

SIGMA Σ RAINWATER UNIT

- Fully automatic unit for domestic rainwater supply.
- Ultra quiet 3- or 4- stage self-priming centrifugal pump.
- Automatic mains water back-up via integral 9-litre tank with WRAS-approved inlet valve.
- Energy efficient technology; industry leading standby power of less than 0.2 watt.
- Long service life guaranteed by tried and tested durable components.
- Optional pneumatic level indicator.
- Includes stainless steel wall bracket and attractive cover.
- Ideal for retro-fit.



The *Sigma Σ* rainwater centre has been developed by leading German specialist Wisy AG as a rainwater harvesting solution for new-build and retro-fit domestic situations. Designed for UK use with a WRAS-approved inlet valve and weir overflow, the *Sigma Σ* unit is supplied ready to connect and is simple to install.

Complies with DIN 1989 & EN 1717 and fully WRAS Approved

The *Sigma Σ* rainwater centre comprises a small tank mounted on a sturdy stainless steel frame, coupled to an efficient quiet-running pump with intelligent controls. It functions as the central point of a domestic rainwater harvesting system. It works by drawing water from the main rainwater storage tank (above or below ground), and supplying this under pressure to the domestic rainwater circuit. The

harvested water is then used to supply WCs, external taps and washing machine. When no rainwater is available the unit automatically takes water from the integral 9-litre tank, which is fed with mains water. When rainwater becomes available again, the unit automatically switches back to using harvested water. The unit can also be switched to run solely from the mains water supply if required.



Sigma unit dimensions in mm: 500w x 510h x 315d



The Sigma unit is available with a choice of two pump sizes and optionally with a level indicator to display the level of water in the main storage tank.

Flexible System Design

Our comprehensive range of specialist items has been developed specifically for Rainwater Harvesting Systems. Because the range consists of separate components, it has exceptional flexibility.

We supply equipment suitable for almost any system design, whether you're planning a system for a small house, school or large industrial or commercial premises.



We are the UK's sole agent and distributor of Wisy products for rainwater utilisation

WISY SIGMA Σ RAINWATER CENTRE



The following items are included in the full Sigma package:

- Self priming multi-stage centrifugal pump and automatic controller, available in two versions (3 or 4 bar), with optional level indicator
- Pressure gauge
- Integral 9-litre mains water tank with automatic backup function and safety emergency overflow
- Cover
- Float switch to control mains water switch-over
- Stainless steel wall mounting bracket

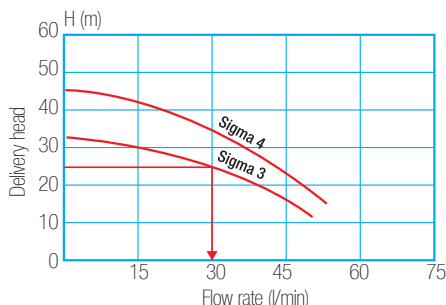
Rainwater is extracted from the storage tank through a fine floating suction filter. This ensures that the water is drawn from the cleanest area of the tank. An integrated non-return valve maintains the suction column.



The Sigma unit should be located on the ground floor, ideally in a utility room or similar. The simple, robust components require very little maintenance.

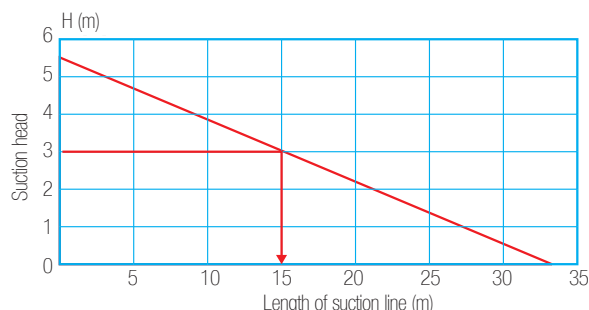
For the discharge side of the pump:

The graph right shows the delivery performance of the Sigma pumps. e.g. the Sigma 3 pump delivers 30 l/min at a delivery head of 25m (2.5 bar)



For the suction side of the pump:

The graph left shows the suction performance. e.g. - with a suction lift of 3 metres, the maximum suction line length would be 15 metres



Operating principle

The Sigma rainwater centre is controlled by simple integrated electronic circuitry.

The self-priming pump draws water from the rainwater storage tank. The graphs above show the maximum suction line length and the suction head.

The pump is controlled by an automatic controller; its **standby energy use is only 0.2 watt**.

If the rainwater storage tank becomes empty, the system automatically switches over to mains water operation. When the storage tank begins to fill again, the system reverts back to using rainwater. The mains water back-up tank is equipped with an emergency overflow compliant with DIN EN 1717 and is WRAS Approved.

Manual changeover to mains water operation only is available at the flick of a switch.

A pressure gauge shows the operating pressure of the system at all times.

An optional level indicator shows the water level in the storage tank.

Electronic control system

Suction pump

Energy efficiency

Mains water back-up

Manual switch over

Pressure gauge

Level indicator



NB continuous development may necessitate change in these details without notice E&OE.

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