

V4043C Motorized Zone Valves 2-PORT HYDRONIC VALVES

PRODUCT DATA



Application

Honeywell V4043C 2-port hydronic valves are used in domestic and small commercial heating and cooling applications to control the flow of hot or cold water.

They are designed for on-off zone control of domestic systems and can be used to control individual fan coil, radiator, space heater or convector applications. They can be controlled by a line voltage SPST controller such as a room thermostat, aquastat or flow switch.

The actuator head is removable without affecting the integrity of the water system.

Features

- Rugged design
- Control by a line voltage SPST controller
- Minimal actuator power consumption
- Actuator head installation does not require draining of the system
- High flow rate capacity
- Indifferent to dirt in system

Specifications

Medium	Water or water-glycol mixture (max. 50% glycol content), quality to VDI 2035
pH-value	8...9.5
Operating temperature	5...88°C (41...190°F)
Ambient temperature	max. 50°C (122°F)
Operating pressure	max. 8.6 bar (125 psi) static
Differential pressure	see chapter "Dimensions" below
k_{vs} (cv)-values	see chapter "Dimensions" below
Flow	A – B
Starting position	normally closed
Voltage	220-240V, 50Hz
Power consumption	6W / 0.042A
Nominal timing	On: 12 seconds under power Off: 6 seconds under spring return
Electrical termination	1m flying lead, heat resistant cable
Shipping temperature	-40...65°C (-40...149°F)
Humidity rating	5...95% RH (non-condensing)
Atmosphere	non-corrosive, non-explosive

Design

V4043C zone valves consist of:

- 2-way valve housing with BSPP internal threads
- Control ball assembly
- Actuator assembly with cable

Materials

- Valve housing made of forged brass
- Spindle shaft made of brass
- O-ring seals made of EPDM rubber
- Ball plug made of NBR rubber
- Actuator cover and base made of zinc-plated steel

Function

V4043C 2-position normally closed hydronic valves are used in domestic and small commercial applications to control the flow of hot water. They consist of an actuator and a valve.

With the manual opener set to AUTO and the actuator energized, the valve is opened. When the actuator is de-energized, a spring-return mechanism drives the valve to the closed position. The valve can also be opened with no electrical power by moving the manual opening lever over the stop and pushing slowly and firmly to the MAN. OPEN position. The stop permits the valve to be locked in the open position. The valve returns to the automatic position when the valve is energized.

A power failure will leave the valve at the spring-returned position. When power is restored, the valve will respond to controller demand.

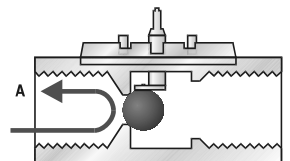


Fig. 1. V4043C in closed position

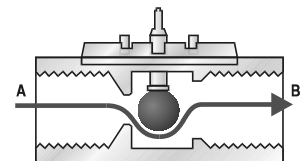


Fig. 2. V4043C in open position

Wiring

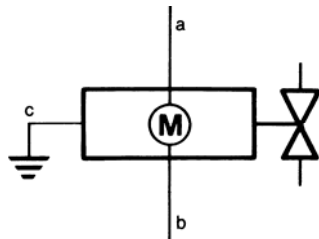


Fig. 3. Wiring diagram for V4043C

Wire	Function
a = brown	line (power supply)
b = blue	neutral
c = green/yellow	earth (ground)

Dimensions and Ordering Information

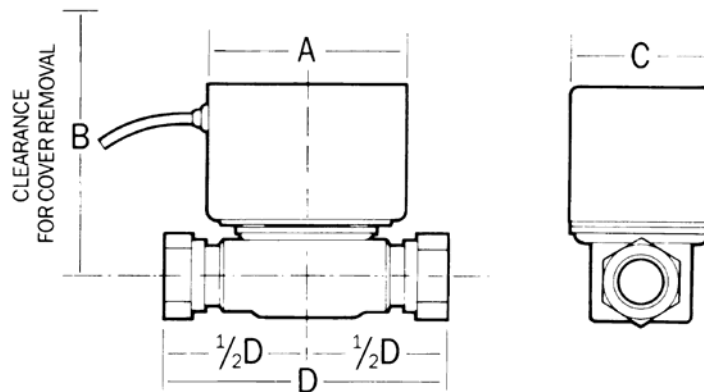


Fig. 4. V4043C 2-way zone valve

Table 1. Dimensions and Ordering Information

Body	k _{vs} -value	max. close-off pressure	Dimensions				OS-No.
			A	B	C	D	
1/2" BSPP (internal)	3.0	1.38 bar	87	98	60	96	V4043C1255
3/4" BSPP (internal)	6.9	0.55 bar	87	98	60	96	V4043C1263
1" BSPP (internal)	8.6	0.45 bar	87	98	60	96	V4043C1271

NOTE: All dimensions in mm unless stated otherwise

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