PresCal™
Pre-adjustable pressure reducing valves

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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 PrexCal™ 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 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, NSF/ANSI 61 (180°F/82°C Commercial Hot), NSF/ANSI 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. 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
- cover:	glass reinforced nylon PA66M40/1I
- 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 (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):	see page 2
Pressure gauge scale:	0 - 100 psi (0 - 7 bar)
Filter mesh size:	0.51 mm (35 mesh)

Connections

Main connections:

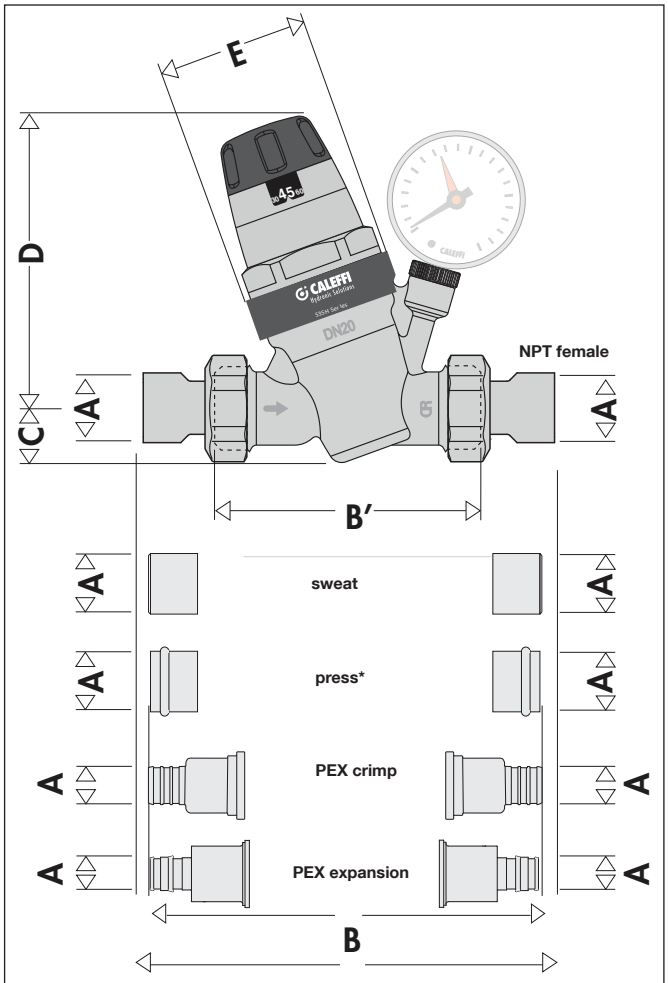
½", ¾", 1", 1¼", 1½" & 2" NPT female and sweat union
¾" & 1" press union
¾" & 1" PEX crimp union
¾" PEX expansion union

Lay length:

- ¾" press connection:	4 ¼"
- 1" press connection:	5 ¾"

Pressure gauge connection: 1/8" NPT female

Dimensions



*Lay length:
¾" press- 4¼ inch.
1" press- 5¾ inch.

See page 2 for dimensions.

ASSE 1003
NSF 61

Certifications

1. Complies with codes IPC, IRC, UPC and NPC. ICC-ES certified to ASSE 1003, CSA B356 (R2015), and
2. NSF/ANSI 61 (180°F/82°C Commercial Hot), file PMG-1356.
3. NSF/ANSI 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, 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.

Dimensions

Code	A	Connection	Outlet Pressure Gauge	B	B'	C	D	E	Flow rate (gpm)*	Wt (lb)
535940HA	½"	sweat		5 5/8"	3"	13/16"	4½"	2 3/8"	7.3	1.9
535941HA		sweat	√	5 5/8"						2.0
535340HA		NPT female		5 ¾"						2.0
535341HA		NPT female	√	5 ¾"						2.1
535950HA	¾"	sweat		5 5/8"	3 9/16"				12.50	2.2
535951HA		sweat	√	5 5/8"						2.3
535350HA		NPT female		6 5/16"						2.3
535351HA		NPT female	√	6 5/16"						2.4
535650HA		press		6 ¼"						2.3
535651HA		press	√	6 ¼"						2.4
535750HA		PEX barb		7"						2.3
535751HA		PEX barb	√	7"						2.4
535550HA		PEX exp.		7 ¾"						2.3
535551HA		PEX exp.	√	7 ¾"						2.4
535960HA	1"	sweat		6 7/8"	3 ¾"				19.0	2.9
535961HA		sweat	√	6 7/8"						3.0
535360HA		NPT female		7 1/16"						3.0
535361HA		NPT female	√	7 1/16"						3.1
535660HA		press		7 ¾"						3.0
535661HA		press	√	7 ¾"						3.1
535760HA		PEX barb		6 ¼"						3.0
535761HA		PEX barb	√	6 ¼"						3.1
535970HA	1¼"	sweat		7 7/8"	4 5/16"	1 9/16"	7"	3 1/16"	34.0	5.6
535971HA		sweat	√	7 7/8"						5.7
535370HA		NPT female		7 7/8"						5.7
535371HA		NPT female	√	7 7/8"						5.8
535980HA	1½"	sweat		7 9/16"	4 ¾"	1½"			44.0	7.3
535981HA		sweat	√	7 9/16"						7.4
535380HA		NPT female		7 7/8"						7.3
535381HA		NPT female	√	7 7/8"						7.4
535990HA	2"	sweat		8"	5 1/8"				70.0	9.7
535991HA		sweat	√	8"						9.8
535390HA		NPT female		8 3/8"						9.7
535391HA		NPT female	√	8 3/8"						9.8

NOTE:
*gpm flow rate at 6 feet per second water velocity.

Job name _____ Size _____
Job location _____ Quantity _____
Engineer _____ Approval _____
Mechanical contractor _____ Service _____
Contractor's P.O. No. _____ Tag No. _____
Representative _____ Notes _____

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