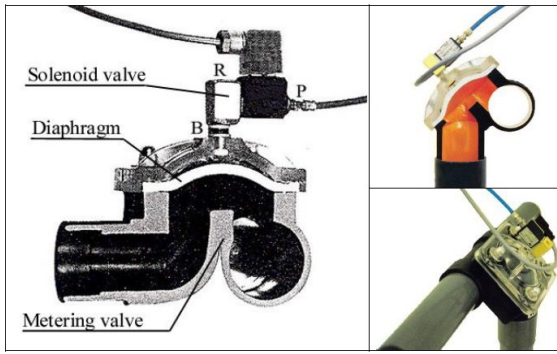# Metering Valve

A metering valve is designed for the feeding equipment in cattle breeding (ex. pigs). The valve consists of a plastic body, an elastic diaphragm secured by the cover and a pilot solenoid valve. Thanks to a computerized system this valve can modify the quantity of feedstuff supplied in each battery in case of cattle feeding differentiations based on age. The following abbreviations are used to describe how the system operates: "**MV**" metering valve, "**P**" supply, "**B**" use and "**R**" exhaust, as indicated in the picture.

Construction Diagram Of The System
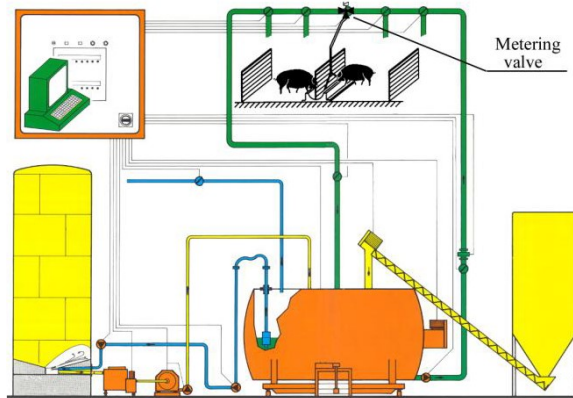
Solenoid Valve Application

The system operates as follows: first corn is ground and the flour is stocked into the silos. The flour is then taken from the silos to be put into a tank and mixed with water. The mixture thus obtained is distributed to the network by a pump. The **MV** intercepts the feedstuff and regulates its distribution to the manger thanks to the elastic diaphragm. The diaphragm is operated by the pressure of air let into the upper chamber of the solenoid valve. As a matter of fact, when the solenoid valve (assembled on the cover of the **MV**) is de-energised, air flows from **P** to **B**, pressing the diaphragm and closing the **MV**; when it is energised air from the chamber is exhausted from **B** to **R** and the **MV** opens.

Solenoid Valves Used

TYPE SB906CVD1
3/2 way NC second service direct acting solenoid valve with coils series 2

We Recommend

For this application M&M International has designed a type of solenoid valve where the third way is intended for the supply. This operation is called second service and is exactly the same carried out by a 3/2 way NO direct acting solenoid valve. In applications where passages over Ø 1,7 mm are not requested, the recommended valve is less expensive than a 3/2-way valve. This model is an example of customized product complying with the customer' s requirements and offering high quality standards and a competitive price. The same solenoid valve is also available in another version with the common supply direction.