

Note: Photos are for representation purposes only. Vendors and models subject to change without notice.



#### MANUAL BALL VALVE W/MEMORY STOP (BVMS)

An adjustable stop position lever to limit travel of the On/Off handle. This allows the ball valve to be closed, and returned to the balance setting position without re-testing the system. 1/2" size shown.

Nominal Size:	1/2"	3/4"	1"
Body Material:	Brass	Brass	Brass
Ball:	Hard Chrome Plated	Hard Chrome Plated	Hard Chrome
Seats:	Teflon	Teflon	Teflon
Stem Seal:	(2) Viton O-Rings	Teflon	Teflon
Connection:	Sweat	Sweat	Sweat
Pressure Rating (psig):	600	600	600
Temp. Rating, °F:	325	325	325
17 32	27		Cv:



#### FLEXIBLE HOSE KITS, 18" (RBH)

Materials: EPDM inner lined, Kevlar® reinforced hose with stainless steel outer covering

Flow Rates:	0.5 to 12.0 GPM, based on application
Pressure Temp. Rating	375 PSIG @ 250°F (450 PSIG test pressure)
Minimum Burst Pressure:	1500 PSI
Flame Spread:	Not greater than 25 per UL 723
Smoke Development:	Not greater than 50 per UL 723
Ball Valve w/Memory Stop:	Full port brass
Ball:	Stainless steel
Seats:	Teflon
Stem Seal:	(2) Viton O-Rings
Pressure Rating:	600 PSIG WOG
Temperature Rating:	325°F
Cv:	20 Available in 1/2" size only.



#### TYPICAL 2-WAY, 2-POSITION CONTROL VALVE

A 2-position water control valve driven open with spring return upon a call for heating or cooling to maintain space temperature. In open position, water can flow through the unit's water coil to heat or cool the space depending on supply water temperature. In closed position, water cannot flow through the water coil. Control valves are piped normally closed to the coil as standard. Valve actuators can be line or low (24VAC) voltage.

Nominal Size	1/2" 2-Way	3/4" 2-Way	1" 2-Way
Body Material:	Brass	Brass	Brass
Connection:	Sweat	Sweat	Sweat
Pressure Rating (psig):	300	300	300
Temperature Rating, °F:	200	200	200
Cv:	2.5	5.0	8.0
Maximum Close-off Pressure, Std. (PSIG):	40	20	17
High Close-off:	50	25	20
Power Consumption:	7VA	7VA	7VA

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### TYPICAL 3-WAY, 2-POSITION CONTROL VALVE

A 2-position water control valve driven open with spring return (bypass) upon a call for heating or cooling to maintain space temperature. Energized, the bypass port is blocked, and water can flow through the unit's water coil to heat or cool the space depending on the supply water temperature. De-energized, water cannot flow through the water coil but is forced to flow through the bypass port, bypassing the coil. Control valves are piped normally closed to the coil as standard (in full bypass). Valve actuators can be line or low (24VAC) voltage.

Nominal Size	1/2" 3-Way	3/4" 3-Way	1" 3-Way
Body Material:	Brass	Brass	Brass
Connection:	Sweat	Sweat	Sweat
Pressure Rating (psig):	300	300	300
Temperature Rating, °F:	200	200	200
Cv:	3.0	5.0	8.0
Maximum Close-off Pressure (PSIG):	N/A	N/A	N/A
Power Consumption:	7VA	7VA	7VA



### 2-WAY, 2-POSITION MOTORIZED BALL VALVE

A 2-position water control motorized ball valve driven open with a capacitor upon a call for heating or cooling to maintain space temperature. In open position, water can flow through the unit's water coil to heat or cool the space depending on supply water temperature. In closed position, water cannot flow through the water coil. Control valves are piped normally closed to the coil as standard. Valve actuators are low voltage (24VAC).

Nominal Size	1/2" 2-Way	3/4" 2-Way	1" 2-Way
Body Material:	Forged Brass	Forged Brass	Forged Brass
Connection:	Sweat	Sweat	Sweat
Pressure Rating (psig):	300	300	300
Temperature Rating, °F:	240	240	240
Cv:	4.9	10.3	8.9
Maximum Close-off Pressure Operating Mode:	125	125	125
Power Consumption (Power On):	2VA	2VA	2VA
Power Consumption (Charging):	12VA	12VA	12VA



### 3-WAY, 2-POSITION MOTORIZED BALL VALVE

A 2-position water control motorized ball valve driven open with a capacitor (bypass) upon a call for heating or cooling to maintain space temperature. Energized, the bypass port is blocked, and water can flow through the unit's water coil to heat or cool the space depending on the supply water temperature. De-energized, water cannot flow through the water coil but is forced to flow through the bypass port, bypassing the coil. Control valves are piped normally closed to the coil as standard (in full bypass). Valve actuators are low voltage (24VAC).

Nominal Size	1/2" 3-Way	3/4" 3-Way	1" 3-Way
Body Material:	Forged Brass	Forged Brass	Forged Brass
Connection:	Sweat	Sweat	Sweat
Pressure Rating (psig):	300	300	300
Temperature Rating, °F:	240	240	240
Cv:	1.5	3.3	3.0
Maximum Close-off Pressure Operating Mode:	125	125	125
Power Consumption (On):	2VA	2VA	2VA
Power Consumption (Charging):	12VA	12VA	12VA



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#### TYPICAL 2-WAY MODULATING CONTROL VALVE

A 3-wire floating point, fail-in-place (non-spring return) modulating water control valve, driven open or closed upon a call for heating or cooling to maintain space temperature. In the open position, water can flow through the unit's water coil to heat or cool the space depending on supply water temperature. In the closed position, water cannot flow through the water coil. Factory furnished 2-way valve packages are piped normally closed to the water coil. The floating point control valve is compatible with any 24VAC three-wire signal when three minute time-out logic resides in the thermostat or system controller.

Nominal Size	1/2" 2-Way	3/4" 2-Way	1" 2-Way
Body Material:	Brass	Brass	Brass
Connection:	NPT	NPT	NPT
Pressure Rating (psig):	300	300	300
Temperature Rating, °F:	200	200	200
Cv:	1.9	4.7	7.4
Maximum Close-off			
Pressure Operating Mode:	50	35	35
Power Consumption:	1VA	1VA	1VA

Contact Titus for 3-wire floating, spring return applications



#### TYPICAL 3-WAY MODULATING CONTROL VALVE

A 3-wire floating point, fail-in-place (non-spring return) modulating water control valve, driven open or closed (bypass) upon a call for heating or cooling to maintain space temperature. In the "open" position, the bypass port is closed and water is directed through the unit's water coil to heat or cool the space depending on supply water temperature. In the "closed" position, the service (water coil) port is closed and water is directed through the bypass port. Factory furnished 3-way valve packages are piped as "mixing" valves. The floating point control valve is compatible with any 24VAC three-wire signal when three minute time-out logic resides in the thermostat or system controller.

Nominal Size	1/2" 3-Way	3/4" 3-Way	1" 3-Way
Body Material:	Brass	Brass	Brass
Connection:	NPT	NPT	NPT
Pressure Rating (psig):	300	300	300
Temperature Rating, °F:	200	200	200
Cv:	1.9	4.7	7.4
Maximum Close-off Pressure			
Operating Mode:	200	200	200
Power Consumption:	3VA	3VA	3VA

Contact Titus for 3-wire floating, spring return applications



Device = A

#### AUTOMATIC FIXED FLOW CONTROL (FC)

A pressure compensated automatic fixed flow control device designed to limit the flow GPM through the unit coil. Desired GPM must be specified when ordering. Device A shown is typical for controlling flow up to 8.0 GPM, and features a changeable flow cartridge. Decide B is typical for flows above 8.0 GPM.

Nominal Size (A):	1/2" and 3/4"
Nominal Size (B):	3/4" and 1"
Body Material:	Copper
Connection:	Sweat
Pressure Rating (psig) (A):	600
Pressure Rating (psig) (B):	522
Temp. Rating, °F:	220
Cv:	Variable With Inlet Pressure



Device = B



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### AUTOMATIC CARTRIDGE FLOW CONTROL (FCN, FCS)

An automatic fixed flow control device with a replaceable stainless steel cartridge, and two pressure/temperature ports, designed to limit the flow GPM through the unit coil to  $\pm 5\%$  of rated GPM. Desired GPM must be specified when ordering. Available with 20 mesh stainless steel screen. 1/2" size shown.

Nominal Size:	1/2", 3/4", and 1"
Body Material:	Forged brass
Connection:	Sweat
Seals:	EPDM O-Rings
Pressure Rating (psig):	230
Temp. Rating, °F:	250
PSIG Range:	2 - 32

Optional Strainer: Body Material: 20 mesh stainless steel\*

\* The optional strainer is internal and does not affect the dimensions.



### ADJUSTABLE FLOW CIRCUIT SETTER (AFS)

A control device designed to allow maximum water flow through the unit coil in the Open (0%) position, and as little as 10% of flow through the unit coil in the Closed (90%) position. The device has a calibrated nameplate, built in test ports and adjustable mechanical stops, and is suitable for positive shutoff.

Nominal Size:	1/2", 3/4", and 1"
Body Material:	Bronze
Connection:	Sweat
Pressure Rating (psig):	300
Temp. Rating, °F:	250
Cv:	Variable



### BALANCE BYPASS VALVE (BPV)

A plug type valve designed to balance the water flow through the bypass circuit of a 3-way control valve. Manual adjustment is required. No calibration is provided at the valve.

Nominal Size:	1/2", 3/4", and 1"
Body Material:	Bronze
Connection:	Sweat
Pressure Rating (psig):	400
Temp. Rating, °F:	200
Cv:	Adjustable



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### UNIONS

A fitting used to provide a mechanical connection between the coil and valve package that can be connected, disconnected, and re-connected without the need to cut tubing or unsolder a joint. Unions are installed at the coil on RBH, RAH, and RBV fan coil units. Unions are not available on RAV fan coil units.

Nominal Size:	1/2", 3/4", and 1"
Body Material:	Bronze/Copper
Connection:	Sweat
Pressure Rating (psig):	125*
Temp. Rating, °F:	200*

\*Contact Titus for unions rated at 600 PSIG and 325°F.



### Y-STRAINER (Y-STR)

Designed to allow water to flow through a built in screen to filter debris or contaminants from the water system. With the water system isolated, the plug can be removed from the blow down leg of the strainer and the captured debris removed from the screen. After the plug is replaced, the system can be put back in operation and the strainer will continue to filter the unit's water.

Nominal Size:	1/2" and 3/4"
Body Material:	Forged Brass
Connection:	Sweat
Pressure Rating (psig):	600
Temp. Rating, °F:	325
Screen:	20 Mesh Stainless Steel



### CLEAN OUT VALVE FOR Y-STRAINER (Y-CO)

A standard ball valve installed on the strainer blow down leg to allow flushing the strainer screen without removing the plug in the blow down leg. This valve has a standard 1/2" garden hose connection to allow fluid to be piped to a container or remote location during cleaning. Not available separately.

Nominal Size:	1/4"
Body Material:	Bronze
Connection:	MPT
Pressure Rating (psig):	600
Temp. Rating, °F:	200

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### OPTIONAL PRESSURE/TEMPERATURE TEST PORT LOCATIONS (P/T)

Designed to allow testing of water pressure, differential pressure or water temperature without interrupting the waterside operation of the Fan Coil Unit. Sensor probes (1/8") are not included.

Nominal Size:	1/4"
Body Material:	Brass
Connection:	MPT
Pressure Rating (psig):	400
Temp. Rating, °F:	250



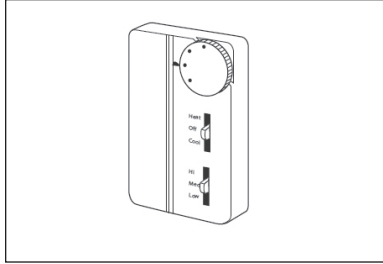
### AQUA THERMOSTAT

The aqua thermostat, also called an automatic seasonal changeover switch or aquastat, is a switch designed to change a room thermostat from heating to cooling and back, based on the temperature of the water supplied to a 2-pipe unit to be used for both heating and cooling. The switch is shipped loose and is mounted in the field on the water tubing using the integral clip or spring.

Nominal Size:	1/2", 3/4" and 1"
Switch Action:	SPDT
	Switch on temperature rise, 85°F (± 6°F)
	Switch on temperature fall, 70°F (± 6°F)
Current Rating:	120VAC = 5.8 FLA/34.8 LRA (Inductive), 10.0 Amps (Resistive)
	208/240VAC = 2.9 FLA/17.4 LRA (Inductive), 2.0 Amps (Resistive)
	277VAC = 3.6 FLA/21.6 LRA (Inductive), 1.0 Amp (Resistive)
Agency Approval:	UL Listed, CSA Approved

Ratings may vary with vendor and size.



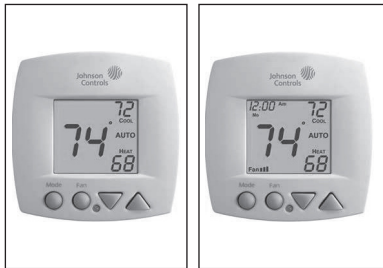


#### ERIE T155 SERIES

The T155 series thermostat provides on/off control for low voltage and line voltage valves, relays and fan motors. Applications include two pipe and four pipe fan coil units, ventilators and air quality operations. The TA-155 thermostat is designed for use with HVAC systems including two or four-pipe fan coil applications. Available in both Auto Changeover and Manual Changeover models, the TA-155 is ideal for installations requiring either automatic internal switching between heating and cooling or manual switching between heating and cooling. Solid state accuracy offers comfort and efficiency with contemporary styling.

Universal Voltage Capability is found in the TA-155 electronic thermostat. The thermostat can be applied directly to input voltages from 24 to 277 VAC, 50 or 60Hz. Thermostat outputs are suitable for connection to relays and valves. The system and fan switches will handle inductive and resistive loads.

The standard TA-155 is user configurable for either unit or remote thermistor sensing. Fan operation is continuous or can be cycled with the use of a load handling relay.



#### NON-PROGRAMMABLE / PROGRAMMABLE THERMOSTAT

The T701DFN Non-programmable and T701DFP Programmable thermostat controllers provide control of two or four-pipe fan coils. These thermostat controllers provide on/off; three speeds of fan control, and dry contact unoccupied control. They are designed as standalone devices for use in commercial buildings such as schools and hotels. The thermostats provide the user access to parameters such as system mode, fan mode, and temperature setpoints.



#### T60 X DFH-4 / T60 X DFH-4+PIR SERIES THERMOSTAT CONTROLLERS

The T60 x DFH-4 and T60 x DFH-4+PIR Series Thermostat Controllers provide control of two-or four-pipe fan coils, cabinet unit heaters, or other equipment. These thermostat controllers provide on/off, floating, or proportional 0 to 10 VDC control outputs; three speeds of fan control; and dehumidification capability. The T60 x DFH-4+PIR Series Thermostat Controllers have occupancy sensing capability built into the device. These are stand-alone devices that maximize up to 30% energy savings in high-energy usage light commercial buildings, such as schools and hotels, during occupied times by using additional Stand-By setpoints.



#### TEC3000 SERIES

The TEC3000 Series Thermostat Controllers are wireless, stand-alone, and field-selectable BACnet units or N2 networked devices that provide on/off, floating, and proportional control. Models also provide single-or two-stage control of unitary rooftop units (RTUs) with or without economizers and heat pumps. The wireless thermostat controllers feature a connection to the ZFR Pro wireless network. All models include a USB port configuration that reduces installation time by allowing simple backup and restore features from a USB drive, which enables rapid cloning of configuration between like units. Models are available with or without the logo.