

PWG MULTIVALVE

Duplex Upflow Service Softeners



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Your most efficient
& cost-saving softener.

 a proven green solution

PWG MULTIVALVE

Softening of water is the removal of Calcium, Magnesium and other cations by use of cation-exchange resins. The resulting water gives an extension of the lifetime of the pipework and installations further in line.

Hydris delivers a complete plug and play unit, easily adaptable on request. Installation of a duplex softening unit guarantees the continuous delivery of softened water due to an alternating approach.

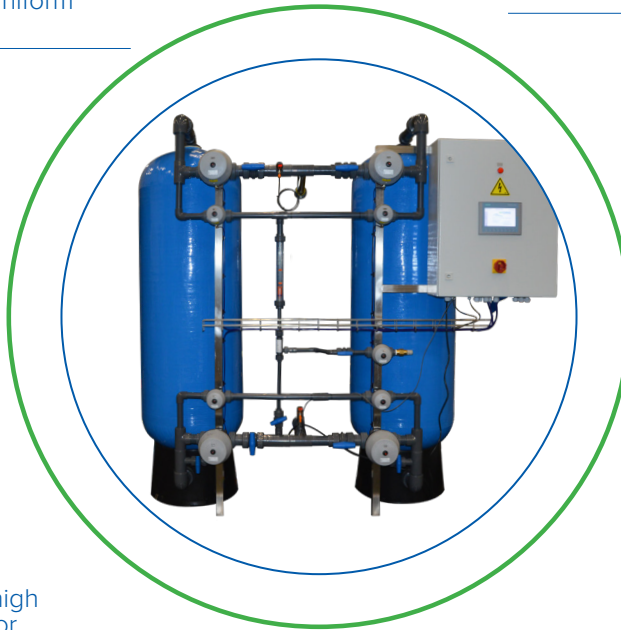
Softening is done in upflow service and regeneration in downflow modus which minimizes the salt usage. Regeneration is initiated automatically on hardness control. Conductivity monitoring on the drain prevents spill of water.



Tank & distributors: composite fiberglass vessel with 4" threaded or 6" flanged top and bottom opening; assembled with distribution systems for a uniform water dispersion.

Operating specifications: electrical supply of 230-24 VAC - estimated power consumption of 100 VA.

Siemens PLC: The control unit with touch screen allows automatic monitoring and control through solenoid valves. Input signals through a pulse water meter and hardness, conductivity and pressure meters. A general alarm is communicated through a digital output signal.



Inlet specifications: water pressure between 2,5 and 10 bar - operating temperature between 7° and 30°C.

Panopoly: full assembly of the components in PVC-U with easy mounting 3-pcs unions or flanges. The valves are mounted on a stainless steel frame.

Gemü diaphragm or Sigeval butterfly valves: high quality diaphragm valves for service and regeneration. Additional manual PVC ball valves or butterfly valves are installed on the in- and outlet for easy disconnection of the net during maintenance. All control valves are pneumatic and require compressed air (4-6 bar, 6mm connection).

Filter media: a support layer (1,7 - 2,5 mm) protects the distribution system and improves the water distribution over the full surface of the vessel. The mono cation exchange resin is food grade certified, has a high capacity and a good physical, chemical and thermal stability. A top layer of inert resins finishes the packed bed and allows efficient water distribution.

TECHNICAL DATA SOFT MV UFS MONO D18-D63

D18	D21	D24	D30	D36	D42	D48	D55	D63
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Order code starting with 4407055(...)

497	498	499	500	501	502	503	504	505
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Tech. spec's / vessel

Tank diameter	mm	457	533	610	762	914	1.067	1.219	1.397	1.600
Total tank height	mm	1.880	1.760	2.010	2.040	2.350	2.430	2.465	2.681	3.270
Volume - total	L	250	302,5	436,5	710	1.020	1.360	1.840	2.619	4.265

Filter media / vessel

Inert resins Bags of 25L	L	38	38	50	75	125	150	175	325	325
Resins Bags of 25L	L	175	200	300	500	725	950	1.275	1.650	3.000
Support layer Bags of 25kg	kg	25	50	75	100	175	275	425	750	1.025

Flow rates

Qnom @1,0 bar dP	m ³ /h	8,0	11	12	15	21	34	43	44	53
Qnom @1,5 bar dP	m ³ /h	10	14	16	21	30	47	55	59	74

Exchange capacities / vessel

°F.m ³		963 - 1.138	1.100 - 1.300	1.650 - 1.950	2.750 - 3.250	3.988 - 4.713	5.225 - 6.175	7.013 - 8.288	9.075 - 10.725	16.500 - 19.500
dH.m ³		541 - 639	618 - 730	927 - 1.096	1.545 - 1.826	2.240 - 2.647	2.935 - 3.469	3.940 - 4.656	5.098 - 6.025	9.270 - 10.955
kg CaCO ₃		10 - 11	11 - 13	17 - 20	28 - 33	40 - 47	52 - 62	70 - 83	91 - 107	165 - 195

Regeneration

Salt consumption	kg	15	18	26	44	64	84	112	145	264
Brine consumption	L	51	59	88	147	213	279	374	484	880
Brine tank type	L	200		300	400	750		1.000	1.750	2.500
Water consumption	m ³	0,30	0,34	0,51	0,85	1,24	1,62	2,17	2,81	5,12

Connections

IN/OUT	DN40		DN50	DN65	DN80	DN100			
DRAIN	DN15	DN20		DN25	DN32		DN40	DN50	
BRINE	DN15			DN20	DN20	DN25			DN32

Dimensions Softener

Width	mm	1.714	1.867	2.019	2.324	2.629	2.934	3.238	3.594	4.000
Depth	mm	957	1.033	1.110	1.262	1.414	1.567	1.719	1.897	2.100
Height	mm	2.380	2.260	2.510	2.540	2.850	2.930	2.965	3.181	3.770
Estimated operating weight ¹	kg	850	1.000	1.350	2.100	2.950	3.900	6.500	7.500	11.900

Dimensions Brine Tank

Diameter	mm	680	760	880	1.030		1.100	1.300	1.420	
Height	mm	830		1.000	920	1.120		1.290	1.500	2.060

¹ Brine tank excluded

WHY PWG MULTIVALVE?

- **Proven Technology**
- **Tank fully utilized**
 - No bed expansion needed
 - More capacity /tank size
 - Low footprint
- **Water savings up to 80 %**
 - No backwash needed
 - Conductivity controlled regeneration cycles
- **Salt savings up to 50 %**
 - Efficient brining (downflow)
- **Short regeneration time**
 - No backwash
 - Controlled regeneration cycles (by conductivity)
- **Independent pneumatic Gemü or Sigeval valves**
 - Extremely reliable, high quality.
 - Reduces pressure drop up to 50 % compared with central valves
- **Hygienic**
 - No accumulation of dirt
- **High ROI**
 - Water savings
 - Salt savings
- **Industrial softener with Siemens PLC**
 - Easy to handle, logical touch screen
- **Extremely reliable**
 - Independent pneumatic valves
 - Alternating
 - PLC controlled
- **No packing or channeling**
 - Free flow



RESIDENTIAL
Home appliances, boilers and heaters.



HORECA
Central softening of cold & hot water, kitchen, laundry, boilers, ...



BUILDING
Boilers & cooling towers.



INDUSTRY
Pre-treatment reverse osmosis, steam boilers, process, cooling towers, food & beverage.



MEDICAL
Central softening of cold & hot water, boilers, pre-treatment reverse osmosis, kitchen, laundry.