



CHANGE-OVER VALVE for gas bottles

Made in Germany

Do you know this problem?

In the midst of an operation the gas flow from your Insufflator stops!

We have a solution! An automatic mechanical

CHANGE-OVER VALVE

CHANGE-OVER VALVE

This automatic change-over valve makes continuous gas insufflation possible and results in an uninterrupted operation.

Q. "Why does this problem exist at all, even though the insufflator is equipped with a gas consumption indicator?"

A. "The problem is caused by a relatively unknown feature of carbon dioxide. Contrary to other gases, such as oxygen, carbon dioxide when stored under pressure - such as in a gas bottle - exists in liquid state. This causes a constant bottle pressure as long as there is some liquid carbon dioxide in the bottle. In other words, even a nearly empty bottle appears to have maximum pressure. Only if the liquid gas is completely consumed, will the bottle pressure decrease.

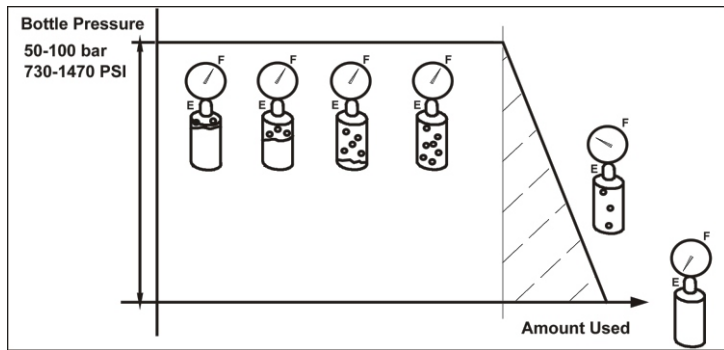


Diagram 1: Gas Bottle Pressure in Relation to Amount Used

As you can see the meter indicates a decrease in bottle pressure only when the liquid gas is used up - then it is almost too late. In contrast with meters for other types of gases or the petrol gauge in your car you can see more precisely how much is left in the tank.

To reliably carry out an operation bottles are often replaced which are not completely empty. To eliminate problems with limited gas supply and the unnecessary replacement of bottles we developed the new automatic mechanical gas bottle change-over valve. Due to its pure mechanical construction it can easily fit into your existing operating system."

During an operation, if the first bottle of gas is used up, changing over to a second bottle will be carried out automatically. This bottle will be completely emptied except for a small residue (below 1 %) to prevent contamination of the bottle. After the operation the empty bottle can simply be replaced.

TECHNICAL DATA

Proof Pressure	0 - 200 bar
Gas	Carbon Dioxide Medical Grade
Gas Connectors	German standard, ISO, UNF
Temperature Range	10° to 50 °C ; 50° to 104°F
Weight	1,2 kg
Dimensions	155 x 170 x 120 mm