

OPERATING INSTRUCTIONS

Category II Pressure Accessory
Type C3L Reducing Valve



Application

Suitable for compressed air, gas, water and oil service.



Operation

The outlet pressure can be varied as required by compressing or relaxing the spring using the adjusting screw:

Clockwise turns compress the spring increasing outlet pressure.

Anti-clockwise turns relax the spring decreasing outlet pressure.



Lifting and Handling

Wooden cases should be lifted using either a Fork Lift Vehicle or a Crane with adequate Safety Approved slings applied to carry the weight, which will be evenly distributed within the case.

Important: All manual handling operations should be carried out in compliance with the Manual Handling Operations Regulations 1992 (SI 1992/2793) (EC Directive 90/269/EEC).



Storage

If valve is bound to be stored longer than 6 months, turn back adjusting screw to remove compression from spring. (Re-adjust spring compression on installation).

Valves with Screwed ends shall have plugs fitted in their connections to prevent ingress of dirt etc. Flanged valves shall have their bores blanked off.

We recommend that plugs/blanks be removed immediately prior to installation.



Installation and Commissioning

It is most important that the pipeline be clean and free from dirt, scale, etc.

Fit valve in pipeline with flow as indicated by arrow cast on valve body and with adjusting screw in vertical position below pipeline.

It is also advisable to fit a stop valve on high-pressure side of line.



Important! When fitting Pressure Gauge to valve body, ensure threads do not penetrate, interfering with internal moving parts, otherwise valve could jam.



Maintenance

Examine annually for signs of defect, damage or deterioration.

Give special attention to contact/seating faces, if damaged these should be re-faced. Discs, diaphragms, seals and springs should be replaced if there is any sign of deterioration.

All parts should move freely in their respective guides.

Note: Quote the unique valve serial number when ordering spare parts.



Safety Warning!

Before dismantling ensure that the valve has been isolated from the pressure and the adjusting screw has been removed.



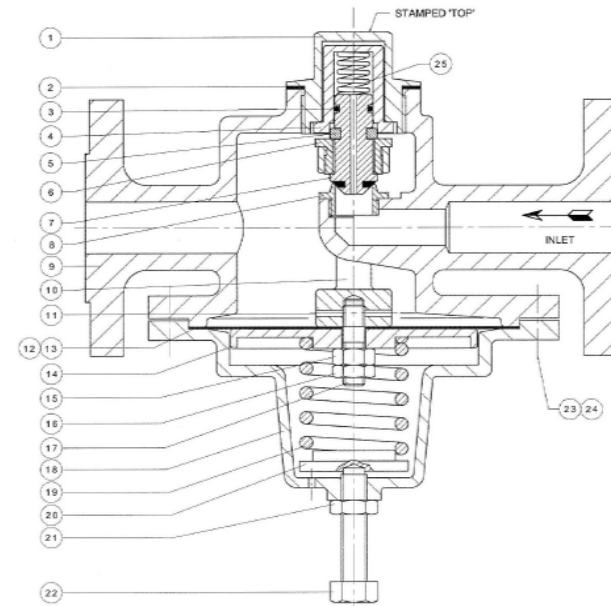
Dismantling and Reassembly

To replace Diaphragms: When the pressure is off: Remove; Adjusting screw (22) together with Locknut (21); Bonnet (18); Spring (19); Piston nuts (15 & 16) and Piston (14). Diaphragms (12 & 13) should come away freely. Clean the diaphragm seating spigot on Body (9).

To replace Valve Lid: Follow the instructions for replacement of Diaphragms; this will leave Saddle (10) unrestricted at the Diaphragm end of the valve. Unscrew Cap (1) and remove together with Joint (2). Remove Bush (4); Loading Spring (25) and the two halves of Split Collet (5). Next hold unrestricted Saddle (10) at the Diaphragm end of the valve then unscrew and remove Saddle Cap (6), this will give access to Valve Lid (7) which should be replaced.

Note: Replace Joint (2) and 'O' Ring (3) with new ones.

Reassembly: The valve is reassembled in reverse order of above dismantling procedures, in addition Valve Lid (7) must be held in the fully closed position and new Diaphragms (12 & 13) should then be fitted, ensure that the faces of the collar on Saddle (10) and the Diaphragm spigot on Body (9) are level (as shown in the illustration). **Important!** the Metal Diaphragm (12) must be fitted prior to fitting the Rubber Diaphragm (13). Before fitting Bonnet (18) make sure Saddle (10) is square in Body (9) and does not touch side of nozzle. Readjust the pressure by means of Adjusting Screw (22); Locknut (21) should then be tightened.



Item	Description	Qty
1	Cap	1
* 2	Joint (Cap)	1
* 3	O' Ring	1
4	Bush	1
5	Split Collet (Half)	2
6	Saddle Cap	1
* 7	Valve Lid	1
8	Seat	1
9	Body	1
10	Saddle	1
11	Pin	1
* 12	Diaphragm	1
* 13	Diaphragm	1
14	Piston	1
15	Nut	1
16	Locknut	1
17	Piston Bolt	1
18	Bonnet	1
19	Spring	1
20	Spring Carrier	1
21	Locknut (Adjusting Screw)	1
22	Adjusting Screw	1
23	Bolt	8
24	Nut	8
25	Loading Spring	1

* Recommended spare parts

EC DECLARATION OF CONFORMITY

Issued in accordance with the

PRESSURE EQUIPMENT DIRECTIVE (PED) 97/23/EC

We hereby declare that, in compliance with the above Directive, the product(s) detailed below, have been manufactured in accordance with conformity assessment module D1 'Full quality assurance (ISO 9001)' as approved by Lloyds Register (Notified Body No. 0038), of Middlemarch Office Village, Siskin Drive, Coventry, CV3 4FJ, UK, under EC Certificate of Conformity RPS 0160389/02.

Product Description – Pressure Accessory

Product Reference – Type C3L Reducing Valve

Comprising – Not Applicable

Serial Number – Not Applicable

Applicable Standards – None

Other Applicable Directives – None

Signed: A. Derrick
Name: A. J. Derrick
Position: Managing Director
Date: 24th April 2002

