

Differential by-pass valve

518 series www.caleffi.com



- Avoids noise, overstressing of components and rapid wear on the system due to excessive differential pressure.
- In heat pump systems, differential by-pass valves are used to guarantee the minimum flow rate value required for the machine or variable-speed circulators to work properly.





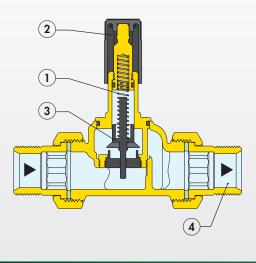


CODE	CONNEC- TION
518 500	3/4"

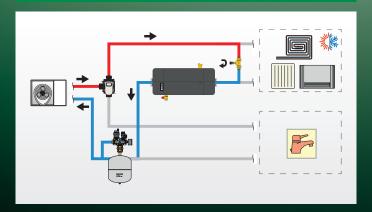


OPERATING PRINCIPLE

When the compression spring (1) is adjusted using the control knob (2), the force acting on the obturator (3) changes, thus modifying the trigger pressure value of the valve. The obturator only opens, activating the by-pass circuit, when it is subjected to a differential pressure sufficient to generate a greater thrust than that exerted by the counter-spring. This allows flow discharge through the outlet (4), limiting the difference in pressure in the section downstream of the point at which the valve is fitted.



APPLICATION DIAGRAM



TECHNICAL SPECIFICATIONS

Working temperature range	0–100 °C
Max. working pressure	10 bar
Max. percentage of glycol	30 %
Setting	1–6 m w.g.

REFERENCE DOCUMENTATION

518 series

- Tech. broch. 01007

