inta

WRAS APPROVED PRODUCT

Product

Female Pressure Reducing Valves
PRV223305000.1 - ½" pressure reducing valve
PRV223307500.1 - ¾" pressure reducing valve

Compression Pressure Reducing Valves
PRV22331500.1 - 15mm pressure reducing valve
PRV22332200.1 - 22mm pressure reducing valve

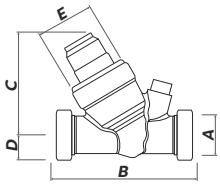
Compression Dial Up Pressure Reducing Valves
PRV22332800.1 - 28mm pressure reducing valve
PRV22333500.1 - 35mm pressure reducing valve
PRV22334200.1 - 42mm pressure reducing valve
PRV22335400.1 - 54mm pressure reducing valve

Screwed Iron Dial Up Pressure Reducing Valves
PRV223310000.1 - 1" pressure reducing valve
PRV223312500.1 - 1"¼ pressure reducing valve
PRV223315000.1 - 1"½ pressure reducing valve
PRV223320000.1 - 2" pressure reducing valve

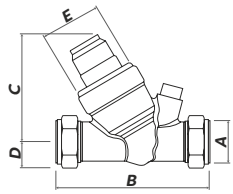
Technical Specification

Max Inlet Pressure (static):	16 Bar
Adjustable Pressure Range:	0.8 - 6 Bar
Min Inlet Pressure:	0.5 Bar
Factory Set Pressure:	3 Bar
Max Inlet Temperature:	80°C

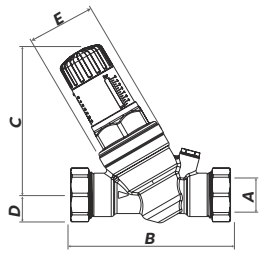
Drawings



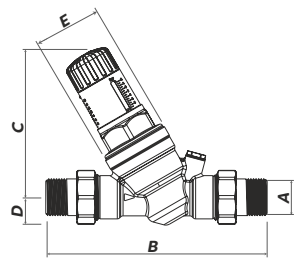
A	B	C	D	E
1/2"	75	76	18	46
3/4"	78	77	16	46



A	B	C	D	E
15mm	103	75	19	46
22mm	107	77	19	46



A	B	C	D	E
28mm	131	134	25	61
35mm	138	137	28	61
42mm	148	142	30	61
54mm	155	146	38	61



A	B	C	D	E
1"	199	134	24	61
1 1/4"	217	138	30	61
1 1/2"	236	144	37	61
2"	269	146	47	61

Additional Information

WRAS Approved

Easy to service high temperature cartridge

Large PRVs feature a dial up head

AISI 304 stainless steel cartridge

Conforms to BS EN 1567

Controls both static and dynamic pressure

Designed for both domestic & commercial use

Please scan for more information

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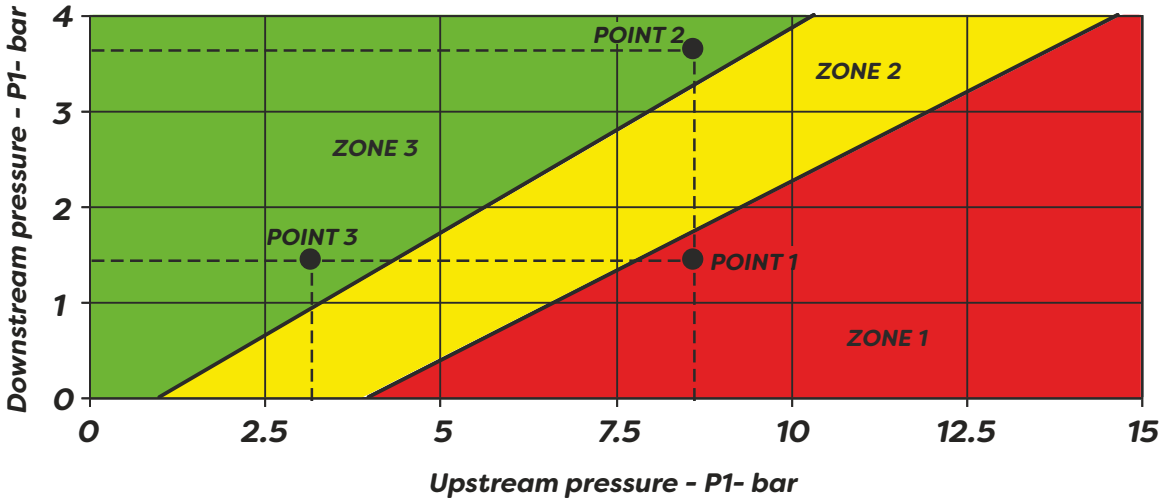
E&OE

Cavitation

In order to prevent cavitation, which can cause excessive noise, vibration and damage to the valve and downstream pipe, in certain pressure situations with high inlet pressures and low outlet pressures (high pressure loss) then a number of pressure reducing valves may be required.

The cavitation diagram shows three areas of operation depending upon the upstream and downstream (outlet) pressures.

Cavitation Diagram



- ZONE 1: Damage and Noise - The characteristics of cavitation are clearly audible and visible inside the pressure reducing valve and pipework. The valve should not be used under these conditions.
- ZONE 2: Critical Zone - Highlights the possibility of cavitation of occurring inside the pressure reducing valve or pipework. Using the valve under these conditions should be avoided and is not recommended.
- ZONE 3: Operating Zone - The pressure reducing valve works under its optimum conditions. The valve can safely be used used under these conditions.

In order to avoid cavitation occurring the ratio between the maximum upstream pressure and the outlet pressure should not exceed a value of 2.5.

* NOTE: The cavitation diagram has the sole purpose of supplying the technician with a quick reference for the system conditions to determine if cavitation will be present and the likely level.

Example

If the pressure reducing valve is used under the following conditions;

- Upstream pressure: Pm = 8.5 bar
- Outlet pressure: Pv = 1.5 bar

On the Cavitation Diagram these pressures correspond to POINT 1 in ZONE 1.

Ratio Pm/Pv = 8.5/1.5 = 5.67.

Solution

Use 2 pressure reducing valves in series.

First valve using the following conditions;

- Upstream pressure: Pm = 8.5 bar
- Outlet pressure: Pv = 3.5 bar

Pressure ration 8.5/3.5 = 2.42 < 2.5

On the Cavitation Diagram these pressures correspond to POINT 2 in ZONE 3.

Second valve using the following conditions;

- Upstream pressure: Pm = 3.5 bar
- Outlet pressure: Pv = 1.5 bar

Pressure ration 3.5/1.5 = 2.33 < 2.5

On the Cavitation Diagram these pressures correspond to POINT 3 in ZONE 3.

NOTE: The outlet pressure of the pressure reducing valve MUST NEVER be higher than the maximum pressure of components and outlets (tap and showers) downstream of the valve.