

The symbol drawn above represents a 3/2 N.C. valve and, as we can see, its discharge way has the number 3, and in the rest conditions outlet 2 is not intercepted, as is the case of 2/2, but it is connected to discharge 3. The arrow indicates flow direction. We can notice how the identifying numbers increase progressively when the number of ways increases, while those of control remain unchanged.

The number of the control signals has specific meanings.

A 10 indicates that inlet 1 is connected to nothing; while a 12 means that 1 must be connected with 2. When 12 intervenes, the square to be considered is the one adjoining (left figure at the bottom on the previous page), 1 is connected with 2, and 3, that was connected before with the discharge is now intercepted.

The valves with repositioning on 10, by means of a spring, are called **monostable** or **unistable** valves because the resting position is predefined. It also means that the outlet signal shall have duration equal to the control signal. Disappearance of the control signal shall change the status of the outlet signal.

A valve that has no preferential position remains in one of the two positions until one of the two signals is selected. The control, in this case, may be an impulse, and it shall switch the valve under the condition that the opposite control is absent. They are valves defined as **bistable** or **memory** valves, because they remember the last control signal received.

The completion of the symbol requires the control graphic related with numbers 10 and 12. The most common symbols used are:



As an example, a 3/2 N.C. valve with pneumatic control and spring return is described. The 2/2 valves are used in the N.C. and N.O. versions as simple shut-off valves, while the 3/2 valves are used to control single-acting cylinders or to send signals to other valves by virtue of the third discharge way.