

PresCal™ Compact pressure reducing valves



533H series

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Application

Pressure reducing valves are devices which, when installed on water systems, reduce and stabilize the pressure of the water entering from the water supply main. This pressure, in general, is too high and variable for domestic systems to operate correctly. PresCal™ Compact 533H series pressure reducing valves, ideal for small system applications, is constructed of a DZR low-lead forged brass body and incorporates a unique noise reducing and high flow seat design. It can be easily serviced with a replaceable cartridge and has an integral stainless steel filter (35 mesh), suitable for water systems that may contain sediment and debris. A tamper-resistant cap is included to replace the standard cap to hide the adjustment screw to prevent set point tampering.

Typical Specification

Furnish and install on the plans and described herein, a Caleffi 533H series pressure reducing valve as manufactured by Caleffi. Each valve must be designed with a self-contained removable cartridge with stainless steel filter. The valve design must include a DZR low-lead forged brass body, glass reinforced nylon cover, peroxide-cured EPDM diaphragm and seals, with PTFE compensating piston rings. Equipped with operating knob for manual setting with adjustment screw. Provided with tamper-resistant cap for optional use. The valve must be ICC-ES certified to ASSE 1003, CSA B356, NSF/ANSI/CAN 61 (180°F/82°C Commercial Hot), NSF/ANSI/CAN 372, low lead laws and listed by ICC-ES; and meet codes IPC, IRC, UPC and NPC for use in accordance with the US and Canadian plumbing codes. Each valve shall be Caleffi model 533H series or approved equal. (See product instructions for specific installation information.)

Technical specifications

| | | |
|------------------|------------------------------|--|
| Materials | - body: | DZR low-lead forged brass EN 12165 CW724R |
| | - cover: | glass reinforced nylon PA6G30 |
| | - control stem: | stainless steel EN 10088-3 (AISI 303) |
| | - moving parts: | DZR low-lead brass EN 12165 CW724R |
| | - diaphragm: | peroxide-cured EPDM |
| | - seals: | peroxide-cured EPDM |
| | - compensation piston rings: | PTFE |
| | - filter: | stainless steel EN 10088-2 (AISI 304) |
| | - seat: | stainless steel EN 10088-3 (AISI 303) |
| | - shuttle: | PPSG40 |

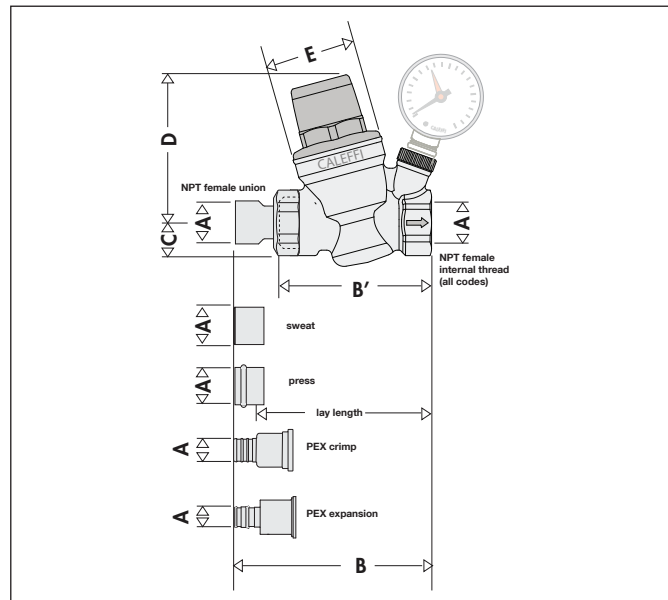
Performance

| | |
|------------------------------------|-----------------------------|
| Suitable fluids: | water |
| Max. working pressure: | 250 psi (17.25 bar) |
| Downstream pressure setting range: | 15 - 80 psi (1 - 5.5 bar) |
| Factory setting: | 45 psi (3 bar) |
| Maximum working temperature: | 180°F (80°C) |
| Flow rates (gpm): | 1/2": 3.0-5.6; 3/4": 5.6-10 |
| Pressure gauge scale: | 0 - 100 psi (0 - 7 bar) |
| Filter mesh size: | 0.51 mm (35 mesh) |

Connections

| | |
|----------------------------|-----------------|
| Main connections: | See table |
| Pressure gauge connection: | 1/8" NPT female |

Dimensions



| Code | A | B | B' | C | D | E | Wt (lb) | | |
|-----------|--------------------|----------|----------|------|----|--------|---------|----|-----|
| 533940HA | 1/2" sweat | 3 5/8" | 2 15/16" | 3/4" | 3" | 1 7/8" | 2.0 | | |
| 533941HA* | 1/2" sweat | 3 5/8" | | | | | 2.1 | | |
| 533340HA | 1/2" FNPT | 4 1/16" | | | | | 1.9 | | |
| 533341HA* | 1/2" FNPT | 4 1/16" | | | | | 2.0 | | |
| 533640HA | 1/2" press | 5 1/16" | 3" | | | | 2.3 | | |
| 533641HA* | 1/2" press | 5 1/16" | | | | | 2.4 | | |
| 533950HA | 3/4" sweat | 4" | 3" | | | | 3/4" | 3" | 2.3 |
| 533951HA* | 3/4" sweat | 4" | | | | | | | 2.4 |
| 533350HA | 3/4" FNPT | 4 1/4" | | | | | | | 2.2 |
| 533351HA* | 3/4" FNPT | 4 1/4" | | | | | | | 2.3 |
| 533650HA | 3/4" press | 4 1/4" | | 2.3 | | | | | |
| 533651HA* | 3/4" press | 4 1/4" | | 2.4 | | | | | |
| 533750HA | 3/4" PEX crimp | 4 9/16" | | 2.3 | | | | | |
| 533751HA* | 3/4" PEX crimp | 4 9/16" | | 2.4 | | | | | |
| 533850HA | 3/4" PEX expansion | 4 15/16" | | 2.3 | | | | | |
| 533851HA* | 1/2" PEX expansion | 4 15/16" | | 2.3 | | | | | |

*Configuration includes factory supplied outlet pressure gauge. Models without gauge have a plugged gauge port.
For press connection, lay length: size 1/2" - 4 1/16"; size 3/4" - 3 1/4".
See Caleffi Technical Brochure 1252 NA for other connection lay lengths.

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 _____