

PRESSURE REDUCING VALVE

ACV Ratio Reducing Valve

REF EFC-408 ISSUED 15 Jun 2026

SPECIFICATIONS

Size	DN50–DN400
Pressure	PN16–PN16
End connection	flanged (EN 1092-2)

STANDARDS

Design	EN 1074-5
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APPROVALS & CERTIFICATIONS

- WRAS
- ISO 9001

COATINGS & LINING

- Rubber lined

APPLICATIONS

- Trunk main pressure management
- Variable inlet pressure systems
- District metered areas
- Pressure zone management

FEATURES

- The ACV ratio reducing valve maintains a fixed ratio between upstream and downstream pressure: as inlet pressure varies, the outlet pressure varies proportionally
- This is particularly useful on systems where demand patterns cause large upstream pressure fluctuations, as it avoids the very low outlet pressures that a fixed-set-point PRV would deliver at low inlet pressures
- Fully hydraulic, no external power required



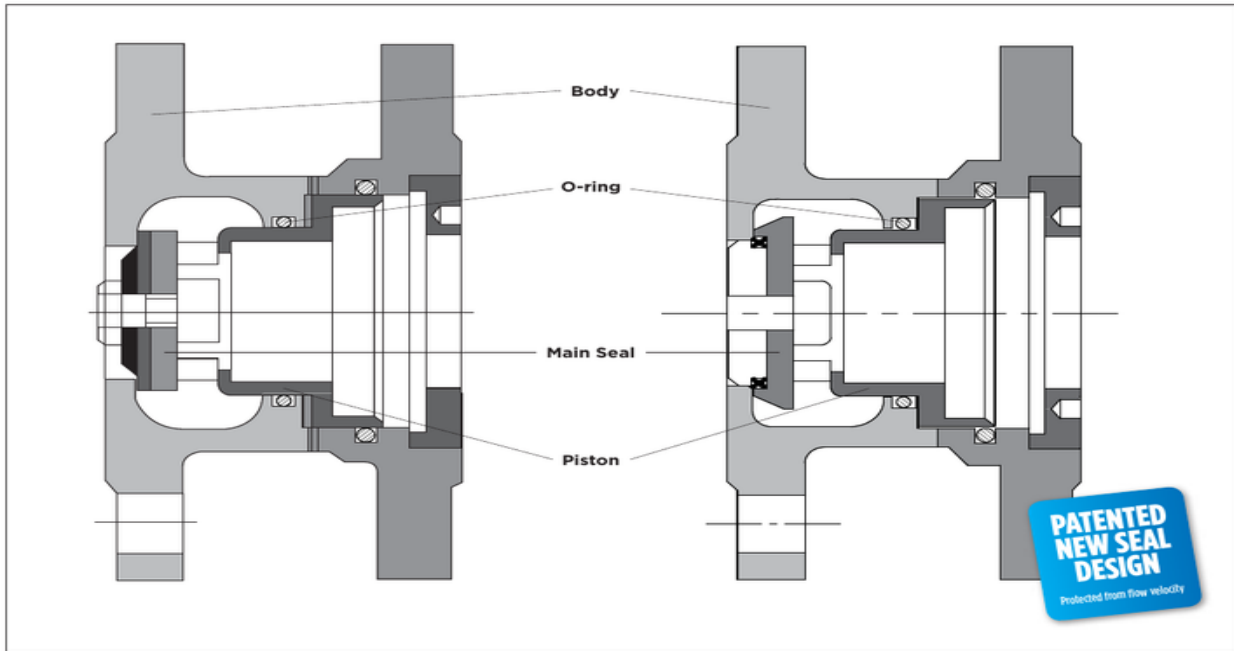
PRESSURE-TEMPERATURE RATING

CLASS	TEMPERATURE	MAX PRESSURE
screwed end valves PN40	20°C	35 bar
flanged end valves	20°C	100 bar

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BENEFITS

Hydraulics Simplified

Because the Ratio Pressure Reducing Valve (RPRV) is of an inline Axial flow design, it has all the benefits of

- High Cavitation resistance (5:1 ratios available)
- Fast response – almost instantaneous response to demand changes
- High range-ability and can control down to very low flow rates

Due to these features the Ultra RPRV can operate in series with other control valves without experiencing instability, and also would not require bypass PRV's to cater for low flow periods. Sizing and application Engineering thus becomes simplified. If in doubt just install a line size RPRV in any position where pressure needs to be reduced without doing complicated sizing.

Fast and Easy installation

The RPRV has a compact design, which makes it ideal for tight spaces such as fire installations and plumbing in High Rise buildings. They can be installed in any orientation.

Complete security

- **Fixed Ratio.** No need for adjustments or calibration – the valve settings are fixed and cannot change with time.

- **Simple sealing action.** Because the valve relies on only one moving part, it means high reliability and shutoff when required. There are no internal ports, which can become blocked, or springs that can become corroded or damaged.
- **Maintained Pressure.** Under no-flow conditions the downstream pressure is maintained because the valve will remain closed and will not open until the downstream pressure drops.
- **Ease of maintenance.** Can be handled by one person. This valve generally only needs servicing once every 3 to 5 years. Service kits include standard seals and O-rings, which are readily available.
- **Tamper proof.** There are no external regulators or pilot tubes, which can be tampered with.
- **Leakages** from Control tubing which is always a problem in buildings is eliminated
- No need to bleed air from control chamber.

High Performance

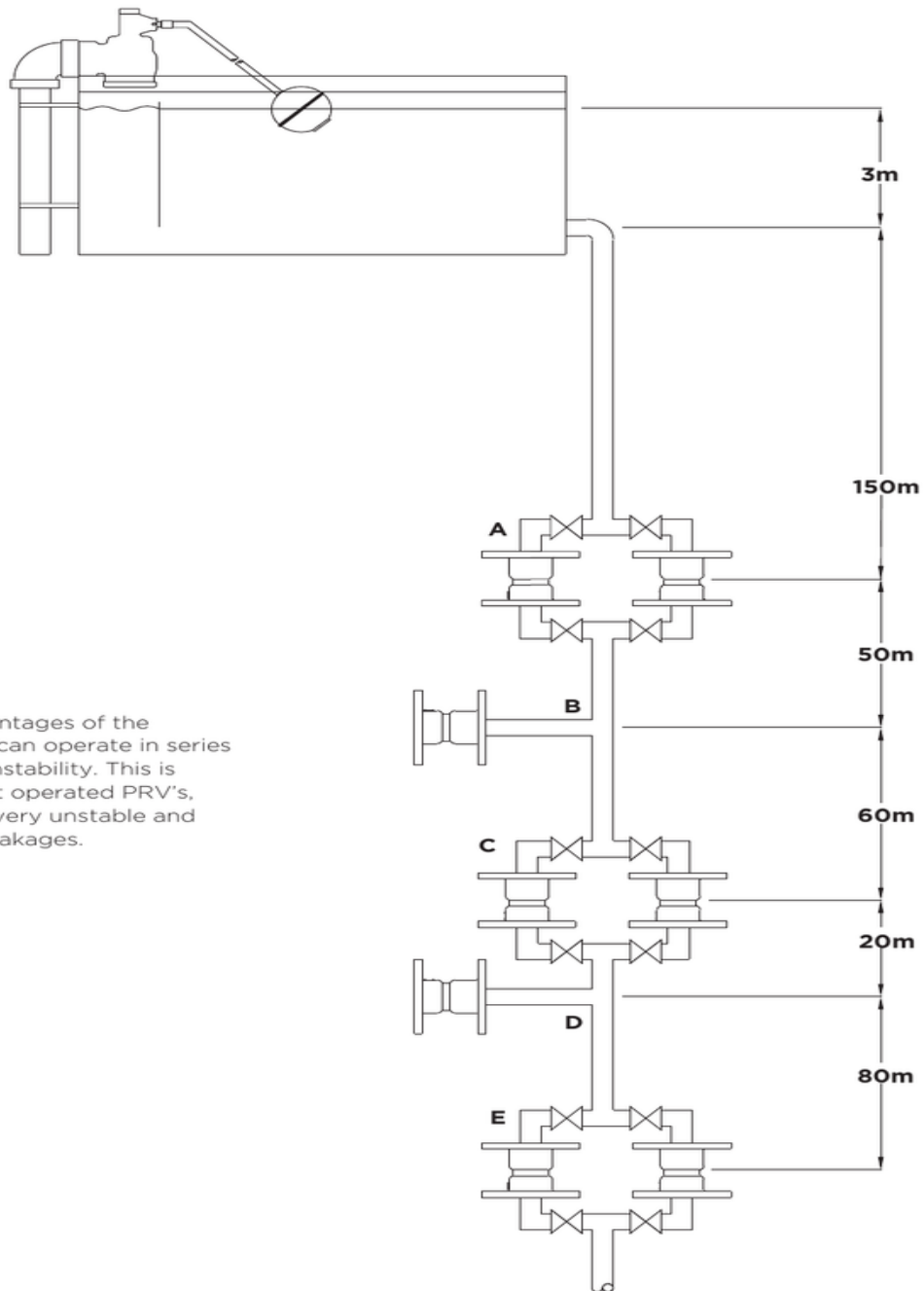
One moving part and only 2 O-ring seals and 1 main seal results in many years of trouble free operation without maintenance required. *Truly a Valve for African Conditions.*

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TYPICAL INSTALLATIONS IN HIGH RISE BUILDINGS AND MINE SHAFTS



One of the big advantages of the RRRPV is that they can operate in series without danger of instability. This is unlike standard Pilot operated PRV's, which can become very unstable and resulting in pipe breakages.

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SECTION Dimensions per size REF EFC-408

SIZE	L
50mm	80
80mm	110
100mm	120
150mm	160
200mm	200
250mm	250
300mm	300

All dimensions in millimetres unless stated otherwise. Values are nominal; tolerances confirmed at quote.