

FriwaMini

Innovative system technology for modern heating
and solar thermal systems





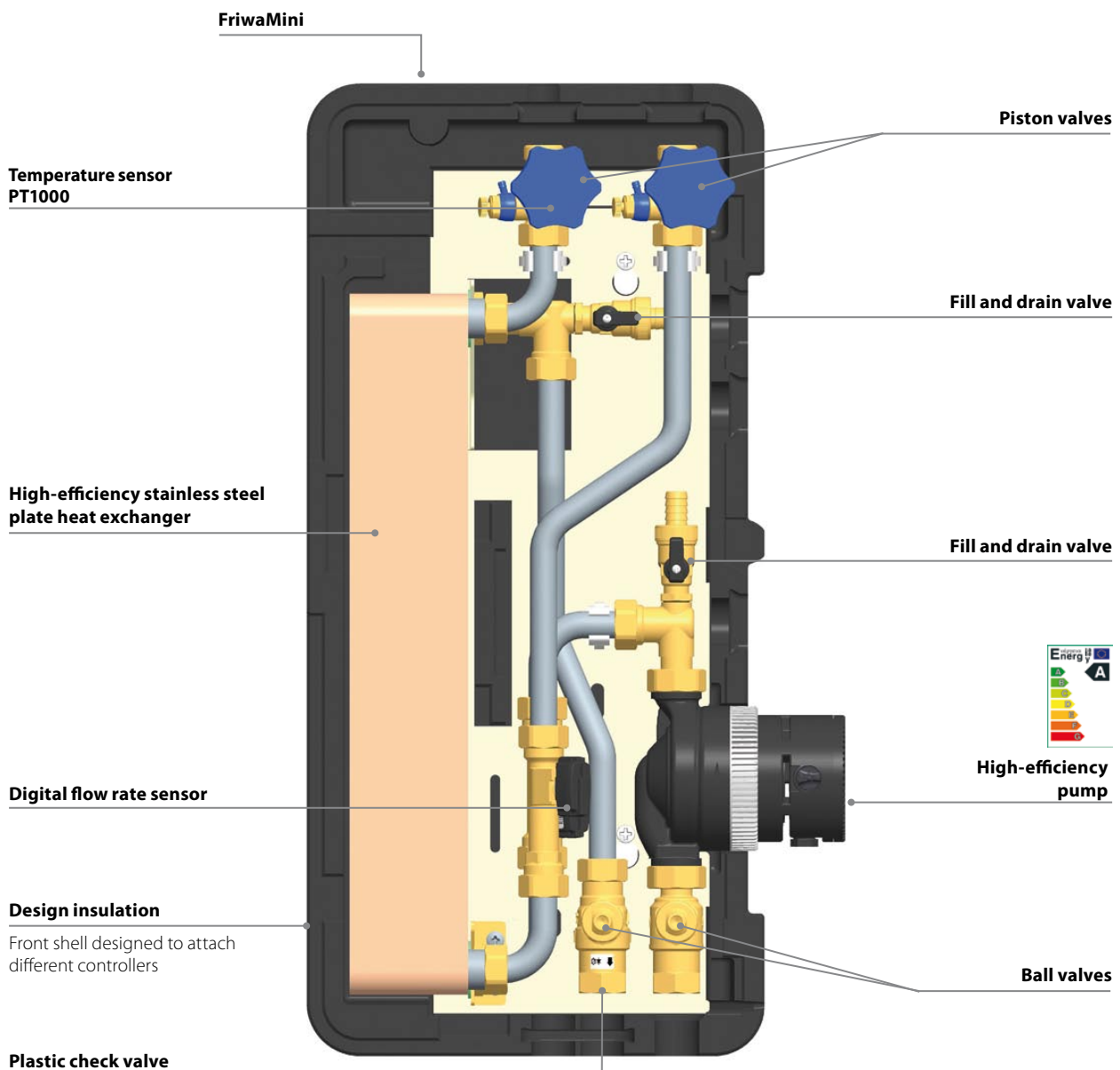
FriwaMini

Domestic hot water module for hygienic domestic hot water preparation

The compact and completely pre-mounted station for comfortable and hygienic domestic hot water preparation only when it is needed. The water is heated up only at the moment when it is needed - a quick, safe and clean solution! Fresh hot and hygienically clean water is always available at any time without that a domestic hot water storage tank is needed.

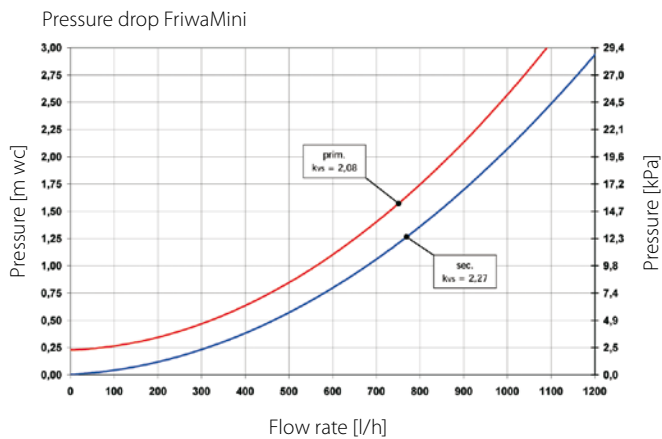
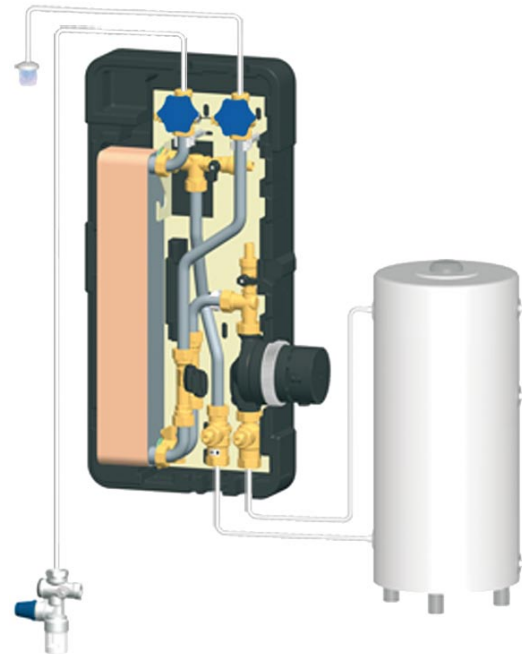
The energy necessary for heating the domestic water comes from a buffer storage tank which can be heated by various systems: solar installations as well as solid combustibles, traditional oil or gas boilers or other systems.

The FriwaMini is very well suited for the application in a solar thermal installation and offers you the following features:








Technical data

Materials	
Valves and fittings	Brass / Bronze
Gaskets	Klingersil/EPDM
Insulation	EPP
Check valve	Plastic
Heat exchanger	Plates + connecting pieces: 1.4401 Solder: 99.99 % copper
Technical data	
Max. pressure	3 bars primary, 10 bars secondary
Max. operating temperature	130 °C
Kvs value primary	2.08
Kvs value secondary	2.27
Equipment	
Heat exchanger	30 plates
Dimensions	
Connections	¾" internal thread primary, 1" external thread secondary
Width	350 mm
Height	610 mm



Performance characteristics of the FriwaMini, for cold water entry temperature = 10 °C

Set hot water temperature	Tap performance of 45 °C hot water at the preset hot water temperature	Transmission performance	Primary flow temperature necessary	Primary return temperature
45 °C	13 l/min	31 kW	50 °C	25 °C
	20 l/min	49 kW	75 °C	15 °C
55 °C	14 l/min	36 kW	60 °C	30 °C
	25 l/min	63 kW	75 °C	22 °C

Illustration	Item	corresp.	Item no.
	<p>FriwaMini</p>		
	<p>primary: Laing ecocirc E6vario-15/130 G, PWM</p>		6404330
	<p>Equipment</p>		
	<p>Service water mixing valve</p> <p>The PAW service water mixing valve is used for setting a constant temperature of the tapped water from solar or buffer storage tanks between 30 °C and 70 °C. With this valve, the danger of scalding due to hot water from the storage tank is reduced considerably. A must-have for each correctly designed service water solar system.</p> <p>Housing: Brass, insensitive to calcification, resistant to dezincification Precision of setting: +/- 2 °C Max. operating temp.: 98 °C Max. operating pressure: PN 10 Control range: 30-70 °C Tap performance: 39 l/min (DP = 1,5 bars) Connections 56311: Thread connection with 3/4" external thread Connections 56321: Solder sleeve d = 22 mm</p>		
	<p>Service water mixing valve</p>		56311
	<p>Service water mixing valve</p>		56321
	<p>PAW EC1 controller for circulation pump</p> <p>The circulation pump control EC1 actuates a hot water circulation system in order to provide hot water as fast as possible. The solutions available until now are very complicated and have a high energy demand.</p> <p>Our solution: The control unit controls the water withdrawal via the flow switch in the hot water line. After a tap has been opened, the circulation pump is switched on and switched off after a preset time. The tap point is used as a "remote control". Switching on only when it is needed is saving energy and nevertheless offers the highest possible comfort.</p> <p>Power supply: 230 V/50 Hz Connection flow switch: 22 mm flat-sealing connection, 3/4" external thread</p> <p>Please note: The flow switch must be installed vertically with flow direction upwards.</p>		
	<p>PAW EC1 controller for circulation pump</p>		56360
	<p>Domestic hot water safety group</p> <p>Safety group for hot water storage tank, with shut off and controllable check valve. For horizontal installation. With seat made of stainless steel. Brass housing. Chromed. Certified according to EN 1487.</p>		
	<p>Domestic hot water safety group</p>		563907
	<p>Discharge tundish for domestic hot water safety group</p> <p>The discharge tundish absorbs water splashes during draining via the pressure relief valve and leads them into the drain line.</p>		
	<p>Discharge tundish for domestic hot water safety group</p>		5639071