

# FLANGED PRESSURE REDUCING VALVE

50MM - 100MM

**All Valve**  
INDUSTRIES



*REDUCES AND STABILISES HIGH UPSTREAM PRESSURE*

## FUNCTION AND FEATURES

### ■ Robust construction

Ductile iron body, SS & bronze trim with EPDM seals provides long service life.

### ■ Outstanding flow rates

Excellent hydraulic performance may allow for a smaller size valve selection.

### ■ Safe operation

Minimal risk of faults as the upper guide and spring are not in contact with water.

### ■ Simplified maintenance

Valve bonnet can be disassembled inline without special tools for maintenance.

### ■ Reliable operation

One moving part means reliable operation and minimal spare parts.

### ■ No risk of blockages

The valve utilises a diaphragm, rather than a piston, for no risk of mechanical blocking.

## PRODUCT DETAILS

The Bayard brand 'Monostab' pressure reducing valve provides a reduction and stabilisation of the downstream pressure from a higher upstream pressure, irrespective of variations in upstream pressure and required flow rate. The valve has been in production since 1982 and is subject to continuous improvement.

The Monostab PRV features a modern design with a robust, yet simple construction ensuring a long and trouble free service life, as well providing ease of maintenance. The valve bonnet can be disassembled inline from the top, without any special tools, for maintenance purposes.

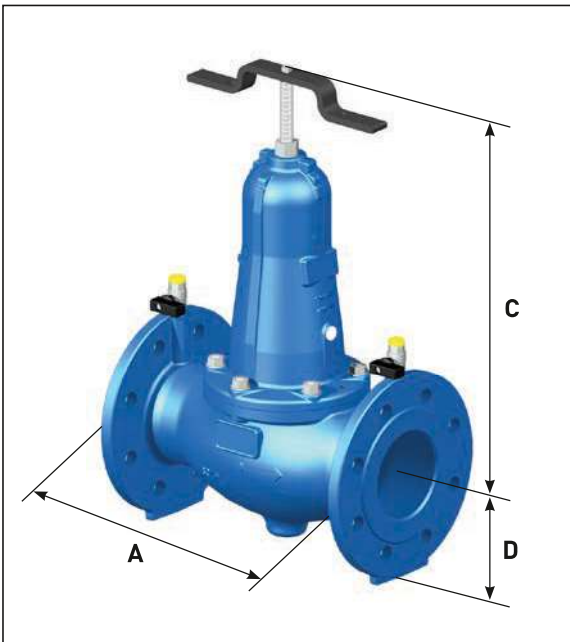
The valve operates with the use of a diaphragm, rather than a piston, which gives the benefit of having no risk of blockages, as well as smooth and quick reactions to pressure fluctuations. The upper guide is not in contact with the water, and the lower guide is coated with a scale inhibitor to ensure that operation of the guide is free of any friction.

### PERFORMANCE

MAX WORKING PRESSURE	1,600kPa
MIN SUPPLY PRESSURE	200kPa
ADJUSTABLE PRESSURE RANGE *	150-600kPa
WORKING TEMPERATURE	1-65°C
CONNECTION	TABLE 'D'
MEDIA	WATER
GAUGE	OPTIONAL

\* Optional 500 - 1,200kPa spring range available upon request

## DIAGRAM



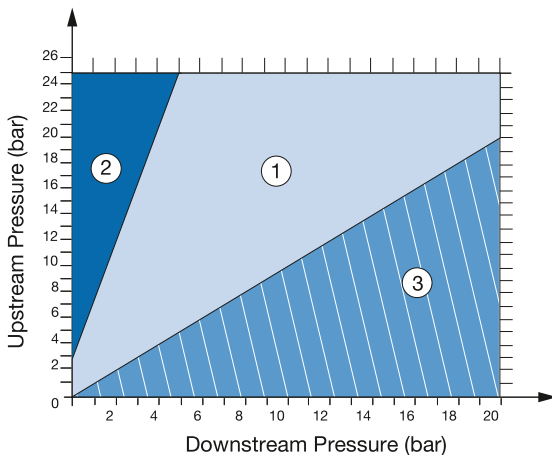
CODE	PRV-050	PRV-065	PRV-080	PRV-100
SIZE	50mm	65mm	80mm	100mm
A	230	290	310	360
C	430	420	450	450
D	86	100	112	112
C+D	516	520	562	562
WEIGHT	18 kg	22 kg	25 kg	32 kg

### Maintenance:

The frequency of maintenance depends directly on the quality of the water (raw or drinking, presence of lime scale), frequency of use (main or backup device) and operating range (continuous low flow rates).

Preventive maintenance requires an annual inspection to be carried out. If more frequent servicing is necessary, contact Customer Support to examine provisions for the parts subject to stress. Our experience indicates that a minimum level of preventive maintenance can avoid the causes of malfunctions.

## CAVITATION DIAGRAM



- Area 1 = normal working conditions.
- Area 2 = cavitation; reduce the pressure in stages with two units in series
- Area 3 = not possible.

## FLOW TABLE

The table below shows a **DN** based on **max flow. (l/m)** and the available **Δp**.

DN	50	65	80	100	Average velocity
Available Δp. = 100kPa	174	300	468	708	1.5 m/s
Available Δp. = 100-300kPa	240	396	606	942	2 m/s
Available Δp. > 300kPa	354	600	900	1,416	3 m/s
Exceptional flow rate	474	798	1,200	1,884	4 m/s*

\* Accuracy of adjustment is not guaranteed at this velocity



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