

## Z series, Presscon™ assemblies

Submittal Data 02917.4 NA — Issue Date 02/2017

### Application

The Z-one, a two-position spring return zone valve, is used in heating and air-conditioning systems. The Z-one Presscon valve assembly series consist of a Z111000 or Z151000 actuator which is assembled to a Z20068x (2-way male union) valve body and Presscon press tailpieces and union nuts. Z1 actuator is approved to UL 873, cUL listed and CE, and UL 1995 section 18 air plenum and ducts rating. US Patent 7,048,251; others pending.

### Typical Specification

Furnish and install on the plans and describing herein, a Caleffi Z-one zone valve as manufactured by Caleffi. Each zone valve must be designed with forged brass valve body rated at 300 psi, stainless steel valve stem, and seals in EPDM. The actuator is approved to UL 873, cUL listed and CE, and UL 1995 section 18 air plenum and ducts rating. Each zone valve shall be Caleffi model Z-one series. (See product instructions for specific installation information.)

### Technical Data

Valve body material:

- Body: forged brass
- seat: machined brass
- stem: stainless steel
- two o-ring seals and paddle: EPDM

Flow: Z44P, Z54P: 3.5 Cv; Z45P, Z55P, Z45PL, Z55PL, Z46P, Z56P: 7.5 Cv

Medium: water and glycol, low pressure steam

Maximum percent of glycol: 50%

Temperature range: 32 to 240°F (0 -115°C)

Max. static pressure: 15 psi (1 bar) steam

300 psi (20 bar)

Connection:

- press: ½", ¾" & 1"

Lay length: size ½ inch: 3 ½"

size ¾ inch: 3 ⅝"

size 1 inch (PL)\*: 5"

size 1 inch: 4 ⅞"

\*one long tailpiece on outlet for extra long lay length for retrofit convenience

Actuator return-to-normal position: Z111000 & Z151000: Normally closed

Actuator material:

- base and cover: polycarbonate
- base plate: aluminum

Motor: -AC voltage: 24V ; 50/60 Hz

- Current draw: 24 VAC - 300 mA

Power requirements: 5 W, 7 VA

Power connections:

- Z151000: Terminal screws with auxiliary switch
- Z111000: Wire lead length: 18" (45 cm)

Actuator ambient temperature range: 24 V: 32 to 125°F (0 to 18°C)

Humidity: 95% non-condensing

Full stroke time: - On: <60 seconds

- Off: 6 seconds

Close-off Pressure:

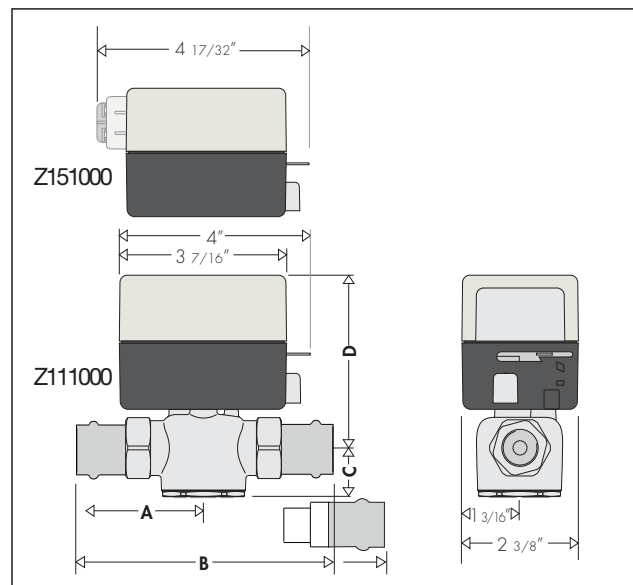
Z44P, Z54P: 30 psi; Z45P, Z55P, Z45PL, Z55PL, Z46P, Z56P: 20 psi

Approvals: UL873, cUL listed & CE

UL 1995 sec. 18: Air plenums & duct

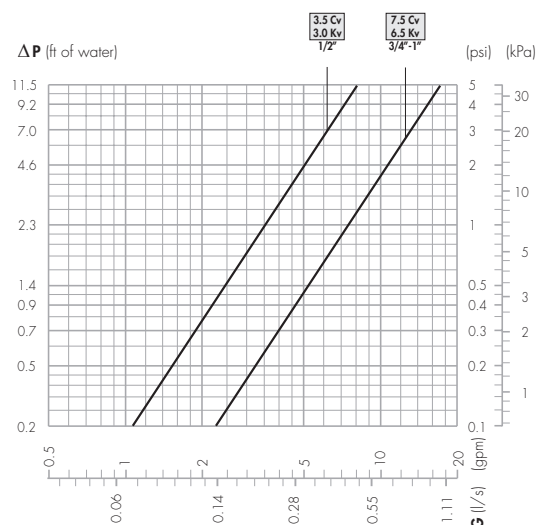
Environmental: Indoor only

### Dimensions



| Connections                       | A    | B    | C    | D    |
|-----------------------------------|------|------|------|------|
| ½" press, Z44P, Z54P              | 2 ½" | 5"   | 1 ⅝" | 3 ½" |
| ¾" press, Z45P, Z55P              | 2 ⅜" | 5 ⅝" | 1 ⅝" | 3 ½" |
| ¾" press extra long, Z45PL, Z55PL | 2 ⅜" | 7"   | 1 ⅝" | 3 ½" |
| 1" press, Z46P, Z56P              | 2 ⅝" | 5 ⅞" | 1 ⅝" | 3 ½" |

### Hydraulic characteristics



We reserve the right to change our products and their relevant technical data, contained in this publication, at any time and without prior notice. Contractors should request production drawings if prefabricating the system.

Job name \_\_\_\_\_  
 Job location \_\_\_\_\_  
 Engineer \_\_\_\_\_  
 Mechanical contractor \_\_\_\_\_  
 Contractor's P.O. No. \_\_\_\_\_  
 Representative \_\_\_\_\_

Size \_\_\_\_\_  
 Quantity \_\_\_\_\_  
 Approval \_\_\_\_\_  
 Service \_\_\_\_\_  
 Tag No. \_\_\_\_\_  
 Notes \_\_\_\_\_