



3170 Wasson Road • Cincinnati, OH 45209 USA
Phone 513-533-5600 • Fax 513-871-0105
info@richardsind.com • www.jordanvalve.com

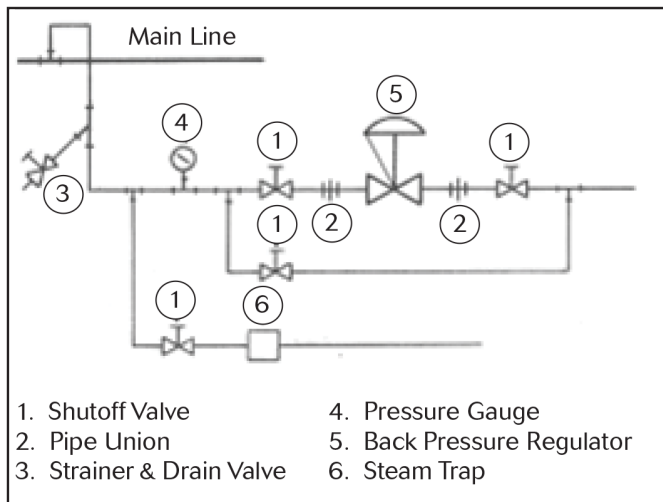
I & M Mark 508UBS

Installation & Maintenance Instructions for Mark 508UBS Back Pressure Regulators

Warning: Thorough maintenance operations and overhauls are important for the safe and reliable operation of all valves. The service procedures recommended by Jordan and described in this manual are for carrying out maintenance operations. Please note that this service manual contains various warning and caution notices which should be read carefully in order to minimize the risk of injury to people or the possibility of using incorrect work methods which may damage the valves or make them unsafe. It is important to realise, however, that these warnings cannot be exhaustive. Jordan is unable to know, assess and inform customers or users of all the conceivable methods of performing maintenance operations and all the risks deriving from the use of such methods. Therefore, whoever uses a service method or piece of equipment which is not recommended by Jordan must make sure that neither his own or other people's safety, nor valve safety and performance are jeopardized by the chosen method. Testing, installing or removing the valves or accessories may cause you to come into contact with fluids at very high pressures or temperatures and/or corrosive or erosive. Therefore, take all safety precautions while testing, installing or removing the product; these include, wearing ear plugs, goggles and safety clothing, such as gloves, both in or near the work area. Users of Jordan products are responsible for training the staff that will use the product. It is most important for these people to acquire a thorough knowledge of the instructions of the product, especially the ones contained in this manual.

Please read these instructions carefully!

Ideal Installation



Safety Precautions

Always observe the current plant safety regulations together with the following indication:

- Wear safety clothing. Hot water can scald you and overheated steam is invisible.
- When removing a valve, wear safety clothing to prevent being sprayed by any process fluid that may have accumulated inside. Remember that this fluid may generate a potentially explosive mixture. Make sure the valve is isolated from any pressure source in the system before starting to remove it.
- Inspect/ service the valves at least once a year.

The outer surfaces of the valves reach the same temperature as that of the fluid flowing inside them. For this reason, when installing a valve in a potentially explosive atmosphere, make sure that the flashover temperature of the mixture surrounding the valve is safely above that of the fluid flowing inside the valve and do not allow flammable powders to deposit on the outer surface of the valve.

- The system must be at zero static potential at the connection between the valve and the piping in order to prevent the accumulation of static electricity on the outer surfaces of the system that can act as an efficient flashover trigger in a potentially explosive atmosphere.

Transport, Storage & Handling

Transport

Depending on their size, valves can be transported loose, packed in cardboard boxes or in wooden crates. All of the valve ends are fitted with covers to prevent dirt from entering. Packs can be placed on pallets if required. Follow all and any indications written on the packaging.

Storage

Valves must be kept in a dry place to protect them from atmospheric conditions. They may only be removed from their crates or packing immediately prior to installation. The end protections and covers must be kept on until the last moment. Valves, whether packed or not, must not be subject to violent knocks. Valves, whether

packed or not, must be kept upright, that is, never lying on one side, in order to prevent distortion and damage to internal parts.

Handling

When unpacking the valves and removing the end protectors immediately prior to installation, take great care to make sure that foreign bodies do not enter the valve inlet and outlet holes while it is being connected.

Fig. 1

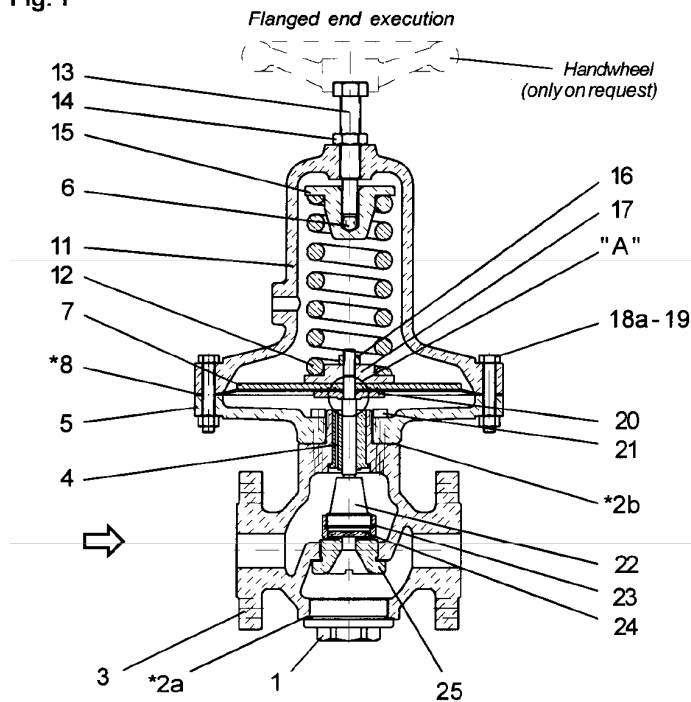


Fig. 2

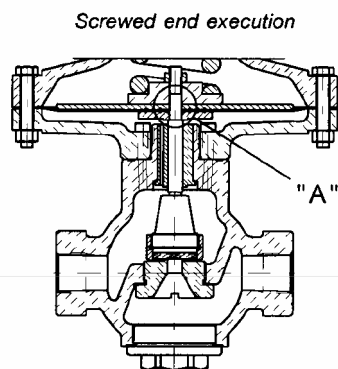


Fig. 3

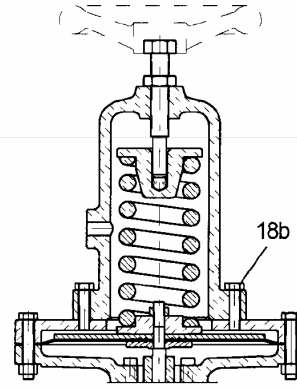


Fig. 4

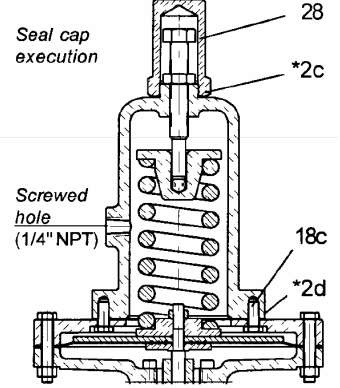
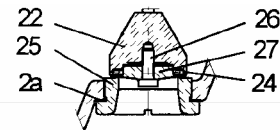
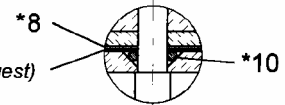


Fig. 5



Resilient tightness disc for valves ND 40 (1.1/2") and ND 50

PART. "A"



*9 - (only on request)

- 1 - Cover
- * 2 - Set of gaskets
- 3 - Valve body
- 4 - Guide
- 5 - Lower diaphragm case
- 6 - Ball
- 7 - Upper diaphragm plate
- * 8 - Diaphragm
- * 9 - Protection (if requested)
- *10 - O-Ring gasket
- 11 - Spring cover
- 12 - Spring
- 13 - Adjusting screw
- 14 - Lock nut
- 15 - Spring loader
- 16 - Nut
- 17 - Spring guide
- 18 - Screw
- 19 - Nut
- 20 - Lower diaphragm plate
- 21 - Screw
- *22 - Plug
- *23 - Ring Nut
- *24 - Disc
- *25 - Seat
- *26 - Screw
- *27 - Gasket plate
- 28 - Cap

* RECOMMENDED SPARE PARTS

Note: The actuators with diameter 220 and 360 in carbon steel or stainless steel are provided with a decomposed spring cover.

Installation

The UBS and UBS/V valves must be installed with the spring housing (2) facing upwards and the diaphragm horizontal, as shown in Fig. 6. In overflow valves regulating very low pressures (normally lower than 100 mm water column; the rating plate is always installed upside down and is therefore indicative), they must be installed with the actuator facing downwards and horizontal, as shown in Fig. 7; the weight of the mobile equipment is greater than the force of the pressure regulated on the diaphragm and must therefore be supported by the spring.

Before installation the valve on the piping, make sure the insides of the pipes are clean, especially the upstream section; blow down the piping if possible to eliminate any remaining dirt: small drops of solder may seriously damage the valve.

Fig.6

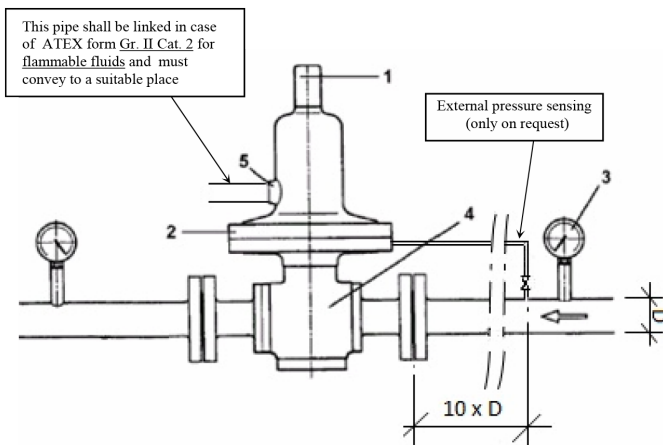
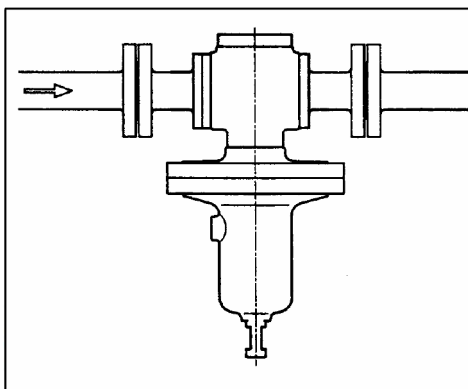


Fig.7



- 1.) Adjustment screw
- 2.) Actuator
- 3.) Pressure gauge
- 4.) Valve body
- 5.) Drain hole

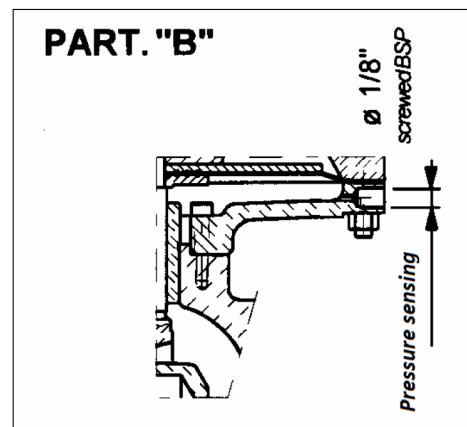
WARNING ON ATEX: the spring cover is not airtight (ATEX form Gr. II Cat. 2 for non-flammable fluids - Fig. 3 in case of harmless fluids (e.g., inert gases like nitrogen, carbon dioxide, noble gases). It's equipped with a hole (see fig. 6/7), whose chief function is that to drain the pressure whether the diaphragm cracked. Meanwhile in case of flammable fluids the spring cover is airtight (ATEX form Gr. II Cat. 2 for flammable fluids - Fig. 4), made from carbon steel and stainless steel, the hole (5) in Fig. 6 and 7 is always threaded 1/4" NPT and must be connected to pipe conveying the discharge to a suitable place (at atmospheric pressure).

Please bear in mind that the regulated pressure sensing is located inside the valve, for which reason the pressure drops in the piping connecting the valve to the ambient under control must be added to the calibration pressure value. This must be considered when calculating the size of the above piping.

When it is essential to avoid pressure variations at the point of use, the valves are fitted with an external pressure sensing, as shown in Fig. 6. In that case connect the actuator to the sensing line upline at a distance of at least 10 times pipe diameter 'D'.

The sensing line must always be connected to the side of the main pipe or on top of it, never underneath, otherwise solids substances may obstruct the pressure sensing.

To remove the valve, attach the joints in three pieces in the appropriate positions on the sensing line. The 1/8" female threaded connector is shown in Part "B".



External pressure sensing (only on request)

Generally speaking, the fluid crossing the overflow valves has been checked to make sure it is clean; if there are any doubts about this, fit a filter upline from the overflow valves.

If in the plant there is the possibility that the pressure in contact with the diaphragm exceeds the maximum diaphragm rating, it is necessary to install the safety relief device shown in Fig. A. The device is installed on the low-

er diaphragm case, through a 1/8" Gas female threaded hole and a threaded nipple 1/8" Gas male 3/8" Gas female (on the opposite side respect the pressure sensing in case of external pressure sensing construction). It consists (see Fig. A) in a plug, pressed by a spring properly calibrated depending on the maximum diaphragm rating, that can move inside a cylindrical body, due to the fluid action, gradually discovering a 1/4" NPT threaded female discharge hole. The discharge flow, discharged versus ground, can be released in atmosphere or properly collected, depending on working medium. If this is an ATEX version of the valve the discharge flow must be collected in inert atmosphere, through an appropriate tube with 1/4" NPT male threaded connection, to avoid the potential generation of explosive mixtures.

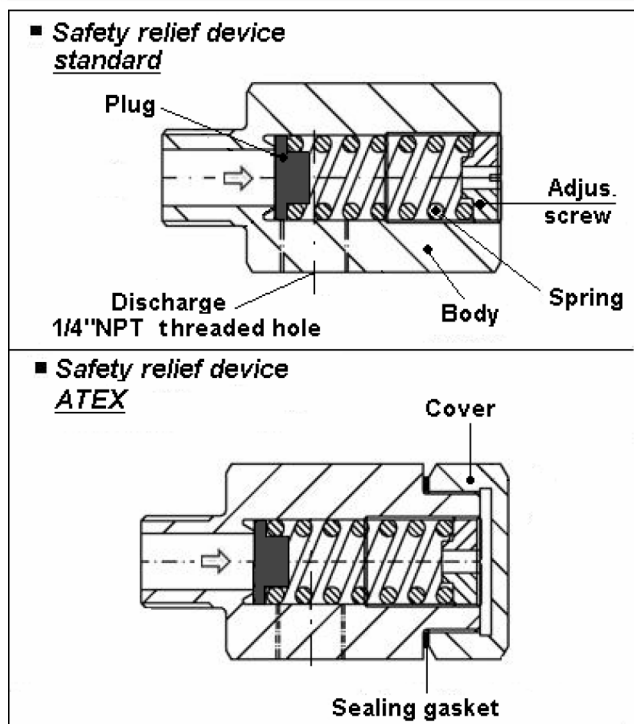
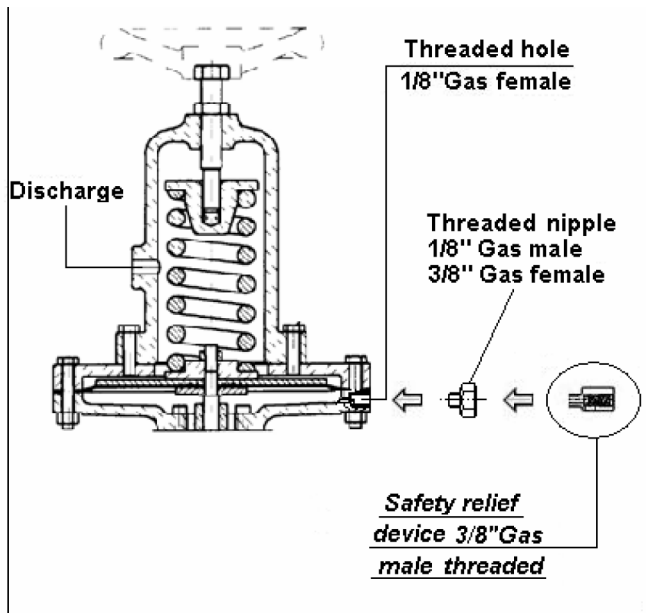


Fig. A

Start-Up and Calibration

Regulation equipment is normally supplied calibrated to the value indicated in the order; *the set pressure must be checked in real operating conditions.*

If the valve does not open at the required set pressure, loosed the lock nut (14) and turn the adjustment screw (13) clockwise to increase overflow pressure or anti-clockwise to reduce it; in case of construction with seal cap (Fig. 4), first remove the cap (28).

After checking set pressure, tighten the lock nut (14); re-install the cap (28) in case of construction with seal cap (Fig. 4).

ATTENTION! During Valve start-up or operation, do not touch any part of the valve as this can conduct heat if the fluid used it at a high temperature.

Maintenance

If the regulated fluid is clean and the plant is fitted with a filter, maintenance operations will be infrequent occurrences.

The user much check the seats *at least once a year* depending on the need for the valve to close airtight. When performing this inspection, the interval components can be removed without removing the body from the line, but it is easier to work if the entire valve is removed from the piping. Before starting the above operation, make sure the recommended spare parts are available (Figs. 1-2-3-4-5, parts list).

Removing the Components

(see Figs. 1-2-3-4-5)

Removing the Actuator

Removing the spring by unscrewing the adjustment screw (13) after loosening the lock out (14), leaving it in position or noting down its position on the adjustment screw in order to restore calibration after reassembly. If the spring housing is airtight (Fig. 4), first remove the cap (28) with gasket (2c). Remove the spring cover (11) by loosening the nuts (19); do not disassemble the spring cover of teh 220 and 360 actuators.

Remove the spring (12). Unscrew the nut (16). Remove the diaphragm (8), after having removed spring guide (18) and diaphragm plate (7).

Removing the Body

Unscrew and remove the cover (1) with gasket (2a). Unscrew the seat (25) with a screwdriver (see Figs. 1, 2 and 5).

Pull the plug (22) off its guide (4) and remove it from the body (3).

Parts Inspection

All the components are now ready to be inspected. Replace any worn ones. Clean all the parts. In particular, check the state of the disk of the plug (24), both elastic and metal, and the seat of the orifice (25). If the seat is

worn, work it by rubbing with a metal disk and abrasive paste. If this is not enough, rework it on the lathe. If no expert operators are available, send the whole valve back to our factory for revision. Another important component to control is the diaphragm (8); replace it if the surface is in poor condition. The same applies to the Teflon protection. Replace all the gaskets (2a-b-c-d), *at least once a year*, after cleaning the surfaces they lie on.

Reassembly

Carry out the removal operations in reverse order. Fit the stem of the plug (22) into the body (3) and push it onto its guide (4). Tighten the seat (25), making sure that the relevant gasket (2a) is new and correctly positioned. Replace the small retention ring (10) after thoroughly cleaning its seat.

Install the diaphragm (8), taking care to install the protection (9), where applicable, underneath, towards the valve body, lying on the little plate (20). Reinstall the disk (7) and the spring guide (17), and fully tighten the nut (16).

Match the holes of the diaphragm with the ones in the lower diaphragm case (5) and reinstall the spring (12), spring loader (15) and cover (11). Screw back the cover (1). Return the screw (13) to the position marked by the nut (14) or the position you noted down (see 8.4.2.1). Exact calibration must then be checked when the valve starts working again.

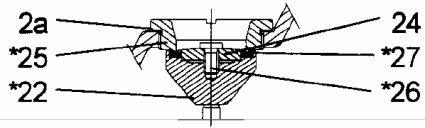
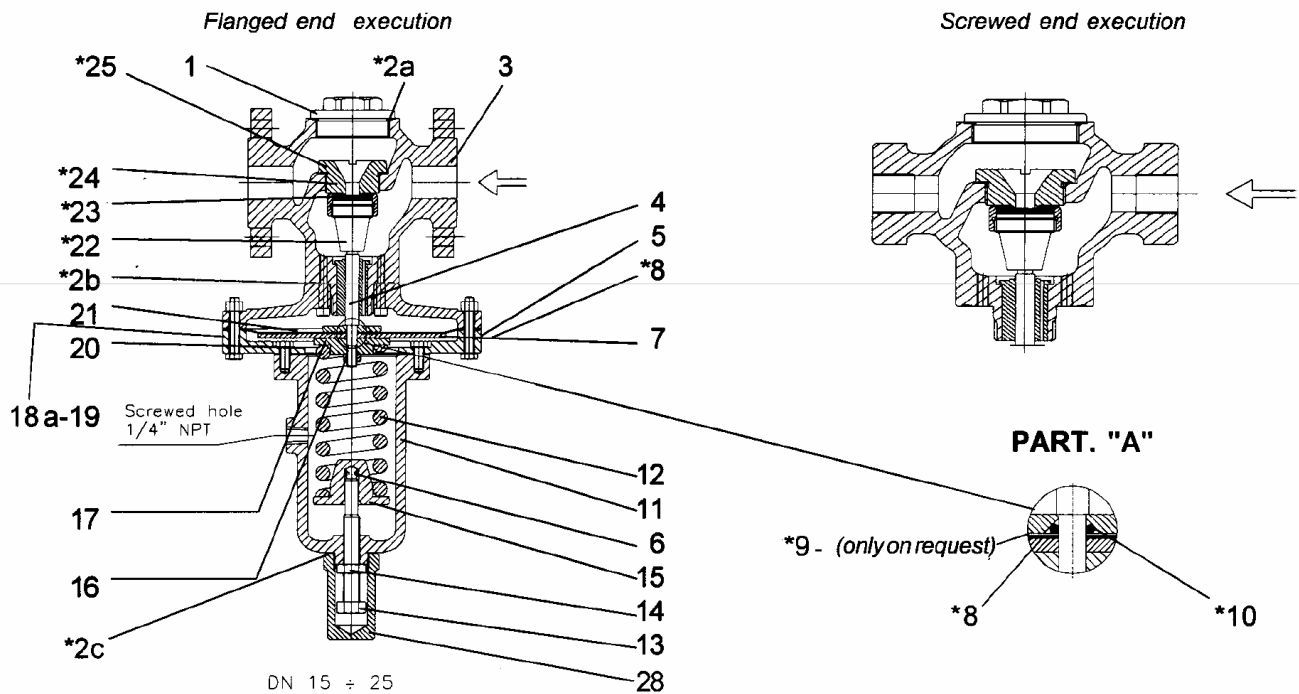
Replacing the Diaphragm Only

If the diaphragm deteriorates or breaks during operation or requires replacement without having to perform any other maintenance operations and if the valve is easy to access, perform the operations listed in paragraph "Removing the Actuator", leaving the valve on the piping, preventing the operating medium inflow to the valve itself and discharging the pressure on the main line. At the end of operations proceed to reassembly with inverse operations from those described in paragraph "Removing the Actuator".

Check calibration once more when the valve starts working again and adjust if necessary.

After each maintenance operation, replenish your stock of spare parts by reordering used items.

ATTENTION! When welding piping, do not attach the earth connector to the valve as this may damage important sliding parts.



DN 40 - 50

- 1 - Cover
- * 2 - Set of gaskets
- 3 - Valve body
- 4 - Guide
- 5 - Lower diaphragm case
- 6 - Ball
- 7 - Upper diaphragm plate
- * 8 - Diaphragm
- * 9 - Protection (if requested)
- *10 - O-Ring gasket
- 11 - Spring cover
- 12 - Spring
- 13 - Adjusting screw
- 14 - Lock nut
- 15 - Spring loader
- 16 - Nut
- 17 - Spring guide
- 18 - Screw
- 19 - Nut
- 20 - Lower diaphragm plate
- 21 - Screw
- *22 - Plug
- *23 - Ring nut
- *24 - Disc
- *25 - Seat
- *26 - Screw
- *27 - Gasket plate
- 28 - Cap

Note: The actuators with diameter 220 and 360 in carbon steel or stainless steel are provided with a decomposed spring cover.

Fig.8

Installation

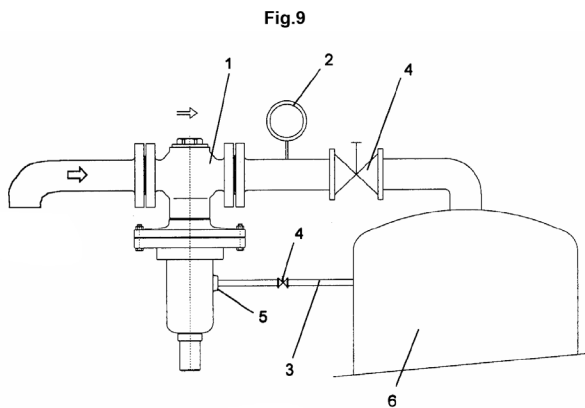
Before installing the valve, remove the plastic covers protecting the flanges or connectors.

Make sure the data indicated on the rating plate corresponds to operating conditions.

ATTENTION! Check that the maximum positive pressure that can occur in the equipment being protected does not exceed the following values:

| Diameter of Actuator in mm | Maximum positive pressure in bar |
|----------------------------|----------------------------------|
| * 360 | 1.5 |
| * 220 | 5 |

* This data can be derived from the valve code shown on the rating plate.



1 – Depression valve UBS
2 – Vacuum pressure gauge
3 – ¼ NPT pipe

4 – On/off valve
5 – Three-piece joint
6 – Equipment to protect

Before installing the valve in the piping, make sure the insides of the pipes are clean, especially the upstream section; blow down the piping if possible to eliminate any remaining dirt: small drops of solder may seriously damage the valve.

ATTENTION! The valve must always be installed with the actuator facing down. The section of the inlet tubing at atmospheric pressure must also face downwards in order to prevent impurities or water from depositing at the valve inlet in the event of outdoor installations.

Start-Up and Calibration

Valves are normally supplied calibrated to the value indicated in the order. This calibration must be checked in real operating conditions.

If the valve does not open at the required calibration value, remove the cap (28), loosen the lock nut (14) and turn the adjustment screw (13) clockwise to increase overflow pressure or anti-clockwise to reduce it. After

checking opening pressure, start the plant at full power and adjust calibration as required by turning the adjustment screw (13); then tighten the lock nut (14).

Maintenance

ATTENTION! Before removing the valve, make sure the recommended spare parts are available (fig. 8). After each operation, replenish your stock of spare parts by reordering used items.

ATTENTION! Only use original spare parts.

If the regulated fluid is clean and the plant is fitted with a filter, as recommended, maintenance operations will be infrequent occurrences.

The user must check the seats at least once a year depending on the need for the valve to close airtight. When performing this inspection, the internal components can be removed without removing the body from the line, but it is easier to work if the entire valve is removed from the piping.

REMOVING THE COMPONENTS

Removing the Actuator

Remove the cap (28) and release the spring by unscrewing the adjustment screw (13) after loosening the lock nut (14), leaving it in position or noting down its position on the adjustment screw in order to restore set pressure after assembly.

Remove the spring cover (11) by unscrewing the nuts (19); do not disassemble the spring cover. Remove the spring (12). Unscrew the nut (16). Remove the diaphragm (8), after having removed spring guide (18) and upper diaphragm plate (7).

Removing the Body

Unscrew and remove the cover (1) with gasket (2a).

Unscrew the seat (25) with a screwdriver (Fig. 8).

Pull the plug (22) off its guide (4) and remove it from the body (3).

Parts Inspection

All the components are now ready to be inspected.

Replace any worn ones. Clean all the parts. In particular, check the state of the disk of the plug (24) and the seat of the orifice (25).

Reassembly

Carry out the removal operations in reverse order.

Fit the stem of the plug (22) into the body (3) and push it into its guide (4).

Tighten the seat (25), making sure that the relevant washer is in good condition and correctly positioned.

Replace the small retention ring (10) after thoroughly cleaning its seat.

Install the diaphragm (8), taking care to install the protection (9), where applicable, towards the area in contact with the tank fluid, fitted between the diaphragm (8) and the upper diaphragm plate (7). Reinstall the upper diaphragm plate (7) and spring guide (17), and then fully tighten the nut (16). Match the holes of the diaphragm with the ones in the lower diaphragm case and reinstall the spring (12), spring loader (15) and cover (11). Screw back the cover (1). Return the screw (13) to the position marked by the nut (14) or the position you noted down (see 9.2.4). Exact set pressure must then be checked when the starts working again.

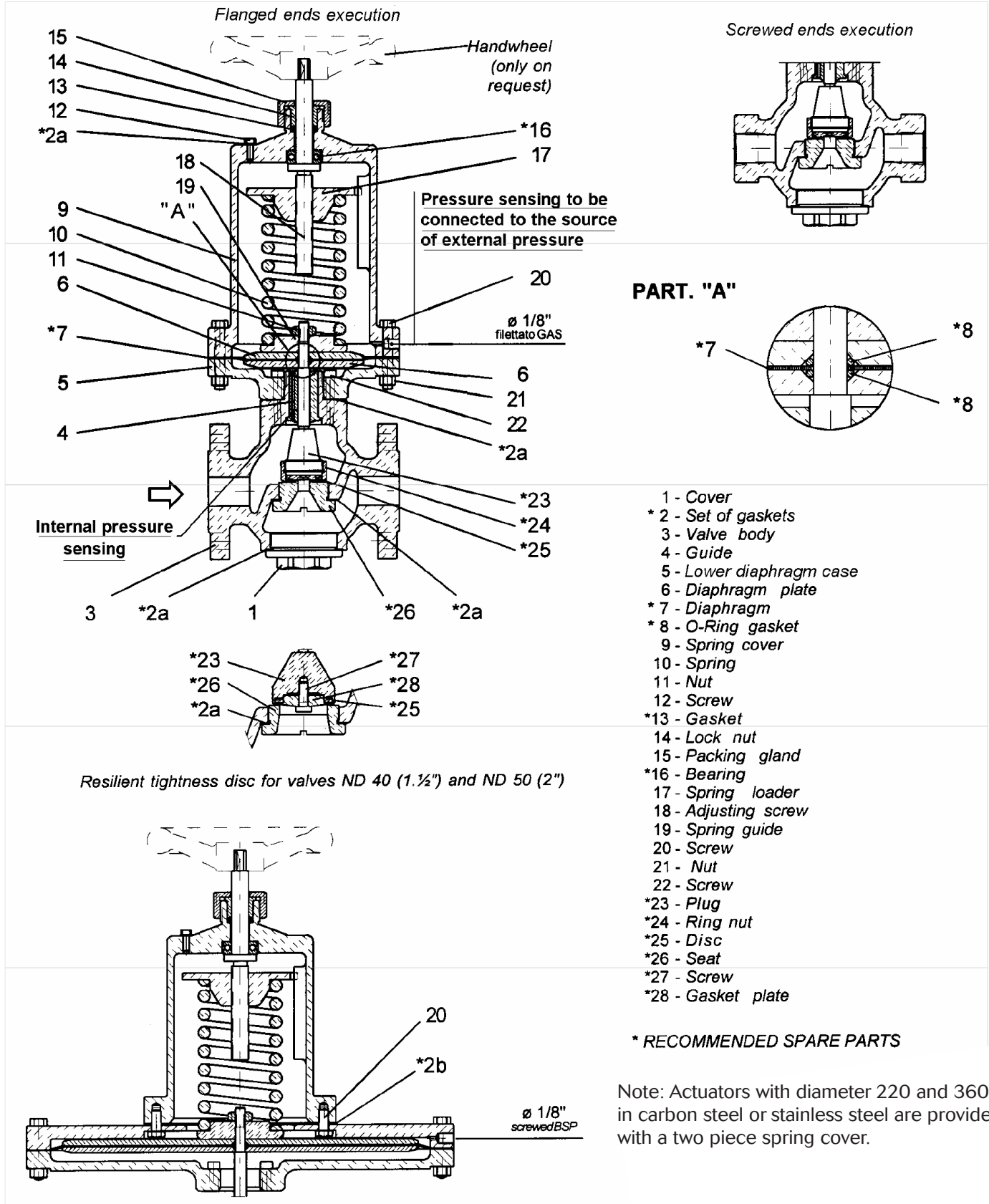
Replacing the diaphragm only

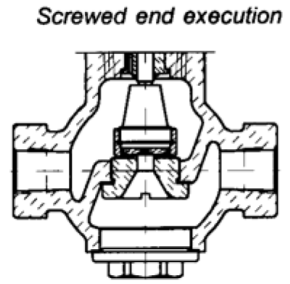
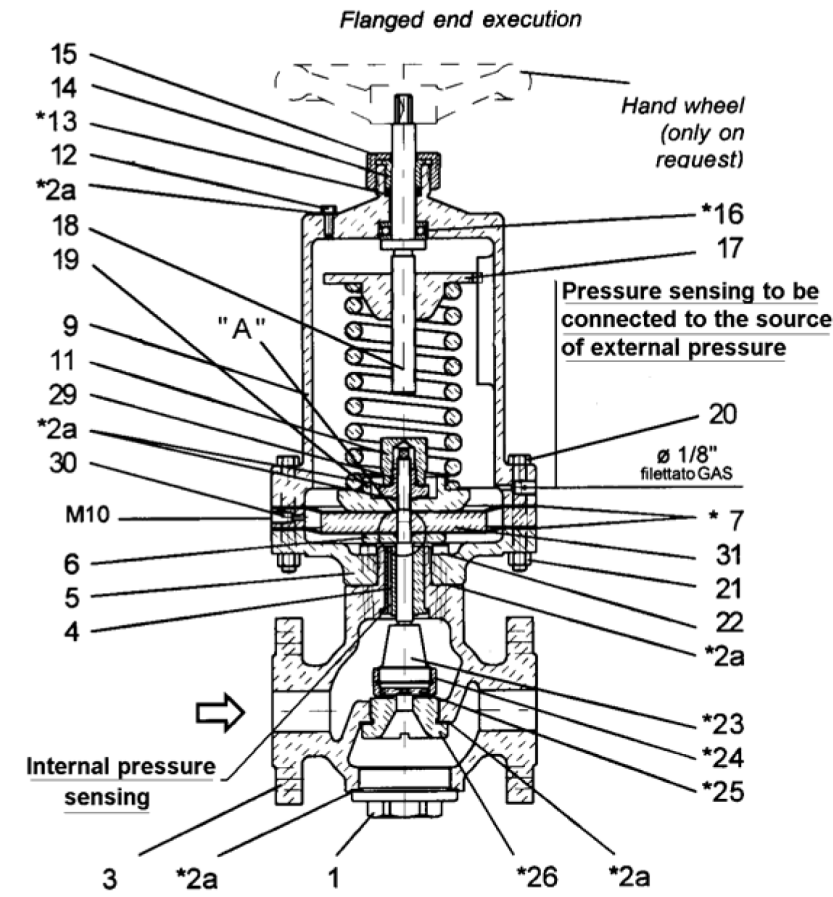
If the diaphragm deteriorates or breaks during operation or requires replacement without having to perform any other maintenance operations and if the valve is easy to access, perform the operations listed in paragraph “Removing the Actuator”, leaving the valve on the piping, and closing the shut off valves (4) Fig. 9 on the main line and sensing line. At the end of operations proceed to reassembly with inverse operations from those described in paragraph “Removing the Actuator”. Check calibration once more when the valve starts working again and adjust if necessary.

Operating Faults

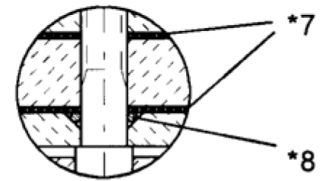
| FAULT | REASON | ACTION |
|--|---------------------------------|--|
| Leaking while the valve is closed for valves also working with positive pressure | Valve not airtight | Remove the valve and replace the gasket. |
| Difficulty in adjusting the vacuum in the tank for valves only working in a vacuum | Valve out of calibration | Check calibration as per point 9.3 |
| | Valve not airtight | Remove the valve and replace the gasket. |
| | Diaphragm broken | Remove actuator assembly and replace the diaphragm, O-ring and spring cover, where applicable. |
| | Gaskets 2A, 2B, 2C, and 2D worn | Replace the gaskets |

UBS/D1



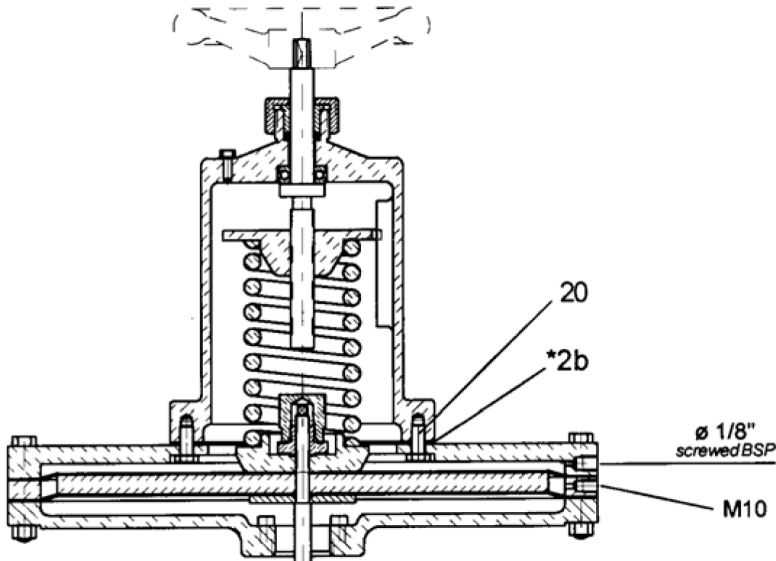
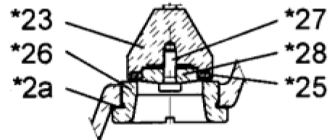


PART. "A"



- 1 - Cover
- * 2 - Set of gaskets
- 3 - Valve body
- 4 - Guide
- 5 - Lower diaphragm case
- 6 - Diaphragm plate
- * 7 - Diaphragm
- * 8 - O-Ring gasket
- 9 - Spring cover
- 10 - Spring
- 11 - Lock nut
- 12 - Screw
- *13 - Gasket
- 14 - Packing gland
- 15 - Lock nut
- *16 - Bearing
- 17 - Spring loader
- 18 - Adjusting screw
- 19 - Spring guide
- 20 - Screw
- 21 - Nut
- 22 - Screw
- *23 - Plug
- *24 - Ring nut
- *25 - Disc
- *26 - Seat
- *27 - Screw
- *28 - Gasket plate
- 29 - Nut
- 30 - Servomotor ring
- 31 - intermediate plate

Resilient tightness disc for valves
ND 40 (1.½") and ND 50 (2")



* RECOMMENDED SPARE PARTS

The UBS/D valves comprise two groups of regulators:

Group 1:

All the group 1 regulators have just one diaphragm: one of the controlled pressures acts under the diaphragm through an internal pressure sensing while the other acts over the diaphragm through a pressure sensing on the spring cover. The plug is kept closed by the spring. The following types belong to this group:

- UBS/D1 and UBS/V/D1 (see Fig. 10);

Group 2:

All the group 2 regulators have two diaphragms separated by a chamber communicating with the outside; the controlled pressures act under the lower diaphragm (through an internal pressure sensing) and over the upper diaphragm (through a pressure sensing on the spring cover). The plug is kept closed by the spring. The following types belong to this group:

- UBS/D2 and UBS/V/D2

Installation

All UBS/D regulators must be installed with the actuator facing upwards and the diaphragm horizontal.

Installation diagrams

In most cases the flow crosses the valve as shown by the arrow in Figs. 10 and 11.

The installation diagrams are therefore as follows:

Group 1 valves: Fig. 12

Group 2 valves: Fig. 13

Install an on/off valve upline, downline and on the sensing and discharge line, in order to service the valve (if necessary) while the plant is pressurized.

Install one filter or pressure gauge upline from the regulator and another one on the sensing line, as shown in the diagrams, in order to calibrate the differential pressure and keep it constantly under control.

Before installing the valve in the piping, make sure the insides of the pipes are scrupulously clean, especially the upline section; blow down the piping if possible to eliminate any remaining dirt: small drops of solder may seriously damage the valve.

In group 2 valves, the chamber between the two diaphragms must be connected to piping taking the discharge to a suitable place, at atmospheric pressure. This hole can be closed with a plug or pressure gauge with an electrical contact for the remote signalling that the diaphragm has broken, as long as the downline plant is protected as shown in the following point.

If there is the slightest possibility of the pressure upstream from the reduction valve exceeding the maxi-

imum admissible pressure for the installation, caused by the failure of the overflow valve, a safety valve must be installed upstream, without an on-off valve in between, in order to discharge the entire flow crossing the differential pressure regulator.

Please bear in mind that a regulated differential pressure sensing may be fitted inside the valve, for which reason the pressure drops in the piping connecting the valve to the sensing point must be added to the regulated differential pressure value, creating pressure variations according to the variation in flow; this must be considered when calculating the size of the connection piping.

When it is essential to avoid pressure variations at the point of use, the regulator can be fitted with an external pressure sensing, replacing the internal one and fitted to the lower flange of the actuator, as shown in Figs. 12-13. In that case connect the actuator to the sensing line upline at a distance of at least 10 times pipe diameter 'D'. The sensing line must always be connected to the side of the main pipe or on top if it, never underneath, otherwise solid substances may obstruct the pressure sensing. To remove the valve, attach the joints in three pieces in the appropriate positions on the sensing line. The 1/8" female threaded connector is shown in Part "B".

Fig.12 Example of installation layout - Group 1 valves: "UBS/D1 and UBS/V/D1"

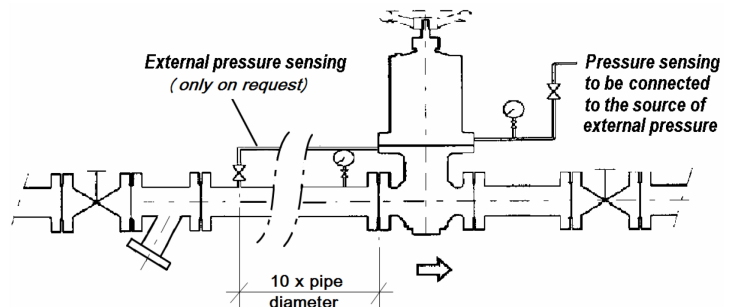
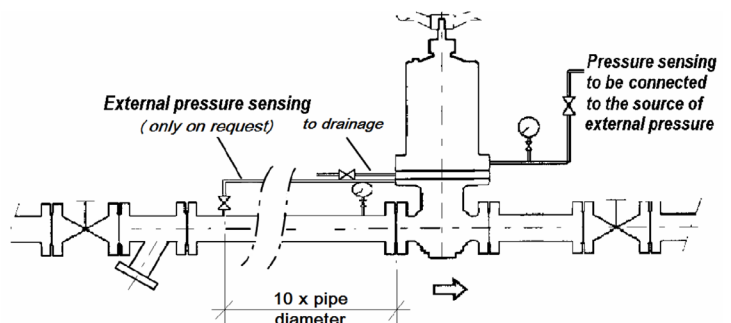


Fig. 13 Example of installation layout – Group 2 valves: "UBS/D2 and UBS/V/D2"



Start-Up and Calibration

This operation is similar for both groups.

The regulators are factory calibrated at the set pressure indicated in the order. If necessary it is possible to modify the set pressure at operating conditions on the plant as follows.

Loosen the lock nut (14) and correct the position of the adjustment screw (18) reading the pressure indicated by the gauge; this must be done when the system is working at normal operating condition. Then, tighten the lock nut (14).

Maintenance

If the regulated fluid is clean and the plant is fitted with a filter, maintenance operations will be infrequent occurrences. **The user must check the seats at least once a year depending on the need for the valve to close airtight.**

When performing this inspection, the internal components can be removed without removing the body from the line, but it is easier to work if the entire valve is removed from the piping.

Before starting the above operation, make sure the recommended spare parts are available (Figs. 10-11, parts list).

Removing the Actuator

Loosen the lock nut (14) and release the spring (10) by turning the adjustment screw (18) and count and note down the number of turns in order to restore calibration after reassembly. Remove the spring cover (9) by loosening the nuts (21). Do not touch the spring cover of the 220 and 360 actuators. Remove the spring (10). Then:

- For UBS/D1 and UBS/V/D1 valves (Fig.10): unscrew the nut (11), remove spring guide (19) and the diaphragm (7) with the relevant plates (6) and O-ring (8);
- For UBS/D2 and the UBS/V/D2 valves (Fig. 11): unscrew the lock nut (11) and remove the O-ring (2a), then unscrew the nut (29) and remove the relevant O-ring (2a); remove the spring guide (19), two diaphragm assembly (7) with diaphragm plate (6), actuator ring (30) and relevant O-ring (8), and intermediate plate (31).

Removing the Body

Unscrew and remove the cover (1) with relevant gasket (2a). Unscrew the seat (26) with a screwdriver (see Fig. 10-11).

Pull the plug (23) off its guide (4) and remove it from the body (3).

Parts Inspection (Figs. 10-11)

All the components are now ready to be inspected. Replace any worn ones. Clean all the parts. In particu-

lar, check the state of the disk of the plug (24), both elastic and metal, and the seat of the orifice (26). If the seat is worn, true it by rubbing it with a metal disk and abrasive paste. If this is not enough, turn it again on the lathe. If no expert operators are available, send the whole valve back to our factory for revision. Another important component to control is the diaphragm (7); replace it if the surface is in poor condition. Replace all the gaskets at least once a year, after cleaning the surfaces they lie on.

Reassembly

Carry out the removal operations in reverse order. Push the stem of the plug (23) into its guide (4) and tighten the seat (26). Screw back the cover (1). Install the diaphragm/s. Make sure the seats of the O-rings are perfectly clean before installing them. Assemble:

- for D1 valves (Fig. 10) the assembly: plug (23), diaphragm plate (6) (with relevant gaskets (8)), diaphragm (7), spring guide (19), and nut (11)
- For D2 Valves (Fig.11) the assembly: plug (23), diaphragm plate (6) (with relevant gaskets (8)), lower diaphragm (7), intermediate plate (31) and actuator ring (30), upper diaphragm (7), spring guide (19) (with relevant gaskets (2a)), nut (29) and lock nut (11).

Match the holes of the diaphragm/s with the holes in the lower diaphragm case (5) and reinstall the spring (10), spring loader (17) and spring cover (9). Turn the adjustment screw (18) the number of turns noted down during disassembly. Exact calibration must then be checked when the valve starts working again.

Replacing the diaphragm only

If the diaphragm deteriorates or breaks during operation or requires replacement without having to perform any other maintenance operations and if the valve is easy to access, perform the operations listed in paragraph "Removing the Actuator", leaving the valve on the piping, preventing the operation medium inflow to the valve itself and discharging the pressure on the main line. Prevent the external pressure source medium inflow and discharge the pressure inside cover-spring through the discharge screw (12) Fig. 10-11, conveying the medium if necessary. Disconnect the pressure sensing on the spring-cover. At the end of operations proceed to reassembly with inverse operations from those described in paragraph "Removing the Actuator". Check calibration once more when the valve starts working again and adjust if necessary.

Repairs

If it is not possible to eliminate the problems, send faulty valves to the supplier/manufacturer, together with a description of the problem.

In order to receive spare parts or information, always quote the series number shown on the rating plate attached to the valve or punched on the outer surface of the flanges.

ATTENTION! The maker declines all liability for modifications to the product or operations that are not contemplated in this manual.