

Fan Coils

Valve packages general data: V-2E

Zehnder Rittling Console and High Capacity Fan Coils have standard valve packages available as a factory built assembly and field-installed option for the main cooling coil and optional heating coil. Vertical Hi-Stack Fan Coils are the exception where all valve packages are factory installed. All valve packages are manufactured within strict tolerances and are hydrostatically tested for leaks. All cooling piping and components are located directly above the drain pan to allow condensate to be captured and properly drained. Insulation of the factory valve package is not required. However, all field connections downstream of the valve package should be insulated.

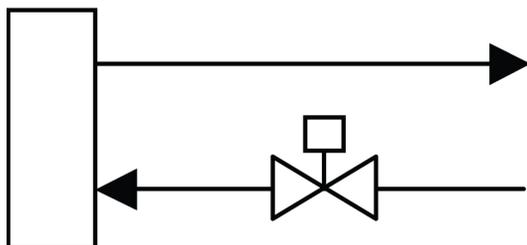
Valve package components

Zehnder Rittling valve packages consist of a variety of components and selection of each combination is dependent upon the application. The following sections provide a detailed description of each of the components. Following this section are additional schematic illustrations and mechanical specifications and photos.

2-way on/off valve

These 1/2" valves are normally closed to the coil as standard and will isolate the coil during a loss of power. Upon response to a signal from the controller, the valve will be either fully open or fully closed. These valves are located in the water supply pipe, have a C_v of 3.5, and close off DP of 20 PSI. A means of relieving pump head pressure must be accounted for when two-way valves are selected, most notably when used in combination with automatic changeover.

Part	Material
Body	Forged brass
Stem	Nickel plated/chrome plated brass
Seat	Brass
Paddle/plug	Buna N
Actuator	Stainless steel base plate, aluminum cover
Temperature	200 °F maximum
Working pressure	300 PSI



Fan Coils

Valve packages general data: V-2M

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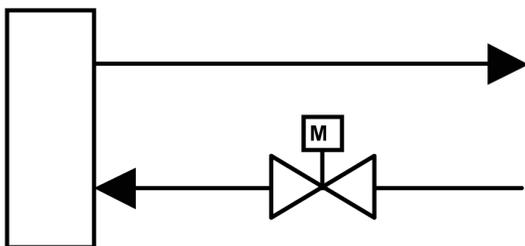
Valve package components

Zehnder Rittling valve packages consist of a variety of components and selection of each combination is dependent upon the application. The following sections provide a detailed description of each of the components. Following this section are additional schematic illustrations and mechanical specifications and photos.

2-way modulating valve

These 1/2", 24V valves modulate the flow of water (0-100%) through the coil in response to a signal from the controller and are normally closed to the coil as standard. All modulating valves are three-wire floating equal percentage valves, designed for precise temperature control. All valves feature a magnetic clutch to extend the life of the motor and gear train, manual operating lever/position indicator facilitates field setup, and easy to use lever terminal blocks. These valves are located in the water supply pipe, have a C_v of 4.0, and close off DP of 50 PSI. A means of relieving pump head pressure must be accounted for when two-way valves are selected, most notably when used in combination with automatic changeover.

Part	Material
Body	Forged brass
Stem	Nickel plated/chrome plated brass
Seat	Brass
Paddle/plug	High temperature thermoplastic/rubber
Actuator	High temperature plastic
Temperature	200 °F maximum
Working pressure	300 PSI



Fan Coils

Valve packages general data: V-3E

Zehnder Rittling Console and High Capacity Fan Coils have standard valve packages available as a factory built assembly and field-installed option for the main cooling coil and optional heating coil. Vertical Hi-Stack Fan Coils are the exception where all valve packages are factory installed. All valve packages are manufactured within strict tolerances and are hydrostatically tested for leaks. All cooling piping and components are located directly above the drain pan to allow condensate to be captured and properly drained. Insulation of the factory valve package is not required. However, all field connections downstream of the valve package should be insulated.

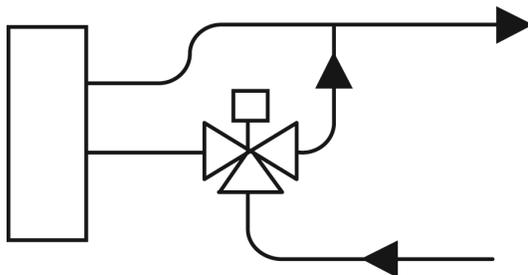
Valve package components

Zehnder Rittling valve packages consist of a variety of components and selection of each combination is dependent upon the application. The following sections provide a detailed description of each of the components. Following this section are additional schematic illustrations and mechanical specifications and photos.

3-way on/off valve

These 1/2" valves are normally closed to the coil as standard and will isolate the coil during a loss of power. Upon response to a signal from the controller, the valve will be either fully open allowing full flow to the coil or fully closed to the coil diverting full flow to the bypass line. All 3-way valve configurations include a balance fitting in the bypass line to allow proper flow balancing. These valves are located in the water supply pipe, have a C_v of 4.0, and close off DP of 20 PSI.

Part	Material
Body	Forged brass
Stem	Nickel plated/chrome plated brass
Seat	Brass
Paddle/plug	Buna N
Actuator	Stainless steel base plate, aluminum cover
Temperature	200 °F maximum
Working pressure	300 PSI



Fan Coils

Valve packages general data: V-3M

Zehnder Rittling Console and High Capacity Fan Coils have standard valve packages available as a factory built assembly and field-installed option for the main cooling coil and optional heating coil. Vertical Hi-Stack Fan Coils are the exception where all valve packages are factory installed. All valve packages are manufactured within strict tolerances and are hydrostatically tested for leaks. All cooling piping and components are located directly above the drain pan to allow condensate to be captured and properly drained. Insulation of the factory valve package is not required. However, all field connections downstream of the valve package should be insulated.

Valve package components

Zehnder Rittling valve packages consist of a variety of components and selection of each combination is dependent upon the application. The following sections provide a detailed description of each of the components. Following this section are additional schematic illustrations and mechanical specifications and photos.

3-way modulating valve

These 1/2", 24V valves modulate the flow of water (0-100%) through the coil in response to a signal from the controller and are normally closed to the coil as standard. 3-way valves allow the water supply from the water supply pipe to mix with bypass water from the bypass line. This mixture exits through the supply water pipe to the coil. Modulating three-wire floating type valves are compatible with any 24V three-wire signal when three-minute time-out logic resides in the system controller. Modulating proportional type valves are compatible with any 0 to 10 Vdc or 4 to 20 mA signal with jumper selectable operating range and action resulting in precise positioning. All valves feature a magnetic clutch to extend the life of the motor and gear train, manual operating lever/position indicator facilitates field setup, and easy to use lever terminal blocks. These valves are located in the water supply pipe, have a C_v of 4.0, and close off DP of 50 PSI.

Part	Material
Body	Forged brass
Stem	Nickel plated/chrome plated brass
Seat	Brass
Paddle/plug	High temperature thermoplastic/rubber
Actuator	High temperature plastic
Temperature	200 °F maximum
Working pressure	300 PSI

