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1 CE DECLARATION OF CONFORMITY

The undersigned: PIUSI S.p.A. Via Piacentini 16/A z.l. Rangavino 46029 Suzzara - (MN) - Italy
DECLARES under its own responsibility that the machine described below: Description: Filtering system for oil / Diesel fuel Model: FILTROLL
Serial No.: refer to Lot Number shown on CE plate affixed to product
Year of manufacture: refer to the year of production shown on the CE plate affixed to the product
is in conformity with the legal provisions indicated in the directives:
- Machine Directive 2006/42/EC
- Electromagnetic Compatibility Directive 2014/50/EU
The documentation is at the disposal of the competent authority following motivated request at Piusi S.p.A. or following request sent to the email address: doc.tec@piusi.com

Suzzara, 20/04/2016
Otto Varini legal representative

2 GENERAL WARNINGS

Important precautions To ensure operator safety and to protect the pump from potential damage, workers must be fully acquainted with this instruction manual before performing any operation.

Symbols used in the manual The following symbols will be used throughout the manual to highlight safety information and precautions of particular importance.

ATTENTION This symbol indicates safe working practices for operators and/or potentially exposed persons.

WARNING This symbol indicates that there is risk of damage to the equipment and/or its components.

NOTE This symbol indicates useful information.

Manual preservation This manual should be complete and legible throughout. It should remain available to end users and specialist installation and maintenance technicians for consultation at any time.

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3 SAFETY INSTRUCTIONS

ATTENTION Mains - preliminary checks before installation Maintenance control You must avoid any contact between the electrical power supply and the fluid that needs to be FILTERED.

To help prevent fire and explosion: Use equipment only in well ventilated area. Keep work area free of debris, including rags and spilled or open containers of solvent and gasoline.

Do not plug or unplug power cords or turn lights on or off when flammable fumes are present. Ground all equipment in the work area.

Stop operation immediately if static sparking occurs or if you feel a shock. Do not use equipment until you identify and correct the problem.

Keep a working fire extinguisher in the work area. This equipment must be grounded. Improper grounding, setup or usage of the system can cause electric shock.

Turn off and disconnect power cord before servicing equipment. Connect only to a grounded electrical outlets.

Only use cables with grounded in accordance with local electrical codes. Extension cords should have a ground lead.

Ensure ground prongs are intact on power and extension cords. Do not expose to rain. Store indoors.

Never touch the electric plug of socket with wet hands. Do not turn the dispensing system on if the power connection cord or other important parts of the apparatus are damaged, such as the inlet/outlet plumbing, dispensing nozzle or safety devices.

Replace damaged components before operation. Before each use check that the power connection cord and power plug are not damaged.

If damaged, have power connection cord replaced before use by a qualified electrician. The electrical connection between the plug and socket must be kept well away from water.

Unsuitable extension leads can be hazardous, in accordance with current regulations. Only extension cords that are labelled for outdoor use and have a sufficient conduction path should be used outdoors.

For safety reasons, we recommend that, in principle, the equipment be used only with an earth-leakage circuit breaker (max 30 mA).

EQUIPMENT MISUSE

Electrical connections must use ground fault circuit interrupter (GFCI). Installation operations are carried out with the box open and accessible electrical contacts. All these operations have to be done with the unit isolated from the power supply to prevent electrical shock!

Do not operate the unit when fatigued or under the influence of drugs or alcohol. Do not leave the work area while equipment is energized or under pressure.

Turn off all equipment when equipment is not in use. Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards.

Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not kink or over bend hoses or use hoses to pull equipment.

Keep children and animals away from work area. Comply with all applicable safety regulations. Do not exceed the maximum operating pressure or the temperature of the part with lower nominal value of the system. See Technical Data in all equipment manuals.

Use fluids and solvents that are compatible with the wetted part of the system. See Technical Data in all equipment manuals. Read the manufacturer's instructions of the fluids and solvents. For more information on the material, request the safety data sheet (MSDS) from the distributor or dealer.

Check the equipment every day. Immediately repair or replace worn or damaged parts only with original spare parts of the manufacturer.

Make sure the equipment is classified and approved compliant with the standards of the environment where it is used. Use the equipment only for the intended use. Contact your distributor for more information.

Keep hoses and cables far from traffic areas, sharp edges, moving parts and hot surfaces. Do not bend or overbend the hoses or use the hose to pull the equipment.

To avoid severe burns do not touch hot fluid or equipment. Read MSDS's to know the specific hazards of the fluids you are using.

Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines. Prolonged contact with the treated product may cause skin irritation; always wear protective gloves during dispensing.

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Prolonged contact with the treated product may cause skin irritation; always wear protective gloves during dispensing.

Please refer to the safety data sheet for the product

Disconnect the unit from the mains, or use a dry insulator as protection while moving the electrocuted person far from any conductor. Do not touch the electrocuted person with bare hands until he/she is far from any conductor.

When operating the filtering system and in particular during dispensing, DO NOT SMOKE and do not use open flame.

Wear protective equipment that is: - suited to the operations that need to be performed; - resistant to cleaning products.

Safety shoes; Close-fitting clothing; Protective gloves; Safety goggles; Instruction manual.

Prolonged contact with the treated product may cause skin irritation; always wear protective gloves during dispensing.

Never touch the electric plug or socket with wet hands. Do not switch the dispensing system on if the network connection cable or important parts of the apparatus are damaged, such as the inlet/outlet pipe, nozzle or safety devices.

Replace the damaged pipe immediately. The electrical connection between the plug and socket must be kept well away from water.

Unsuitable extension leads can be dangerous. In accordance with current regulations, only extension cords that are labelled for outdoor use and have a sufficient conduction path should be used outdoors.

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5 PACKAGE CONTENTS/PRE-INSPECTION

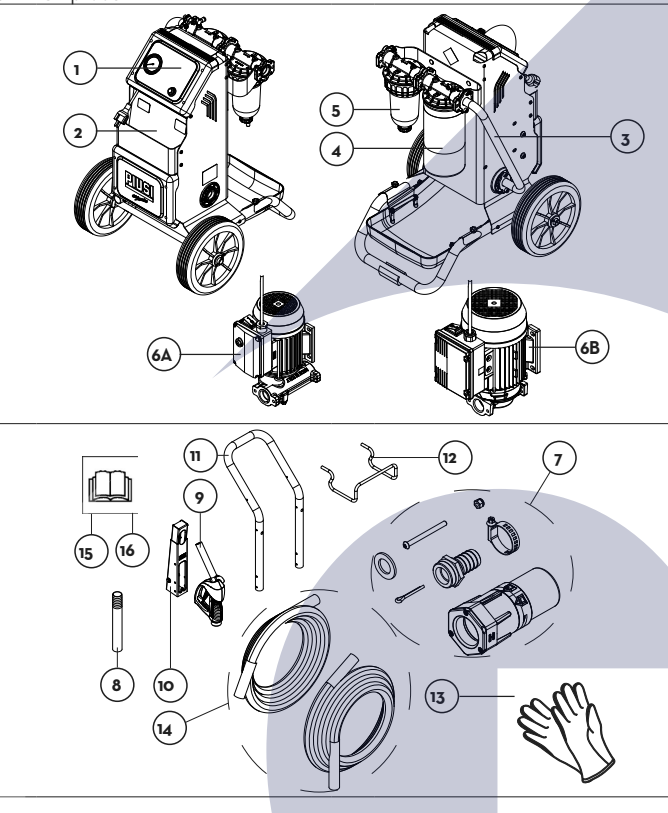
FOREWORD To open the packaging, use a pair of scissors or a cutter. Check that the following components provided as part of the equipment are available.

NOTE In the event that one or more of the components described below are missing from inside the package, please contact Piusi S.p.A. technical support.

ATTENTION Check that the data on the plate correspond to the desired specifications. In the event of any anomaly, contact the supplier immediately, indicating the nature of the defects. Do not use equipment which you suspect might not be safe.

5.1 COMPOSITION OF FILTROLL

- 1 Front part
2 Accessory pocket
3 Flared pipe
4 Water captor filter
5 Clear captor filter
6A Pump for Diesel fuel
6B Pump for lubricating oil
7 Small metal items kit
8 Oil probe
9 Diesel fuel nozzle
10 Nozzle Support
11 Handle
12 Pipe support
13 Protection gloves
14 Delivery and suction pipes
15 Filtrroll use and maintenance handbook
16 Pump use and maintenance handbook



6 MACHINE AND MANUFACTURER IDENTIFICATION

The filtering system comes with an identification plate; this is attached to the system and contains the following information: - type; - lot number / production year; - technical data; - use and maintenance handbook code.

Before installing, always make sure the type of filtering system is correct and suitable for the available power supply. (Voltage / Frequency)

ATTENTION Before installing, always make sure the type of filtering system is correct and suitable for the available power supply. (Voltage / Frequency)

Should this situation arise, please contact our support department and arrange to have the damaged or missing plates sent back and replaced where necessary.

Consult the user and maintenance manual. Protection gloves. Safety shoes. Safety goggles. Close-fitting clothing.

ATTENTION Never touch the electric plug or socket with wet hands. Do not switch the dispensing system on if the network connection cable or important parts of the apparatus are damaged, such as the inlet/outlet pipe, nozzle or safety devices.

Replace the damaged pipe immediately. The electrical connection between the plug and socket must be kept well away from water.

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7 TECHNICAL SPECIFICATIONS

Table with dimensions: Width 540 mm, Depth 584 mm, Height 1220 mm, Weight 35 Kg.

Table with technical specifications: FILTROLL DIESEL FUEL 230/50-60, FILTROLL DIESEL FUEL 12V DC, FILTROLL LUBE OIL, FILTROLL LUBE OIL. Columns include Power Supply Voltage (V), Frequency (Hz), Current supply (A) (\*), Power (W), Flow rate (l/min), Max. pressure (bar), and Giri (rpm).

8 INTENDED USE

INTENDED USE The filtering system FILTROLL was designed and built to dispense oil/diesel fuel. The filtering system FILTROLL should be used by observing the following conditions:

Max. temperature of dispensed product: +35°C/ 95°F. Min temperature of dispensed product: -10°C/ 12.2°F. Max. temperature of dispensed product permitted by materials: +40°C / +104°F.

Equivalent continuous sound pressure level at the workstation: 75 dB(A). Make sure that the pump operates within its nominal operating parameters.

\* DIESEL FUEL with a viscosity of between 2 and 5.35 cSt (at a temperature of 37.8°C/100°F). Minimum Flash Point (PM): 52°C/131°F. \* OIL with a VIS OSITY from 50 to 2000 cSt (at working temperature).

The system "FILTROLL" was not designed for dispensing petrol, flammable liquids with flash point 55°C/131°F or for operation in environments with potentially explosive atmosphere. The use in the above mentioned conditions is forbidden.

Room temperature: min. -20°C / max +60°C. Relative humidity: max 90%. The temperature limits shown apply to the pump components and must be respected to avoid possible damage or malfunction.

Depending on the model, the maximum acceptable variations from the electrical parameters are +/- 10% of the nominal value.

Power supply from lines with values that do not fall within the indicated limits could cause damage.

FLUIDS NOT PERMITTED: Petrol, Flammable liquids with pm <55°C, Water, Liquid food products, Corrosive chemical products, Solvents.

RELATED DANGERS: fire, explosion, fire, explosion, pump oxidation, contamination of the same pump corrosion, injury to persons, fire, explosion damage to gasket seals and/or overload (PANTHER DC).

It is absolutely forbidden to use the system for purposes different from those specified in section "Intended use". Do not operate the system for any purpose other than the purpose described within this manual; all other use is considered "IMPROPER" and will result in Piusi S.p.A. disclaiming any responsibility for damage to property, people, animals or to the system itself.

For optimal packaging, the filtering system "FILTROLL" is supplied partially assembled. The following parts shall be fitted by the user: - handle - nozzle - suction and delivery pipes - foot valve.

The final user can assemble and use FILTROLL only after reading this use and maintenance manual. Do not carry or handle FILTROLL while dispensing. Ensure the correct installation of equipment required for the correct functioning of the system; only use suitable accessories.

The use of accessories that are unsuitable and/or were not provided with the system is strictly prohibited. The use of unsuitable fluids is strictly prohibited. Piusi S.p.A. accepts no responsibility for damage to persons, property or the environment caused by failure to comply with this requirement.

Use FILTROLL in a well lit place in compliance with applicable regulations.

For any details about the pipes, see the summary table. For details about assembly and parts position, see the exploded view.

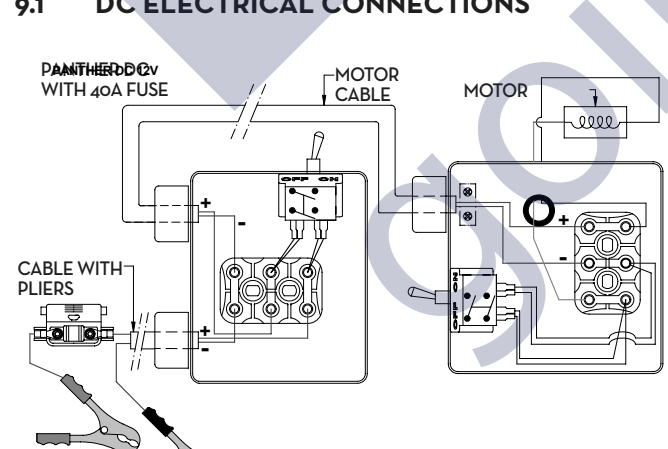
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9.1 DC ELECTRICAL CONNECTIONS



10 OPERATION AND USE

FOREWORD Directions on how to start and stop operation of the system are given below. During operation the motor may be hot; be careful.

ATTENTION Do not run the pump dry. This can cause serious damage to its components. Never start or stop the pump by connecting or cutting out the power supply.

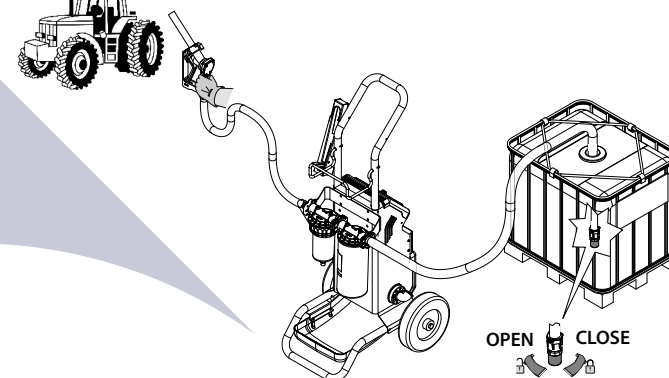
Operation of the pump without dispensing is only admitted for periods of no longer than 3 minutes.

WARNING We recommend that the pump remains switched off whenever the system is not in use.

PROCEDURE 1 Attach the pipe ends to the tanks. In the absence of an appropriate slot, solidly grasp the delivery pipe or the nozzle before beginning filtering.

2 Before starting the pump by pressing the "START/STOP" button, make sure the delivery pipe is inserted in the storage tank.

3 The by-pass valve allows functioning with delivery closed only for brief periods. Monitor the working pressure. If it exceeds 5 bar, empty the filter.



MAINTENANCE CONTROL Check that the labels and plates found on the filtering system do not deteriorate or become detached over time.

MEASURES TO BE TAKEN ONCE A WEEK ONCE A MONTH ATTENTION Check that the pipe connections are not loose to prevent any leaks. Check that the electrical supply cables are in good condition. For a correct pump maintenance, see the special use and maintenance documentation.

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12 TROUBLESHOOTING

Table with troubleshooting information: PROBLEM, POSSIBLE CAUSE, CORRECTIVE ACTION. Includes issues like 'THE MOTOR IS NOT TURNING', 'THE MOTOR TURNS SLOWLY WHEN STARTING', 'LOW OR NO FLOW RATE', 'INCREASED PUMP NOISE', 'LEAKAGE FROM THE PUMP BODY', 'REDUCED FILTERING STANDARD'.

13 DEMOLITION AND DISPOSAL

FOREWORD If the system needs to be disposed, the parts which make it up must be delivered to companies that specialize in the recycling and disposal of industrial waste and, in particular:

DISPOSING OF PACKING MATERIALS METAL PARTS DISPOSAL DISPOSAL OF ELECTRIC AND ELECTRONIC COMPONENTS

European Directive 2012/19/UE requires that all equipment marked with this symbol on the product and/or packaging not be disposed of together with non-differentiated urban waste.

The symbol indicates that this product must not be disposed of together with normal household waste. It is the responsibility of the owner to dispose of these products as well as other electric or electronic equipment by means of the specific refuse collection structures indicated by the government or the local governing authorities.

Disposing of RAEE equipment as household waste is strictly forbidden. Such wastes must be disposed of separately.

Any hazardous substances in the electrical and electronic appliances and/or the misuse of such appliances can have potentially serious consequences for the environment and human health.

In case of the unlawful disposal of said wastes, fines will be applicable as defined by the laws in force.

Other components, such as pipes, rubber gaskets, plastic parts and wires, must be disposed of by companies specialising in the disposal of industrial waste.

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Installazione uso e manutenzione IT Installation, use and maintenance EN

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7	PACKAGE CONTENTS/PRE-INSPECTION
8	COMPOSITION OF FILTRROLL
9	MACHINE AND MANUFACTURER IDENTIFICATION
10	PLATE POSITION
11	TECHNICAL SPECIFICATIONS
12	INTENDED USE
13	INSTALLATION
14	DC ELECTRICAL CONNECTIONS
15	OPERATION AND USE
16	MAINTENANCE
17	DISMANTLING AND DISPOSAL

## 1 CE DECLARATION OF CONFORMITY

The undersigned: Piusi S.p.A.  
Via Pionotti 16/A z.l. Rangavino  
46029 Suzzara - (MN) - Italy

DECLARES under its own responsibility that the machine described below:  
Description: **Filtering system for oil / Diesel fuel**  
Model: **FILTRROLL**  
Serial No.: refer to Lot Number shown on CE plate affixed to product  
Year of manufacture: refer to the year of production shown on the CE plate affixed to the product  
is in conformity with the legal provisions indicated in the directives:  
- **Machine Directive 2006/42/EC**  
- **Electromagnetic Compatibility Directive 2014/50/EU**  
The documentation is at the competent authority following motivated request at Piusi S.p.A. or following request sent to the email address: doc.tec@piusi.com

Suzzara, 20/04/2016

Otto Varini  
legal representative

## 2 GENERAL WARNINGS

**Important precautions**  
To ensure operator safety and to protect the pump from potential damage, workers must be fully acquainted with this instruction manual before performing any operation.

**Symbols used in the manual**  
The following symbols will be used throughout the manual to highlight safety information and precautions of particular importance.

**ATTENTION**  
This symbol indicates safe working practices for operators and/or potentially exposed persons.

**WARNING**  
This symbol indicates that there is risk of damage to the equipment and/or its components.

**NOTE**  
This symbol indicates useful information.

**Manual preservation**  
This manual should be complete and legible throughout its life. It should remain available to end users and specialist installation and maintenance technicians for consultation at any time.

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## 3 SAFETY INSTRUCTIONS

**ATTENTION**  
Mains - preliminary checks before installation  
Maintenance control

Before any checks or maintenance work are carried out, disconnect the power source.

**To help prevent fire and explosion:**  
Use equipment only in well ventilated area.  
Keep work area free of debris, including rags and spilled or open containers of solvent and gasoline.  
Do not plug or unplug power cords or turn lights on or off when flammable fumes are present.

Ground all equipment in the work area.  
Stop operation immediately if static sparking occurs or if you feel a shock. Do not use equipment until you identify and correct the problem.  
Keep a working fire extinguisher in the work area.

This equipment must be grounded. Improper grounding, setup or usage of the system can cause electric shock.

Turn off and disconnect power cord before servicing equipment.  
Connect only to a grounded electrical outlets.

Only use cables with grounded in accordance with local electrical codes. Extension cords should have a ground lead.  
Ensure ground prongs are intact on power and extension cords.  
Do not expose to rain. Store indoors.

Never touch the electric plug of socket with wet hands.  
Do not turn the dispensing system on if the power connection cord or other important parts of the apparatus are damaged, such as the inlet/outlet plumbing, dispensing nozzle or safety devices. Replace damaged components before operation.

Before each use check that the power connection cord and power plug are not damaged. If damaged, have power connection cord replaced before use by a qualified electrician.

The electrical connection between the plug and socket must be kept well away from water.

Unsuitable extension leads can be hazardous, in accordance with current regulations. Only extension cords that are labelled for outdoor use and have a sufficient conduction path should be used outdoors.

For safety reasons, we recommend that, in principle, the equipment be used only with a earth-leakage circuit breaker (max. 30 mA).

Electrical connections must use ground fault circuit interrupter (GFCI).

Installation operations are carried out with the box open and accessible electrical contacts. All these operations have to be done with the unit isolated from the power supply to prevent electrical shock!

Do not operate the unit when fatigued or under the influence of drugs or alcohol.

Do not leave the work area while equipment is energized or under pressure.

Turn off all equipment when equipment is not in use.

Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards.

Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.

Do not kink or over bend hoses or use hoses to pull equipment.

Keep children and animals away from work area. Comply with all applicable safety regulations.

Do not exceed the maximum operating pressure or the temperature of the part with lower nominal value of the system. See Technical Data in all equipment manuals.

Use fluids and solvents that are compatible with the wetted part of the system. See Technical Data in all equipment manuals. Read the manufacturer's instructions of the fluids and solvents. For more information on the material, request the safety data sheet (MSDS) from the distributor or dealer.

Check the equipment every year. Immediately repair or replace worn or damaged parts only with original spare parts of the manufacturer.

Make sure the equipment is classified and approved compliant with the standards of the environment where it is used.

Use the equipment only for the intended use. Contact your distributor for more information.

Keep hoses and cables far from traffic areas, sharp edges, moving parts and hot surfaces.

Do not bend or over bend the hoses or use the hose to pull the equipment.

To avoid severe burns do not touch hot fluid or equipment.

Read MSDS's to know the specific hazards of the fluids you are using.

Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.

Prolonged contact with the treated product may cause skin irritation; always wear protective gloves during dispensing.

Disconnect the unit from the mains, or use a dry insulator as protection while moving the electrocuted person far from any conductor. Do not touch the electrocuted person with bare hands until he/she is far from any conductor. Ask qualified and trained people for help immediately.

When operating the filtering system and in particular during dispensing, DO NOT SMOKE and do not use open flame.

Wear protective equipment that is:  
- suited to the operations that need to be performed;  
- resistant to cleaning products.Safety shoes;  
Close-fitting clothing;  
Protective gloves;  
Safety goggles.  
Instruction manual.

Prolonged contact with the treated product may cause skin irritation; always wear protective gloves during dispensing.

Never touch the electric plug or socket with wet hands.  
Do not switch the dispensing system on if the network connection cable or important parts of the apparatus are damaged, such as the inlet/outlet pipe, nozzle or safety devices. Replace the damaged plug immediately.

Before each use, check that the network connection cable and power plug are not damaged. Have the network connection cable replaced immediately by a qualified electrician.

The electrical connection between the plug and socket must be kept well away from water.

Unsuitable extension leads can be dangerous. In accordance with current regulations, only extension cords that are labelled for outdoor use and have a sufficient conduction path should be used outdoors.

For safety reasons, we recommend that, in principle, the equipment be used only with a earth-leakage circuit breaker (max. 30 mA).

Consult the user and maintenance manual

Safety shoes

Safety goggles

Close-fitting clothing

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Safety shoes

## 5 PACKAGE CONTENTS/PRE-INSPECTION

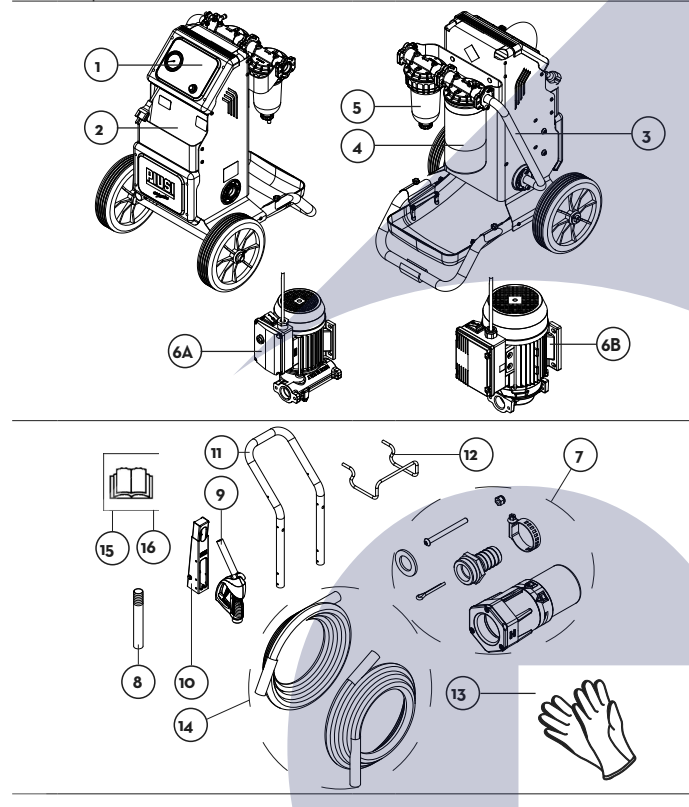
**FOREWORD**  
To open the packaging, use a pair of scissors or a cutter. Check that the following components provided as part of the equipment are available:

**NOTE**  
In the event that one or more of the components described below are missing from inside the package, please contact Piusi S.p.A. technical support.

**ATTENTION**  
Check that the data on the plate correspond to the desired specifications. In the event of any anomaly, contact the supplier immediately, indicating the nature of the defects. Do not use equipment which you suspect might not be safe.

## 5.1 COMPOSITION OF FILTRROLL

- |    |                          |    |  |
|----|--------------------------|----|--|
| 1  | Front part               | 9  | Diesel fuel nozzle                     |
| 2  | Accessory pocket         | 10 | Nozzle Support                         |
| 3  | Flared pipe              | 11 | Handle                                 |
| 4  | Water captor filter      | 12 | Pipe support                           |
| 5  | Clear captor filter      | 13 | Protection gloves                      |
| 6A | Pump for Diesel fuel     | 14 | Delivery and suction pipes             |
| 6B | Pump for lubricating oil | 15 | Filtrroll use and maintenance handbook |
| 7  | Small metal items kit    | 16 | Pump use and maintenance handbook      |
| 8  | Oil probe                |    |  |



## 6 MACHINE AND MANUFACTURER IDENTIFICATION

The filtering system comes with an identification plate; this is attached to the system and contains the following information:

- type;
- lot number / production year;
- technical data;
- use and maintenance handbook code.

**ATTENTION**  
Before installing, always make sure the type of filtering system is correct and suitable for the available power supply. (Voltage / Frequency)

## 6.1 PLATE POSITION

The filtering system is equipped with decals and/or plates to provide operators with the necessary important information. Make sure that these do not deteriorate or become detached over time.

The final user can assemble and use FILTRROLL only after reading this use and maintenance manual. Do not carry or handle FILTRROLL while dispensing. Ensure the correct installation of equipment required for the correct functioning of the system; only use suitable accessories.

The use of accessories that are unsuitable and/or were not provided with the system is strictly prohibited. The use of unsuitable fluids is strictly prohibited. Piusi S.p.A. accepts no responsibility for damage to persons, property or the environment caused by failure to comply with this requirement.

Use FILTRROLL in a well lit place in compliance with applicable regulations.

For any details about the pipes, see the summary table.

For details about assembly and parts position, see the exploded view.

Consult the user and maintenance manual

Safety shoes

Safety goggles

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## 7 TECHNICAL SPECIFICATIONS

Dimensions	
Width	540 mm
Depth	584 mm
Height	1220 mm
Weight	35 Kg

Type						
FILTRROLL DIESEL FUEL 230/50-60	230	50-60	3-6	350-600	56	2,8
FILTRROLL DIESEL FUEL 12V DC	12	DC	35	300	56	2,5
FILTRROLL LUBE OIL	230	50	4,6	750	25	4,6
FILTRROLL LUBE OIL	230	60	4,6	750	25	4,6

## 8 INTENDED USE

**INTENDED USE**  
The filtering system FILTRROLL was designed and built to dispense oil/diesel fuel.

The filtering system FILTRROLL should be used by observing the following conditions:

Max. temperature of dispensed product: +35°C / 95°F  
Min. temperature of dispensed product: -10°C / 12°F  
Max. temperature of dispensed product permitted by materials: +104°F.

Equivalent continuous sound pressure level at the workstation: 75 dB(A)

Make sure that the pump operates within its nominal operating parameters.

\* DIESEL FUEL with a viscosity of between 2 and 5,35 cSt (at a temperature of 37,8°C/100°F)

Minimum Flash Point (PM): 55°C/131°F

\* OIL with a VISCOSITY from 50 to 2000 cSt (at working temperature)

The system "FILTRROLL" was not designed for dispensing petrol, flammable liquids with flash point 55°C/131°F or for operation in environments with potentially explosive atmosphere. The use in the above mentioned conditions is forbidden.

Room temperature: min. -20°C / max +60°C  
Relative humidity: max 90%

The temperature limits shown apply to the pump components and must be respected to avoid possible damage or malfunction.

Depending on the model, the maximum acceptable variations from the electrical parameters are +/- 10% of the nominal value.

**ATTENTION**  
Power supply from lines with values that do not fall within the indicated limits could cause damage.

**FLUIDS NOT PERMITTED**  
- Petrol  
- Flammable liquids with pm <55°C  
- Water  
- Liquid food products  
- Corrosive chemical products  
- Solvents

**RELATED DANGERS**  
- fire, explosion  
- fire, explosion  
- pump oxidation  
- contamination of the same pump corrosion  
- injury to persons  
- fire, explosion  
- damage to gasket seals  
- motor overload (PANTHER DC)

**ATTENTION**  
It is absolutely forbidden to use the system for purposes different from those specified in section "Intended use".

Do not operate the system for any purpose other than the purpose described within this manual; all other use is considered "IMPROPER" and will result in Piusi S.p.A. disclaiming any responsibility for damage to property, people, animals or to the system itself.

## 9 INSTALLATION

**FOREWORD**  
For optimal packaging, the filtering system "FILTRROLL" is supplied partially assembled. The following parts shall be fitted by the user:

- handle
- nozzle
- suction and delivery pipes
- foot valve.

The final user can assemble and use FILTRROLL only after reading this use and maintenance manual. Do not carry or handle FILTRROLL while dispensing. Ensure the correct installation of equipment required for the correct functioning of the system; only use suitable accessories.

The use of accessories that are unsuitable and/or were not provided with the system is strictly prohibited. The use of unsuitable fluids is strictly prohibited. Piusi S.p.A. accepts no responsibility for damage to persons, property or the environment caused by failure to comply with this requirement.

Use FILTRROLL in a well lit place in compliance with applicable regulations.

For any details about the pipes, see the summary table.

For details about assembly and parts position, see the exploded view.

Consult the user and maintenance manual

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## 10 OPERATION AND USE

**FOREWORD**  
Directions on how to start and stop operation of the system are given below.

**ATTENTION**  
During operation the motor may be hot: be careful.

**WARNING**  
Do not run the pump dry. This can cause serious damage to its components. Never start or stop the pump by connecting or cutting out the power supply.

**ATTENTION**  
Operation of the pump without dispensing is only admitted for periods of no longer than 3 minutes.

**WARNING**  
We recommend that the pump remains switched off whenever the system is not in use.

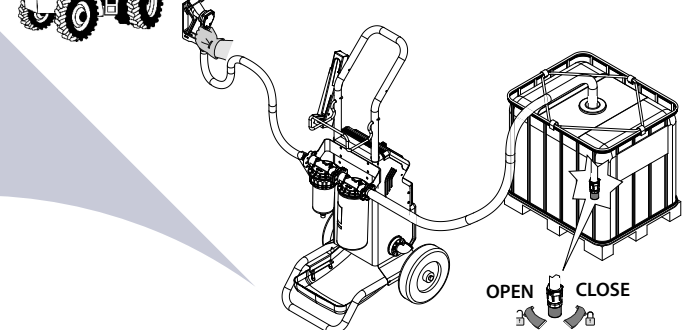
**PROCEDURE**  
1 Attach the pipe ends to the tanks. In the absence of an appropriate slot, solidly grasp the delivery pipe or the nozzle before beginning filtering.

2 Before starting the pump by pressing the "START/STOP" button, make sure the delivery pipe is inserted in the storage tank.

3 Enable starting and begin filtering.

The by-pass valve allows functioning with delivery closed only for brief periods.

Monitor the working pressure. If it exceeds 5 bar, empty the filter.



## 11 MAINTENANCE

**SAFETY INSTRUCTIONS**  
The filtering system was designed and built to require a minimal amount of maintenance.

Before carrying out any maintenance work, disconnect the filtering system from any electrical and hydraulic power source.

During maintenance, the use of the personal protective equipment (PPE) is compulsory.

In any case always bear in mind the following basic recommendations for a good functioning of the filtering system:

Tampering with the machine could lead to a loss of performance and danger to persons and/or things and may result in the warranty being voided.

Check that the labels and parts found on the filtering system do not deteriorate or become detached over time.

- Check that the pipe connections are not loose to prevent any leaks.

- Check that the electrical supply cables are in good condition.

For a correct pump maintenance, see the special use and maintenance documentation.

Consult the user and maintenance manual

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## 12 TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
THE MOTOR IS NOT TURNING	Lack of electric power	Check the electrical connections and the safety systems
	Rotor jammed	Check for possible damage or obstruction of the rotating components
	The motor protecting thermal switch has tripped	Wait until the motor cools, verify that it starts again, look for the cause of overheating
THE MOTOR TURNS SLOWLY WHEN STARTING	Motor problems	Contact the Service Department
	Low voltage in the electric power line	Bring the voltage back within the anticipated limits
	Excessive oil viscosity (ONLY VISCOMAT 70)	Verify the oil temperature and warm it to reduce the excessive viscosity
LOW OR NO FLOW RATE	Low level in the suction tank	Refill the tank
	Foot valve blocked	Clean and/or replace the valve
	Filter clogged	Clean the filter
	Excessive suction pressure	Lower the pump with respect to the level of the tank or increase the cross-section of the piping
	High loss of head in the delivery circuit (working with the by-pass open)	Use shorter piping or of greater diameter
	By-pass valve blocked	Dismantle the valve, clean and/or replace it
INCREASED PUMP NOISE	Air entering the pump or the suction piping	Check the seals of the connections
	A narrowing in the suction piping	Use piping suitable for working under suction pressure
	Low rotation speed	