

SOFTENER DATASHEET

CLACK 2" HF TM MONO *SIMPLEX & DUPLEX ALT.*



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THE 2" HIGH FLOW VALVE

The WS2HF valve is part of our commercial/industrial line of valves. They feature the same “stack technology” as the other control valves, but they have their own controller that is more suited to industrial applications. The latest version includes a new graphics display, features multiple languages and offers Modbus TCP/IP capabilities.

- Service Integrated Modbus RTU interface, data exchange with CSS
 - 5 available European languages : EN, ES, FR, GE, IT
 - Permanent storage of settings via battery
 - Easily configurable with a hand-held controller
 - Easy communication via changing led, 3 states standby, on line and regen
 - Diagnostic information memory with 127 days usage history
 - Optional feature is an addition of up to two relay expansion boards. With these relays you can communicate specific signals. i.e. Regeneration, specific volume and or time, error monitor,..
 - One potential free contact, to receive a signal for remote regeneration or to hold regeneration.
 - The NHWB (No Hard Water Bypass) is an external two way valve that can close the outlet automatically during regeneration so there is no bypass of hard water. The MAV is a 3-way valve, this is standardly delivered to operate between a duplex alternating unit. It can also be used to regenerate automatically with a separate source of water.
 - Up to 16 units can be daisy chained using the integrated communication protocols.
- Possible operations:
1. Series
 2. Alternating
 3. Progressive flow
 4. Random



CERTIFICATION

Valve	WQA, NSF 61 & 372, CE
Vessel	CE, NSF 44, 61 & 372, ACS, KTW, W270 For 6" UBA, ACS, UKCA, CE & DM 174
Monospheric resin	RESAP, ACS, Kosher, Halal, WRAS

Our standard simplex and alternating duplex units come with a two-year warranty.



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CLACK 2" HF TM MONO SIMPLEX

The CLACK 2" HF TM MONO SIMPLEX & DUPLEX ALT. units are a sustainable solution against limescale and can be implemented in many different applications such as flat buildings, hotels & restaurants, schools & hospitals, carwashes, offices, etc. Our softeners are built according to Pollet Water Group standards to follow as closely as possible the norm EN14743. Our focus is on volumetric softeners to use the full capacity of the device.

Our standard simplex softeners come with:

- Clack WS2 HF volumetric electronic valve
- Riser tube with top & bottom distributor
- Brine tank with salt platform
- Brine well with safety brine valve, consisting of float and aircheck
- Composite vessel + monodisperse resin
- Connections 2" BSPT



The softeners are fully configured during assembly.

DIMENSIONS SIMPLEX

		liters of resin	400	500	600	700	800	900	1000	1100	1200	1300
Valve	H1	mm	293	293	293	293	293	293	293	293	293	293
Vessel	H2	mm	2140	2150	2150	2150	2150	2430	2430	2430	2465	2465
Brine tank	H3	mm	1220	1220	1120	1120	1120	1290	1290	1500	1500	1500
Softener	Ht	mm	2433	2443	2443	2443	2443	2723	2723	2723	2758	2758
Diameter vessel	W1	mm	780	930	930	930	930	1104	1104	1104	1260	1260
Diameter brine tank	W2	mm	880	880	1030	1030	1030	1100	1100	1300	1300	1300
Vessel type		inch	30x72	36x72	36x72	36x72	36x72	42x78	42x78	42x78	48x82	48x82
Volume brine tank		l	500	500	750	750	750	1000	1000	1750	1750	1750
Weight*		kg	1487	1842	2049	2100	2150	2793	2844	3504	4060	4111

* Estimation of weight in service with full brine tank.

CLACK 2" HF TM MONO SIMPLEX



CONDITIONS FOR INSTALLATION

Connection IN & OUT	2"
Drain connection (*)	2"
Electrical requirement	200-240V AC 50/60 Hz
Output & Power rating	24 V / 0,8A - 19.2 W
Min. - max. inlet pressure	2 - 6 bar
Vacuum	no allowance
Max pressure loss during nominal flowrate	100 kPA (1 bar)
Max. water temperature	43°C

* without nuds and open at atmospheric pressure

REGENERATION

Start	2:00 am, adjustable
Total time	max. 95 minutes
Chronometric	1 - 28 days between regeneration
Volumetric	Automatically calculated with incoming hardness

RESIN

Type	Monospheric strong acid cation resin - softening, food grade quality
Life span	15 years under normal circumstances

The presence of free chlorine can damage your resin, lowering the capacity of your softener.

FLOW RATE

	liters of resin	400	500	600	700	800	900	1000	1100	1200	1300
Nominal	m ³ / h	20.0	20.2	24.2	23.4	22.6	26.9	26.3	28.2	27.9	27.7
Peak	m ³ / h	27.4	26.0	30.8	30.0	29.2	33.9	33.5	35.6	35.2	35.0

WATER USAGE DURING REGENERATION

	liters of resin	400	500	600	700	800	900	1000	1100	1200	1300
Total H2O usage	liters	2975	3775	5130	5265	5515	7365	7545	9524	10145	10340
Water efficiency*	l water / g CaCO ₃	0.13	0.13	0.15	0.13	0.12	0.15	0.13	0.15	0.15	0.14

* According to EN14743 the water efficiency should be below 0.33 l water / g CaCO₃

ION EXCHANGE (AVERAGE SALT CONSUMPTION OF 125 g/l)

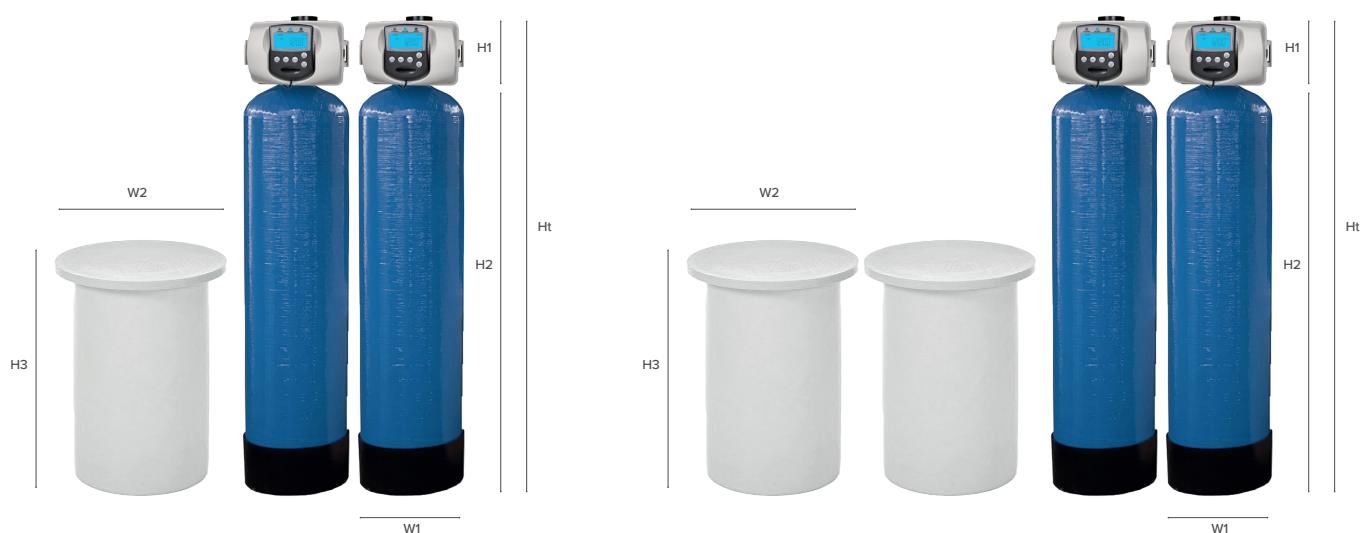
	liters of resin	400	500	600	700	800	900	1000	1100	1200	1300
Capacity	kg CaCO ₃	22.4	28.0	33.6	39.2	44.8	50.4	56.0	61.6	67.2	72.8
	°F x m ³	2239	2800	3361	3920	4480	5039	5600	6161	6720	7280
	dH x m ³	1258	1573	1888	2202	2517	2831	3146	3461	3775	4090
Brine efficiency*	kg salt / kg CaCO ₃	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Salt consumption	kg salt / regeneration	50	63	75	88	100	113	125	138	150	163

* According to EN14743 the brine efficiency should be above 0.4 Kg salt / Kg CaCO₃

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CLACK 2" HF TM MONO DUPLEX ALT.

The configurations below offer continuous 24/7 softened water through our duplex alternating systems. You have the choice of ordering the unit with two brine tanks or one brine tank. Where two brine tanks offer a more robust solution with less filling of salt in the brine tanks, the one brine tank configuration can offer a lower foot print.



DIMENSIONS DUPLEX - ONE BRINE TANK

	liters of resin		400	500	600	700	800	900	1000	1100	1200	1300
Valve	H1	cm	293	293	293	293	293	-	-	-	-	-
Vessel	H2	mm	2140	2150	2150	2150	2150	-	-	-	-	-
Brine tank	H3	mm	1290	1500	1500	1500	1500	-	-	-	-	-
Softener	Ht	mm	2433	2443	2443	2443	2443	-	-	-	-	-
Diameter vessel	W1	mm	780	930	930	930	930	-	-	-	-	-
Brine tank		l	1000	1750	1750	1750	1750	-	-	-	-	-
Diameter brine tank	W2	mm	1100	1300	1300	1300	1300	-	-	-	-	-
Vessel type		inch	30x72	36x72	36x72	36x72	36x72	-	-	-	-	-
Weight*		kg	3910	5266	5719	5857	5996	-	-	-	-	-

* Estimation of weight in service with full brine tank.

CLACK 2" HF TM MONO DUPLEX ALT.



DIMENSIONS DUPLEX - TWO BRINE TANKS

		liters of resin	400	500	600	700	800	900	1000	1100	1200	1300
Valve	H1	cm	293	293	293	293	293	293	293	293	293	293
Vessel	H2	mm	2140	2150	2150	2150	2150	2430	2430	2430	2465	2465
Brine tank	H3	mm	1220	1220	1120	1120	1120	1290	1500	1500	1500	1500
Softener	Ht	mm	2433	2443	2443	2443	2443	2723	2723	2723	2758	2758
Diameter vessel	W1	mm	780	930	930	930	930	1100	1100	1100	1260	1260
Brine tank		l	500	500	750	750	750	1000	1750	1750	1750	1750
Diameter brine tank	W2	mm	880	880	1030	1030	1030	1100	1300	1300	1300	1300
Vessel type		inch	30x72	36x72	36x72	36x72	36x72	42x78	42x78	42x78	48x82	48x82
Weight*		kg	4021	4767	5534	5672	5811	7494	8853	10211	11361	11499

* Estimation of weight in service with full brine tank.

DUPLEX - INSTALLATION

Included when ordering a CLACK 2" HF duplex mono softener:



* Pipework not included