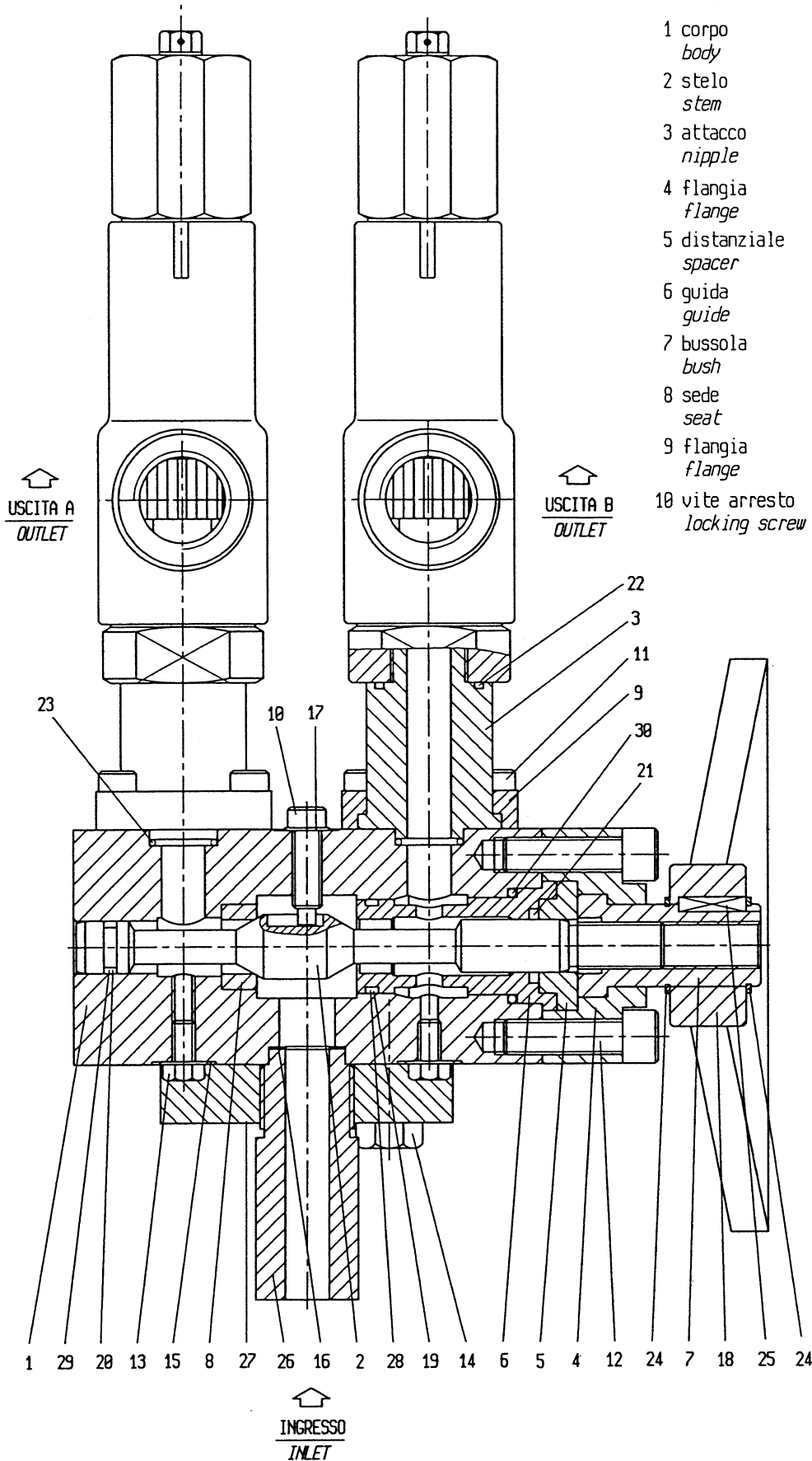


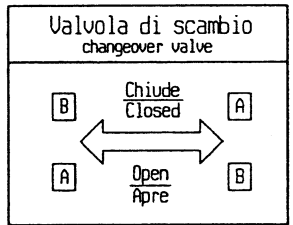
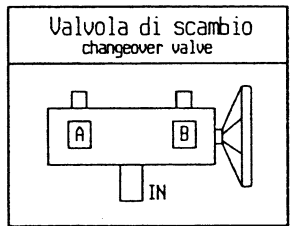
CHANGEOVER VALVE

CV-1500 SERIES

USE AND MAINTENANCE MANUAL



- | | | |
|---|----------------------------------|---------------------------------|
| 1 corpo
<i>body</i> | 11 vite
<i>screw</i> | 21 stepseal
<i>gasket</i> |
| 2 stelo
<i>stem</i> | 12 vite
<i>screw</i> | 22 o-ring
<i>gasket</i> |
| 3 attacco
<i>nipple</i> | 13 vite
<i>screw</i> | 23 o-ring
<i>gasket</i> |
| 4 flangia
<i>flange</i> | 14 vite
<i>screw</i> | 24 seeger
<i>seeger</i> |
| 5 distanziale
<i>spacer</i> | 15 rondella
<i>washer</i> | 25 chiavetta
<i>splain</i> |
| 6 guida
<i>guide</i> | 16 rondella
<i>washer</i> | 26 attacco
<i>nipple</i> |
| 7 bussola
<i>bush</i> | 17 rondella
<i>washer</i> | 27 flangia
<i>flange</i> |
| 8 sede
<i>seat</i> | 18 volantino
<i>handwheel</i> | 28 guarnizione
<i>gasket</i> |
| 9 flangia
<i>flange</i> | 19 o-ring
<i>gasket</i> | 29 guarnizione
<i>gasket</i> |
| 10 vite arresto
<i>locking screw</i> | 20 o-ring
<i>gasket</i> | 30 o-ring
<i>gasket</i> |



CHANGEOVER VALVE CV-1500 SERIES

The changeover valve **CV-1500** Series permits to intercept one of two valves mounted on it making operate simultaneously the other one and permitting to carrying out the disassembling and the maintenance.

The simultaneous interception of the two valves is never possible.

The mounted valves can be positioned in the most opportune position.

1. OPERATION

The operation and the check of the changeover valve happen thanks to a handwheel.

Turning clockwise the handwheel, the farer valve to the handwheel itself is intercepted (**outlet A**), turning counterclockwise the handwheel it is intercepted the closest valve (**outlet B**).

A sticker put on the handwheel, indicates the correct direction of rotation to be followed in order to intercept the valve that should be removed.

2. DISASSEMBLING OF SAFETY VALVE FROM CHANGEOVER VALVE

For disassembling the safety valve from changeover valve carry out progressively the following operations:

CAUTION: before disassembling the safety valve from changeover valve make sure that no pressure under the valve itself has remained.

In case of pressure presence it is necessary:

- To intercept the corresponding passage of the disassembling valve turning clockwise the handwheel for the valve **A** and counterclockwise from the valve **B**;
- to discharge the fluid in pressure using only the screw (13) corresponding to the valve to be disassembled, placed under the valve itself on the side of the change over valve ;
- once sure that all the pressure has been discharged, remove the safety valves from the changeover valve.
- once the maintenance of the safety valve has been carried out re-mount it on the changeover valve and make sure that the screw (13) is tightened.

3. DISASSEMBLING OF THE CHANGEOVER VALVE FROM THE PLANT

For disassembling the changeover valve from the plant carry out progressively the following operations:

CAUTION: before disassembling the changeover valve from the plant make sure that the plant on which it is mounted is not "under pressure" and that no pressure inside the valve itself has remained.

In case of pressure presence it is necessary:

- Verify that the stem is not at stroke on one of the two seats; otherwise it is necessary to advance or withdraw the stem turning the handwheel clockwise or anticlockwise (about two turns) depending on the position in which the stem is;
- to remove the screw (14);
- to remove the changeover valve from the plant.

4. DISASSEMBLING CHANGEOVER VALVE (see drawing page 2)

For disassembling the changeover valve carry out progressively the following operations:

- remove the two safety valves from the changeover valve;
- remove the screw (11) and the nipple (3) from the changeover valve;
- remove the circlip (20) the spline (19) and the handwheel (18);
- loosen the locking screw (10), remove the screw (11) and the flange (14);
- loosen the guide (7) from the stem (2);
- remove in the order spacer (5), bush (6), stem (2) and seat (8).

5. ASSEMBLING CHANGEOVER VALVE

For assembling carry out the same of point 4) but in reverse order, mounting the first the o-ring on all internal particular of the valve.

6. MAINTENANCE

The changeover requires an ordinary but careful maintenance (**SEE MAINTENANCE PLANT**) and in the case it would be necessary to follow the operation stated at point 4) for disassembling and in point 5) for assembling. In case of seats damaging it is necessary to carry out a new working: this operation has to be executed by skilled workers.

WARNING

- **The changeover valve should not be subjected to bumps or such stresses that could compromise the working.**
- **The changeover valve must be used only exclusively for the use stated in the construction declaration.**
- **The changeover valve must be revised within four years from installation independently from the number of interventions executed by the valve.**

ORDINARY MAINTENANCE PLAN	
<i>Check of seat and stem-disc on the plant</i>	<i>Every 6 months working.</i>
<i>Check of the seal outwards on the plant.</i>	<i>Every 30 days.</i>
<i>Check of painting condition on the plant.</i>	<i>Every 6 months.</i>
<i>Ordinary maintenance of the assembled on the plant, including the seal check and surface check and the functional check with alternate move of the stem-disc.</i>	<i>Every 12 months working</i>
<i>General maintenance of the valve removed from the plant including the disassembling, the seat and stem-disc check, the possible seat and stem-disc working, gasket substitution, painting restoration and inspection on the test bench.</i>	<i>Every 36 months working</i>