

Submittal Data 03020 NA — Issue Date 05/2023

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 PresCal™ 535H 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 PresCal 535H 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 housing with UV protective snap-on cover, stainless steel filter, peroxide-cured 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, and conforms to NSF/ANSI/CAN 61 (180°F/82°C Commercial Hot), NSF/ANSI/CAN 372, low lead laws as certified by ICC-ES; and meet codes IPC, IRC and UPC for use in accordance with the US and Canadian plumbing codes. Plenum rated: compliant with the requirements of standard UL 2043. Each valve shall be Caleffi model 535H series or approved equal. (See product instructions for specific installation information.)

Technical specifications

Materials	- body:	DZR low-lead forged brass CR EN 1982 CC768S
	- housing:	glass reinforced nylon PA66M40/1
	- outdoor protective cover:	UV stabilized ABS, gray
	- control stem and moving parts:	DZR low-lead brass CR EN 12164 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 cartridge:	PPSG40

Performance

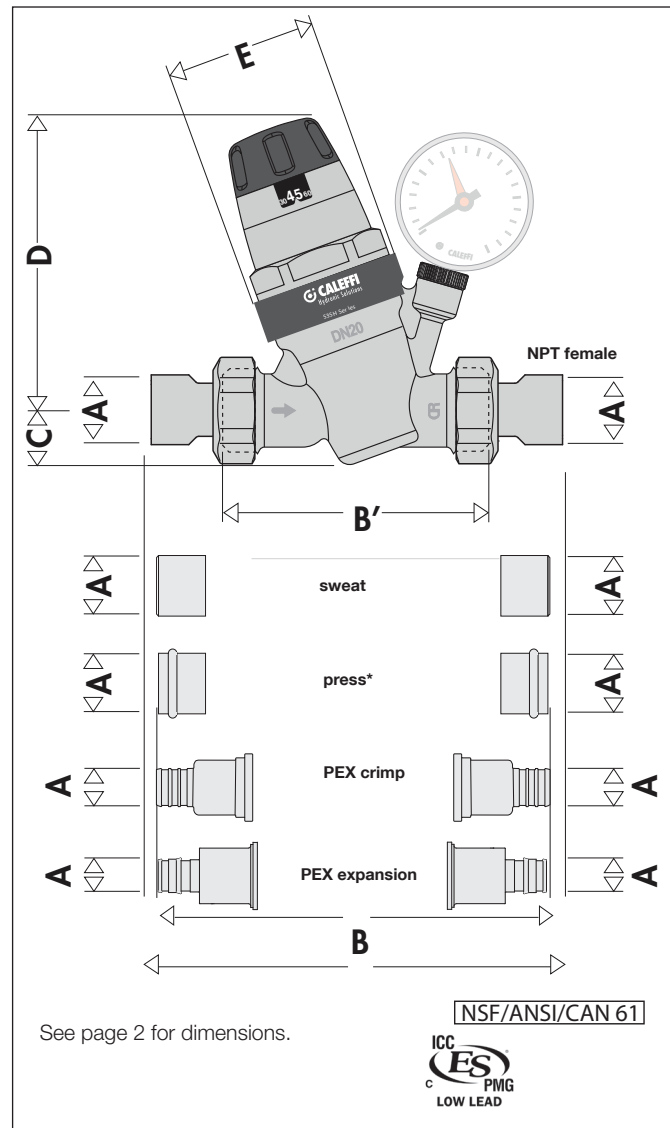
Suitable fluids:	water
Max. working pressure:	300 psi (2000 kPa)
Downstream pressure setting range:	15 - 90 psi (100 - 600 kPa)
Factory setting:	45 psi (300 kPa)
Maximum working temperature:	180°F (80°C)
Flow rates at 6 fps (gpm):	½": 7.3; ¾": 12.5; 1": 19.0; 1¼": 34.0; 1½": 44.0; 2": 70.0
Pressure gauge scale:	100 psi (0 - 700 kPa)
Filter mesh size:	0.51 mm (35 mesh)

Connections

Main connections:
 ½", ¾", 1", 1¼", 1½" & 2" NPT female and sweat union
 ½", ¾", 1", 1¼", 1½" & 2" press union
 ¾" & 1" PEX crimp union
 ¾" & 1" PEX expansion union

Lay length for press connections: see page 2
 Pressure gauge connection: 1/8" NPT female

Dimensions



Certifications

1. Complies with codes IPC, IRC, UPC and NPC. ICC-ES certified to ASSE 1003, CSA B356 (R2015).
2. Complies with NSF/ANSI/CAN 61 (180°F/82°C Commercial Hot), as certified by ICC-ES, file PMG-1356.
3. Complies with NSF/ANSI/CAN 372, Drinking Water System Components-Lead Content Reduction of Lead in Drinking Water Act, California Health and Safety Code 116875 S.3874, Reduction in Drinking Water Act, Vermont Act 193 - The Lead in Plumbing Supplies Law and Maryland's Lead Free Law HB.372, as certified by ICC-ES, file PMG-1360.
4. PEX crimp fittings certified to ASTM F 1807.
5. PEX expansion fittings certified to ASTM F 1960.
6. Plenum rated: Evaluated in accordance with the standard UL 2043 and was found compliant with the standard's requirements. (This does not pertain to the outdoor protective cover)

Dimensions

Code	A	B	B'	C	D	E	Wt (lb)
535940HA	½" swt	5 5/8"	3"	13/16"	4½"	2³/8"	1.9
535941HA	½" swt*	5 5/8"	3"	13/16"	4½"	2³/8"	2.0
535340HA	½" nptf	5 ½"	3"	13/16"	4½"	2³/8"	2.0
535341HA	½" nptf*	5 ½"	3"	13/16"	4½"	2³/8"	2.1
535640HA	½" press	5 9/16"	3"	13/16"	4½"	2³/8"	1.9
535641HA	½" press*	5 9/16"	3"	13/16"	4½"	2³/8"	2.0
535950HA	¾" swt	5 5/8"	3 9/16"	13/16"	4½"	2³/8"	2.2
535951HA	¾" swt*	5 5/8"	3 9/16"	13/16"	4½"	2³/8"	2.3
535350HA	¾" nptf	6 5/16"	3 9/16"	13/16"	4½"	2³/8"	2.3
535351HA	¾" nptf*	6 5/16"	3 9/16"	13/16"	4½"	2³/8"	2.4
535650HA	¾"press	6 ¼"	3 9/16"	13/16"	4½"	2³/8"	2.3
535651HA	¾"press*	6 ¼"	3 9/16"	13/16"	4½"	2³/8"	2.4
535750HA	¾" PEX crimp	7"	3 9/16"	13/16"	4½"	2³/8"	2.3
535751HA	¾" PEX crimp*	7"	3 9/16"	13/16"	4½"	2³/8"	2.4
535550HA	¾" PEX expansion	7 ¾"	3 9/16"	13/16"	4½"	2³/8"	2.3
535551HA	¾" PEX expansion*	7 ¾"	3 9/16"	13/16"	4½"	2³/8"	2.4
535960HA	1" swt	6 7/8"	3 ¾"	13/16"	4½"	2³/8"	2.9
535961HA	1" swt*	6 7/8"	3 ¾"	13/16"	4½"	2³/8"	3.0
535360HA	1" nptf	6 7/8"	3 ¾"	13/16"	4½"	2³/8"	3.0
535361HA	1" nptf*	6 7/8"	3 ¾"	13/16"	4½"	2³/8"	3.1

Code	A	B	B'	C	D	E	Wt (lb)
535760HA	1" PEX crimp	6 ¼"	3 ¾"	13/16"	4½"	2³/8"	3.0
535761HA	1" PEX crimp*	6 ¼"	3 ¾"	13/16"	4½"	2³/8"	3.1
535560HA	1" PEX expansion	7 3/8"	3 ¾"	13/16"	4½"	2³/8"	3.0
535561HA	1" PEX expansion*	7 3/8"	3 ¾"	13/16"	4½"	2³/8"	3.1
535970HA	1¼"swt	6 5/8"	4 5/16"	1 9/16"	7"	3 1/16"	5.6
535971HA	1¼"swt*	6 5/8"	4 5/16"	1 9/16"	7"	3 1/16"	5.7
535370HA	1¼"nptf	7 7/8"	4 5/16"	1 9/16"	7"	3 1/16"	5.7
535371HA	1¼"nptf*	7 7/8"	4 5/16"	1 9/16"	7"	3 1/16"	5.8
535670HA	1¼" press	9"	4 5/16"	1 9/16"	7"	3 1/16"	5.8
535671HA	1¼" press*	9"	4 5/16"	1 9/16"	7"	3 1/16"	5.8
535980HA	1½"swt	7 ¾"	4 ¾"	1½"	7"	3 1/16"	7.3
535981HA	1½"swt*	7 ¾"	4 ¾"	1½"	7"	3 1/16"	7.4
535380HA	1½"nptf	8"	4 ¾"	1½"	7"	3 1/16"	7.3
535381HA	1½" nptf*	8"	4 ¾"	1½"	7"	3 1/16"	7.4
535680HA	1½" press	12 5/8"	4 ¾"	1½"	7"	3 1/16"	7.3
535681HA	1½" press*	12 5/8"	4 ¾"	1½"	7"	3 1/16"	7.4
535990HA	2"swt	8"	5 1/8"	1½"	7"	3 1/16"	9.7
535991HA	2"swt*	8"	5 1/8"	1½"	7"	3 1/16"	9.8
535390HA	2"nptf	8 3/8"	5 1/8"	1½"	7"	3 1/16"	9.7
535391HA	2"nptf*	8 3/8"	5 1/8"	1½"	7"	3 1/16"	9.8
535690HA	2" press	14"	5 1/8"	1½"	7"	3 1/16"	9.7
535691HA	2" press*	14"	5 1/8"	1½"	7"	3 1/16"	9.8

NOTE:

*configuration includes factory supplied outlet pressure gauge.
All configurations come with outdoor protective cover.

Lay length:

- ½" press: 3 9/16 inch.
- ¾" press: 4¼ inch.
- 1" press: 5¾ inch.
- 1¼" press: 7 inch.
- 1½" press: 9 7/8 inch.

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 _____