

# Pre-adjustable pressure reducing valves



## 535HA 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. The 535HA series pressure reducing valves feature a dial indicator with direct readout allowing easy pressure pre-adjustment. The valve is constructed of DZR low-lead forged brass and incorporates a unique noise reducing and high flow seat design, easy inline servicing with a replaceable cartridge and an integral stainless steel filter (35 mesh), suitable for water systems that may contain sediment and debris.

### Typical Specification

Furnish and install on the plans and described herein, a Caleffi 535HA series pressure reducing valve as manufactured by Caleffi. Each valve must be designed with a pressure balanced seat and self-contained removable cartridge. The valve design must include a DZR low-lead forged brass body, glass reinforced nylon cover, stainless steel filter, EPDM membrane diaphragm and sealing gaskets, with PTFE compensating piston rings. Equipped with operating knob with downstream pressure adjustment scale for manual setting and tamper-proof adjustment locking screw. The valve must be ICC-ES certified to ASSE 1003, CSA B356, NSF 61, NSF 372, low lead laws and listed by ICC-ES; and meet codes IPC, IRC and UPC for use in accordance with the US and Canadian plumbing codes. Each valve shall be Caleffi model 535HA 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 PA66M40/11
  - control stem: stainless steel EN 10088-3 (AISI 303)
  - moving parts: DZR low-lead brass  
EN 12165 CW724R
  - diaphragm: EPDM
  - seals: EPDM
  - compensation piston rings: PTFE
  - filter: stainless steel EN 10088-2 (AISI 304)
  - seat: stainless steel EN 10088-3 (AISI 303)
  - shuttle: PPSG40

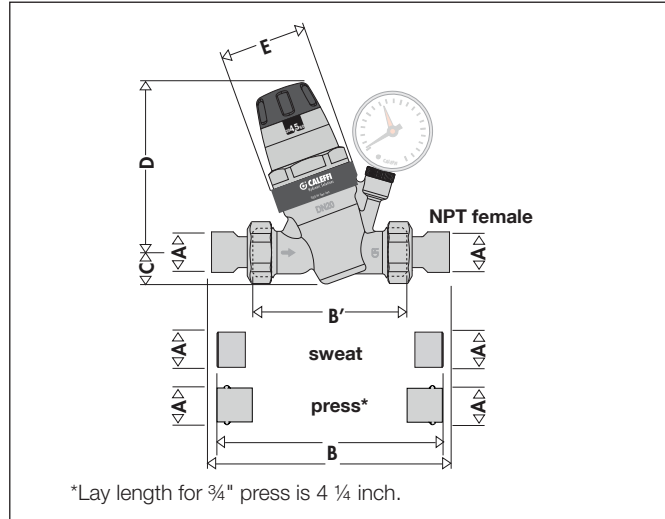
### Performance

- Suitable fluids: water
- Max. working pressure: 300 psi (20 bar)
- Downstream pressure setting range: 15 - 90 psi (1 - 6 bar)
- Factory setting: 45 psi (3 bar)
- Maximum working temperature: 180°F (80°C)
- Flow rates (gpm): 1/2": 4.1-7.3; 3/4": 6.7-12.5; 1": 10-19; 1 1/4": 17-34
- Pressure gauge scale: 0 - 100 psi (0 - 7 bar)
- Filter mesh size: 0.51 mm (35 mesh)

### Connections

- Main connections: 1/2", 3/4", 1" & 1 1/4" NPT female and sweat union  
3/4" press union
- Lay length (3/4" press connection): 4 1/4"
- Pressure gauge connection: 1/8" NPT female

### Dimensions



Code	A	B	B'	C	D	E	Wt (lb)
535940HA	1/2" swt	5 5/8"	3"	13/16"	4 1/2"	2 3/8"	1.9
535941HA	1/2" swt*	5 5/8"	3"	13/16"	4 1/2"	2 3/8"	2.0
535340HA	1/2" nptf	5 3/4"	3"	13/16"	4 1/2"	2 3/8"	2.0
535341HA	1/2" nptf*	5 3/4"	3"	13/16"	4 1/2"	2 3/8"	2.1
535950HA	3/4" swt	5 5/8"	3 9/16"	13/16"	4 1/2"	2 3/8"	2.2
535951HA	3/4" swt*	5 5/8"	3 9/16"	13/16"	4 1/2"	2 3/8"	2.3
535350HA	3/4" nptf	6 5/16"	3 9/16"	13/16"	4 1/2"	2 3/8"	2.3
535351HA	3/4" nptf*	6 5/16"	3 9/16"	13/16"	4 1/2"	2 3/8"	2.4
535650HA	3/4" press	6 1/4"	3 9/16"	13/16"	4 1/2"	2 3/8"	2.3
535651HA	3/4" press*	6 1/4"	3 9/16"	13/16"	4 1/2"	2 3/8"	2.4
535960HA	1" swt	6 7/8"	3 3/4"	13/16"	4 1/2"	2 3/8"	2.9
535961HA	1" swt*	6 7/8"	3 3/4"	13/16"	4 1/2"	2 3/8"	3.0
535360HA	1" nptf	7 1/16"	3 3/4"	13/16"	4 1/2"	2 3/8"	3.0
535361HA	1" nptf*	7 1/16"	3 3/4"	13/16"	4 1/2"	2 3/8"	3.1
535970HA	1 1/4" swt	7 7/8"	4 5/16"	1-9/16"	7"	3-1/16"	5.6
535971HA	1 1/4" swt*	7 7/8"	4 5/16"	1-9/16"	7"	3-1/16"	5.7
535370HA	1 1/4" nptf	7 7/8"	4 5/16"	1-9/16"	7"	3-1/16"	5.7
535371HA	1 1/4" nptf*	7 7/8"	4 5/16"	1-9/16"	7"	3-1/16"	5.8

\*configuration includes factory supplied outlet pressure gauge.

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 \_\_\_\_\_