

# Pressure Reduction Valve

# PRV



## PRESSURE REDUCTION VALVE

A pressure reduction valve (PRV) can be a valuable addition to many piping systems. If the incoming water pressure is too high, this can put unnecessary strain on water heaters, pipe work, plumbing joints, taps and tap washers. It can increase the risk of burst hoses on washing machines, water leaks and possibly magnify any existing water hammer problems.

The valves are factory set at 500 kPa. The down stream pressure is adjustable from 250 to 650 kPa by turning the screw on top. Clockwise to increase pressure and anticlockwise to reduce pressure. For pressure monitoring, there are three gauge ports standard on the body of the valve so that a gauge can be fitted to monitor the upstream and downstream pressure.

The tagging eye has been cast into the PRV body to allow the valve to be identified and tagged for mechanical service.



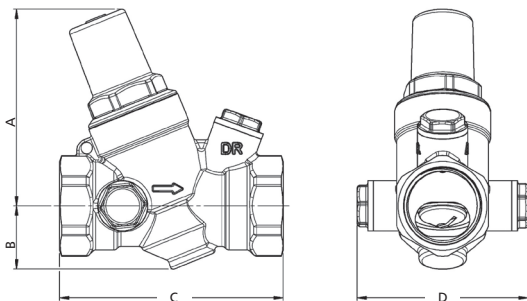
## FEATURES

- No breather hole
- Stainless Steel Seat
- Triple Test Points
- Adjustable Range 250 – 650 kPa
- Compact design
- DZR brass valve body
- Factory set at 500 Kpa
- Internal strainer
- High Flow rate

## MATERIAL SPECIFICATIONS

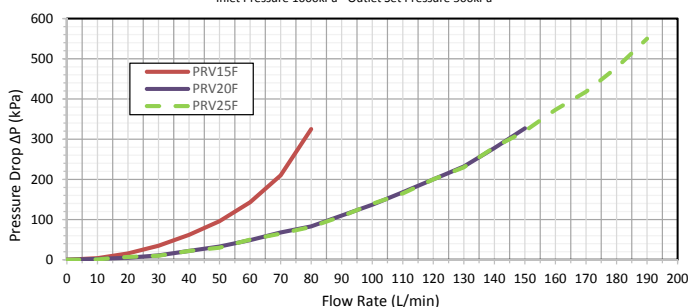
Body:	DR Brass
Control Spindle:	DR Brass
Components:	DR Brass
Seals:	EDPM 70
Strainer:	Stainless Steel
Seat:	Stainless Steel 316
Spring:	Stainless Steel

## PRV DIMENSIONS



MODEL NO.	A	B	C	D
PRV15F	68mm	22mm	78mm	60mm
PRV20F	68mm	22mm	78mm	60mm
PRV25F	70mm	25mm	82mm	68mm

PRV Flow Characteristics  
Inlet Pressure 1000kPa - Outlet Set Pressure 500kPa



**SUITABLE** for installation **BELOW GROUND** in a suitable approved box

## PERFORMANCE SPECIFICATIONS

Pressure setting range: 250-650 kPa

Factory Setting: 500 kPa

Max. Inlet Pressure: 1600 kPa

Max. Working Temp.: 80°C

Medium: Water

Complies with: AS 1357.2

Flow Rate as per Appendix K @ 700 kPa dynamic

PRV15	set pressure 500 kPa	Flow Rate 60 L/Min
	set pressure 250 kPa	Flow Rate 22 L/Min
PRV20	set pressure 500 kPa	Flow Rate 130 L/Min
	set pressure 250 kPa	Flow Rate 30 L/Min
PRV25	set pressure 500 kPa	Flow Rate 155 L/Min
	set pressure 250 kPa	Flow Rate 25.4 L/Min

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## INSTALLATION

Flush out your lines to remove any debris or dirt particles that may cause the valve to malfunction.

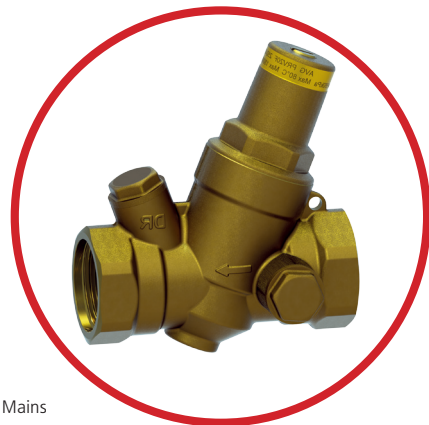
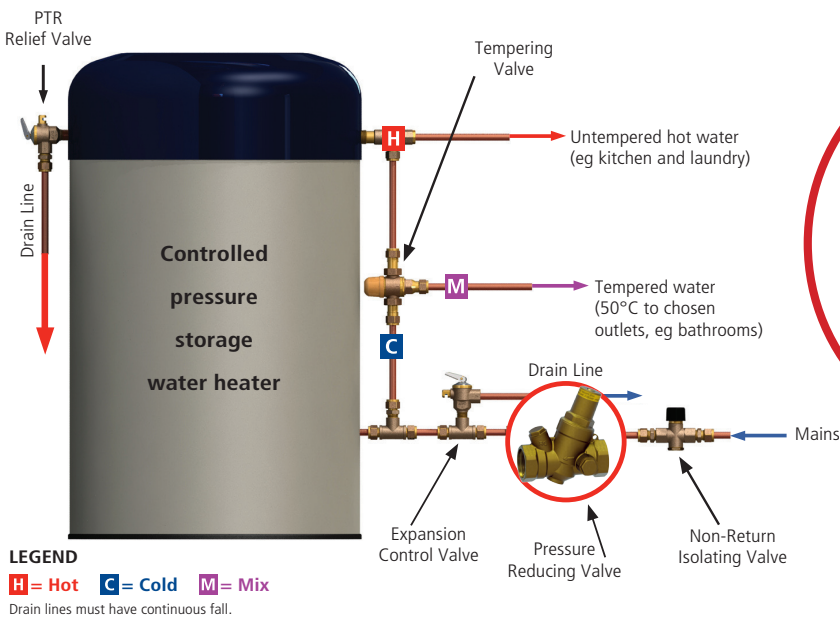
1. The pressure reduction valve may be installed horizontally or vertically.
2. It is recommended that isolation valves be fitted either side of the pressure reduction valve to assist future maintenance operations.
3. The PRV15 and PRV20 are protected by an internal stainless steel mesh filter. If the valve is being installed in an environment where fine dirt particles are present it is recommended that a line strainer be fitted upstream of the valve

The pressure reduction valve must be installed by a licensed plumber and in accordance with AS/NZS 3500 building code and relevant local requirements and the following manufacturer's instructions.

4. Ensure that the valve is installed in an accessible position for future maintenance operations.
5. Install the valve with the arrow on the valve body pointing in the direction of flow.

For best operation the inlet pressure should be at least 100 kPa higher than the outlet pressure.

## TYPICAL CONTROLLED PRESSURE HOT WATER SYSTEM INSTALLATION



## RECOMMENDATIONS FOR INSTALLATION

1. Suitable for installation below ground in a suitable approved box.
2. If the installation is at risk of water hammer, fit a water hammer arrestor. Do not install PRV's below ground unless the valve is fitted inside a protective box as to prevent damage and corrosion by chemicals in the soil.
3. If the pressure setting is important for the protection of equipment fit a pressure relief valve downstream of the valve.  
**\*Installation Suggestion:** Multistorey Buildings - where multiple pressure reducing valves will be used as part of a hydraulic circuit, consideration should be given to the design of the hydraulic circuit to avoid the operating condition where combined high inlet pressure/low outlet flow-rate results in high water velocity within the Pressure Reducing Valve. Where inlet pressures are likely to exceed 1,000 kPa, this may require it to be reduced through staged pressure reduction measures.

Installation Instructions