

DESCRIPTION

The Dereve Pressure Reducing Valve type **WR4** was principally designed for use on water installations up to a capacity of **23 LPM (5GPM)**, but can also be used as an air regulator up to **70 m³/h**.

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

The body is manufactured from brass and, together with other exposed brass components, is chromium plated to increase corrosion resistance. The diaphragm, 'O' ring and valve pad are made from synthetic rubber.

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.



Suitable for Water & Air duties

Inlet and Outlet connections are 1/2" BSP parallel, female x female.

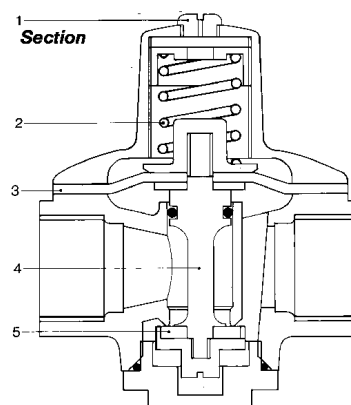
(formed to accept 15 mm compression fittings, brass nuts and copper olives can be supplied on request).

OPERATION

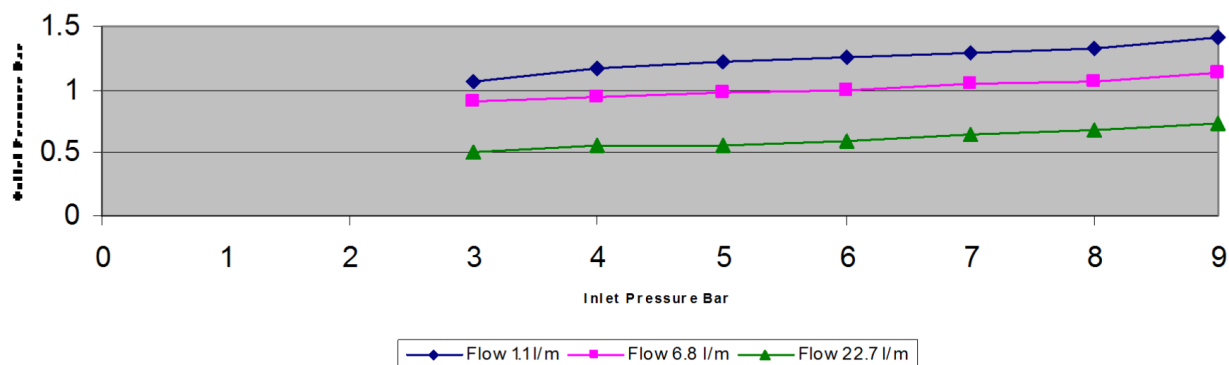
The pressure above the diaphragm is atmospheric and is maintained by a breather hole in the cap (1).

The diaphragm (3) is loaded by means of a spring (2) and is fixed to spindle (4) which has a resilient valve washer (5) positioned to operate against the single valve seat. The top of the spindle is fitted with an 'O' ring and as the top of the spindle is equal to the valve seat area 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 control so that near constant outlet pressure is maintained.



Performance



Technical data

Type

Connection Range
 Flow Range Water - L/min (gal/min)
 Flow Range Air
 Max. Inlet Pressure - barg (psig)
 Max. Outlet Pressure Range - barg (psig)
 Maximum Working Temperature - deg C (deg F)
 Weight - gms (lb)

WR4

1/2" BSP
 1.13-22.7 (0.25 - 5.0)
 up to 70 m³/hr
 10.35 (150)
 0.14-4.83 (2-70)
 80°C (176°F)
 695 (1.5)

Selection table

	Product no.	Outlet Pressure Range
WR4	07052/02	0.14 - 0.69 barg (2-10 psig)
WR4	07052/04	0.69 - 2.04 barg (10-30 psig)
WR4	07052/03	2.04 - 4.83 barg (30-70 psig)

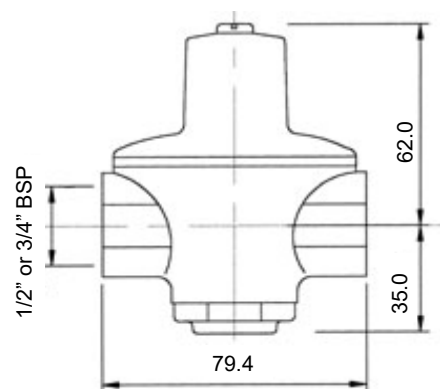
Installation

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 housing of the control must not be used as a lever and undue force must not be applied to assembly connections.

If compression fittings have been supplied with the control, screw in the nut finger tight plus one turn.



dimensions in mm



BE® Bonut Engineering Ltd

Unit 12 Latham Close, Bredbury Industrial Park
 Stockport, Cheshire, SK6 2SD, United Kingdom
 Tel: +44 (0) 161 430 4000 Fax: +44 (0) 161 494 1461
 Email: sales@bonut.co.uk Website: www.bonut.co.uk

DEREVE®
brownall®
RHODES®