

Pressure-reducing, 2-way metal pilot-valve

The CXPR is a 2-way, diaphragm actuated, spring-loaded pressure reducing pilot-valve, designed for control of hydraulic valves. The pilot valve modulates to keep a steady, pre-set downstream pressure. As the downstream pressure falls below the set-value, the pilot valve opens a full passage between its "IN" and "OUT" ports thus allowing the valve to open by venting the control chamber pressure to the downstream side of the valve. As the downstream pressure rises above the set-value, the pilot valve throttles the internal passage, restricting the flow out of the main valve control chamber and causing the main valve to keep its position or to close (if necessary).

Features

- A pressure-reducing 2-way pilot valve
- Normally-open, allows water passage when downstream pressure is lower than the adjusted spring setting
- 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!
- Superb accuracy and repeatability
- Easy to adjust
- Integral SST needle valve - highly accurate and simplify the control-loop assembly
- No internal sealing allows for maximal dependability



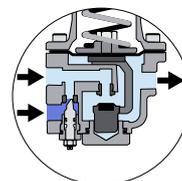
Typical applications

- Pressure reducing - PR

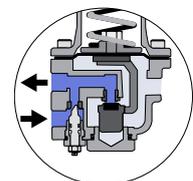
Technical data

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	2.21 Kg / 4.9 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, O	NPT 1/4"	

* other materials available upon demand



Low pressure



High pressure



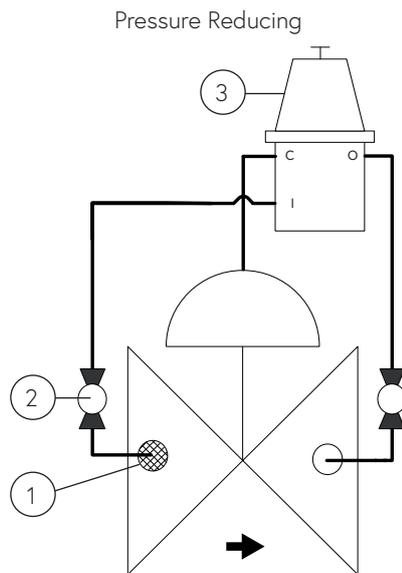
Installation

Main components

#	Description
1	Self flushing filter
2	Isolation ball valve
3	CXPR 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.

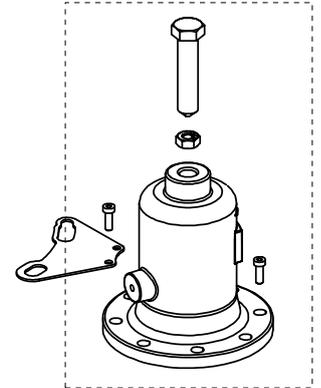
Springs adjustment range

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

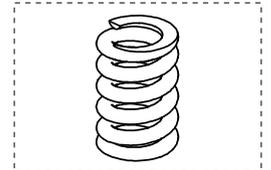
Adjustment: Turn the adjusting screw clockwise to increase the set point

Spare parts

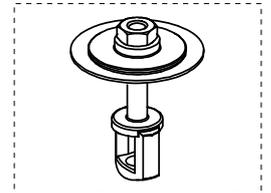
Bonnet kit



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	66120CXPR000000
Body kit	66101CXPR000000