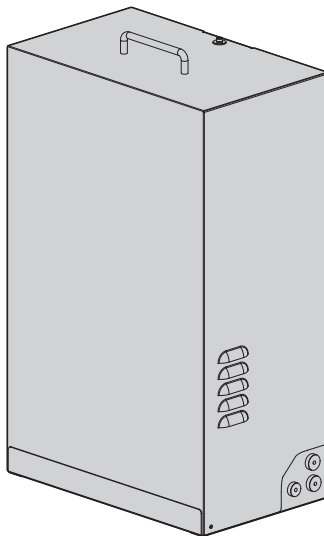




WASNX

Washer pump with solenoid valve for stainless steel products



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1 About this manual

Read all the documentation supplied carefully before installing and using this product. Keep the manual in a convenient place for future reference.

1.1 Typographical conventions



DANGER!

High level hazard.

Risk of electric shock. Disconnect the power supply before proceeding with any operation, unless indicated otherwise.



CAUTION!

Medium level hazard.

This operation is very important for the system to function properly. Please read the procedure described very carefully and carry it out as instructed.



INFO

Description of system specifications.

We recommend reading this part carefully in order to understand the subsequent stages.

2 Notes on copyright and information on trademarks

The mentioned names of products or companies are trademarks or registered trademarks.

3 Safety rules



CAUTION! The electrical system to which the unit is connected must be equipped with a 15A max automatic bipolar circuit breaker. The minimum distance between the circuit breaker contacts must be 3mm (0.1in). The circuit breaker must be provided with protection against the fault current towards the ground (differential) and the overcurrent (magnetothermal).



CAUTION! Device installation and maintaining must be performed by specialist technical staff only.



This device must be earthed using the solenoid valve connector.

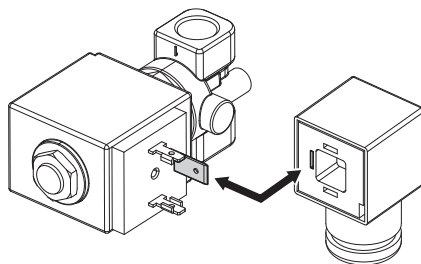


Fig. 1

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Make sure that all the devices are suitable for the application and for the environment in which they will be installed.

- When installing the devices make sure the system and installer personnel are absolutely safe.
- Choose an installation site that is strong enough to sustain the weight of the device, also bearing in mind particular environmental aspects, such as exposure to strong winds.
- We strongly recommend using only approved brackets and accessories during installation.
- Installation category (also called Overvoltage Category) specifies the level of mains voltage surges that the equipment will be subjected to. The category depends upon the location of the equipment, and on any surge voltage protection provided. Equipment in an industrial environment, directly connected to major feeders/short branch circuits, is subjected to Installation Category III. If this is the case, a reduction to Installation Category II is required. This can be achieved by use of an insulating transformer with an earthed screen between primary and secondary windings, or by fitting UL listed Surge Protective Devices (SPDs) from live to neutral and from neutral to earth. Listed SPDs shall be designed for repeated limiting of transient voltage surges and the following rated operation conditions: Type 2 (SPDs permanently connected to the power network and intended for installation on the load side of the service equipment); Nominal Discharge Current (In) 20kA min. For example: FERRAZ SHAWMUT, STT2240SPG-CN, STT2BL240SPG-CN rated 120Vac/240Vac, (In=20kA). Maximum distance between installation and reduction is 5m.
- The manufacturer declines all responsibility for any damage caused by an improper use of the appliances mentioned in this manual. Furthermore, the manufacturer reserves the right to modify its contents without any prior notice. The documentation contained in this manual has been collected and verified with great care. The manufacturer, however, cannot take any liability for its use. The same thing can be said for any person or company involved in the creation and production of this manual.
- This device was designed to be permanently secured and connected on a building or on a suitable structure. The device must be permanently secured and connected before any operation.
- Since the user is responsible for choosing the surface to which the device is to be anchored, we do not supply screws for attaching the device firmly to the particular surface. The installer is responsible for choosing screws suitable for the specific purpose on hand.
- Before starting any operation, make sure the power supply is disconnected.
- A power disconnect device must be included in the electrical installation, and it must be very quickly recognizable and operated if needed.
- Equipment intended for installation in Restricted Access Location performed by specialist technical staff.
- Make sure that the connected devices are completely compatible and suitable for use.
- Make sure the operating temperatures are compatible with the devices.
- Any change that is not expressly approved by the manufacturer will invalidate the warranty.

- The device must only be opened by specialist technical staff. Tampering with the device will invalidate the guarantee.
- Be careful not to use cables that seem worn or old.
- The device must be properly connected to the earth circuit.
- The device can only be considered to be switched off when the power supply has been disconnected and the connection cables to other devices have been removed.
- Before powering the device install an overload protection device in the building electrical system.
- For technical services, consult only and exclusively authorized technicians.
- Keep this handbook carefully; it must be available for consultation on the installation site.
- Never, under any circumstances, make any changes or connections that are not shown in this handbook. Improper use of the appliance can cause serious hazards, risking the safety of personnel and of the installation.
- Use only VIDEOTEC original spare parts.

4 Identification

4.1 Product description and type designation

The WASNX washer pump is an important element for effective video surveillance because it guarantees sharp images in all environmental conditions and reduces the need for maintenance.

The WASNX system is designed to operate in special environments such as marine, industrial, chemical and where the external conditions are highly corrosive.

The wash system is also compatible with third-party products.

The kit includes a stainless steel 10-litre tank with solenoid valve.

4.2 Product marking

See the label attached to the product.

Product marking is also seen inside the product, on the label positioned as illustrated in the figure.

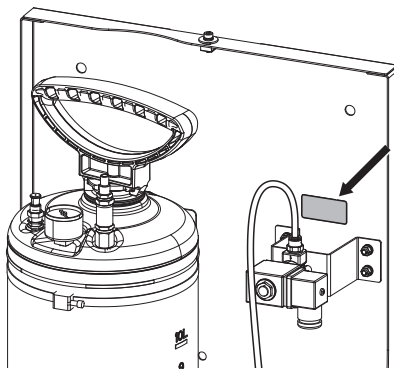


Fig. 2

5 Preparing the product for use

5.1 Unpacking

When the product is delivered, make sure that the package is intact and that there are no signs that it has been dropped or scratched.

If there are obvious signs of damage, contact the supplier immediately.

When returning a faulty product we recommend using the original packaging for shipping.

Keep the packaging in case you need to send the product for repairs.

5.2 Safely disposing of packaging material

The packaging material can all be recycled. The installer technician will be responsible for separating the material for disposal, and in any case for compliance with the legislation in force where the device is to be used.

5.3 Contents

Check the contents to make sure they correspond with the list of materials as below:

- Glass wash system
- Bolts and screws
- Washer semi-rigid pipe (with nozzle)
- Hydraulic joints
- Delivery pipe
- Instruction manual

5.4 Preparatory work before installation

5.4.1 Product opening

Unscrew the 2 side screws to open the cover.

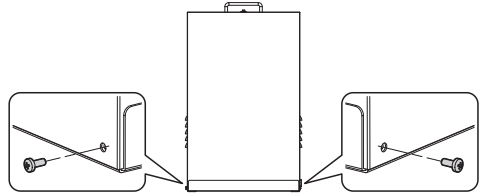


Fig. 3

Unscrew the safety screw (01) and lift the casing (02).

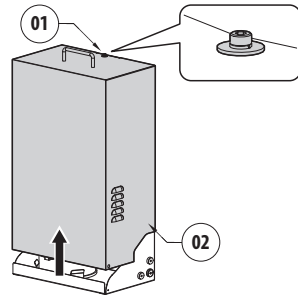


Fig. 4

5.4.2 Drilling the box (optional)

There are 2 holes on the side of the product, protected by sealing rings. The 2 holes enable passage of the power supply cable of the solenoid valve and the delivery pipe. Additional holes can be made at the base or on the other side. The holes should be protected by sealing rings.

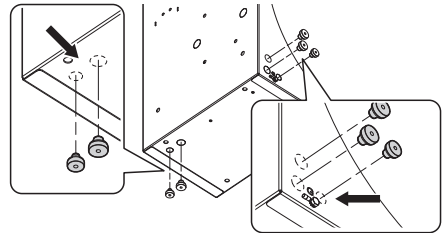


Fig. 5

5.4.3 Assembly of the seal rings (optional)

⚠ During assembly, be careful not to damage the rubber and thereby reduce its airtightness.

Insert the conical part of the sealing ring in the hole. Tighten the conical part of the sealing ring with a pliers or a similar tool.

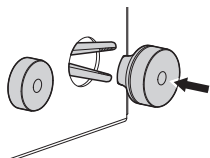


Fig. 6

Pull the sealing ring allowing it to pass through the hole until the conical part is completely out. In the final position, the sealing ring should completely close the passage hole.

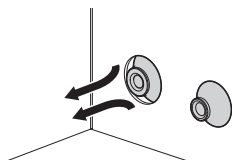


Fig. 7

RATIO BETWEEN THE DIMENSIONS OF THE SEALING RINGS AND THE DIAMETER OF THE USABLE CABLES		
Sealing ring	Ø passage hole (mm)	Ø cable (mm)
M16	16.5	From 5 up to 9
M20	20.5	From 8 up to 12

Tab. 1

5.4.4 Assembly on supports

The product can be fastened directly to the wall or the floor using the holes present.

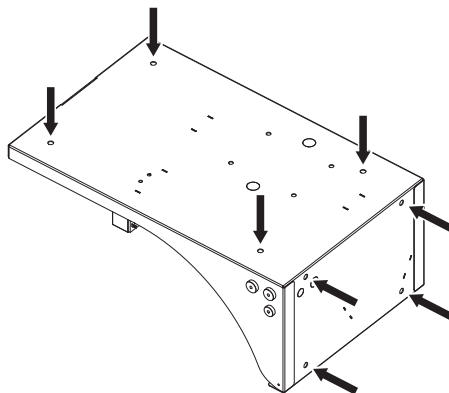


Fig. 8

The box can also be assembled on a pole collar or corner adaptor module.

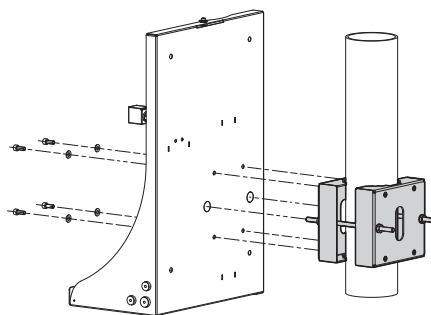


Fig. 9 Pole mounting.

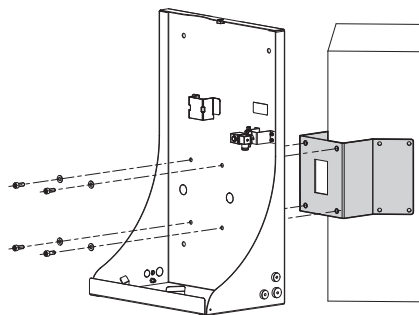


Fig. 10 Fastening with corner adaptor module.

6 Installation

⚠ Electrical connections must be performed with the power supply disconnected and the circuit-breaker open.

6.1 Installation and loading of the pump

⚠ We recommend filling the tank with water at ambient temperature. If using the pump at temperatures below 3°C (37.4°F) add some glass cleaner antifreeze liquid to the water.

During installation or maintenance operations of the pump, you can leave the tank in place or remove it. To remove the tank (01) loosen the metal clips (02) and release the connection pipe (03) by exerting pressure on the fast connection joint (04).

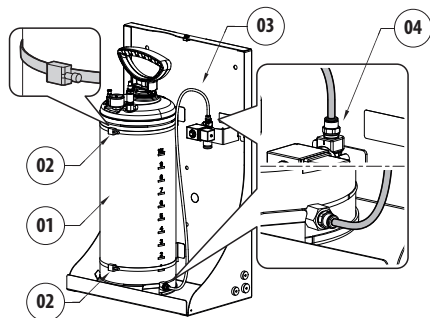


Fig. 11

Reduce any residual pressure in the tank using the safety valve.

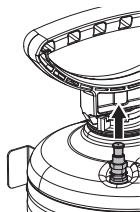


Fig. 12

Undo the top body of the pump (01) by turning it anti-clockwise and removing it. Fill the tank (02).

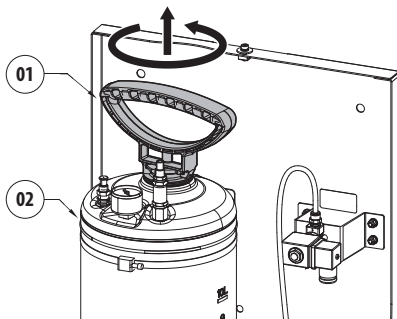


Fig. 13

Pressurise the tank pumping with the handle until the indicated pressure is reached: 4Bar (without accessories), 6Bar (antistatic water delivery pipe, 30m (98ft), WEXTUB30). Turn the handle on the body of the pump to its safety position.

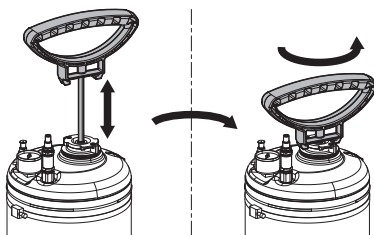


Fig. 14

Pass the delivery pipe (01) through the sealing ring (02). Connect the delivery pipe to the solenoid valve (fast connector joint).

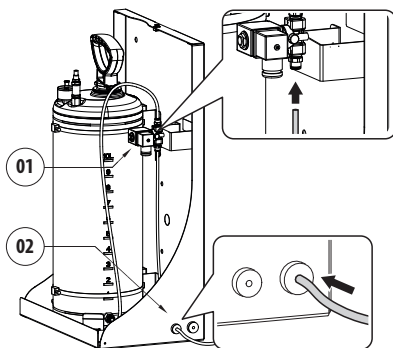


Fig. 15

6.2 Connecting the power supply

The device can be provided with different power supply voltages. The power supply voltage is indicated on the product identification label. (4.2 Product marking, page 5).

6.2.1 24Vac power line connection

i For further information, refer to the PTZ unit/Camera manual.

The solenoid valve can be directly activated using the PTZ unit/Camera RL2 relay.

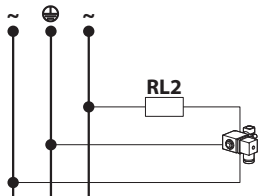


Fig. 16 24Vac power supply.

6.2.2 120Vac and 230Vac power line connection

⚡ Use an auxiliary relay with adequate electrical specifications for the power supply voltage and absorption of the wash system.

⚠ The relay (RL2 on the PTZ unit board) has the characteristics outlined below.

- Working voltage: 30Vac max or 60Vdc max.
- Nominal current: 1A max.

i For further information, refer to the PTZ unit manual.

The solenoid valve cannot be directly activated using the PTZ unit RL2 relay.

You also need to use an auxiliary relay with NO (Normally Open) contact.

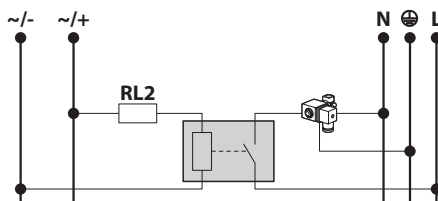


Fig. 17 Power supply 120Vac or 230Vac.

6.2.3 Connection of the solenoid valve

Pass the power supply cable through the sealing ring.

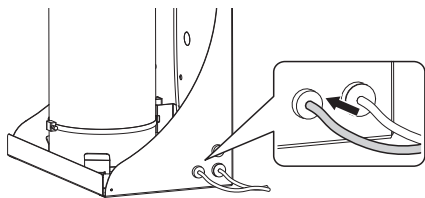


Fig. 18

Connect the power supply cable to the connector as described below.

Unscrew the screw and remove the connector.

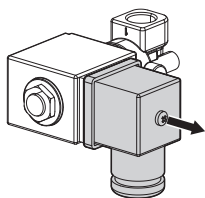


Fig. 19

Remove the terminal block from the connector hood.

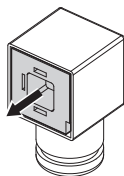


Fig. 20

Unscrew and remove the cable gland. Insert the power supply cable and connect it to the terminal block.

Re-insert the terminal block in the connector and tighten the cable gland. Connect the connector to the solenoid valve and screw in the screw.

i Use cables with the characteristics outlined below.

- Diameter: from 6mm (0.24in) up to 8mm (0.3in).
- Section (single conductor): 1.5mm² (15AWG) max.

6.3 Product closure

After installation and wiring, close the product.

6.4 Washer installation (NXPTZ range)

Fasten the support (01) onto the PTZ unit body with the metal clip (02) provided.

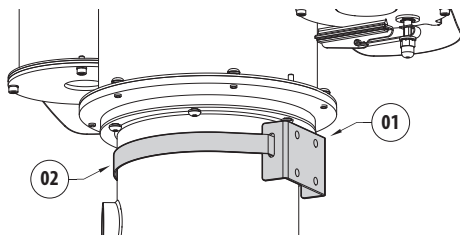


Fig. 21

Shorten the semi-rigid washer pipe (01) as needed. Unscrew the nut (02) from the joint and slide it along the pipe. Insert the end of the pipe into the ogive (03).

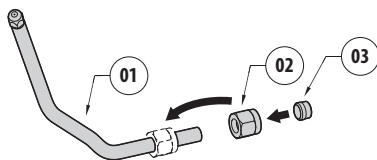


Fig. 22

Lock the nut to the coupling.

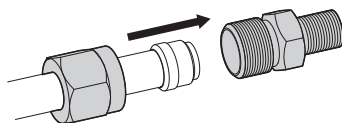


Fig. 23

Tighten the delivery joint.

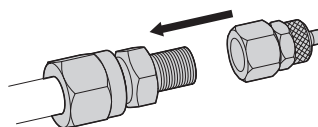


Fig. 24

Unscrew the knurled nut (01) from the delivery joint (02). Insert the knurled nut on the delivery pipe (03). Insert the end of the delivery pipe into the spinner (04). Lock the nut to the coupling.

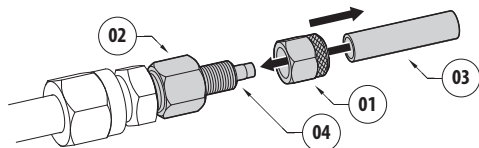


Fig. 25

Fasten the semi-rigid pipe (01) to the washer support using the plate (02), the screws (03) and the washers (04) supplied.

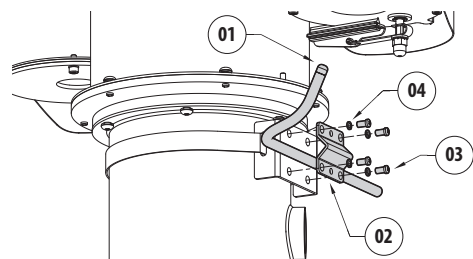


Fig. 26

To calibrate the jet, orientate the nozzle towards the window of the housing.

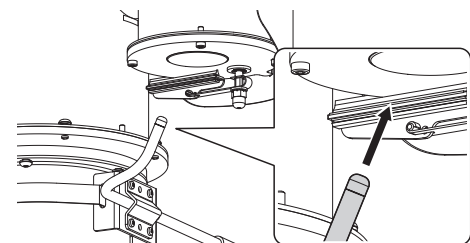


Fig. 27

6.4.1 Installation examples

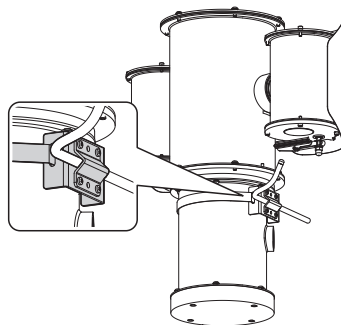


Fig. 28 PTZ unit fastening.

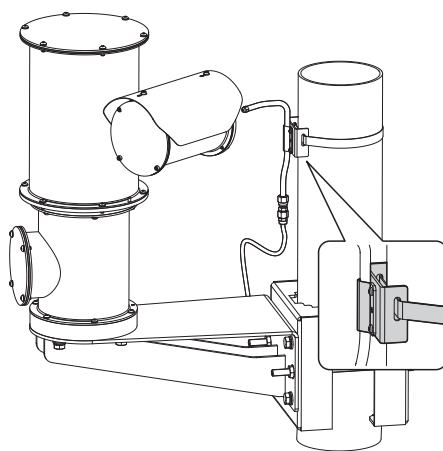


Fig. 29 Pole mounting.

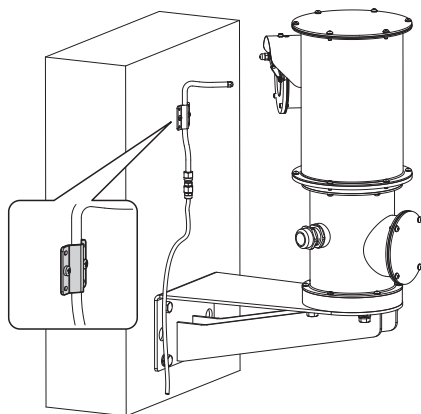


Fig. 30 Wall mounting.

6.5 Washer installation (NVX range)

The camera, if equipped with a wiper, can be equipped with an external pump that provides water to clean the glass.

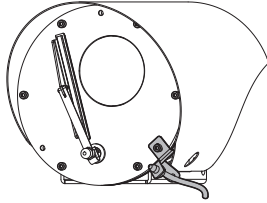


Fig. 31

To complete installation of the washing system, use the kit supplied with the camera.

Insert the head of the nozzle (01) on the support (02) by tightening the nut (03).

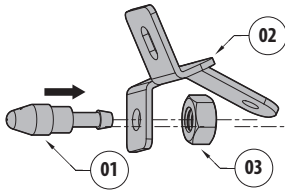


Fig. 32

Fasten the nozzle and the support assembled by using one of the accessory holes (01) on the front of the housing. Tighten the screw and the washer (02). Insert the delivery pipe of the nozzle (03). Secure the delivery pipe to the support with a clip (04).

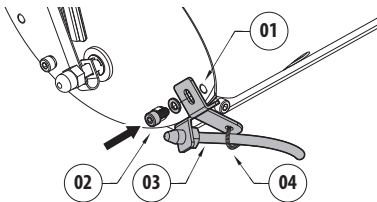


Fig. 33

7 Instructions for normal operation

7.1 Pump manual activation

Close the contact (button, switch, etc.) to activate the wash system. Open the contact to shut-off water supply.

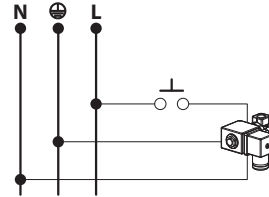


Fig. 34

8 Maintenance

8.1 Replacing the solenoid valve



Maintenance must be performed with the power supply disconnected and the circuit-breaker open.

Dismantle the support plate (01). Dismantle the solenoid valve (02) from the support plate and replace it.

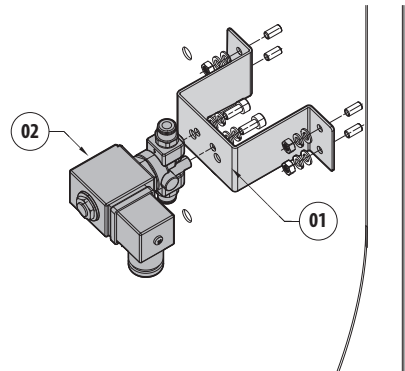



Fig. 35

9 Cleaning

 **Frequency will depend on the type of environment in which the product is used.**

The device should be cleaned using a damp cloth; compressed air must not be used.

10 Information on disposal and recycling

The European Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE) mandates that these devices should not be disposed of in the normal flow of municipal solid waste, but they should be collected separately in order to optimize the recovery stream and recycling of the materials that they contain and to reduce the impact on human health and the environment due to the presence of potentially hazardous substances.



The symbol of the crossed out bin is marked on all products to remember this.

The waste may be delivered to appropriate collection centers, or may be delivered free of charge to the distributor where you purchased the equipment at the time of purchase of a new equivalent or without obligation to a new purchase for equipment with size smaller than 25cm (9.8in).

For more information on proper disposal of these devices, you can contact the responsible public service.

11 Technical data

11.1 Mechanical

Materials

- External enclosure: Stainless steel AISI 316L
- Antistatic water delivery pipe: Antistatic plastic

Antistatic water delivery pipe (supplied)

- Length: 20m (66ft)

Pressure: 6bar max

Delivery head

- 20m (66ft), 4bar
- 30m (98ft), 6bar (with accessory tube, WEXTUB30)

Water tank capacity: 10l (2.6gal)

Dimensions (WxHxL): 429x697x255mm
(16.9x27.4x10in)

Unit weight: 18kg (40lb)

11.2 Electrical

Supply voltage/Current consumption

- 230Vac, 0.07A, 50/60Hz
- 120Vac, 0.13A, 50/60Hz
- 24Vac, 0.7A, 50/60Hz

11.3 Environment

For indoors and outdoors installation

Operating temperature of solenoid valve: from -20°C (-4°F) up to +60°C (140°F)

Operating temperature of device: depending on the solidification temperature of the liquid

11.4 Certifications

Electrical safety (CE): EN60950-1, EN62368-1

Electromagnetic compatibility (CE): EN61000-6-2, EN61000-6-3

Outdoor installation (CE): EN60950-22

IP protection degree (EN60529):

- IP65 (solenoid valve only, enclosure not rated)

EAC certification

12 Technical drawings



The indicated measurements are expressed in millimetres.

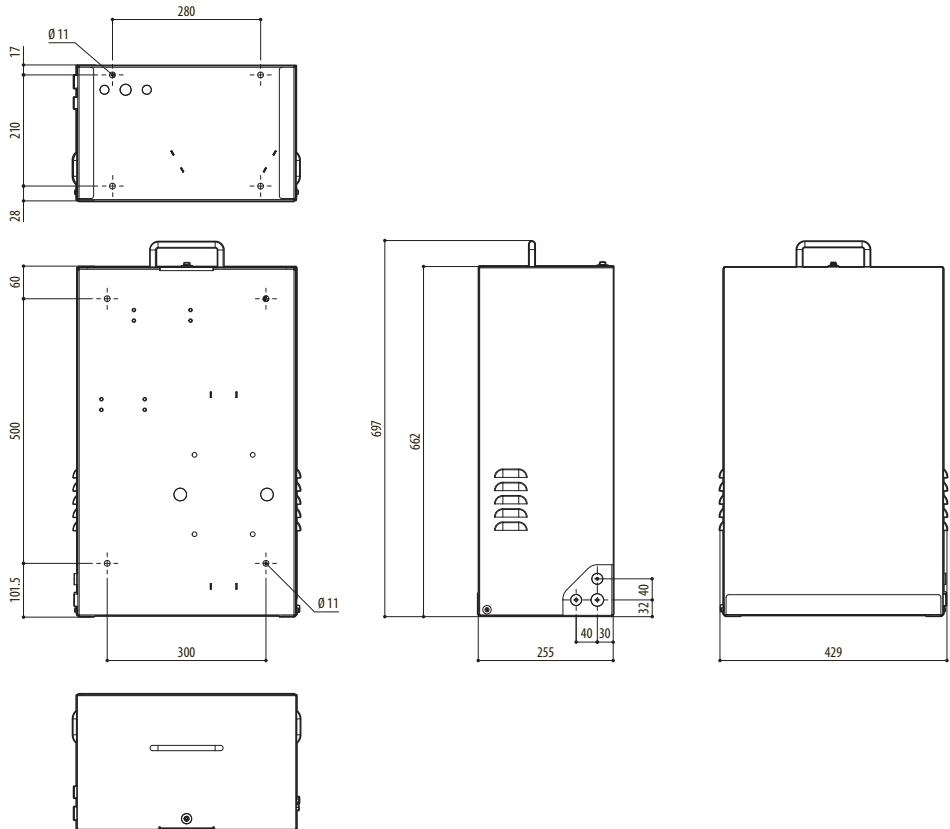


Fig. 36 WASNX.



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