

Series “MDA” Diaphragm Accumulators

- 0.075 to 3.5 Liters
- Operating Pressures to 330 Bar
- Nitrile & Hydrin Diaphragms



Pre-Charging Diaphragm Accumulators

Use nitrogen for pre-charging accumulators, Please pay attention to the danger of explosion when using other gases! If the gas pressure in the nitrogen cylinder is higher than the maximum working pressure of the accumulator, a pressure relief valve must be installed. If the gas pressure in the nitrogen bottle is lower than the required gas pressure, a booster device needs to be installed.

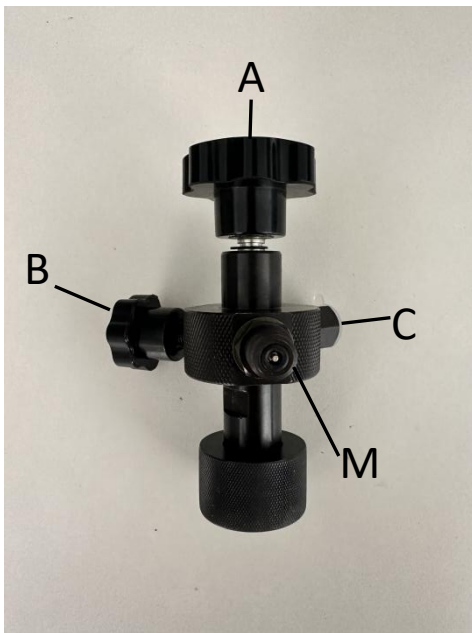


Figure 1

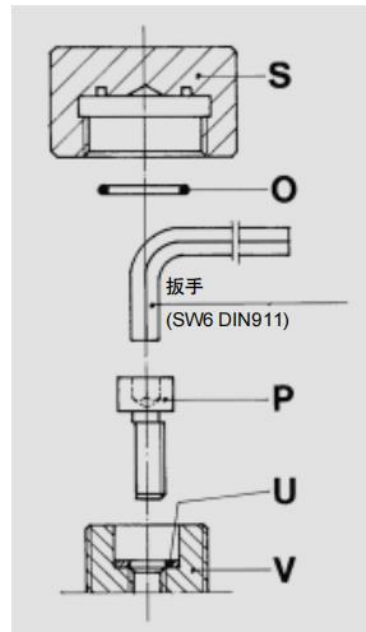


Figure 2

(A) Unscrew the protective cap S and slowly loosen the hexagon socket screw P on the accumulator (about half a turn) with the Allen wrench SW6.

(B) Use the G5/8 end of the connector to connect the inflation hose to the pressure reducing valve of the nitrogen bottle, and use the nitrogen bottle connector of the corresponding country.

(C) Connect the other end of the inflation hose to the inflation valve, and install the inflation valve into the air end of the accumulator. At the same time, confirm that the pressure relief valve B is closed, and select a suitable pressure gauge to install in position C.

(D) Slowly unscrew the stop valve on the nitrogen bottle and slowly release nitrogen into the accumulator until the pressure is close to 1 bar, then turn the stop valve of the nitrogen bottle larger to inflate faster until the required precharging pressure is reached.

(E) Close the rotation axis A of the inflation valve clockwise, then open the pressure relief valve to exhaust, remove the inflation valve, and finally tighten the Allen screw P with the Allen wrench SW6.

(F) Apply liquid to the gas end, check for leakage, and then screw the protective cap S into the gas end of the accumulator.

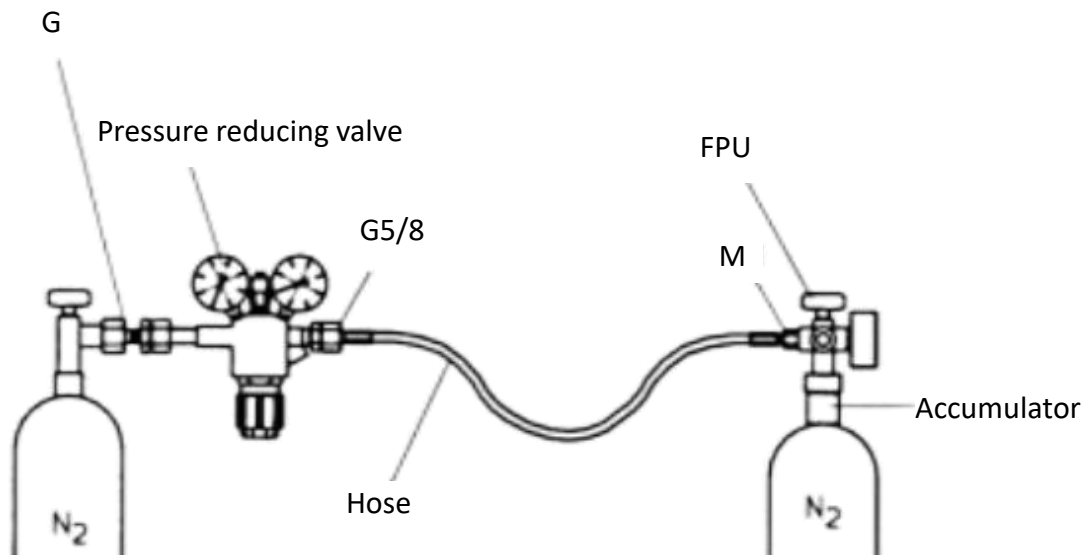


Figure 3

Check/reduce pre-charging pressure

(AA) Unscrew the protective cap S and use the Allen wrench SW6 to slightly loosen the Allen screw P on the accumulator (about 1/4 turn).

(BB) Screw the charging valve with a pressure gauge into the gas end of the accumulator, confirm that the pressure relief valve B is closed, and at the same time, fully unscrew the rotation axis A counterclockwise to open the gas valve.

(CC) Read the accumulator charging pressure with a pressure gauge. (If you need to lower the pre-charging pressure, you can slowly open the pressure relief valve B, and then close the pressure relief valve B after reaching the

required pressure).

(DD)Close the rotation axis A of the inflation valve clockwise, then open the pressure relief valve to exhaust, remove the inflation valve, and finally tighten the Allen screw P with the Allen wrench SW6.

(EE)Apply liquid to the gas end, check for leakage, and then screw the protective cap S into the gas end of the accumulator.

Note:After rotating the hexagon socket screw P three times, the lower M8 combination pad needs to be replaced to prevent air end leakage caused by damage to the combination pad.