

Fresh water station FW-EZ 40 / E 40

The FW-EZ 40 / FW-E 40 fresh water station is a powerful and flexible solution for the central heating of drinking water using the flow principle. It is equipped with modern high-efficiency pumps, high-quality sanitary circuit control valve and a sturdy installation frame and impresses with its cascading capability

Suitable for:



- † **High-efficiency pump:** PWM-controlled for demand-based heating.
- † **Sanitary circuit control valves:** High-quality valves for precise control of water flow.
- † **Outlets at the top:** All drinking water outlets are located at the top for easy installation.
- † **Sturdy construction:** Installation frame made of galvanized sheet steel for durability and stability.
- † **Fitting piece for meter:** For easy integration of a water meter.
- † **Design front:** Aesthetically appealing and functional.
- † **Cascade capable:** To enable higher performance, it can be operated in cascade mode.
- † Incl. safety valve (cold water connection)

Application: The FW-EZ 40 / FW-E 40 fresh water station heats drinking water centrally and distributes it to the tapping points via the hot water pipe. Operation based on the flow principle means that the hot drinking water is heated "just in time" only when needed, so there is no need for storage. A buffer tank is required to provide a sufficient volume flow of heating water.

Hot water preparation: The drinking water is only heated when needed via a stainless steel plate heat exchanger. The design of the heat exchanger enables high tap capacities and a low return temperature to the buffer tank.

High-efficiency pump: The integrated PWM-controlled high-efficiency pump ensures precise and demand-based control of the heating water flow rate. It operates quietly and energy-efficiently, ensuring a constant hot water temperature.

Control and sensors: A speed-controlled regulation system ensures that the hot water temperature remains constant. Modern sensors, such as the vortex flow sensor, accurately measure the flow rate and hot water temperature.

Circulation: A high-efficiency drinking water circulation pump is intelligently controlled (by pulse, time, and temperature) and speed-controlled by the electronic control system.



Y	PRIMARY	SECONDARY
	BUFFER STORAGE	DRINKING WATER
Pressure rating:	PN 6	PN 10
Max. temperature:	110 °C	75 °C
Connection dimensions:	DN 25	DN 20
Thread:	G1" internal thread	G1" external thread
Dimensions (WxHxD):	480 x 675 x 240 mm	

ORDER NO.	
1610006	FW-EZ 40 with fully stainl. steel brazed plate heat exchanger
1610003	FW-EZ 40 with copper brazed plate heat exchanger
1610004	FW-E 40 with fully stainl. steel brazed plate heat exchanger
1610001	FW-E 40 with copper brazed plate heat exchanger

PERFORMANCE DATA	PI2*	PI1**
Hot water output:	87,2 kW	83 kW
Supply temperature:	70 °C	60 °C
Return temperature:	32,6 °C	25,4 °C
CW/HW temperature:	10 °C / 60 °C	10 °C / 45 °C
Tap capacity:	25 l/min	34 l/min
Pressure loss DHW***:	294 mbar	542 mbar
Pressure loss Heating***:	247 mbar	261 mbar
Heating flow rate:	2005 l/h	2066 l/h
38 °C DHW tap quantity after cold water admixture:	44,6 l/min	42,5 l/min
40 °C DHW tap quantity after cold water admixture:	41,7 l/min	39,7 l/min

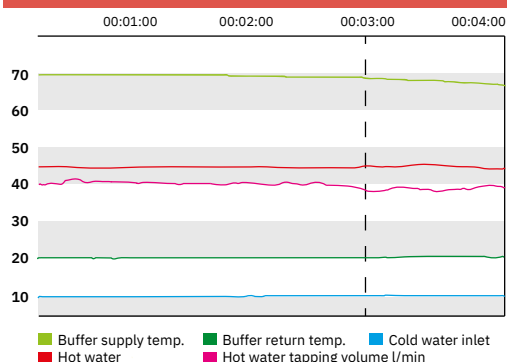
⚠ **Attention!** Normal operation guaranteed at 50-75 °C, install a pre-mixer if necessary
*** without cold water meter or heat meter

**PI2 = Performance indicator 2: at a set hot water temperature of 60 °C; at a primary flow temperature of 70 °C; at a cold water temperature of 10 °C

*PI1 = Performance indicator 1: at a set hot water temperature of 45 °C; at a primary flow temperature of 60 °C; at a cold water temperature of 10 °C

TECHNICAL DATA	
OPERATION	<ul style="list-style-type: none"> • Easy-to-read, illuminated LCD display with full text and graphics mode • Internationally understandable thanks to up to 6 languages included • Self-explanatory: The assigned commands are shown on the display directly above the respective input key • Quick and easy installation thanks to the integrated commissioning wizard
OPERATING MODE	Fresh water control without circulation (FW-EZ 40) Fresh water control with circulation (FW-E 40)
ADD. FUNCTION	Storage charging, cascade
PLATE HEAT EXCHANGER	Long thermal length, low pressure loss Stainless steel 1.4401, copper soldered
PIPING	Stainless steel 1.4401, 22x1 mm
PUMPS	Heating pump HE 15-60/130 PWM 1 Drinking water circulation pump HE-Z 15-7 PWM 2 (only with FW-EZ 40)
SENSORS	Hot water temperature and volume flow: Sika VVX15 CW/ Buffer/ Circulation temperature (FW-EZ 40): PT1000/B/2 plug-in sensor with cable
INSULATION	EPP, black
DELIVERY	Wired and leak-tested, with operating instructions and mounting accessories in the box

PERFORMANCE DIAGRAM: FULL LOAD



FW-E 40

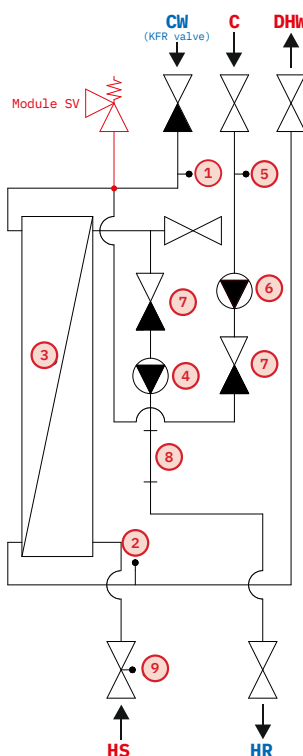


Image: FW-EZ 40

DHW = Hot drinking water
CW = Cold water
HS = Heating supply
HR = Heating return
C = Circulation

SCHEMATIC

1	Temperature sensor CW
2	Temperature and flow sensor based on the vortex principle
3	Plate heat exchanger
4	Heating pump
5	Temperature sensor Z
6	Circulation pump (only for FW-EZ 40)
7	Backflow preventer
8	Heat meter fitting piece 130 mm
9	Direct measuring point heat meter

OPTIONS



ORDER NO.

1000132 Module Pre-mixer
 Pre-mixer set for eco and FW-40 series