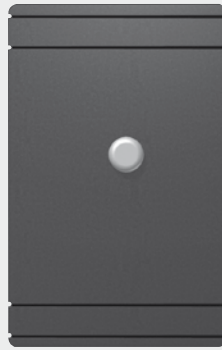
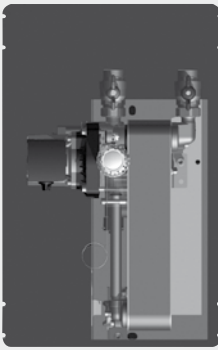


FWM FRESH WATER MODULE



Fresh water module

The fresh water module guarantees permanently fresh and vital hot water. Required quantities can be supplied without any waiting time or temperature fluctuations. A long service life is ensured by high-quality components and protection against limescale deposition due to thermal conditions.

Product advantages: Prevents the development of Legionella bacteria, very fast response times, tank or wall installation, for 1 to 3 family households, separable flat sealing system connection, high tap quantities through utilisation of a large heat exchanger.

Note: For cascading (max. 3 FWM), one overflow valve per expansion is required (not included in the delivery scope – can be ordered separately).

Technical Description

Type	FWM 30
Item no.	1610802
Max. tap output	30 l/min
Charger pump	230 V (50 Hz)
Speed	2200 rpm
Power consumption	95 W
Nominal current	0.4 A
Max. operating pressure, fresh water circuit	10 bar
Max. operating pressure, backup water circuit	3 bar
Cover	EPP
Weight	20 kg
Temperatures	min.–max.
Ambient	2 °C – 40 °C
Backup water	2 °C – 95 °C
Connections	
Cold water	G1" female thread
Hot water	G1" female thread
Tank forward flow	G1" male thread
Tank return flow	G1" male thread
Circulation	G½" female thread

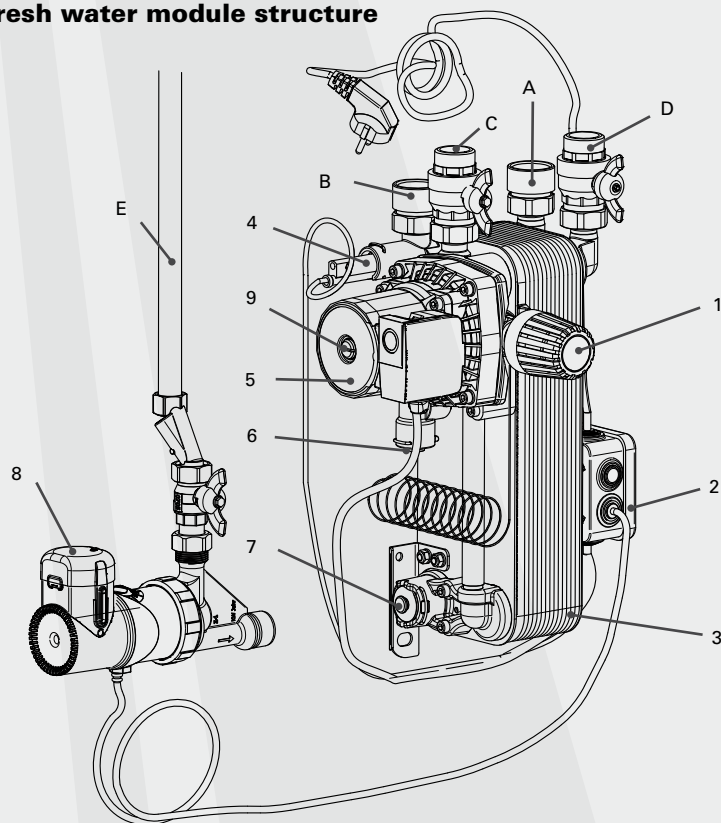
Permitted water ingredients and limit values

Water ingredients	Unit	Limit values (copper-soldered)
pH		7–9 (taking into account the SI index)
Saturation Index SI (delta pH value)		-0.2 < 0 < +0.2
Total hardness	°dH	6–15
Conductivity	µS/cm	10...500
Substances removable by filtration	mg/l	<30
Free chlorine	mg/l	<0.5
Hydrogen sulphide (H ₂ S)	mg/l	<0.05
Ammonia (NH ₃ /NH ₄ ⁺)	mg/l	<2
Sulphate	mg/l	<100
Hydrogen carbonate	mg/l	<300
Hydrogen carbonate/sulphate	mg/l	>1.0
Sulphide	mg/l	<1
Nitrate	mg/l	<100
Nitrite	mg/l	<0.1
Iron, dissolved	mg/l	<0.2
Manganese	mg/l	<0.1
Free aggressive carbonic acid	mg/l	<20

TANK ACCESSORIES

FWM FRESH WATER MODULE

Fresh water module structure



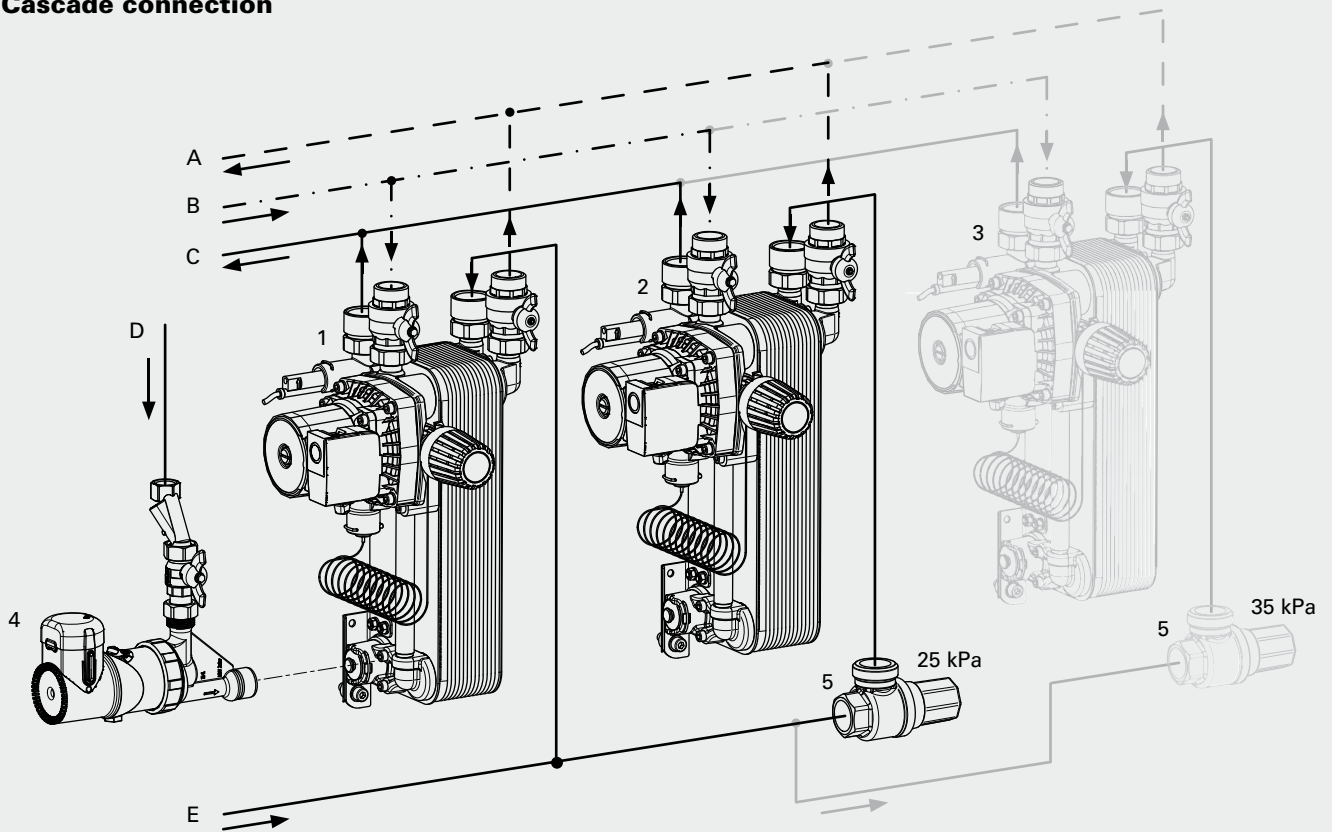
- 1 Thermostat head
- 2 Connection box
- 3 Plate heat exchanger
- 4 Water switch
- 5 Charger pump
- 6 Coiled sensor
- 7 Push-in connection for circulation unit (incl. blind cap closure)
- 8 Circulation unit (optional)
- 9 Charger pump venting screw
- A Cold water
- B Hot water
- C Tank forward flow
- D Tank return flow
- E Circulation line (not included in delivery scope)

Tap quantity l/min – Hot water temperature/Return flow temperature °C

Head setting	Forward flow temperature °C	35 HW/return flow)	30 HW/return flow)	25 HW/return flow)	20 HW/return flow)	15 HW/return flow)	10 HW/return flow)	5 HW/return flow)
45	50 °C	30.05/15.33	31.41/16.01	32.64/16.35	33.86/17.07	35.72/17.77	38.32/19.38	41.94/23.25
	55 °C	31.89/15.68	33.04/16.18	34.19/16.41	35.66/16.92	37.21/17.53	40.38/19.16	42.93/21.23
	60 °C	33.76/15.89	34.81/16.33	35.78/16.61	37.30/17.02	39.43/17.93	42.41/19.18	44.66/20.42
	70 °C	34.15/15.06	35.05/15.18	36.22/15.31	37.96/15.67	40.24/16.39	42.55/16.99	44.31/17.71
	90 °C	36.81/13.54	37.77/13.73	39.27/13.95	41.18/14.22	43.17/14.59	44.39/14.64	45.15/14.80
50	50 °C	30.39/15.42	32.64/16.53	35.66/18.26	37.60/19.46	39.36/20.61	41.71/22.40	44.95/27.92
	55 °C	33.10/16.21	36.33/17.71	37.62/18.34	39.14/19.00	40.95/19.75	43.65/21.46	47.38/25.31
	60 °C	35.84/16.60	38.05/17.64	39.64/18.40	41.09/18.92	42.91/19.64	46.12/21.40	49.19/24.36
	70 °C	37.95/16.49	38.75/16.72	39.96/16.91	41.48/17.21	43.56/17.80	46.76/19.15	48.85/19.83
	90 °C	40.46/14.47	41.73/14.50	42.99/14.57	45.00/14.95	47.27/15.32	49.30/15.60	50.61/15.93
55	50 °C	30.26/15.25	32.50/16.37	35.88/18.22	39.83/21.13	42.70/23.88	44.65/26.52	47.05/32.74
	55 °C	33.15/16.22	35.92/17.44	39.82/19.55	42.30/21.30	44.35/22.63	46.78/24.72	50.26/30.82
	60 °C	35.79/16.55	38.87/17.99	42.81/20.08	44.97/21.33	46.76/22.39	49.19/24.22	53.09/29.93
	70 °C	40.15/17.35	42.12/18.20	43.71/18.85	45.28/19.10	47.15/19.75	50.52/21.43	53.30/23.16
	90 °C	44.96/17.28	45.87/17.40	47.23/17.59	48.96/17.96	51.40/18.49	53.87/19.24	55.27/19.40
60	50 °C	30.27/15.60	32.92/16.91	35.70/18.41	39.61/21.31	43.73/25.58	46.82/31.68	47.94/39.24
	55 °C	33.08/15.95	35.57/17.25	39.34/19.34	43.84/22.50	47.40/26.00	49.81/29.28	51.97/35.99
	60 °C	36.26/17.51	38.97/18.83	43.16/21.06	47.59/24.12	49.98/26.59	52.15/29.01	55.04/36.15
	70 °C	41.23/18.18	44.32/19.48	47.88/21.36	49.70/22.21	51.58/23.21	54.17/24.59	57.89/28.52
	90 °C	49.32/19.08	50.17/19.24	51.58/19.40	53.06/19.78	55.25/20.20	58.47/21.17	60.29/21.79
65	50 °C	30.71/15.63	32.81/16.58	35.90/18.38	39.88/21.24	44.18/25.96	47.18/31.98	48.30/39.91
	55 °C	33.10/15.82	35.67/16.96	39.47/19.18	43.94/22.32	48.64/26.94	52.51/34.33	53.73/42.19
	60 °C	36.57/17.56	39.02/18.72	43.35/20.95	47.67/24.02	53.12/29.49	55.70/34.47	57.46/42.55
	70 °C	41.34/18.17	44.73/19.68	49.74/22.24	53.69/24.86	55.74/26.20	58.12/27.88	62.12/33.51
	90 °C	51.20/19.61	54.37/20.84	55.91/21.42	57.53/21.79	59.52/22.03	62.69/23.24	65.09/24.24
70	50 °C	30.15/15.42	32.42/16.46	35.58/18.20	39.37/20.80	43.71/25.24	47.10/31.83	48.31/40.04
	55 °C	32.67/15.67	35.63/16.99	39.33/19.04	43.65/22.02	48.69/27.20	52.48/34.42	54.01/44.08
	60 °C	36.30/17.53	39.32/19.04	43.36/21.38	47.87/24.22	53.13/29.65	57.38/38.65	58.56/47.37
	70 °C	41.08/18.33	44.92/19.88	49.72/22.25	55.72/26.32	59.59/30.14	62.04/32.87	65.30/40.20
	90 °C	51.92/20.35	57.16/22.47	59.85/23.55	61.66/24.05	63.68/24.61	66.84/25.96	69.80/27.52

FWM FRESH WATER MODULE

Cascade connection



- | | | | |
|---|---|---|---|
| 1 | Fresh water station – module 1 | A | Backup water return flow |
| 2 | Fresh water station – module 2 | B | Backup water forward flow |
| 3 | Fresh water station – module 3 (max. 3 modules) | C | Fresh water station – module 3 (max. 3 modules) |
| 4 | Circulation unit (optional) | D | Circulation unit (optional) |
| 5 | Overflow valve | E | Overflow valve |



Circulation pump

Attachable to the fresh water module using a simple plug-in system. Temperature selection switch and time switch are integrated.

Technical Description

Item no.	1610803
Circulation unit	230 V, 50 Hz
Power consumption	8 W
Nominal current	< 0.1 A

- | | |
|---|---|
| 1 | Circulation pump |
| 2 | Sealing ring |
| 3 | Plug-in adapter |
| 4 | Check flap |
| 5 | Flat seal |
| 6 | Shut-off valve |
| 7 | Union nut |
| 8 | Eccentric |
| 9 | Circulation line (not included in the delivery scope) |

