Heating System Components

Reliance VALVES

100 Series High Capacity Sealed Heating System Pressure Relief Valve

Discharges water off the system at a set pressure in the event of system over pressurisation (high for larger capacity systems)

Overview

Reliance Valves 100 Series Pressure Relief Valves are made from hot pressed brass and are predominantly used to protect closed-circuit wet heating systems from overpressure. The outlet is one size larger than the inlet to ensure high discharge flow rates.

It has a separate seal seating from the diaphragm to give improved scaling resistance and a cover which is made from OT58 brass. Available in a variety of sizes to suit most installations, it also has a pressure range from 2.5 - 5.0 bar, with the response pressure indicated on the twist cap. The valve size is determined by the heat output of the boiler as shown in the maximum heating capacity table.

Features & benefits

- High flow design for larger capacity systems
- Outlet is one size larger than the inlet for high capacity discharge
- Provides protection against over pressurisation in wet heating systems
- Diaphragm design gives improved resistance against scale
- Cartridge design gives ease of service and replacement without the need to reset the response pressure
- Set pressure range from 2.5 - 5.0 bar to suit any system requirement
- High lift design for increased discharge capacity
- Suitable for heating applications only

Product code	Pressure	Size
PREL100008	2.5 bar	½'' x ¾'' FxFBSP
PREL100001	3.0 bar	½'' x ¾'' FxFBSP
PREL100003	4.0 bar	½'' x ¾'' FxFBSP
PREL100004	5.0 bar	½'' x ¾'' FxFBSP
PREL100013	2.5 bar	¾'' x 1'' FxFBSP
PREL100014	3.0 bar	¾'' x 1'' FxFBSP
PREL100016	4.0 bar	¾'' x 1'' FxFBSP
PREL100028	5.0 bar	¾'' x 1'' FxFBSP
PREL100022	2.5 bar	1'' x 1¼'' FxFBSP
PREL100023	3.0 bar	1'' x 1¼'' FxFBSP
PREL100025	4.0 bar	1'' x 1¼'' FxFBSP
PREL100027	5.0 bar	1'' x 1¼'' FxFBSP
PREL100032	2.5 bar	1¼'' x 1½'' FxFBSP
PREL100033	3.0 bar	1¼'' x 1½'' FxFBSP
PREL100034	4.0 bar	1¼'' x 1½'' FxFBSP
PREL100036	5.0 bar	1¼'' x 1½'' FxFBSP
PREL100044	2.5 bar	1½'' x 2'' FxFBSP
PREL100041	3.0 bar	1½'' x 2'' FxFBSP
PREL100042	4.0 bar	1½'' x 2'' FxFBSP
PREL100046	5.0 bar	1½'' x 2'' FxFBSP
PREL100052	2.5 bar	2'' x 2½'' FxFBSP
PREL100049	3.0 bar	2'' x 2½'' FxFBSP
PREL100050	4.0 bar	2'' x 2½'' FxFBSP
PREL100055	5.0 bar	2'' x 2½'' FxFBSP

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Materials

Body	Hot pressed DZR brass
Diaphragm	EPDM elastomer
Seal	EPDM elastomer
Spring	Spring steel wire - corrosion protected
Internals	OT58 brass
Cap	High grade glass fibre reinforced plastic

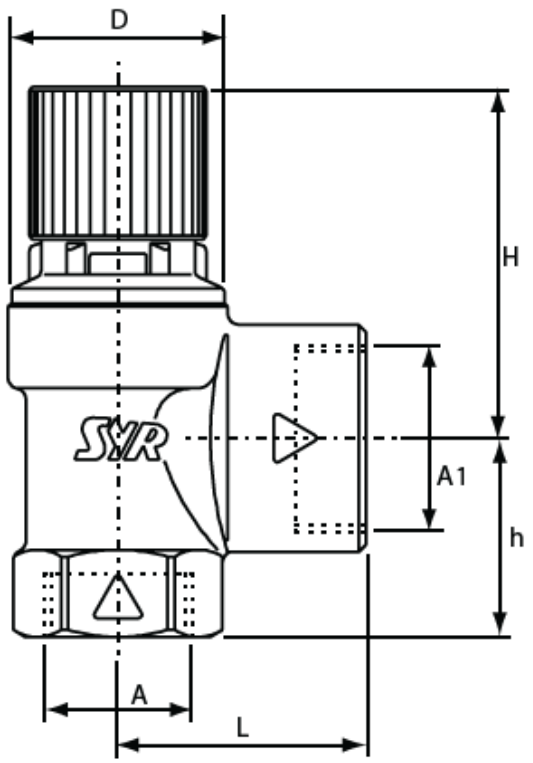
Specifications

Set pressure range	2.5 bar - 5.0 bar
Operating temperature Test	140°C max
Test pressure of body	25.0 bar

How to specify

A high capacity (outlet one size larger than the inlet) heating system pressure relief valve, manufactured from hot pressed DZR brass. Twist top cartridge style construction and pressure indicated on cap. Include correct product range code.

Dimensions – All measurements in mm unless otherwise stated



A	A1	L	D	H	h
½"	¾"	35	31	52	28
¾"	1"	38.5	49	54	34
1"	1¾"	47	49	79.5	40
1¼"	1½"	52.5	51	110	46
1½"	2"	70	75	186.5	55
2"	2½"	75	75	195	66

Maximum capacity

Table to show how valve size is determined by the heat output of the boiler.

Pressure setting (bar)	Maximum Heating Capacity (kW)					
Inlet size	½"	¾"	1"	1¼"	1½"	2"
1.5	36	72	144	252	433	650
2.0	43	86	172	302	518	778
2.5	50	100	200	350	600	900
3.0	56	112	224	395	678	1017
4.0	70	140	280	490	840	1260
5.0	85	168	336	588	1008	1512

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