

## Differential pressure reducing, 3-way plastic pilot-valve

The 29-310 is a 3-way, diaphragm actuated, spring-loaded pilot-valve that is designed for control of differential pressure-reducing hydraulic valves. The pilot valve operates as a selector between the common port and the two other ports. The pilot valve will vent, pressurize or lock the hydraulic valve's chamber as a factor of the relation between the regulated pressure and the adjusted set-value.

### Features

- 3-way pilot valve
- Made of corrosion-proof composite materials
- Minimize pressure losses through the main valve by completely venting the control chamber
- Wide regulation range
- Accurate and easy to adjust
- Simple design and maximal dependability

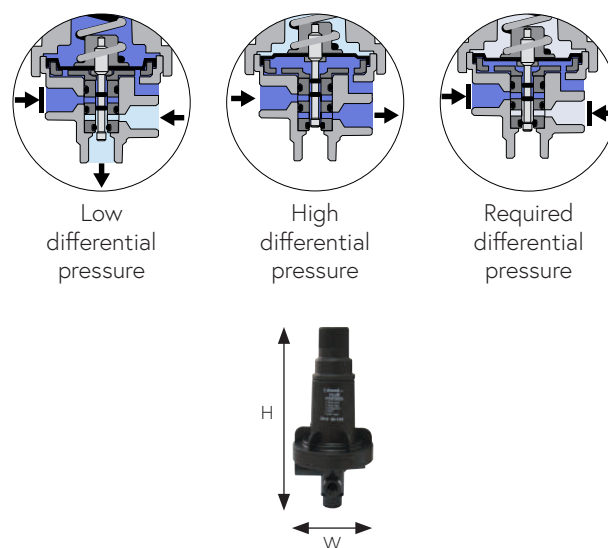


### Typical applications

- Flow rate control valves - FR
- Differential pressure reducing valves - DP
- Pressure reducing for low pressure setting - PR

### Technical data

General	
Pressure rating	10 bar / 150 psi
Pressure adjustment range	0.2 - 3 bar / 3 - 40 psi
Fluid temperature	50°C max. / 120°F max.
Weight	0.17 kg / 0.37 lbs
Materials	
Body and bonnet	GPR
Elastomers	NBR
Internal parts	SST
Spring	SST
Dimensions	
H (Height) max.	143 mm / 5.63"
W (Width)	65 mm / 2.56"
Port Connections	
1, 2, 3, 4, 5	NPT 1/8"



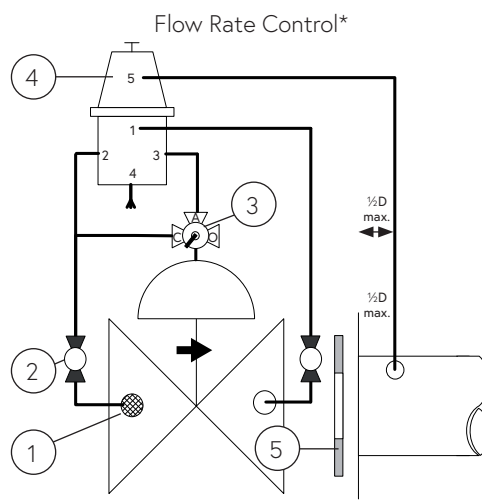
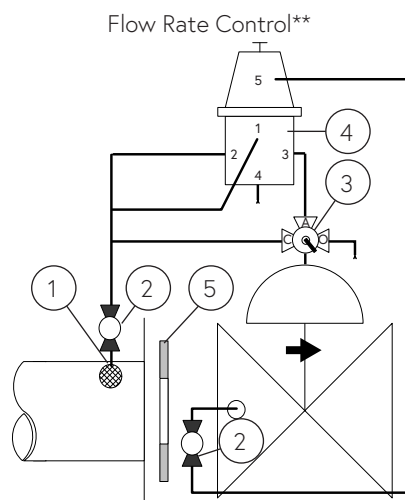
## Installation

### Main components

#	Description
1	Self flushing filter
2	Isolation ball valve
3	3-way manual selector valve
4	29-310 Pilot valve
5	Orifice plate

### Connections

Port	Connecto to
1	Upstream orifice pressure
2	Upstream
3	Valve control chamber
4	Vent
5	Downstream orifice pressure



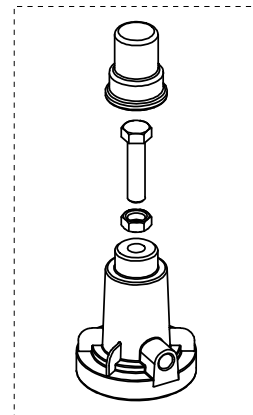
\* Downstream orifice for models 300 and 500

\*\* Upstream orifice for model 100

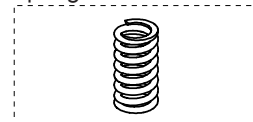
Sample drawing. Consult Dorot for the assembly design to fit your needs

### Spare parts

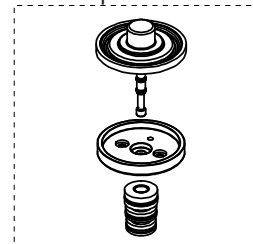
#### Bonnet kit



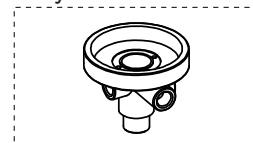
#### Spring kit



#### Internal parts kit



#### Body kit



### Springs adjustment range

Spring number	Color	bar	psi
82 (Std.)	White	0.2 - 0.5	3 - 7
72	Yellow	0.3 - 3	4 - 40

Adjustment: Turn the adjusting screw clockwise to increase the set point

### Catalogue numbers

Description	Catalogue number
Bonnet kit	661022931000000
Spring Kit 82 - White	0022082000
Spring Kit 72 - Yellow	0022072000
Internal parts kit	661202931000000
Body kit	661012931000000