

Water Softeners

Removal of scale-forming hardness minerals



C&I SERIES Autotrol Valve

THE PRINCIPAL SCALE-FORMING MINERALS, CALCIUM AND MAGNESIUM, ACCUMULATE IN PIPING, HEAT EXCHANGERS, WATER HEATERS, BOILERS AND STEAM EQUIPMENT RESULTING IN SIGNIFICANT INCREASES IN ENERGY CONSUMPTION, HIGHER RUNNING COSTS AND MAINTENANCE

VALVE, CONTROL & CONFIGURATION OPTIONS:

- Single softener or multiple-softener configuration
- Free-standing, skid-mounted or containerised systems fully plumbed and wired
- Timer, water meter, pressure differential or external signal regeneration initiation
- Single or twin, timer or metered control; or alternating, sequential or parallel controls for up to four softeners
- Top-mount or side-mount 5 cycle automatic valves on softeners 30cm to 107cm diameter
- Hydraulic or pneumatic valves with stager and controller in Nema enclosure on softeners 76cm to 160cm diameter



AUTOTROL VALVES USED ON ALL MODELS EXCEPT 16" (CLACK)

Softener Model	(Dia x Height)		resin litres	in/out mm	service lpm*	peak lpm*	Back wash lpm	max/min capacity kgms		max/min salt usage kgms	
	cms	inch									
WTWS12M	30 x 130	12 x 52	56	25	38.0	75.0	13.0	3.9	1.3	13.5	4.5
WTWS13M	33 x 137	13 x 54	70	25	48.0	95.0	16.0	4.9	1.6	16.9	5.6
WTWS14M	35 x 165	14 x 65	100	25	63.0	95.0	18.0	6.7	2.2	22.8	7.6
WTWS16	40 x 165	16 x 65	125	40	83.0	125.0	23.0	8.7	2.9	30.0	10.0
WTWS21-MGM	51 x 157	21 x 62	175	40	116.0	175.0	42.0	12.3	4.1	42.0	14.0
WTWS24-MGM	61 x 183	24 x 72	300	40	202.0	288.0	53.0	21.0	7.0	72.0	24.0
WTWS30-MGM	76 x 183	30 x 72	475	50	288.0	288.0	82.0	33.3	11.1	114.0	38.0
WTWS36-MGM	92 x 183	36 x 72	700	50	288.0	288.0	125.0	49.0	16.3	168.0	56.0

Tank dimensions do not include base. *Flow rates are a guide only - peak flow rates can be achieved for short periods. Peak flows based on 105kpa pressure loss through valve. Minimum inlet pressure 420 kpa. Maximum inlet pressure 600 kpa with no water hammer. For open discharge applications (e.g. tank filling), or during regeneration a switch kit &/or solenoid valve or NHWBP option will be required to provide back-pressure when the softener is regenerating. Refer Dowdens for information and pricing.

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FEATURES

- Single or multiple softener configurations
- Top-mount 5-cycle automatic softener valves. Side-mount option available on WTWS16 to WTWS48 systems
- Water meter, pressure differential or external signal regeneration initiation
- Single, alternating or twin metered controls. Sequential or parallel controls for multiple softeners
- Free-standing FRP fibreglass wrapped polyethylene resin tanks
- Heavy duty polyethylene brine tanks & lids
- Food grade industrial softener resin
- No Hard Water Bypass valve option to prevent unsoftened water to service during regeneration
- Motorised alternating valve option for soft water regeneration



Model	(Dia x Height)		resin litres	in/out mm	service lpm*	peak lpm*	Back wash lpm	max/min capacity kgms		max/min salt usage kgms	
	cms	inches									
WTWS12	30 x 130	12 x 52	56	25	38.0	76.0	13.0	3.9	1.3	13.5	4.5
WTWS13	33 x 137	13 x 54	70	25	48.0	96.0	16.0	4.9	1.6	16.9	5.6
WTWS14	35 x 165	14 x 65	100	25	67.0	134.0	18.0	6.7	2.2	22.8	7.6
WTWS16	40 x 165	16 x 65	125	40	83.0	116.0	23.0	8.7	2.9	30.0	10.0
WTWS21	51 x 157	21 x 62	175	40	116.0	232.0	42.0	12.3	4.1	42.0	14.0
WTWS24	61 x 183	24 x 72	300	40	202.0	265.0	53.0	21.0	7.0	72.0	24.0
WTWS30	76 x 183	30 x 72	500	50	335.0	470.0	82.0	33.5	11.1	114.0	38.0
WTWS36	92 x 183	36 x 72	700	50	435.0	473.0	125.0	49.0	16.3	168.0	56.0
WTWS42	107 x 183	42 x 72	875	80	587.0	946.0	162.0	61.3	20.4	210.0	70.0
WTWS48	122 x 183	48 x 72	1175	80	788.0	946.0	217.0	81.9	27.3	280.0	93.3



Optional No Hard Water Bypass Valve (NHWB) to prevent hard water to service during regeneration. Add '-NHWB' suffix to Softener Model



Optional Motorised Alternating Valve (MAV) option for soft water regeneration

Tank dimensions do not include base. *Flow rates are a guide only - peak flow rates can be achieved for short periods only. Peak flows based on 105kpa pressure loss through valve. Minimum inlet pressure 420 kpa. Maximum inlet pressure 600 kpa with no water hammer. For open discharge applications (e.g. tank filling), or during regeneration a NHWB option will be required to provide back-pressure when the softener is regenerating.