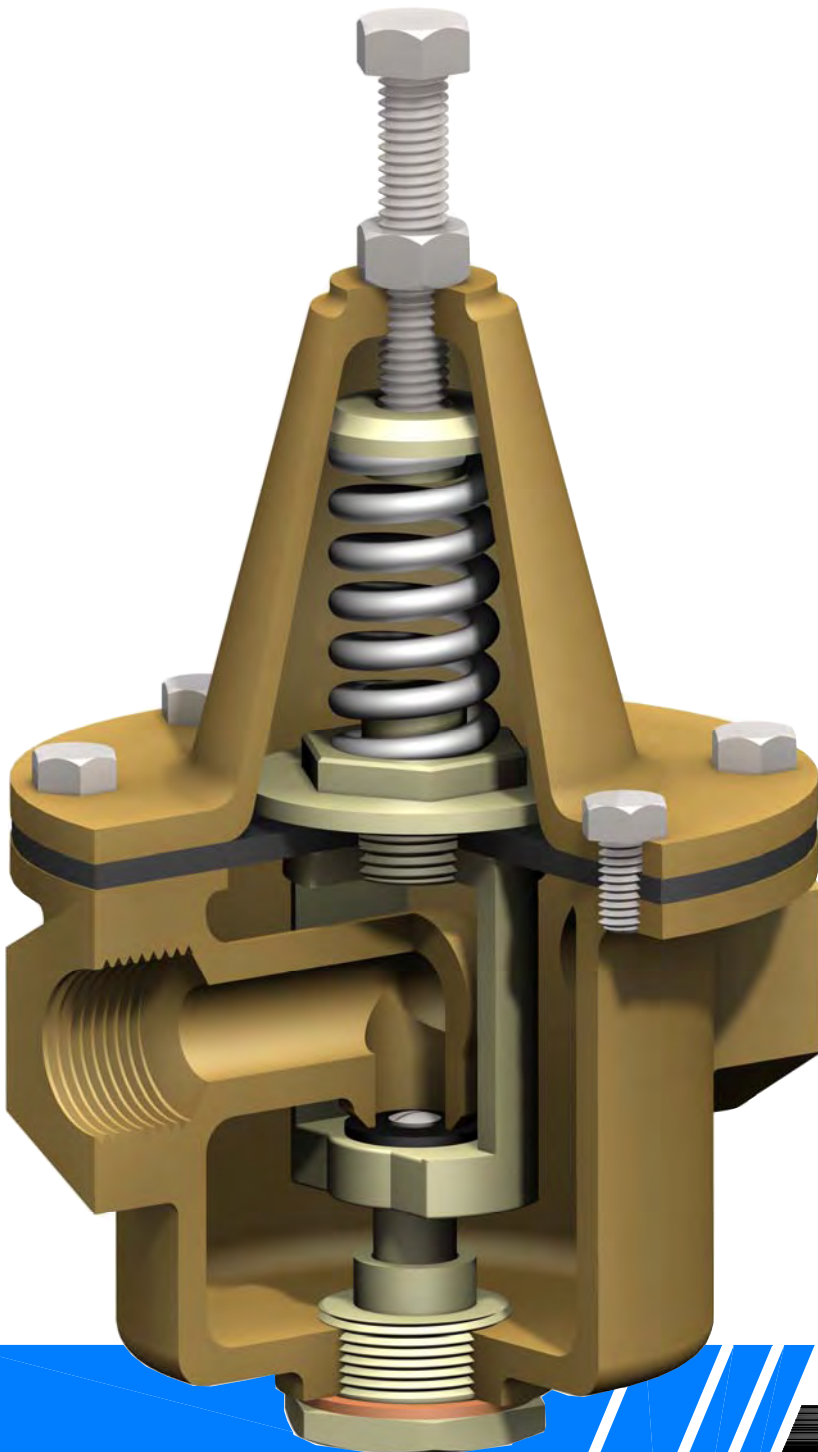


# AD10<sup>®</sup> Reducing Valve ...for water and air.

Ideal for use in domestic and industrial water supply. Public buildings and housing, air supply, fire control and irrigation. Designed on the direct action principle, AD10 requires highest manufacturing skill but gives the simplest and most user friendly operation. No need for maintenance or strainers.



- WRAS approved.
- Spring corrosion protected.
- Dead tight shut off. Heavy duty diaphragm can stand downstream surges even at 80°C.
- Stirrup links the diaphragm to face. Free floating mechanism can handle all types of water.
- Bronze body not affected by wear or corrosion.
- Valve face doesn't deform. High flow velocity keeps the face free of dirt.
- Stirrup centred by bottom plug eliminating jamming risks.

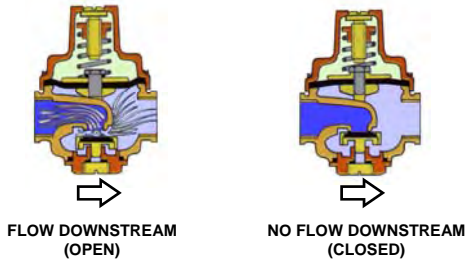
**AULD<sup>®</sup>**

PRESSURE CONTROL AND SAFETY VALVES

# AD10<sup>®</sup> REDUCING VALVE

## DATA TABLE

The outlet pressure acts on the bottom face of the diaphragm, compressing the spring when it exceeds the pre-set outlet value and thus closing the valve. As long as no water is drawn off on the downstream side (the no-flow condition), the outlet pressure is thus kept at the pre-set value. When water is drawn off on the downstream side, the outlet pressure decreases and the spring pushes against the diaphragm, opening the valve. Under prolonged flow conditions, a self-damping effect occurs in the valve action instead of a series of jerky opening and closing movements.

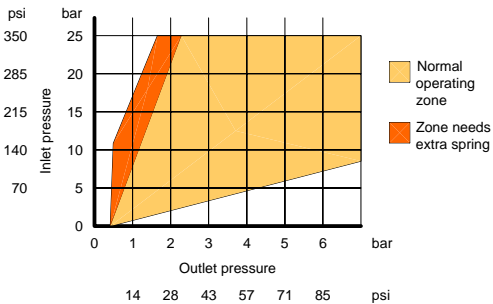


## TEMPERATURE & OTHER FLUIDS

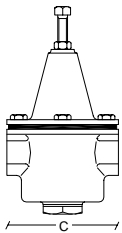
The AD pressure reducing valves may be used with any liquids or gases compatible with neoprene rubber compound and bronze, i.e. compressed air, inert gases, water up to 80°C and domestic heating oil up to 40°C etc. Oxygen is unsuitable as it damages rubber. When other fluids are concerned it is up to the user to decide as to the compatibility with our valve materials.

## PRESSURE & ADJUSTMENT RANGE

**IMPORTANT:** when required reduction is too large (outside the range of the charts) correct results can be obtained by fitting two pressure reducing valves in sequence, e.g. 20 to 3 bar and 3 to 1 bar.



The pre-set outlet pressure can be easily changed by turning the adjusting screw to the new value.



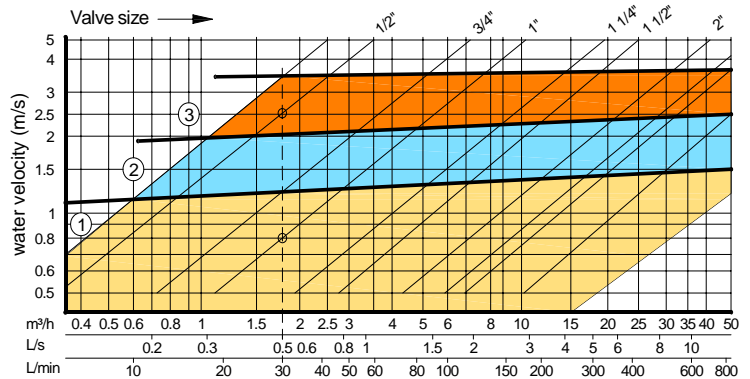
	1/2" DN 15	3/4" DN 20	1" DN 25	1 1/4" DN 32	1 1/2" DN 40	2" DN 50	
OVERALL DIMENSIONS (mm)	A	48	55	60	77	84	105
	B	120	130	160	180	205	235
	C	92	108	123	155	172	198
WEIGHT (kg)	1.25	1.75	2.35	4.0	5.4	8.3	

## VALVE SIZING CHART

For practical purposes the AD10 pressure reducing valves may be chosen with the same diameter as the pipe, providing that the pipe size itself is correct.

The chart is for water applications. With compressed air, the velocities are generally taken as being roughly 10 times higher than with water. The flow taken into account is the flow on the downstream side.

- ① ZONE recommended for domestic and low noise applications.
- ② Intermediate ZONE.
- ③ ZONE used for industry where a certain noise level is acceptable.



## EXAMPLE:

In a domestic water supply system, which AD10 pressure reducing valve should be chosen to give a max flow of 30L/min? Draw a vertical line through the base at 30L/min (or 0.5L/s or 1.8m<sup>3</sup>/h). This line shown as a broken line on the chart, gives 1" in the domestic or 1/2" in Zone 3 – industrial. In all common applications, this method is enough to choose the right size of pressure reducing valve.

## LOCATION & FITTING

AD10 reducing valves can be fitted in any attitude. In all cases the direction of flow must be correct, as shown by the arrow on the valve body. If there is a frost risk it should be drained. Further information on location and setting is available from the company but note: In apartment buildings with booster pumps, merely fitting a pressure reducing valve at the foot of each rising main will not ensure satisfactory pressure distribution owing to the static pressure differentials at each floor. The only way to ensure equal pressure distribution on all floors is to fit pressure reducing valves to each apartment. Both hot and cold water supply systems should use pressure reducing valves. In industry each installation should be treated as a special case.

## FOR MORE INFORMATION

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