

est. 1947

DUFF^{CO.}

When you need it now... or don't know how

CLACK WS3

WS3

WATER SPECIALIST CONTROL VALVE

NSF

Certified to NSF/ANSI 61 and 372.

- 3" top mount or side mount control valve suited for commercial and industrial applications
- Epoxy coated lead free brass valve body
- Economical stainless steel optional meter assembly
- Service flow rate 250 gpm (946 lpm) (56.8 m³/h), Backwash flow rate 220 gpm (833 lpm) (50.0 m³/h)
- Solid state microprocessor with easy access front removable POD
- Front panel display for Time of Day, Current Flow Rate, Totalizer and Volume/Days until Regeneration
- Four methods to initiate the down flow regeneration; meter delayed, meter immediate, time clock delayed, aor pressure differential
- Fully programmable regeneration cycle sequences (maximum 9)
- Fully programmable regeneration cycle times
- Pre or Post treated water regenerant refill
- Days override feature; 1-28 days available
- Capacitor back-up with up to 24 hour carry over
- Level VI 18-volt output DC power supply provides safe and easy installation
- Reliable and proven DC drive
- Patented one piece expanding seal spacer stack assembly U.S. Patent 6,402,944
- Patented linearly reciprocating piston operation U.S. Patent 6,444,127



Optional 3" Meter



Side Mount Adapter

DWC
DUFF WATER CONDITIONING
Products for Quality Water

CALL 610-275-4453

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Water Specialist 3" Control Specifications

Inlet/Outlet (1)	3" Female NPT or BSPT
Cycles	up to 9
Valve Material	Lead free brass
Regeneration	Downflow
CONTROL VALVE FLOW RATES	
Service @ 15 psi/1 bar drop.....	250 gpm (946 lpm) (56.8 m ³ /h)
Backwash @ 25 psi/1.7 bar drop.....	220 gpm (833 lpm) (50.0 m ³ /h)
Cv Service.....	64.6
Cv Backwash.....	44.0
OPERATING PRESSURES	
Minimum/Maximum	20 - 125 psi (1.4 - 8.6 bar)
OPERATING TEMPERATURES	
Minimum/Maximum	40° - 110° F (4° - 43° C)
METER SPECIFICATIONS	
Accuracy.....	± 5%
Flow Rate Range.....	3.5 - 350 gpm (13.3 - 1325 lpm)
Volume Range	10 - 999,000 gallons (38 - 3,796.2 liters x1000)
Totalizer	1,000 - 999,999,000 gallons (3,786 - 3,785,407.9 liters x1000)
DIMENSIONS & WEIGHT	
Distributor Pilot	
Valve Bodies with 3" Female NPT Inlet & Outlet.....	3.5" OD (3" NPS)
Valve Bodies with 3" Female BSPT Inlet & Outlet	90mm OD
Drain Line Connection	3" Female NPT/BSPT "No Groove Lock"
Brine Line Adapters Included.....	1" Male NPT elbow and 3/4" x 1" solvent weld elbow
Mounting Base.....	6" Flange or Side Mount
Height From Top Of Tank with 6" Flange QC Base	12.5" (318mm)
Shipping Weight Without Optional Meter	57 lbs (25.9 Kg)
ELECTRICAL SPECIFICATIONS	
POWER SUPPLY	
	<u>U.S.</u> <u>International</u>
Supply Voltage	120VAC 240VAC
Supply Frequency.....	60 Hz 60 Hz
Output Voltage	18VDC 18VDC
Output Current	750 mA..... 750 mA
TANK APPLICATIONS	
Water Softener	18" - 63" Diameter with standard injectors, to 96" with Brine Pump
Water Filter (2).....	18" - 63" Diameter
CYCLES OF OPERATION	
Choose up to nine regeneration cycles, in any order, with a wide range of available values:	
Cycle	Range of values
Backwash.....	1 - 95 minutes
Brine (draw).....	1 - 180 minutes
Slow Rinse	1 - 95 minutes
Fast Rinse	1 - 95 minutes
Refill	0.1 - 99 minutes
Hold (service)	1 - 480 minutes

Options: Backwash Filter

Compatible with the following typical concentrations of regenerants or chemicals: Sodium chloride, potassium chloride, potassium permanganate, sodium bisulfite, chlorine and chloramines

1. See Distributor Pilot.

2. Filter tank size calculated @ 10 gpm of backwash per square foot of bed area/407 lpm per m² of bed area