



PRESSURE REDUCING VALVE

15MM - 25MM

CALEFFI
Hydronic Solutions



W
AS 1357.2
C OF C 02467

SAFEGUARDS WATER HEATERS AND DOMESTIC SYSTEMS

FUNCTION AND FEATURES

- | | |
|-------------------------------------|-----------------------------|
| ■ Compact design | ■ Factory set at 500kPa |
| ■ Easily adjustable 100 - 600kPa | ■ Gauge port (inline model) |
| ■ Superior flow rate | ■ Inbuilt Strainer |
| ■ Suitable for hot water up to 80°C | ■ Replaceable cartridge |

PRODUCT SPECIFICATIONS

Pressure reducing valves are a valuable asset to any piping system. Many people are under the misapprehension that more pressure is better when, in fact, it is often the reverse. Too much pressure in a system puts unnecessary strain on water heaters, plumbing joints, taps, washers, etc, increasing the chance of leaks, burst hoses on washing machines and other appliances and adding greatly to water hammer problems.

The Caleffi 5335H series pressure reducing valve is fully adjustable between 100 - 600kPa and allows for easy adjustment to an optimum pressure. A pressure gauge can be fitted into the gauge port for accurate setting. The valve comes factory set at 500kPa, the most common pressure setting required for domestic systems.

SIZING A PRESSURE REDUCING VALVE

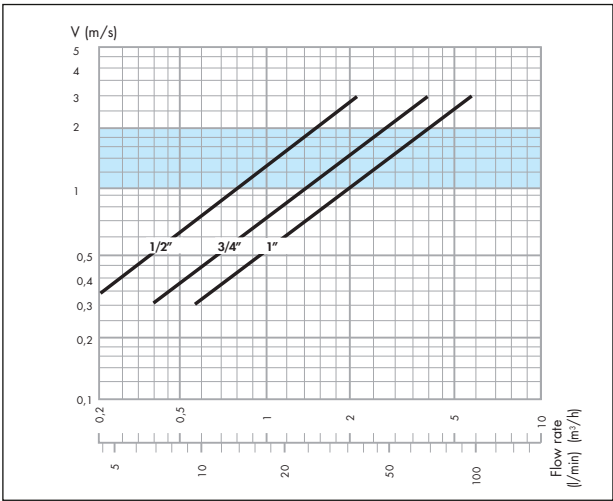
SIZE FOR 1 - 2 M/S VELOCITY

With the nominal flow rate required, select a valve size that intersects the flow rate within 1-2 m/s on the water velocity chart. This range is advisable for good pressure control within the valve's optimum flow rate range. Sometimes there is a choice in terms of valve size within the acceptable water velocities; at that point you can decide if you want a better control at reduced flow rates with higher velocity and higher pressure loss at nominal flow rates (selecting the smaller size) or vice versa. The corresponding pressure loss graph may then be used at the same flow rate and valve size to obtain the pressure loss.

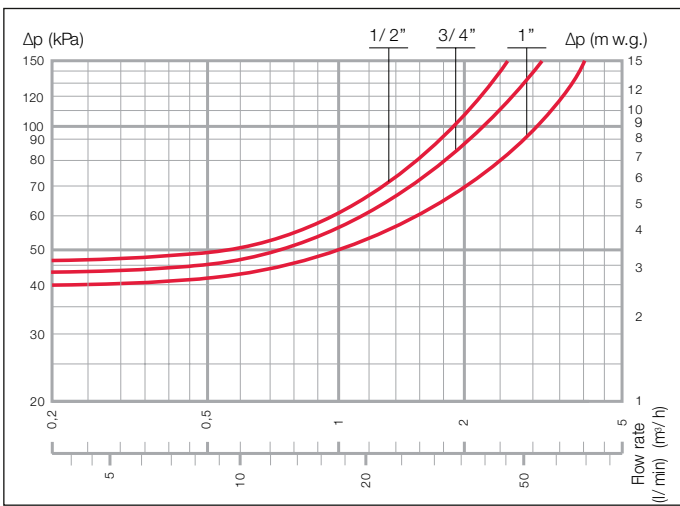
WHAT IS THE DESIRED REDUCED DOWNSTREAM PRESSURE?

Optimal performance is achieved at a 2:1 ratio or less. Example: 600kPa supply pressure, 300kPa static downstream pressure. Where large pressure drops are required, for example in multi-storey buildings where inlet pressures are likely to exceed 1,000 kPa, this may be achieved through staged pressure reduction measures. A situation with low flow and a high differential pressure forces the valve to operate in a near closed position, potentially resulting in cavitation and possible noise.

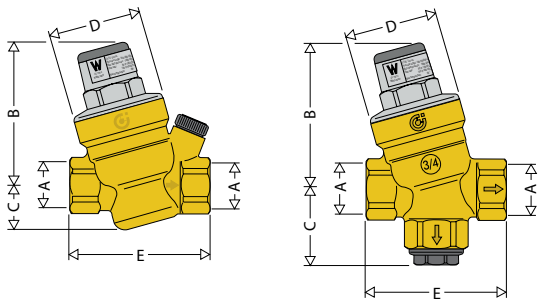
WATER VELOCITY CHART



PRESSURE LOSS CHART



DIAGRAM



CODE	STRAIGHT			DUAL
	533545H	533555H	533565H	533550H
A	15mm	20mm	25mm	20mm
B	74.5	74.5	74.5	74.5
C	22	22	23	50
D	Ø 46	Ø 46	Ø 46	Ø 46
E	79	84.5	95	82.5
Weight(kg)	0.45	0.46	0.54	0.49

TECHNICAL SPECIFICATIONS

PRESSURE RANGE	100 - 600kPa
FACTORY SET	500kPa
MAX. PRESSURE	2000kPa*
MAX. TEMPERATURE	80°C
MEDIA	Water
OPTIONAL PRESSURE GAUGE	0 - 1000kPa
GAUGE PORT SIZE	1/4" BSP

* See sizing guidelines above for determining maximum design inlet pressure. Max pressure noted in specifications is suitable for hydrostatic test pressures but should not be referenced for normal operation.



All Valve
INDUSTRIES

210225-02