

WP Series

Washer Systems with Integral Pump



Installation manual

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DESCRIPTION

The **WP** washer systems series has been designed to operate on camera housings with wash wiper system. 5, 10, 25 litres tanks are available with 10 and 15 metres max delivery head and 24 VAC, 110 VAC, 240 VAC supply voltage, to meet every installation requirement.

The units can be controlled using direct supply voltage, a 24VAC signal (such as the RX250DC telemetry receiver output) or an open collector signal input. A float switch that prevents the pump from running dry and gives an empty tank output alarm is available as option.

CODING

Meaning	Washer System	Capacity	Delivery height	Activation	Float switch	Frame/Cabinet	Supply Voltage
Example	WP	10	10m	D	X	F	24

WP: washer system
5 litres
10 litres
25 litres
10m: 10 metres
15m: 15 metres
D: direct
V: relay interface – 24VAC voltage
C: dry contact/open collector (NPN) interface
S: float switch
X: no float switch
F: frame
C: cabinet
24 VAC
110 VAC
230 VAC

Washer system (WP), 10 litres (10), 10 metres (-10m), direct activation through supply voltage (-D), without float switch (X), enclosed in a frame (F) and with 24 VAC supply voltage (/24)

The cabinet is not available for 25 litres tank systems. The 15 metres pump is only available for 25 litres tank systems. Every other configuration is available.

PRELIMINARY REMARKS

	Prior to installation and operation, read carefully all instructions the in this manual and heed all warnings.
	Unpack this equipment and handle it carefully. If the package appears to be damaged, notify the shipper immediately.
	Use the original packaging to transport the unit. Disconnect power supply before moving it. In case of returning the equipment, the original packaging must be used.
	Make sure that the installation surface can support at least four times the weight of the unit in normal operating conditions. In case of excessive external stress (e.g. vibration, strong winds or impact), the equipment may need additional means of protection.
	Proper stainless steel hardware should be carefully chosen to fasten the unit to the surfaces.
	The internal pump must not run dry to prevent its failure. A float switch option with an empty tank alarm is available to prevent such damages.
	Use caution when lifting and assembling the unit. It is recommended that non-slip protective gloves be worn during installation. The unit could bear sharp edges.
	The junction box must be tightly closed when operating. Tightening/loosing the screws using automatic tools such as drill drivers may result in damaged threads.
	The unit is intended to be used with water or with water solutions: denser mixtures could obstruct the nozzle. If the solution used has residual, it must be filtered before use. Keep the unit empty until the end of the installation.
	This equipment has been designed to fit in harsh environments requiring little or no maintenance. Suggested inspection interval is 6 months, but extremely harsh environments may require more frequent inspection and maintenance checks.
Check cables, electrical connections and mounting hardware for integrity and tightness. Replace or tighten any damaged/loose part.	
Operating temperature: -20° +55° C (-4° +131° F).	

CERTIFICATIONS

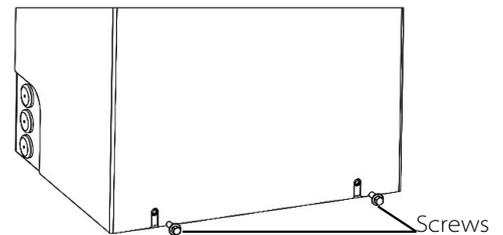
Weatherproof standard: IP66 (junction box)
 2004/108/EC (EMC – Electromagnetic Compatibility)
 2006/95/EC (LVD – Safety)

	<p>Before performing any operation, turn off the power. The installation of the unit can be performed only by qualified personnel in accordance with the regulations in force. Do not connect the unit to a supply circuit unless the installation is completed.</p>
	<p>Check carefully the supply voltage marked on the label. Incorrect Power Supply Voltage may damage the unit. Do not overload the terminal connection, as it may cause a fire or electrical shock hazard.</p>
	<p>An all-pole mains switch with an opening distance between the contacts at least 3 mm in each pole must be incorporated in the electrical installation. The switch must be equipped with protection against the fault current towards the ground (differential) and the overcurrent (magnetothermal, maximum 15A). It must be very quickly recognizable and readily accessible. A suitable blow fuse must also be installed for protection.</p>
	<p>For connection to the mains, use a multipolar cable having minimum $3 \times 1,5 \text{ mm}^2$ (15 AWG). The main cable must be at least protected by an ordinary PVC sheath.</p>
	<p>Fasten all the cables inside the housing with cables ties or other fixing means to avoid the electrical contact with surrounding parts in case that terminal blocks screw off.</p>
	<p>Electrical connections (such as plugs and cords) and the water hose must be protected from potential hazardous environmental factors (e.g. foot traffic, hitting objects).</p>
	<p>Ensure that the unit case is properly earthed, connecting all the earth ground studs. Earth cable should be about 10mm longer than the other cables on the connector, in such way that it won't be accidentally disconnected if the cable is stretched or pulled.</p>
<p>When leaving the unit unused for long periods, disconnect supply cables.</p>	

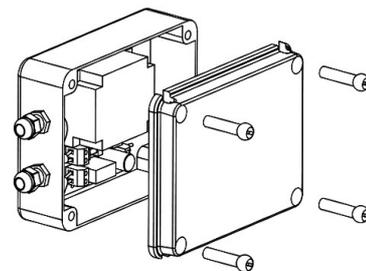
INSTALLING THE UNIT

Preliminary operations – Cabinet version

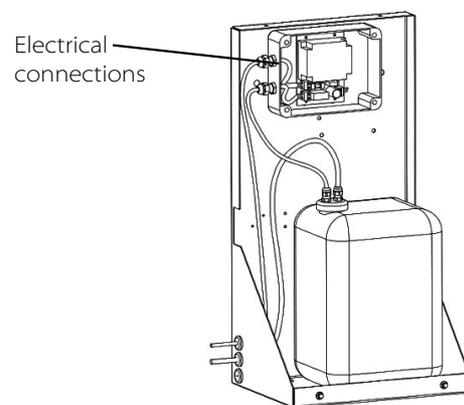
Loosen the two M6 screws to remove the cover and to access the internal parts.
Do not remove the screws.



Extract the cover of the plastic box by removing the four screws.

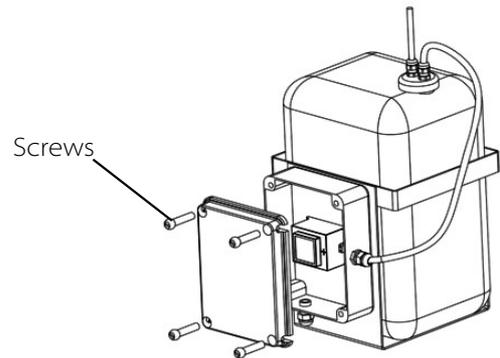


Pass the power supply cable through the fairlead and through the cable gland into the plastic box. Tighten the cable glands up till an 8 Nm torque ratio.

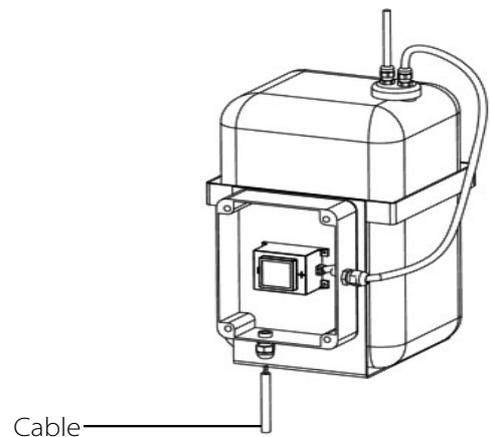


Preliminary operations – Frame version

Extract the cover of the plastic box by removing the four screws.



Pass the cables through the cable gland into the plastic box. Tighten the cable glands up till an 8 Nm torque ratio.

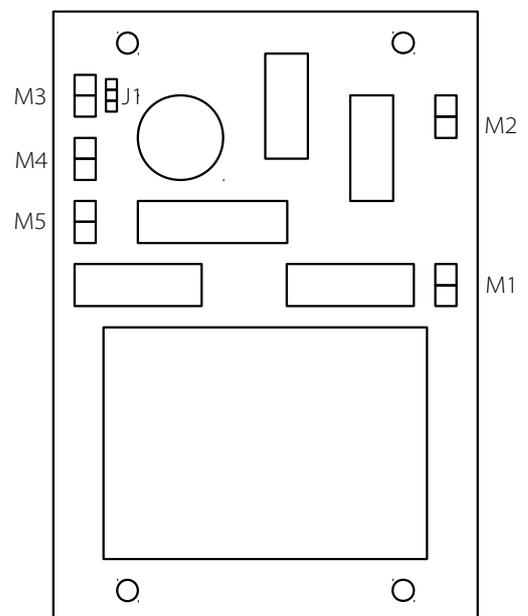


Electrical connections – 10 metres pumps

Perform the electrical connections on the board, depending on version and the close the plastic box.

Conn.	Notes
M1	Power supply (voltage may be 24, 110 or 230 VAC, depending on model)
M2	Not connected in direct activation versions. Signal input (24 VAC voltage) or dry contact/open collector (NPN) activation, depending on model.
M3	Empty tank alarm. Can be set NC or NO via J1. Not connected in models without float switch.
M4	Float switch (connected by Tecnovideo). Not connected in models without float switch.
M5	Water pump output (connected by Tecnovideo).

The plastic junction box has five cable glands in float switch models and three in no float switch models.

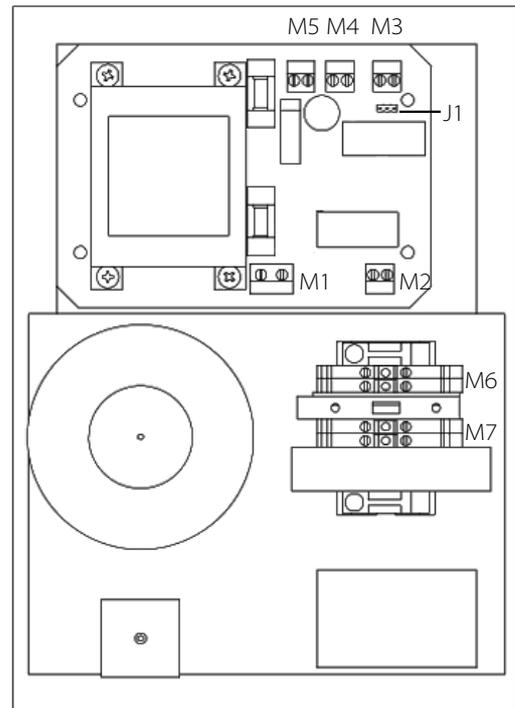


Electrical connections – 15 metres pumps

Perform the electrical connections on the board, depending on version and the close the plastic box.

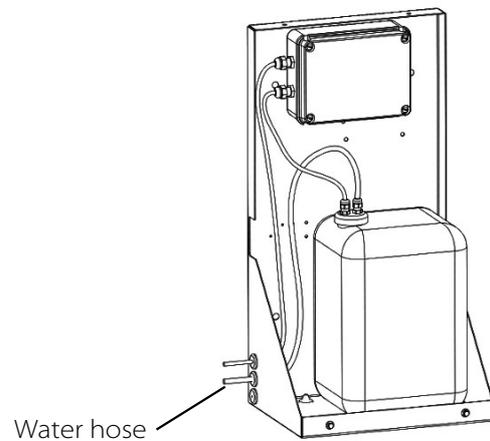
Conn.	Connection
M1	Internal connections (connected by Tecnovideo).
M2	Not connected in direct activation versions. Signal input (24 VAC voltage) or dry contact/open collector (NPN) activation, depending on model.
M3	Empty tank alarm. Can be set NC or NO via J1. Not connected in models without float switch.
M4	Float switch (connected by Tecnovideo). Not connected in models without float switch.
M5	Internal connections (connected by Tecnovideo).
M6	Water pump output (connected by Tecnovideo).
M7	Power supply (voltage may be 24, 110 or 230 VAC, depending on model)

The plastic junction box has five cable glands in float switch models and three in no float switch models.



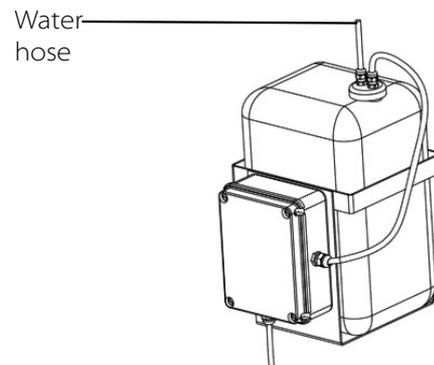
Final operations – Cabinet version

Connect the water hose to the housing washer nozzle.
Eventually close the cabinet.



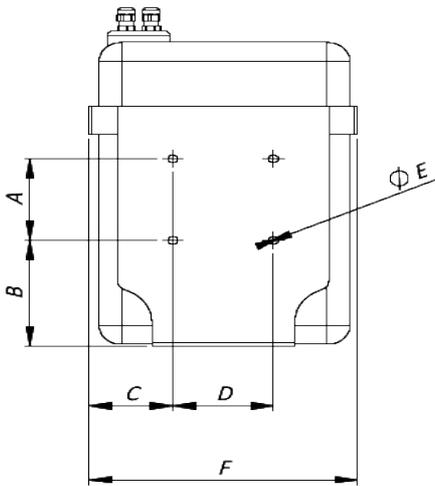
Final operations – Frame version

Connect the water hose to the housing washer nozzle.

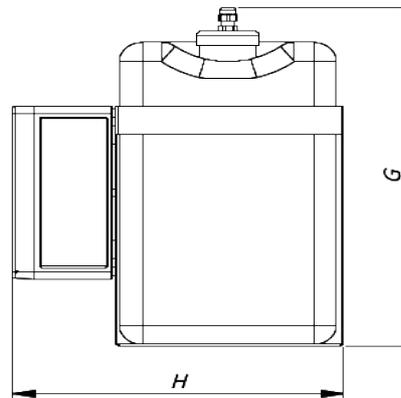


DIMENSIONS

MOUNTING PATTERN (FRAME)



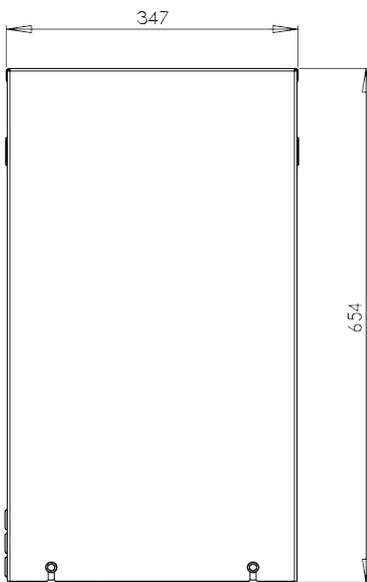
SIDE VIEW (FRAME)



	WP5	WP10	WP25
A	85	85	85
B	25	110	145
C	53,5	73,5	113,5
D	88	88	88
E	8,5	8,5	8,5
F	195	235	315
G	279	353	527
H	263	290	355*

* 376 for 15 meters model

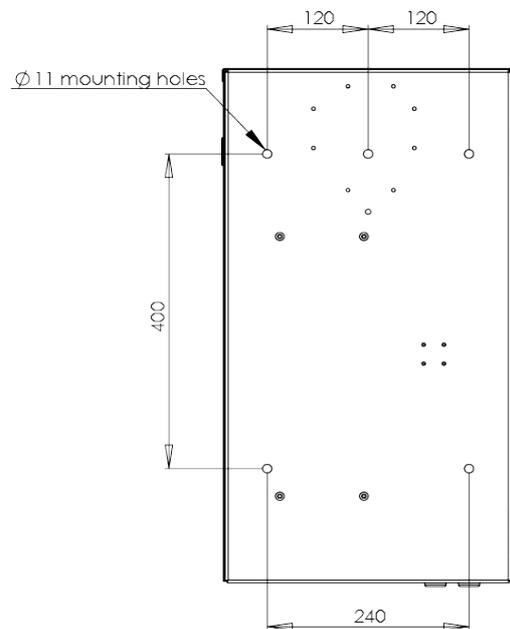
FRONT VIEW (CABINET)



SIDE VIEW (CABINET)



MOUNTING PATTERN (CABINET)



Dimensions in millimetres – Tolerances according QMS – Design and product specifications subject to change without notice



Preserve this manual as a reference for future needs.

Here you can find the always up-to-date pdf version of this document:



Used electrical, electronic and stainless steel products should not be mixed with general waste.
For proper treatment, recovery and recycling of old products, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/95/EC and 2002/96/EC.
By disposing of these products correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.
For more information about collection and recycling of old products, please contact your local municipality or your waste disposal service.
Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

The manufacturer declines all liability for any consequence resulting from improper installation practices, tampering or improper uses of the product.

The descriptions and illustrations contained in this manual are not binding. The manufacturer reserves the right to make any alterations deemed appropriate for the technical, manufacturing and commercial improvement of the product, while leaving the essential product features unchanged, at any time and without undertaking to update the present publication.

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