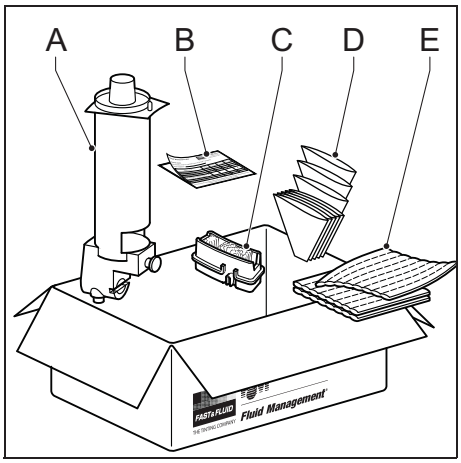
3. Reset the emergency stop switch by turning the emergency stop switch. The machine restarts automatically.

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

3.3 Maintenance

3.3.1 X-Smart Maintenance Kit

To keep your X-Smart in optimal condition, we highly recommend you to use the X-Smart Maintenance Kit. The X-Smart 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: X-Smart schedule sticker (1x)
C: Replacement brush unit (3x)
D: Paper funnel (200x)
E: X-Smart 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 X-Smart 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 X-Smart paper funnels (D) for the clean filling and refilling of the canisters.
- Use the X-Smart cleaning cloth (E) with a non-organic cleaning liquid to clean the machine and the nozzles.

Note
The X-Smart Maintenance Kit is available through your machine supplier.

3.3.2 General cleaning: daily

1. Clean the machine with a damp X-Smart 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.

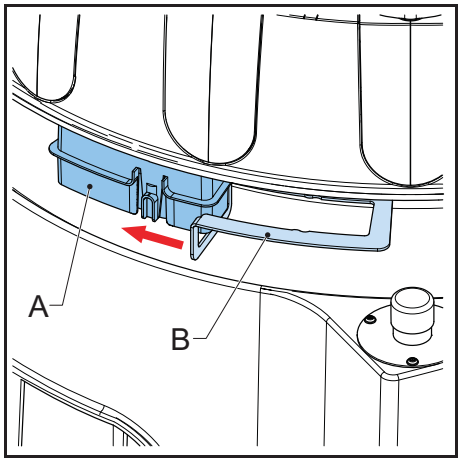
2. When the brush is too dirty and does not clean the nozzle of the canister, rinse and clean the brush. See *§ 3.3.3*.
3. When the nozzles are too dirty, clean the nozzles individually with a damp cloth. See *§ 3.3.4*.

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 X-Smart Maintenance Kit.

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

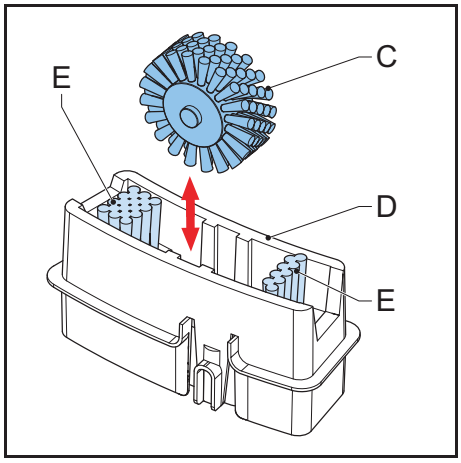
1. Slide the brush unit (A) out of the bracket (B).



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.



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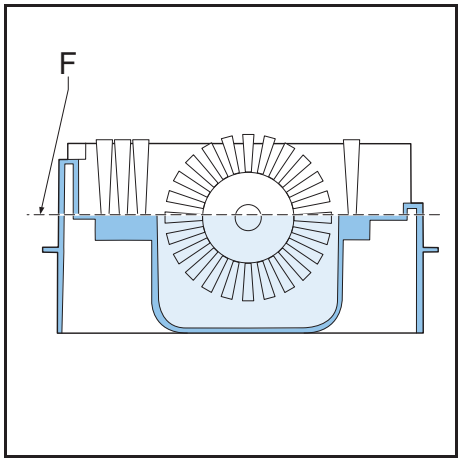
7. Fill the brush container with fluid. This fluid must be a water-based cleaning agent.

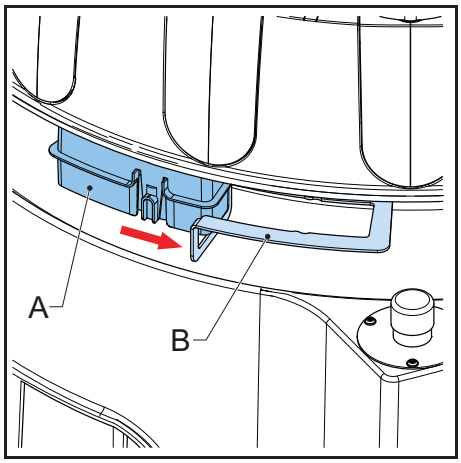


WARNING
Do not put flammable liquids in the brush container.

Note
Do not exceed the maximum filling height (F).

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

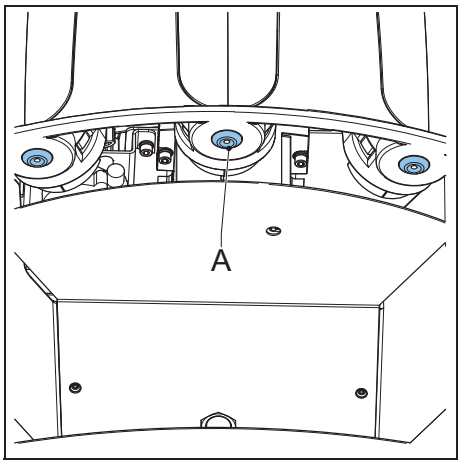
8. Slide the brush unit (A) back in the bracket (B).



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 X-Smart cleaning cloth, as provided in the X-Smart Maintenance Kit, with a non-organic cleaning liquid.*



WARNING
Do not clean the nozzles when the turntable moves.

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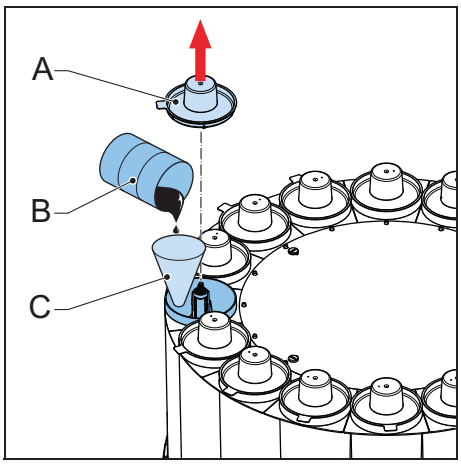
3.3.5 Refilling a canister

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 X-Smart paper funnel (C), which is provided in the X-Smart 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.

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 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 Contact service

1. Find the type plate on the plate next to the emergency stop switch. See *§ 3.1.3*.
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 (Fast & Fluid Management Europe and Asia) or www.fluidman.com (Fluid management, U.S.A.).

5.2 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 *§ 5.1*.

6 Technical data

6.1 General specifications

Parameter	Specification	
	Metric standard	Imperial standard
Model	X-Smart	
Number of canisters	16	
Dispensing	Sequential	
Pump type	Piston pump	
Cleaning system	Rotary brush	
Suitable for	Water and universal colorants	
Canister size	2.25 L	0.594 USgal
Resolution	± 0.005 mL/step	± 0.000169 fl oz/step
Maximum flow rate	0.25 L/min.	0.066 USgal/min.
Minimum dispensing	0.077 mL	0.0026 fl oz
Nozzle diameter	4 mm	0.517 in

6.2 Dimensions and mass

Parameter	Specification	
	Metric standard	Imperial standard
Dimensions [height x width x depth]	125x83x95 cm	49.2x32.7x37.4 in
Packed dimensions [height x width x depth]	113x88x88 cm	44.5x34.6x34.6 in
Mass incl. packaging	65 kg	143.3 lbs
Mass filled machine (max.)	140 kg	308.6 lbs
Minimum requirement of load capacity of the floor according to EN 61010-1:2010	560 kg	1234.6 lbs
Filling height of the canister	120 cm	47.2 in
Maximum can height	48 cm	18.9 in
Minimum can height	7 cm	2.8 in
Can table dimensions [width x depth]	38x27 cm	15.0x10.6 in

6.3 Ambient conditions

Parameter	Specification	
	Metric standard	Imperial standard
Temperature	+15 to +40 °C	+59 to +104 °F
Altitude above sea level, operational	-10 to 2000 m	-33 to 6562 ft
Altitude above sea level, out of operation	-10 to 12000 m	-33 to 39370 ft
Maximum Relative Humidity, without condensation	90% RH	

6.4 Noise level

Parameter	Specification
Maximum noise level	< 65 db(A)

6.5 Safety classifications

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

6.6 Electrical specifications

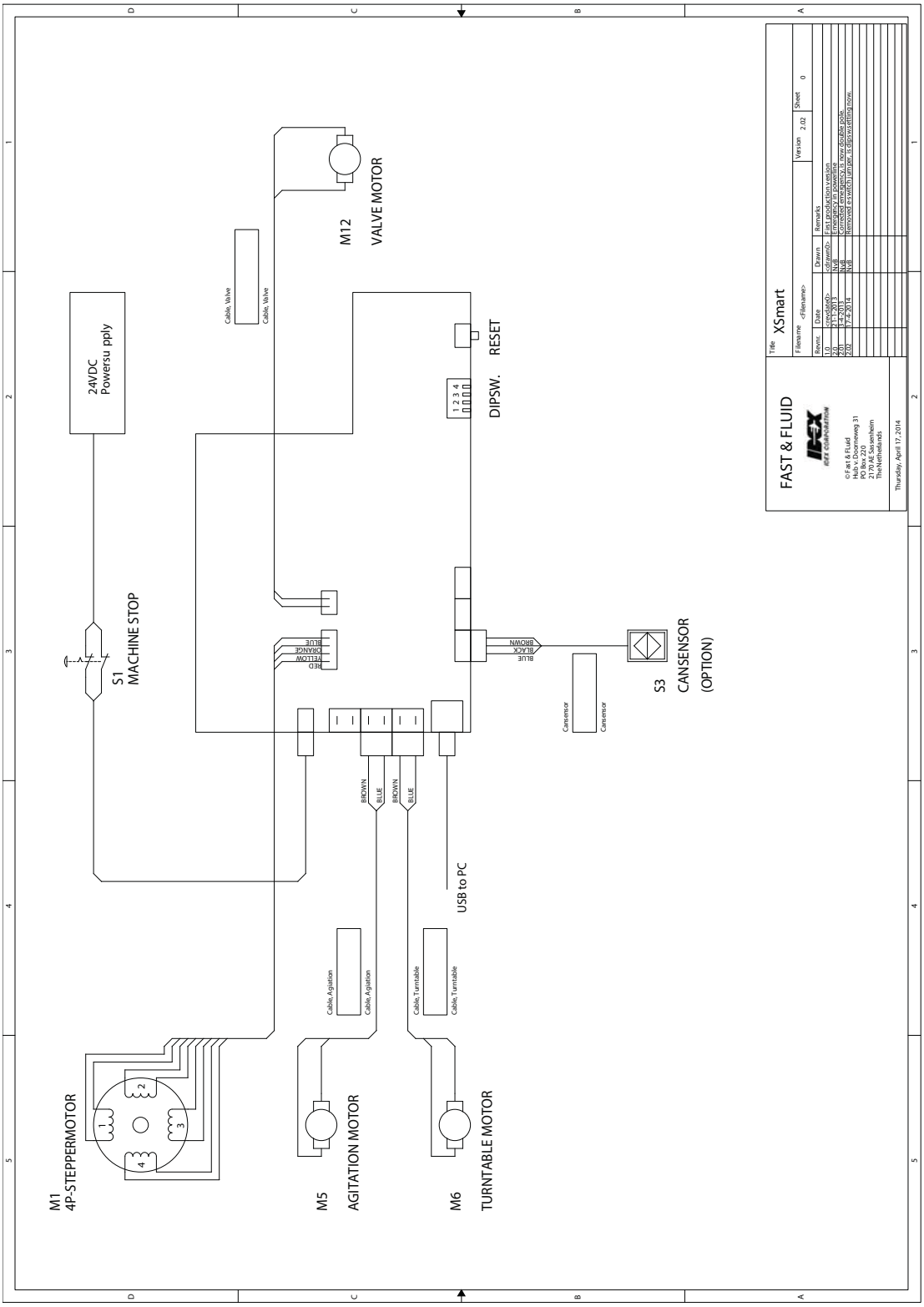
6.6.1 Power supply

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

6.6.2 Dispenser

Parameter	Specification
Maximum power consumption	75 W
Voltage	24 V DC

6.7 Electrical diagram



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Manufactured by:

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