

Pressure-sustaining/relief, 2-way metal pilot-valve

The CXPS is a 2-way, diaphragm actuated, spring-loaded, pressure-sustaining pilot-valve, designed for control of hydraulically actuated valves. The pilot valve modulates to keep a steady, pre-set pressure upstream of the valve's location. As the upstream pressure rises above the adjusted value, the pilot-valve opens to allow water flow between its "COM" and "OUT" ports, thus allowing the water in the main valve's chamber to be vented out to the downstream, causing the main valve to open. As the downstream pressure falls below the set-value, the pilot valve throttles the internal passage, restricting the flow out of the main valve's control-chamber, restricting the valve's opening or causing it to close (if necessary).

Features

- 2-way pilot valve for high-accuracy pressure sustaining/relief applications
- Normally-close, will open when the upstream pressure exceed the adjustable spring setting
- Integral SST needle valve - highly accurate and simplify the control-loop assembly
- Wide regulation range: a single spring is used for setting range of 3-19 bar / 45-275 psi. No need for different springs for that range!
- Easy to adjust



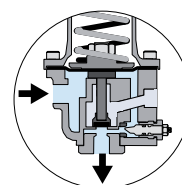
Typical applications

- Pressure sustaining control valves - PS
- Pressure relief valve - PS(R)
- Quick acting pressure-relief - QR

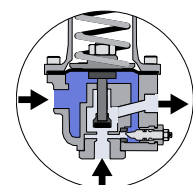
Technical data

General		
Pressure rating	25 bar / 360 psi	
Pressure adjustment range	0.3 - 35 bar / 4 - 500 psi	
Fluid temperature	80°C max. / 175°F max.	
Weight	2.23 Kg / 4.92 lbs	
Materials	Standard	Optional*
Body and bonnet	Brass	SST/Bronze
Elastomers	NBR	EPDM
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	215 mm / 8.46"	
W (Width)	84 mm / 3.31"	
Port Connections		
I, C	NPT ¼"	
O	NPT ½"	

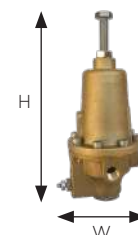
* other materials available upon demand



Low pressure



High pressure



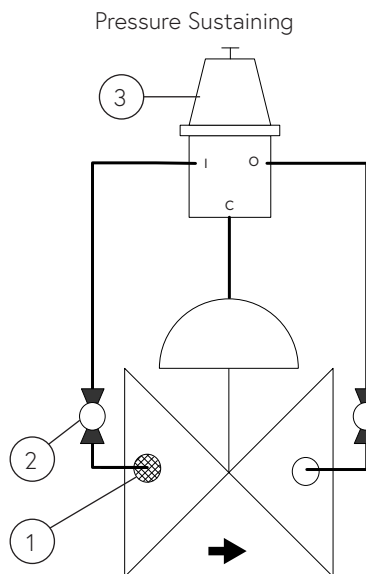
Installation

Main components

#	Description
1	Self flushing filter
2	Isolation ball valve
3	CXPS pilot valve

Connections

Port	Pressure Reducing
I	Upstream
C	Valve control chamber
O	Downstream



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

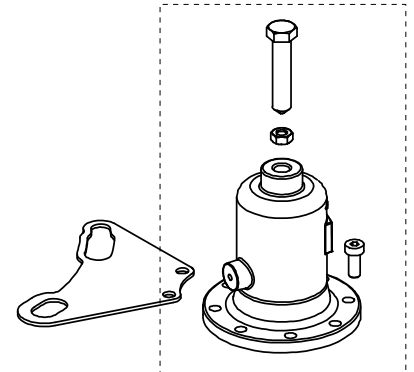
Springs adjustment range

Spring number	bar	psi
53 (Std.)	3 - 19	44 - 275
125	15 - 35	215 - 500
108	0.3 - 3.5	4 - 50

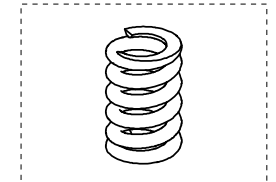
Adjustment: Turn the adjusting screw clockwise to increase the set point

Spare parts

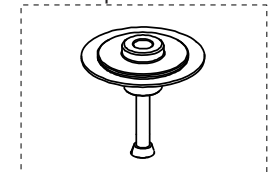
Bonnet kit



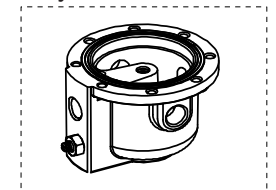
Spring



Internal parts kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	66102CXPR000000
Spring 53	0022053000
Spring 125	0022012500
Spring 108	0022010800
Internal parts kit	66120CXPS000000
Body kit	66101CXPS000000