

## DESCRIPTION:

The Dereve Pressure Reducing Valve type **WRP4** has been developed as an alternative to the WR4 metal version and is made mainly from Acetal plastic and is suitable for **WATER** and **AIR** duties.

**WATER:** Capacity up to 18 L/min (4 gal/min)

**AIR:** Capacity up to 250 L/min (8.8 cfm)

The continuously variable setting of the outlet pressure is obtained by an adjusting screw located beneath the push-in plastic cap and engaged by an 8mm (5/16") A/F allen key. The outlet pressure is increased by turning the screw clockwise.

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

When the outlet flow of the WRP4 is reduced to zero the valve 'locks up' i.e. does not allow the outlet pressure to rise appreciably above the set outlet pressure.

**Inlet and Outlet connections are 1/2" BSP female and are formed to accept 15mm compression fittings.**

Brass nuts (external threaded) and copper olives can be supplied on request.

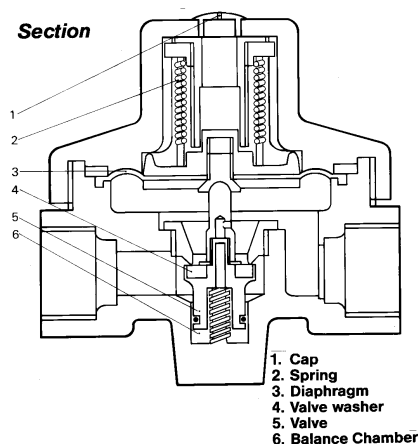


*Suitable for Water & Air duties*

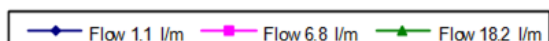
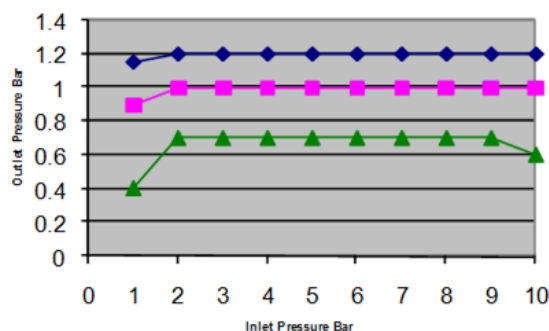
## OPERATION

The pressure above the diaphragm is atmospheric and is maintained by a breather hole in the cap which must not be blocked (1). The diaphragm (3) is loaded by means of a spring (2) and engages with the valve (5) with resilient rubber washer (4). The balance chamber (6) is connected to the outlet pressure and as the valve seat area is almost equal to the base area of the valve a balance of forces is produced.

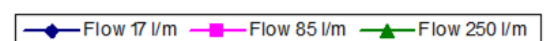
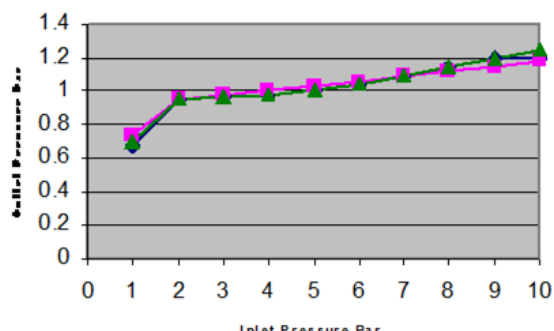
The outlet pressure acting over the effective area of the diaphragm opposes the spring force to produce equilibrium. Changes of flow and inlet pressure are compensated for by the valve so that near constant outlet pressure is maintained.



### Performance: Water



### Air



### Technical data:

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)

1/2" BSP/15mm Comp

0-18 (0-4)

0-250 (0-8.8)

10 (150)

0.2-5.0 (2-70)

60 (140)

186 (0.41)

### Product range:

#### Model

WRP4 Adjustable

WRP4 Adjustable

#### Product Code.

07078/08

07078/09

#### Outlet Pressure Range

0.2 - 2.0 barg (2-30 psig)

2.0 - 5.0 barg (30-70 psig)

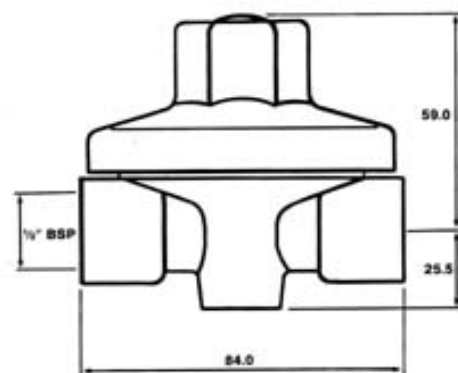
### Installation:

The Dereve WRP4 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 to assembly.

### Connections:

If compression fittings have been supplied 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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