KR - RAINWATER HARVESTING SYSTEM

Rainharvesting system, boosting, water lifting, distribution of rainwater to the users

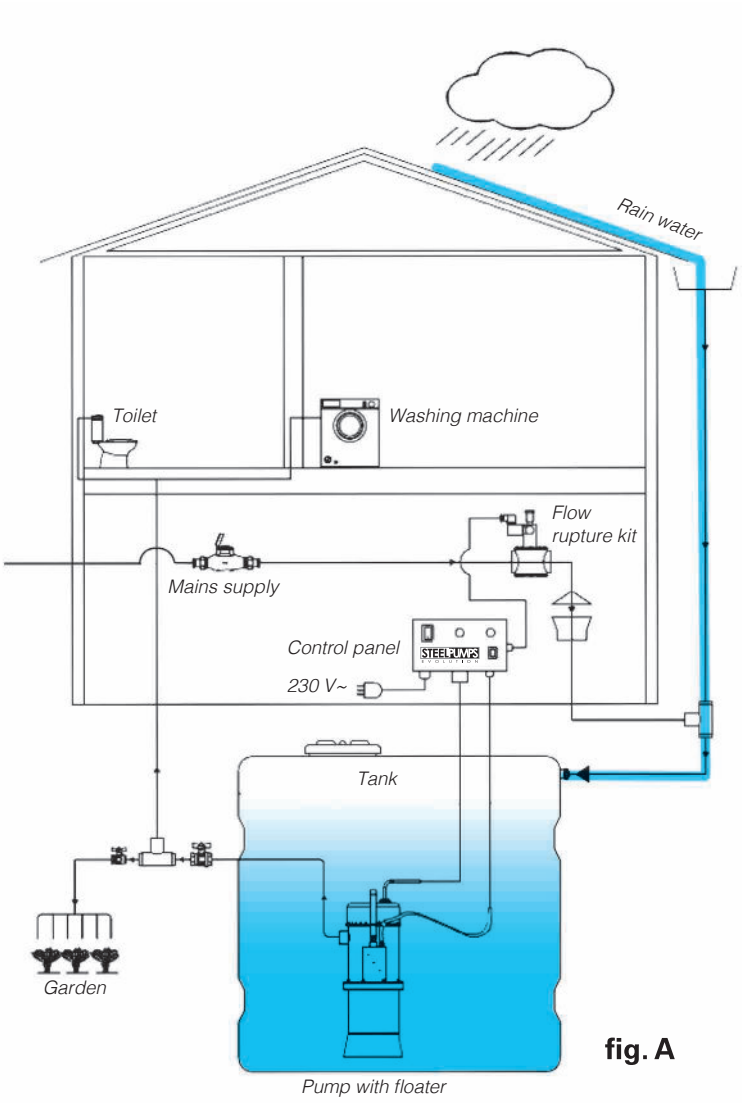


fig. A

When a rainwater tank is installed, it is recommended to have a pump system for sending the water to the utilities (toilets, washing machines, external water points, small garden irrigation systems, etc.). If there are prolonged periods without rain, the recovered water will run out, and therefore, to meet the needs of the connected utilities, it is necessary to install a water replenishment system from the public water supply ensuring continued operation of the domestic appliances **(as shown in Fig. A)**.

In compliance with European regulations, it is forbidden a back flow from rainwater to come into contact with the mains water system and this is in order to prevent any risk of contamination or infection in the public network.

To ensure this separation, a special kit must be installed, which must also be clearly visible for inspection by the relevant authorities **(as shown in Fig. C)**. This kit, known as the "refeeding kit," guarantees that there is no possible contact between the mains pipes and the rainwater.

The kit includes an electric valve to regulate the flow of water coming from the mains. This controlled flow prevents turbulence in the system, which could lead to harmful water leaks that might damage surrounding structures over time. Additionally, this regulation helps to avoid damaging "water hammer" effects, reducing noise and preventing harm to the water system and household appliances.

A probe system continuously monitors the minimum water level in the tank to prevent the pump from going into alarm mode due to insufficient water. If the water level is too low, the probe system signals the control panel to open the electric valve of the refilling kit.

This probe system is integrated into the pump, supported by a stainless steel structure **(as shown in Fig. B)**, ensuring that a minimum water level (4-6 cm) is always maintained within the tank.

The pump operates automatically when water is required. It also features an anti-blocking function that checks the pump status every 72 hours. For 1 second, the pump activates to keep the rotor unlocked and lubricate the seals in the oil chamber.

The system's technical condition is visible to the customer through the control panel **(as shown in Fig. C)**, where the pump's activity can be monitored.

With this advanced system, the customer will not face issues due to a lack of rainwater. Additionally, by installing the pump inside the tank, noise is minimized, and there are no obstructions from smaller tanks or unsightly waste bins that would otherwise need to be placed near the drip tray.

The supply of the KR kit includes





Technopolymer check valve included

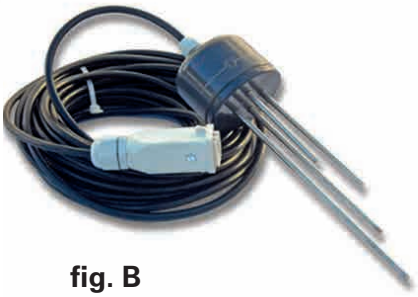


fig. B

Probes
(KR04SONDE replacement code)

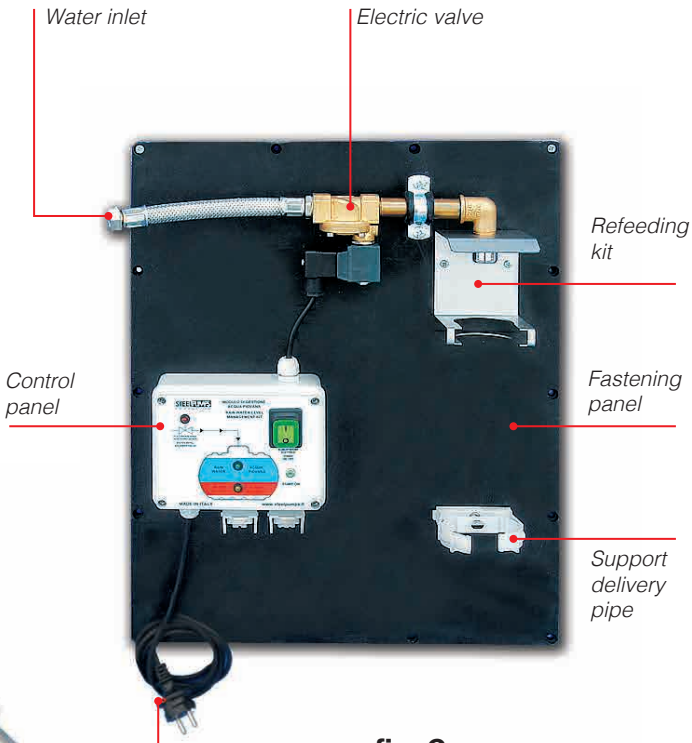


fig. C

Control panel
(KR01POMPE replacement code)

Codice	Description	P2 Nominal Hp	H max (m)	Q max (lt/m)	Attack feeding filling
KRJV80P	KR with self-priming vertical pump	0,8	40	50	1/2" M
KRJV100P	KR with self-priming vertical pump	1,0	47	60	1/2" M
KRJV120P	KR with self-priming vertical pump	1,2	49	60	1/2" M
KRMOV100B	KR with multistage vertical pump	1,0	42	90	1/2" M
KRMOV120B	KR with multistage vertical pump	1,2	52	90	1/2" M
KRMV1505HF	KR with multistage vertical pump HF	1,5	51	145	1/2" M
KRMV2006HF	KR with multistage vertical pump HF	2,0	62	145	1/2" M
KR01POMPE	Control panel for level and electropump monitoring (Probes included)				
KR04SONDE	Inox level probes complete with cable and special power supply socket				