

CASTEL HEAVY DUTY SOLENOID VALVES DO NOT FEAR EXTREME TEMPERATURES!

Only Castel valves excel when used for oil management in extremely cold temperatures.

Thanks to their heavy-duty construction, these valves are very responsive and provide a long life.

In the case of a standstill system, the oil exhibits a very high viscosity, especially in the presence of very low ambient temperatures. In these conditions of the oil, solenoid valves are difficult to open, but not the Castel series 13 valves!

Thanks to the heavy-duty design and extremely robust components, the series 13 solenoid valves are already responsive even in the case of high oil viscosities, always ensuring the correct and continuous flow of oil to the compressor.

The series 13 solenoid valves can be used as hot gas by-pass valves between the high and low pressure side of a system, and as liquid injection valves.

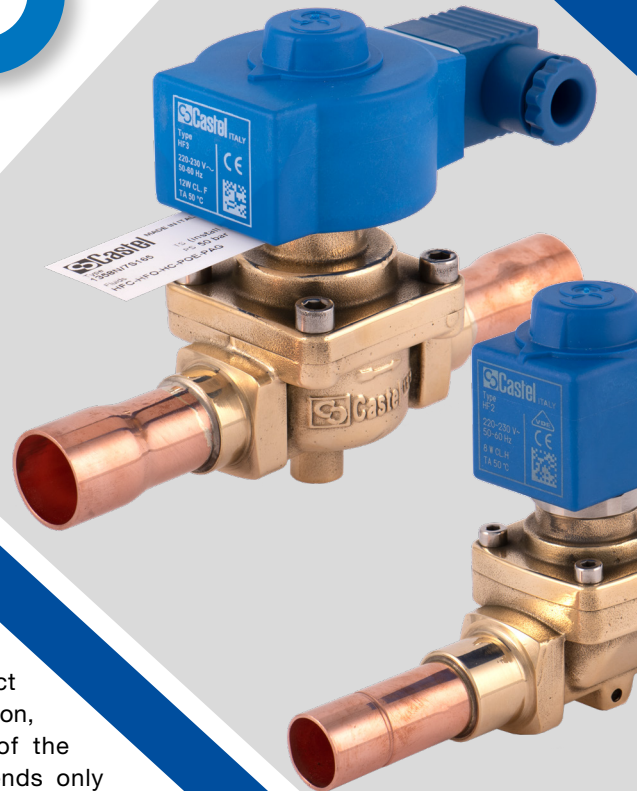
These valves have been designed for applications that require a solenoid valve that cycles at high frequencies for a short period, to accurately maintain the regulation of the temperature of the refrigerant fluid. All this, once again, is guaranteed by the robustness of the valve.

Construction

The NC pulse solenoid valves are equipped with a specific reinforced magnetic unit (mobile plunger + valve sleeve for holding it), specifically designed to guarantee a very high number of work cycles compared to a standard NC solenoid valve.

Operation

Series 13 valves are normally closed valves (NC). This means that when the coil is not energized, the plunger closes the fluid flow. When the coil is energized, the plunger opens the valve seat connecting the inlet to the outlet.



In the direct acting version, operation of the valve depends only on the magnetic field produced by the current flow into the coil. Opening/closing of the main valve seat, the only seat, is directly controlled by the mobile plunger.

These valves can work with zero pressure differential.

The series 13 valves are also available in pilot-operated piston versions.

Their operation depends not only on the magnetic field produced by the current flow into the coil, but also on a minimum inlet pressure, which is necessary to:

- open the piston and keep it raised off the main opening
 - close the piston and ensure the tightness on the main opening
- Opening/closing of the main valve seat is controlled by the piston, whilst opening/closing of the pilot seat is controlled by the mobile plunger and the coil.

These valves cannot work with zero differential pressure.

Castel 13 series solenoid valves are a versatile and resilient ally that cannot be missing in your warehouse, in your system sizing program or in your toolbox.

The Castel technical department is always available for further information and support in order to select the correct valves.

Download the 2020 General Catalogue from our web site: www.castel.it to see our complete solenoid valve range (and not only!).