

SOFTENER DATASHEET

PALLAS CK 1.5" PLASTIC MONO *SIMPLEX & DUPLEX ALT.*



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PALLAS CK VALVE

The Pallas CK valve comes with proportional brining for saving on salt usage exclusively for the upflow regeneration units. It has 7 available European languages, a salt alarm based on automatic calculation and a service reminder with the contact details of your installer.

- Choice of different languages:
English, French, Spanish, Italian, German, Polish and Turkish
- Service indication with name and phone number on the screen
- Display changes colour to give a quick indication of the installation status
- Proportional brining for a significant reduction in the salt consumption
- Calculated low salt alarm
- Double backwash feature for optimum efficiency
- Small customizable front cover label
- Diagnostic information memory with 63 days usage history
- Two programmable digital outputs, can be used for error communication or other signalization
- One potential free contact, to receive a signal for regeneration or to hold regeneration.
- Double output for NHWBP and MAV
 - 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.
- Optional features:
 - WIFI connectivity for monitoring & settings adjustments in distance
 - Progressive flow



CERTIFICATION

Valve	WQA, NSF 61 & 372, CE
Vessel	CE, NSF 44, 61 & 372, ACS, KTW, W270
Monospheric resin	RESAP, ACS, Kosher, Halal, WRAS

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



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PALLAS CK 1.5" PLASTIC MONO SIMPLEX

The PALLAS CK WS1.5 PLASTIC 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 WS1.5 PLASTIC CK 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 1.5"
- Fittings to install the valve & water in the piping:
 - 2 x QC straight to BSPT 1,5"
 - 2 x QC elbow to BSPT 1,5"
 - 1 x QC elbow to QC elbow



The softeners are fully configured during assembly.

DIMENSIONS SIMPLEX

	liters of resin		125	150	200	250	300	350	400	500
Valve	H1	mm	272	272	272	272	272	272	272	272
Vessel	H2	mm	1674	1706	1722	1721	1918	1918	2140	2140
Brine tank	H3	mm	830	1000	1000	920	920	1220	1220	1220
Softener	Ht	mm	1946	1978	1994	1993	2190	2190	2412	2412
Diameter vessel	W1	mm	369	413	495	559	618	618	780	780
Diameter brine tank	W2	mm	680	760	760	880	880	880	880	880
Vessel type		inch	14x65	16x65	18x65	21x62	24x72	24x72	30x72	30x72
Volume brine tank		l	200	300	300	400	400	500	500	500
Weight*		kg	391	553	655	811	1012	1168	1467	1518

* Estimation of weight in service with full brine tank.

PALLAS CK 1.5" PLASTIC MONO SIMPLEX



CONDITIONS FOR INSTALLATION

Connection IN & OUT	1.5"
Drain connection (*)	1"
Electrical requirement	200-240V AC 50/60 Hz
Output & Power rating	15V / 0.5A - 7.5W
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	125	150	200	250	300	350	400	500
Nominal	m ³ / h	5.4	6.0	7.4	9.0	9.2	9.6	10.4	10.8
Peak	m ³ / h	7.4	8.0	9.8	11.6	12.0	12.2	13.2	13.6

WATER USAGE DURING REGENERATION

	liters of resin	125	150	200	250	300	350	400	500
Total H2O usage	liters	775	990	1150	1590	2240	2295	3090	3935
Water efficiency*	l water / g CaCO ₃	0.11	0.12	0.10	0.11	0.13	0.12	0.14	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)

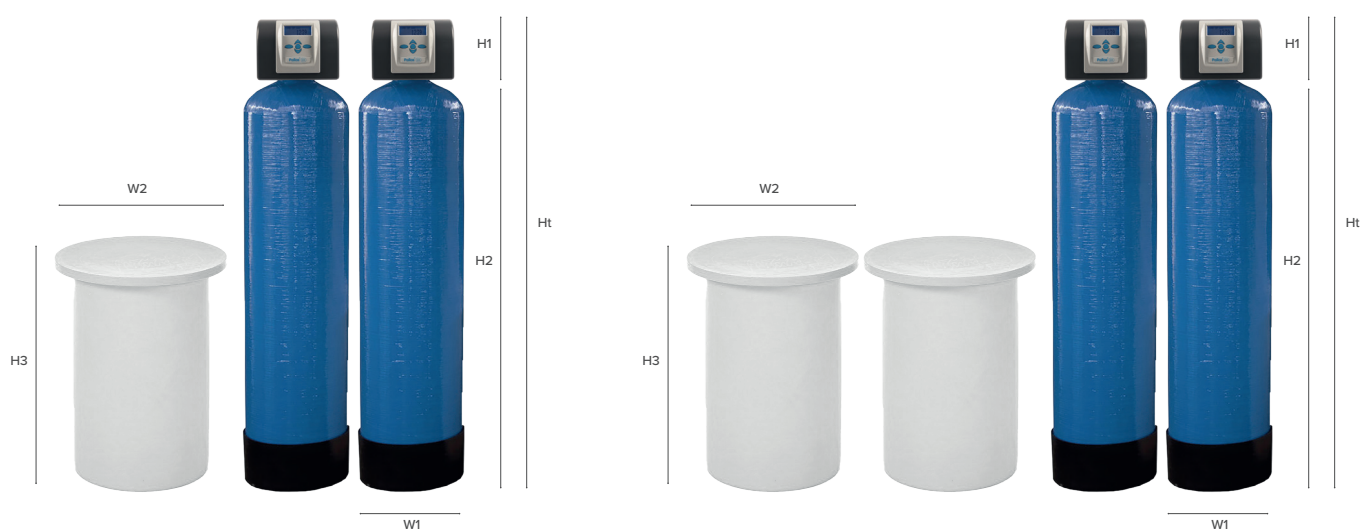
	liters of resin	125	150	200	250	300	350	400	500
Capacity	kg CaCO ₃	7.0	8.4	11.2	14.0	16.8	19.6	22.4	28.0
	°F x m ³	700	840	1120	1401	1680	1960	2239	2800
	dH x m ³	393	472	629	787	944	1101	1258	1573
Brine efficiency*	kg salt / kg CaCO ₃	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Salt consumption	kg salt / regeneration	16	19	25	31	38	44	50	63

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

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PALLAS CK 1.5" PLASTIC 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		125	150	200	250	300	350	400	500
Valve	H1	mm	272	272	272	272	272	272	272	272
Vessel	H2	mm	1674	1706	1722	1721	1918	1918	2140	2140
Brine tank	H3	mm	920	920	1120	1120	1120	1290	1290	1500
Softener	Ht	mm	1946	1978	1994	1993	2190	2190	2412	2412
Diameter vessel	W1	mm	370	410	500	560	620	620	780	780
Brine tank		l	400	400	750	750	750	1000	1000	1750
Diameter brine tank	W2	mm	880	880	1030	1030	1030	1100	1100	1300
Vessel type		inch	14x65	16x65	18x65	21x62	24x72	24x72	30x72	30x72
Weight*		kg	1150	1317	1938	2273	2606	3118	3451	4729

* Estimation of weight in service with full brine tank.

PALLAS CK 1.5" PLASTIC MONO DUPLEX ALT.



DIMENSIONS DUPLEX - TWO BRINE TANKS

	liters of resin		125	150	200	250	300	350	400	500
Valve	H1	mm	272	272	272	272	272	272	272	272
Vessel	H2	mm	1674	1706	1722	1721	1918	1918	2140	2140
Brine tank	H3	mm	830	1000	1000	920	920	1220	1220	1220
Softener	Ht	mm	1946	1978	1994	1993	2190	2190	2412	2412
Width vessel	W1	mm	370	410	500	560	620	620	780	780
Brine tank		l	200	300	300	400	400	500	500	500
Width brine tank	W2	mm	680	760	760	880	880	880	880	880
Vessel type		inch	14x65	16x65	18x65	21x62	24x72	24x72	30x72	30x72
Weight*		kg	1153	1528	1861	2302	2635	3229	3562	4230

* Estimation of weight in service with full brine tank.

DUPLEX - INSTALLATION

Included when ordering a CK duplex mono softener:

- Fittings to connect both valves, water meter & the MAV in the piping:
 - 4 x QC straight to BSPT 1,5"
 - 6 x QC elbow to BSPT 1,5"



* Pipework not included