

DESCRIPTION:

The Dereve Pressure Reducing Valve type **WRP2** has been developed for low flow situations and is suitable for **WATER** and **AIR** duties.

WATER: capacity up to 10 L/min (2.2 gal/min)
AIR: capacity up to 150 L/min (5.3 cfm)

Variable and fixed outlet pressure versions are available. In the variable pressure versions, setting of the outlet pressure is obtained by an adjusting screw located beneath the push-on plastic cap and engaged by a screwdriver. The outlet pressure is increased by turning the screw anti-clockwise. When the outlet flow of the WRP is reduced to zero the valve 'locks up' i.e. does not allow the outlet pressure to rise appreciably above the set outlet pressure.

The body and cover are manufactured from acetal, the diaphragm 'O' ring, valve pad from synthetic rubber and other internal parts from nylon and brass.



Colour for demonstration purposes only. Blue superseded by white



The WRP2 is available in several configurations, for instance the clamp type method of connection mounting enables variation of size/type to be achieved without changing the body of the reducing valve and although the body is plastic, the method gives electrical continuity across the valve. The all plastic body version is also available as a fixed or adjustable type.

Connections available:

1/4" BSP (External or Internal) formed to accept compression fittings.

1/2" BSP (External or Internal) can be formed to accept compression fittings or flat washer.

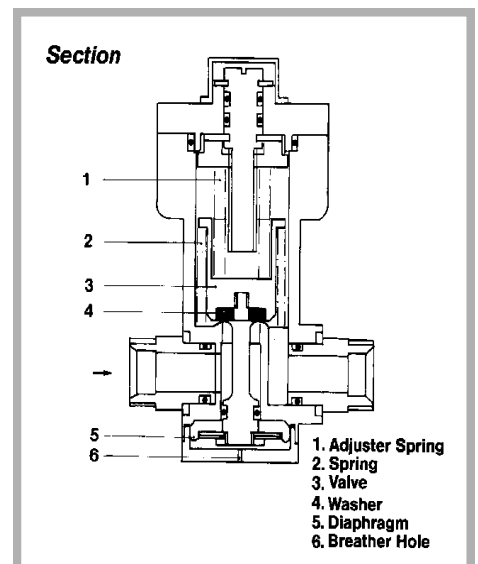
1/2" Hose connection

Other connectors can be supplied on request including plain metal tube type connectors suitable for compression or push on type fittings.

OPERATION:

The inlet pressure acts upwards on the valve washer and downwards on the other end of the valve spindle which is sealed by an 'O' ring. As these areas are almost equal a balance of forces is produced. The pressure below the diaphragm is atmospheric and is maintained by a breather hole (6), in the cap, which must not be blocked. The diaphragm (5) is loaded by the spring (2) and adjuster spring (1) which engages valve (3) with resilient washer (4). The outlet pressure acting over the effective area of the diaphragm opposes the spring force to produce equilibrium. Changes of flow and inlet pressure are compensated for by the valve so that near constant outlet pressure is maintained.

In the fixed pressure version the adjuster spindle and nut are removed and the diaphragm loaded with one spring (2) only.



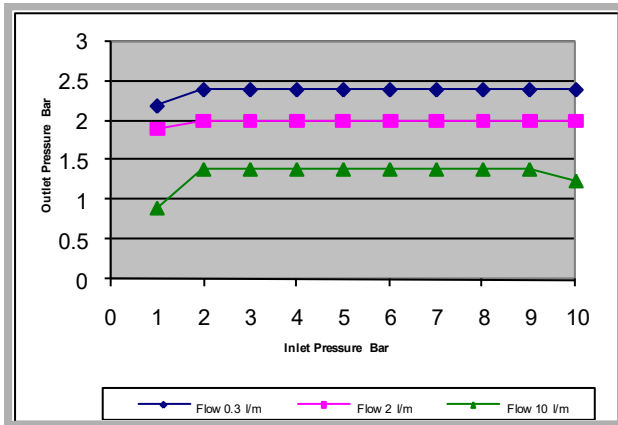
BE™ Bonut Engineering Ltd
T/A **DEREVE™ Valves**

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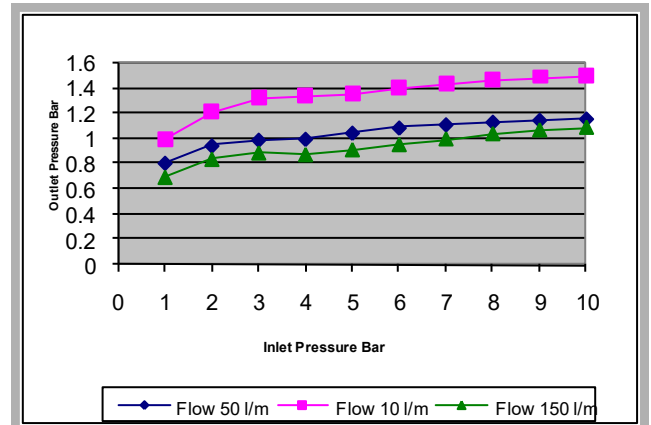


Performance

Water



Air



Technical data:

Type WRP2

Connection Range

Flow Range Water - L/min (gal/min)

Flow Range Air - L/min (cfm)

Max. Inlet Pressure - barg (psig)

Outlet Pressure Range - barg (psig)

Maximum Working Temperature - deg C (deg F)

Weight - gms (lb)

1/4" BSP - 1/2" BSP

0-10 (0-2.2)

0-150 (0-5.3)

10 (150)

0.2-4.0 (2-60)

60 (140)

87 (0.19)

Product Range:

WRP2 1/2" BSP

WRP2 1/2" Hose

Product no.

07100/08

07100/21

Outlet Pressure Range

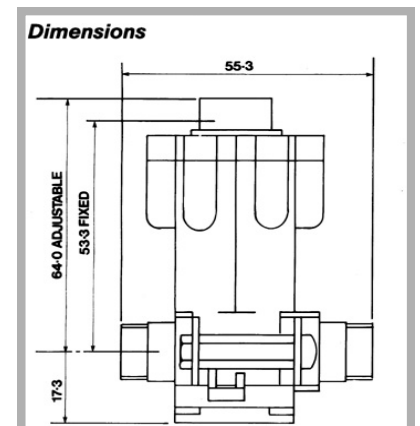
0.2 - 2.0 barg (2-30 psig)

2.0 - 4.0 barg (30-60 psig)

Valves can be supplied with other fixed pressure settings or as adjustable type within the above range

Installation:

The Dereve Pressure Reducing Valve can be mounted in any position and the direction of flow is marked with an arrow. All pipes must be free of burrs and should be clean before being connected. The body of the valve must not be under strain from the pipework when installed as any distortion could affect its performance. Undue force must not be applied during assembly and installation. If compression fittings are being used with the valve, insert the pipe to the stop and screw in the nut finger tight plus one turn. For screwed port valves take care not to allow jointing compound or tape to enter the valve.



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