

Dorot-pilot

Dorot

PR 29-100



PR 29-200

The Dorot pilots are dynamic pressure regulators with a wide range of applications for basic or 3-way Dorot valves. The pilot on the diaphragm valve acts like an automatic selector switch between inlet and outlet side and the solenoid. The most widely known pilots are the pressure-reducing pilot (PR 29-100) and the pressure-holding pilot (PS 29-200). Both can be used on the Dorot 75 Series and on the 95 and 96 Series.

Pressure-reducing pilot (black: PR 29-100): reduces the line pressure. Pressure fluctuations in the line are hereby automatically compensated by the valve opening or closing further. The 29-100 pilot is frequently used where a constant, reduced pressure is required with varying water withdrawal. The pressure downstream of the valve is then equal to the set spring pressure.

Pressure-holding pilot (blue: PS 29-200): acts in the opposite way to the PR 29-100 and ensures a constant pressure upstream of the valve. Installing the PR pilot in a by-pass line around the pump is an easy way of ensuring a constant pressure in a main line. Ensure that the by-pass is not connected directly to the suction line of the pump. The pressure upstream of the valve is then equal to the set spring pressure.

Pilots can only function when there is a flow in the pipe-work system.

APPLICATION

With large irrigation sections (bed lengths of more than 100 meters), a pressure-reducing electric pilot valve is used (see photo under technical data) to achieve a quick start of the system.

When opening, the valve opens completely; as soon as the system is pressurised, the pressure-regulating function of the pilot starts and the pressure is maintained at the set value. Short irrigation cycles are thus possible even with large bed lengths. By modifying the spring in the pilot it is possible to adapt the pilot to the specific working range of the valve. In addition, pilots are also possible for delayed opening.

CHARACTERISTICS

- ✓ 3-way control valve
- ✓ Made from corrosion-resistant materials
- ✓ Minimises pressure losses of the diaphragm valve by completely relieving the control chamber pressure
- ✓ Broad control range thanks to different springs with corresponding pressure levels
- ✓ Simple and precise adjustment
- ✓ Simple design

TECHNICAL DATA

Type	: PR: 29-100 (black) - pressure reducing
PS	: 29-200 (blue) - pressure relief
For combination with	: electric, manual, hydraulic operation
Spring range	: 1.0-4.5 bar (green / standard: spring 54) 0.5-2.5 bar (yellow: spring 72) 2.0-6.0 bar (red: spring 65)
Maximum temperature	: 60 °C (with decreasing maximum working pressure)
Maximum pressure	: 10 bar (at 20 °C)
Material	: plastic (housing) : rubber (diaphragm) : Stainless steel (spring)



INSTALLATION & MAINTENANCE

- ✓ The pilots are installed on or alongside the valves.
- ✓ The connections are numbered for simple installation.
- ✓ Connection diagrams are available on request.

