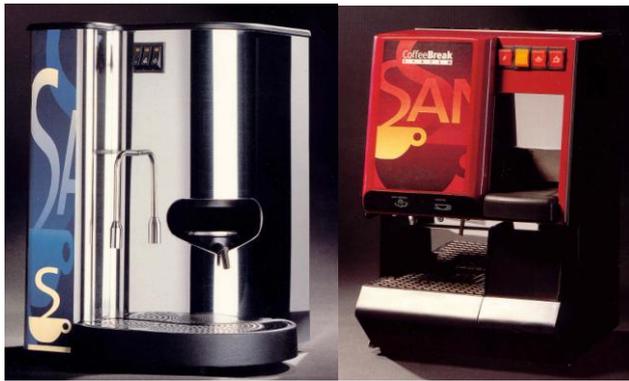
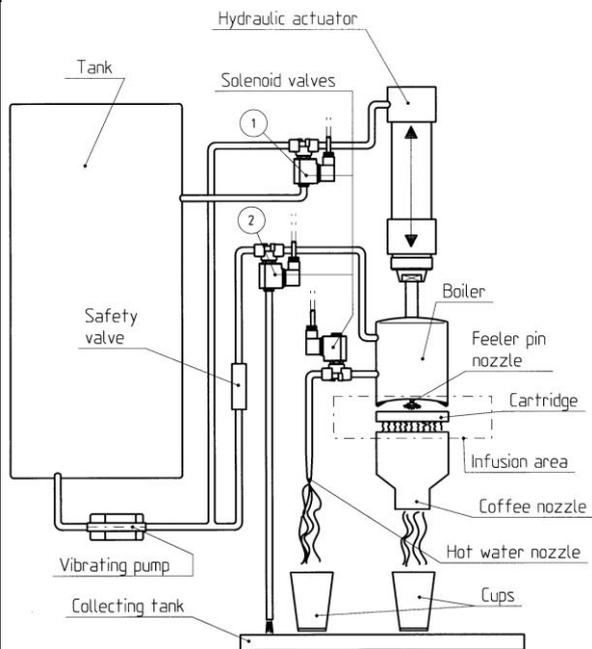


COFFEE-IN-CARTRIDGE DISPENSERS



Semi-automatic coffee-in-cartridge dispensers complete with hot water delivery heads are used to supply coffee and soluble beverages in cartridge. The hydraulically moved coffee infusion unit automatically expels the cartridge into the specially provided container. The dispenser can be equipped with a support cabinet with cup dispenser, spoon and sugar drawer and product storage compartment with door. Small dimensions and easiness of use make them widely used as household appliances but also in shops, offices, associations, laboratories, hotels and wherever a constant supply is not required.

CONSTRUCTION DIAGRAM OF THE SYSTEM



SOLENOID VALVE APPLICATION

Water contained in a tank is sucked up by a vibrating pump and then intercepted by two three-way solenoid valves. The former supplies the hydraulic actuator, the latter delivers water to the boiler. The boiler is always full with hot water whose temperature is adjusted by a thermostat. It is installed on the actuator stem and is equipped with a feeler pin nozzle that delivers hot water when it is pressed. The operation starts when the cartridge is in; the two solenoid valves open at the same time and the actuator pushes the boiler downwards against the cartridge. A safety valve above the second solenoid valve prevents water from flowing out before the actuator has descended completely. When the pressure of 9-10 bar has been reached inside the circuit (about 10 sec.), the safety valve opens, cold water flows into the boiler while water that had previously been warmed up flows out and filters through the cartridge. The mixture produced (coffee, tea, chocolate, cappuccino, etc.) flows through a nozzle into the cup. At the end of the cycle the second solenoid valve closes and exhausts the remaining hot water under overpressure from the third way into the collecting tank. Then the first solenoid valve closes and water under pressure inside the actuator is exhausted from

the third way into the tank. The actuator returns into its rest position under the effect of the spring. When a different control is selected, only hot water is delivered: a two-way solenoid valve connected directly to the boiler intercepts hot water and pours it directly into the cup through a different nozzle.

SOLENOID VALVES USED

TYPE B397



TYPE B297



TYPE B397

3/2 way NC direct acting solenoid valve with series 2 coils

TYPE B297

2/2 way NC direct acting solenoid valve with series 2 coils

WE RECOMMEND:

The types recommended are the best offered on the market for this application. M&M was created and developed with a specialization in this application. Unlike less qualified competitors, a stainless steel orifice is pressed on a brass body, whereas bush and tube are made of stainless steel and not machined into the brass body. Price is a key factor but quality connected to a reduced maintenance should be given emphasis.