

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

The 29-50F 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 enabling the lowest-possible pressure-losses
- Easy & simple hand-operated setting with no tools required
- Protected from indeliberate adjustment by a 'medicine-cap' locking mechanism
- Made of the toughest corrosion-proof & glass-reinforced composite materials
- Pressure-balanced– the set value is unaffected by upstream pressure variations
- ID Plate with port-markings, for easy connection, assembly and maintenance
- Dual orientation "Snap" mechanism for an easy & robust connection to the main control-valve

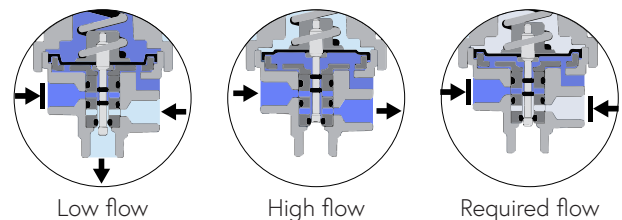


### Typical applications

- Flow rate control valves - FR
- Differential pressure reducing valves - DP

### Technical data

General	
Pressure rating	10 bar / 150 psi
Pressure adjustment range	0.3 - 7.5 bar / 5 - 125 psi
Fluid temperature	50°C max. / 120°F max.
Weight	0.17 kg / 0.37 lbs
Materials	
Body and bonnet	PA-GF
Elastomers	EPDM
Internal parts	SST+PTFE
Spring	SST
Dimensions	
H (Height) max.	160 mm / 6.29"
W (Width)	62 mm / 2.44"
Port Connections	
Control Ports	NPT 1/8"



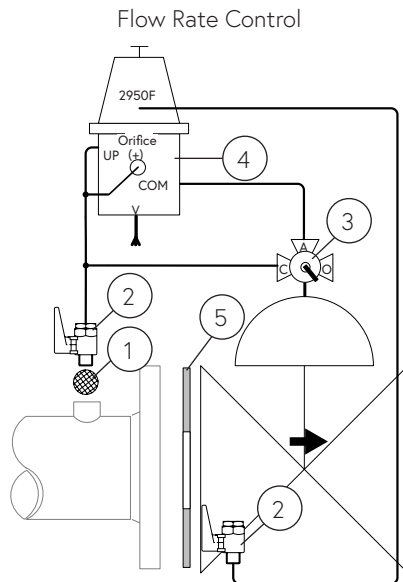
## Installation

### Main components

#	Description
1	Self flushing filter
2	Isolation ball valve
3	3-way manual-override selector valve
4	29-50F Pilot valve
5	Orifice plate

### Connections

Port	Connect to
UP	Upstream orifice pressure
Orifice (+)	Upstream orifice pressure
Bonnet port	Downstream orifice pressure
COM	Valve control chamber
V	Vent



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

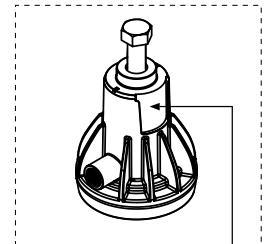
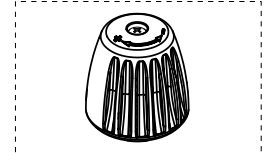
### Springs adjustment range

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

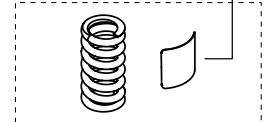
Adjustment: Turn the adjusting screw clockwise to increase the set pointv

### Spare parts

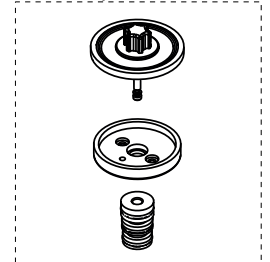
#### Bonnet kit



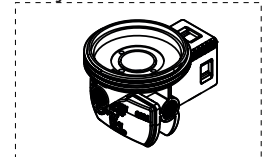
#### Spring kit



#### Internal parts kit



#### Body kit



### Catalogue numbers

Description	Catalogue number
Bonnet kit	665022950F
Spring Kit 82 - White	665262950F
Internal parts kit	665202950M