

Multi-purpose, 3-way reinforced-plastic pilot-valve

The 29-50M is a 3-way, diaphragm actuated, spring- loaded pilot-valve that is designed for control of pressure-regulating 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. The 29-50M pilot-valve can be used for implementing wide range of hydraulic control-functions.

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
- Calibration-scale allowing proper adjustment and visual indication of the adjusted value.
- Made of the toughest corrosion-proof & glass-reinforced composite materials
- Calibration-scale allowing adjustment and visual indication of the adjusted value
- Pressure-balanced as Pressure Reducing–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
- Same pilot valve can be used for various control functions by simply changing the way it is connected to the valve

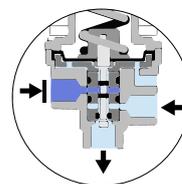


Typical applications

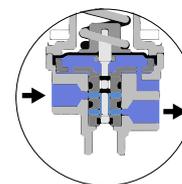
- Pressure reducing valves - PR
- Pressure sustaining valves - PS
- Topography-compensating, remote hydraulic-control - RC

Technical data

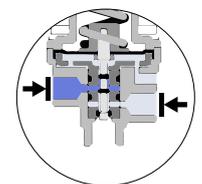
General	
Pressure rating	10 bar / 150 psi
Pressure adjustment range	0.3 - 7.5 bar / 5 - 125 psi
Fluid temperature	50°C max. / 120°F max.
Weight	0.17 kg / 0.37 lbs
Materials	
Body and bonnet	PA-GF
Elastomers	EPDM
Internal parts	SST+PTFE
Spring	SST
Dimensions	
H (Height) max.	160 mm / 6.29"
W (Width)	62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



Low pressure



High pressure



Required pressure



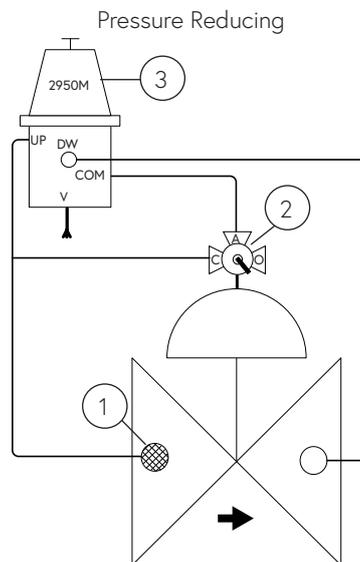
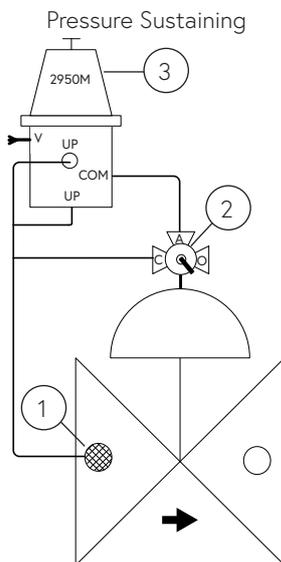
Installation

Main components

#	Description
1	Self flushing filter
2	3-way manual-override selector valve
3	29-50M Pilot valve

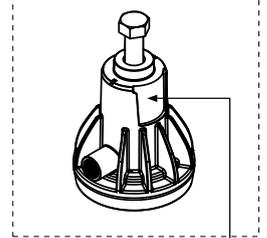
Connections

Port	Pressure Sustaining	Pressure Reducing
UP	Upstream	Upstream
UP	-	Upstream
DW	Downstream	-
COM	Valve control chamber	Valve control chamber
VENT	Vent	Vent

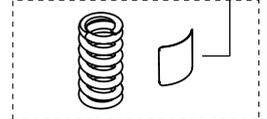


Spare parts

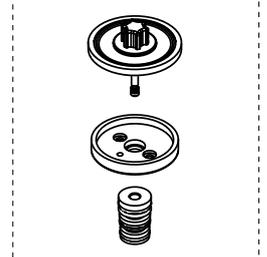
Bonnet kit



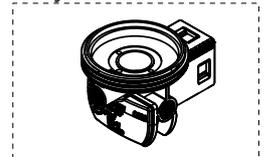
Spring kit



Internal parts kit



Body kit



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

Springs adjustment range

Spring number	Color	bar	psi
54 (Std.)	Green	0.5 - 4.5	7 - 65
72	Yellow	0.3 - 3	4 - 40
65	Red	1 - 7.5	15 - 110

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

Catalogue numbers

Description	Catalogue number
Bonnet kit	665022950M
Spring Kit 54 - Green	66526295GM
Spring Kit 72 - Yellow	66526295YM
Spring Kit 65 - Red	66526295RM
Internal parts kit	665202950M