

Multi purpose, 3-way metal pilot-valve

The 76-200 is a 3-way, diaphragm actuated, spring-loaded pilot-valve that is designed for control of 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 76-200 pilot-valve can be used for implementing wide range of hydraulic control-functions.

Features

- A multi-purpose 3-way pilot valve designed for flow regulating, pressure-differential reducing and pressure differential-sustaining valves
- Fully vents the control chamber to open - minimize pressure losses
- Can be used with any hydraulic control valve of any size (as standard used with valve sizes larger than 6"/150mm)
- Wide regulation range
- Accurate and easy to adjust
- Simple design
- Can be activated by hydraulic or pneumatic pressure



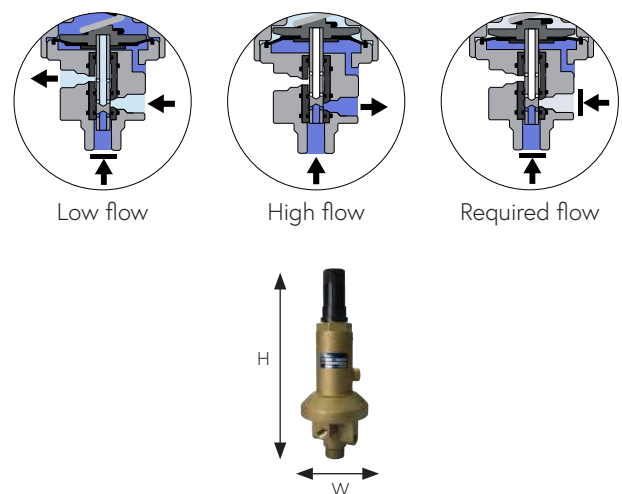
Typical applications

- Flow-rate control valves - FR
- Differential pressure reducing valves - DP
- Differential pressure sustaining valves - DI
- Excessive flow Shut-Off valves - FE

Technical data

General		
Pressure rating	25 bar / 360 psi	
Pressure adjustment range	2 - 65 mt / 3 - 95 psi	
Fluid temperature	80°C max. / 176°F max.	
Weight	2.2 Kg. / 5 lbs.	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	210 mm / 8.27"	
W (Width)	86 mm / 3.38"	
Port Connections		
1, 2, 3, 4	NPT 1/4"	
5	NPT 1/8"	

* other materials available upon demand



Installation

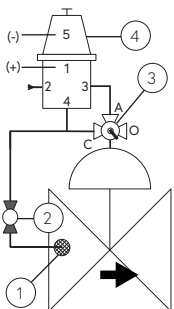
Main components

#	Description
1	Self flushing filter
2	Isolation ball valve
3	3-way Manual selector valve
4	76-200 Pilot valve
5	Orifice plate

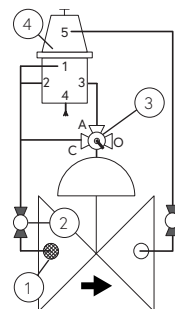
Connections

Port	Flow-Rate Control	Differential Pressure Reducing	Excessive Flow Shut - Off	Differential Pressure Sustaining
1	Upstream orifice	Upstream orifice	Upstream orifice	Upstream valve
2	Vent	Vent	Plug	Upstream valve
3	Control chamber	Control chamber	Control chamber	Control chamber
4	Upstream orifice	Upstream valve	Upstream orifice	Vent
5	Downstream orifice	Downstream orifice	Downstream valve	Downstream valve

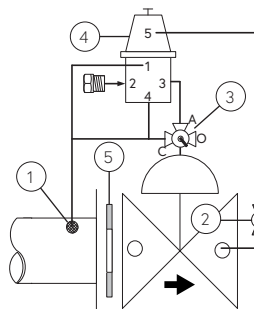
Differential Pressure Reducing



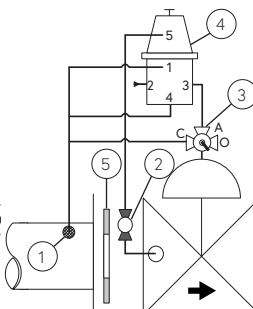
Differential Pressure Sustaining



Excessive Flow Shut - Off



Flow-Rate Control



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

Springs adjustment range

Spring number	Color	Meter	psi
70 (Std.)	No color	2 - 5	3 - 7
42	Yellow	5 - 45	7 - 65
47	Green	10 - 65	15 - 95

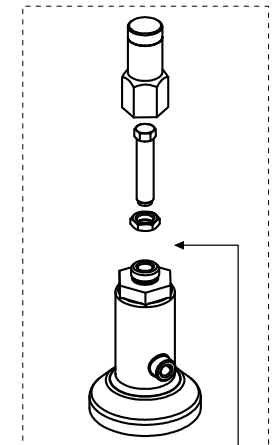
Adjustment: Turn the adjusting screw clockwise to increase the set point

Catalogue numbers

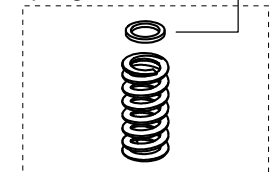
Description	Catalogue number
Bonnet kit	661027620000000
Spring 70	0022070000
Spring 42 - Yellow	0022042000
Spring 47 - Green	0022047000
Internal parts kit	661207620000000
Body kit	661017620000000

Spare parts

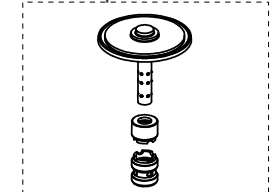
Bonnet kit



Spring



Internal parts kit



Body kit

