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valvole speciali per l'industria

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Instruction Manual

Diaphragm Valve model GS.53-54

This valve model GS.53 is the guided flow type; it's normally closed and is opened by a hydropneumatic cylinder with return spring.

The valve body and diaphragm can be made of the materials most suitable for the fluids passing through them. This model is fitted with an emergency handwheel.

This valve model GS.54 is the same as the GS.53; it too has an emergency handwheel, and a ring nut for regulating the opening.

To replace the diaphragm:

1. Remove the bolts, washers and nuts (part.15-14-11), then take out the hydropneumatic unit.
2. Remove the bolts, washers and nuts (part.7-5-4); take out the support (part.3).
3. To change the diaphragm remove the screws (part.13) in the plug (part.6).
4. Having done this the diaphragm (part. 8) can be replaced with a new one.
5. During remounting, to ensure an efficient seal at the seat of the valve body, tighten the bolts, washers and nuts (part.7-5-4) in crosswise order.

To replace the packing and spring:

1. Put air into the cylinder and tighten the handwheel until it touches the cap bushing (part.24-25 for the S.53-part.25 for the GS.54), then let out the air.
2. Remove the bolts, nuts, washers (part.11-14-15) and also the hydropneumatic unit.
3. Remove the bronze nut (part.24), also the bolts, nuts and washers (16-18-17).
4. Take off the cylinder (part.21).
5. By unscrewing the handwheel the hydropneumatic unit becomes disassembled piston (part.22), spring (part.20), cap (part.19).
6. The small packing (part.10) is in its seat inside the cylinder;
The large packing (part.23) is placed in the piston (part.22) slot;
The spring (part.20) is inside the cap (part.19).
7. When re-assembling, see that the cylinder (part.21) is quite clean, and oil with silicon oil.

To re-assemble the hydropneumatic unit

1. Place the spring (part.20) inside the cap (part.19), mount the piston with the threaded rod (part.22) inside the cap and use the handwheel to screw them all together until the upper surface of the piston rest on the surface of the cap.
2. Fit the unit this completed inside the cylinder and screw up the bolts, nuts and washers (part.16-18-17).
3. Screw up the bronze nut, returning it to its original position and assemble the hydropneumatic unit with the valve support.
4. For greater efficiency of the pneumatic unit, use air free from condensation.

N.B. All part numbers will be found in our technical and parts catalogue.