



## 2-WAY 24 VOLT ZONE VALVES

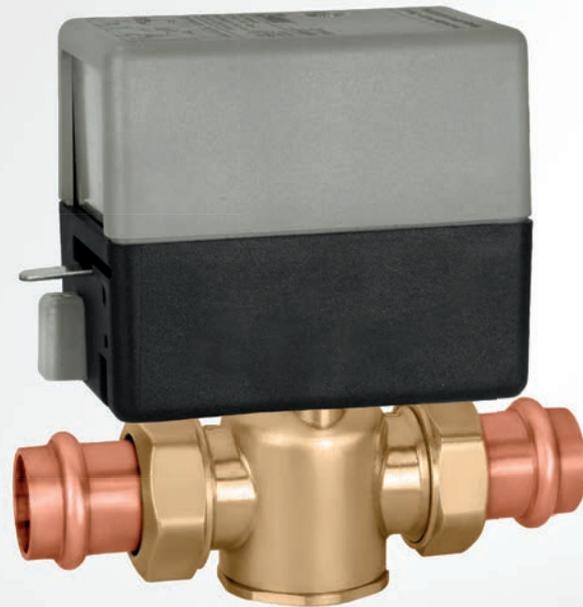
### Z-one™

**CALEFFI**  
Hydronic Solutions



Heating & Cooling

Components for today's modern hydronic systems



**UL** E239721  
US LISTED  
86BP

US Patent 7,048,251.

## FUNCTIONS AND FEATURES

- A snap on actuator allows for fast installation and easy replacement with a convenient in-line push button.
- Compact design provides quick and easy installation, the Z-one valve fits perfectly inside baseboards and fan coils. Available with choice of NPT, sweat and press fittings for ease of installation and maintenance.
- Suitable for all types of systems - made with materials compatible with chilled or hot water up to 240°F, 15 psi steam, and open or closed systems.
- A gear ratio of 21:1 in the actuator increases torque for high close-off pressure and increases closing time to reduce water hammer.
- Hermetically sealed end switch in 24V actuators requires no minimum current load allowing multiple end switches connected in parallel to zoning panel.
- Low power consumption allows up to five valves per 40 VA transformer.

## Z-ONE™



CODE	CONNECTION
Z40	Inverted flare
Z40F	¾" Inv. flare
Z42	½" SAE flare
Z44	½" sweat
Z45	¾" sweat
Z46	1" sweat
Z47	1¼" sweat
Z50	Inverted flare
Z50F	¾" Inv. flare
Z54	½" sweat
Z55	¾" sweat
Z56	1" sweat
Z57	1¼" sweat
Z45P	¾" press
Z55P	¾" press

Z4\_: 24VAC 18" wire lead; Z5\_: 24VAC screw terminal

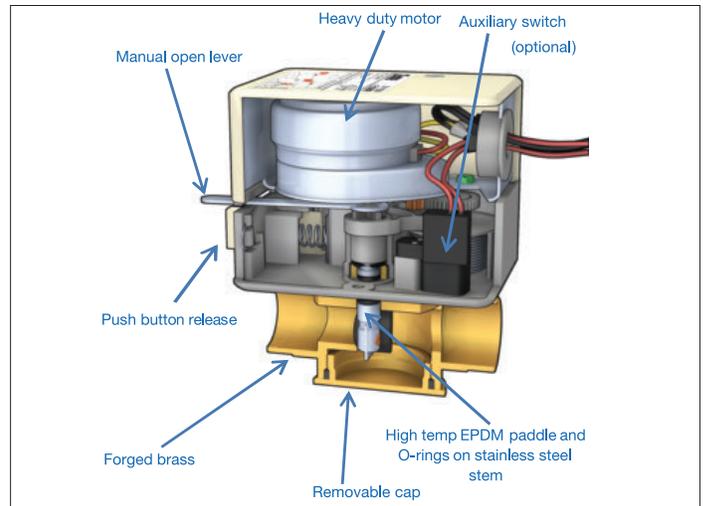
### PERFORMANCE

MAX. BODY PRESSURE	300 psi
TEMPERATURE RANGE	32 — 240 F
SUITABLE FLUIDS	Water, glycol solutions 5 psi steam
MAX. PERCENTAGE GLYCOL	50%
PATENTED	US 7,048,251
ELECTRICAL CONNECTIONS	18 inch wire lead Screw terminal block
APPROVALS	UL873, CUL Listed & CE

### MATERIALS

VALVE BODY	Forged brass
ACTUATOR	
BASE COVER	Polycarbonate
BASEPLATE	Aluminum

## CONSTRUCTION

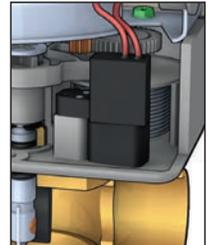


### CONSTRUCTION DETAILS

The Z-one™ valve is a truly universal zone valve that can be used in a wide range of commercial and residential applications; from fan coils to baseboard, radiant to high rise, the Z-one™ is the professional's valve of choice. The Z-one™ can be used in both chilled or hot water and low pressure steam applications. With Delta P close off pressures of up to 75 PSI, the Z-one™ outperforms all other zone valves. The Z-one™ is available in sizes from ½" to 1¼" sweat or NPT connections on valve body, with removable actuator.

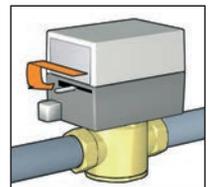
#### • Auxiliary switch

The actuator contains an auxiliary micro-switch to operate other devices. The 24 V actuators use a sealed reed switch, patent pending, which has been produced specifically for use with relays, boiler contacts (TT) and DDC systems. It requires no minimum current load. The auxiliary switch is activated when the valve is 60% open or when the actuator is manually opened.



#### • Manual opening (Normally closed actuator only)

The valve can be opened manually by moving the lever for opening it. When the power is restored the manual control is automatically overridden. The auxiliary switch is tripped when the unit is put into manual open position. This helps during start up to check if the wiring is correct without firing the valve electrically with the thermostat.



#### • Easy push button

A simple push of the button makes it easy to remove it from the body of the valve for maintenance or replacement operations.

#### • Operation

The actuator is fitted with a special mechanism for gradual movement of the valve paddle which provides smooth and quiet constant operation.

REFERENCE DOCUMENTATION: TECHNICAL BROCHURE 01115



**CALEFFI**  
Hydronic Solutions

WE RESERVE THE RIGHT TO CHANGE OUR PRODUCTS AND THEIR RELEVANT TECHNICAL DATA, CONTAINED IN THIS PUBLICATION, AT ANY TIME AND WITHOUT PRIOR NOTICE.

Caleffi North America, Inc. 3883 W. Milwaukee Road Milwaukee, WI 53208  
Tel. 414-238-2360 Fax 414-238-2366  
sales@caleffi.com · www.caleffi.com  
© Copyright 2015 Caleffi North America, Inc.

03556-15NA