

# Installation manual

## Dosave Dosing System

For washer extractors L6000 with Clarus Vibe



**Electrolux**  
PROFESSIONAL



# Contents

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The manufacturer reserves the right to make changes to design and component specifications.










## 1 General safety information

These installation, operation and servicing instructions shall only be performed by qualified personnel.

The Dosave system must be installed in accordance with all applicable electrical and plumbing standards. All washer extractor and dispenser power must be isolated during installation and/or any time the dispenser is maintained or serviced.

- Always verify all voltage sources with a meter.
- Do not locate the pump-stand under plumbing fittings that could leak.
- Ensure that the installer has enough room to carry and lift the units when installing the Dosave system.
- Do not pick up unit by supply cord.
- Wear PPE (Personal Protective Equipment) when dispensing chemicals or other materials or when working in the vicinity of all chemicals, filling, or emptying equipment.
- Always observe safety and handling instructions of the chemical manufacturers.
- You must follow all precautions as advised on the product safety data sheet.
- Always direct discharge away from you or other persons or into approved containers.
- Always dispense cleaners and chemicals in accordance with manufacturer's instructions.
- Always exercise caution when maintaining your equipment.
- Always re-assemble equipment according to instruction procedures. Be sure all components are firmly screwed or latched into position.
- Keep equipment clean to maintain proper operation.
- **NOTE! This appliance is not be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.**
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- This appliance is designed to be used in commercial areas.
- The appliance is not designed to be used at an altitude higher than 2000m.
- **NOTE! Appliances connected to the water mains by detachable hose should use hoses provided with the appliance and should not reuse previous.**
- **NOTE! If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person, in order to avoid a hazard.**
- **NOTE! A locally approved back-flow prevention device must be installed with the appliance for safe and legal operation.**

## 2 Symbols

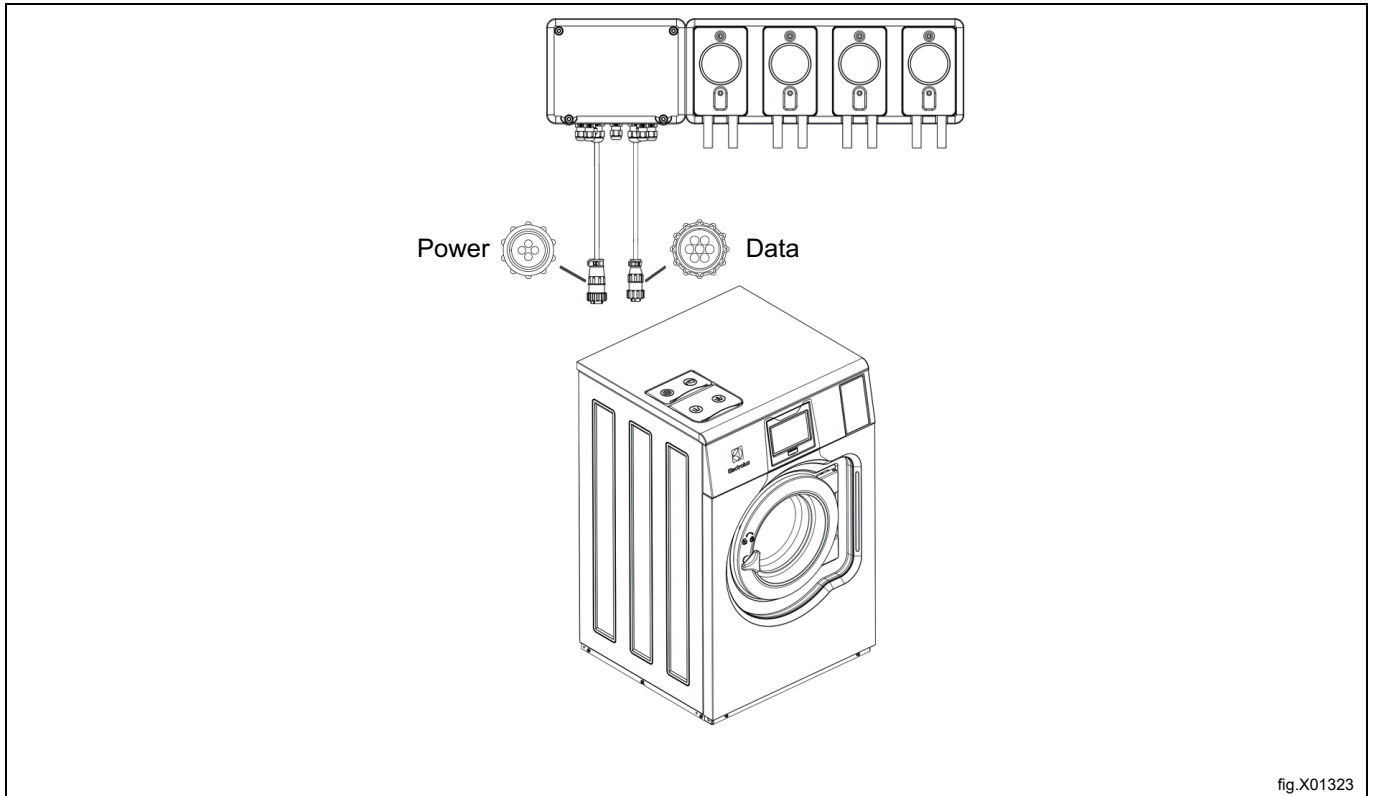
	<p><b>Warning/Caution</b> An appropriate safety instruction should be followed or caution to a potential hazard exists.</p>
	<p><b>Dangerous voltage</b> To indicate a hazardous arising from dangerous voltages.</p>
	<p><b>Protective earth (ground)</b> To identify any terminal which is intended for connection to an external conductor for protection against electric shock in case of a fault, or the terminal of a protective earth (ground) electrode.</p>
	<p><b>Refer to product manual</b> Read the instructions before using the machine.</p>
	<p><b>Protective Personal Equipment</b> The use of appropriate eyewear shall be used.</p>
	<p><b>Protective Personal Equipment</b> The use of appropriate safety gloves shall be used.</p>
	<p><b>Protective Personal Equipment</b> The use of appropriate protective clothing shall be used.</p>

### 3 Introduction

The Dosave system is designed to be connected directly to the washer extractor using two multi pin connectors. The Dosave system can dispense measured amounts of product and product delays if required.

The Dosave system connected and supplied from the washer extractor 230V~ 50/60Hz. It also provides an interface for the optional Flush manifold and the low level alarms.

The optional Flush manifold provides an alternative means of chemical transfer to the washer extractor. In flush configuration, the Dosave is an integrated water flush chemical dispensing system.



- The washer extractor is provided with AMP Style power and interface connectors so no external power source is needed for the pumps.
- The Dosave system is for indoor use only.
- Ensure that the units can be mounted in an accessible position above the height of the required discharge location.

**Note!**

**Above shoulder height would require steps or platform.**

- The pump-stand shall be installed within 3 m of the washer extractor and close to product containers and at a convenient height for pump tube servicing, about 1–1.5 m.
- The input tubing from the chemical container to the pump-stand shall not be more than 2 m.
- The tubes must not be twisted and shall hang freely without any sharp bends. Longer tubes requires maintenance more often.
- It is recommended to install a Flush manifold when the tubes between the pump-stand and the washer extractor are more than 10 m.

Make sure there is free space under the pump-stand for a Flush manifold, water valve, and related plumbing.

- Max. 15 pumps (3 sets of Dosave system) and 15 low level alarms can be installed to the washer extractor. Max. 3 pumps can be run at the same time.

Dosave PNC's	Description
988930011	Complete kit with 2 pumps, Silicone tubes,350 ml/min
988930012	Complete kit with 3 pumps, Silicone tubes,350 ml/min
988930013	Complete kit with 4 pumps, Silicone tubes,350 ml/min
988930014	Complete kit with 5 pumps, Silicone tubes,350 ml/min

## 4 Installation

### 4.1 Installation of the pump-stand

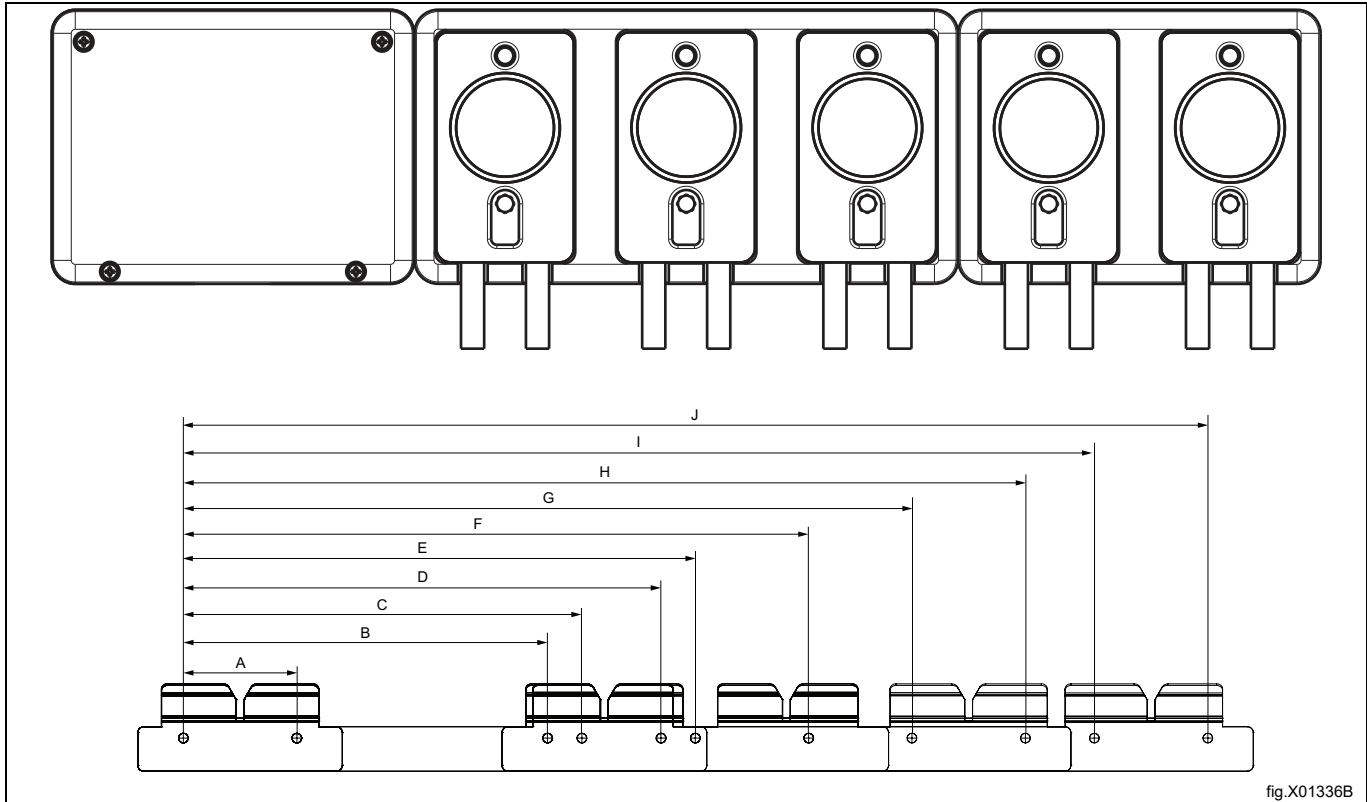
The wall where the pump-stand is to be mounted must support wall anchors and must be flat and perpendicular to the floor.

Use the wall mounting bracket as a template and mark the location of the holes on the wall.

Drill the holes and put in suitable wall anchors. Fasten the wall mounting bracket with the screws. Make sure the wall mounting bracket is in level.

Mount the pump-stand on the wall mounting bracket by pressing it downwards until it is in position.

There are different sizes of pump-stands, from 2 pumps up to 5 pumps. The figure shows a pump-stand with 5 pumps as an example and the table show the measures for all versions of pump-stands.



A	61 mm	Control box
B	196 mm	2 and 4 pumps
C	214 mm	3 and 5 pumps
D	257 mm	2 and 4 pumps
E	275 mm	3 and 5 pumps
F	336 mm	3 and 5 pumps
G	392 mm	4 pumps
H	453 mm	4 pumps
I	489 mm	5 pumps
J	550 mm	5 pumps

Connect the hoses to the pump-stand.

Connect the hose from the liquid detergent to the left on each pump.

The hose from the pump to the washer extractor is connected to the right on each pump.

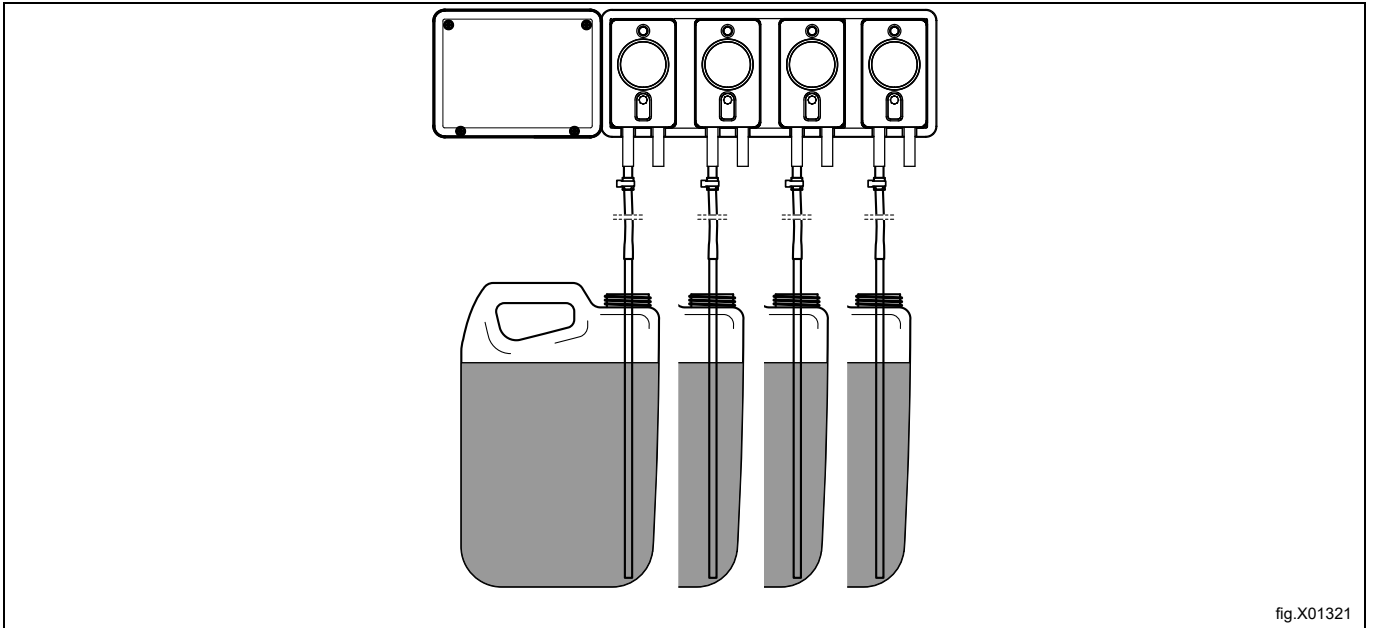


fig.X01321

The washer extractor is prepared for connection of external dosing systems or water re-use systems etc.

The connections are closed at delivery. Open the connections (A) that shall be used by drilling a  $\varnothing$  6 mm hole where the hoses shall be connected.

**NOTE!**

**Make sure there is no burrs left after drilling.**

Connect the hose from the right side of the pump to the connection to be used on the washer extractor.

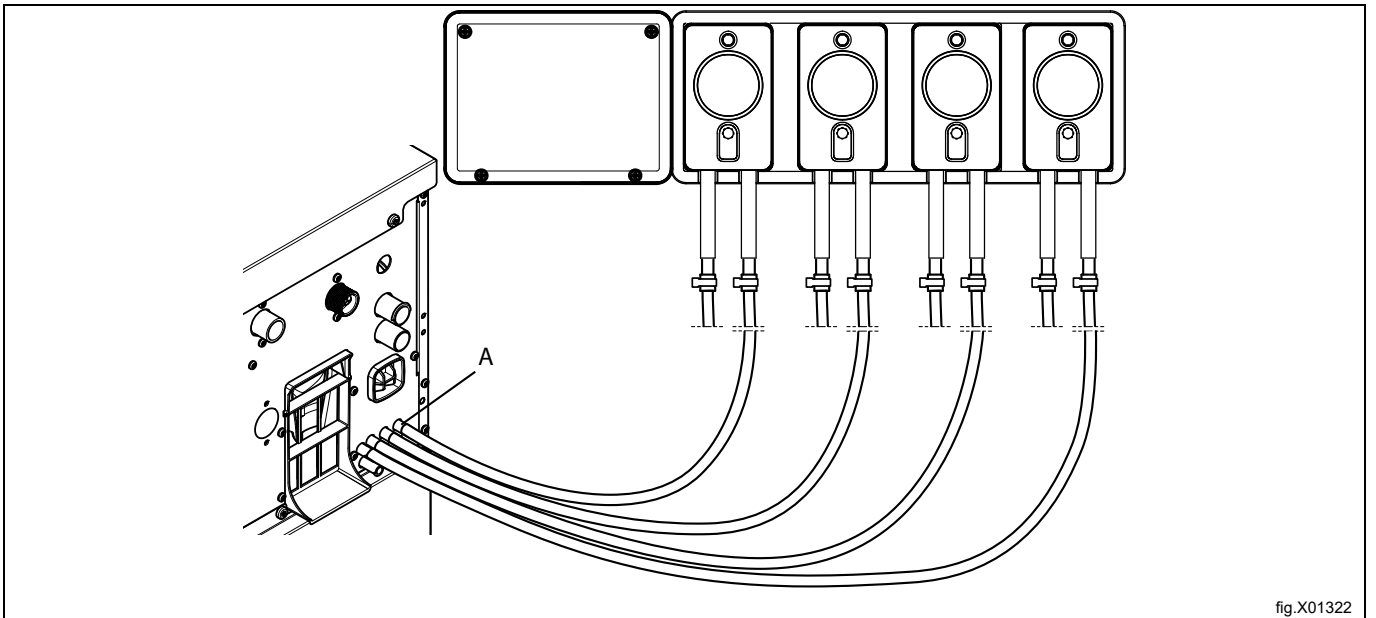


fig.X01322

If the hoses are made of a soft material such as silicone or similar, use a cable tie to fasten the hose on the connection. If the hoses are made of a hard material, it is not recommended to make the connection tighter by using a cable tie.

**NOTE!**

**Equipment for external dosing must only be connected to work on pump pressure and not on network pressure.**

## Connections on the Dosave box

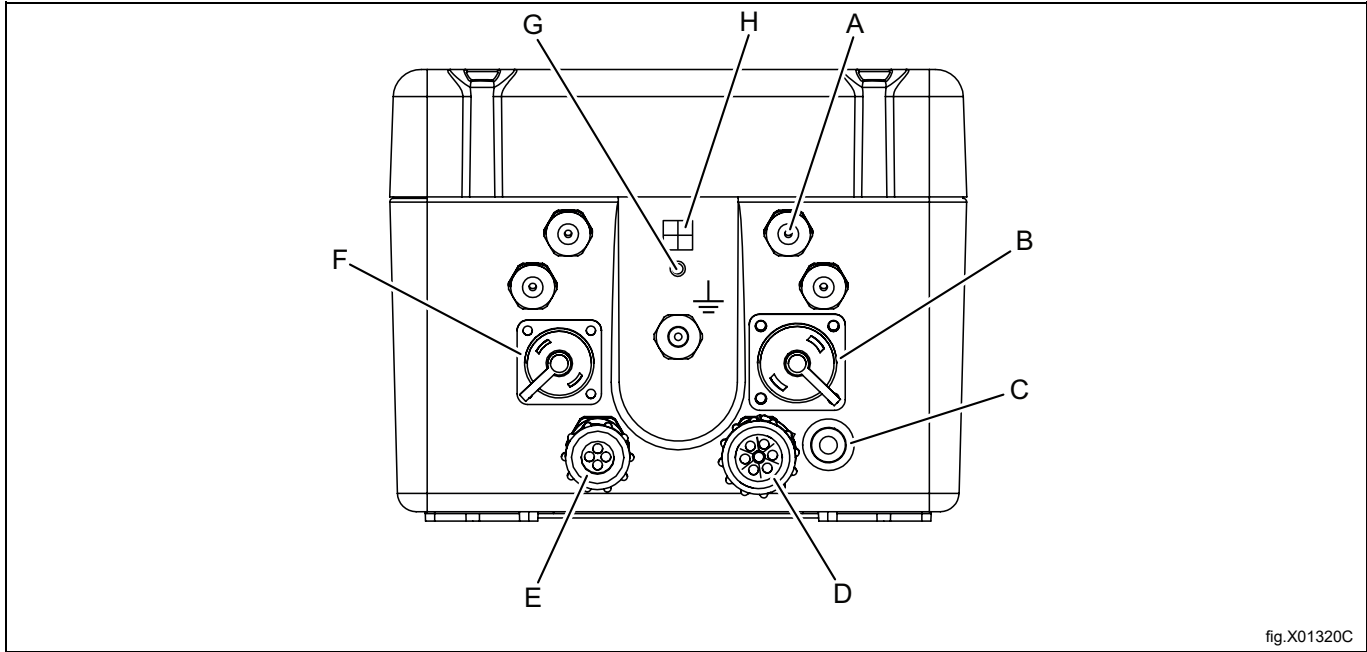


fig.X01320C

A	Low level alarm port x 5 (cable glands)
B	Data out
C	Pairing button
D	Data in
E	Power in (from washer extractor 230V, 50/60Hz 3A Max)
F	Power out
G	Earth connection
H	Connection for Flush manifold (the jumper shall be removed)

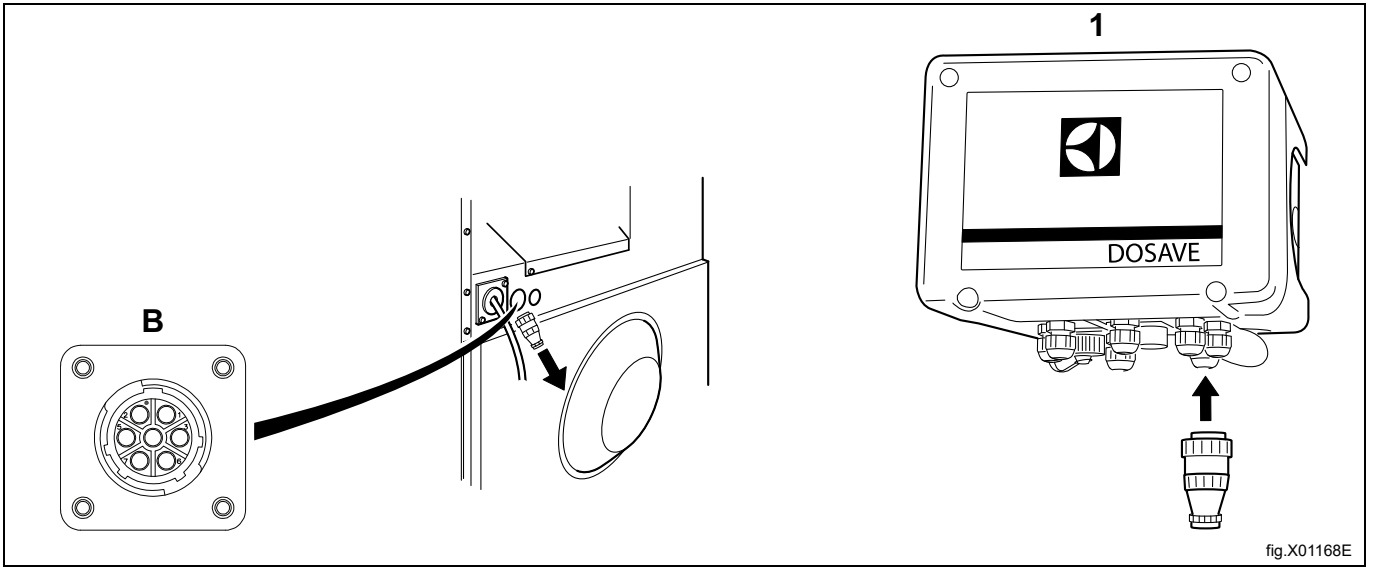
4.1.1 Electrical connection



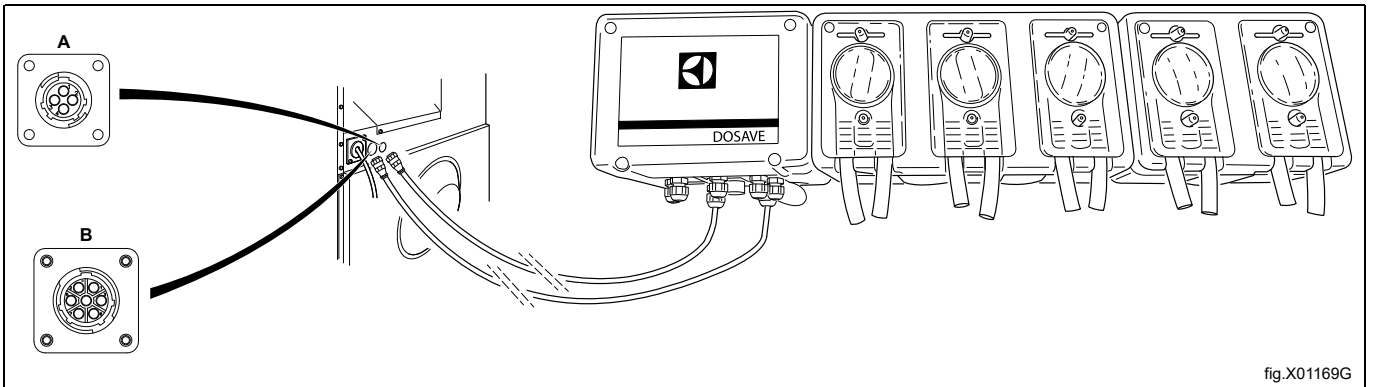
The power supply to the dosing system must never be connected to the machine's incoming terminal block or to the edge connectors on the I/O-board.

Isolate the power to the washer extractor.

Disconnect the connector with termination resistor from the machine (B) and connect it to the (B) data out connection on the Dosave box (1).



Connect the cables from Dosave box to connections A (power out) and B (data out) on the machine.



**Note!**

If a one or more 5 pumps Dosave are part of the chain of connection, they should always be the first ones to be connected (see examples listed right after).

Examples of possible combinations: 5 + 2, 5 + 4 etc. 5 + 5 + 2, 5 + 5 + 3 etc.

Other specific combinations: 3 + 3 or 4 + 3.

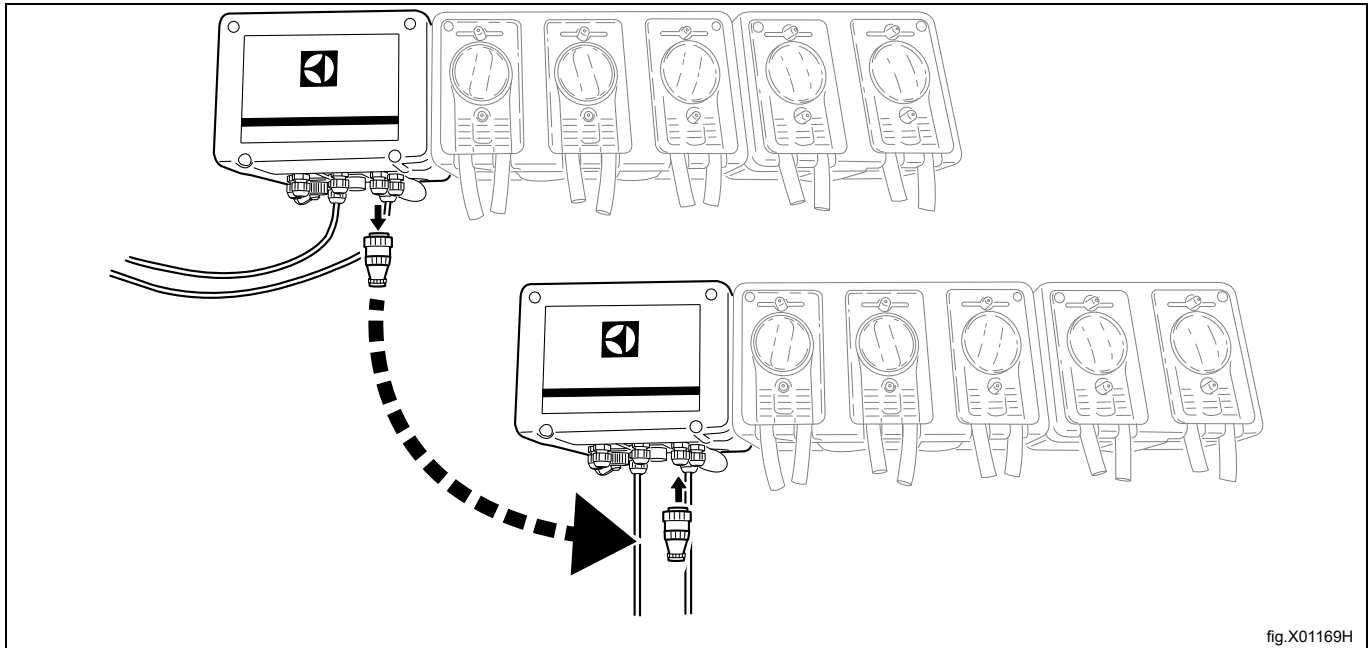
If combining 3 + 3 then pumps outputs used should be: 1, 2, 3, 6, 7 and 8.

If combining 4 + 3 then pumps outputs used should be: 1, 2, 3, 4, 6, 7 and 8.

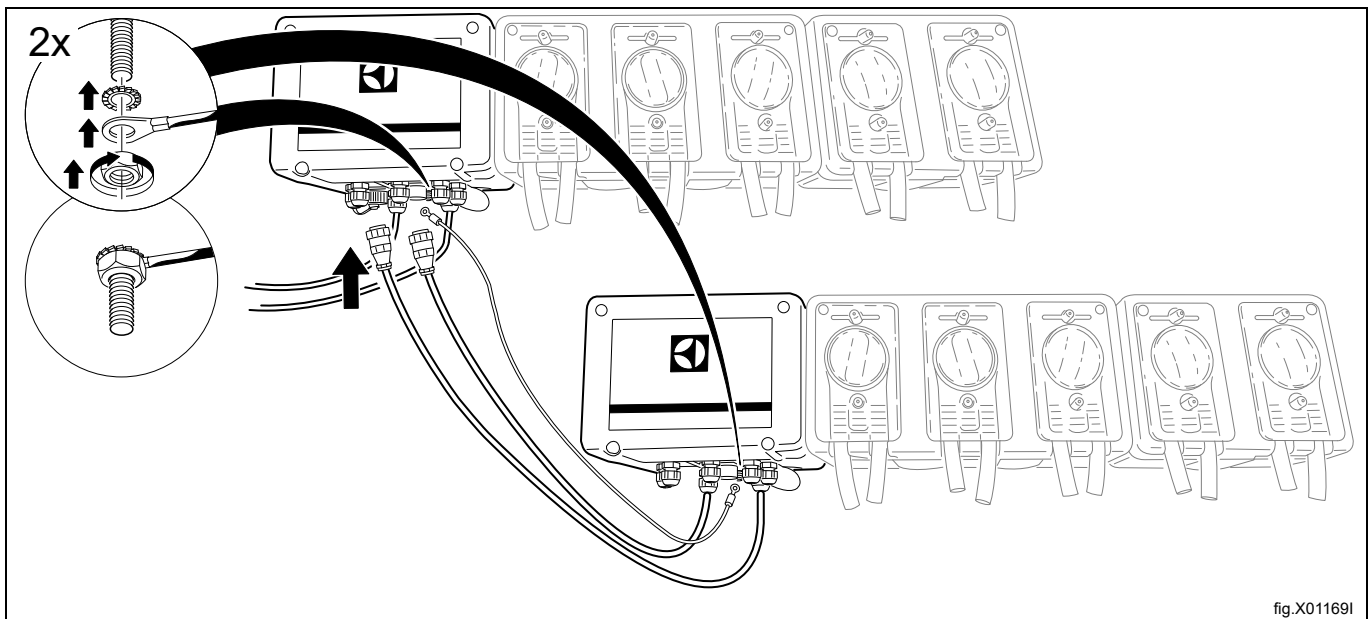
Intastall both units of Dosave next to each other.

If two or three pump-stands are installed, the connector with termination resistor shall be connected to the Dosave box on the last pump-stand.

If the connector with termination resistor is already connected to an existing pump-stand, the connector with termination resistor shall be moved from the first Dosave box and connected to the Dosave box on the last pump-stand.



Connect the cables from the second Dosave box to the connections on the first Dosave box or if three pump stands are used, from the third Dosave box to the second Dosave box.



It is possible to connect up to 3 Dosave systems and one ID Interface in a loop.



### Warning



For continued safety, earth bonding cables should be fitted.

**Chemical connections list (Default from factory, Reference from firmware 418810316 Ver. 2.3.0 )**

Activated: Pumps/Chemicals

Pump	Chemicals name (Output)	→	Each Chemicals name (Output) are changeable to:
Pump 1	Detergent		0: Detergent
Pump 2	Softener		1: Softener
Pump 3	Bleach		2: Bleach
Pump 4	Floor care		3: Floor care
Pump 5	Desinfection		4: Desinfection
Pump 6	W01 - sensitive detergent		5: W1 - sensitive detergent
Pump 7	W02 - delicate detergent		6: W2 - delicate detergent
Pump 8	W03 - sensitive conditioner		7: W3 - sensitive conditioner
Pump 9	Detergent 2		8: Detergent 2
Pump 10	Bleach 2		9: Bleach 2
Pump 11	Floor care 2		10: Floor care 2
Pump 12	Floor care 3		11: Floor care 3
Pump 13	Preservation		12: Preservation
Pump 14	Impregnation		13: Impregnation
Pump 15	Descaling		14: Descaling
Pump 16	Sour		15: Special chemical
			16: A02 - colour transfer reducer
			17: A03 -leather care
			18: Sour
			19: Detergent 3
			20: Detergent 4
			21: Detergent 5
			22: Softener 2
			23: Softener 3
			24: Softener 4
			25: Softener 5
			26: Booster 1
			27: Booster 2
			28: Floor care 4
			29: Special chemical 2
			30: Special chemical 3
			31: None

**Note!**

The washing programs will order or require each chemical from above output, not from pump number. So chemicals requirement in the wash programs must be matched with Chemicals name (Output). Otherwise, the machine will wash without any chemical.

**4.1.2 Selection of system/pumps**

When the Dosave system has been installed the washer extractor must know which type of system/pumps that are used in order to function in the correct way.

Proceed as follow:

- Enter the password set by the manager to access the Main menu.
- Activate the Pumps menu.
- Activate the Pumps menu.

A list with different types of systems/pumps will now be visible on the screen.

- Select **0: Peristatic** for the Dosave system.

### 4.1.3 Pairing the pumps / Addressing the I/O board

- Enter the Advance manager password or Advance service password to access the Main menu.
- Activate the Settings menu.
- Activate the I/O board addressing menu.

Available I/O boards and addresses will now be visible on the screen as a drop down list. The different I/O boards and addresses are marked with either a green or a grey light.

- Green light = in use.
- Grey light = not in use and available for addressing.

The Dosave system is set up as an I/O Type 22. All washer extractors are prepared to accept up to five I/O Type 22.

**The first I/O Type 22 address in the list is reserved for I/O inside the washer extractor and shall not be used for the Dosave system.**

To pair:

- Select the second address for I/O Type 22 (A).
- Press Add to start the pairing function.

#### NOTE!

**It is very important to select the second I/O Type 22 address when pairing the first Dosave system. If not, the system will not work as expected.**



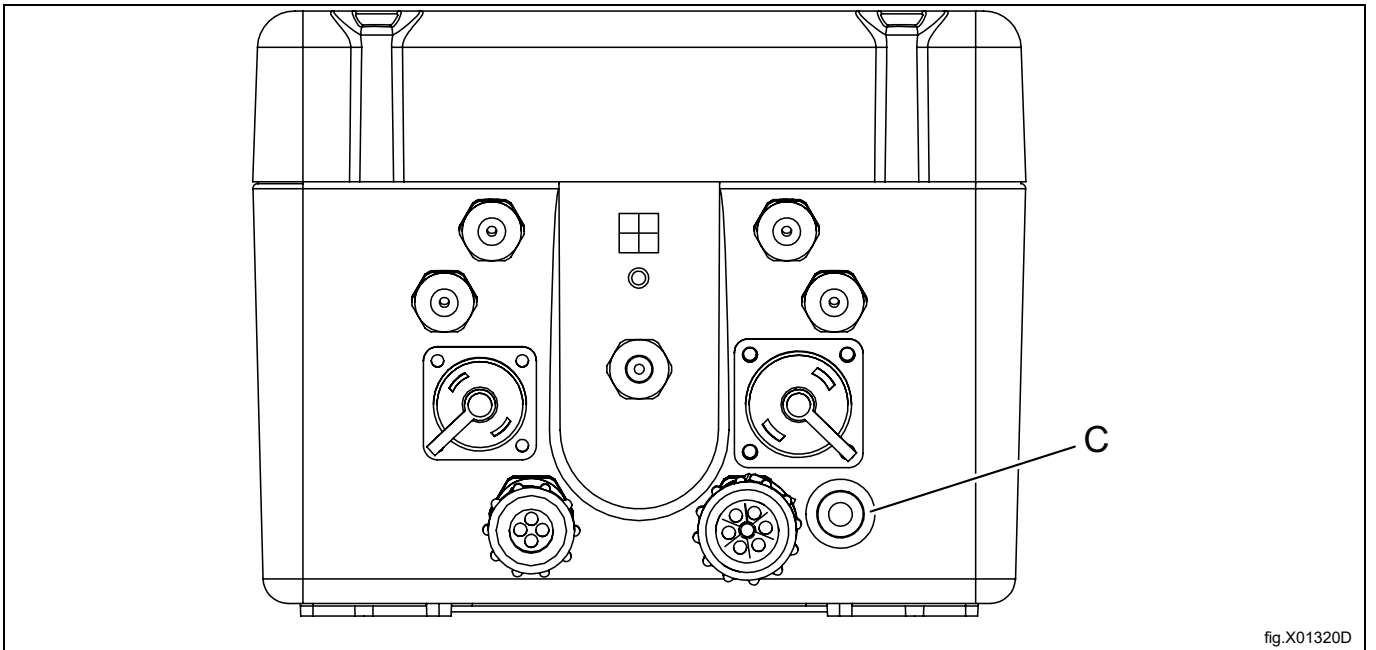
fig.X02320A

The following message will be displayed indicating that it is OK to pair.



fig.X01677

- Press and hold the pairing button (C) in the bottom of the Dosave box for about 1–2 seconds until the buzzer beeps. The beep indicates successful pairing.



Also, a green light on the selected address will indicate that the pairing has been successfully done.



Up to three Dosave systems can be connected to the washer extractor.

When the first Dosave system is correctly paired, select the next address in the list to pair the next Dosave system etc.

#### 4.1.4 Priming the pumps

- Enter the Advance manager password or Advance service password to access the Main menu.
- Activate the Pumps menu.
- Activate the Priming menu.
- Activate Pump 1 from the list to start priming the first pump.
- Press play to start priming and press stop when ready. (You can also use the pairing button (C) to start and stop).

The hose shall be filled all they way to the outlet of the hose.

Do the same for all the pumps.

### 4.1.5 Calibrating the pumps

- Enter the Advance manager password or Advance service password to access the Main menu.
- Activate the Pumps menu.
- Activate the Calibration menu.
- Activate Pump 1 from the list to start calibrating the first pump.

The different steps to be made when calibrating will now be visible on the screen.

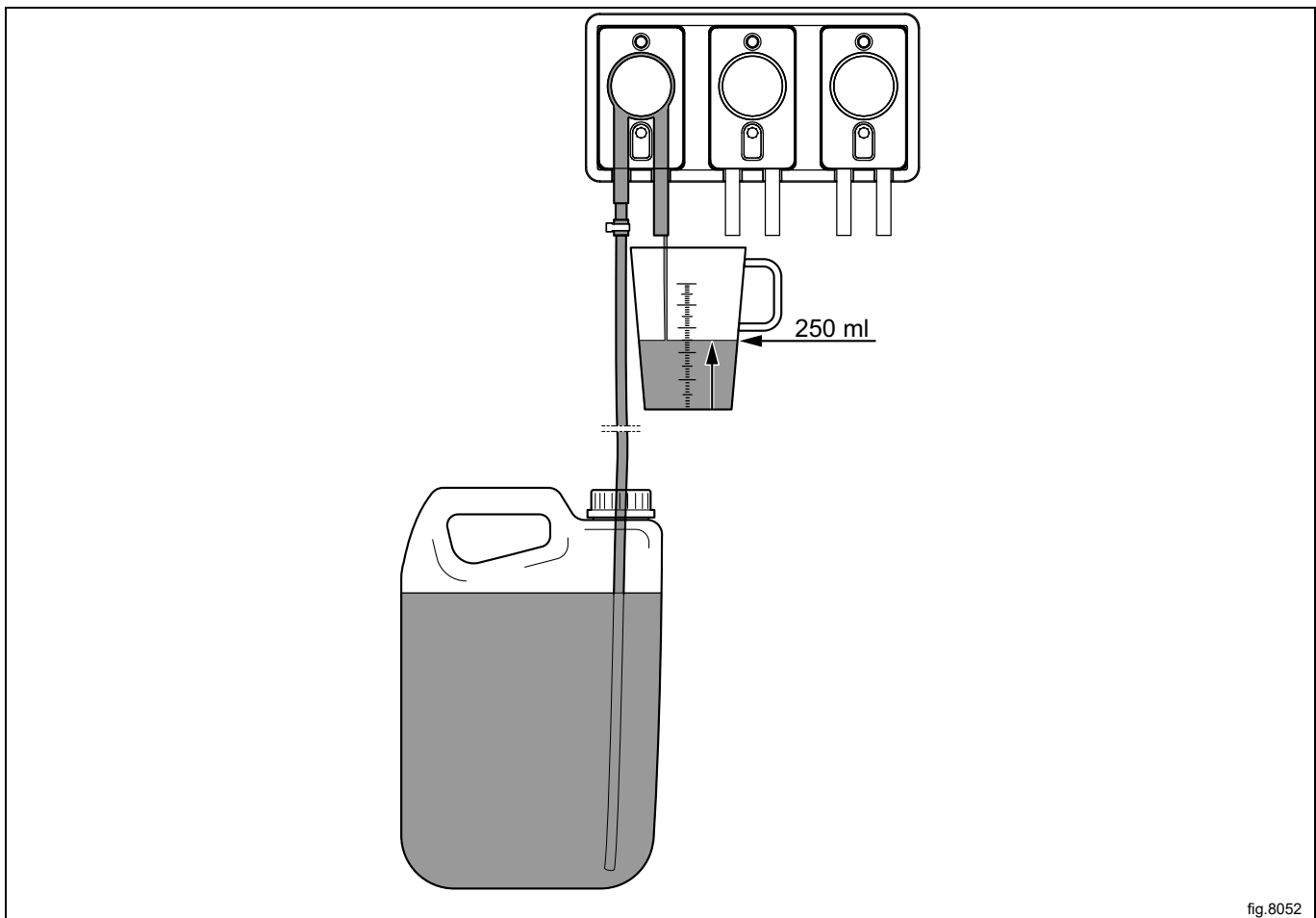
1. Place a container with ml markings (minimum volume 300 ml) under the outlet tube of the pump to be calibrated.
2. Press play to start calibrating.
3. Press stop when there is 250 ml in the container.
4. Save the result for the pump.

The first pump has now been calibrated.

Do the same for all the pumps.

#### Note!

You can also use the pairing button (C) to start and stop the calibration.



### 4.2 Installation of Flush manifold (option)

The Flush manifold is recommended in locations where the tubes between the pump-stand and the washer extractor is more than 10 m. (Water pressure shall be min. 1.8 bar and max. 6 bar).

It can also be used for safety reasons in installations where dangerous chemicals are used.

The Flush manifold is used to flush the tubes clean when not in use.

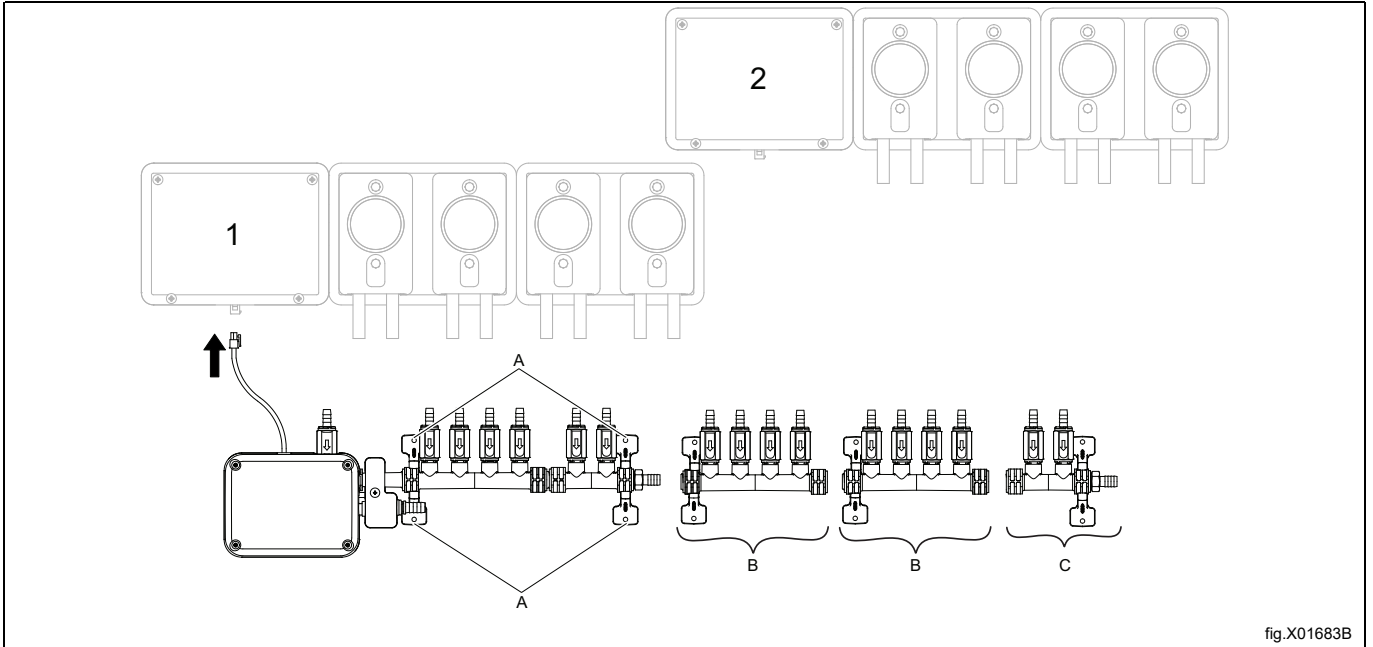
Mount the Flush manifold on a suitable location under the pump-stand. The Flush manifold shall be mounted on the wall by the wall hangers (A).



**Caution**



Electrical output for flush manifold is 24V~ Safety Extra Low Voltage (SELV). Isolate pumpstand from the electrical supply before removing the jumper harness and connecting the flush manifold.

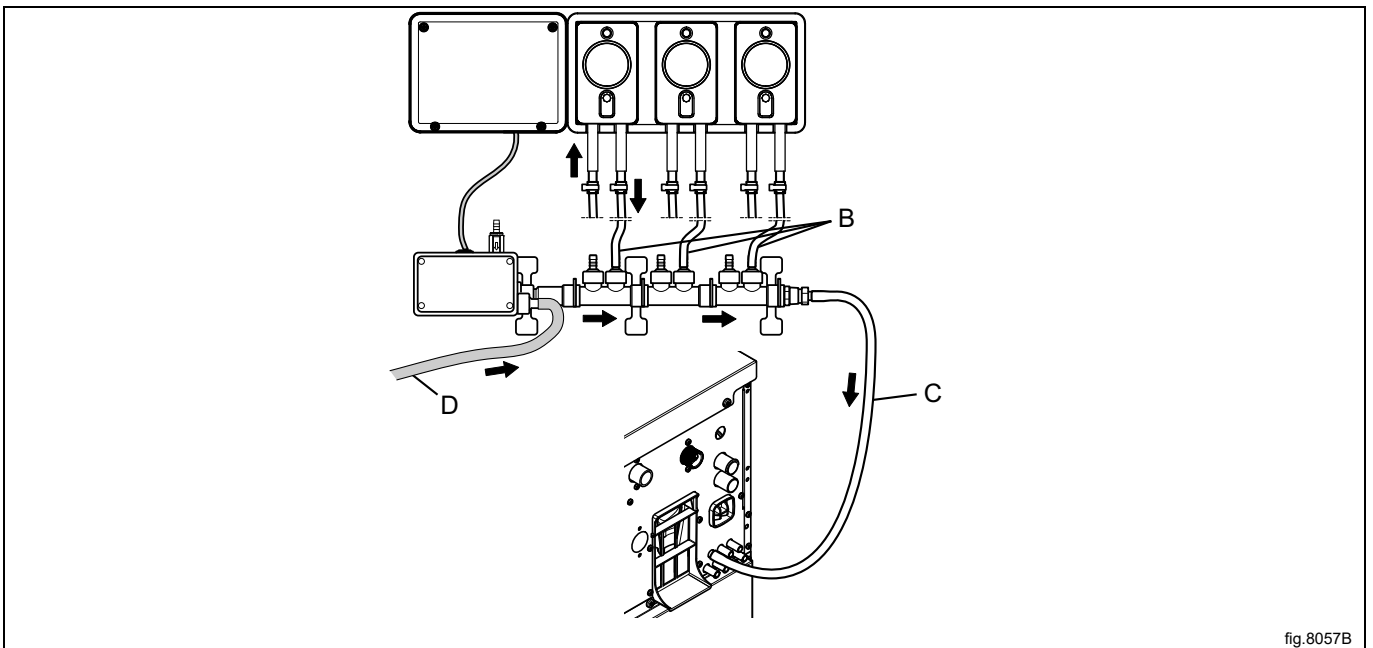


Connect the outlet tubes to the Flush manifold connections (B).  
 Connect one tube from the Flush manifold to the washer extractor (C).

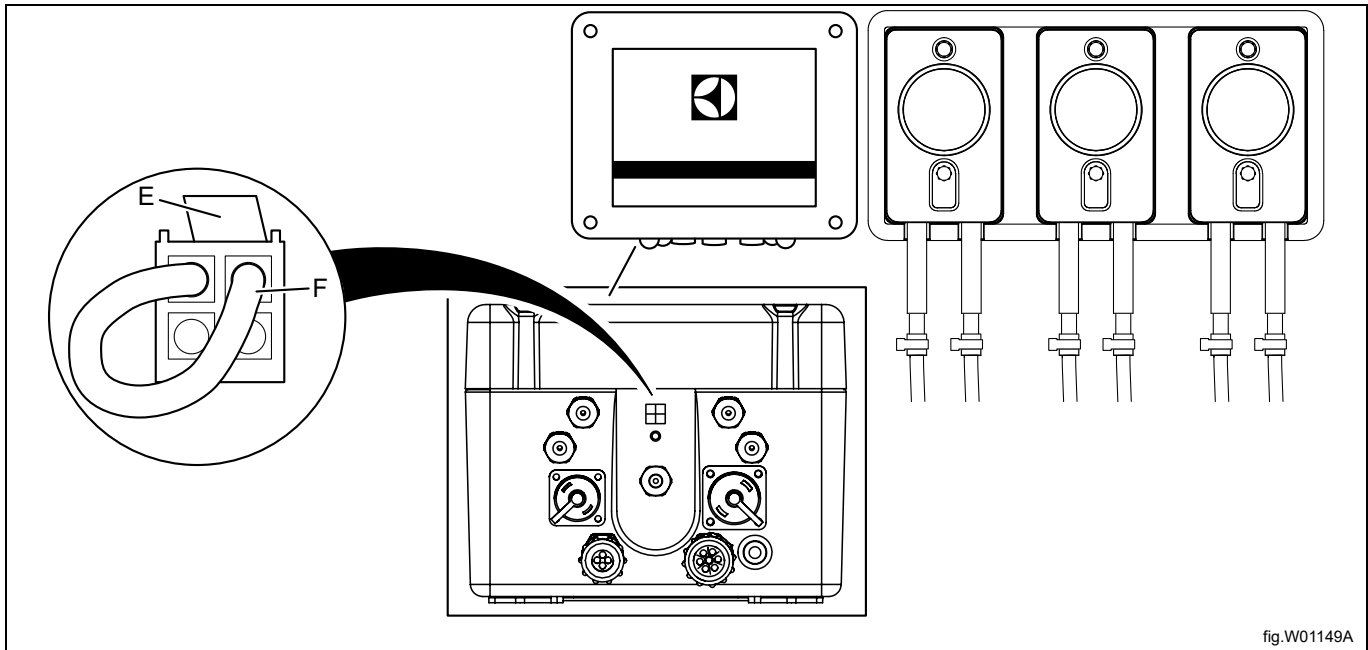
**Note!**

**It is recommended to heat up the tubes before connecting.**

Connect the water inlet (D).



Depress the locking tab (E) and remove the jumper harness (F) from the first pump-stand (save the jumper harness for future use if the Flush manifold might be disconnected). Connect the electrical cable from the Flush manifold to the connection on the pump-stand when removed.



When the Flush manifold has been installed the washer extractor must know which type of system/pumps that are used in order to function in the correct way.

Proceed as follow:

- Enter the Advance manager password or Advance service password to access the Main menu.
- Activate the Pumps menu.
- Activate the Pumps menu.

A list with different types of systems/pumps will now be visible on the screen.

- Select **2: Manifold** for the Flush manifold.

### 4.3 Installation of low level alarm (option)

Put the level probes in their respective product container.

The existing hoses connected to the pump-stand shall be replaced with the new hoses. Connect the hoses to the left side of each pump on the pump-stand as before.

The cable (A) shall be connected to the Level control box and the hose (B) shall be connected to the pump-stand.

The level probes are fitted with a magnetic float switch (C). This switch should arrive in the correct position for your application.

Should the switch work in reverse, remove the cross head screw securing the float magnet, remove the float magnet and refit it in the opposite direction.

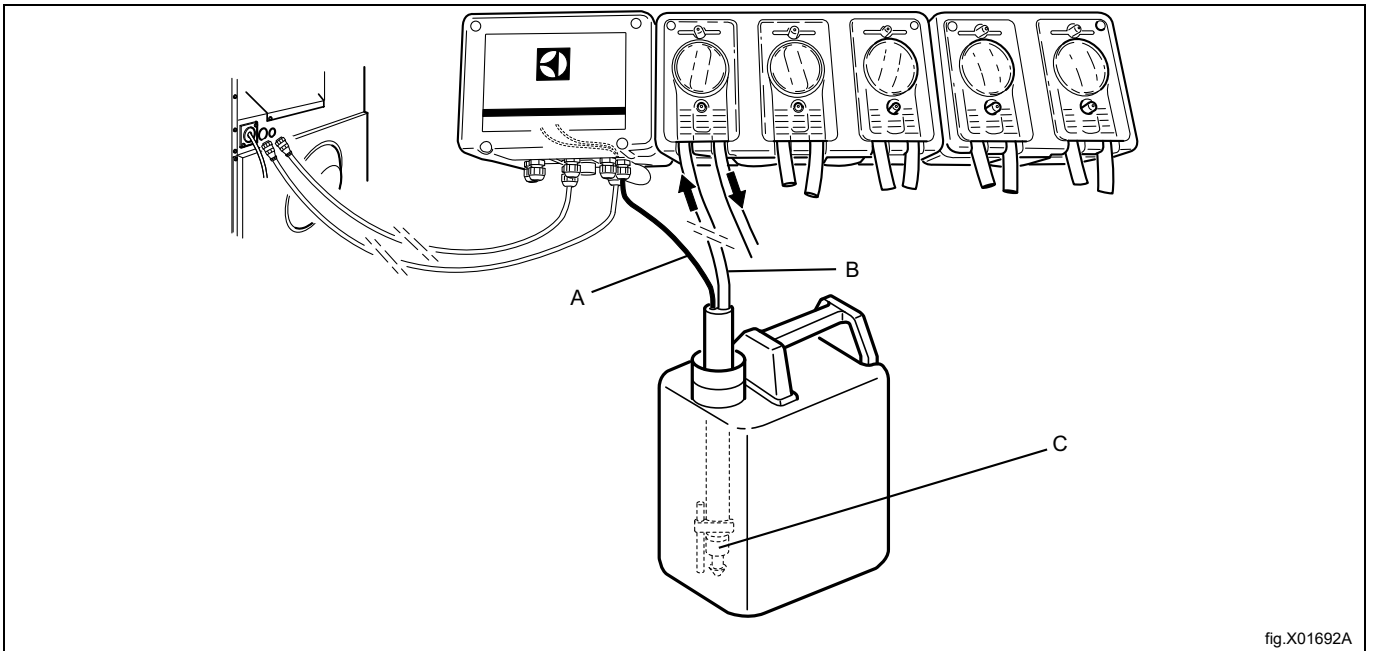


fig.X01692A

### 4.4 Connection with low level sensors and flush manifold

Open the control box before connection.

If low level sensors are installed, an error message will be displayed when any of the chemical tanks is low. The program will however continue. As the A122 board is with 5 outputs for pumps but only 3 inputs for level sensing, some low-level sensors must be connected in parallel. In such an installation the control system will be alarming low level when any of merged sensors has triggered. The figure below is showing such a configuration along with flush manifold.

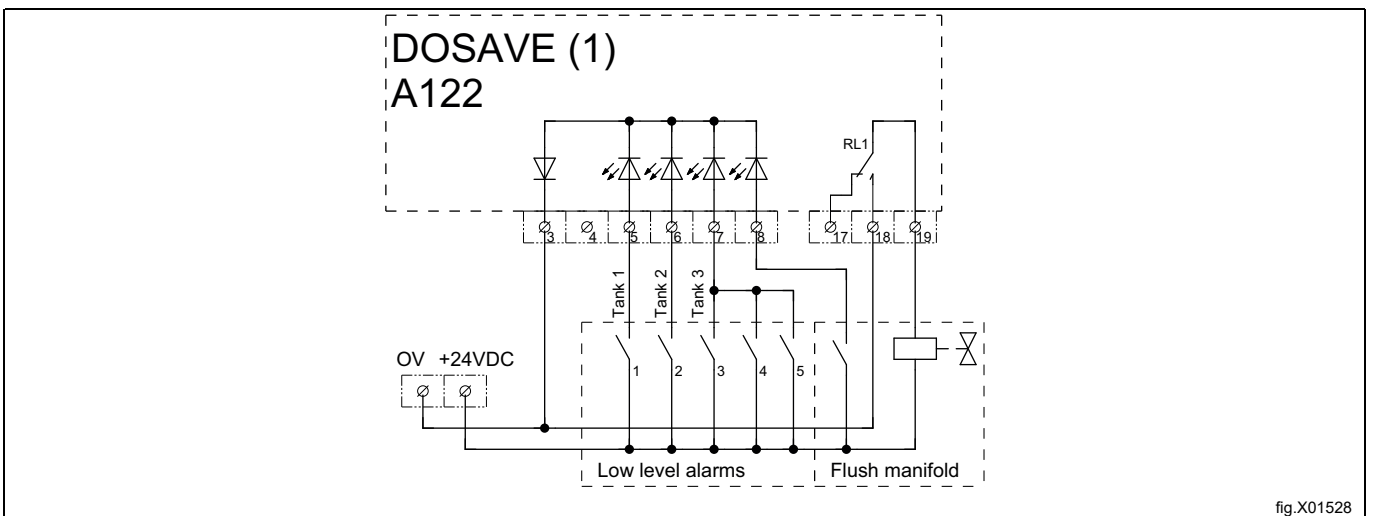


fig.X01528

It is possible to display all the alarms separately by adding an ID interface.

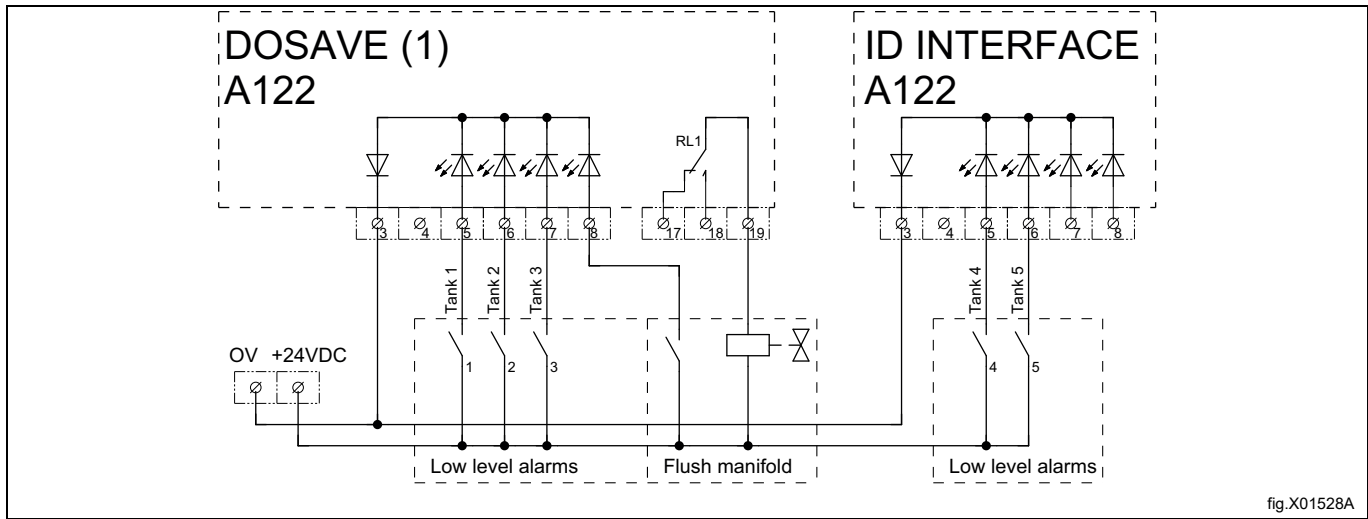


fig.X01528A

The system can be extended for dosing up to 15 chemicals by using three Dosave units:

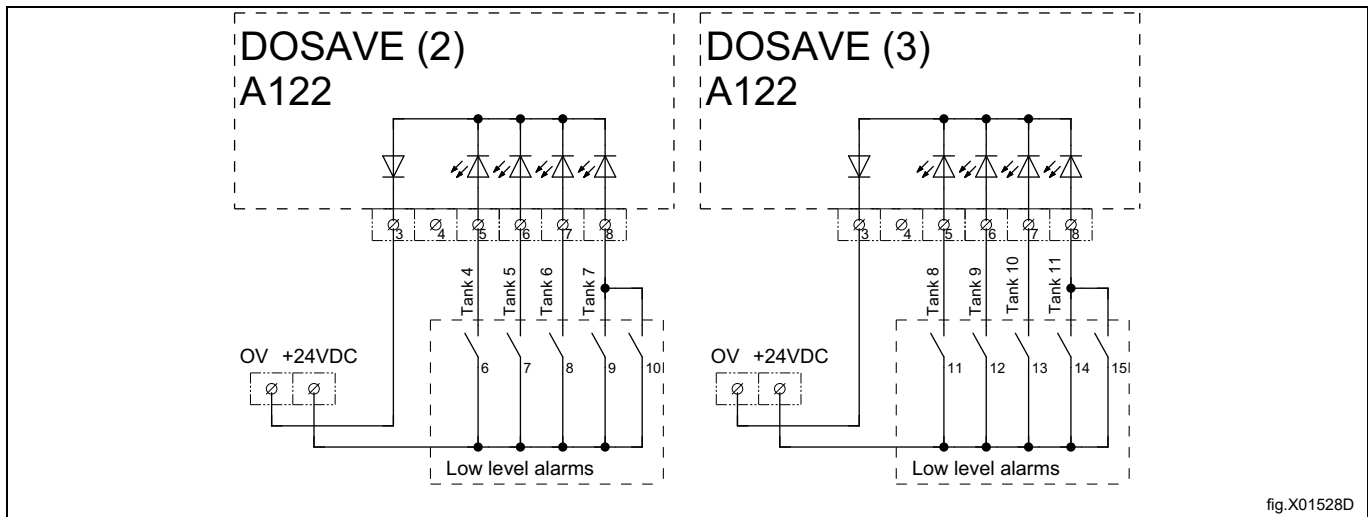


fig.X01528D

Available inputs on A122 for low level sensing:

- The first Dosave in the loop: 5-7 (input 8 dedicated for flow switch).
- Remaining Dosave units: 5-8 (wire preconnected to input 8 can be removed and used for level sensing instead).
- ID Interface: 5-8.

## 5 Technical specification

Number of pumps which may operate at the same time:

- Operation of appliance should not exceed 3A / 3 pumps
- Maximum pump amount = 995 ml
- Maximum pump delay Time = 999 sec.
- Maximum flush time = 999 sec.
- Maximum pump prime time = 5 min.
- Maximum operating temperature = 49°C

<b>Power supply</b>
From the washer extractor: 230V, 50/60Hz, 3A (Max)
From the Dosave system: 230V, 50/60Hz, 3A (Max)

<b>Water supply</b>
Water supply (Flush manifold)
Min. 0.18 mPa (1.8 Bar)
Max. 0.6 mPa (6 Bar)

This unit complies with the following directives and standards:

- 2014/35/EU Low Voltage Directive (LVD)
- 2014/30/EU Electromagnetic Compatibility (EMC)
- EN 60370-1, EN 61000-6-2:, EN 61000-6-4:2001, EN 61000-3-2:2000, EN 61000-3-3:1995/A1:2001

## 6 Trouble shooting and service



Trouble shooting may only be carried out by qualified service personnel.  
 Isolate the power and the water before carrying out any maintenance or cleaning on the units.  
 Do not adjust/rework items not listed in this trouble shooting without guidance from Electrolux Professional service personnel.  
 If the supply cord is damaged it must be replaced, NOT repaired.

## 7 Maintenance, spare parts and specifications

### Regular maintenance

The pump hose should be replaced at regular maintenance intervals, which are determined based on own experience and assessment. An initial test period may be needed to assess the service life of the parts. Many different factors affect service life, such as chemical compatibility, pump pressure (inlet pipe size and pipe length), and the amount of time that has passed. To prevent any product from leaking into the pump housing, always try to replace the pump pipes before any faults occur. AT LEAST once a year.

### Replacement of pump hose

1. Undo the 2 fixing screws and remove the front panel of the pump.
2. Remove the old pump hose. Clean away all product residue with a damp cloth if the hose had failed.
3. Position the roller (pulley) so that the rollers are in positions corresponding to one o'clock and 7 o'clock.
4. Start with the pump's left side and insert the pump hose into the pump. Rotate the roller clockwise while pushing the hose into the pump.
5. Put the front panel back in place and tighten the fixing screws. Make sure that the front panel is securely fastened.

### Lubricate the pump hose

Using the lubricant provided, apply a light coat of lubricant to the new pump hose. Too much lubricant and/or improper lubrication could cause premature pump hose wear or malfunction.

Material of the hose	Lubrication
EPDM, black	432930083, 1 pc
Silicone, transparent	432930087, 1 pc

## 8 Disposal information

### 8.1 Appliance recyclability and disposal

#### 8.1.1 Recyclability

Our appliances are manufactured using a significant percentage of recyclable metals (such as stainless steel, iron, aluminium, galvanized sheet, copper, etc.), which can be recovered through the local recycling systems, in compliance with the regulations in force in the country of use.

National regulations regarding waste disposal may vary. Disposal of the appliance must therefore be carried out in accordance with the applicable legislation and the directives issued by the competent authorities in the country where the appliance is decommissioned.

The components of the appliance must be separated and disposed of in accordance with their material composition (e.g. metals, oils, greases, plastics, rubber, refrigerant gases, insulating boards and other insulating material, glass wool, LEDs, etc.) and in full compliance with applicable local and international waste management regulations.

Compressors may contain oils and refrigerants fluids - are special waste and has to be recycled on local bases regulations.

#### 8.1.2 Procedure regarding appliance disposal and component / material recovery

This product should not simply be disposed of in the environment at the end of its life cycle; it is imperative instead either to dispose of it in accordance with local environmental regulations, or, preferably, to deliver it whole to an authorized recycling center.

All removed components, including doors and other structural parts, must be delivered together with the appliance to an authorized recycling or dismantling facility.

The dismantling/recycling center will apply state of the art technologies and methods available to them to effectively disassemble the products for best recyclability.

Note that printed circuit boards, electrical motors or other components identified in European Union legislation to be of high critical raw materials recovery potential need to be addressed specifically.

In case of doubts or questions, always refer to your reference customer care service.

Before disposing of the appliance, carefully inspect its physical condition and preservation state, checking for potential leaks of liquids or gases, as well as for broken parts that may pose hazards during handling and subsequent dismantling.



The symbol on the product indicates that this product should not be treated as domestic waste, but must be correctly disposed of in order to prevent any negative consequences for the environment and human health. For further information on the recycling of this product, contact the local dealer or agent, the customer care service or the local body responsible for waste disposal.




#### Note!

**When dismantling the appliance, any marking, this manual and other documents concerning the appliance must be destroyed.**

### 8.2 Disposal of packing

The packing must be disposed of in compliance with the current regulations in the country where the appliance is used. All the packing materials are environmentally friendly.

They can be safely kept, recycled or burned in an appropriate waste incineration plant. Recyclable plastic parts are marked as following examples.

	Polyethylene: <ul style="list-style-type: none"> <li>• Outer wrapping</li> <li>• Instructions bag</li> </ul>
	Polypropylene: <ul style="list-style-type: none"> <li>• Straps</li> </ul>
	Polystyrene foam: <ul style="list-style-type: none"> <li>• Corner protectors</li> </ul>







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