



Compressed air supply on filter presses for the separation of solid-liquid mixtures

Ball valves with integrated limit switch box protect compressed air network

Filter presses are used on account of their excellent dewatering characteristics and their separation of solid-liquid mixtures in different areas of application. They are used in areas such as water/waste water treatment, the chemical industry and in mining.

Process description:

In water treatment and product filtration, filter presses separate solids and liquids in substances such as slurries or suspensions. The mixture of substances to be separated is pressed against the filter cloths via a pump with a pressure of 10–20 bar. The solid parts of the mixture are caught by the filter, forming a filter cake.

If the filter press is full, compressed air is used in some procedures to dry the filter cake. After completion of the drying process, the press is opened to dispose of the slurry. With an open valve position, however, the feed pump must be switched off, as a contaminated medium will otherwise be pressed into the compressed air network, which results in significant consequential damage to the pneumatic actuators.

For the deployment of a filter press, a GEMÜ customer requires a manually operated shut-off valve with a position feedback that was delivered to the installation site already fully fitted. With this position feedback, the feed pump is disabled by the software. This prevented the medium from penetrating the compressed air network by means of the compressed air used when cleaning the filter press.

Suitable GEMÜ products:

- GEMÜ B26 manual compact flange ball valve with GEMÜ LSC integrated limit switch box for position feedback

Key process data:

- Medium:
Water, slurries, suspensions
- Operating temperature:
20 to 50 °C
- Operating pressure:
Approx. 10 to 20 bar (abs)



Why GEMÜ:

GEMÜ is offering a technically advanced solution for ball valves for manual operation with suitable position feedback. And these are already pre-assembled, preset and tested. The pre-assembled valves save on the time and effort required for logistics and documentation and enable faster and simpler installation of the plant on site.

For the position feedback for quarter turn valves, the GEMÜ LSF inductive dual sensors or the GEMÜ LSC limit switch box are available from GEMÜ. They are available for both the GEMÜ B22 and GEMÜ B24 3-piece ball valves, the one-piece GEMÜ B26 compact flange ball valve as well as for the GEMÜ 797 high-pressure ball valve.

Our specialists will be happy to advise you in person regarding the appropriate design of the valve, including its accessories



GEMÜ B26 with LSC