



Catalogue

Pilot Valves

Pilot Valves Catalogue

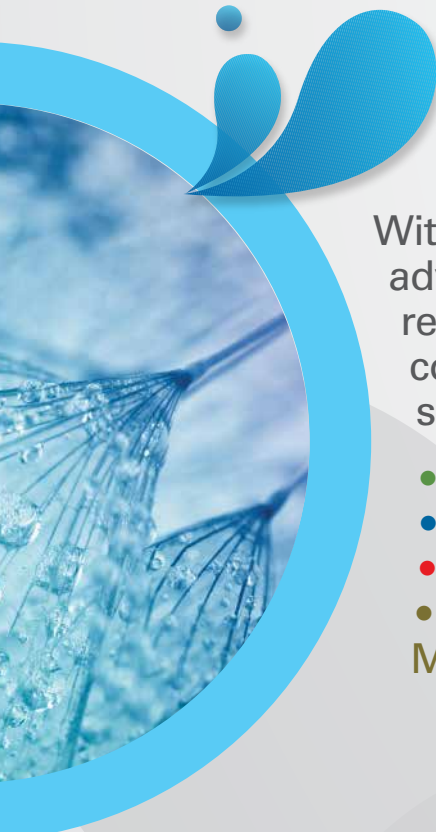
Pilot Valves
Catalogue



Dorot Control Valves is a world leader in the development and supply of sustainable technologies and products for control and optimization of water systems.

Established in 1946, Dorot has a long tradition of providing innovative products and solutions for numerous applications in water and other fluid systems.

Our experienced team of technical experts will support you all the way to achieve your perfect control solution.



With a diversified product portfolio of advanced hydraulic control valves, air release valves and a wide range of complimentary products, Dorot offers solutions for applications in:

- Agricultural and Landscape Irrigation
- Waterworks Distribution
- Firefighting
- Other Industrial Applications such as Mining, Wastewater, Marine...

We invite you to join our family of business partners, together we can provide the best control solutions for the world's most valuable natural resource.

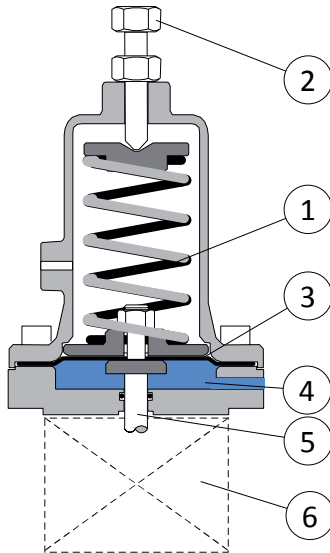


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Pilot valves control trim operation

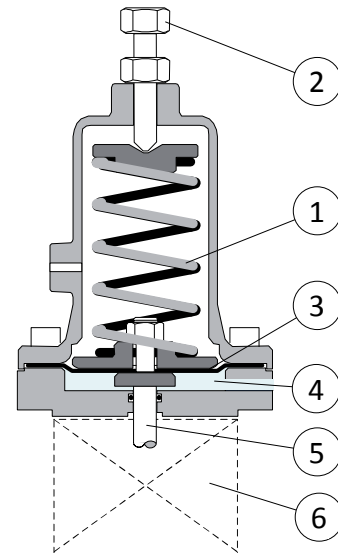
High pressure in sensing chamber (4):

The pressure in the sensing chamber (4) is overcoming spring (1) resistance, forcing the diaphragm (3) up.



Low pressure in sensing chamber (4):

The spring (1) is compressed by the adjustment bolt (2), forcing diaphragm down.



The shaft (5) is moving with the diaphragm, actuating the main valve (6) by opening or closing pilot valve's internal water passages.

Pilot valve set-point

- The pilot valve's position is determined by the forces equilibrium of hydraulic pressure and spring resistance.
- Spring resistance is adjusted by the adjustment bolt (2).
- Compressing the spring (turning the bolt in clock-wise direction) increases the regulated parameter.
For example:
In Pressure Reducing valves- tightening the bolt (turning in clock-wise direction) will increase the maximal downstream pressure.
In Pressure Sustaining valves- tightening the bolt will increase the minimal upstream pressure.
In Flow Control valves- tightening the bolt will increase the maximal flow rate.
- A specific spring has specific pressure range in which it can regulate. Springs are marked by different colors representing different pressure ranges. Correct spring selection is critical for the Pilot valve function.
- Colored rings located on the adjustment bolt specify the internal spring color.
- The spring selection is usually done by "DOROT" technical department according to the client's data and demands but spring replacement can be easily done by the client if conditions demand.

3-way pilot valve (positioning)

The 3-way pilot valve is a selector pilot activated by the pipeline pressure which admits the control media into the control chamber to close the main valve, relieves the media from the control chamber to open the main valve, or locks the volume in the control chamber to keep the main valve throttled at a fixed regulating position. This control principle allows for full opening of the main valve when operating conditions require the valve to be fully open.

3-way Control is used for:

- On-Off Control valves.
- Regulating valves which need operate with low pressure differential.
- Dirty water as raw irrigation water and sewage water.
- Where usage of external control media (such as pressurized air) is required.

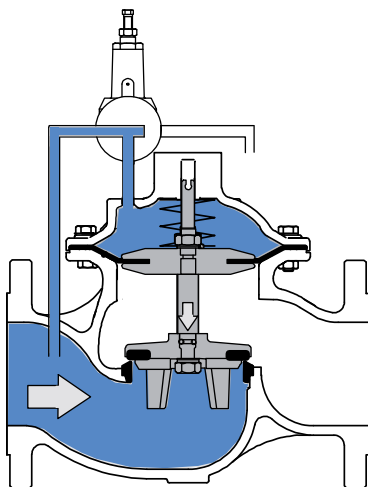
Operation principle :

3-Way pilot valve operation principle:

(Referring to a valve that opens at low regulated pressure and closes at high regulated pressure (such as PR)).

High regulated pressure:

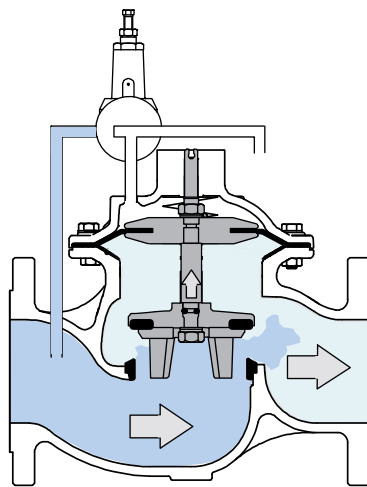
Pilot valve is connecting the valve's control chamber to the upstream. Main valve is closing.



Closing

Low regulated pressure:

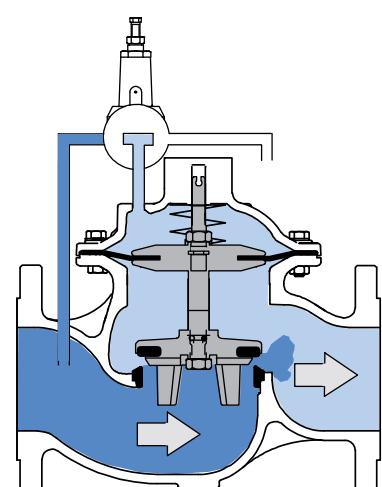
Pilot valve is connecting the valve's control chamber to the atmosphere. Main valve is opening.



Opening

Required regulated pressure:

Pilot valve is preventing flow at all passages. Main valve maintains fixed position.



Set-point

2-way pilot valve

In a two-way pilot valve, the upstream side of the valve is connected by a control tube to the control chamber and to the downstream side of the valve.

Two flow restrictors are assembled. One (orifice or needle valve) assembled upstream of the control chamber and the other (a pilot valve) assembled on the downstream side and modulates in response to the pipeline pressure. The relative opening of both restrictors dictates the position of the main valve. This type of control principle provides very accurate and sensitive regulation but creates considerable pressure loss even if no regulation is needed.

2-way Control is used when:

- Minimal pressure differential at all operating conditions allows it.
- Sensitive (fast response) regulation is required.
- Relatively high quality water.

Operation principle :

2-way pilot valve operation principle:

High regulated pressure:

Pilot (b) senses a downstream pressure higher than the set-point and closes passage (b). Through passage (a) the upstream water flows directly into the upper part of the control chamber, forcing the diaphragm to close the valve.

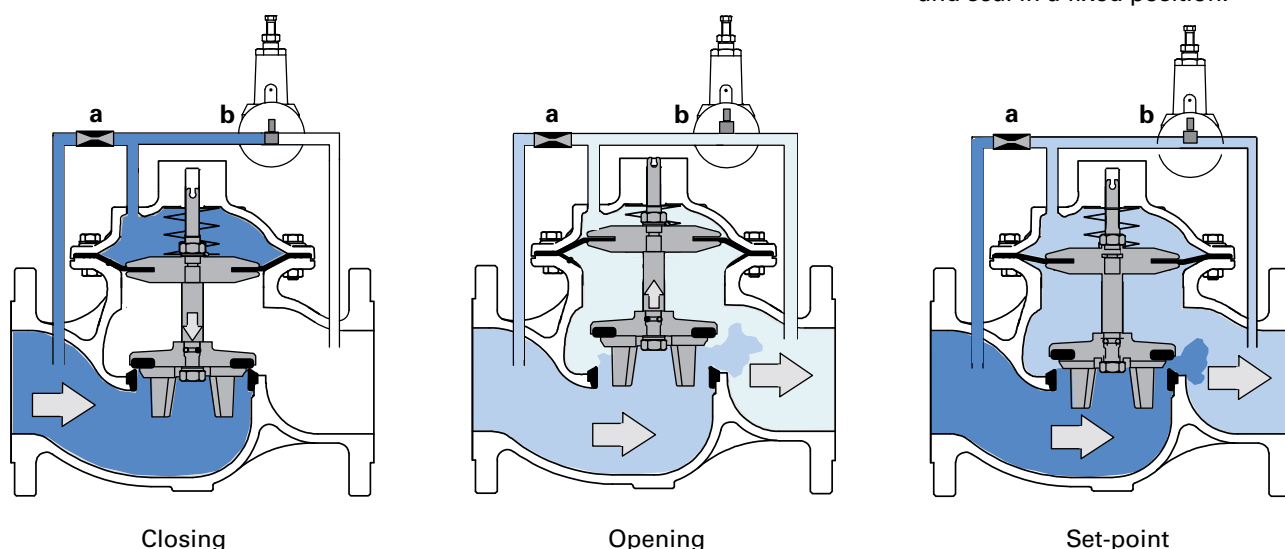
Low regulated pressure:

Pilot (b) senses a downstream pressure lower than the set-point, and fully opens passage (b), larger than (a). All the water from the upstream flows through (a) and (b), directly to the downstream, allowing water from the upper part of the control chamber to partially drain.

Required downstream pressure:

The pilot is set to the required downstream pressure. The pilot senses when the downstream pressure reaches the required value causing passage (b) to equal passage (a) $b=a$. Now, water that flows through the control loop passes from (a) through (b) and into the downstream.

The control media in the upper part of the control chamber is now steady, keeping the diaphragm and seal in a fixed position.



Note: the flow through the first restricting element (a needle valve or an orifice) will determine the valve's closing rate.

The flow ratios between the first restricting element and the pilot (in its fully opened position) will affect the valve's head loss when no regulation is needed.

Quick selection guide

Pilot	Type	Valve sizes	Applications	Setting range		Pressure rating		Pages
Plastic Mini Pilots								
29-100	3-way	3/4" to 4"	PR	0.3 - 7.5 bar	4 - 110 psi	10 bar	150 psi	8
29-200	3-way	3/4" to 4"	PR, PS, RC, DI	0.3 - 7.5 bar	4 - 110 psi	10 bar	150 psi	10
29-310	3-way	3/4" to 4"	FR, DP	0.2 - 3 bar	3 - 40 psi	10 bar	150 psi	12
Metal Mini Pilots								
68-410	2-way	3/4" to 6"	PR	0.5 - 25 bar	7 - 360 psi	25 bar	360 psi	14
68-41M	2-way	3/4" to 6"	PR-controller	0.5 - 24 bar	7 - 350 psi	25 bar	360 psi	16
68-510	2-way	3/4" to 12"	PS, PS[R], QR	0.4 - 40 bar	6 - 580 psi	40 bar	580 psi	18
68-500	2-way	3/4" to 6"	PS, PS[R], QR	0.5 - 12 bar	7 - 175 psi	25 bar	360 psi	20
68-210	2-way	2" to 3"	QR	0.2 - 20 bar	3 - 300 psi	25 bar	360 psi	22
68-220	2-way	3/4" to 6"	QR	1 - 12 bar	15 - 175 psi	16 bar	230 psi	24
31-10R	3-way	3/4" to 6"	PR, PD, RE	0.5 - 12 bar	7 - 175 psi	25 bar	360 psi	26
31-10S	3-way	3/4" to 6"	PS, DI	0.5 - 12 bar	7 - 175 psi	25 bar	360 psi	28
31-10F	3-way	3/4" to 6"	FR, PD	2 - 60 mt	3 - 90 psi	25 bar	360 psi	30
31-10M	3-way	3/4" to 6"	PR-controller	0.5 - 24 bar	7 - 350 psi	25 bar	360 psi	32
Metal Pilots								
CXPR	2-way	2" to 32"	PR	0.3 - 35 bar	4 - 500 psi	40 bar	580 psi	34
CXRS-D	2-way	2" to 32"	FR, PD	0.1 - 19 bar	15 - 275 psi	25 bar	360 psi	36
CXPS	2-way	2" to 32"	PS, PS[R], QR	0.3 - 35 bar	4 - 500 psi	40 bar	580 psi	38
CXSD	2-way	2" to 32"	DI, PS/EL, PS/RC	0.1 - 19 bar	15 - 275 psi	25 bar	360 psi	40
31-310	3-way	2" to 32"	PR, PS	0.2 - 25 bar	3 - 360 psi	25 bar	360 psi	42
76-200	3-way	2" to 32"	FR, DP, DI, FE	0.2 - 6.5 bar	3 - 95 psi	25 bar	360 psi	44
66-310	3-way	1" to 32"	PS, QR, DE, RE	0.4 - 13 bar	6 - 190 psi	25 bar	360 psi	46
68-710	2-way	2" to 32"	PS, PS[R], QR	0.5 - 33 bar	7 - 480 psi	40 bar	580 psi	48
High Sensitivity Metal Pilots								
70-110	3-way	2" to 32"	AL, PR, PS	0.5 - 14 mt	7 - 20 psi	16 bar	230 psi	50
CXAL	2-way	2" to 32"	AL, PR	1 - 65 mt	1.5 - 95 psi	25 bar	360 psi	52
70-410	2-way	2" to 32"	PR, FR, AL	1 - 60 mt	1.5 - 90 psi	25 bar	360 psi	54
Float Pilots (Plastic)								
70-300	2-way	3/4" to 6"	FL	-	-	10 bar	150 psi	56
Float Pilots (Metal)								
70-400	2-way	2" to 32"	FL	-	-	25 bar	360 psi	57
70-550	3-way	2" to 32"	FLDI1	0.15 - 1.8 mt	0.49 - 5.9 ft	25 bar	360 psi	58
70-610	3-way	2" to 32"	FLDI2	0.15 - 0.6 mt	0.49 - 1.96 ft	25 bar	360 psi	60
Plastic Relays								
25-300	3-way	3/4" to 6"	RC, On/Off	1 - 10 bar	15 - 150 psi	10 bar	150 psi	62
Galit	3-way	3/4" to 6"	RC, On/Off	5 - 22 mt	16 - 72 ft	12 bar	175 psi	64
Metal Relays								
28-200	2-way	1" to 32"	RC, On/Off	0.3 - 25 bar	4 - 360 psi	25 bar	360 psi	66
28-300	3-way	1" to 32"	RC, On/Off	1 - 25 bar	15 - 360 psi	25 bar	360 psi	68
66-21X	3-way	1" to 32"	RC, On/Off	1 - 25 bar	15 - 360 psi	25 bar	360 psi	70

References: PR = Pressure reducing valves • PS = Pressure sustaining valves • PS[R] = Pressure relief valves
• QR = Quick release valves • FR = Flow control valves • AL = Altitud control valves • TO = Two stage opening
• PS/EL = Electrically controlled pressure sustaining valves • PR-controller = Variable electronic setting
• DP = Differential pressure reducing valves • DI = Differential pressure sustaining valves • FE = Excessive flow
Shut-Off valves • FL = Level control valves by modulating float • FLDI1 = Level control valves by vertical differential
float • FLDI2 = Level control valves by horizontal differential float • RE = Surge anticipating valves

29-100

Pressure-Reducing, 3-way plastic pilot-valve

The 29-100 is a 3-way, diaphragm actuated, spring-loaded pilot-valve that is designed for control of pressure-reducing hydraulic valves. The pilot valve serves 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.

Features

- 3-way pilot valve
- Made of corrosion-proof composite materials
- Minimize pressure losses through the main valve by completely venting the control chamber
- Wide regulation range
- Accurate and easy to adjust
- Simple design
- "Poppet" design: minimal internal sealing and maximal dependability

Typical applications

- Pressure reducing valves - PR
- Topography-compensating, 'Normally Open', remote hydraulic-control - RC(NO)

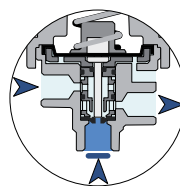
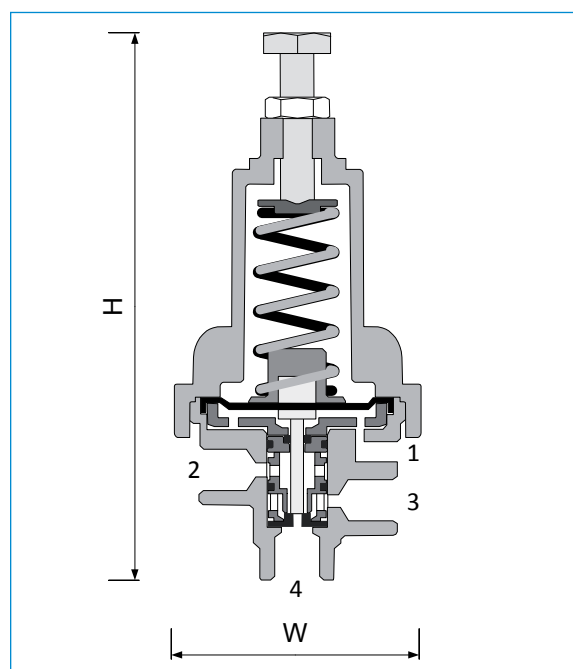
Technical data

General	
Pressure rating	10 bar / 150 psi
Pressure adjustment range	0.3 - 7.5 bar / 4 - 110 psi
Fluid temperature	50°C max. / 120°F max.
Weight	0.17 kg / 0.37 lbs
Materials	
Body and bonnet	GRP
Elastomers	NBR
Internal parts	SST
Spring	SST
Dimensions	
H (Height) max.	130 mm / 5.12"
W (Width)	65 mm / 2.56"
Port Connections	
1,2,3,4	NPT 1/8"

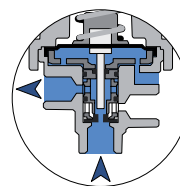
Springs adjustment range

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

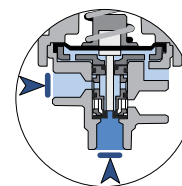
Adjustment: Turn the adjusting screw clockwise to increase the set value



Low pressure



High pressure



Required pressure

Installation

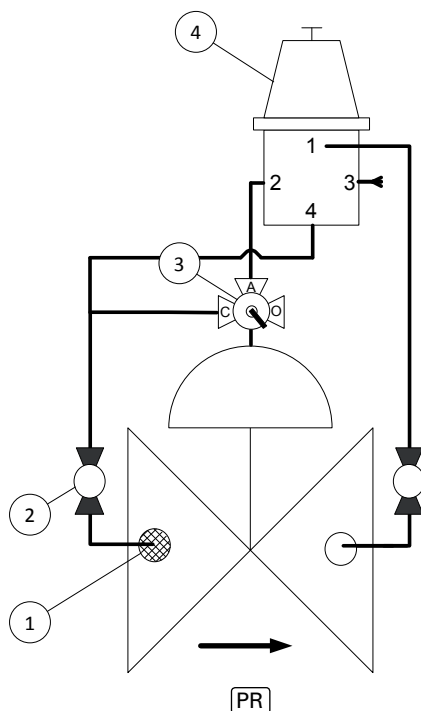
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Pressure reducing
1	Downstream
2	Valve Control Chamber
3	Vent
4	Upstream

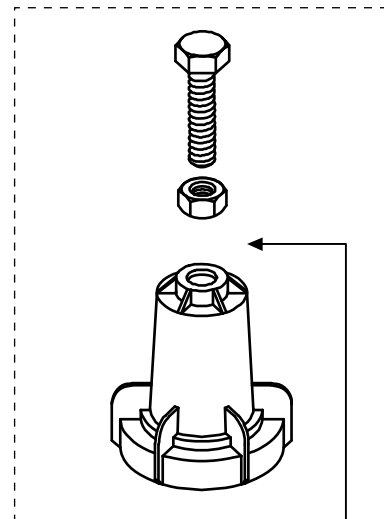
Main components:

1. Self flushing filter
2. Isolation ball valve
3. 3-way Manual selector valve
4. 29-100 Pilot valve

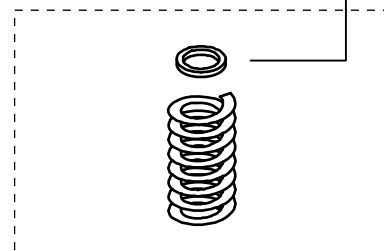


Spare parts

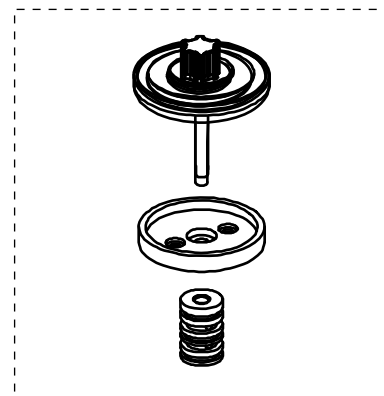
Bonnet kit



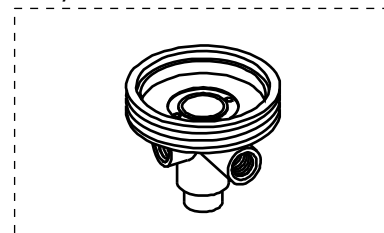
Spring



Internal parts kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	661022910000000
Spring 54 - Green	0022054000
Spring 72 - Yellow	0022072000
Spring 65 - Red	0022065000
Internal parts kit	661202910000000
Body kit	661012910000000

29-200 Multi-purpose, 3-way plastic pilot-valve

The 29-200 is a 3-way, diaphragm actuated, spring-loaded pilot-valve that is designed for control of pressure-regulating hydraulic-valves. The pilot valve serves 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 29-200 pilot-valve can be used for implementing wide range of hydraulic control-functions.

Features

- 3-way pilot valve
- Made of corrosion-proof composite materials
- 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!

Typical applications

- Pressure reducing valves - PR
- Pressure sustaining valves - PS
- Topography-compensating, remote hydraulic-control - RC
- Differential pressure sustaining valves - DI (model 29-200D)

Technical data

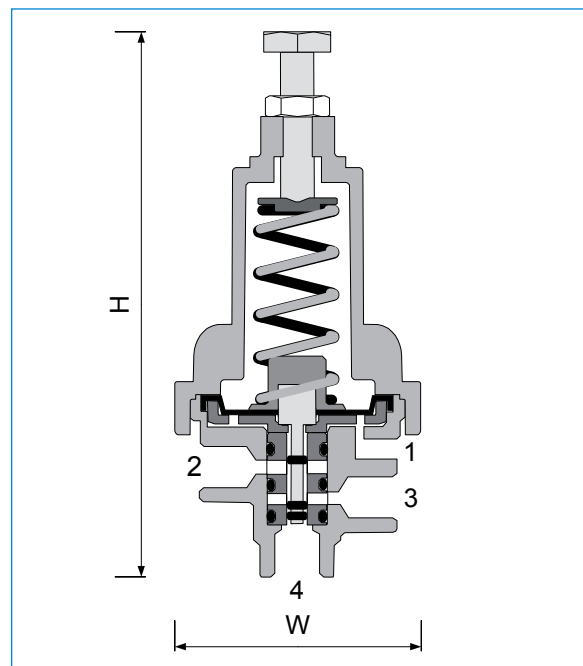
General		
Pressure rating	10 bar / 150 psi	
Pressure adjustment range	0.3 - 7.5 bar / 4 - 110 psi	
Fluid temperature	50°C max. / 120°F max.	
Weight	0.17 kg / 0.37 lbs	
Materials		
	Standard	Optional*
Body and bonnet	GRP	PP
Elastomers	NBR	EPDM - ALD
Internal parts	C.Brass+PTFE	SST 316
Spring	SST	SST 316
Dimensions		
H (Height) max.	130 mm / 5.12"	
W (Width)	65 mm / 2.56"	
Port Connections		
1,2,3,4	NPT 1/8"	

* other materials available upon demand

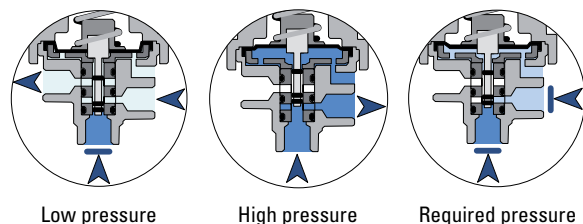
Springs adjustment range

Spring number	Color	bar	psi
54 (Std.)	Green	0.5 - 4.5	7 - 65
72	Yellow	0.3 - 3	5 - 45
65	Red	1 - 7.5	15 - 110

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



Principle of operation
(shown in "Pressure Reducing" mode)



Installation

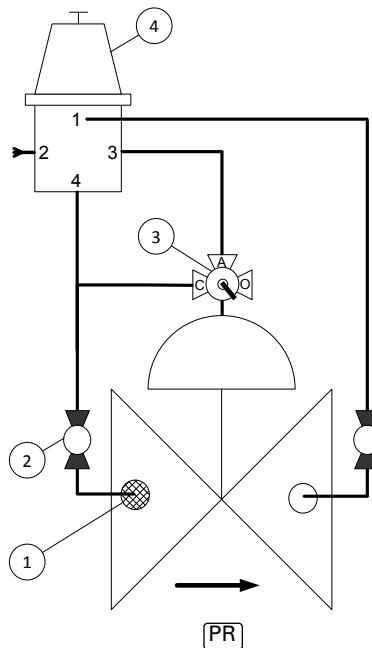
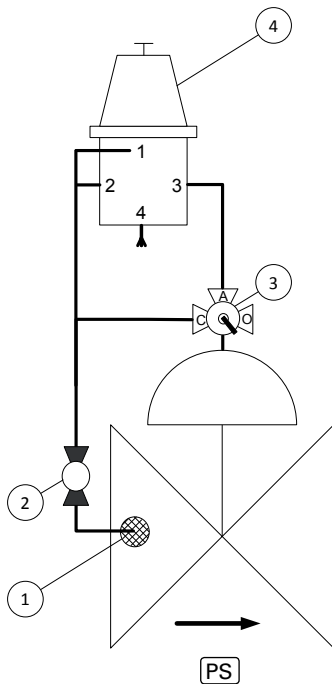
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Pressure sustaining	Pressure reducing
1	Upstream	Downstream
2	Upstream	Vent
3	Valve Control Chamber	Valve Control Chamber
4	Vent	Upstream

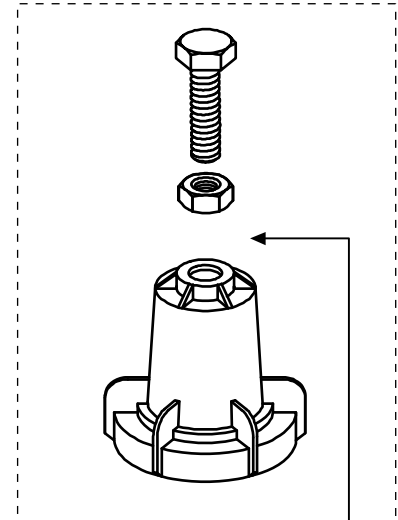
Main components:

1. Self flushing filter
2. Isolation ball valve
3. 3-way Manual selector valve
4. 29-200 Pilot valve

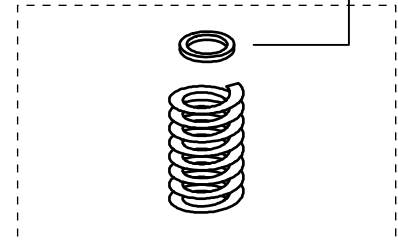


Spare parts

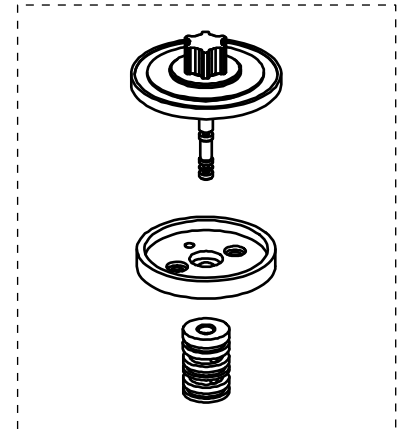
Bonnet kit



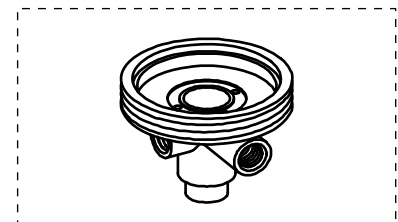
Spring



Internal parts kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	661022920000000
Spring 54 - Green	0022054000
Spring 72 - Yellow	0022072000
Spring 65 - Red	0022065000
Internal parts kit	661202920000000
Body kit	661012920000000

29-310

Differential pressure reducing, 3-way plastic pilot-valve

The 29-310 is a 3-way, diaphragm actuated, spring-loaded pilot-valve that is designed for control of differential pressure-reducing hydraulic valves. The pilot valve serves 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.

Features

- 3-way pilot valve
- Made of corrosion-proof composite materials
- 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

Typical applications

- Flow rate control valves - FR
- Differential pressure reducing valves - DP
- Pressure reducing for low pressure setting - PR

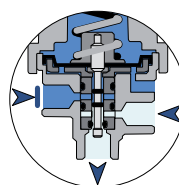
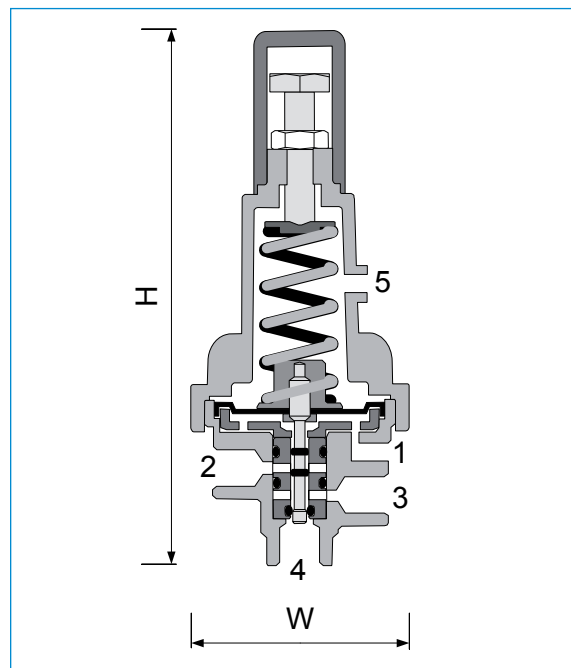
Technical data

General	
Pressure rating	10 bar / 150 psi
Pressure adjustment range	0.2 - 3 bar / 3 - 40 psi
Fluid temperature	50°C max. / 120°F max.
Weight	0.17 kg / 0.37 lbs
Materials	
Body and bonnet	GRP
Elastomers	NBR
Internal parts	SST
Spring	SST
Dimensions	
H (Height) max.	143 mm / 5.63"
W (Width)	65 mm / 2.56"
Port Connections	
1,2,3,4,5	NPT 1/8"

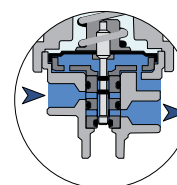
Springs adjustment range

Spring number	Color	bar	psi
82 (Std.)	White	0.2 - 0.5	3 - 7
72	Yellow	0.3 - 3	4 - 40

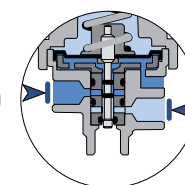
Adjustment: Turn the adjusting screw clockwise to increase the set point



Low differential pressure



High differential pressure



Required differential pressure

Installation

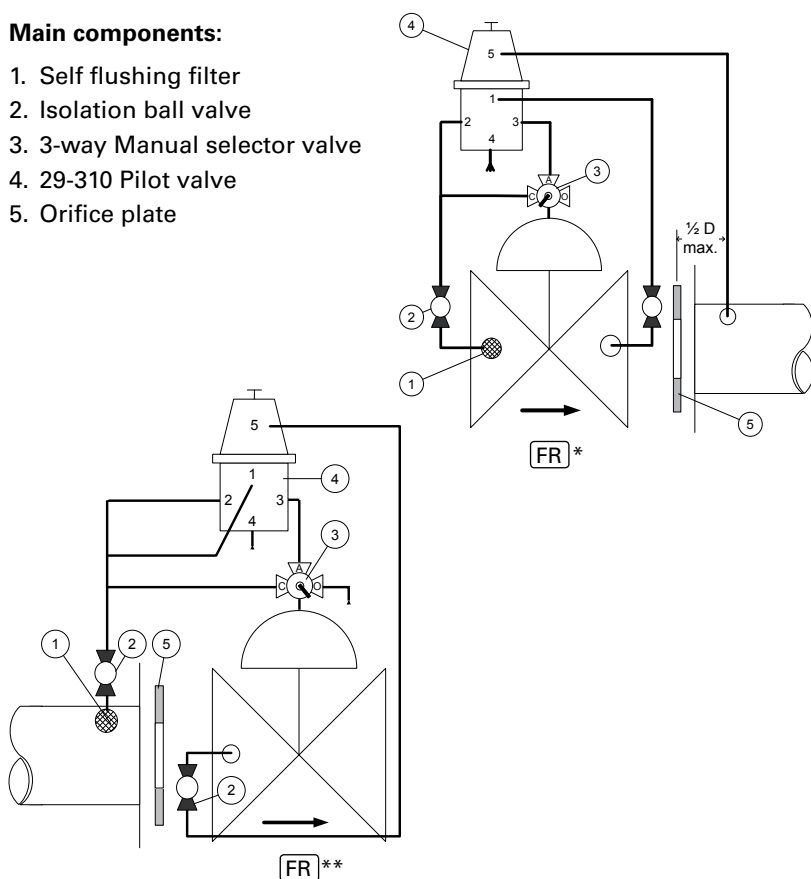
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Connect to:
1	Upstream orifice pressure
2	Upstream
3	Valve Control Chamber
4	Vent
5	Downstream orifice pressure

Main components:

1. Self flushing filter
2. Isolation ball valve
3. 3-way Manual selector valve
4. 29-310 Pilot valve
5. Orifice plate



* Downstream orifice for models 300 and 500.

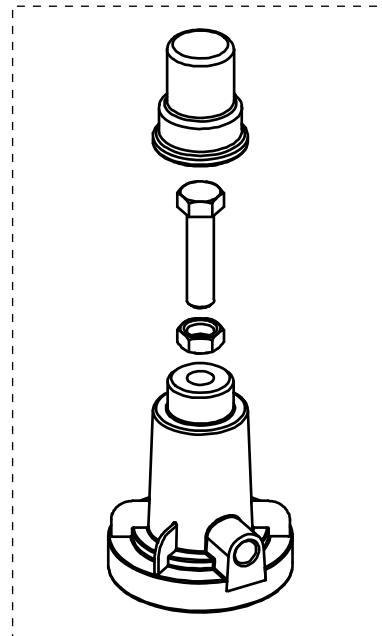
** Upstream orifice for model 100.

Catalogue numbers

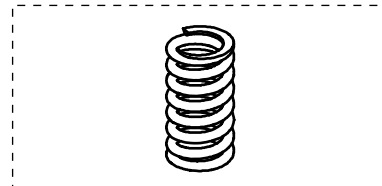
Description	Catalogue number
Bonnet kit	661022931000000
Spring 82 - White	0022082000
Spring 72 - Yellow	0022072000
Internal parts kit	661202931000000
Body kit	661012931000000

Spare parts

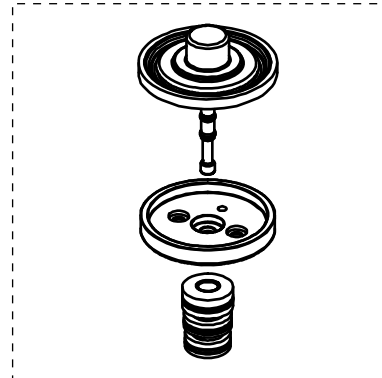
Bonnet kit



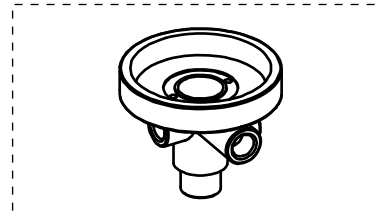
Spring



Internal parts kit



Body kit



68-410 Pressure-Reducing, 2-way metal pilot-valve

The 68-410 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 point, the pilot valve opens the water passage between its "IN" and "OUT" ports thus allowing the water in the main valve's chamber to vent to the downstream, and open the main valve. As the downstream pressure rises above the set point, the pilot-valve throttles the internal passage, restricting the flow out of the main valve control chamber, enabling the valve to keep its position or to close (if necessary).



Features

- A compact-design, pressure reducing 2-way pilot valve
- Normally-open, allows water passage when downstream pressure is lower than the adjusted spring setting
- Wide regulation range
- Accurate and easy to adjust
- No internal sealing allows for maximal dependability

Typical applications

- Pressure reducing - PR

Technical data

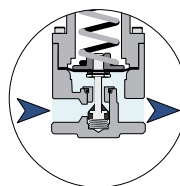
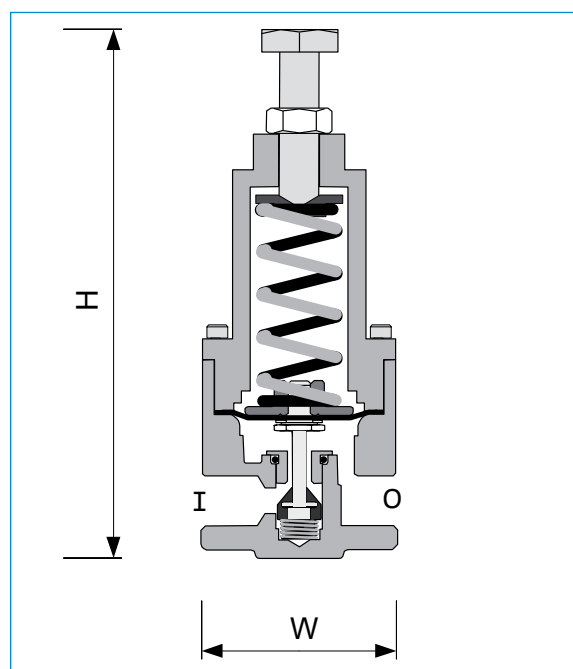
General		
Pressure rating	25 bar / 360 psi	
Spring adjustment range	0.5 - 25 bar / 7 - 360 psi	
Fluid temperature	60°C max. / 140°F max.	
Weight	0.84 Kg / 1.85 lbs	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM, Viton
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	155 mm / 6.10"	
W (Width)	55 mm / 2.17"	
Port Connections		
I1, I2, O1, O2	NPT 1/4"	

* other materials available upon demand

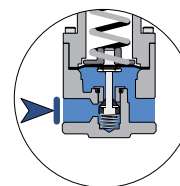
Springs adjustment range

Spring number	Color	bar	psi
66 (Std.)	Green	1 - 11	15 - 160
78	Yellow	0.5 - 3	7 - 45
67	Red	2 - 25	30 - 360

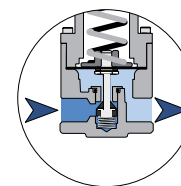
Adjustment: Turn the adjusting screw clockwise to increase the set point



Low pressure



High pressure



Required pressure

Installation

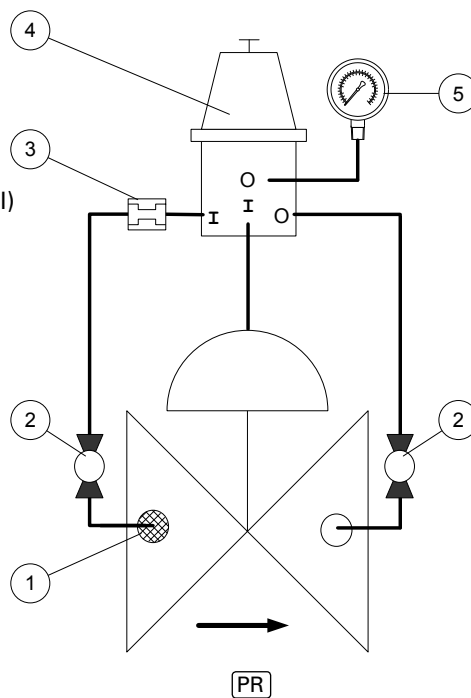
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Pressure reducing
I1	Valve Control Chamber
I2	Upstream (through orifice)
O1	Downstream
O2	Pressure gauge (optional)

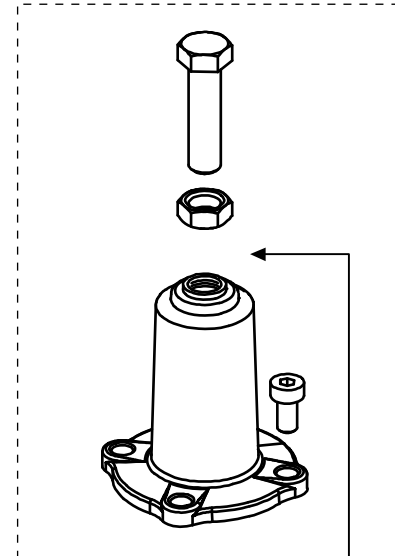
Main components:

1. Self flushing filter
2. Isolation ball valve
3. Orifice / Needle valve
4. 68-410 Pilot valve
5. Pressure gauge (optional)

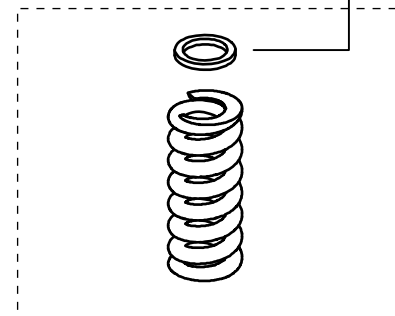


Spare parts

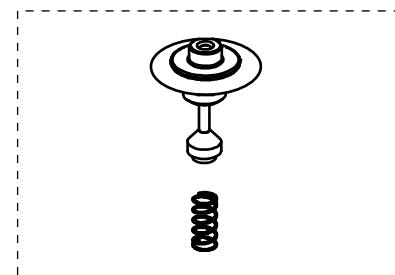
Bonnet kit



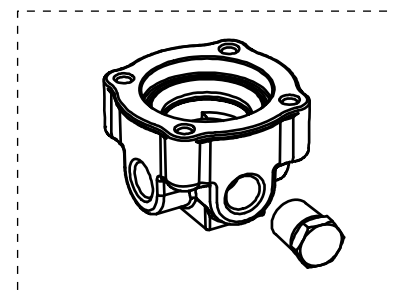
Spring



Internal parts kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	661026841000000
Spring 66 - Green	0022066000
Spring 78 - Yellow	0022078000
Spring 67 - Red	0022067000
Internal parts kit	661206841000000
Body kit	661016841000000

68-41M

Pressure-reducing, 2-way metal pilot-valve with electronic setting (pneumatically) modulated by controller

The 68-41M is a 2-way, diaphragm actuated, spring-loaded pressure reducing pilot-valve designed for control of hydraulic valves. The pilot valve modulates so to keep a steady, pre-set downstream pressure. As the downstream pressure falls below the set point, the pilot valve opens a full passage between its "In" port and "Out" port thus allowing the control chamber pressure to be vented to the downstream side and the valve to open. As the downstream pressure rises above the set point, the pilot valve throttles the internal passage, restricting the flow out of the valve control chamber, causing it to keep position or close.



Features

- A 2-way, diaphragm operated, spring loaded, spring balanced pilot, designed for pressure reducing valves
- Unique modulated setting pneumatic controlled pilot-valve
- Changes the pilot's set point according to a programmed function electronically pneumatic pressure
- It is normally-open, allowing water passage while downstream pressure is less than the adjustable spring setting
- It closes drip-tight when downstream pressure exceeds the pre set point.
- Careful balancing of powers within the pilot - main spring, balancing spring, water pressure - ensure sensitive and accurate response to pressure fluctuations
- Sealing seat and inner passage are made of stainless steel, preventing erosion damage caused by continuous high velocity flow.
- Can be activated by hydraulic or pneumatic pressure

Typical applications

- Pressure reducing valves - PR

Technical data

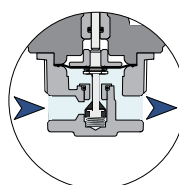
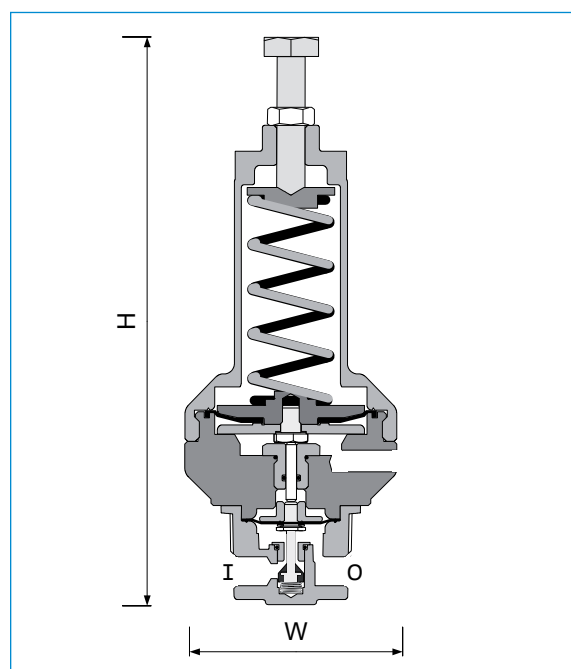
General		
Pressure rating	25 bar / 360 psi	
Spring adjustment range	0.5 - 24 bar / 7 - 350 psi	
Fluid temperature	80°C max. / 175°F max.	
Weight	1.90 Kg / 4.2 lbs	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM, Viton
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	250 mm / 10"	
W (Width)	95 mm / 4"	
Port Connections		
I, I2, O, M	NPT 1/4"	

* other materials available upon demand

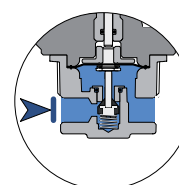
Springs adjustment range

Spring number	Color	bar	psi
42 (Std.)	Yellow	0.5 - 9	7 - 130
47	Green	1 - 13	15 - 190
50	Red	1.5 - 24	22 - 350

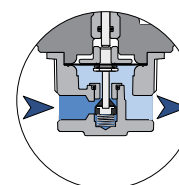
Adjustment: Turn the adjusting screw clockwise to increase the set point



Low pressure



High pressure



Required pressure

Installation

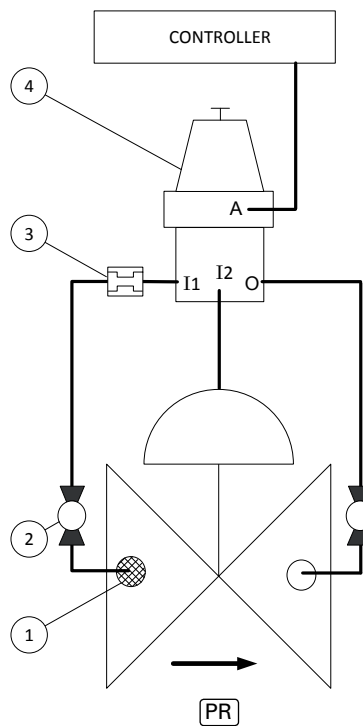
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Pressure reducing
I1	Upstream
I2	Valve Control Chamber
O	Downstream
A	Controller

Main components:

1. Self flushing filter
2. Isolation ball valve
3. Orifice / Needle valve
4. 68-41M Pilot valve

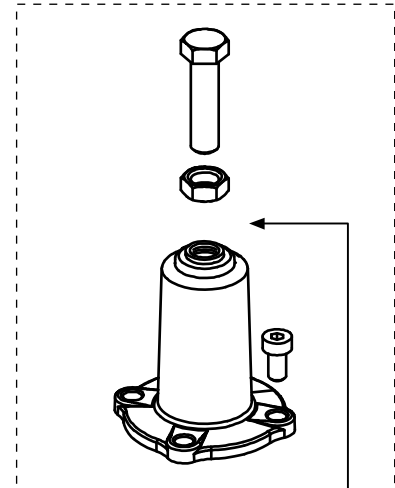


Catalogue numbers

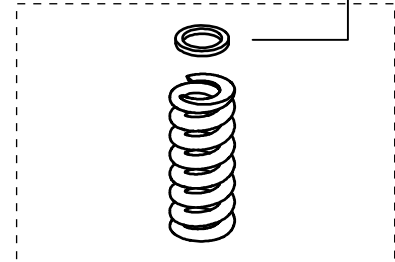
Description	Catalogue number
Bonnet kit	661026841M00000
Spring 42 - Yellow	0022042000
Spring 47 - Green	0022047000
Spring 50 - Red	0022050000
Internal parts kit	661206841M00000
Body kit	661016841M00000

Spare parts

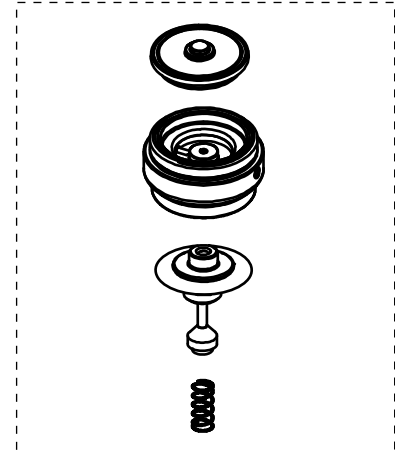
Bonnet kit



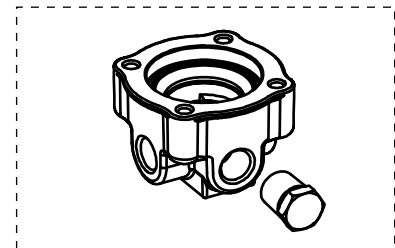
Spring



Internal parts kit



Body kit



68-510

Pressure-Sustaining/Relief, 2-way pilot-valve

The 68-510 is a 2-way, diaphragm actuated, spring-loaded pressure-sustaining pilot-valve, designed for control of hydraulic valves. The pilot valve modulates to keep a steady, pre-set pressure upstream the valve's location. As the upstream pressure rises above the adjusted value, the pilot-valve opens the water passage between its "COM" and "OUT" port thus allowing the water in the main valve's chamber to vent to the downstream, causing the main valve to open. As the downstream pressure falls below the set point, the pilot valve throttles the internal passage, restricting the flow out of the main valve control chamber, enabling the valve to keep its position or to close (if necessary).



Features

- A pressure sustaining/relief 2-way pilot valve
- Normally-close, will open when the upstream pressure exceed the adjustable spring setting
- Wide regulation range
- Easy to adjust
- Minimal internal sealing and maximal dependability
- SST needle valve – integral in the valve's design
- Optional separated sensing chamber (model 68-51A)

Typical applications

- Pressure sustaining valves - PS
- Pressure relief valves - PS[R]
- Quick-acting pressure-relief - QR

Technical data

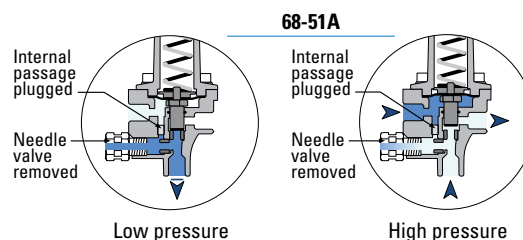
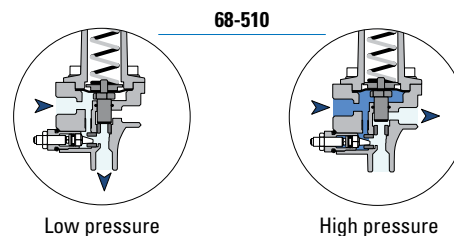
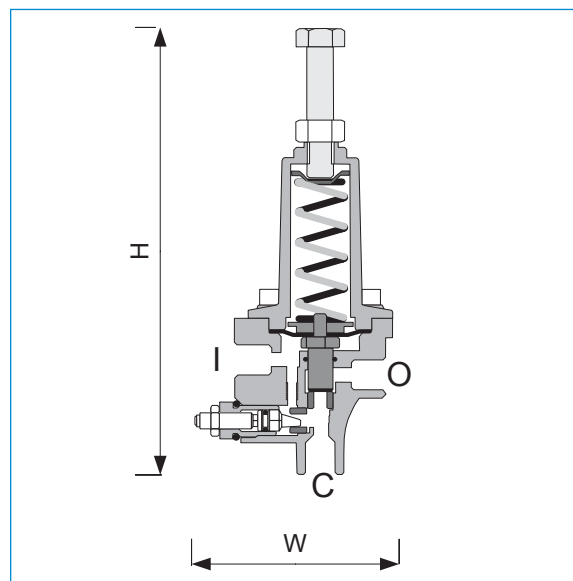
General		
Pressure rating	40 bar / 580 psi	
Pressure adjustment range	0.4 - 40 bar / 6 - 580 psi	
Fluid temperature	80°C max. / 176°F max.	
Weight	850 g. / 1.9 lbs.	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM, Viton
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	180 mm / 7"	
W (Width)	72 mm / 3"	
Port Connections		
I, O, C	1/4" NPT	

* other materials available upon demand

Springs adjustment range

Spring number	Color	bar	psi
67 (Std.)	Red	2 - 40	30 - 580
66	Green	0.8 - 13	10 - 190
78	Yellow	0.4 - 3.5	6 - 50

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



Installation

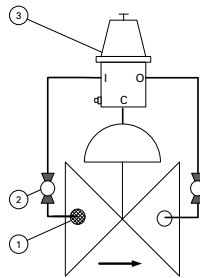
Connections:

Port	Pressure sustaining / relief
I	Upstream
C	Valve / Relay Control Chamber
O	Downstream

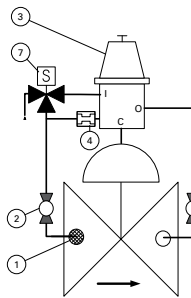
Main components:

1. Self-flushing filter
2. Isolation ball valve
3. 68-510 Pilot valve
4. Orifice / Needle Valve
5. 28-200 Relay valve
6. 2" Relay valve
7. 3/2 solenoid-valve

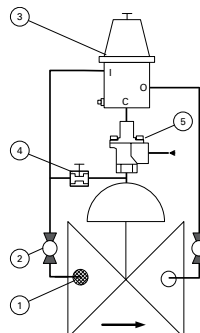
PS and PS[R] (68-510) and QR up to 2½"



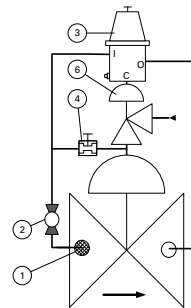
PS/EL (6851A)



QR 3" to 6"

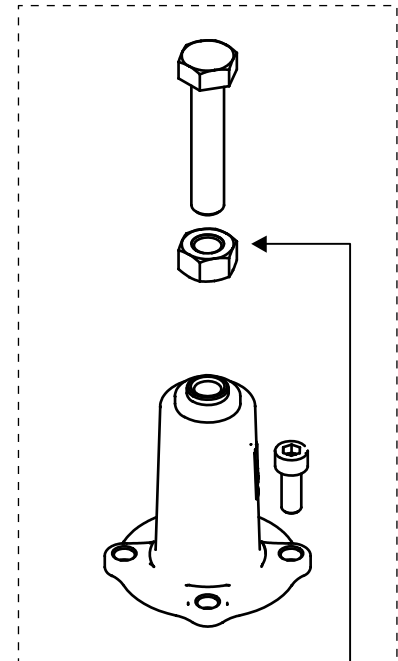


QR 8" or larger

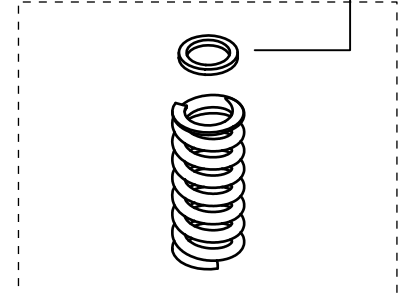


Spare parts

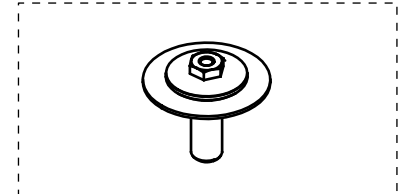
Bonnet kit



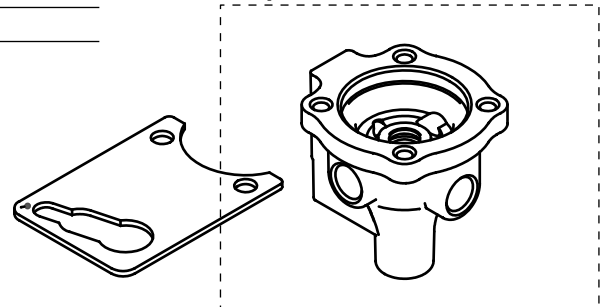
Spring



Internal parts kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	661026851000000
Spring 67 - Red	0022067000
Spring 66 - Green	0022066000
Spring 78 - Yellow	0022078000
Internal parts kit	661206851000000
Body kit	661016851000000
Hex bolt for conversion to 68-510A version	

68-500

Pressure-Sustaining/Relief, 2-way pilot-valve

The 68-500 is a 2-way, diaphragm actuated, spring-loaded pressure-sustaining pilot-valve, designed for control of hydraulic valves. The pilot valve modulates to keep a steady, pre-set pressure upstream the valve's location. As the upstream pressure rises above the adjusted value, the pilot-valve opens the water passage between its "COM" and "OUT" port thus allowing the water in the main valve's chamber to vent to the downstream, causing the main valve to open. As the downstream pressure falls below the set point, the pilot valve throttles the internal passage, restricting the flow out of the main valve control chamber, enabling the valve to keep its position or to close (if necessary).



Features

- A pressure sustaining/relief 2-way pilot valve
- Normally-close, will open when the upstream pressure exceed the adjustable spring setting
- Wide regulation range
- Easy to adjust
- Minimal internal sealing and maximal dependability
- SST needle valve - integral in the valve's design

Typical applications

- Pressure sustaining valves - PS
- Pressure relief valves - PS[R]
- Quick-acting pressure-relief - QR

Technical data

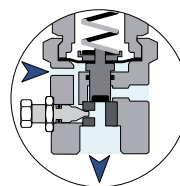
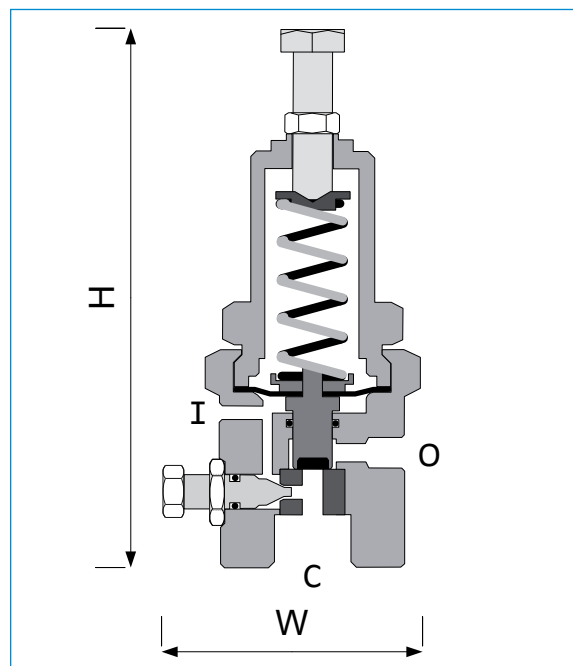
General		
Pressure rating	25 bar / 360 psi	
Pressure adjustment range	0.5 - 12 bar / 7 - 175 psi	
Fluid temperature	80°C max. / 176°F max.	
Weight	1 Kg. / 2.2 lbs.	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM, Viton
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	170 mm / 6.69"	
W (Width)	65 mm / 2.56"	
Port Connections		
I, O, C	NPT 1/4"	

* other materials available upon demand

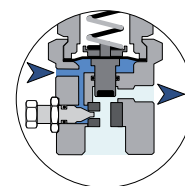
Springs adjustment range

Spring number	Color	bar	psi
66 (Std.)	Green	0.6 - 12	9 - 175
78	Yellow	0.5 - 3	7 - 44

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



Low pressure



High pressure

Installation

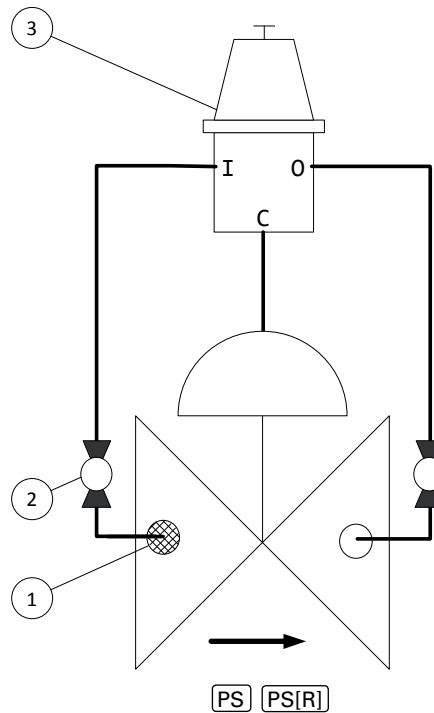
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Altitude
I	Upstream
C	Valve Control Chamber
O	Downstream

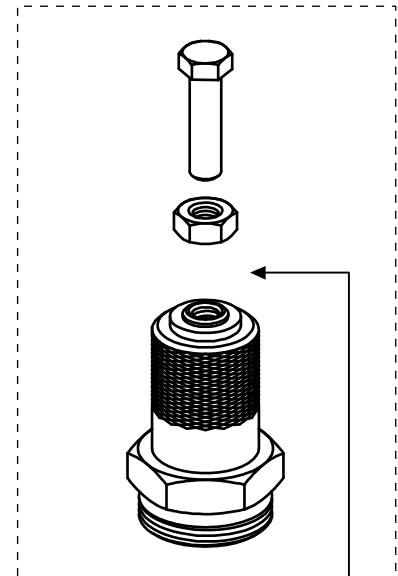
Main components:

1. Self flushing filter
2. Isolation ball valve
3. 68-500 Pilot valve

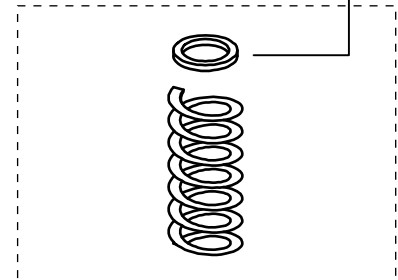


Spare parts

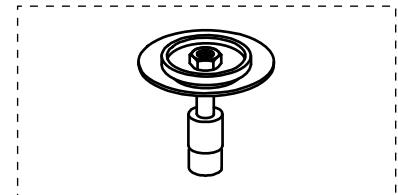
Bonnet kit



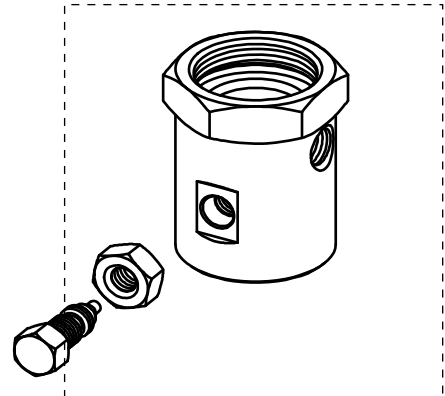
Spring



Internal parts kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	661026850000000
Spring 66 - Green	0022066000
Spring 78 - Yellow	0022078000
Internal parts kit	661206850000000
Body kit	661016850000000

68-210

Quick-Acting, 2-way pressure-relief metal pilot-valve

The 68-210 is a 2-way, diaphragm actuated, spring-loaded pilot-valve designed for control of hydraulic-valves. The pilot valve keeps a normally closed position, as long as the pressure in the system is below the adjusted set-value. It will open fully, allowing fast discharge of water out of the main valve's control chamber once the pressure exceeds the setpoint, thus causing the valve to open, discharge surplus pressure out of the system. The 68-210 pilot will then re-close, keeping but a narrow passage for the upstream-water to enter the main valve's control chamber, making its closure pace slow.

Features

- Integral design - the pilot valve connects directly to the main valve's bonnet
- A quick-acting, pressure relief 2-way pilot valve
- Normally-closed, will opens fully when the upstream pressure exceeds the adjustable spring setting
- The design allows connection without having to install additional needle-valve or orifice
- Can be used with 2" / 50mm, 2 1/2" / 65mm and 3" LF / 80mm LF, 100 series hydraulic control valves
- Wide regulation range
- Accurate and easy to adjust
- Minimal internal sealing and maximal dependability

Typical applications

- Quick pressure relief - QR

Technical data

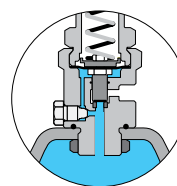
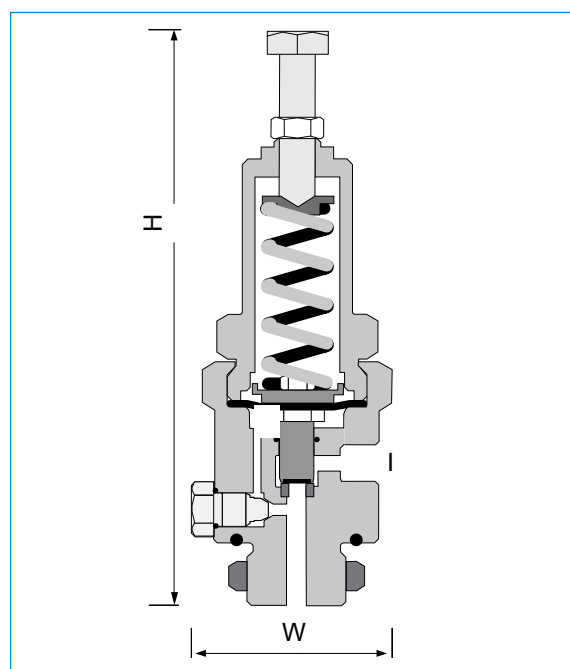
General		
Pressure rating	16 bar / 230 psi	
Pressure adjustment range	0.5 - 12 bar / 7 - 175 psi	
Fluid temperature	80°C max. / 176°F max.	
Weight	1.1 Kg. / 2.4 lbs.	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM, Viton
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	170 mm / 6.69"	
W (Width)	65 mm / 2.56"	
Port Connections		
0	NPT 1/4"	

* other materials available upon demand

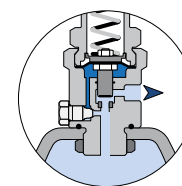
Springs adjustment range

Spring number	Color	bar	psi
58 (Std.)	Green	0.5 - 13.5	7 - 195
78	Yellow	0.2 - 3.5	3 - 50
63	Red	0.9 - 20	13 - 300

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



Low pressure



High pressure

Installation

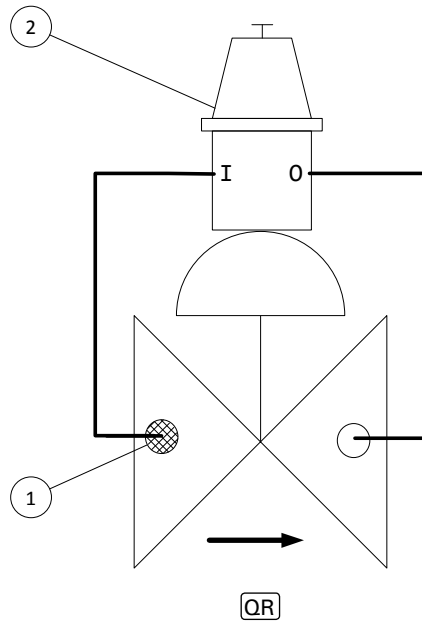
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Altitude
I	Upstream
C	Valve Control Chamber
O	Downstream

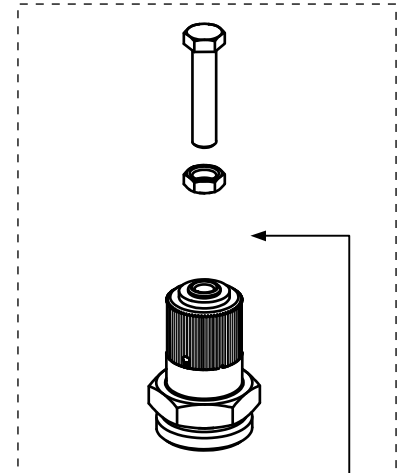
Main components:

1. Self flushing filter
2. 68-210 Pilot valve

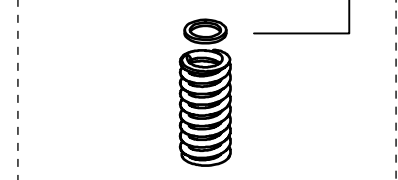


Spare parts

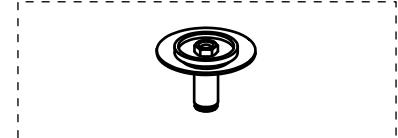
Bonnet kit



Spring



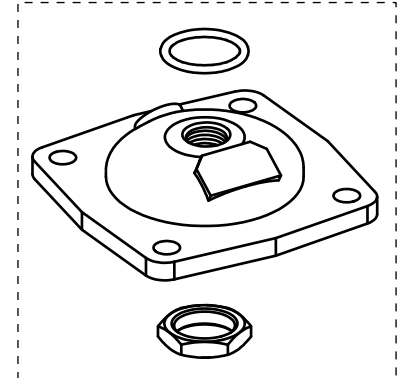
Internal parts kit



Body kit



Bonnet kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	661026821000000
Spring 58 - Green	0022058000
Spring 78 - Yellow	0022078000
Spring 63 - Red	0022063000
Internal parts kit	661206821000000
Body kit	661016821000000
Bonnet kit	661016821000000

31-10R Pressure-Reducing, 3-way metal pilot-valve (31-1RD Differential-Reducing)

The 31-10R is a 3-way, diaphragm actuated, spring-loaded pilot-valve that is designed for control of pressure-reducing hydraulic valves. The pilot valve serves 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.

Features

- A pressure-reducing, 3-way pilot valve
- Differential pressure reducing - Optional
- Fully vents the control chamber to open the main valve - allows minimizing pressure-losses, when downstream pressure drops below the set value.
- Wide regulation range
- Easy to adjust
- Pressure-balanced - will not be affected, even by large, upstream pressure-variations.

Typical applications

- Pressure reducing valves - PR
- Pressure differential reducing - PD
- Surge anticipating - RE

Technical data

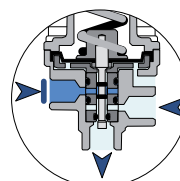
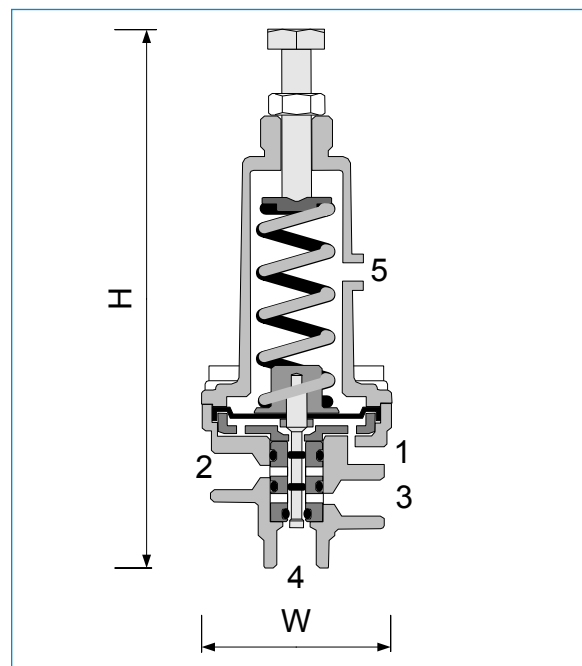
General		
Pressure rating	25 bar / 360 psi	
Spring adjustment range	0.5 - 12 bar / 7 - 175 psi	
Fluid temperature	60°C max. / 140°F max.	
Weight	1.90 Kg / 4.2 lbs	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM, Viton
Internal parts	SST + PVDF	
Spring	SST	
Dimensions		
H (Height) max.	190 mm / 7.5"	
W (Width)	60 mm / 2.4"	
Port Connections		
1,2,3,4	NPT 1/4"	
5	NPT 1/8"	

* other materials available upon demand

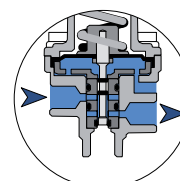
Springs adjustment range

Spring number	Color	bar	psi
124 (Std.)	Red	1.5 - 12	22 - 175
130	Green	0.5 - 6	7 - 85

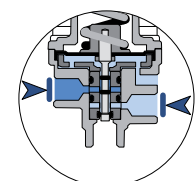
Adjustment: Turn the adjusting screw clockwise to increase the set point



Low pressure



High pressure



Required pressure

Installation

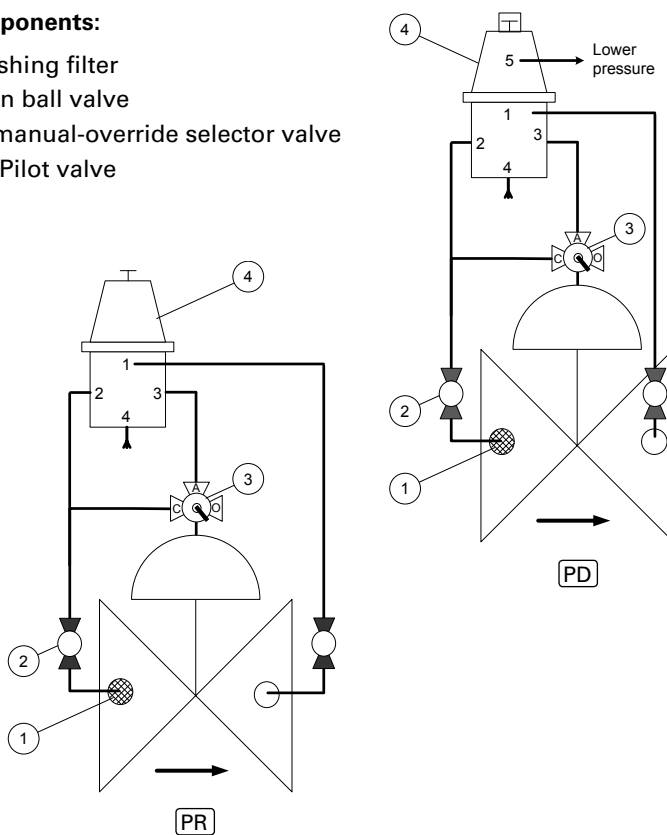
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Pressure reducing	Differential pressure reducing
1	Downstream	High sensing pressure
2	Upstream	Upstream
3	Valve Control Chamber	Valve Control Chamber
4	Vent	Vent
5	-	Low sensing pressure

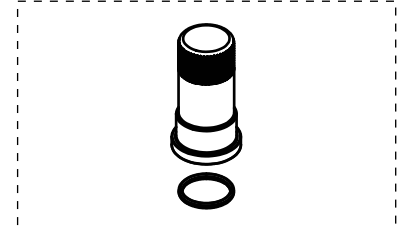
Main components:

1. Self flushing filter
2. Isolation ball valve
3. 3-way manual-override selector valve
4. 31-10R Pilot valve

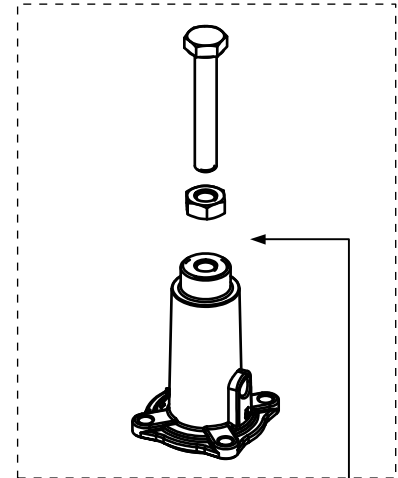


Spare parts

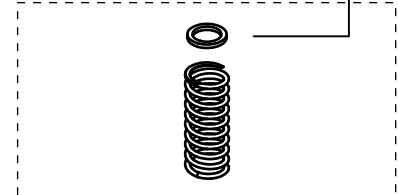
Adjustment bolt cap *



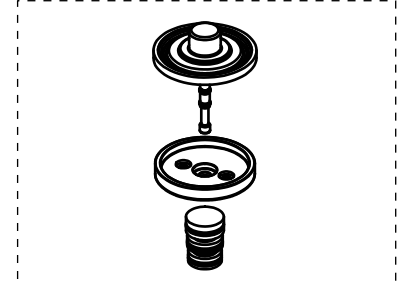
Bonnet kit



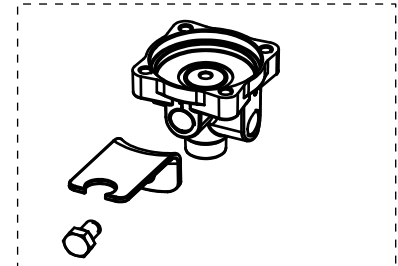
Spring



Internal parts kit



Body kit



* Used in 31-1RD version only

Catalogue numbers

Description	Catalogue number
Bonnet kit	661023110R00000
Adjustment bolt cap	
Spring 124 - Red	0022012400
Spring 130 - Green	0022013000
Internal parts kit	661203110R00000
Body kit	661013110R00000

31-10S

Pressure-Sustaining, 3-way metal pilot-valve

31-1SD

Pressure-Differential sustaining

The 31-10S and the 31-1SD are 3-way, diaphragm actuated, spring-loaded pilot-valves that are designed for control of pressure-sustaining hydraulic valves. The pilot valve serves 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.



Features

- A pressure-sustaining, 3-way pilot valve
- Differential pressure sensing - Optional
- Fully vents the control chamber to open the main valve - allows minimizing pressure-losses, when upstream pressure rises above the set value.
- Wide regulation range
- Easy to adjust

Typical applications

- Pressure sustaining valves - PS
- Pressure differential sustaining - DI

Technical data

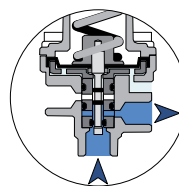
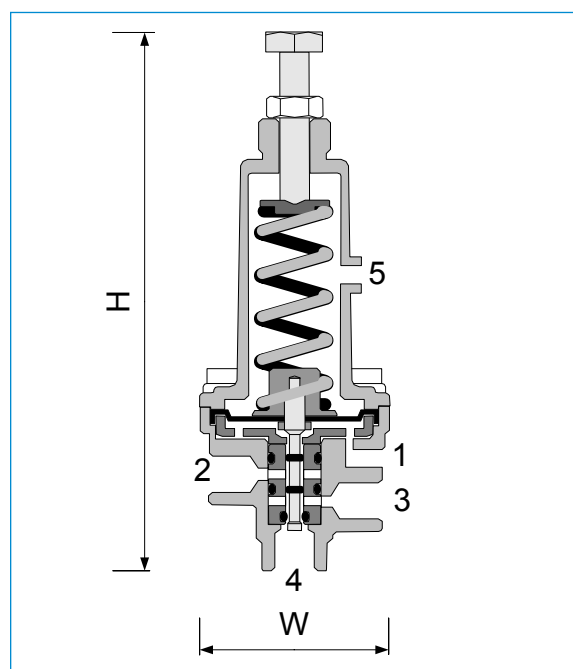
General		
Pressure rating	25 bar / 360 psi	
Spring adjustment range	0.5 - 12 bar / 7 - 175 psi	
Fluid temperature	60°C max. / 140°F max.	
Weight	1.90 Kg / 4.2 lbs	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM, Viton
Internal parts	SST + PVDF	
Spring	SST	
Dimensions		
H (Height) max.	190 mm / 7.5"	
W (Width)	60 mm / 2.4"	
Port Connections		
1,2,3,4	NPT 1/4"	
5	NPT 1/8"	

* other materials available upon demand

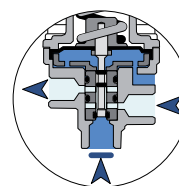
Springs adjustment range

Spring number	Color	bar	psi
124 (Std.)	Red	1.5 - 12	20 - 175
130	Green	0.5 - 6	7 - 85

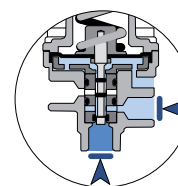
Adjustment: Turn the adjusting screw clockwise to increase the set point



Low pressure



High pressure



Required pressure

Installation

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

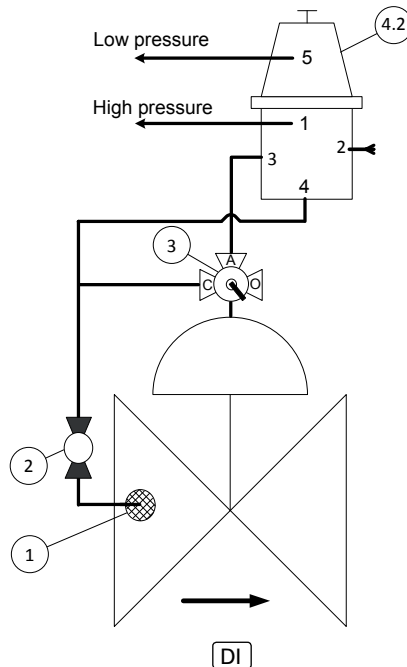
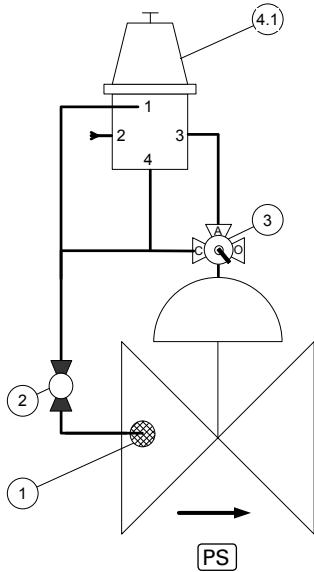
Connections:

Port	PS - Pressure sustaining	DI - Differential pressure sustaining*
1	Upstream pressure	Upstream pressure
2	Vent	Vent
3	Valve Control Chamber	Valve Control Chamber
4	Upstream pressure	Upstream pressure
5	-	Downstream pressure

* DI version can be used for implementing remote-control pressure sustaining. When the spring chamber is pressurized the valve will close.

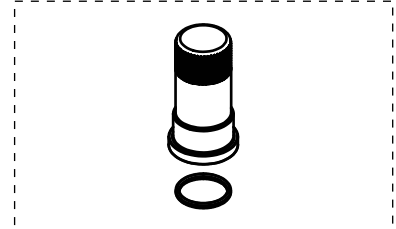
Main components:

1. Self flushing filter
2. Isolation ball valve
3. 3way Manual selector valve
- 4.1. 31-10S Pilot valve
- 4.2. 31-1SD Pilot valve

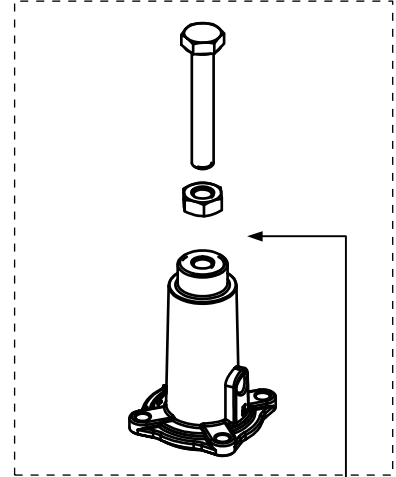


Spare parts

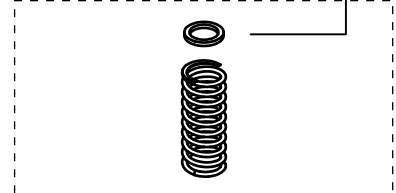
Adjustment bolt cap *



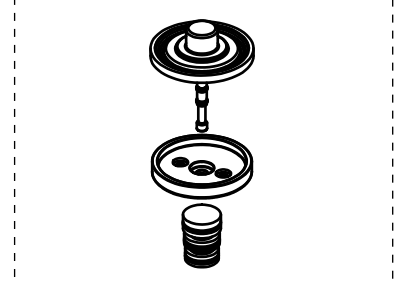
Bonnet kit



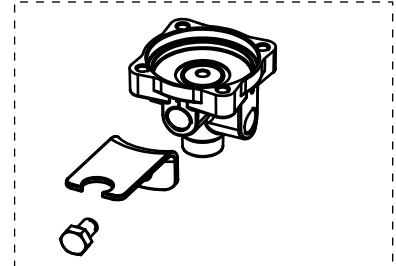
Spring



Internal parts kit



Body kit



* Used in 31-1RD version only

Catalogue numbers

Description	Catalogue number
Bonnet kit	661023110R00000
Adjustment bolt cap	
Spring 124 - Red	0022012400
Spring 130 - Green	0022013000
Internal parts kit	661203110S00000
Body kit	661013110R00000

31-10F

Rate of flow, 3-way metal pilot-valve

The 31-10F is a 3-way, diaphragm actuated, spring- loaded pilot-valve that is designed for control of flow-regulating hydraulic valves. The pilot valve serves 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 pressure differential across a supplementary orifice plate and the adjusted set-value.



Features

- A differential pressure regulating, 3-way pilot valve
- Fully vents the control chamber to open the main valve - thus minimizing pressure-losses, when the differential pressure of the orifice drops below the set-value.
- Easy to adjust
- Pressure-balanced - will not be affected, even by large, upstream pressure-variations.
- Superb sensitivity & repeatability

Typical applications

- Flow rate control valves - FR
- Pressure differential reducing - PD

Technical data

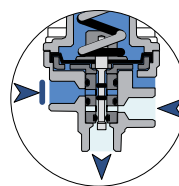
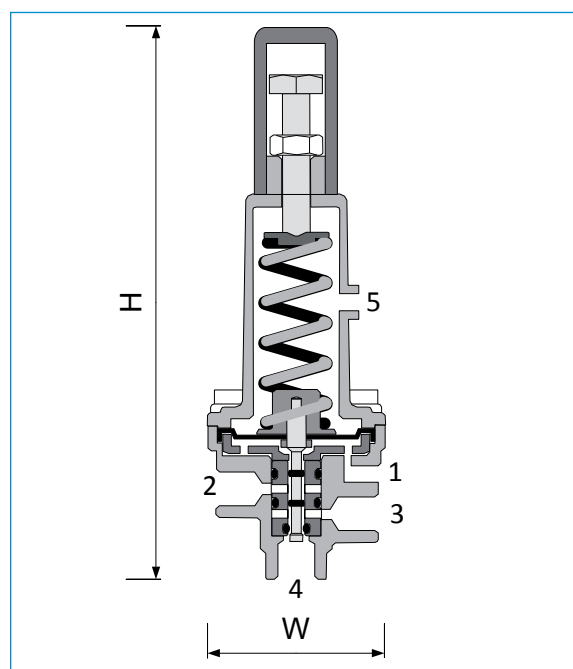
General		
Pressure rating	25 bar / 360 psi	
Spring adjustment range	2 - 60 mt / 3 - 90 psi	
Fluid temperature	80°C max. / 175°F max.	
Weight	1.70 Kg / 3.7 lbs	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM, Viton
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	190 mm / 7.5"	
W (Width)	60 mm / 2.4"	
Port Connections		
1,2,3,4	NPT 1/4"	
5	NPT 1/8"	

* other materials available upon demand

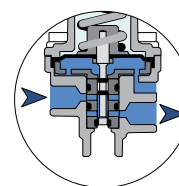
Springs adjustment range

Spring number	Color	meter	psi
78 (Std.)	Yellow	2 - 7	3 - 10
130	Green	5 - 60	7 - 90

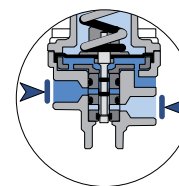
Adjustment: Turn the adjusting screw clockwise to increase the set point



Low pressure



High pressure



Required pressure

Installation

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

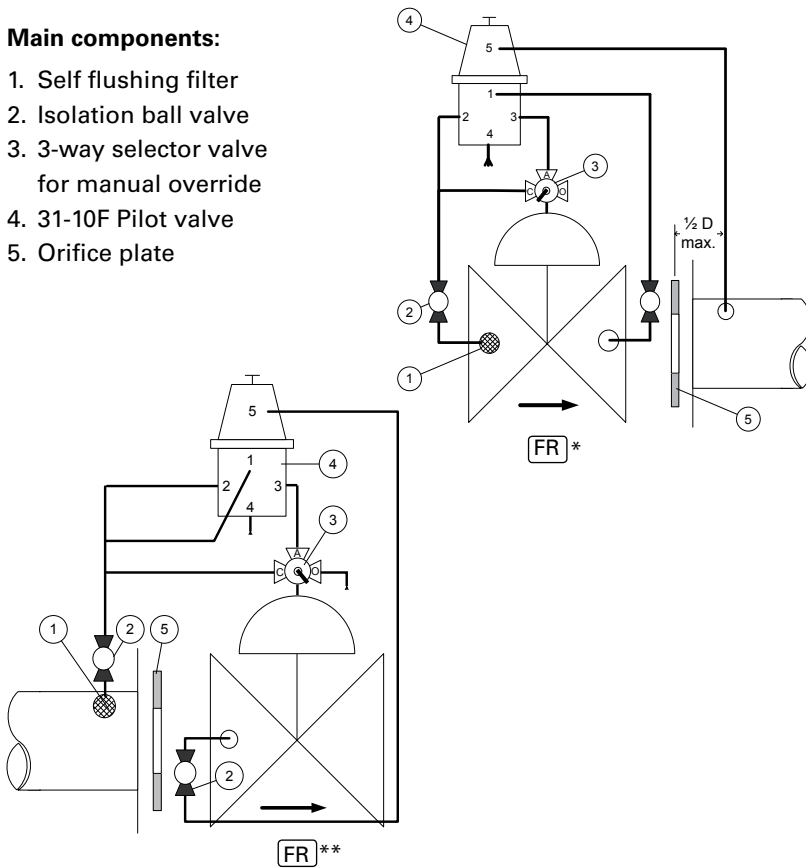
Connections:

Port	Flow rate
1	Upstream orifice plate
2	Upstream orifice plate
3	Valve Control Chamber
4	Vent
5	Downstream orifice plate

* Note: a downstream installation of the orifice plate is possible in globe type valves. Contact Dorot technical Support for further details.

Main components:

1. Self flushing filter
2. Isolation ball valve
3. 3-way selector valve for manual override
4. 31-10F Pilot valve
5. Orifice plate



* Downstream orifice for models 300 and 500.

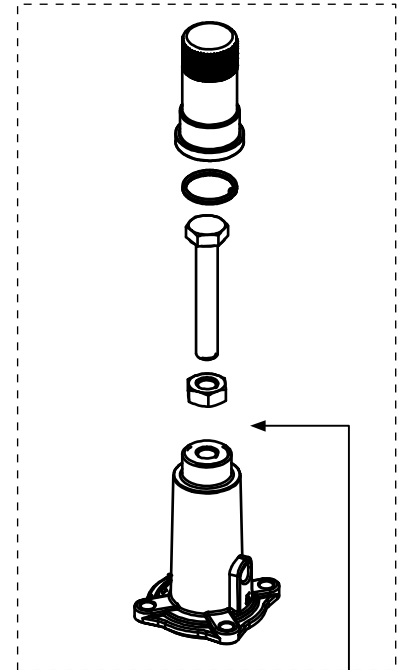
** Upstream orifice for model 100.

Catalogue numbers

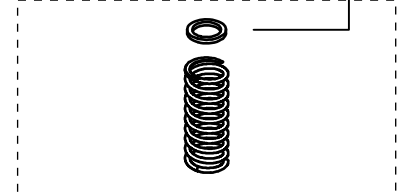
Description	Catalogue number
Bonnet kit	661023110R00000
Spring 78 - Yellow	0022078000
Spring 130 - Green	0022013000
Internal parts kit	661203110F00000
Body kit	661013110R00000

Spare parts

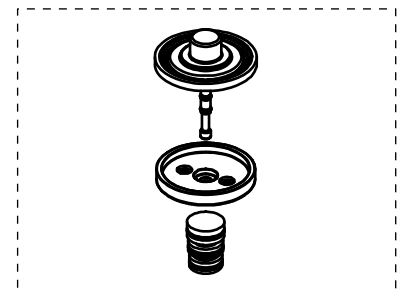
Bonnet kit



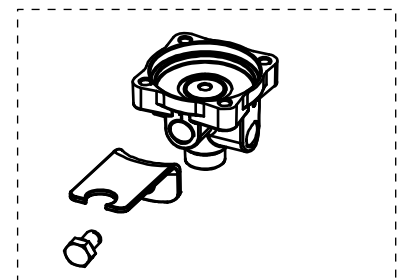
Spring



Internal parts kit



Body assembly



31-10M

Pressure-reducing, 3-way metal pilot-valve with variable electronic setting (pneumatically) modulated by controller

The 31-10M is a 3-way, diaphragm actuated, spring-loaded pilot-valve that is designed for the control of pressure-regulating hydraulic valves. The pilot valve serves as a selector between the common port and the two other ports. The pilot valve will vent or pressurize the control chamber of the main valve to open or to close, as a factor of the regulated pressure value. The pilot valve will block all ports, thus maintaining the main valve locked in position, when the regulated pressure equalize to the set-value. The 31-10M pilot-valve is made of sturdy, high-quality materials and can be used for implementing wide range of hydraulic control-functions.



Features

- A 3-way pilot valve designed for pressure reducing valves
- Unique modulated setting pneumatic controlled pilot-valve
- Changes the pilot's set point according to a programmed function electronically pneumatic pressure
- 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 up to 6"/150mm)
- High precision
- Wide regulation range:
- Accurate and easy to adjust
- Simple design
- Can be activated by hydraulic or pneumatic pressure

Typical applications

- Pressure reducing valves - PR

Technical data

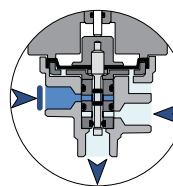
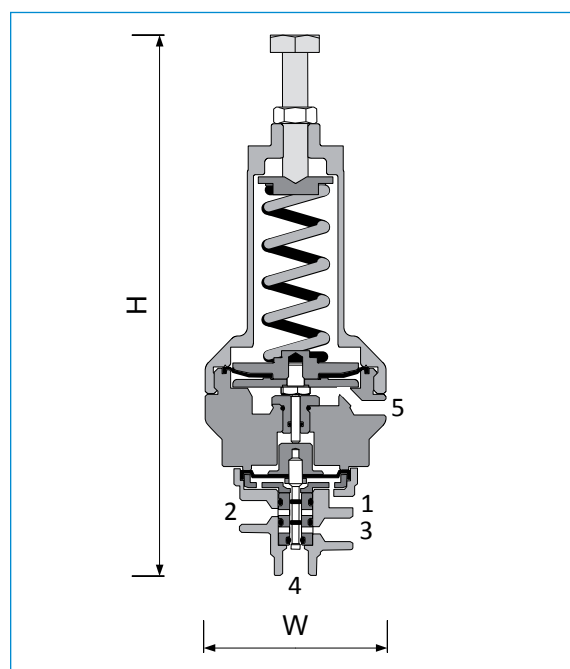
General		
Pressure rating	25 bar / 360 psi	
Spring adjustment range	0.5 - 24 bar / 7 - 350 psi	
Fluid temperature	80°C max. / 175°F max.	
Weight	1.90 Kg / 4.2 lbs	
Materials	Standard	Optional
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM, Viton
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	250 mm / 10"	
W (Width)	95 mm / 4"	
Port Connections		
1,2,3,4,5	NPT 1/4"	

* other materials available upon demand

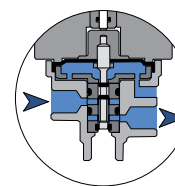
Springs adjustment range

Spring number	Color	bar	psi
42 (Std.)	Yellow	0.5 - 9	7 - 130
47	Green	1 - 13	15 - 190
50	Red	1.5 - 24	22 - 350

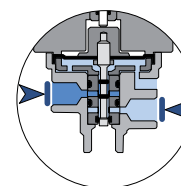
Adjustment: Turn the adjusting screw clockwise to increase the set point



Low pressure



High pressure



Required pressure

Installation

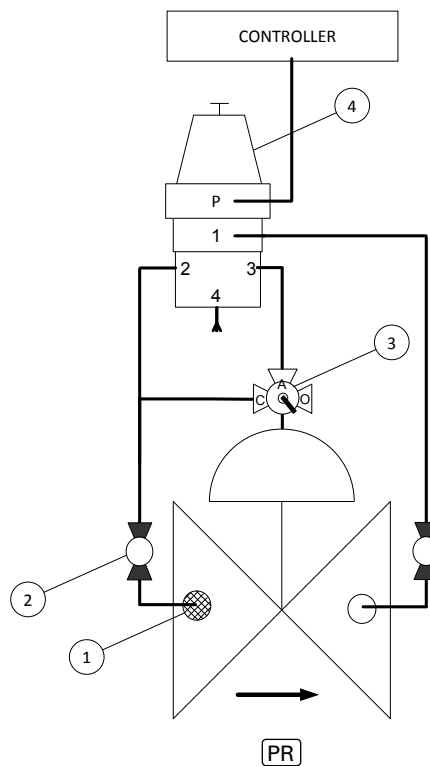
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Pressure reducing
1	Downstream
2	Upstream
3	Valve Control Chamber
4	Vent
P	Pneumatic Control

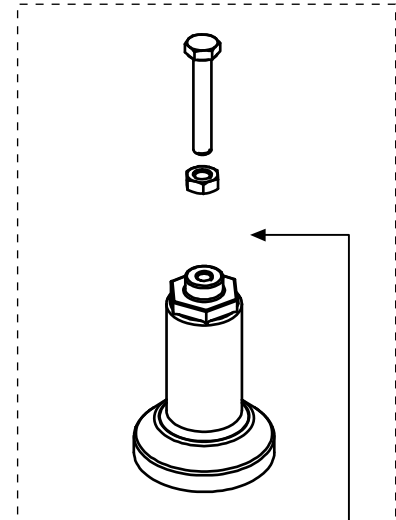
Main components:

1. Self flushing filter
2. Isolation ball valve
3. 3-way Manual selector valve
4. 31-10M Pilot valve

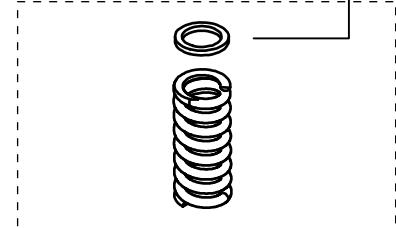


Spare parts

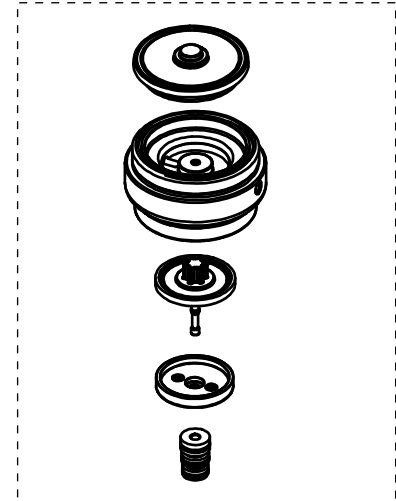
Bonnet kit



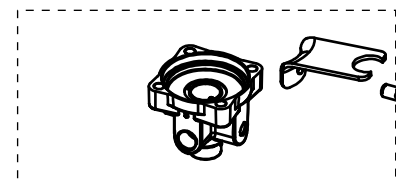
Spring



Internal parts kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	661023110M00000
Spring 42 - Yellow	0022042000
Spring 47 - Green	0022047000
Spring 50 - Red	0022050000
Internal parts kit	661203110M00000
Body kit	661013110M00000

CXPR 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

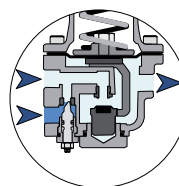
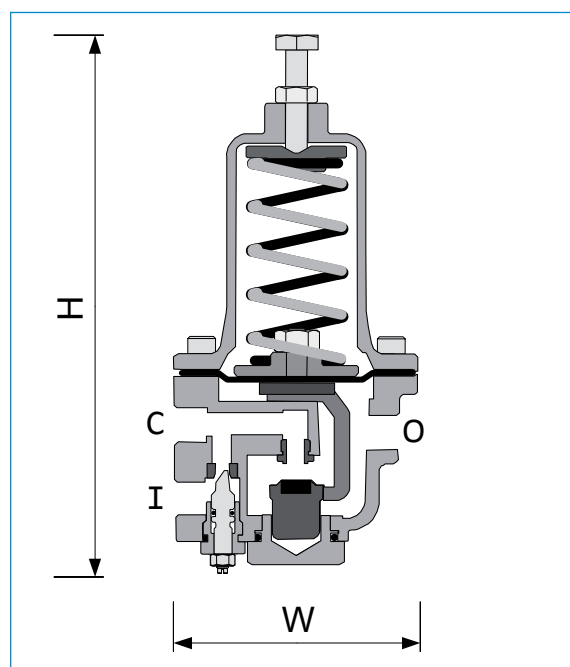
General		
Pressure rating	25 bar / 360 psi	
Pressure adjustment range	0.3 - 35 bar / 4 - 500 psi	
Fluid temperature	80°C max. / 176°F max.	
Weight	2.21 Kg / 4.9 lbs	
Materials	Standard	Optional*
Body and bonnet	Brass	SST or Bronze
Elastomers	NBR	EPDM
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	215 mm / 8.46"	
W (Width)	84 mm / 3.31"	
Port Connections		
I, C, O	1/4" NPT	

* other materials available upon demand

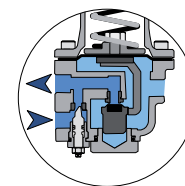
Springs adjustment range

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



Low pressure



High pressure

Installation

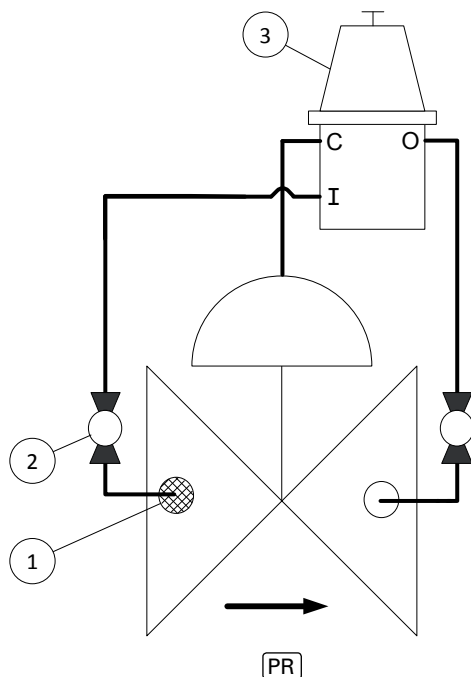
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Pressure reducing
I	Upstream
C	Valve Control Chamber
O	Downstream

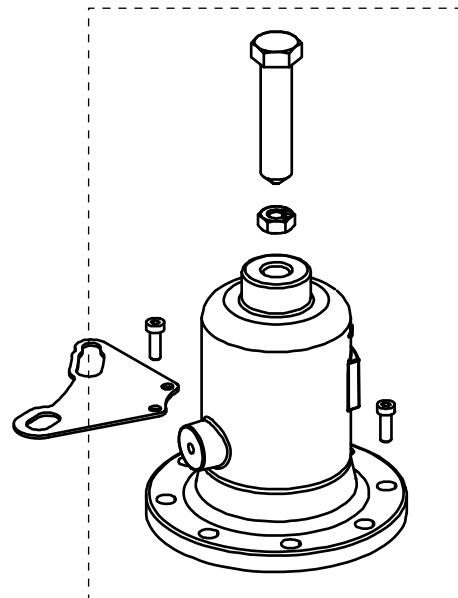
Main components:

1. Self flushing filter
2. Isolation ball valve
3. CXPR Pilot valve

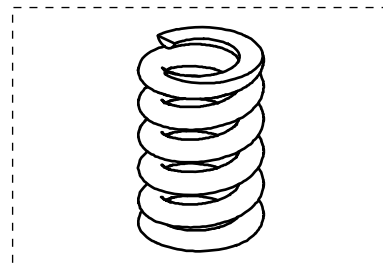


Spare parts

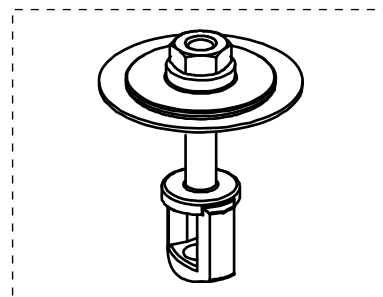
Bonnet kit



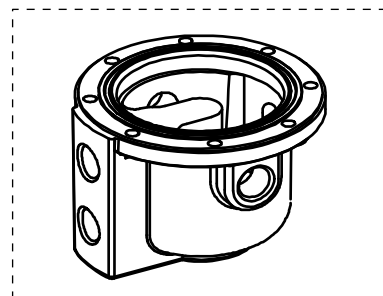
Spring



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

CXRS-D Differential-Reducing, 2-way metal pilot-valve

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



Features

- A 2-way pilot valve
- Remote-sensing, differential-pressure reducing
- Normally-open, allows water passage when the pressure-differential 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!
- Accurate and easy to adjust

Typical applications

- Pressure differential reducing - PD
- Flow rate control valves - FR

Technical data

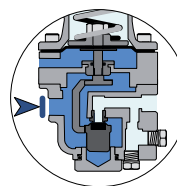
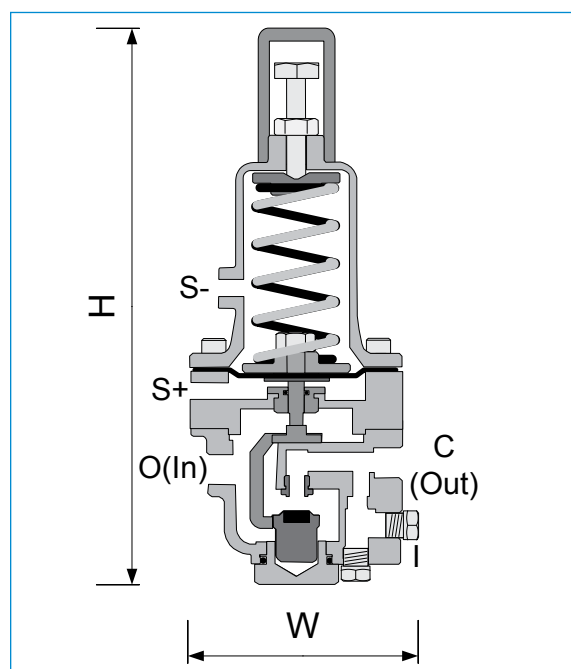
General		
Pressure rating	25 bar / 360 psi	
Pressure adjustment range	0.3 - 19 bar / 4 - 275 psi	
Fluid temperature	80°C max. / 176°F max.	
Weight	2.91 Kg / 6.4 lbs	
Materials	Standard	Optional*
Body and bonnet	Brass	SST or Bronze
Elastomers	NBR	EPDM
Internal parts	SST+Brass	
Spring	SST	
Dimensions		
H (Height) max.	215 mm / 8.46"	
W (Width)	84 mm / 3.31"	
Port Connections		
I, O, S-	1/4" NPT	
S+	1/8" NPT	

* other materials available upon demand

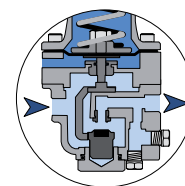
Springs adjustment range

Spring number	bar	psi
53 (Std.)	3 - 19	44 - 275
108	0.3 - 3.5	4 - 50

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



High differential pressure



Low differential pressure

Installation

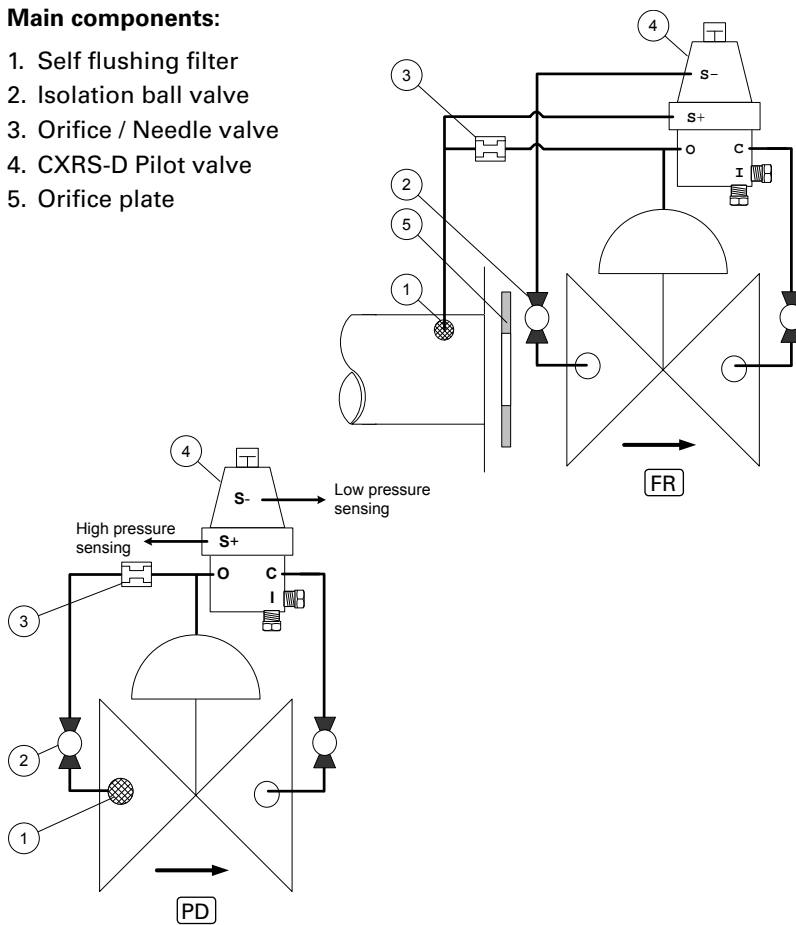
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Pressure differential reducing
O	Upstream
C	Downstream
I	Plug
S+	High pressure sensing
S-	Low pressure sensing

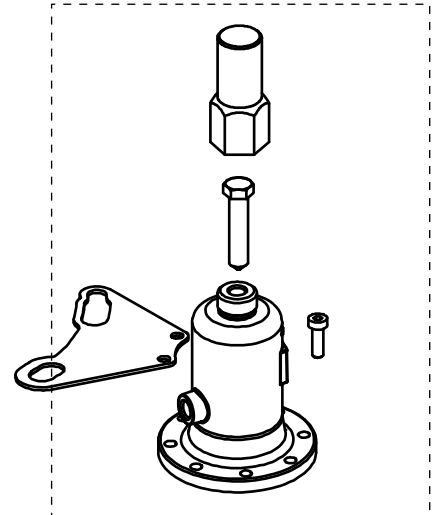
Main components:

1. Self flushing filter
2. Isolation ball valve
3. Orifice / Needle valve
4. CXRS-D Pilot valve
5. Orifice plate

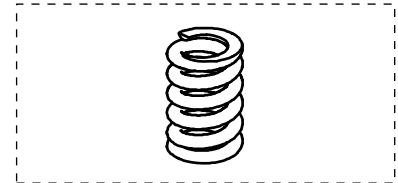


Spare parts

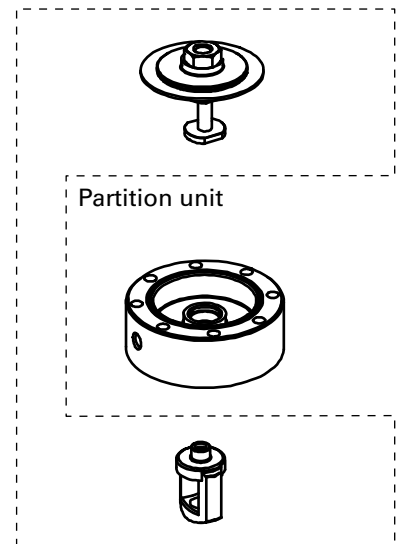
Bonnet kit



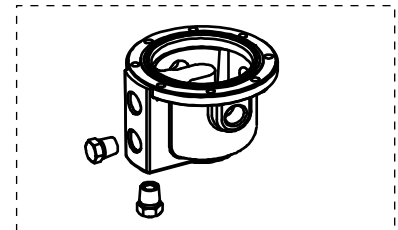
Spring



Diaphragm kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	66102CXRS00000
Spring 53	0022053000
Spring 108	0022010800
Diaphragm kit	66120CXPR000000
Partition unit	66125CXRS0
Body kit	66101CXRS00000

CXPS

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

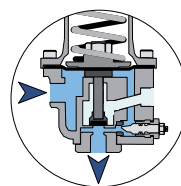
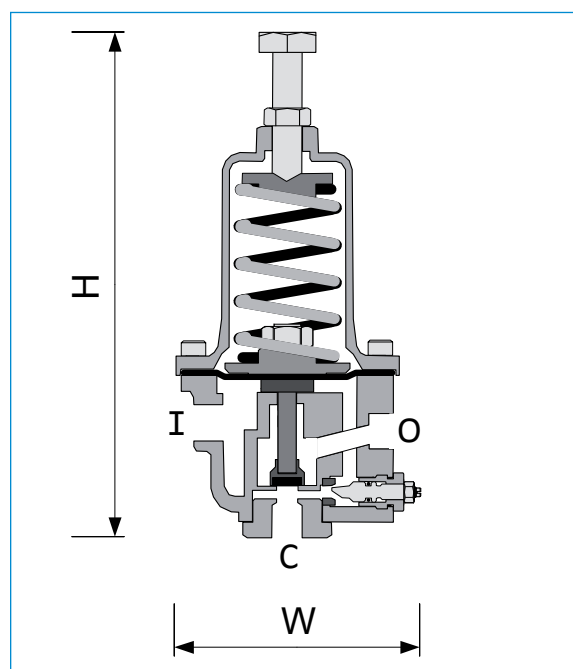
General		
Pressure rating	25 bar / 360 psi	
Pressure adjustment range	0.3 - 35 bar / 4 - 500 psi	
Fluid temperature	80°C max. / 176°F max.	
Weight	2.23 Kg / 4.92 lbs	
Materials	Standard	Optional*
Body and bonnet	Brass	SST or Bronze
Elastomers	NBR	EPDM
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	215 mm / 8.46"	
W (Width)	84 mm / 3.31"	
Port Connections		
I, C	1/4" NPT	
O	1/2" NPT	

* other materials available upon demand

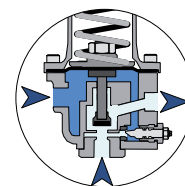
Springs adjustment range

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



Low pressure



High pressure

Installation

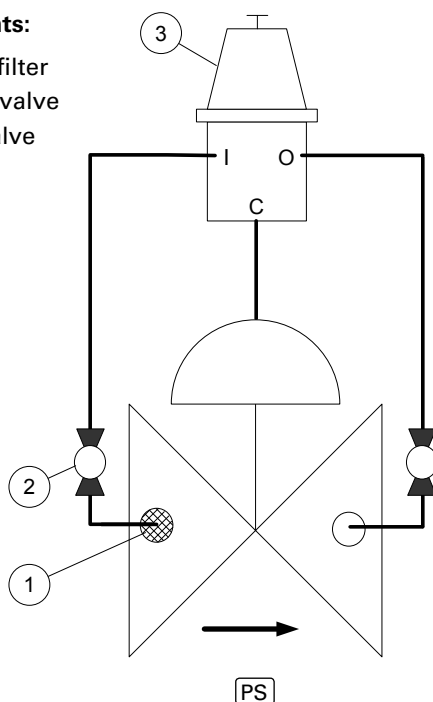
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Pressure sustaining
I	Upstream
C	Valve Control Chamber
O	Downstream

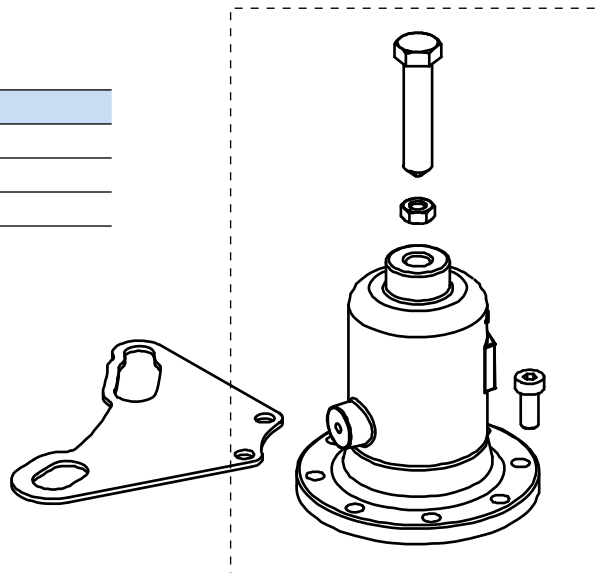
Main components:

1. Self flushing filter
2. Isolation ball valve
3. CXPS Pilot valve

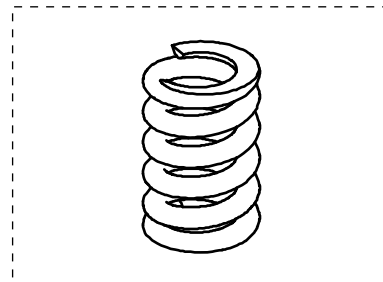


Spare parts

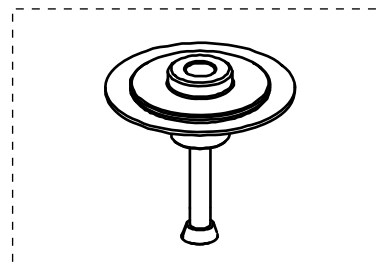
Bonnet kit



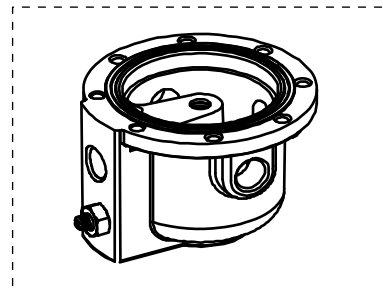
Spring



Diaphragm 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

CXSD

Differential Pressure Sustaining, 2-way metal pilot-valve

The CXSD is a 2-way, diaphragm actuated, spring-loaded differential pressure-sustaining pilot-valve, designed for control of hydraulic valves. The pilot valve modulates to keep a steady, pre-set differential pressure between two points in the water system. As the differential 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 and causing the main valve to open. As the differential 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

- A 2-way pilot valve
- Remote-sensing, differential-pressure sustaining
- Normally-close, will open when the differential 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
- Superb accuracy and repeatability

Typical applications

- Pressure differential sustaining - DI
- Remote-controlled pressure sustaining - PS/EL or PS/RC

Technical data

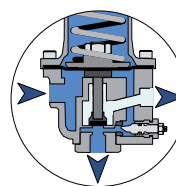
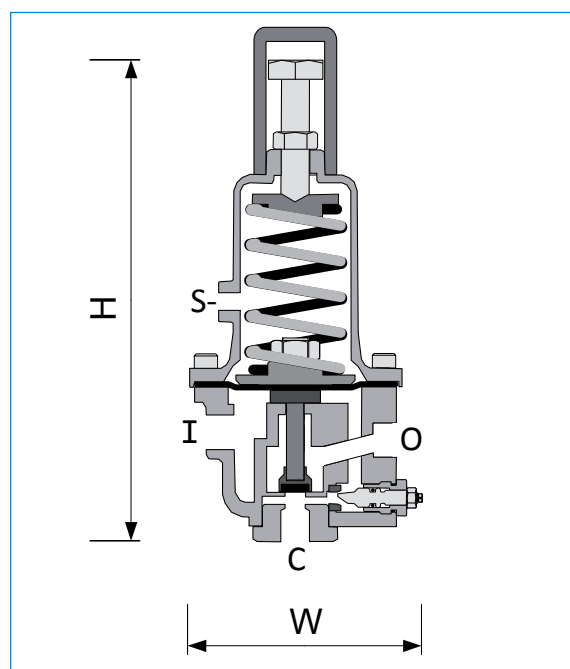
General		
Pressure rating	25 bar / 360 psi	
Pressure adjustment	0.3 - 19 bar / 4 - 275 psi	
Fluid temperature	80°C max. / 176°F max.	
Weight	2.23 Kg / 4.92 lbs	
Materials	Standard	Optional*
Body and bonnet	Brass	SST or Bronze
Elastomers	NBR	EPDM
Internal parts	SST+Brass	
Spring	SST	
Dimensions		
H (Height) max.	215 mm / 8.46"	
W (Width)	84 mm / 3.31"	
Port Connections		
I, C, S	1/4" NPT	
O	1/2" NPT	

* other materials available upon demand

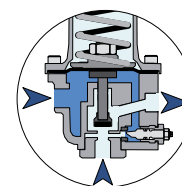
Springs adjustment range

Spring number	bar	psi
53 (Std.)	3 - 19	44 - 275
108	0.3 - 3.5	4 - 50

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



Low pressure



High pressure

Installation

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

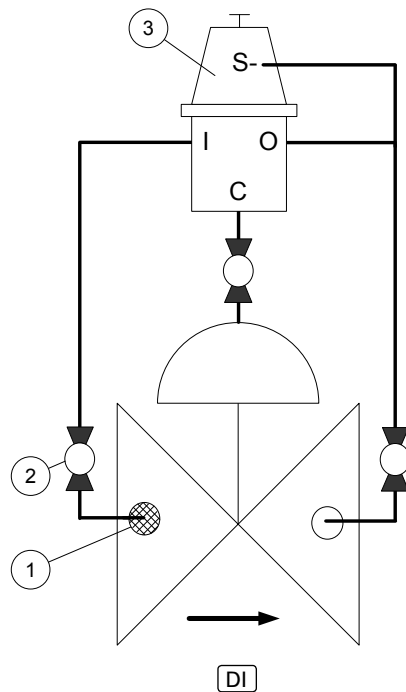
Connections:

Port	Pressure reducing
I	Upstream pressure
C	Valve Control Chamber
O	Downstream pressure
S-	Low pressure sensing*

* Used as command port for remote closing pressure in PS/EL and PS/RC

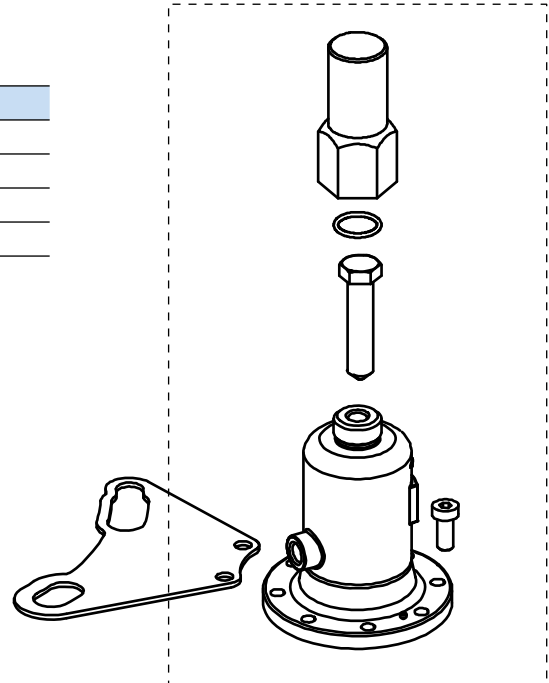
Main components:

1. Self flushing filter
2. Isolation ball valve
3. CXSD Pilot valve

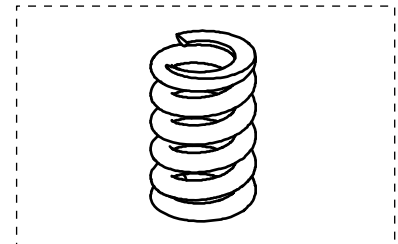


Spare parts

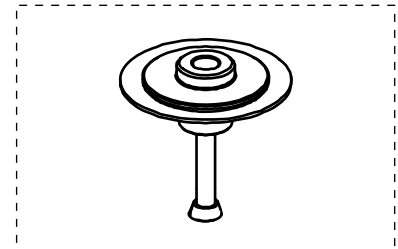
Bonnet kit



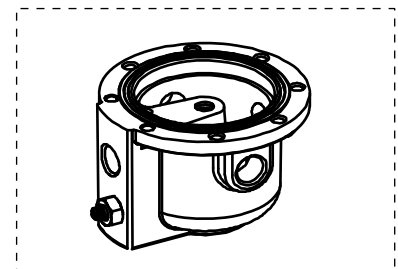
Spring



Diaphragm kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	66102CXRS000000
Spring 53	0022053000
Spring 108	0022010800
Internal parts kit	66120CXPS000000
Body kit	66101CXPS000000

31-310 Multi-purpose, 3-way pilot-valve

The 31-310 is a 3-way, diaphragm actuated, spring-loaded pilot-valve that is designed for control of pressure-regulating hydraulic-valves. The pilot valve serves 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 31-310 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

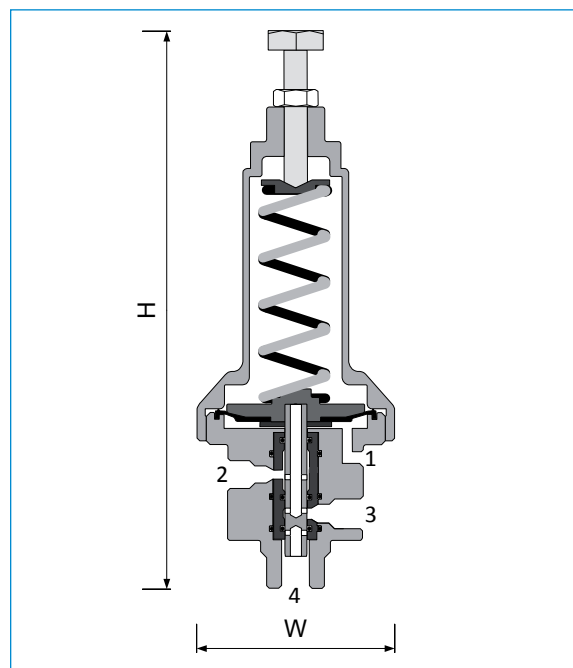
General		
Pressure rating	40 bar / 580 psi	
Pressure adjustment range	0.2 - 33 bar / 3 - 480 psi	
Fluid temperature	80°C max. / 175°F max.	
Weight	1.78 kg / 4 lbs	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	221 mm / 8.70"	
W (Width)	83 mm / 3.27"	
Port Connections		
1,2,3,4	NPT 1/4"	

* other materials available upon demand

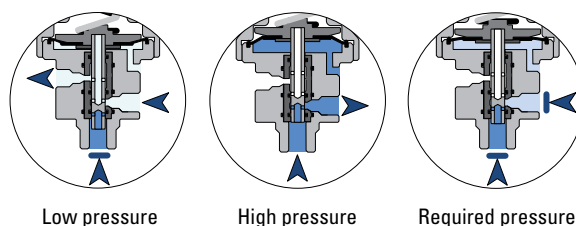
Springs adjustment range

Spring number	Color	bar	psi
47 (Std.)	Green	0.5 - 10	7 - 150
42	Yellow	0.3 - 6	4 - 90
50	Red	0.6 - 15	9 - 220
70	No color	0.2 - 0.5	3 - 7

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



Principle of operation (shown in "Pressure reducing" mode)



Installation

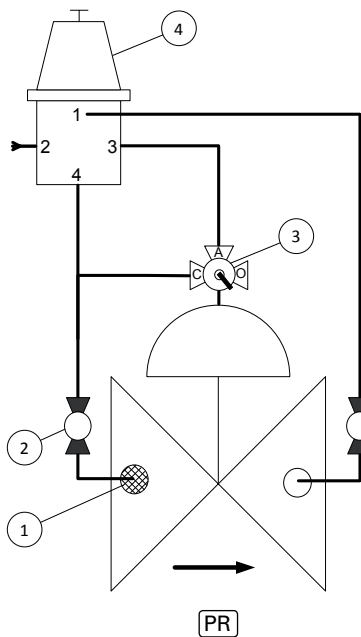
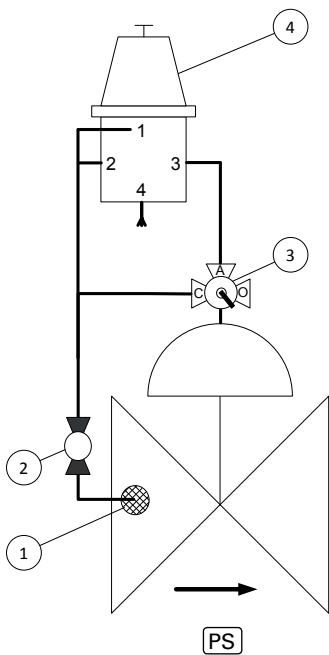
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Pressure reducing	Pressure sustaining
1	Downstream pressure	Upstream pressure
2	Vent	Upstream pressure
3	Valve Control Chamber	Valve Control Chamber
4	Upstream pressure	Vent

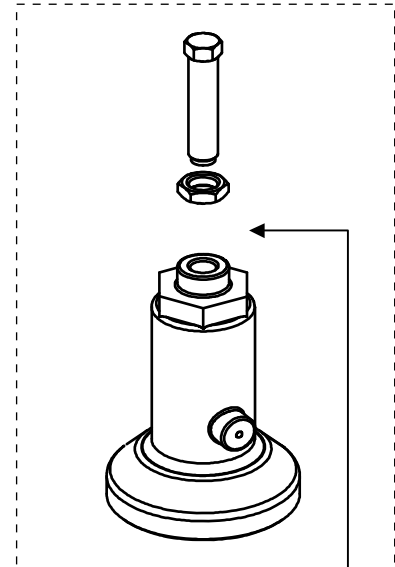
Main components:

1. Self flushing filter
2. Isolation ball valve
3. 3-way Manual selector valve
4. 31-310 Pilot valve

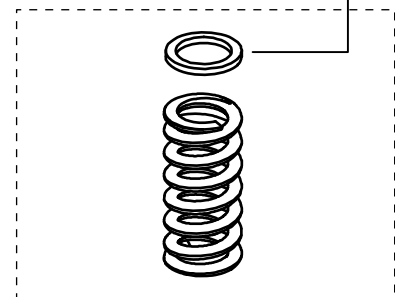


Spare parts

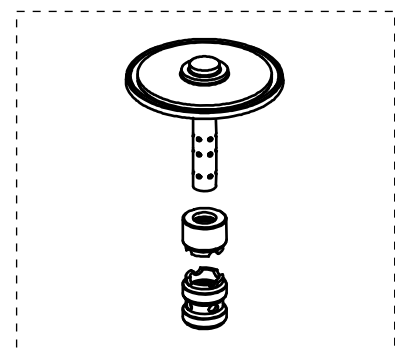
Bonnet kit



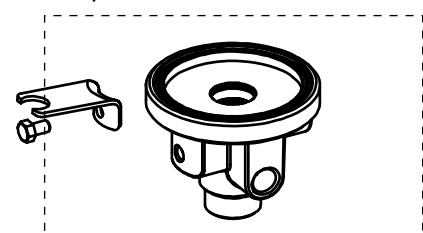
Spring



Diaphragm kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	661023131000000
Spring 42 - Yellow	0022042000
Spring 47 - Green	0022047000
Spring 50 - Red	0022050000
Spring 70 - No color	0022070000
Internal parts kit	661203131000000
Body kit	661013131000000

76-200 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 serves 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

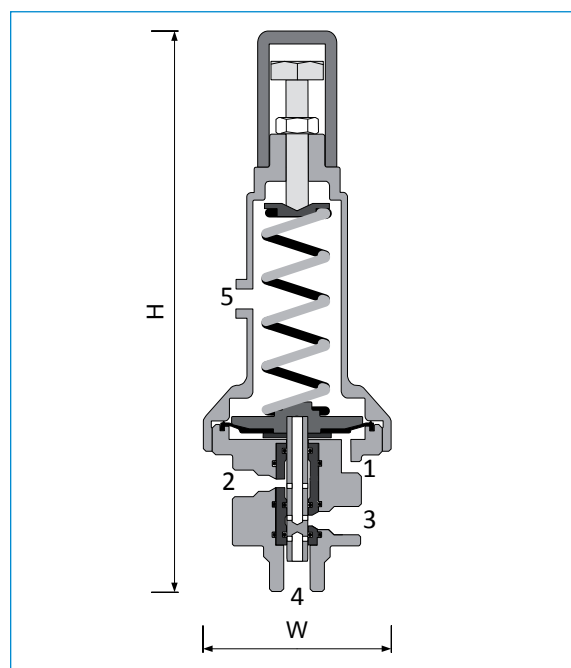
General		
Pressure rating	25 bar / 360 psi	
Pressure adjustment range	2 - 65 mt / 3 - 95 psi	
Fluid temperature	80°C max. / 176°F max.	
Weight	2.2 Kg. / 5 lbs.	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	210 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

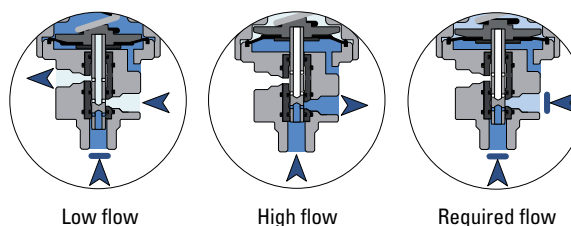
Springs adjustment range

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



Principle of operation
(shown in "Flow-control")



Installation

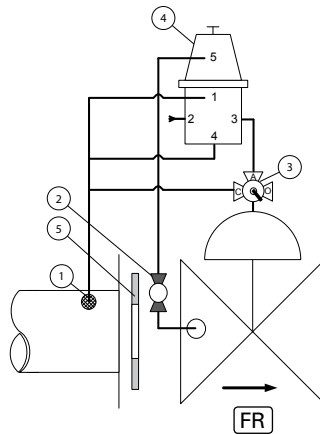
Sample drawing. Consult Dorot for the assembly design to fit your needs.

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

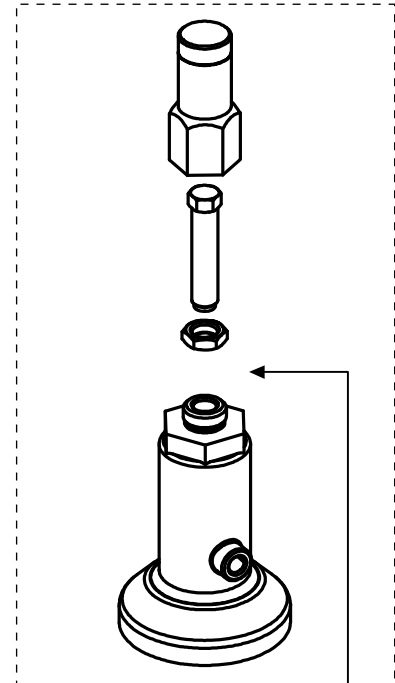
Main components:

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

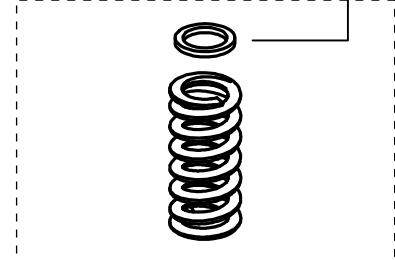


Spare parts

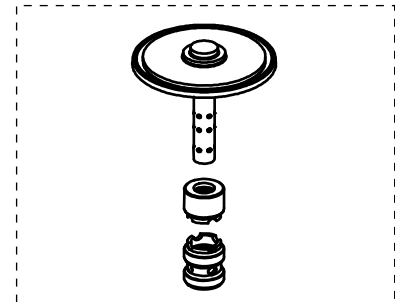
Bonnet kit



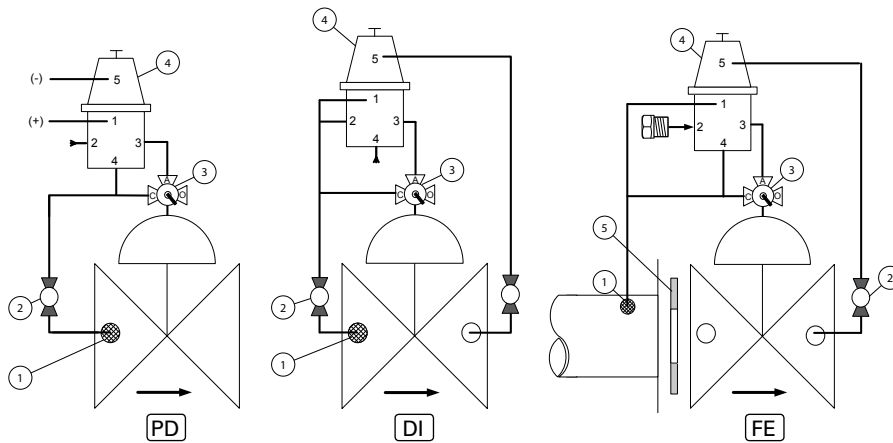
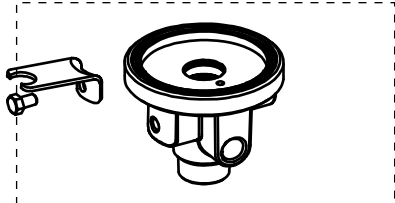
Spring



Diaphragm kit



Body kit



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

66-310 Multi-purpose Metal Pilot and Relay-Valve (66-31D Differential-pressure sensing)

The 66-310 is a diaphragm actuated, spring-loaded pilot-valve that is designed for control of hydraulic-valves. The pilot valve serves either as a 2-way pilot valve or as an adjustable relay valve that is used as a selector between the common port and the two other ports. The pilot valve will vent, or pressurize or lock the hydraulic valve's chamber as a factor of the relation between the regulated pressure and the adjusted set-value. The 66-310 pilot-valve can be used for implementing a wide range of hydraulic control-functions.

Features

- Same pilot can be used for various control functions by simply changing the way it is connected to the valve!
- Differential pressure sensing - 66-31D Optional
- Wide regulation range
- Easy to adjust
- Simple design and maximal dependability
- Can be used with any hydraulic control valve of any size
- Can be activated by hydraulic or pneumatic pressure

Typical applications

- Pressure sustaining valves - PS
- Quick pressure relief valves - QR
- Surge anticipating - RE
- Accelerator relay-valve (used for opening and closing valves quicker)
- Remote hydraulic-control with adjustable-pressure
- Pneumatically and hydraulically actuated deluge/pre-action valves - DE

Technical data

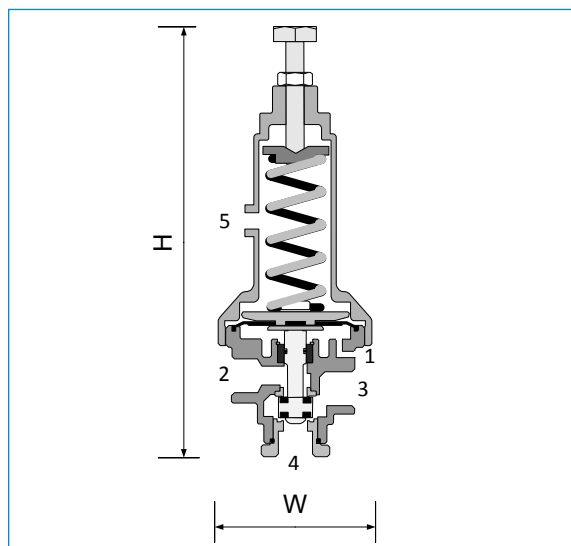
General		
Pressure rating	25 bar / 360 psi	
Pressure adjustment range	0.4 - 13 bar / 6 - 190 psi	
Fluid temperature	80°C max / 175°F max.	
Weight	1.9 kg / 4.2 lbs	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM
Internal parts	SST+Brass	
Spring	SST	
Dimensions		
H (Height) max.	230 mm / 9"	
W (Width)	84 mm / 3.3"	
Port Connections		
1	NPT 1/4"	
2,3,4	NPT 1/2"	
5	NPT 1/8"	

* other materials available upon demand

Springs adjustment range

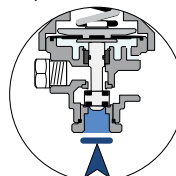
Spring number	Color	bar	psi
42 (Std.)	Yellow	0.4 - 5.5	6 - 80
47	Green	0.6 - 9	9 - 130
50	Red	0.7 - 17	10 - 245

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

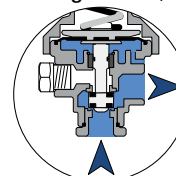


Principle of operation

(shown in "Pressure sustaining" mode)

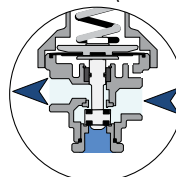


Low pressure

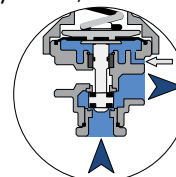


High pressure

(shown in Relay mode)



De-pressurized command



Pressurized command

Installation

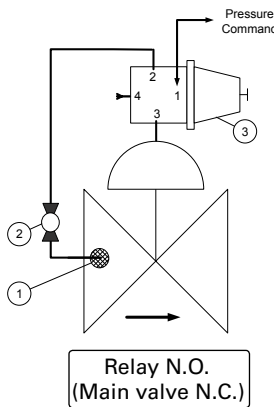
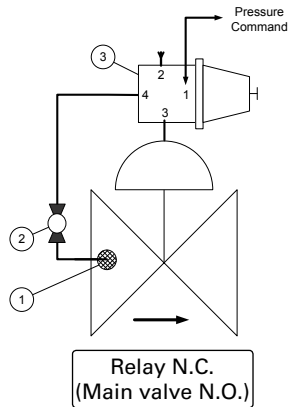
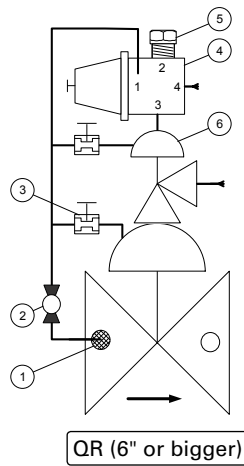
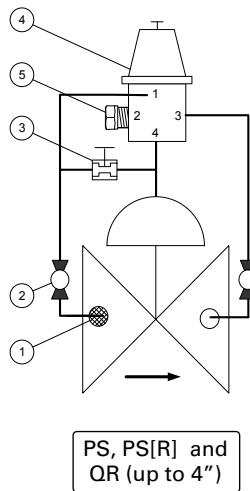
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	P. Sustaining / Quick relief	Quick relief (6" or bigger)	Relay N.O.	Relay N.C.
1	Upstream	Upstream	P. Command	P. Command
2	Plug	Plug	Upstream	Vent
3	Downstream / Vent	Relay C.Chamber	Control Chamber	Control Chamber
4	Control Chamber	Vent	Vent	Upstream

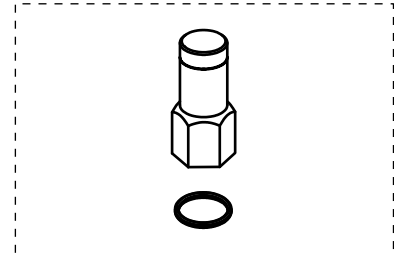
Main components:

1. Self flushing filter
2. Isolation ball valve
3. Needle valve
4. 66-310 Pilot valve
5. Plug
6. 2" Relay valve

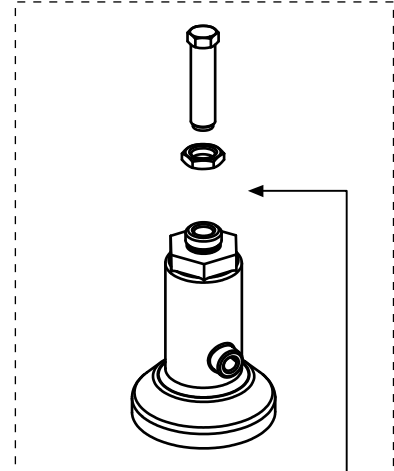


Spare parts

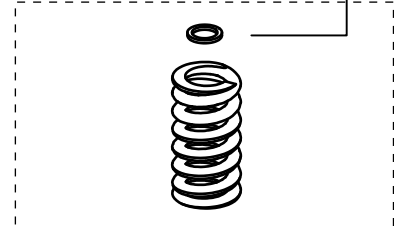
Adjustment bolt cap *



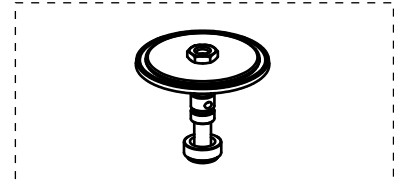
Bonnet kit



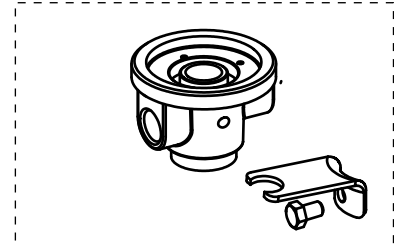
Spring



Diaphragm kit



Body kit



* Used in 66-31D version only

Catalogue numbers

Description	Catalogue number
Bonnet kit	661026631000000
Adjustment bolt cap	
Spring 42 - Yellow	0022042000
Spring 47 - Green	0022047000
Spring 50 - Red	0022050000
Internal parts kit	661206631000000
Body kit	661016631000000

68-710

Multi purpose, 2-way or 3-way metal pilot-valve

The 68-710 can be used as a 2-way, diaphragm actuated, spring-loaded pressure-sustaining pilot-valve, designed for control of hydraulic valves and as a 3-way adjustable relay-valve. As a pressure sustaining, the pilot valve modulates to keep a steady, pre-set pressure upstream of its location. As the upstream pressure rises above the adjusted value, the pilot-valve opens the water passage between its 4 and 3 port thus allowing the water in the main valve's chamber to vent to the downstream, causing the main valve to open. As the downstream pressure falls below the set point, the pilot valve throttles the internal passage, restricting the flow out of the (main) valve control chamber, enabling the valve to keep its position or to close (if needed).



Features

- Wide regulation range (can be set up to 25 bar)
- Large water passages allow high flow capacity and fast reaction
- Accurate and easy to adjust
- Simple design and maximal dependability
- Can be used with any hydraulic control valve at any size.
- Can be activated by hydraulic or pneumatic pressure

Typical applications

- Pressure sustaining valves - PS
- Pressure relief valves - PS[R]
- Quick pressure relief valves - QR
- Accelerator Relay-valve (Used to accelerates the opening and closing speed of large size valves)

Technical data

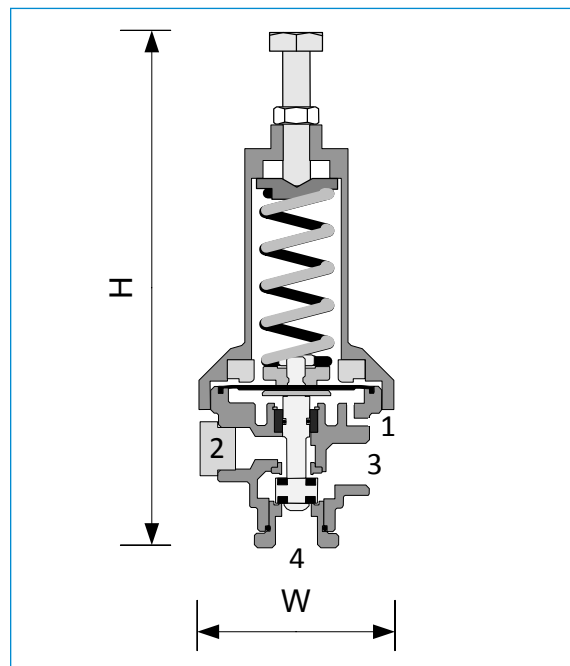
General		
Pressure rating	25 bar / 360 psi	
Pressure adjustment range	0.5 - 33 bar / 7 - 480 psi	
Fluid temperature	80°C max. / 175°F max.	
Weight	1.9 kg / 4.2 lbs	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM
Internal parts	SST+Brass	
Spring	SST	
Dimensions		
H (Height) max.	104 mm / 4.09"	
W (Width)	85 mm / 3.35"	
Port Connections		
1	NPT 1/4"	
2,3,4	NPT 1/2"	

* other materials available upon demand

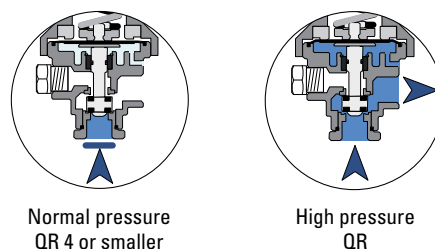
Springs adjustment range

Spring number	Color	bar	psi
47 (Std.)	Green	0.7 - 25	10 - 300
42	Yellow	0.5 - 10	7 - 150
50	Red	1 - 33	15 - 480

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



Principle of operation
(shown in "Quick pressure relief" mode)



Installation

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

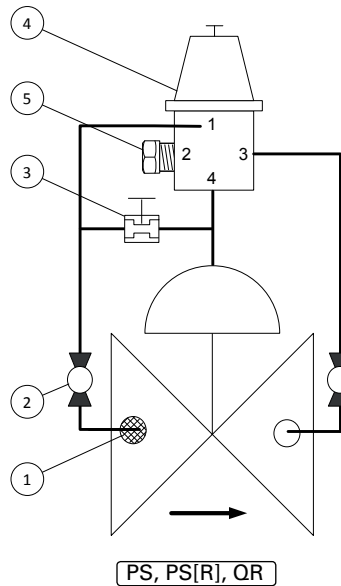
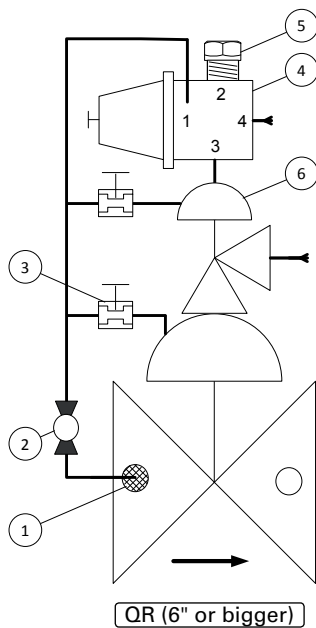
Connections:

Port	P. sustaining	Quick relief (up to 4")	Quick relief (6" or larger)	Adjustable Relay
1	Upstream	Upstream	Upstream	P. Command
2	Plug	Plug	Plug	Plug
3	Control Chamber	Downstream / Vent	Relay C.Chamber	Control Chamber
4	Vent	Control Chamber	Vent	Vent

* Note: In all applications, it is optional to replace the connections to ports 3 and 4

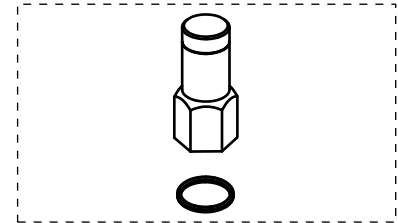
Main components:

1. Self flushing filter
2. Isolation ball valve
3. Needle valve
4. 68-710 Pilot valve
5. Plug
6. 2" Relay valve

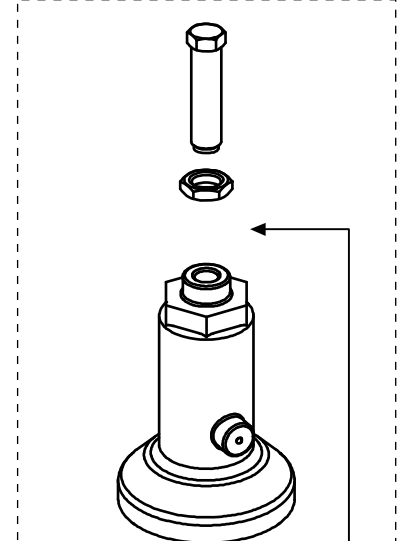


Spare parts

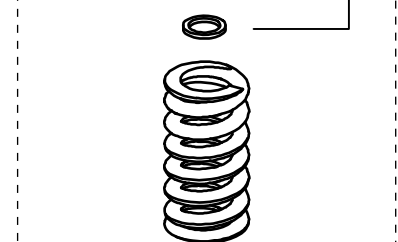
Adjustment bolt cap*



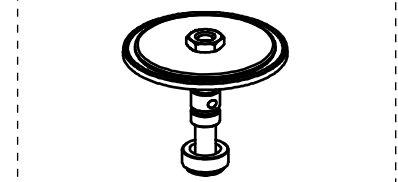
Bonnet kit



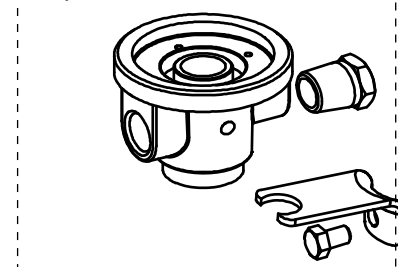
Spring



Diaphragm kit



Body kit



* Used in 68-710 differential version only

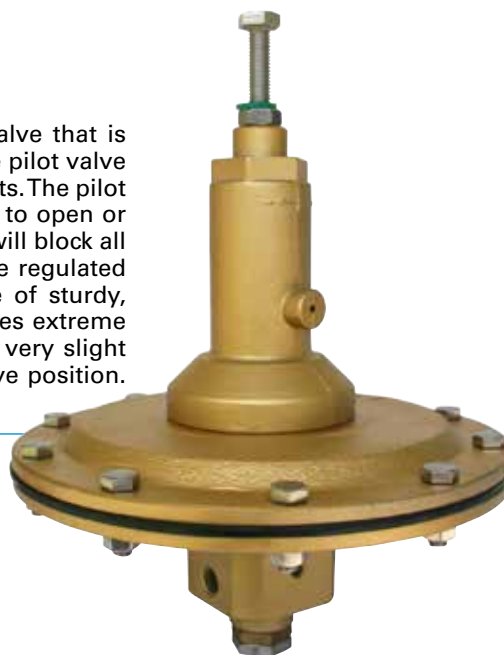
Catalogue numbers

Description	Catalogue number
Bonnet kit	661026871000000
Spring 47 - Green	0022047000
Spring 42 - Yellow	0022042000
Spring 50 - Red	0022050000
Internal parts kit	661206871000000
Body kit	661016871000000

70-110

Altitude control, 3-way metal pilot-valve

The 70-110 is a 3-way, diaphragm actuated, spring-loaded pilot-valve that is designed for the control of pressure-regulating hydraulic valves. The pilot valve serves as a selector between the common port and the two other ports. The pilot valve will vent or pressurize the control chamber of the main valve to open or to close, as a factor of the regulated pressure value. The pilot valve will block all ports, thus maintaining the main valve locked in position, when the regulated pressure equalize to the set-value. The 70-110 pilot-valve is made of sturdy, high-quality materials and has an enlarged diaphragm, which creates extreme sensitivity to pressure variations at the sensor port, so that even a very slight rise or fall of water level causes immediate change of the pilot valve position. The distance between the high and low water level is adjustable.



Features

- A 3-way pilot valve designed for altitude valves
- Operating under two possible positions - high/low level
- Unique adjustable differential level control
- Can be used with any hydraulic control valve of any size
- Fully vents the control chamber to open (no hydrostatic head on the valve's chamber) - minimize pressure losses
- Can be used with any hydraulic control valve of any size (as standard used with valve sizes up to 6"/150mm)
- Wide regulation range
- Accurate and easy to adjust
- Simple design
- Can be activated by hydraulic or pneumatic pressure

Typical applications

- Altitude control valves - AL
- High sensitivity pressure reducing - PR
- High sensitivity pressure sustaining - PS

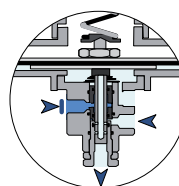
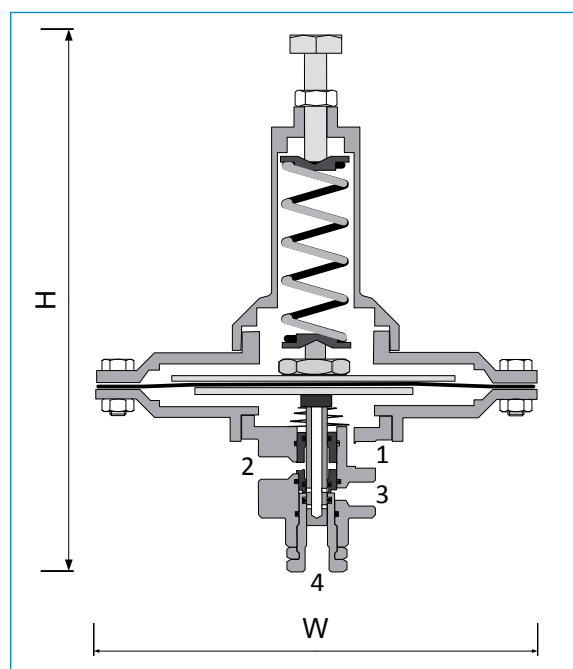
Technical data

General		
Pressure rating	25 bar / 360 psi	
Pressure adjustment range	0.5 - 14 mt / 7 - 20 psi	
Differential adjustment - Green Spring	0.3 - 4 mt / 1 - 13 ft	
Differential adjustment - Red Spring	0.3 - 4 mt / 1 - 13 ft	
Fluid temperature	80°C max. / 176°F max.	
Weight	7.2 Kg. / 16 lbs.	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Diaphragm housing	Bronze	SST
Elastomers	NBR	EPDM
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	260 mm / 10.24"	
W (Width)	220 mm / 8.66"	
Port Connections		
1,2,3,4	NPT 1/4"	

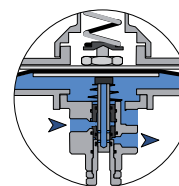
* other materials available upon demand

Springs adjustment range

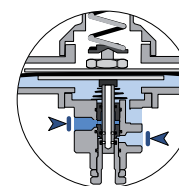
Spring number	Color	meter	psi
47 (Std.)	Green	0.5 - 7	7 - 10
50	Red	1 - 14	15 - 20



Low pressure



High pressure



Required pressure

Installation

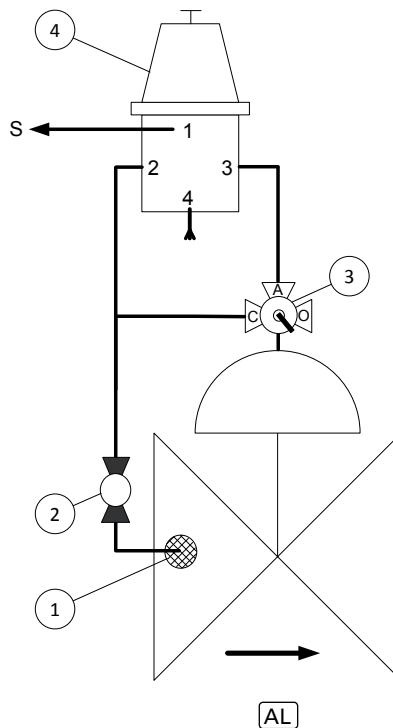
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Altitude
1	Sensing
2	Upstream
3	Valve Control Chamber
4	Vent

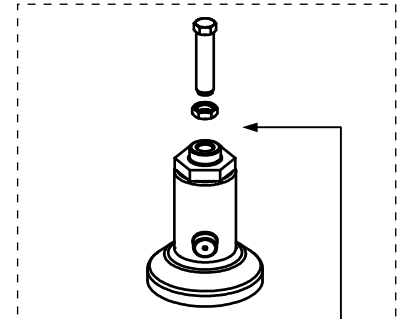
Main components:

1. Self flushing filter
2. Isolation ball valve
3. 3-way Manual selector valve
4. 70-110 Pilot valve

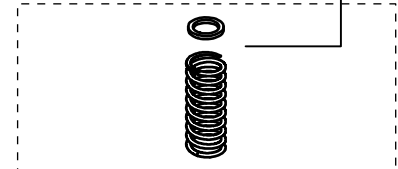


Spare parts

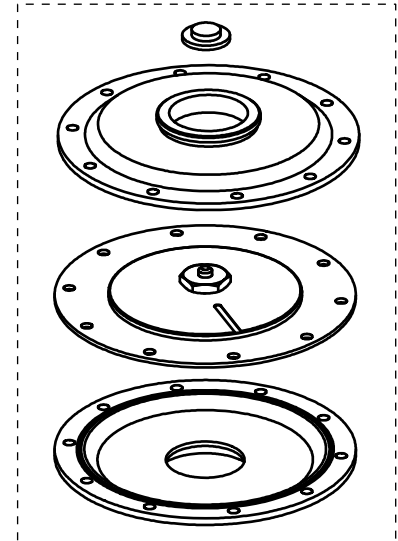
Bonnet kit



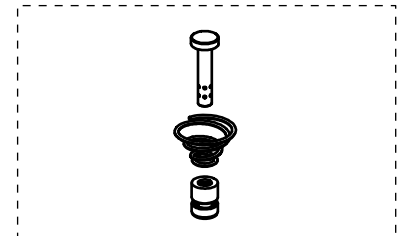
Spring



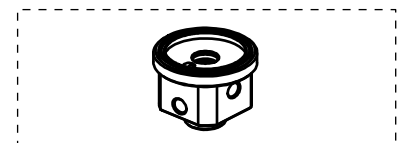
Diaphragm and housing kit



Internal parts kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	661027011000000
Spring 47 - Green	0022047000
Spring 50 - Red	0022050000
Diaphragm and housing kit	6606870111
Internal parts kit	661207011000000
Body kit	661017011000000

CXAL High-Sensitivity Pressure-reducing and Altitude Control, 2-way metal pilot-valve

The CXAL is a high-sensitivity, 2-way, diaphragm actuated and spring-loaded pressure reducing pilot-valve, designed for control of hydraulic valves. The pilot valve modulates to keep a steady, pre-set downstream pressure or level in a downstream elevated-tank. As the downstream pressure or level falls below the set-value, the pilot valve opens a full passage between its "COM" 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 needed).of hydraulic control-functions.



Features

- A pressure-reducing 2-way pilot valve - highly accurate for low-pressure setting
- Normally-open, allows water passage when downstream pressure is lower than the adjusted spring setting
- Wide regulation range
- Superb accuracy and repeatability
- Easy to adjust
- Restrictor needle - integral in the valve design

Typical applications

- Modulating Altitude control valves - AL
- High precision - Pressure reducing control valves - PR

Technical data

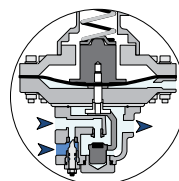
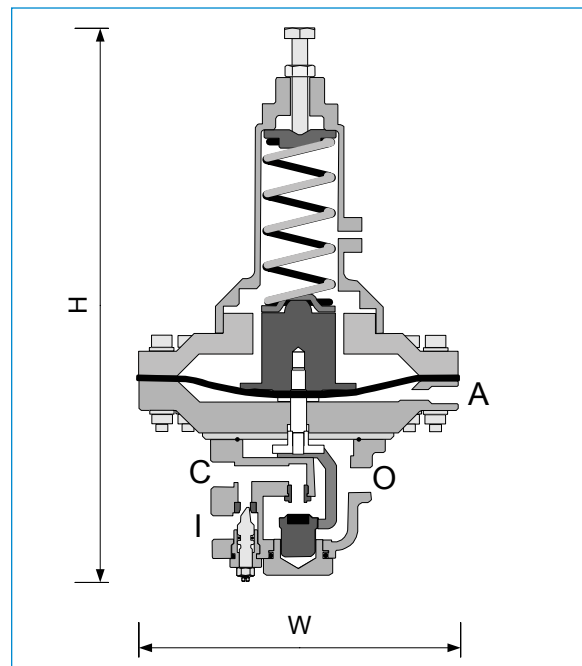
General		
Pressure rating	25 bar / 360 psi	
Pressure adjustment range	1 - 65 mt / 1.5 - 95 psi	
Fluid temperature	60°C max. / 140°F max.	
Weight	3.5 Kg. / 7.7 lbs.	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Diaphragm plates	GRPA	
Elastomers	NBR	EPDM
Internal parts	SST+Brass	
Spring	SST	
Dimensions		
H (Height) max.	285 mm / 11.2"	
W (Width)	157 mm / 6.2"	
Port Connections		
I, O, C, A	1/4" NPT	

* other materials available upon demand

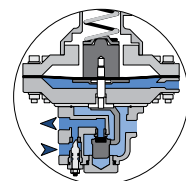
Springs adjustment range

Spring number	Color	meter	psi
47 (Std.)	Yellow	1 - 18	1.5 - 26
42	Green	1 - 46	1.5 - 67
50	Red	2.5 - 65	3.5 - 95

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



Low level /
Low downstream pressure



High level /
High downstream pressure

Installation

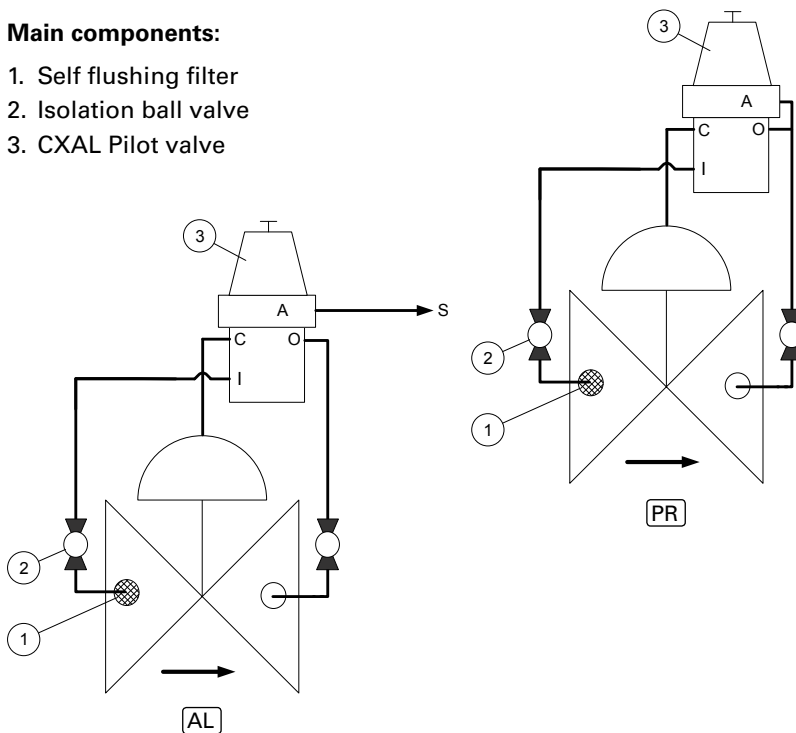
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Altitude	P. Reducing
I	Upstream	Upstream
C	Valve Control Chamber	Valve Control Chamber
O	Downstream	Downstream
A	Tank	Downstream

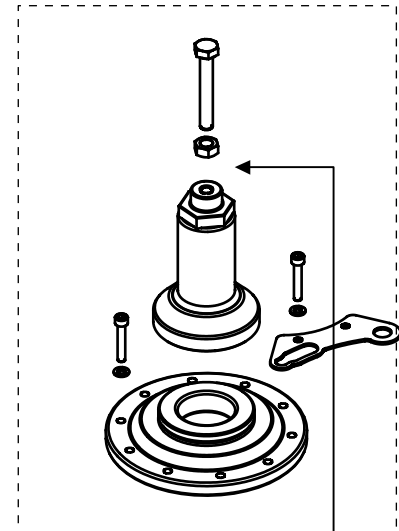
Main components:

1. Self flushing filter
2. Isolation ball valve
3. CXAL Pilot valve

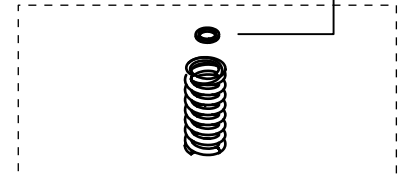


Spare parts

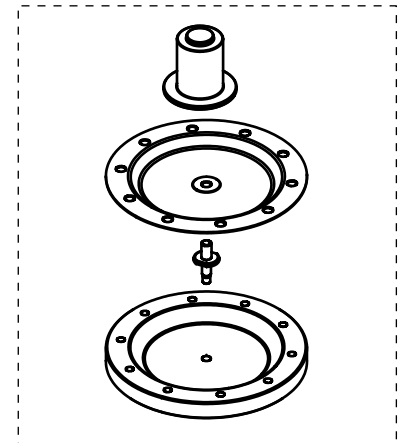
Bonnet kit



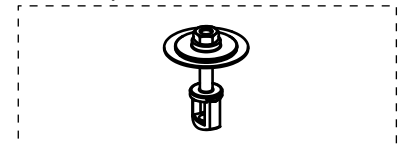
Spring



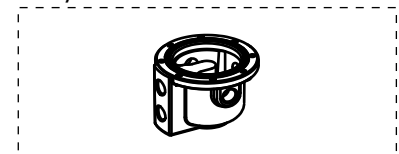
Diaphragm and housing kit



Internal parts kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	661023131000000
Spring 42 - Yellow	0022042000
Spring 47 - Green	0022047000
Spring 50 - Red	0022050000
Diaphragm and housing kit	66068CXALO
Internal parts kit	66120CXAL000000
Body kit	66101CXPRO00000

70-410 Multi-purpose, 2-way metal pilot-valve

The 70-410 is a 2-way, diaphragm actuated, spring-loaded multi purpose pilot valve, designed for control of hydraulic-valves. The pilot valve modulates to keep a steady, pre-set pressure. As the sensed pressure falls below the set point, the pilot valve opens the water passage between its "IN" and "OUT" ports thus allowing the water in the main valve's chamber to vent to the downstream, and open the main valve. As the sensed pressure rises above the set point, the pilot-valve throttles the internal passage, restricting the flow out of the main valve control chamber, enabling the valve to keep its position or to close (if necessary).



Features

- A highly accurate, 2-way pilot valve - for low-pressure setting
- Normally-open, allows water passage when downstream pressure is lower than the adjusted spring setting
- Wide regulation range
- Superb accuracy and repeatability
- Easy to adjust

Typical applications

- High precision pressure reducing control valves - PR
- Flow-rate control valves - FR
- Altitude control valves - AL

Technical data

General		
Pressure rating	25 bar / 360 psi	
Pressure adjustment range	1 - 60 mt / 1.5 - 90 psi	
Fluid temperature	80°C max. / 176°F max.	
Weight	1.98 Kg. / 4.4 lbs.	
Materials	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	EPDM
Internal parts	SST	
Spring	SST	
Plunger	SST	
Dimensions		
H (Height) max.	210 mm / 8.3"	
W (Width)	86 mm / 3.4"	
Port Connections		
I, O, S+	NPT 1/4"	
S-	NPT 1/8"	

* other materials available upon demand

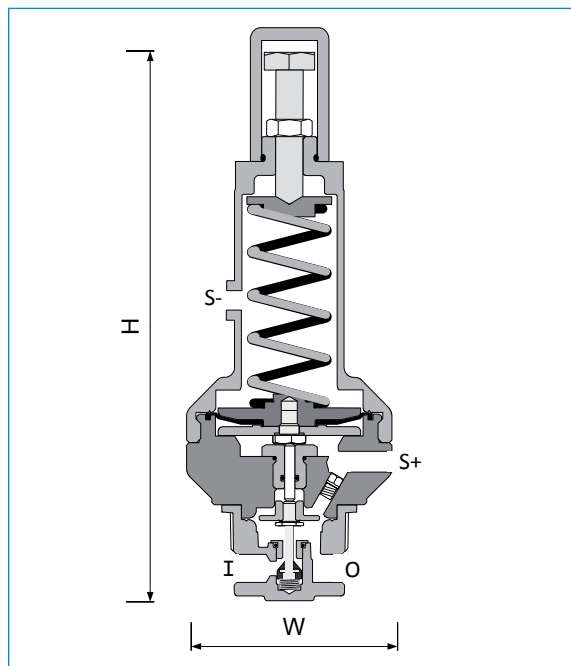
Springs adjustment range - FR

Spring number	Color	meter	psi
34 (Std.)	No color	1 - 8	1.5 - 12

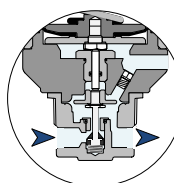
Springs adjustment range - AL

Spring number	Color	meter	psi
34 (Std.)	No color	1 - 8	1.5 - 12
42	Yellow	5 - 30	7 - 45
47	Green	10 - 60	14 - 90

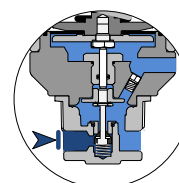
Adjustment: Turn the adjusting screw clockwise to increase the set point



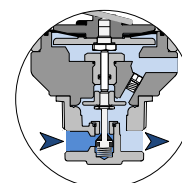
Principle of operation (shown in "Altitude control" mode)



Low pressure



High pressure



Required pressure

Installation

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

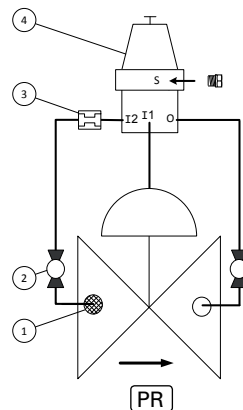
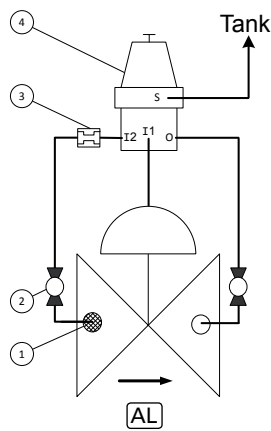
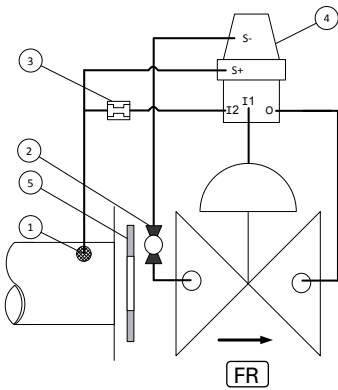
Connections:

Port	Pressure reducing*	Flow rate	Altitude
I1	Valve Control Chamber	Valve Control Chamber	Valve Control Chamber
I2	Upstream	Upstream	Upstream
O	Downstream	Downstream	Downstream
S(+)	Plug	Upstream orifice	Tank
S(-)	-	Downstream orifice	-

* Internal soc. hex screw removed

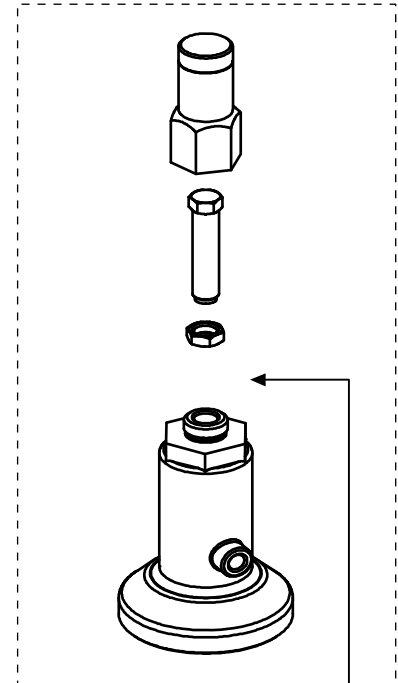
Main components:

1. Self flushing filter
2. Isolation ball valve
3. Restriction
4. 70-410 Pilot valve
5. Orifice plate

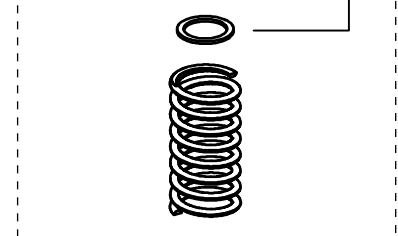


Spare parts

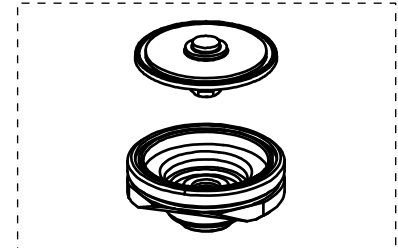
Bonnet kit



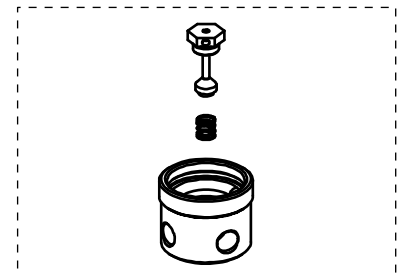
Spring



Internal parts kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	661027041000000
Spring 34	0022034000
Spring 42 - Yellow	0022042000
Spring 47 - Green	0022047000
Internal parts kit	661207041000000
Body kit	661017041000000

70-300 Modulating, 2-way float actuated pilot-valve

The 70-300 is a 2 way, float pilot-valve that is designed for the control of the constant level control valves. The float pilot-valve will vent or pressurize the control chamber of the main valve to open or to close, in direct proportion to the level changes. It proportionally modulates open or throttle closed the main valve, maintaining constant water level, regardless of fluctuating demand.

Features

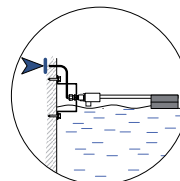
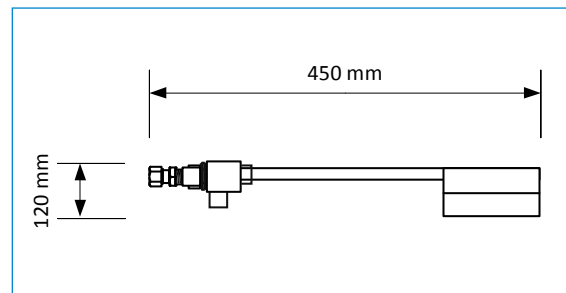
- No overflow - drip tight closure
- "Soft" closure (regulating)
- Inlet flow equalize to the demand flow (constant level)
- External simple installation, easy maintenance
- Drip tight shut-off
- Accurate and easy to adjust
- Simple design

Typical applications

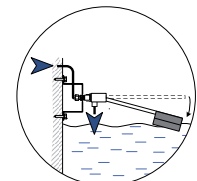
- Level control - modulating float pilot-valve - FL

Technical data

General	
Pressure rating	10 bar / 150 psi
Fluid temperature	50°C max. / 120°F max.
Materials	
Pilot body	GRP
Internal parts	NBR
Float	Plastic
Float rod	Plastic
Port Connections	
	NPT 1/4"



High level



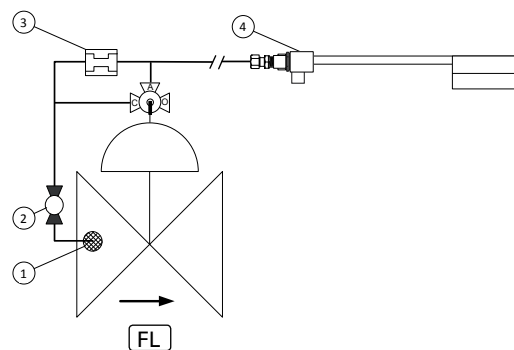
Low level

Installation

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

Main components:

1. Self flushing filter
2. Cock valve
3. Needle valve / Restrictor
4. 70-300 Float pilot valve



70-400 Modulating, 2-way float actuated pilot-valve

The 70-400 is a 2 way, float pilot-valve that is designed for the control of the constant level control valves. The float pilot-valve will vent or pressurize the control chamber of the main valve to open or to close, in direct proportion to the level changes. It proportionally modulates open or throttle closed the main valve, maintaining constant water level, regardless of fluctuating demand.



Features

- No overflow - drip tight closure
- Can be used with any hydraulic control valve of any size
- "Soft" closure (regulating)
- Inlet flow equalize to the demand flow (constant level)
- External simple installation, easy maintenance
- Drip tight shut-off
- Accurate and easy to adjust
- Simple design

Typical applications

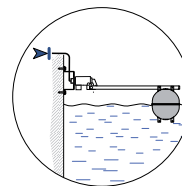
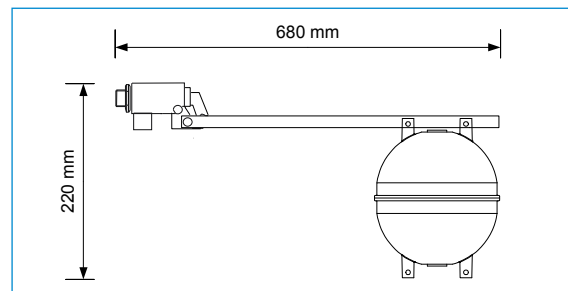
- Level control - modulating float pilot-valve - FL

Technical data

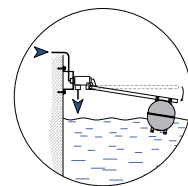
General		
Pressure rating	16 bar / 230 psi **	
Fluid temperature	80°C max. / 175°F max.	
Materials	Standard	Optional*
Pilot body	Brass	SST
Seat	SST	
Float	PP	SST
Float rod	Brass	SST
Port connections		
	BSP (male) 1/2"	

* other materials available upon demand

** Optional 25 bar / 360 psi (for SST pilot body material)



Max. level



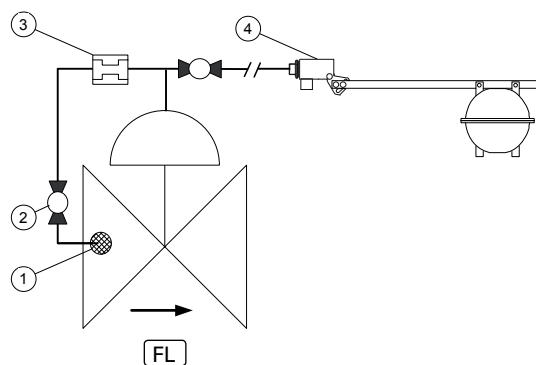
Low level

Installation

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

Main components:

1. Self flushing filter
2. Cock valve
3. Needle valve / Restriction
4. 70-400 Float pilot valve



70-550

Differential, 3 or 4-way vertical float actuated pilot-valve

The 70-550 is a 3 way, float pilot-valve that is designed for the level control valves. The float slides along the rod and positions the pilot control when it reaches either, the high or low level stoppers, venting or pressurizing the control chamber of the main valve to open or close. The difference between the high and low level can be adjusted by positioning the stoppers on the float rod.



Features

- No overflow - drip tight close
- On-Off Non-modulating action
- Can be used with any hydraulic control valve of any size
- The maximum/minimum tank level is adjustable
- Can be used with external/supplementary pressure source
- Highly reliable operation
- Wide differential level range
- Simple installation, easy maintenance

Typical applications

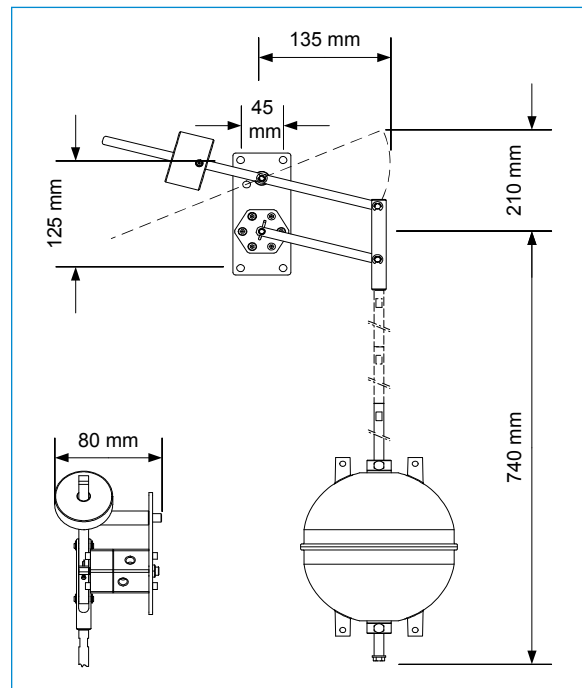
- Level control - Differential control by vertical float-pilot valve - FLDI1

Technical data

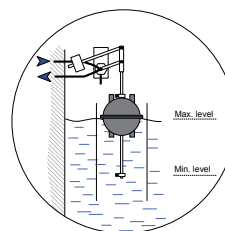
General		
Pressure rating	25 bar / 360 psi	
Fluid temperature	80°C max. / 175°F max.	
Min. level differential	0.15 meter / 0.49 ft	
Max. level differential (3 rods)**	1.8 meter / 5.9 ft	
Materials	Standard	Optional*
Pilot body	Brass	SST
Internal parts	SST / Brass	SST
Float	PP	SST
Float rod	SST	
Port Connections		
P,T	NPT 1/4"	

* other materials available upon demand

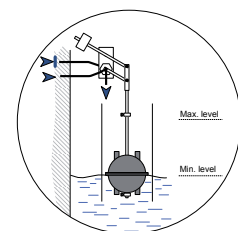
** Extra counterweight required if third extension rod is used



NOTE: Each additional rod add 600 mm to the total length



Max. level



Min. level

Installation

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

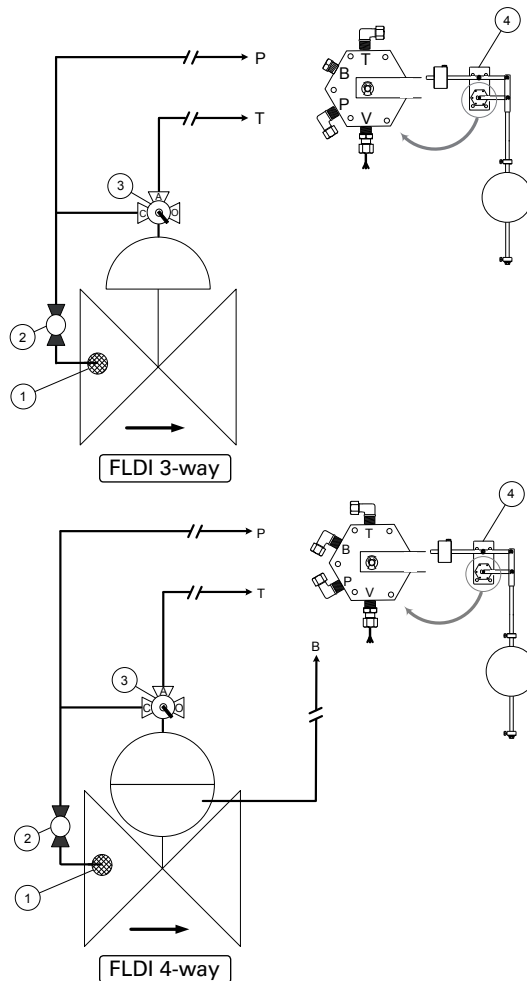
Connections:

Port	Level control
P	Upstream
T	Valve Control Chamber
V	Vent
B	Plug*

* In 4way loop connected to the bottom chamber of valve or relay-valve

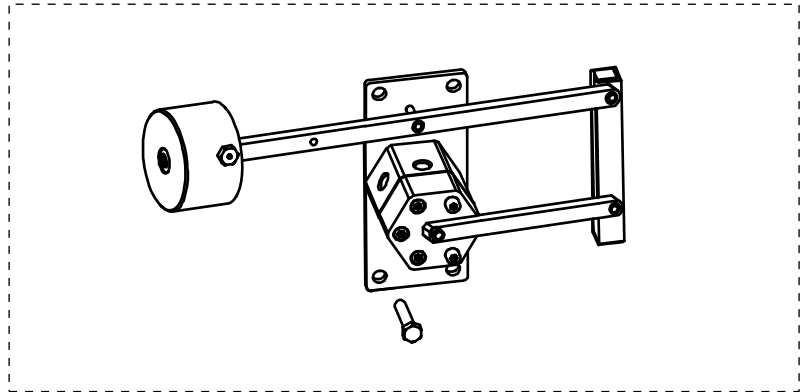
Main components:

1. Self flushing filter
2. Isolation ball valve
3. 3-way Manual selector valve
4. 70-550 Float pilot valve

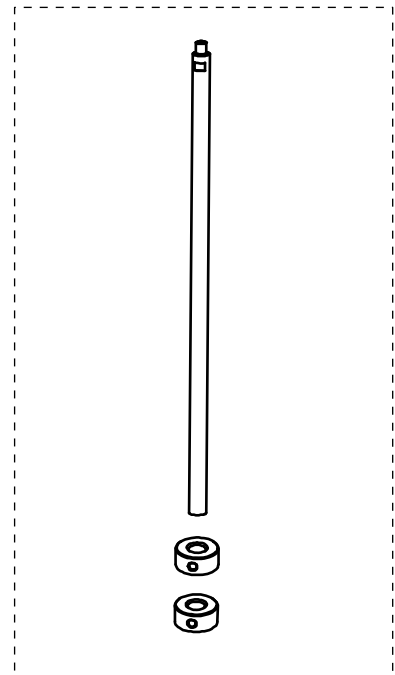


Spare parts

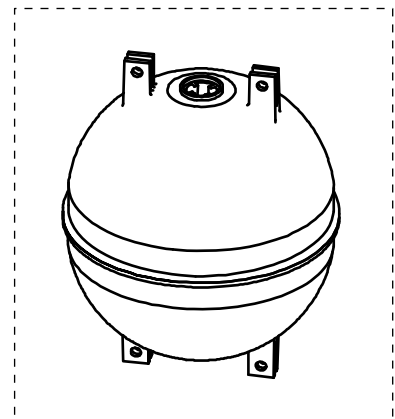
Pilot kit



Kit rod



Float



Catalogue numbers

Description	Catalogue number
Pilot kit	6617055003
Kit rod	6617055004
Float	4453070000

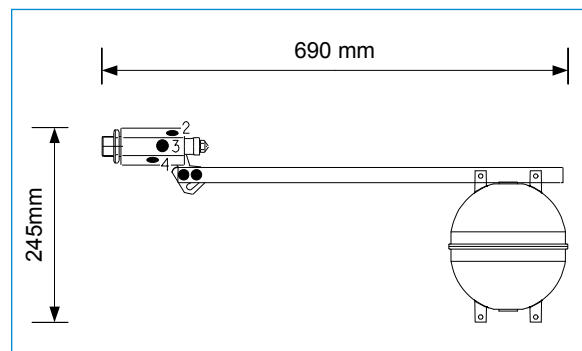
70-610 Differential, 3-way horizontal float actuated pilot-valve

The 70-610 is a 3-way, float pilot-valve that is designed for the level control valves. The float positions the pilot control to open when it reaches a preset low level, and to close drip tight when it reaches a preset high level. The difference between the low and high level can be adjusted.



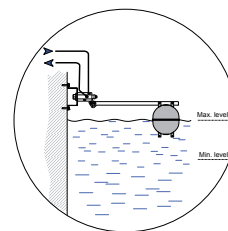
Features

- No overflow - drip tight close
- On-Off Non-modulating action
- Can be used with any hydraulic control valve of any size
- The maximum/minimum tank level is adjustable
- Can be used with external/supplementary pressure source
- Highly reliable operation
- Simple installation, easy maintenance
- Accurate and easy to adjust
- Simple design

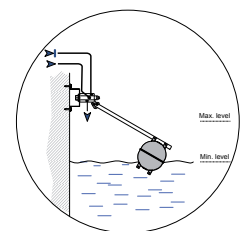


Typical applications

- Level control - Differential control by horizontal float-pilot valve - FLDI2



Max. level



Min. level

Technical data

General		
Pressure rating	25 bar / 360 psi	
Fluid temperature	80°C max. / 175°F max.	
Min. level differential	0.15 meter / 0.49 ft	
Max. level differential	0.6 meter / 1.96 ft	
Materials	Standard	Optional*
Pilot body	Brass	SST
Internal parts	SST / Brass	SST
Float	PP	SST
Float rod	SST	
Port connections		
2,3,4	NPT 1/4"	

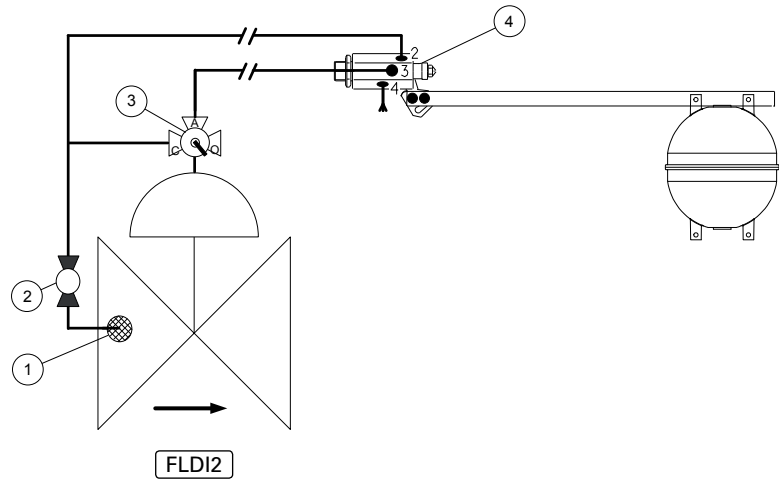
* other materials available upon demand

Installation

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

Connections:

Port	
2	Upstream
3	Valve Control Chamber
4	Vent



Main components:

1. Self flushing filter
2. Isolation ball valve
3. 3-way Manual selector valve
4. 70-610 Float pilot valve

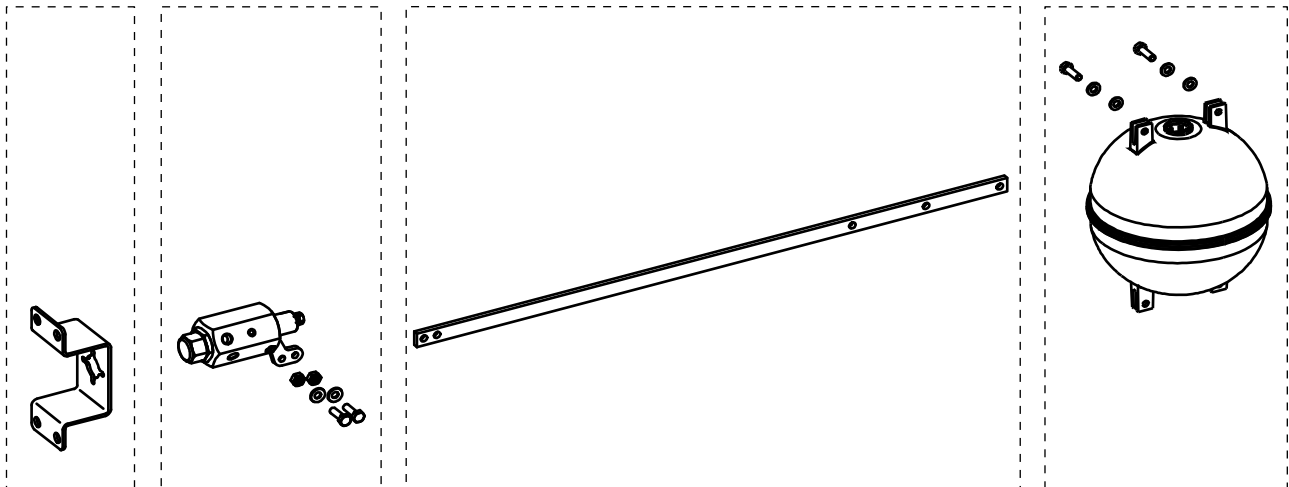
Spare parts

Bracket

Pilot kit

Rod

Float kit



Catalogue numbers

Description	Catalogue number
Bracket	0026570610
Pilot kit	6617061002
Rod	4424170600
Float kit	6653070000

25-300

Hydraulic accelerator, 3-way plastic relay-valve

The 25-300 is a 3-way, hydraulically operated, diaphragm actuated normally close relay-valve which is designed to meet the requirements of hydraulic valves control functions, particularly when fast reaction is required. The body contains two seats, a fully supported frictionless diaphragm and a guided shaft. When pressure command is applied one disc forms a tight seal with the valve seat and when vented the other disc seals drop tight.



Features

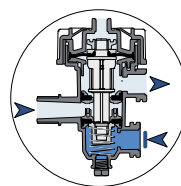
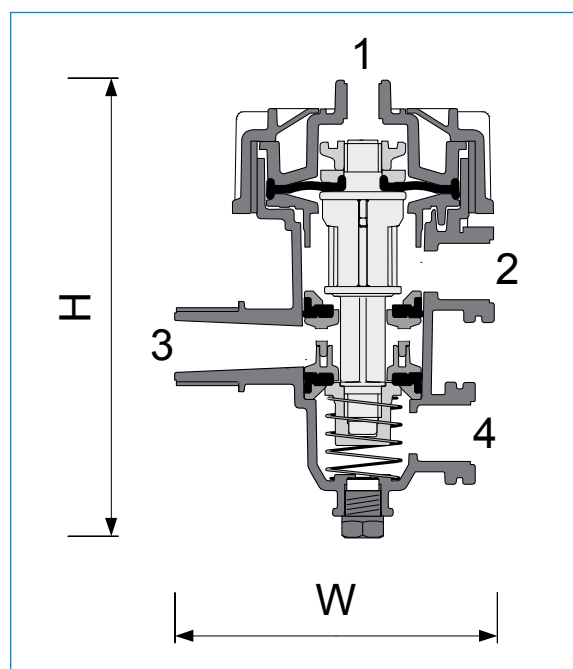
- A 3-way relay-valve designed for accelerate the response of the valve function
- Receives remote commands and activates the hydraulic valve as its location, thereby accelerates reaction time
- Extremely large water passages
- Typically used in irrigation and filtration systems
- Tough and durable construction
- High-grade materials
- Internal trim designed for easy disassembly and maintenance, by removing the bonnet and pulling out trim
- Can be used with any hydraulic control valve
- Simple design

Typical applications

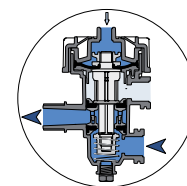
- Hydraulic Remote Control Valve - RC
- Accelerator for ON/OFF commands

Technical data

General	
Pressure rating	12 bar / 175 psi
Operating pressure range	1 - 12 bar / 15 - 175 psi
Command / line pressures ratio	1:3
Fluid temperature	60°C max. / 140°F max.
Weight	139 g / 0.31 lbs
Materials	
Body and bonnet	GRP
Elastomers	NBR
Internal parts	GRP / NBR
Spring	SST
Dimensions	
H (Height) max.	77 mm / 3.10"
W (Width)	58 mm / 2.28"
Port Connections	
1	NPT 1/8"
2,3,4	NPT 3/8"



De-pressurized command



Pressurized command

Installation

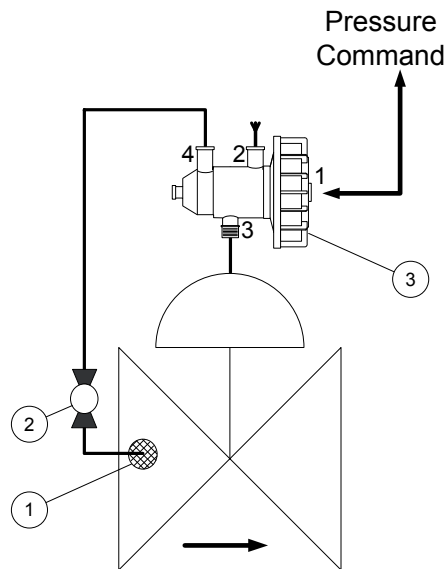
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Relay N.C.
1	Pressure command
2	Vent
3	Valve Control Chamber
4	Upstream

Main components:

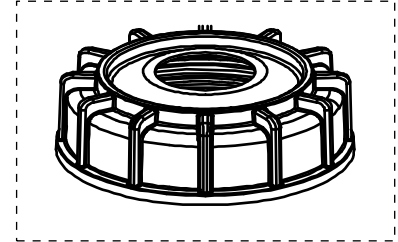
1. Self flushing filter
2. Isolation ball valve
3. 25-300 Pilot valve



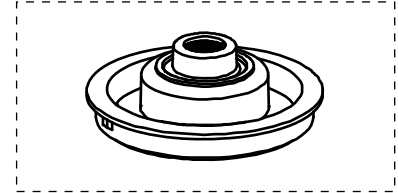
The main valve is normally open and closes by pressure command

Spare parts

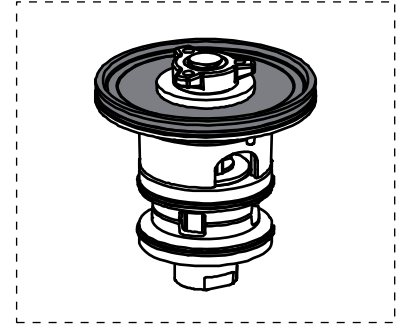
Locking nut



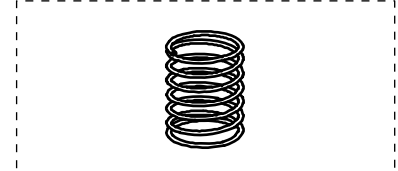
Bonnet



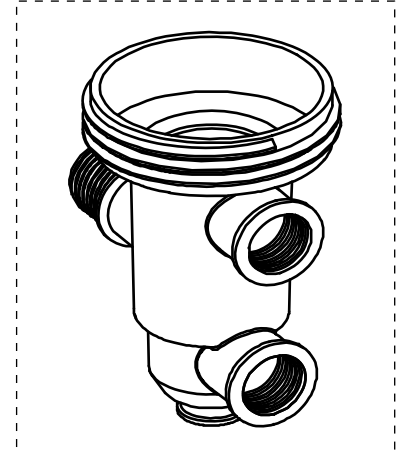
Internal parts kit



Spring



Body kit



Catalogue numbers

Description	Catalogue number
Locking nut	0050225300
Bonnet	0050225300
Internal parts kit	661202530000000
Spring	0022001350
Body kit	661012530000000

Galit Hydraulic accelerator, 3-way plastic relay-valve

The Galit is a 3-way, hydraulically operated, diaphragm actuated relay pilot-valve which is designed to meet the requirements of hydraulic valves control functions, particularly when fast reaction and relay signals are required. It can be used either as a N.O. or N.C.



Features

- A 3-way relay-valve designed for accelerate the response of the valve function
- Receives remote commands and activates the hydraulic valve as its location, thereby accelerates reaction time
- Integral 3 position manual-override
- Can be used either as a N.O. or N.C.
- Solves topographic height differences
- Typically used in irrigation systems

Typical applications

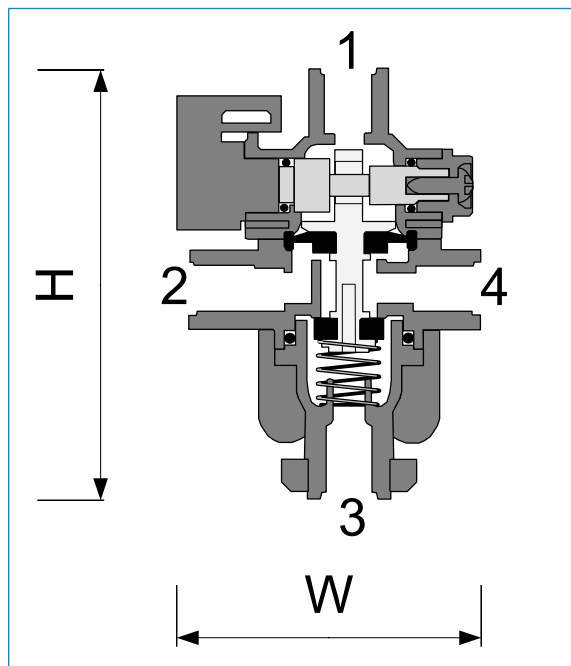
- Hydraulic Remote Control Valve - RC
- Solution for topographic height differences

Technical data

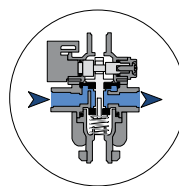
General	
Pressure rating	10 bar / 150 psi
Operating pressure range	0.5 - 10 bar / 7 - 140 psi
Fluid temperature	50°C max. / 120°F max.
Weight	66 g / 0.14 lbs
Materials	
Body and bonnet	GRP
Elastomers	NBR
Internal parts	GRP / NBR
Spring	SST
Dimensions	
H (Height) max.	88 mm / 3.46"
W (Width)	58 mm / 2.3"
Port Connections	
1,2,3,4	BSP 1/8"

Spring range

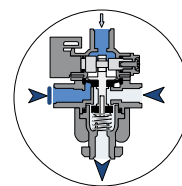
Color	Galit N.O.		Galit N.C.	
	meter	psi	meter	psi
Yellow	5 - 10	7 - 14	5 - 10	7 - 14
Green	10 - 14	14 - 20	10 - 15	14 - 22
White	14 - 17	20 - 25	15 - 20	22 - 29
Red	17 - 22	25 - 32	20 - 25	29 - 36



Principle of operation (shown in N.O. model)



De-pressurized command



Pressurized command

Installation

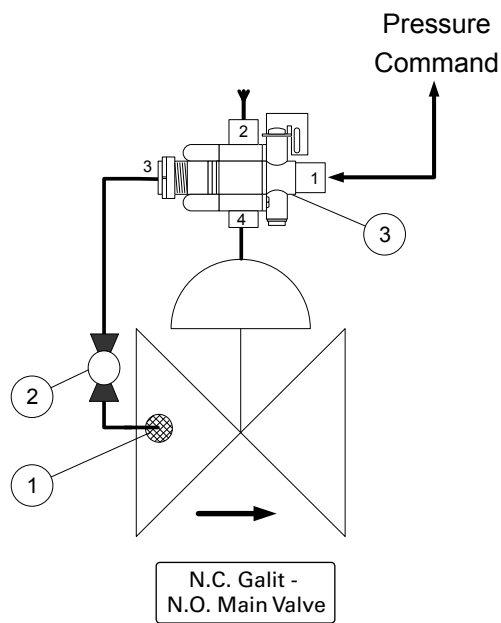
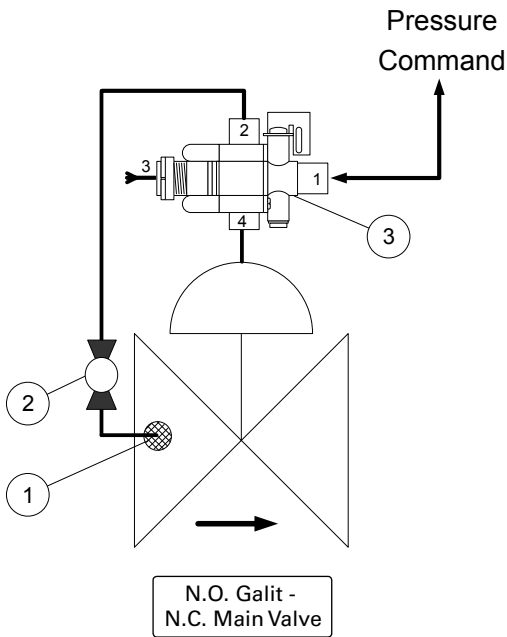
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	N.O.	N.C.
1	Pressure command	Pressure command
2	Upstream pressure	Vent
3	Vent	Upstream pressure
4	Valve Control Chamber	Valve Control Chamber

Main components:

1. Self flushing filter
2. Isolation ball valve
3. Galit Relay



28-200

Hydraulic accelerator, 2-way metal relay-valve

The 28-200 is a 2-way, hydraulically operated, diaphragm actuated normally open relay-valve which is designed to meet the requirements of hydraulic valves control functions, particularly when fast reaction is required. The body contains one seat, a fully supported frictionless diaphragm and a guided shaft. When pressure command is applied above the diaphragm a disc forms a drop tight seal with the valve seat.



Features

- A 2-way relay-valve
- Extremely large water passages enable fast response
- Tough and durable construction
- High-grade materials
- Internal trim designed for easy disassembly and maintenance, by removing the bonnet and pulling the trim
- Can be used with any hydraulic control valve
- Simple design

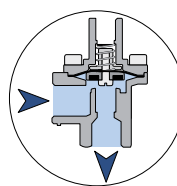
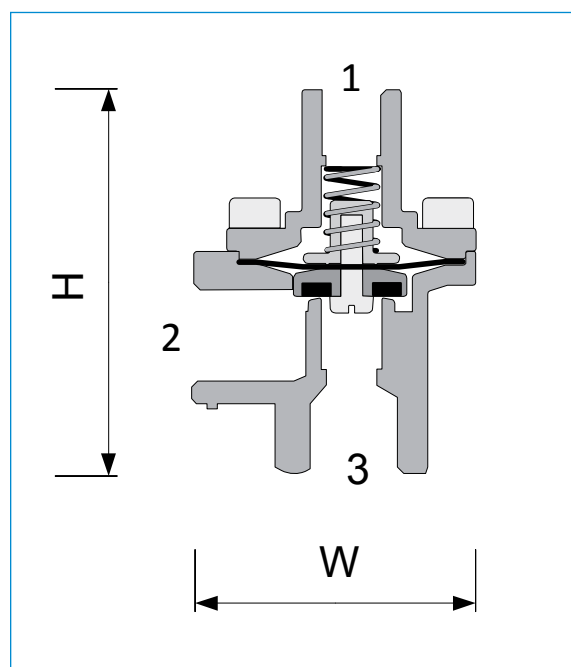
Typical applications

- Hydraulic Remote Control Valve - RC
- On/Off control for 2-way regulating functions

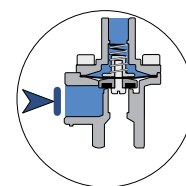
Technical data

General		
Pressure rating	25 bar / 360 psi	
Operating pressure range	0.3 - 25 bar / 4 - 360 psi	
Command / line pressures ratio	1:3	
Fluid temperature	80°C max. / 175°F max.	
Weight	0.43 kg / 0.95 lbs	
Materials		
	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	
Internal parts	SST	
Spring	SST	
Dimensions		
H (Height) max.	76 mm / 3"	
W (Width)	56 mm / 2.20"	
Port Connections		
1	NPT 1/4"	
2,3	NPT 1/2"	

* other materials available upon demand



De-pressurized command



Pressurized command

Installation

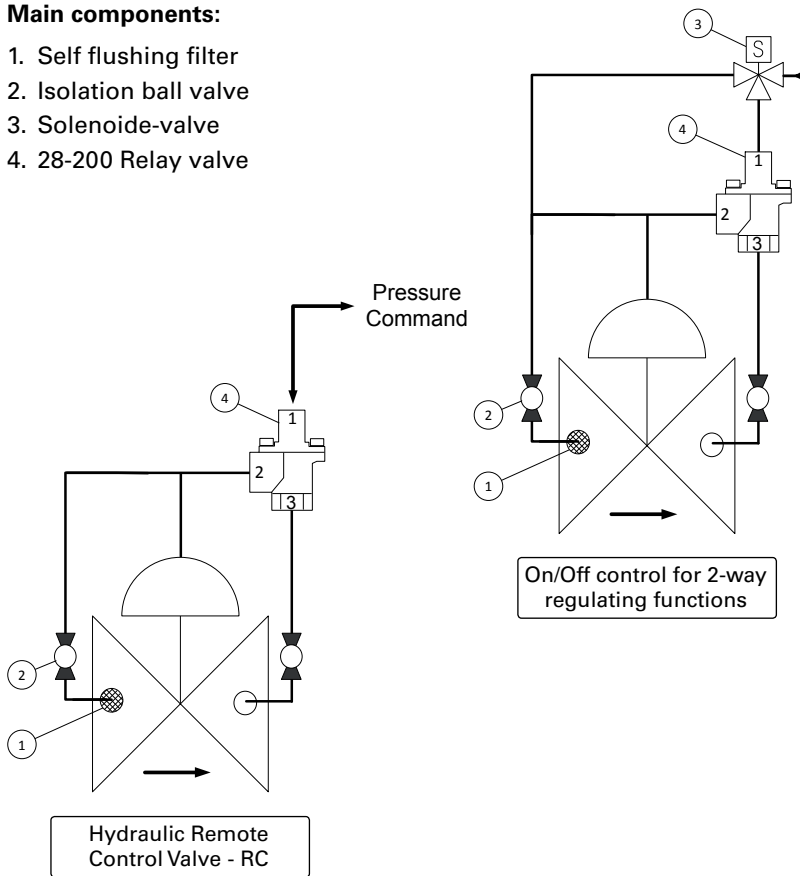
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	
1	Command
2	Inlet
3	Outlet

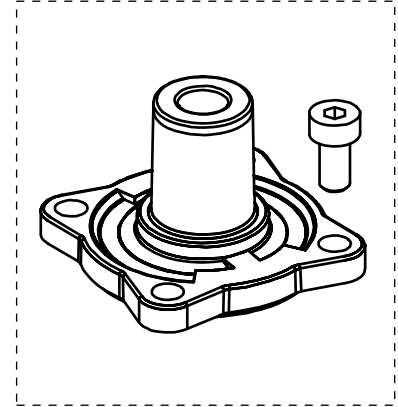
Main components:

1. Self flushing filter
2. Isolation ball valve
3. Solenoide-valve
4. 28-200 Relay valve

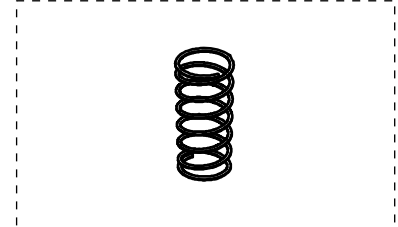


Spare parts

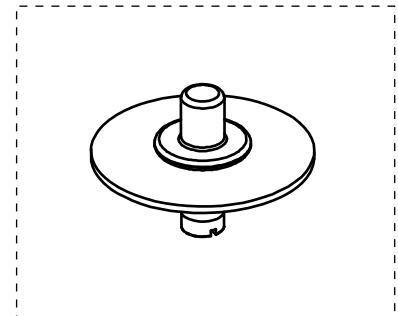
Bonnet kit



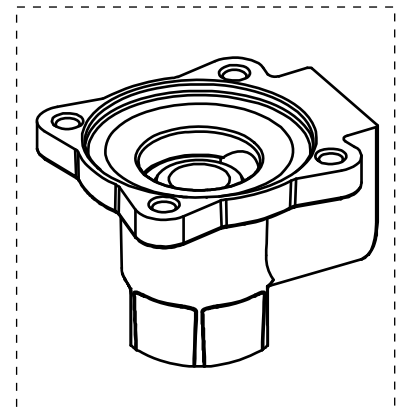
Spring



Internal parts kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	661022820000000
Spring	0022028000
Internal parts kit	661202820000000
Body kit	661012820000000

28-300

Hydraulic accelerator, 3-way metal relay-valve

The 28-300 is a 3-way, hydraulically operated, diaphragm actuated normally close relay-valve which is designed to meet the requirements of hydraulic valves control functions, particularly when fast reaction is required. The body contains two seats, a fully supported frictionless diaphragm and a guided shaft. When pressure command is applied one disc forms a tight seal with the valve seat and when vented the other disc seals drop tight.



Features

- A 3-way relay-valve designed for accelerate the response of the valve function
- Accelerate reaction time
- Large water passages
- Tough and durable construction
- High-grade materials
- Can be used with any hydraulic control valve sizes
- Simple design

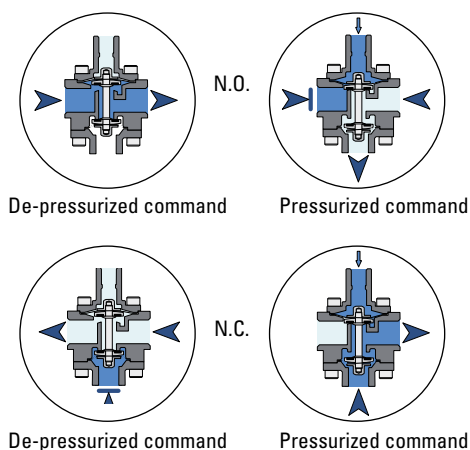
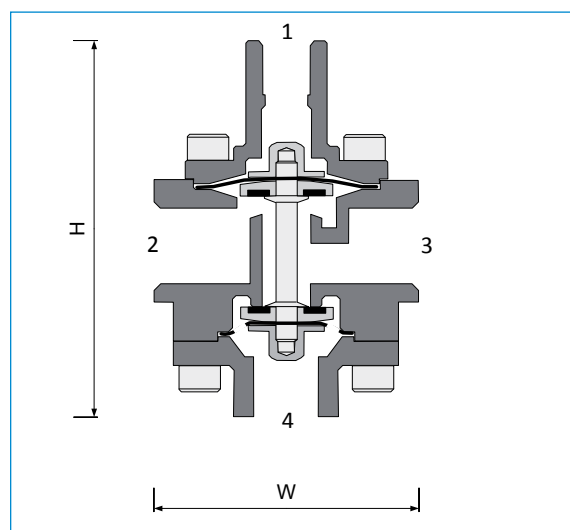
Typical applications

- Open or close a valve by external pressure command - RC
- Accelerator for On/Off commands

Technical data

General		
Pressure rating	25 bar / 360 psi	
Operating pressure range	1 - 25 bar / 15 - 360 psi	
Fluid temperature	80°C max. / 175°F max.	
Weight	1.28 kg / 2.82 lbs	
Materials		
	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	
Internal parts	SST+Brass	SST
Spring	SST	
Dimensions		
H (Height) max.	91 mm / 3.58"	
W (Width)	64 mm / 2.52"	
Port Connections		
1	NPT 1/4"	
2,3,4	NPT 1/2"	

* other materials available upon demand



Installation

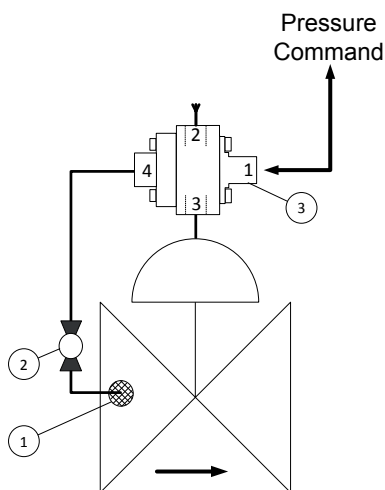
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	Relay N.C	Relay N.O.
1	Command	Command
2	Vent	Upstream
3	Valve Control Chamber	Valve Control Chamber
4	Upstream	Vent

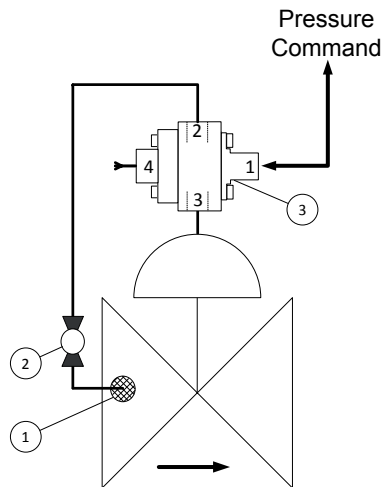
Main components:

1. Self flushing filter
2. Isolation ball valve
3. 28-300 Relay valve



Normally-Closed mode:

The main valve is normally open and closes by pressure command

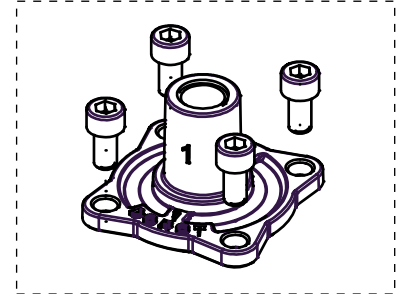


Normally-Opened mode:

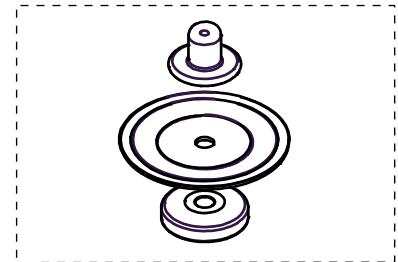
The main valve is normally close and opens by pressure command

Spare parts

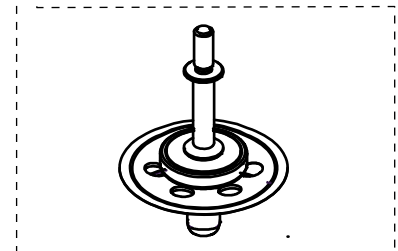
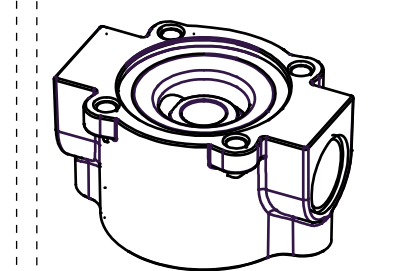
Upper bonnet



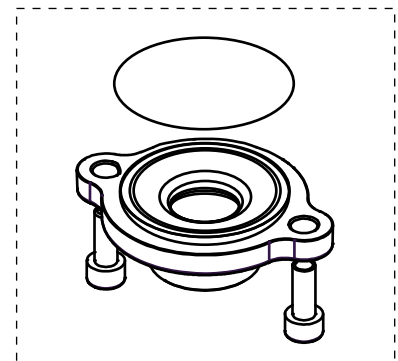
Internal parts kit



Body kit



Bottom port kit



Catalogue numbers

Description	Catalogue number
Upper bonnet	661022830000000
Internal parts kit	661202830000000
Body kit	661012830000000
Bottom port kit	661022830000001

66-21X Hydraulic accelerator, 3-way metal relay-valve

The 66-210 is a 3-way, hydraulically operated, diaphragm actuated normally close relay-valve which is designed to meet the requirements of hydraulic valves control functions, particularly when fast reaction is required. The body contains two seats, a fully supported frictionless diaphragm and a guided shaft. When pressure command is applied one disc forms a tight seal with the valve seat and when vented the other disc seals drop tight.



Features

- A 3-way relay- valve designed for accelerate the response of the valve function
- Large water passages
- Tough and durable construction
- High-grade materials
- Can be used with any hydraulic control valve sizes
- Versatile design enables wide range of applications
- Simple design

Typical applications

- Open or close a valve by external pressure command - RC
- Accelerator for On/Off commands

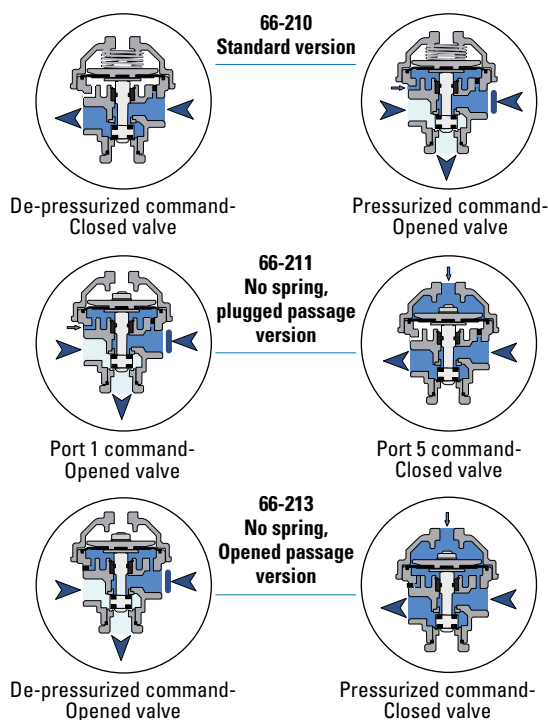
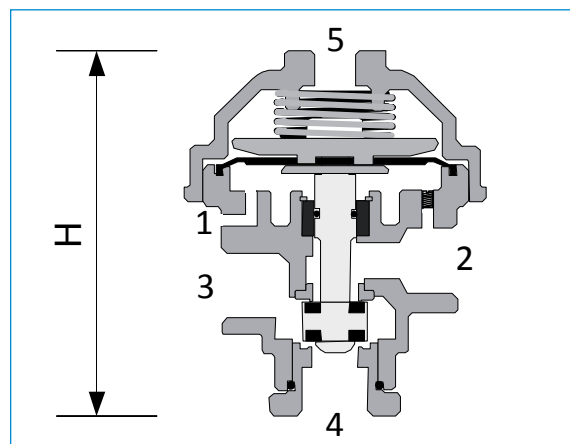
Technical data

General		
Pressure rating	25 bar / 360 psi	
Operating pressure range	1 - 25 bar / 15 - 360 psi	
Fluid temperature	80°C max. / 175°F max.	
Weight	1.3 kg / 2.86 lbs	
Materials		
	Standard	Optional*
Body and bonnet	Brass	SST
Elastomers	NBR	
Internal parts	SST+Brass	SST
Spring	SST	
Dimensions		
H (Height) max.	104 mm / 4.09"	
W (Width)	85 mm / 2.56 "	
Port Connections		
1,5	NPT 1/4"	
2,3,4	NPT 1/2"	

* other materials available upon demand

Design notes

- Standard version allows maximum 9m pressure in port 4, without command at any pipeline pressure, 7m pressure at port #1 changes the relay position
- 66-211 (double acting) version requires draining the command port that is not pressurized. For example: command at port #1 will not activate the relay, unless port #5 is vented.
- 66-213 Version maintains connection of port 2 to port 3, as long the pressure in Port 5 is at least half of the pressure in port 2.



Installation

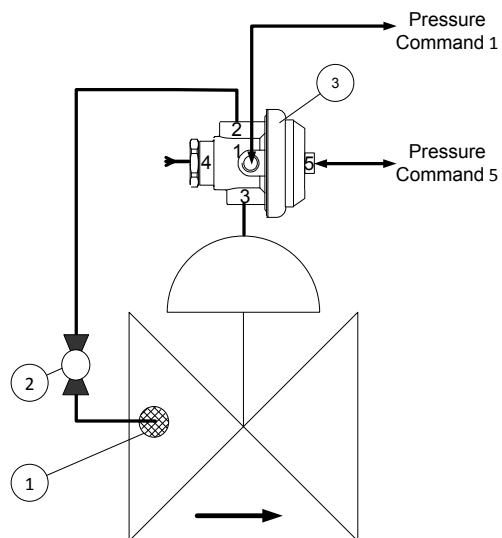
Sample drawing. Consult Dorot for the assembly design to fit your needs.

Connections:

Port	66-210	66-211	66-213
1	Command	Command	plugged
2	Upstream	Upstream	Upstream
3	Valve Control Chamber	Valve Control Chamber	Valve Control Chamber
4	Vent	Vent	Vent
5	-	Command	Command

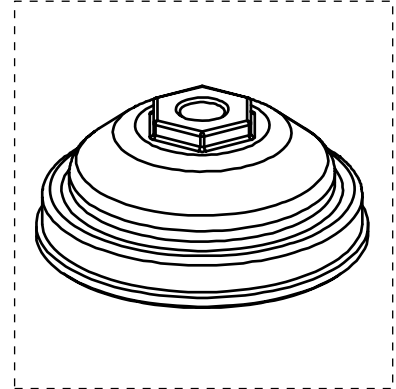
Main components:

1. Self flushing filter
2. Isolation ball valve
3. 66-21X Relay valve

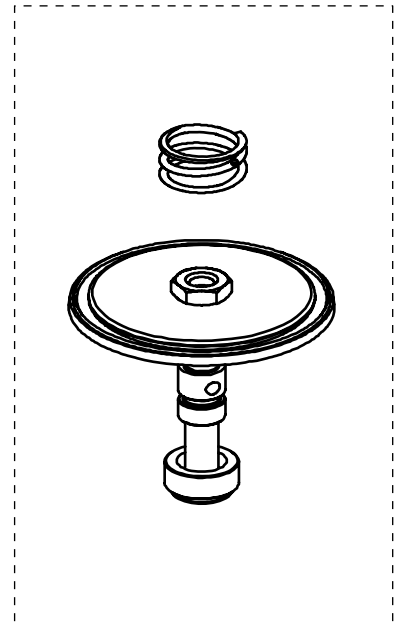


Spare parts

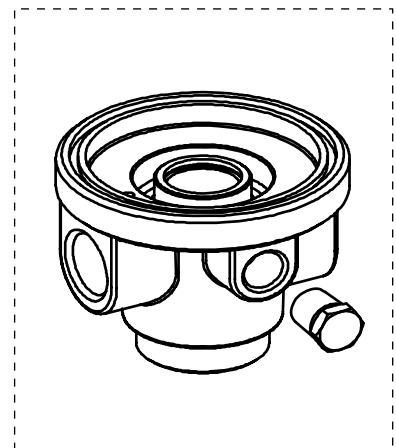
Bonnet kit



Internal parts kit



Body kit



Catalogue numbers

Description	Catalogue number
Bonnet kit	661026621000000
Internal parts kit	661206621000000
Body kit	661016621000000



Innovation
Innovation

Expertise
Expertise

Reliability
Reliability



Hundreds of companies in the industrial, civil engineering, municipal and agricultural sectors around the world have chosen DOROT's innovative and field-proven technologies. Since its establishment in 1946, DOROT leads the valves market with continued innovation, uncompromising excellence and firm commitment to its customers, consulting and supporting them through all stages of a project and overcoming challenges in R&D, design, implementation, and maintenance.



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