

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

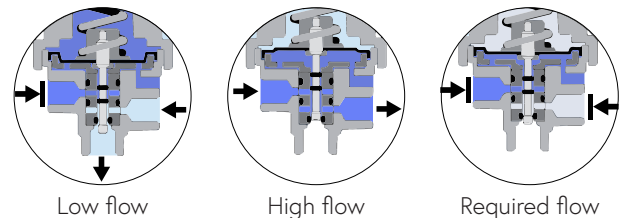


Typical applications

- 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	NR
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"



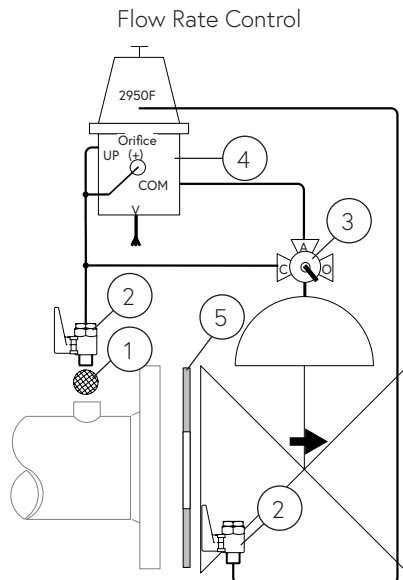
Installation

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.

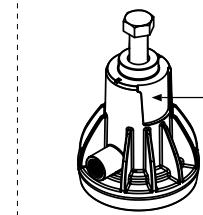
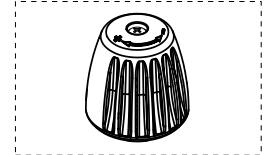
Springs adjustment range

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

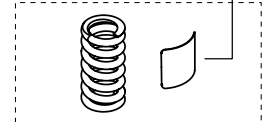
Adjustment: Turn the adjusting screw clockwise to increase the set pointv

Spare parts

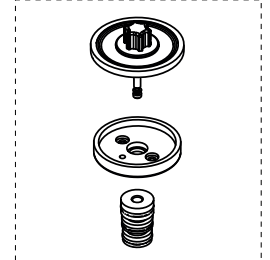
Bonnet kit



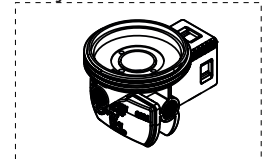
Spring kit



Internal parts kit



Body kit



Catalogue numbers

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