

Multi-purpose, 3-way pilot-valve

The 31-100 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 31-100 pilot-valve can be used for implementing wide range of hydraulic control-functions

Features

- 3-way pilot valve
- 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
- same pilot valve can be used for various control functions by simply changing the way it is connected to the valve.
- Can be activated by hydraulic or pneumatic pressure.

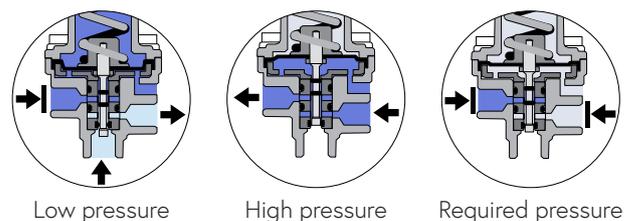


Typical applications

- Pressure reducing valves - PR
- Pressure sustaining valves – PS

Technical data

General	
Max. upstream pressure	25 bar / 360 psi
Pressure adjustment range	0.5 - 12 bar / 7 - 175 psi
Temperature	60°C max. / 140°F max.
Weight	1.90 Kg / 4.2 lbs
Materials	
Body and bonnet	Brass / SS
Elastomers	EPDM / NBR
Internal parts	SS T+ PVDF
Spring	SST 302 / SST 316
Dimensions	
H (Height) max.	190 mm / 7.5"
W (Width)	60 mm / 2.4"
Port Connections	
1, 2, 3, 4	NPT ¼"
5	NPT ⅛"



Installation

Connections

Port	PR - Pressure Reducing	PS - Pressure sustaining
1	Downstream	Upstream
2	Upstream	Vent
3	Valve control chamber	Valve control chamber
4	Vent	Upstream
5	Vent	Vent

Springs adjustment range

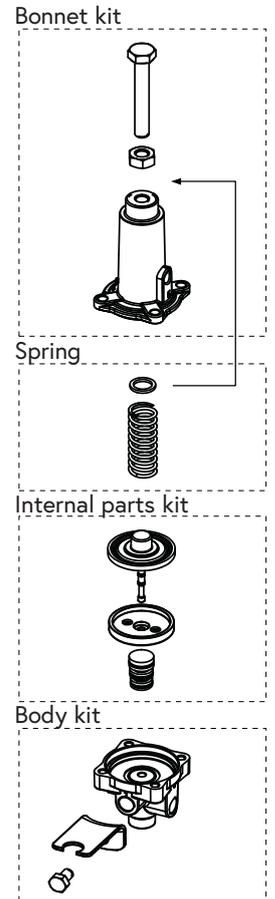
Spring number	Color	bar	psi
124 (Std.)	Red	1.5 - 12	22 - 175
130	Green	0.5 - 6	7 - 85
78	Yellow	0.2-0.7	0.3-10

Adjustment: Turn the adjusting bolt (11) clockwise to increase the maximal downstream pressure

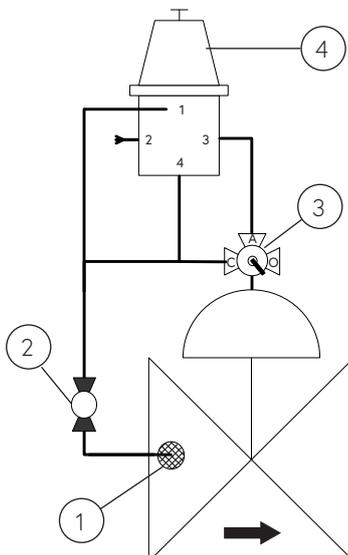
Main components

#	Description
1	Self-Flushing, inline control-filter
2	Isolation ball valve
3	3-way manual – override selector valve
4	31-100 pilot valve

Spare parts



Pressure Sustaining



Pressure Reducing

