

CLACK® CI CONTROL VAVLE

The Clack-International valve, made in the United States, is designed to work with ion-exchange materials. It features a direct-flow regeneration type and backwash function. Regeneration can be delayed, instant, or both.

KEY FEATURES:

- English-language valve
- Icon-based menu
- 3 available hardness units (ppm CaCO₃, °dH, °fH).
- Programmable 9 regeneration cycles
- Available version with mixing option
- Versions with downflow and up-flow regeneration



CLACK® CI CONTROL VAVLE

| Code | Description | Flow rate, m ³ h | | Connection |
|---------------|--|-----------------------------------|-------------------------------------|------------|
| | | Service, (pressure drop 1 bar) | Backwash (pressure drop 1.7 bar) | |
| V1CIDMF-03* | WS1CI VALVE DN M I-F | 6.12 | 6.12 | 1" |
| V1CIUME-M03* | WS1CI Valve UP M I-B with mixing valve | 6.12 | 6.12 | 1" |
| V1CIBMZ-03* | WS1CI VALVE BW M I-Z NOTRN | 6.12 | 6.12 | 1" |
| V1CIDME-M03* | WS1CI VALVE DN M I-E with mixing valve | 6.12 | 6.12 | 1" |
| VTT1CIDME-03* | TT1CI VALVE DN M I-E | 6.36 | 3.4 | 1" |
| V125CIDMK-08* | WS125CI VLV DNM I-K | 7.7 | 7.3 | 1.25" |
| V15CIBTZ-05 | WS15CI VLV BW T I-Z | 15.9 | 11.8 | 1.5" |
| V2CIBTZ-05 | WS2CI VLV BWT I-C NO | 26.1 | 18.2 | 2" |

Water Specialist 1” CI Control Specifications

| | |
|----------------------------|----------------------------|
| Inlet/Outlet Fittings..... | ¾" to 1.5" NPS |
| Cycles | up to 9 |
| Valve Material | Fiber Reinforced Composite |
| Regeneration | downflow/upflow |

FLOW RATES

| | |
|--|---|
| Service @ 15 psi/1 bar drop (includes bypass and meter)..... | 102 lpm (6.12 m ³ /h) (27 gpm) |
| Backwash @ 25 psi/1.7 bar drop (includes bypass)..... | 102 lpm (6.12 m ³ /h) (27 gpm) |

OPERATING PRESSURES

| | |
|-----------------------|------------------------------|
| Minimum/Maximum | 20 - 125 psi (1.4 - 8.6 bar) |
|-----------------------|------------------------------|

OPERATING TEMPERATURES

| | |
|-----------------------|---------------------------|
| Minimum/Maximum | 40° - 110° F (4° - 43° C) |
|-----------------------|---------------------------|

METER

| | |
|----------------------|--|
| Accuracy | ± 5% |
| Flow Rate Range..... | 0.95 - 102 lpm |
| Volume Range | 0.02 - 5,700 m ³ |
| Totalizer | 1 m ³ - 99,999 m ³ |

DIMENSIONS & WEIGHT

| | |
|------------------------------|-------------------------|
| Distributor Pilot | 1.050" OD Pipe (¾" NPS) |
| Drain Line | ¾" or 1" NPT |
| Brine Line | ¾" or ½" OD Poly Tube |
| Mounting Base..... | 2 ½" - 8 NPSM |
| Height From Top Of Tank..... | 7 ¾" (187 mm) |
| Weight | 4.5 lbs (2 kg) |

ELECTRICAL SPECIFICATIONS

| | |
|------------------------|------------------|
| Supply Voltage | 100VAC to 120VAC |
| Supply Frequency | 50/60 Hz |
| Output Voltage | 15VDC |
| Output Current | 500 mA |

POWER SUPPLY

| | <u>U.S.</u> | <u>International</u> |
|------------------------|------------------|----------------------|
| Supply Voltage | 100VAC to 120VAC | 200VAC to 240VAC |
| Supply Frequency | 50/60 Hz | 50/60 Hz |
| Output Voltage | 15VDC | 15VDC |
| Output Current | 500 mA | 500 mA |

TANK APPLICATIONS

| | |
|------------------------|-------------------|
| Water Softener | 6" - 21" Diameter |
| Water Filter (1) | 6" - 21" 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 - 120 minutes |
| Rinse..... | 1 - 120 minutes |
| Pause (service)..... | 1 - 480 minutes |
| Brine (co-current)..... | 1 - 180 minutes |
| Brine (counter-current)..... | 1 - 180 minutes |
| Refill (softener) | 0.05 - 90.00 Kg |
| Refill (filter) | 0.2 - 76.00 Liters |

Options: Backwash Filter, Bypass, Weather Cover

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

1. Filter tank size calculated @ 10 gpm of backwash per square foot of bed area

Water Specialist 1.25" CI Control Specifications

| | |
|----------------------------|----------------------------|
| Inlet/Outlet Fittings..... | ¾" to 1.5" NPS |
| Cycles | up to 9 |
| Valve Material | Fiber Reinforced Composite |
| Regeneration | Downflow |

FLOW RATES

| | |
|---|---------------------------------|
| Service @ 15 psi/1 bar drop (includes meter, bypass, and 1.25" fitting kit) ... | 129 lpm (7.7 m³/h) (34 gpm) |
| Backwash @ 25 psi/1.7 bar drop..... | 121 lpm (7.3 m³/h) (32 gpm) (1) |

OPERATING PRESSURES

| | |
|-----------------------|------------------------------|
| Minimum/Maximum | 20 - 125 psi (1.4 - 8.6 bar) |
|-----------------------|------------------------------|

OPERATING TEMPERATURES

| | |
|-----------------------|---------------------------|
| Minimum/Maximum | 40° - 110° F (4° - 43° C) |
|-----------------------|---------------------------|

METER

| | |
|----------------------|------------------|
| Accuracy | ± 5% |
| Flow Rate Range..... | 0.95 - 129 lpm |
| Volume Range | 0.02 - 5,700 m³ |
| Totalizer | 1 m³ - 99,999 m³ |

DIMENSIONS & WEIGHT

| | |
|------------------------------|------------------------------------|
| Distributor Pilot | 1.32" OD Pipe (1" NPS) or 32 mm OD |
| Drain Line | ¾" or 1" NPT |
| Brine Line | ¾" or ½" OD Poly Tube |
| Mounting Base..... | 2 ½" - 8 NPSM |
| Height From Top Of Tank..... | 7 ¾" (187 mm) |
| Weight | 4.5 lbs (2 kg) |

ELECTRICAL SPECIFICATIONS

POWER SUPPLY

| | <u>U.S.</u> | <u>International</u> |
|------------------------|------------------|----------------------|
| Supply Voltage | 100VAC to 120VAC | 200VAC to 240VAC |
| Supply Frequency | 50/60 Hz | 50/60 Hz |
| Output Voltage | 15VDC | 15VDC |
| Output Current | 500 mA | 500 mA |

TANK APPLICATIONS

| | |
|------------------------|-------------------|
| Water Softener | 6" - 21" Diameter |
| Water Filter (2) | 6" - 24" 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 - 120 minutes |
| Rinse..... | 1 - 120 minutes |
| Pause (service)..... | 1 - 480 minutes |
| Brine (co-current)..... | 1 - 180 minutes |
| Refill (softener) | 0.05 - 90.00 Kg |
| Refill (filter) | 0.2 - 76.00 Liters |

Options: Backwash Filter, Bypass, Weather Cover

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

1. Acquired by use of external drain line flow control
2. Filter tank size calculated @ 10 gpm of backwash per square foot of bed area/407 lpm per square meter of bed area

Water Specialist 1.5” CI Control Specifications

| | |
|------------------------|-------------------------|
| Inlet/Outlet (1) | 1.5” Female BSPT or NPT |
| Cycles | Up to 9 |
| Valve Material | Lead free brass |
| Regeneration | Downflow |

CONTROL VALVE FLOW RATES

| | |
|--|---|
| Service @ 1 bar/15 psi drop (includes meter) | 265 lpm (15.9 m ³ /h) (70 gpm) |
| Backwash @ 1.7 bar/25 psi drop | 197 lpm (11.8 m ³ /h) (52 gpm) |

OPERATING PRESSURES

| | |
|-----------------------|------------------------------|
| Minimum/Maximum | 1.4 - 8.6 bar (20 - 125 psi) |
|-----------------------|------------------------------|

OPERATING TEMPERATURES

| | |
|-----------------------|---------------------------|
| Minimum/Maximum | 4° - 43° C (40° - 110° F) |
|-----------------------|---------------------------|

METER SPECIFICATIONS

| | |
|-----------------------|---|
| Accuracy | ± 5% |
| Flow Rate Range | 2 - 284 lpm (0.5 - 75 gpm) |
| Volume Range | 0.02 - 5,700 m ³ |
| Totalizer | 1 - 99,999 m ³ (264 - 26,417,000 gallons) |

DIMENSIONS & WEIGHT

| | |
|---|-----------------------------|
| Distributor Pilot | |
| Valve bodies with 1.5" Female BSPT Inlet & Outlet | 50 mm OD |
| Valve bodies with 1.5" Female NPT Inlet & Outlet | 1.90” OD (1.5” NPS) |
| Drain Line Connection(2) | 1.25” Female NPT |
| Adapter Included | ¾” Male NPT Elbow |
| Brine Line Connection | ¾” Female NPT |
| Adapter Included | ½” OD Poly Tube Compression |
| Mounting Base | 4” - 8 UN |
| Height From Top Of Tank | 191 mm (7.5”) |
| Shipping Weight With Meter | 9.5 kg (21 lbs.) |

ELECTRICAL SPECIFICATIONS

POWER SUPPLY

| | U.S. | International |
|------------------------|------------------|------------------|
| Supply Voltage | 100VAC to 120VAC | 200VAC to 240VAC |
| Supply Frequency | 50/60 Hz | 50/60 Hz |
| Output Voltage | 15VDC | 15VDC |
| Output Current | 500 mA | 500 mA |

TANK APPLICATIONS

| | |
|------------------------|--------------------|
| Water Softener | 12” - 24” Diameter |
| Water Filter (3) | 12” - 30” 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 - 120 minutes |
| Rinse | 1 - 120 minutes |
| Pause (service) | 1 - 480 minutes |
| Brine (co-current) | 1 - 180 minutes |
| Refill (softener) | 0.05 - 90.00 Kg / .1 - 99 minutes |
| Refill (filter) | 0.2 - 76.00 Liters |

Options: Backwash Filter, Weather Cover

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

Water Specialist 2” CI Control Specifications

| | |
|------------------------|-----------------------|
| Inlet/Outlet (1) | 2” Female BSPT or NPT |
| Cycles | Up to 9 |
| Valve Material | Lead free brass |
| Regeneration | Downflow |

CONTROL VALVE FLOW RATES

| | |
|-------------------------------------|--|
| Service @ 1 bar/15 psi drop | 435 lpm (26.1 m ³ /h) (115 gpm) |
| Backwash @ 1.7 bar/25 psi drop..... | 303 lpm (18.2 m ³ /h) (80 gpm) |
| Cv Service | 29.7 |
| Cv Backwash | 16.0 |

OPERATING PRESSURES

| | |
|-----------------------|----------------------------------|
| Minimum/Maximum | 1.4 - 8.6 bar (20 psi - 125 psi) |
|-----------------------|----------------------------------|

OPERATING TEMPERATURES

| | |
|-----------------------|---------------------------|
| Minimum/Maximum | 4° - 43° C (40° - 110° F) |
|-----------------------|---------------------------|

METER SPECIFICATIONS

| | |
|----------------------|---|
| Accuracy | ± 5% |
| Flow Rate Range..... | 5.7 - 568 lpm (1.5 - 150 gpm) |
| Volume Range | 0.02 - 5,700 m ³ |
| Totalizer | 1 - 99,999 m ³ (264 - 26,417,000 gallons) |

DIMENSIONS & WEIGHT

| | |
|--|---|
| Distributor Pilot | |
| Valve bodies with 2" Female BSPT Inlet & Outlet..... | 50mm OD |
| Valve bodies with 2" Female NPT Inlet & Outlet | 1.90" OD (1.5" NPS) |
| Drain Line Connection | 1.5" Female NPT |
| Brine Line Adapters Included..... | 1" Male NPT elbow, ¾" x 1" solvent weld elbow and ½" OD Poly Tube Compression |
| Mounting Base | 4" - 8 UN |
| Height From Top Of Tank..... | 216 mm (8.5") |
| Shipping Weight With Meter | 13 Kg (29 lbs.) |

ELECTRICAL SPECIFICATIONS

POWER SUPPLY

| | U.S. | International |
|------------------------|----------------------|------------------|
| Supply Voltage | 100VAC to 120VAC ... | 200VAC to 240VAC |
| Supply Frequency | 50/60 Hz | 50/60 Hz |
| Output Voltage | 15VDC | 15VDC |
| Output Current | 500 mA | 500 mA |

TANK APPLICATIONS

| | |
|-----------------------|--------------------|
| Water Softener | 12" - 48" diameter |
| Water Filter (2)..... | 12" - 36" 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 - 120 minutes |
| Rinse..... | 1 - 120 minutes |
| Pause (service)..... | 1 - 480 minutes |
| Brine (co-current)..... | 1 - 180 minutes |
| Refill (softener) | 0.1 - 99.0 minutes |
| Refill (filter) | 0.1 - 99.0 minutes |

Options: Backwash Filter, Weather Cover

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