ASBİR®

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800 Series
Hydraulic Control Valves

Waterworks • Industrial Applications

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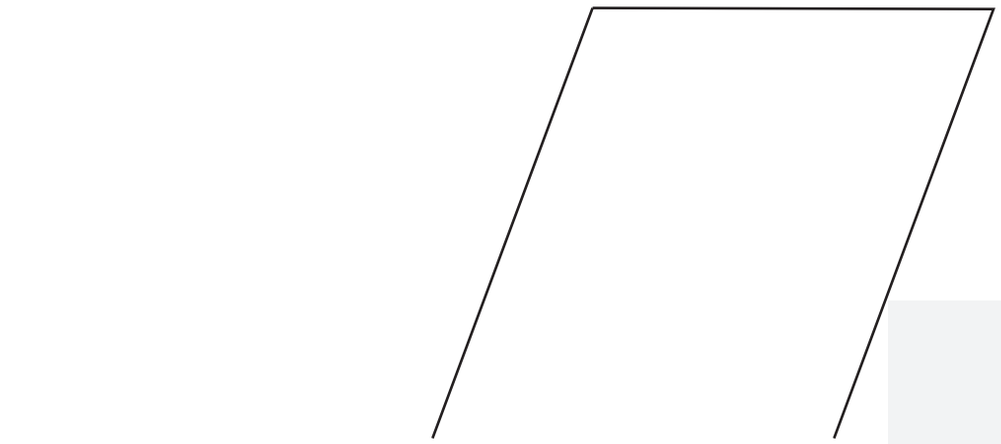

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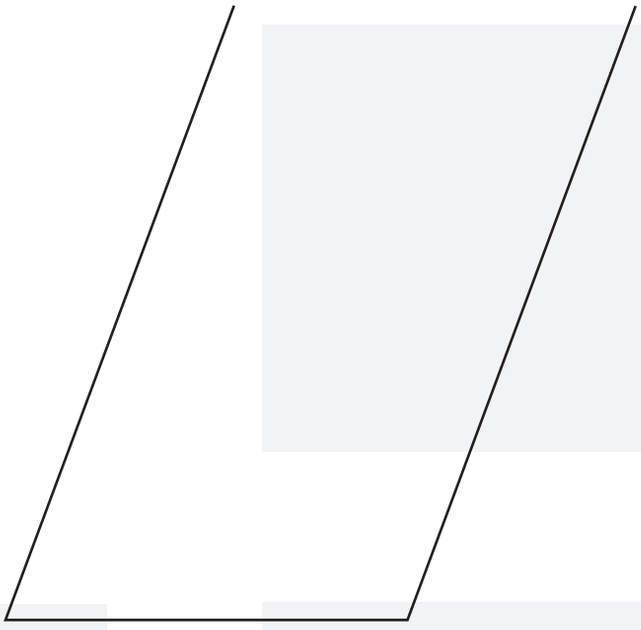


INDEX

GENERAL DEFINITION

Asbir 800 series automatic hydraulic control valves are designed in the "Y" body model type so as to show maximum resistance to cavitation under minimum head loss in high flow rates.

Asbir 800 series automatic hydraulic control valves are double-chamber diaphragm actuated and disc closed type. Valve has a standard double control chamber. However, if required, it maybe used as a single control valve without using an extra control chamber. In addition, if required, the valve operates easily controlledly even in very low flows by means of an extra port added to the disc. Valves performing various functions may be obtained by adding different control equipment to the basic valve body.

ADVANTAGES & BENEFITS

- The "Y" type valve body designed hydrodynamically provides 25 % more flow compared to standard globe bodies and has a lower head loss.
- Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design compared to diaphragm-actuator, diaphragm-closing valves and prevents blockage by showing less sensitivity against solid substances within fluid.
- Ensures maximum flow thanks to its "Y"- type body.
- Is effected minimally from cavitation damages thanks to its broad "Y"- type body design.
- Has easy use and maintenance due to simple design.
- Makes opening and closing without causing and surges.
- Ensures smooth control thanks to its standard dual control chambers.
- Provides full tightness thanks to its stem bedded rigidly and stainless steel spring.
- It operates controlledly and smoothly and closes drip-tight by means of valve stem embedded rigidly on valve body.
- Closing disc provides tightness by means of elastic rubber in the disc, sitting in the replaceable body bush.
- Does not require maintenance in operation for a long time due to its corrosion resistant components.
- Has a long working life in operation since coating has been made with phosphorization and over-dried epoxy powder paint.

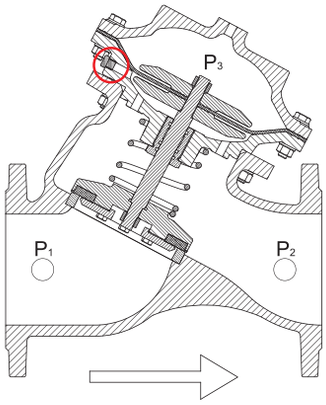
- Performs perfect modulation in variable flows and even too low flow rates close to zero.
- Has a wide range of application with use of different pilot valves.

USING WITH SINGLE/DOUBLE CHAMBER ACTUATOR

Asbir 800 series automatic hydraulic control valves are designed with double-chamber actuator as a standard. Valve can be easily used with single or double-chamber actuator without need for any additional parts.

USING WITH SINGLE CHAMBER ACTUATOR

When using the valve with single-chamber actuator, the plugs under the middle bonnet are removed and a plug is in started into the middle bonnet inlet port and thus, the valve actuator is made with single chamber. In such a case, the pressures to be compared are P1, P2, P3.



Using With Single Chamber Actuator

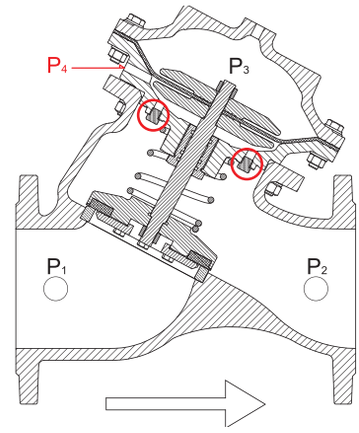
P_1 : Upstream Pressure
P_2 : Downstream Pressure
P_3 : Actuator Pressure

USING WITH DOUBLE CHAMBER ACTUATOR

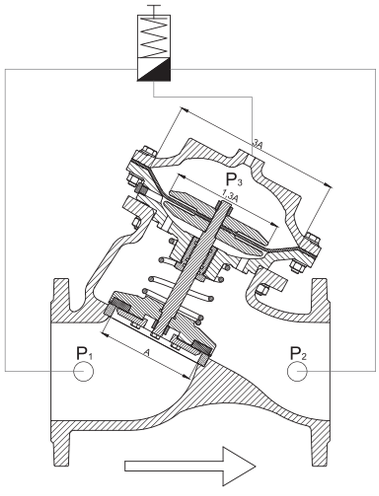
When using the valve with double-chamber actuator, the port holes under the middle bonnet for an extra P4 comparison pressure are closed with plugs and the P4 comparison pressure is given through the middle bonnet port. With P4 comparison pressure, valve controls may be further arranged with the aid of an extra pressure.

Using With Double Chamber Actuator

P_1 : Upstream Pressure
P_2 : Downstream Pressure
P_3 : Actuator Pressure
P_4 : External Effect Pressure



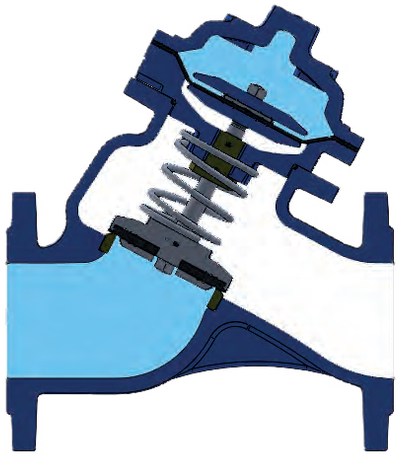
WORKING PRINCIPLES



Asbir 800 series automatic hydraulic control valves are designed with double-chamber actuator as a standard. Valve can be easily used with single or double-chamber actuator without need for any additional parts.

Valve Impact Pressures and Impact Areas

P_1 : Upstream Pressure
P_2 : Downstream Pressure
P_3 : Actuator Pressure
P_{spring} : Spring Force
A : Disc Impact Area



A

Valve Closing Mode

The control valve ensure that the valve closes drip-tight with the valve disc's sitting on the body bush by means of the force imposed by the upstream pressure on the diaphragm in the actuator by the pilot valve. When examining the forces on the valve with the aid of impact pressures and impact areas causing the valve to close, the following inequality will be obtained:

$$P_3x3A + P_{spring} > P_1xA$$

With the pilot valve or manual intervention causing the valve to close, without hydraulic intervention in the section shown with P_3 pressure out of installations, P_3 pressure will be equal to the maximum P_1 pressure. The force $P_3x3A + P_{spring}$ will prevail over the force P_1xA. Thus, the inequality in proved including the force P_{spring} and the valve closes drip-tight with the force obtained. The geometric properties of the Asbir 800 series automatic hydraulic control valves determined at the design level and the pressure P_3 are not affected by head losses due to pilot valve and head losses in hydraulic systems thanks to the impact area ratio and the valve closes drip-tight.

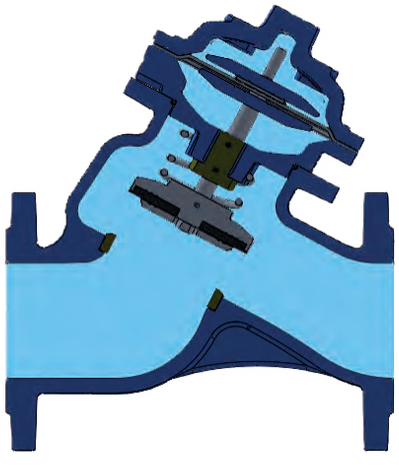
Valve Opening Mode

The force imposed by the upstream pressure trying to open the control valve, under the valve disc, ensures that the valve opens with prevailing over the pressure force on the diaphragm by means of the spring force and the pilot valve assisting in closing operation. When examining the forces on the valve with the aid of impact pressures and impact areas causing the valve to open, the following inequality will be obtained:

$$P_1xA > P_{spring} + P_3x3A$$

With the pilot valve or manual intervention causing the valve to open, the section shown with pressure P_3 in put in discharge mode. In this case, the P_3 difference pressure opened to atmosphere will be 0 (zero) and when the force P_1xA overcomes (the spring force) P_{spring}, the valve will open. The minimum opening pressure of the valve will be determined by P_{spring}, because of overcoming the minimum P_{spring} force to open the valve.

B



C

Modulation Mode

Pilot valves connected to the main valve actuator ensure that the main valve operates in modulated mode. They ensure that it operates in modulated mode by continuously controlling the pressure of fluid in the main valve actuator according to the flow rate or pressure conditions required to be adjusted when examining the force equations in the valve modulation valve with the aid of impact pressures and impact areas, the equation

$$P_1xA + P_2x3A = P_3x3A + P_{spring} + P_2xA$$

is obtained. The pilot valve used in the modulation of the valve ensures the modulation of the valve and keeps force equation by regulating the pressures P_3 ve P_2.

A port ensures that the valve operates more sensitively, more smoothly and more silently for flow and pressure regulation and prevents vibration and provides high pressure decrease compared to flat disc.

SUGGESTED USE APPLICATIONS

- Pressure reducing valves
- Pressure sustaining valves
- Deep well pump control valves
- Float valves
- High pressure reducing and pressure sustaining applications.

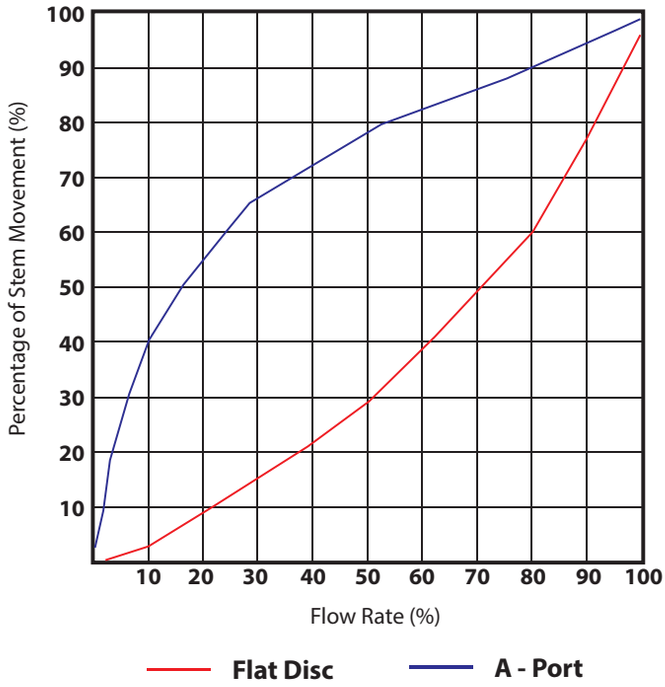
NON-SUGGESTED USE APPLICATIONS

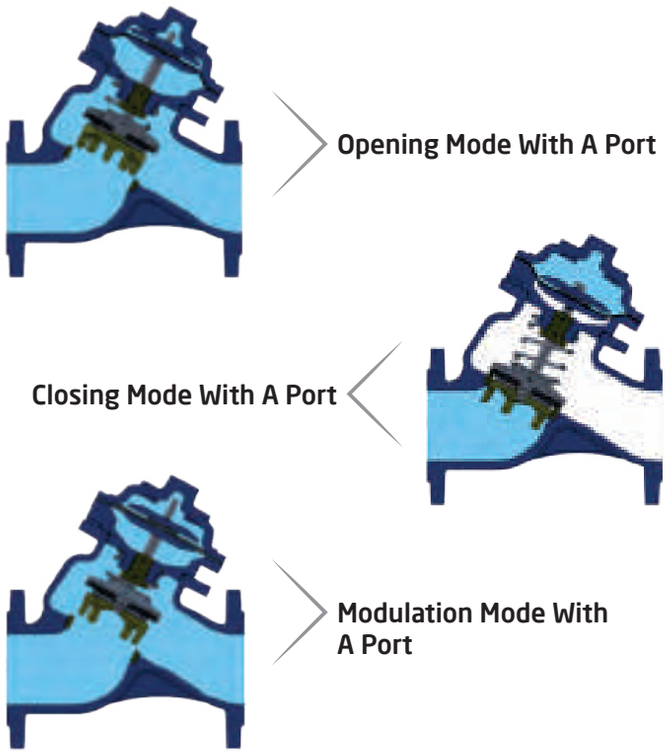
- Booster Pump Control Valves
- Applications that require minimum head loss.
- In a condition to have low pressure difference between upstream-downstream.

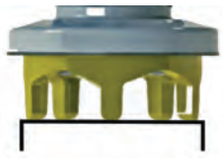
INSTALLATION

Remove the screws of disc press washer under the disc and demount the disc press washer which is a flat disc and install A port in the place of flat press washer with the same screws.

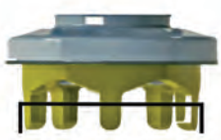
A PORT GRAPHIC



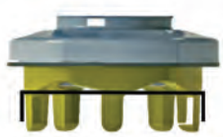




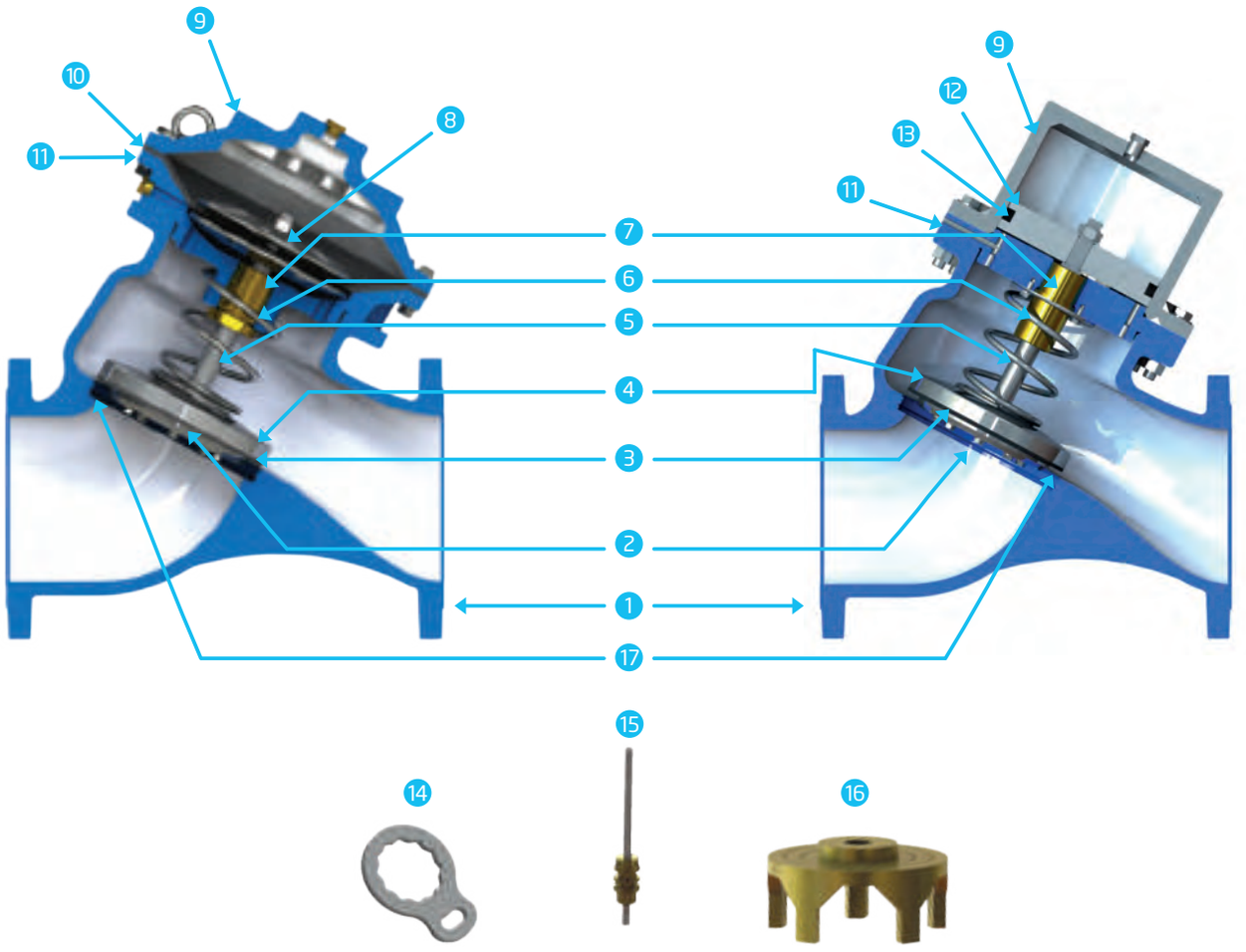
High Flow



Average Flow



Low Flow



	NO	PART NAME	MATERIAL	
			87 Model	88 Model
MAIN PARTS	1	Body	GGG50 (Ductile Iron)	GGG50 (Ductile Iron)
	2	Disc Washer	AISI 304 (2"-6") GGG50-Ductile Iron (8"-16")	AISI 304 (2"-6") GGG50-Ductile Iron (8")
	3	Rubber Seal	Standard: Buna-N Optional: NBR"	Standard: Buna-N Optional: NBR"
	4	Disc	AISI 304 (2"-6") GGG50-Ductile Iron (8"-16")	AISI 304 (2"-6") GGG50-Ductile Iron (8")
	5	Stem	AISI304	AISI304
	6	Spring	AISI302	AISI302
	7	Stem Bearing	Ms58	Ms58
	8	Diaphragm Disc	AISI 304 (2"-6") GGG50-Ductile Iron (8"-16")	---
	9	Upper Bonnet	GGG50 (Ductile Iron)	AISI304
	10	Diaphragm	Standard: Neoprene Optional: EPDM, Natural Rubber	---
	11	Middle Bonnet	GGG50 (Ductile Iron)	AISI304
	12	Piston	---	AISI304
	13	Gasket	---	NBR
	14	Locking Plate	AISI304	---
	15	Position Indicator Stem (Optional)	AISI304	AISI304
	16	A Port (Optional)	Ms58	Ms58
	17	Seat	AISI304	AISI304

TECHNICAL SPECIFICATIONS				
	PRESSURE RATING	Standard	0.5 - 16 bar (7.5 - 240 psi)	
		High Pressure Range	87 model: 0.5 bar - 25 bar (7.5 - 360 psi)	88 model: 0.5 bar - 40 bar (7.5 - 580 psi)
	TEMPERATURE	Min. Operating Temperature	- 10 °C (14 °F) DIN 2401 / 2	
		Max. Operating Temperature	80 °C (176 °F) DIN 2401 / 2	
	CONNECTION	Flanged	Standard: EN 1092/2	Optional: ANSI, BS 10-E
	COATING	Standard	Epoxy	
		Optional	Polyester	
	HYDRAULIC CONNECTIONS	Standard	Copper	
		Optional	SST, Reinforced Nylon · Hydraulic Pipe · SAEJ 844	
	ACTUATOR TYPE	87 Model	Double Chamber, Diaphragm Actuated, Disc Closed Type	
		88 Model	Double Chamber, Piston Actuated, Disc Closed Type	

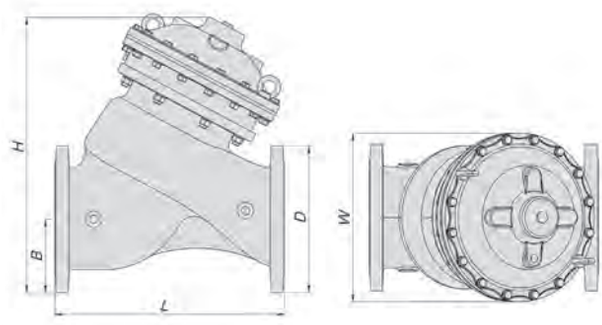
AVAILABLE MODELS

87
MODEL

88
MODEL

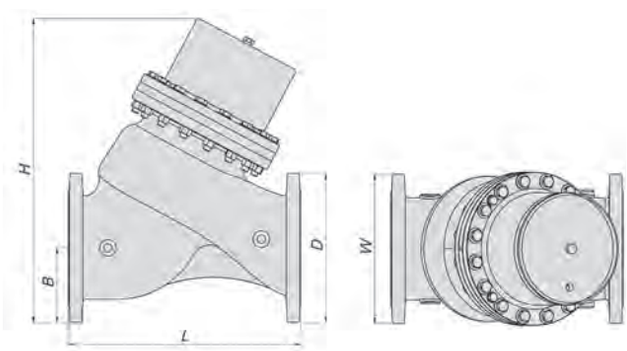
MODEL	87		88	
Connection	Flanged		Flanged	
Material	Ductile Iron (GGG50)		Ductile Iron (GGG50)	
Body Pattern	Y Type		Y Type	
Operating Pressure	16 bar (240 psi) - 25 bar (360 psi)		40 bar (580 psi)	
Available Sizes	**INCH**	**MM**	**INCH**	**MM**
	2	50	2	50
	2½	65	2½	65
	3	80	3	80
	4	100	4	100
	5	125	5	125
	6	150	6	150
	8	200	8	200
	10	250		
	12	300		
	14	350		
	16	400		

MODEL 87



DN		H		B		L		D		W		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	Lbs.	kg.
2	50	10,4	264	3,3	83	8,3	210	6,5	165	5,5	139	28,7	13
2½	65	11,2	284	3,7	93	8,7	222	7,3	185	5,5	139	35,3	16
3	80	12,8	324	4	100	10,6	270	7,9	200	6,7	170	55,1	25
4	100	15,6	395	4,4	111	13	330	8,7	220	7,9	201	81,6	37
5	125	16,1	406	5,1	130	13	330	9,8	250	7,9	201	86	39
6	150	20,8	529	5,7	145	16,8	427	11,2	285	12,6	320	172	78
8	200	25,9	658	6,7	170	20,9	530	13,4	340	15,4	390	308,6	140
10	250	30,4	771	8	203	24,4	620	15,9	405	19,3	490	507,1	230
12	300	36,5	927	9,2	233	28,5	725	18,1	460	21,3	540	815,7	370
14	350	39	991	10,6	270	28,5	725	20,5	520	21,3	540	848,8	385
16	400	45,5	1155	12	305	39	990	22,8	580	29,1	740	1830	830

MODEL 88



DN		H		B		L		D		W		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	Lbs.	kg.
2	50	11,3	287	3,3	83	8,3	210	6,5	165	6,5	165	33,1	15
2½	65	12,1	307	3,7	93	8,7	222	7,3	185	7,3	185	37,5	17
3	80	14,3	362	4	100	10,6	270	7,9	200	7,9	200	59,5	27
4	100	16,8	426	4,4	111	13	330	8,7	220	8,7	220	93,0	42
5	125	17,8	453	5,1	130	13	330	9,8	250	9,8	250	99,9	45
6	150	21,8	554	5,7	145	16,8	427	11,2	285	11,2	285	200,6	91
8	200	27,3	693	6,7	170	20,9	530	13,4	340	13,4	340	381,0	173

HYDRAULIC PERFORMANCE

FLAT DISC	Valve Size	mm	50	65	80	100	125	150	200	250	300	350	400
		inch	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"	16"
	Kv	m³/h @ 1 bar	50	65	115	200	310	460	815	1250	1850	1990	3300
	Cv	gpm @ 1 psi	60	75	135	230	360	530	945	1445	2135	2300	3810
	K	dimensionless	3,9	6,6	4,9	3,9	4	3,8	3,8	3,9	3,7	5,9	3,7
	Maximum Flow Continuance	m³/h	39	66	100	156	243	350	622	972	1400	1905	2488
		gpm	171	289	438	685	1070	1541	2739	4279	6162	8388	10955
	Maximum Flow Intermittent	m³/h	78	131	199	311	486	573	848	1325	1909	2598	3393
		gpm	342	579	876	1369	2140	2521	3735	5836	8403	11438	14939
	Vol. Control Chamber	lt	0,185	0,185	0,403	0,629	0,629	2,542	5,536	11,215	13,560	13,560	39,241

A PORT	Valve Size	mm	50	65	80	100	125	150	200	250	300	350	400
		inch	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"	16"
	Kv	m³/h @ 1 bar	40	55	100	170	260	390	695	1065	1575	1695	2800
	Cv	gpm @ 1 psi	47	64	115	196	300	450	805	1230	1820	1960	3240
	K	dimensionless	6,1	9,3	6,4	5,4	5,7	5,2	5,2	5,4	5,1	8,2	5,1
	Maximum Flow Continuance	m³/h	31	56	87	132	204	297	530	828	1192	1623	2108
		gpm	137	245	381	582	897	1306	2336	3646	5246	7144	9280
	Maximum Flow Intermittent	m³/h	62	111	173	264	408	485	723	1129	1625	2213	2874
		gpm	274	490	762	1164	1795	2137	3185	4972	7154	9742	12655
	Vol. Control Chamber	lt	0,185	0,185	0,403	0,629	0,629	2,542	5,536	11,215	13,560	13,560	39,241

Valve Flow Coefficient (Kv, Cv)

Kv :Valve flow coefficient (flow in m^3/h at 1bar Diff. Press.)
Cv :Valve flow coefficient (flow in gpm at Diff. Press. 1psi)
Q :Flow rate (m^3/h ; gpm)
ΔP :Differential pressure (bar ; psi)
G :Liquid specific gravity (Water = 1.0)

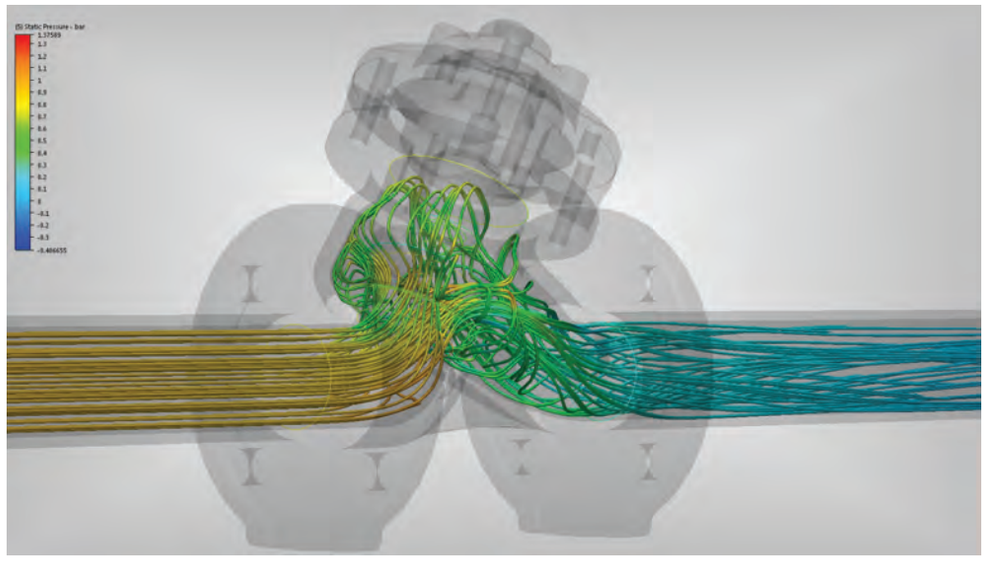
$$Kv, (Cv) = Q.\sqrt{\frac{G}{\Delta P}} \qquad Cv = 1{,}155\ Kv$$

Flow Resistance - Head Loss Coefficient

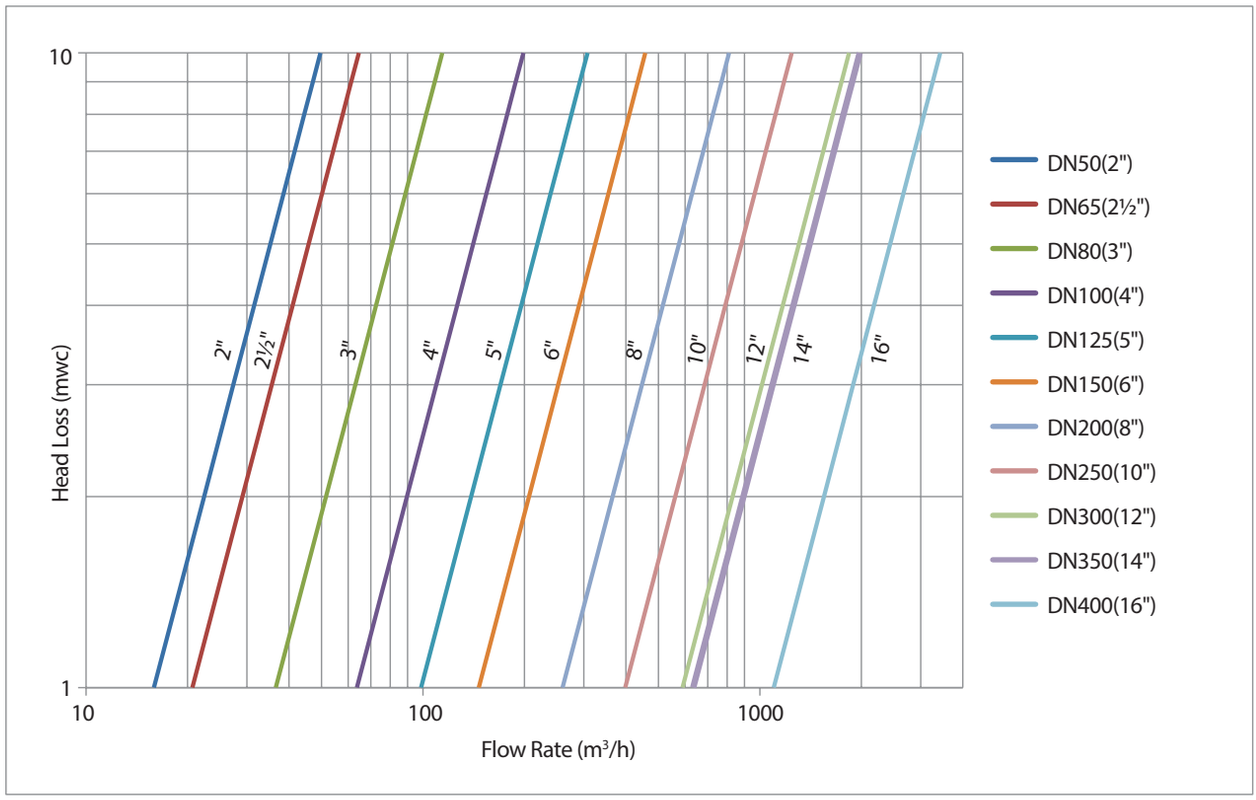
K :Flow resistance or Head loss coefficient (dimensionless)
ΔH :Head loss (m ; feet)
V :Nominal size flow velocity (m/s ; feet/s)
g :Acceleration of gravity (9.81 m/s^2 ; 32.18 $feet/s^2$)

$$K = \Delta H \frac{2g}{V^2}$$

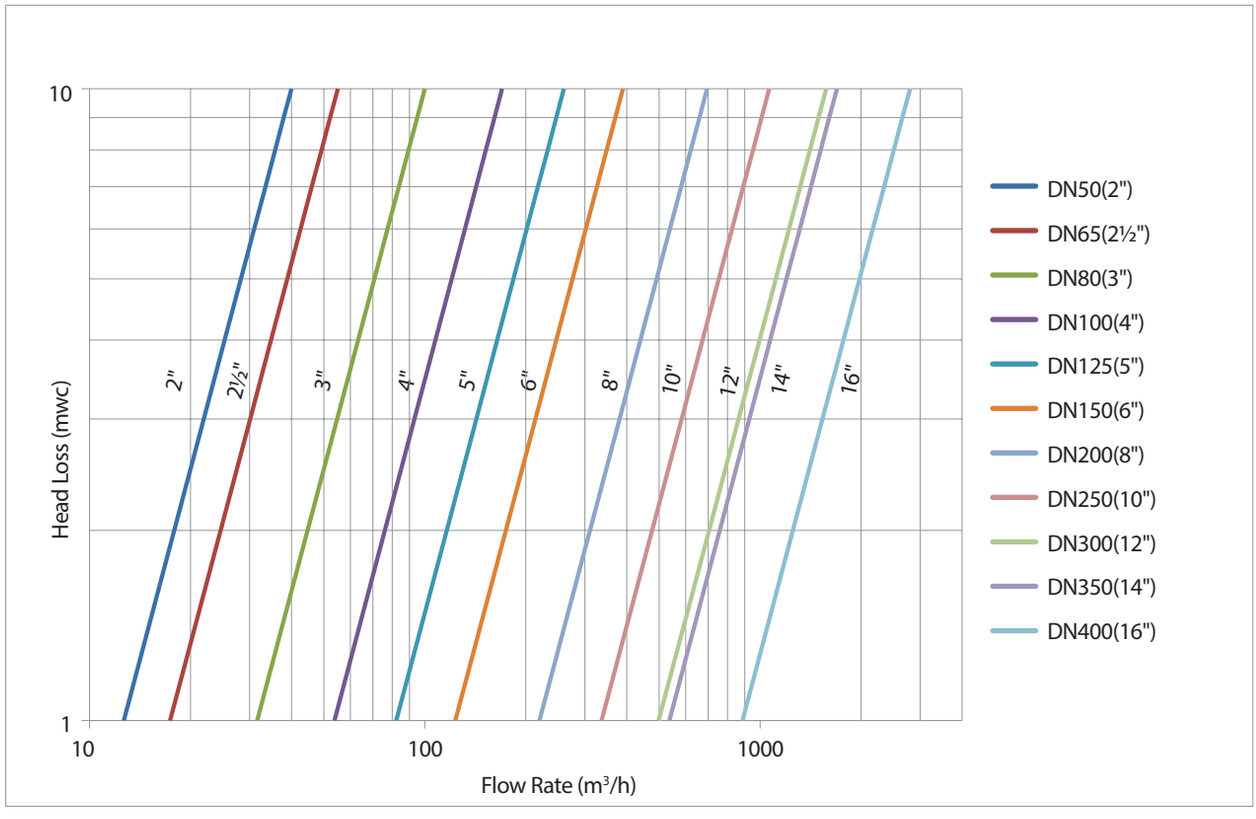
Flow Rate Analysis



HEAD LOSS CHART (FLAT DISC)



HEAD LOSS CHART (A PORT)



CAVITATION

Cavitation occurs in hydraulic control valves when they are not used under proper pressure values. When fluid passes through the closing area of the hydraulic valve, its value will increase due to extreme choking and its static pressure will drop under the evaporation pressure of the fluid. The fluid evaporates and steam bubbles occur in the fluid. Such steam bubbles explode in the outlet side of the valve under the downstream pressure. Such sudden expositions produce intensive shock waves and temperature increases. Extreme reduction in the valve causes water jets. Shock waves and water jets break particles from valve body material and cause the valve to be worn out, to be pierced and to decrease its life due to such a use. Cavitation causes also damage to installation and thus noise and vibration.

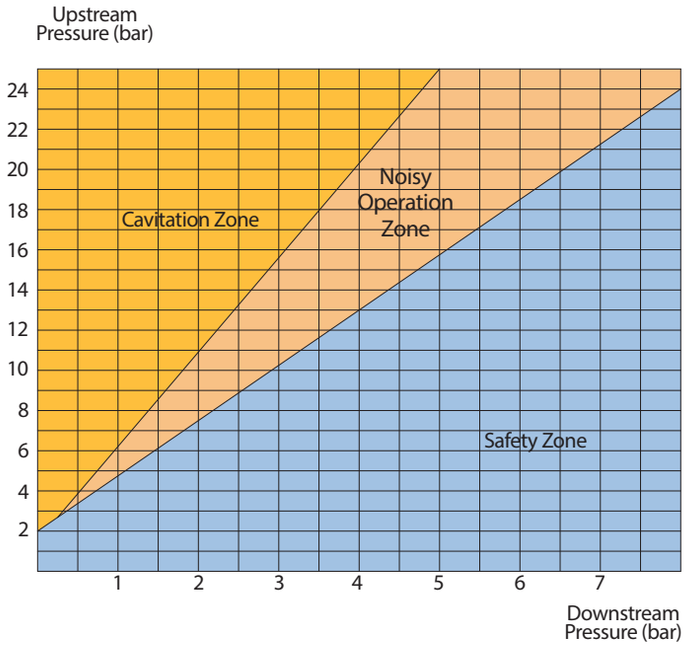
PREVENTING CAVITATION

- Increase the downstream pressure if the system allows to do so.
- If downstream pressure can not be handled, increase valve diameter and thus decrease water speed, if possible.
- Increase the number of pressure decrease points using multiple valves or use multiple valves at the same point to decrease pressure. Besides, decrease the pressure proportionally including the Asbir 800 series proportional pressure reducing control valve in the system at certain points.

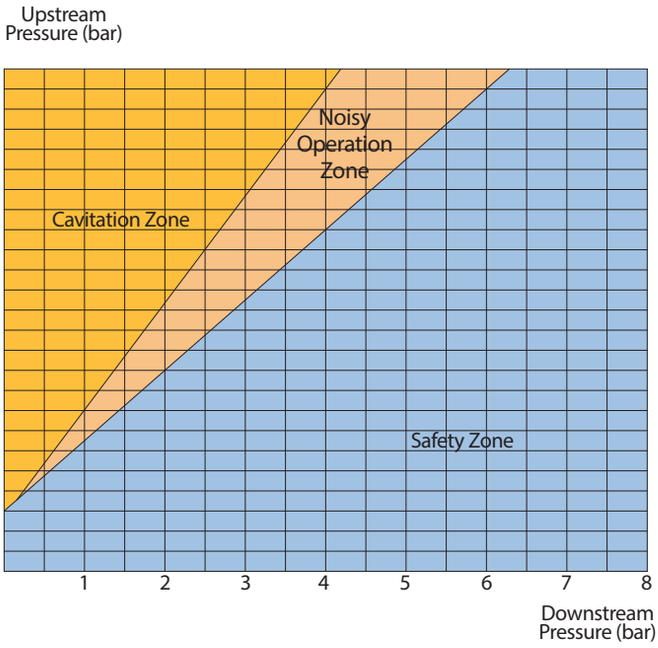
CAVITATION CHART

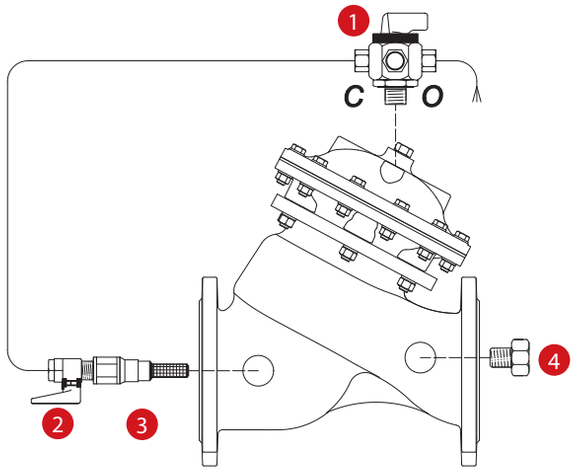
For the purpose of using cavitation charts:
- Determine the valve upstream pressure specified in the system on the charts.
- Make the required downstream pressure intersect the determined downstream pressure.
- Determine the cavitation condition of the valve based on 3 areas whose intersections are shown on the charts.

FLAT DISC



A PORT





DESCRIPTION

Asbir "M" model valve is the hydraulic control valve operated by line pressure and designed to ensure opening/closing process by means of 3-way selector valve. Minimum opening pressure of valve is 0.5 bar. Thanks to its flexible diaphragm, stem bedded rigidly and stainless steel spring, it makes easy and fast control process in high pressure applications and is closed as full tightness without causing surge. It may be used in different applications by adding different pilot valves on its main body.

CONTROL SYSTEM COMPONENTS

1. 3- way selector valve
2. Ball Valve
3. In-line Finger Filter
4. Plug

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

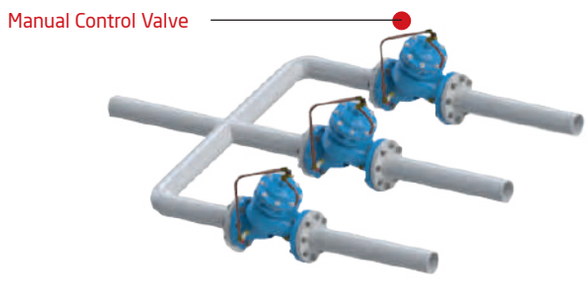
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

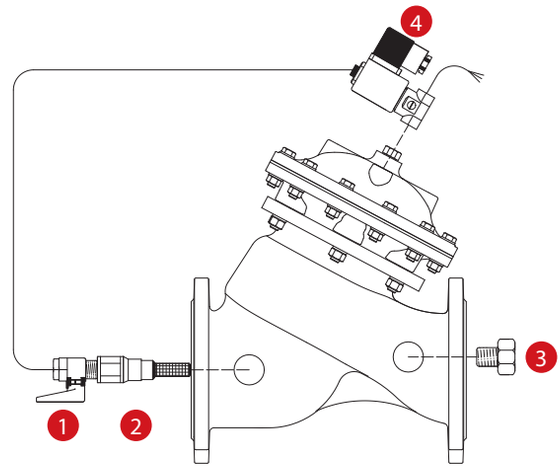
Maximum flow rate	: m^3/h	Main line size	: mm
Maximum network/line pressure	: bar	Valve connection type	: ---

TYPICAL APPLICATION



Asbir Manual Control Valves can be used as on-off valve instead of mechanical valves at water network lines.

EL SOLENOID CONTROLLED VALVE



DESCRIPTION

Asbir "EL" model valve is the hydraulic control valve operated by line pressure and designed to ensure opening/closing process by means of built-in 3/2-way solenoid pilot valves controlled remotely with electric signal. Electric signal for solenoid pilot valves is ensured by means of a control device, time relay, main switch and PLC control units etc. Opening/Closing process may be realized easily thanks to manual control on solenoid pilot valve. Depending on desire, 24V AC 50Hz/60Hz or 12V DC, 9V DC LATCH and 12V DC latch normally open (N.O.) or normally closed (N.C.) solenoid coils may be used on main valve.

CONTROL SYSTEM COMPONENTS

1. Ball Valve
2. In-line Finger Filter
3. Plug
4. Solenoid Pilot Valve

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

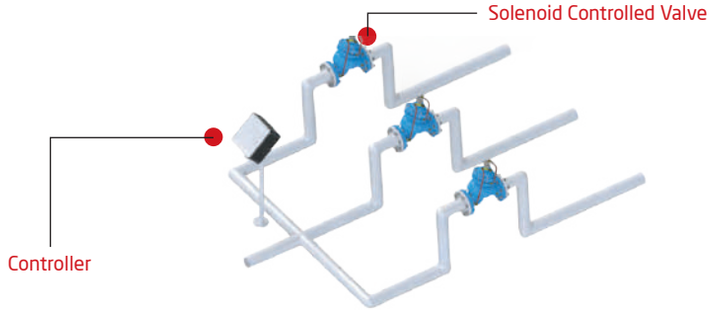
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

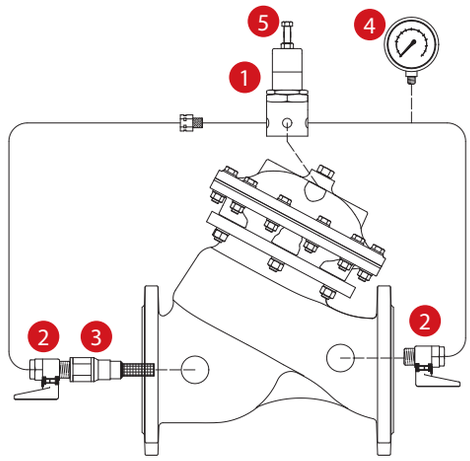
Please submit following information to our sales department while ordering.

Maximum flow rate	: m^3/h	Valve connection type	: ---
Maximum network/line pressure	: bar	Electric voltage value to be used	: volt
Main line size	: mm		

TYPICAL APPLICATION



Asbir Solenoid Controlled Valves can be used with a local control unit or advanced automatin systems.



DESCRIPTION

Asbir "PR" model pressure reducing control valve is the hydraulic control valve which reduces high upstream pressure value into desired lower pressure value by means of built-in pressure reducing pilot valves. Pressure reducer control valve controls downstream pressure value continuously and maintains it constant without being affected from flow rate and upstream pressure values. When no flow exists in the system, it is closer by itself automatically. When valve upstream pressure value decreases below adjusted downstream pressure value, it is opened fully by itself.

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

ORDER INFORMATION

Please submit following information to our sales department while ordering.

Maximum flow rate	: m³/h
Maximum network/line pressure	: bar
Main line size	: mm
Valve connection type	: ---
Maximum upstream pressure	: bar
Minimum upstream pressure	: bar
Desired downstream pressure	: bar

CONTROL SYSTEM COMPONENTS

1. Pressure Reducing Pilot Valve
2. Ball Valves
3. In-line Finger Filter
4. Pressure Gauge
5. Adjustment Bolt

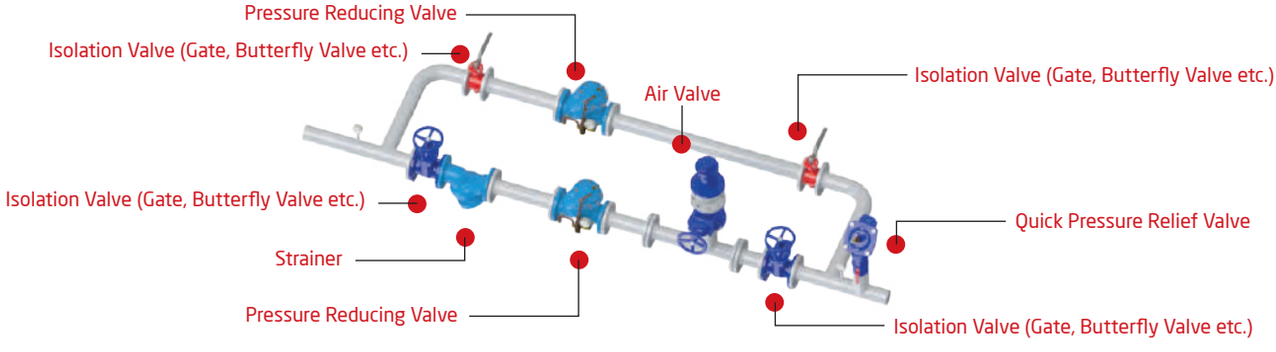
QUICK SIZING

Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

3-WAY PILOT OPERATING

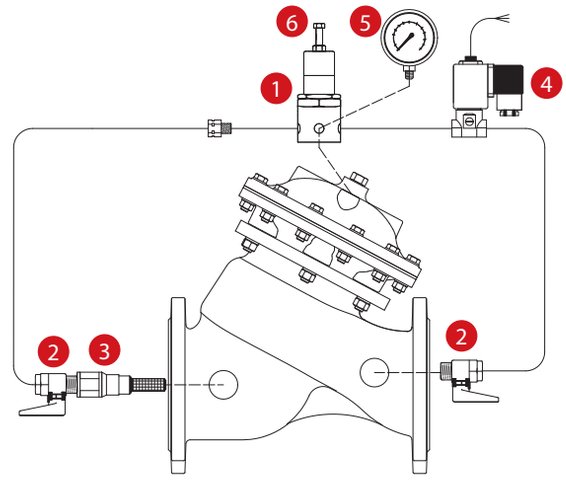
3-way pilots are recommended to use at the application which has very close values between upstream and set pressure because of 3-way pilots provide less head loss.

TYPICAL APPLICATION



Asbir Pressure Reducing Valves reduce pressure to setted downstream pressure value without affecting upstream pressure value at pressure chambers and supplying lines.

PREL SOLENOID CONTROLLED PRESSURE REDUCING VALVE



DESCRIPTION

Asbir "PREL" model pressure reducing valve is the hydraulic control valve which reduces high upstream pressure value into desired lower pressure value. Control of main valve is achieved by means of built-in 3/2 -way solenoid pilot valves. Electric signal for solenoid pilot valves is ensured by means of a control device, time relay, main switch and PLC control units etc. Automated control may be easily ensured by this way in application systems.

CONTROL SYSTEM COMPONENTS

1. Pressure Reducing Pilot Valve
2. Ball Valves
3. In-line Finger Filter
4. Solenoid Pilot Valve
5. Pressure Gauge
6. Adjustment Bolt

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

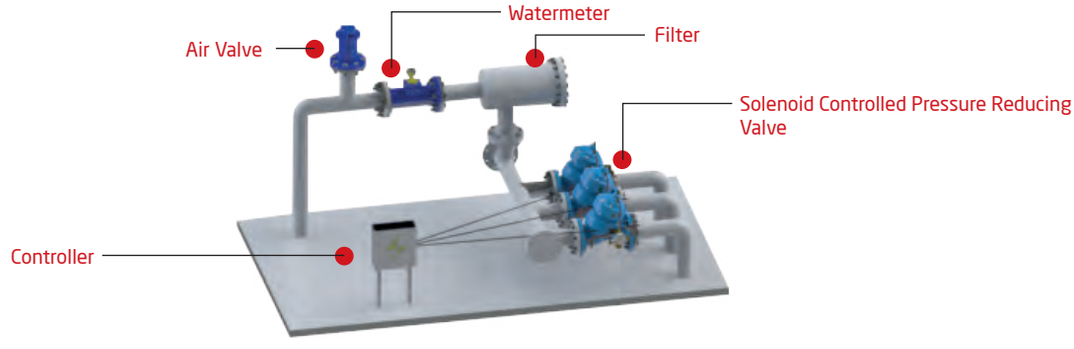
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

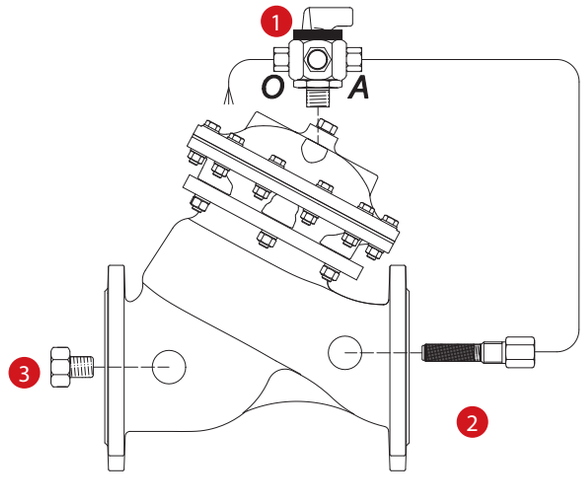
Maximum flow rate	: m^3/h	Maximum upstream pressure	: bar
Maximum network/line pressure	: bar	Minimum upstream pressure	: bar
Main line size	: mm	Desired downstream pressure	: bar
Valve connection type	: ---	Electric voltage value to be used	: volt

TYPICAL APPLICATION



Asbir Solenoid Controlled Pressure Reducing Valves can be used at advanced automation systems with its pressure reducing function.

PROPORTIONAL PRESSURE REDUCING VALVE PRD



DESCRIPTION

Asbir "PRD" model proportional pressure reducing control valves reduce high upstream pressure values and downstream pressure values at a rate of 1/3. Proportional pressure reducing control valves reduces the downstream pressure at about 1/3 without affecting from flow rate and upstream pressure values. When there is no flow in the system, valve closes itself drip-tight. Proportional pressure reducing control valves do not equalize the upstream pressure value to the downstream pressure value. The valves should be placed in series in the pipeline, otherwise the system will not be balanced.

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

ORDER INFORMATION

Please submit following information to our sales department while ordering.

Maximum flow rate	: m^3/h	Valve connection type	: ---
Maximum network/line pressure	: bar	Maximum upstream pressure	: bar
Main line size	: mm	Minimum upstream pressure	: bar

CONTROL SYSTEM COMPONENTS

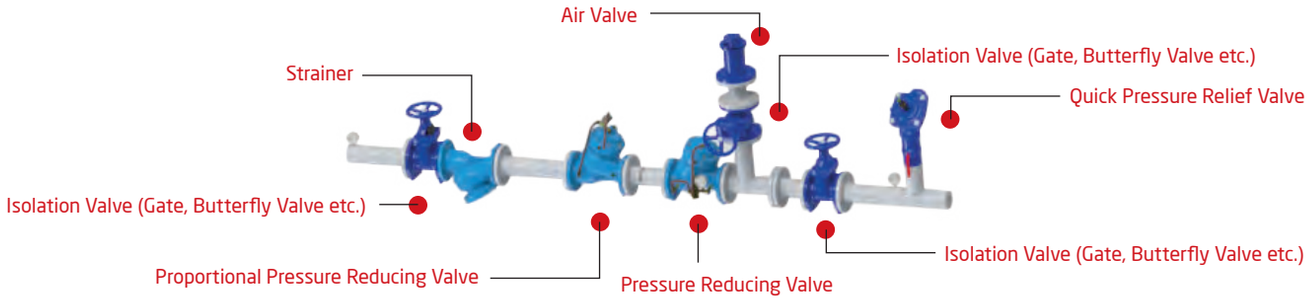
1. 3- way selector valve
2. In-line Finger Filter
3. Plug

QUICK SIZING

Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

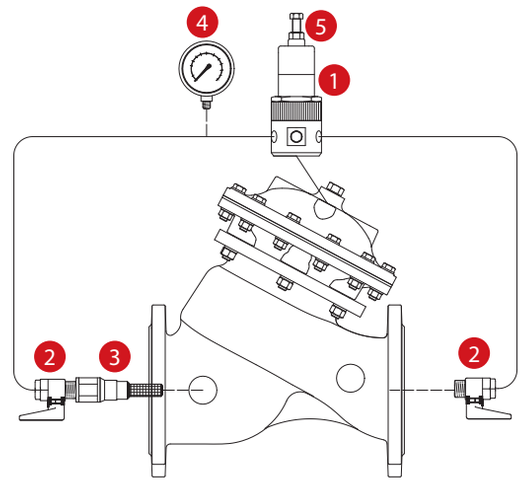
Valve Size		Pressure Reducing Ratio	
inç	mm	Flat Disc	A Port
2	50	3.7	4
2½	65	3.7	4
3	80	2.6	2.9
4	100	2.5	2.8
5	125	2.5	2.8
6	150	2.5	2.7
8	200	2.4	2.6
10	250	2.3	2.5
12	300	2.2	2.4
14	350	2.2	2.4
16	400	2.2	2.3

TYPICAL APPLICATION



Asbir Proportional Pressure Reducing Valves reduce pressure without any pilot as proportional according to catalouge values.

PS PRESSURE SUSTAINING VALVE



DESCRIPTION

Asbir "PS" model pressure sustaining hydraulic control valve maintains valve upstream pressure value constant. Valve is opened when line pressure reaches adjusted valve pressure level. It ensures that pump motor within pumping systems will start without load. It also prevents positive pressure waves caused by pump during start-up. Valve controls upstream pressure value continuously and keeps it in a constant value without being affected from changes in flow rates. When no flow exists, it is closed by itself as fully tightness.

CONTROL SYSTEM COMPONENTS

1. Pressure Sustaining Pilot Valve
2. Ball Valves
3. In-line Finger Filter
4. Pressure Gauge
5. Adjustment Bolt

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

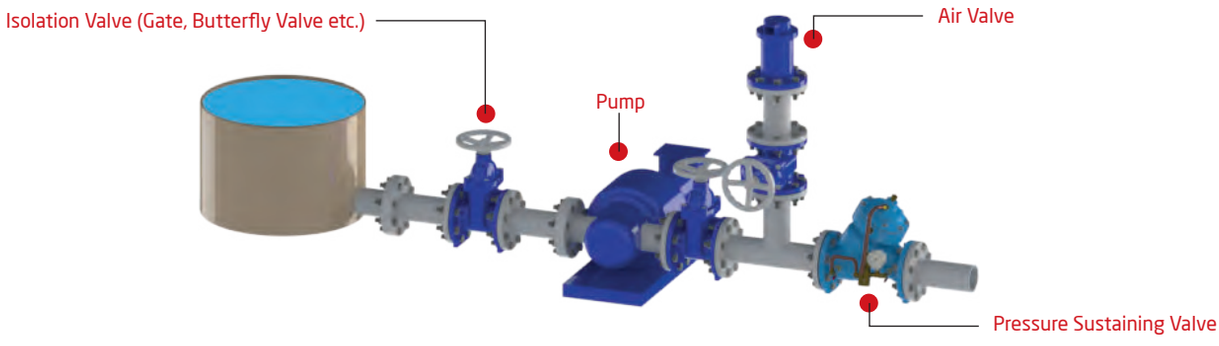
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

Maximum flow rate	: m^3/h	Valve connection type	: --
Maximum network/line pressure	: bar	Desired upstream pressure	: bar
Main line size	: mm		

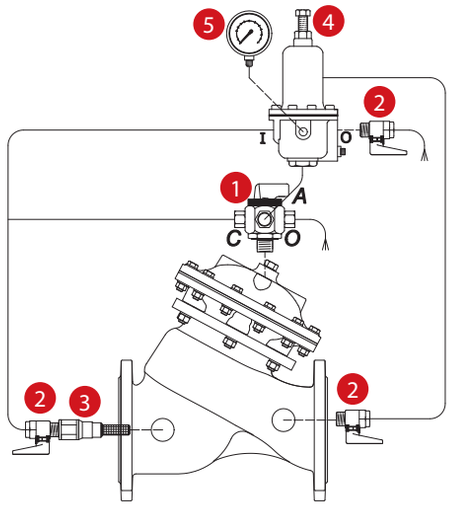
TYPICAL APPLICATION



Asbir Pressure Sustaining Valves control upstream pressure to provide a good condition operating for pump systems.

DIFFERENTIAL PRESSURE SUSTAINING VALVE

DIF



DESCRIPTION

Asbir "DIF" model differential pressure sustaining valves keep differential pressure between two points at a fixed value regardless of variable flow rate and upstream pressure. The determined upstream pressure can be easily adjusted by a pilot valve. The valve controls booster pumps drainage, heating and cooling systems, bypass lines, filters and similar systems.

CONTROL SYSTEM COMPONENTS

1. 3- way selector valve
2. Ball Valves
3. In-line Finger Filter
4. Differential Pressure Sustaining Pilot Valve
5. Pressure Gauge

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

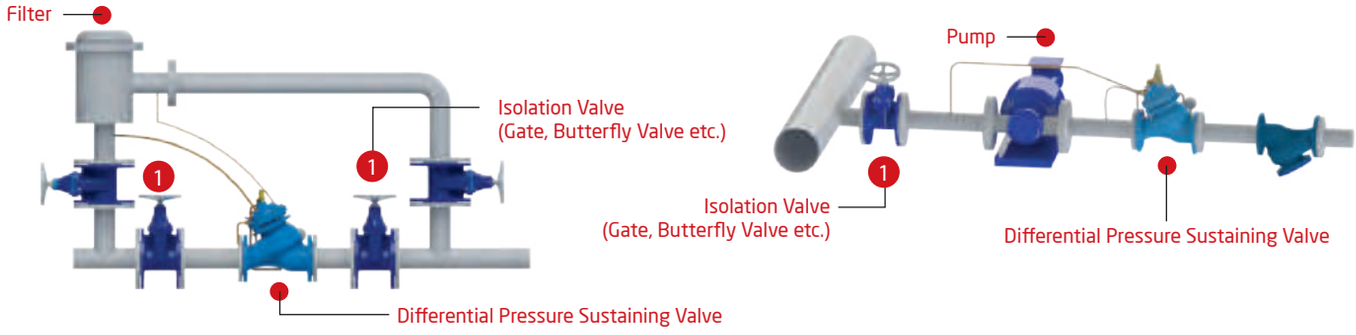
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

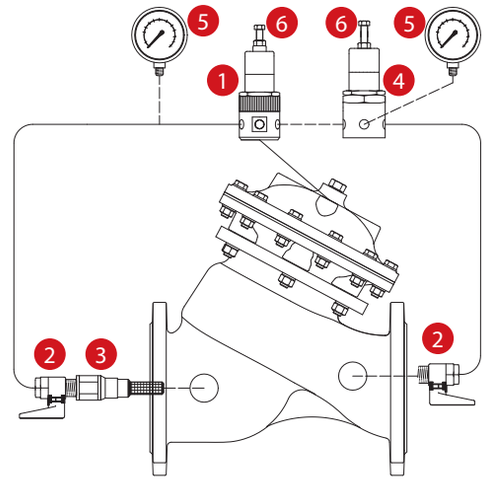
Maximum flow rate	: m^3/h	Maximum upstream pressure	: bar
Maximum network/line pressure	: bar	Minimum upstream pressure	: bar
Main line size	: mm	Desired pressure difference value	: bar
Valve connection type	: ---		

TYPICAL APPLICATION



Asbir Differential Pressure Sustaining Valves sustain pressure difference of two different points which is located in the system.

PRPS PRESSURE REDUCING and SUSTAINING VALVE



DESCRIPTION

Asbir "PRPS" model pressure reducing/sustaining hydraulic control valve reduces valve downstream pressure to desired value by sustaining upstream pressure. Two pilot valves exist on valve. Pilot valve on upstream side is the pressure sustaining pilot valve and sustains upstream pressure. Other pilot valve is pressure reducing pilot valve and keeps downstream pressure constant by reducing it to desired value. It controls upstream and downstream pressure continuously and keeps them within constant values.

CONTROL SYSTEM COMPONENTS

1. Pressure Sustaining Pilot Valve
2. Ball Valves
3. In-line Finger Filter
4. Pressure Reducing Pilot Valve
5. Pressure Gauge
6. Adjustment Bolt

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

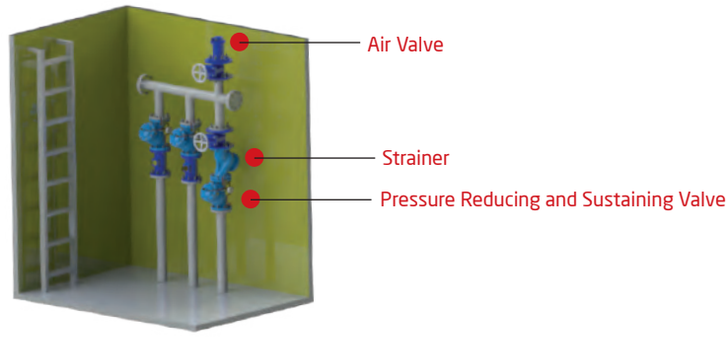
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

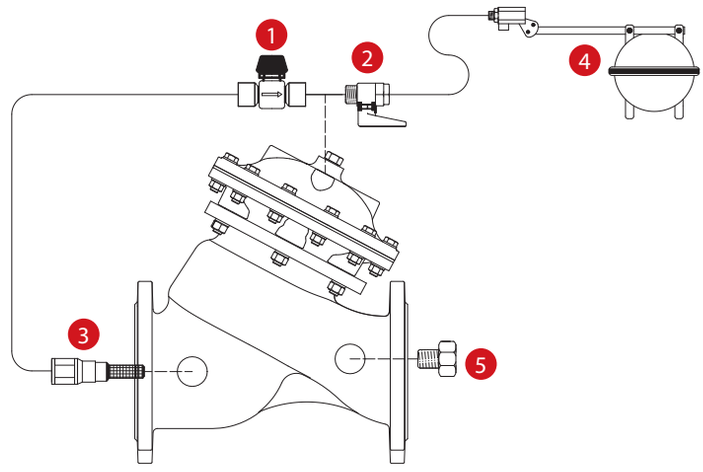
Please submit following information to our sales department while ordering.

Maximum flow rate	: m^3/h	Maximum upstream pressure	: bar
Maximum network/line pressure	: bar	Minimum upstream pressure	: bar
Main line size	: mm	Desired downstream pressure	: bar
Valve connection type	: ---	Desired upstream pressure	: bar

TYPICAL APPLICATION



Asbir Pressure Reducing and Sustaining Valves can be used for avoiding any interaction of high altitude and low altitude usage areas which is feeded by same line and for avoiding unnecessary line discharge.



DESCRIPTION

Asbir "FL" model float level control valve is the hydraulic control valve designed to control water level in reservoirs and tanks continuously. Main valve is controlled by 2-way modulating type float pilot valve manually. Main valve mounted on reservoir and tank upstream is closed as fully sealed without causing surge when water level reaches to maximum level. Valve opening/closing speed may be adjusted in set value. It may be used in the system by mounting horizontal or vertical positions.

CONTROL SYSTEM COMPONENTS

1. Needle Valve
2. Ball Valve
3. In-line Finger Filter
4. Float
5. Plug

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

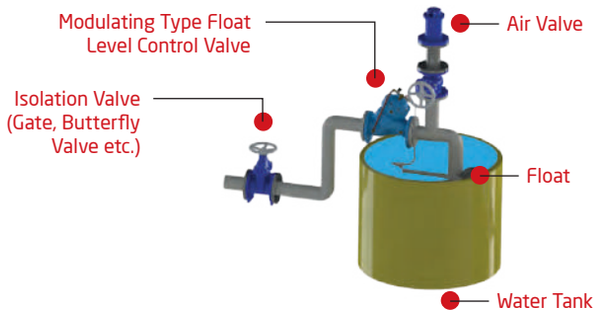
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

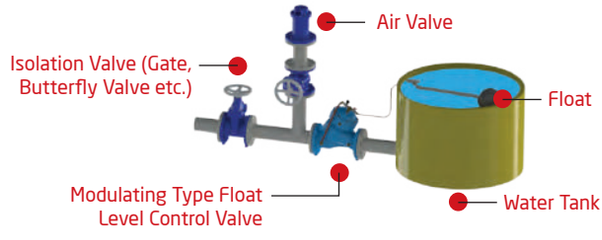
ORDER INFORMATION

Please submit following information to our sales department while ordering.

Maximum flow rate	: m³/h	Main line size	: mm
Maximum network/line pressure	: bar	Valve connection type	: ---

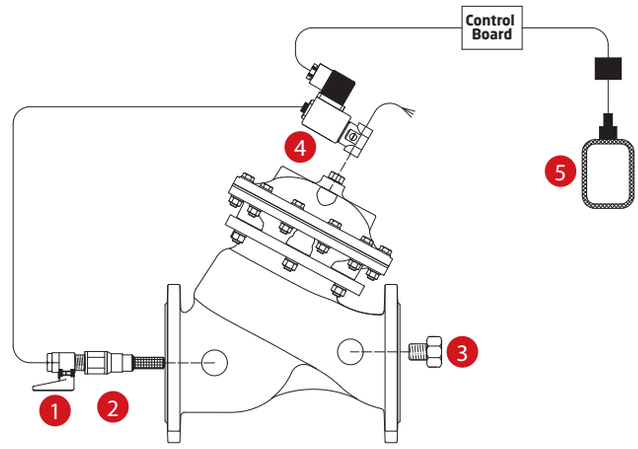
TYPICAL APPLICATION





Asbir Float Level Control Valves prevent water tank overflow.

FLEL ELECTRIC FLOAT LEVEL CONTROL VALVE



DESCRIPTION

Asbir "FLEL" model electrical float level control valve is the hydraulic control valve designed to control water level continuously by means of electrical float placed in reservoirs and tanks. Electrical float sends signal to solenoid coil on main valve when water level decreases below set level. Main valve is opened and ensures that tank or reservoir will be filled permanently. When water reaches maximum level, electrical float sends signal to solenoid coil again and main valve is closed as full sealed. Valve may be used in the system by mounting horizontal or vertical positions.

CONTROL SYSTEM COMPONENTS

1. Ball Valve
2. In-line Finger Filter
3. Plug
4. Solenoid Pilot Valve
5. Electric Float Switch

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

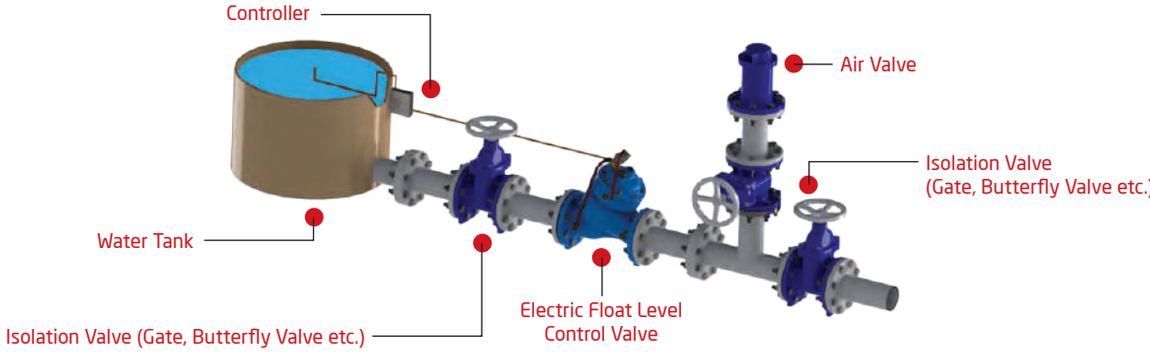
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

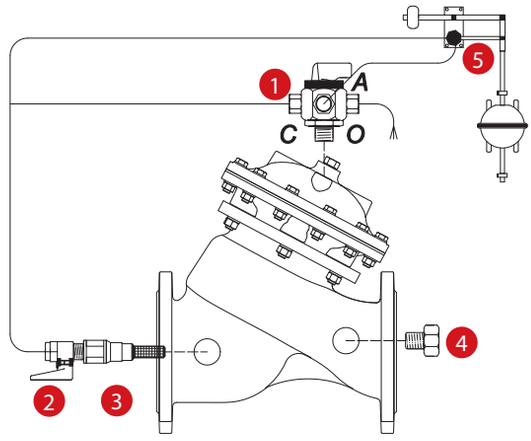
Maximum flow rate	: m^3/h	Valve connection type	: ---
Maximum network/line pressure	: bar	Electric voltage value to be used	: volt
Main line size	: mm		

TYPICAL APPLICATION



Asbir Electric Float Level Control Valves prevent water tank overflow thanks to electric float.

ASBİR® DIFFERENTIAL FLOAT LEVEL CONTROL VALVE DIFL



DESCRIPTION

Asbir "DIFL" model differential float level control valve is the hydraulic control valve designed to control water level in reservoirs and tanks in desired ranges. Main valve is closed as wholly sealed without surge when water reach desired level thanks to 4/3 way differential control pilot. Max. and min. water level in reservoir may be adjusted to desired value in a wide range. Thanks to this feature, pump does not put into/out of service frequently during level control of reservoir fed by pump. Valve controls water level and keeps it in desired range without being affected from flow rate and pressure changes.

CONTROL SYSTEM COMPONENTS

1. 3- way selector valve
2. Ball Valve
3. In-line Finger Filter
4. Plug
5. Differential Level Control Pilot Valve

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

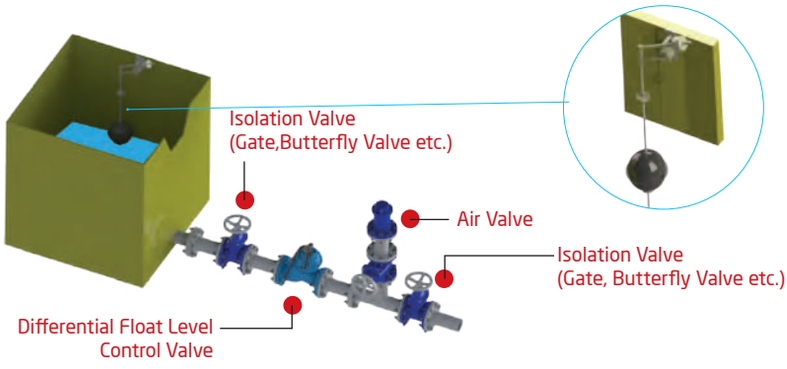
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

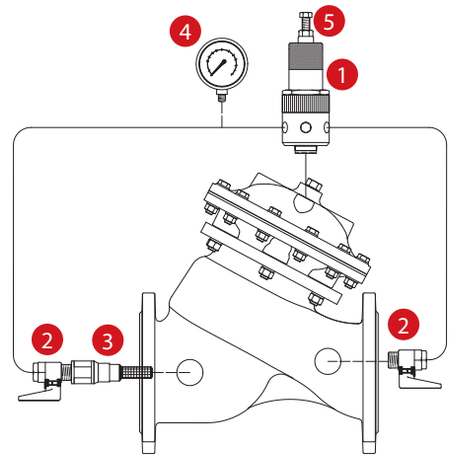
Maximum flow rate	: m^3/h	Valve connection type	: ---
Maximum network/line pressure	: bar	Desired level control range	: m
Main line size	: mm		

TYPICAL APPLICATION



Asbir Differential Float Level Control Valves control minimum and maximum water levels at water tanks thanks to its differential float.

QR QUICK PRESSURE RELIEF VALVE



DESCRIPTION

Asbir "QR" model quick relief control valve is the safety control valve designed to protect system by releasing pressure surges to atmosphere quickly caused from sudden changes in water speed because pumps put into/out of service frequently in water network elevation lines. When network pressure goes beyond set point, valve opens by itself quickly and protects system by releasing over pressure. When line pressure decreases to normal level, it is closed slowly and automatically as wholly sealed without causing surge.

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

ORDER INFORMATION

Please submit following information to our sales department while ordering.

Maximum flow rate	: m^3/h
Maximum network/line pressure	: bar
Main line size	: mm
Valve connection type	: ---
Maximum upstream pressure	: bar
Desired upstream pressure	: bar

CONTROL SYSTEM COMPONENTS

1. Quick Pressure Relief Pilot Valve
2. Ball Valves
3. In-line Finger Filter
4. Pressure Gauge
5. Adjustment Bolt

QUICK SIZING

• Quick Pressure control valve is mounted on network in TE configuration.

• Since valve's function is to release pressure, valve diameter may be selected as equal to or in closest smaller size than main pipe diameter. Valve diameter should be selected as smaller than main pipe diameter. Following empirical formula may be used in determining diameter of quick pressure relief control valve. Where;

$$D=\sqrt{\frac{250xQ}{\sqrt{Hm}}}$$

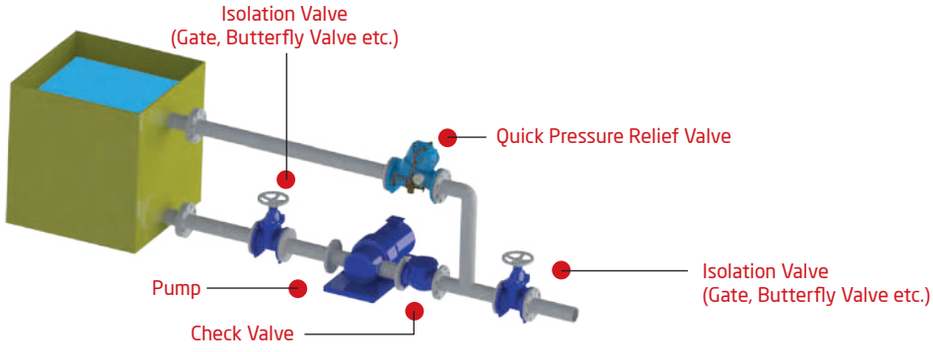
D = Diameter of quick pressure relief control valve (mm)

Q = System Flow Rate (m^3/h)

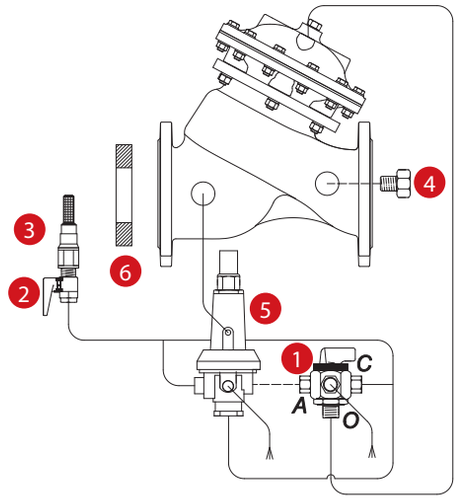
Hm = System Operating Pressure (meter → 1 bar ≈ 10 meter)

• Valve closing time is proportional with pipe length. As system pipe length increases, valve closing time should be increased.

TYPICAL APPLICATION



Asbir Quick Pressure Relief Valves protect pipe-line and system equipments during pressure fluctuations.



DESCRIPTION

Asbir "FR" model flow rate control valve is designed to limit desired flow rate. The orifice on main valve upstream creates pressure difference and 3/way differential pressure set pilot mounted in control chamber of valve senses this pressure difference and ensures that main valve opens in desired flow rate. Valve thereby limits desired flow rate automatically and keeps it fixed. It eliminates over flow by preventing excessive flow during reverse washing in filtration systems.

CONTROL SYSTEM COMPONENTS

1. 3- way selector valve
2. Ball Valve
3. In-line Finger Filter
4. Plug
5. Flow Rate Control Pilot Valve
6. Orifice Plate

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

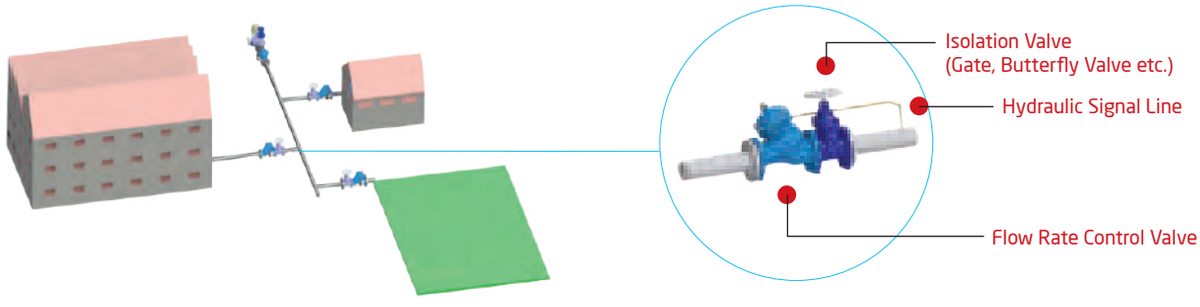
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

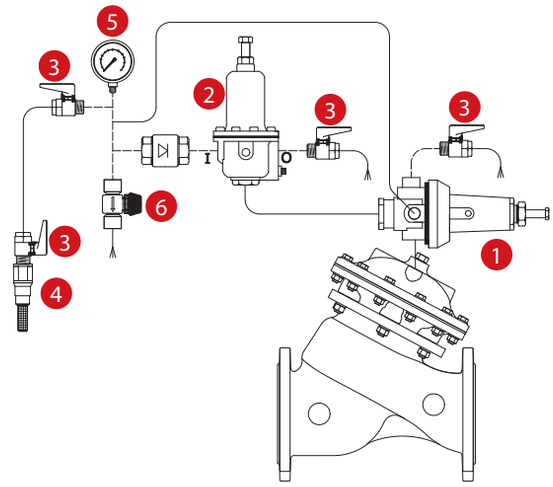
Maximum flow rate	: m^3/h	Valve connection type	: ---
Maximum network/line pressure	: bar	Maximum upstream pressure	: bar
Main line size	: mm	Desired flow rate	: m^3/h

TYPICAL APPLICATION



Asbir Flow Rate Control Valves limit the flow rate to requested value.

SA SURGE ANTICIPATING VALVE



DESCRIPTION

Asbir "SA" model surge anticipating control valve is the safety control valve designed to protect system in relatively longer water supply network elevating line by damping energy waves formed by energy interruptions in pumping systems and by releasing water-hammers which are caused from sudden changes in water flow rate to atmosphere automatically and quickly. Valve is opened quickly by sensing diminished pressure wave previously by means of pressure signal tube it owned. When line pressure reached normal level, it is closed slowly and automatically as wholly sealed.

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

ORDER INFORMATION

Please submit following information to our sales department while ordering.

Maximum flow rate	: m^3/h
Maximum network/line pressure	: bar
Main line size	: mm
Valve connection type	: ---
Maximum pump pressure	: bar
Length of main pipe line	: m

CONTROL SYSTEM COMPONENTS

1. Low Pressure Pilot Valve
2. High Pressure Pilot Valve
3. Ball Valves
4. In-line Finger Filter
5. Pressure Gauge
6. Needle Valve

QUICK SIZING

• Surge Anticipating valve is mounted on network in TE configuration.

• Since valve's function is to release pressure, valve diameter may be selected as equal to or in closest smaller size than main pipe diameter. Valve diameter should be selected as smaller than main pipe diameter. Following empirical formula may be used in determining diameter of quick pressure relief control valve. Where;

$$D=\sqrt{\frac{250xQ}{\sqrt{Hm}}}$$

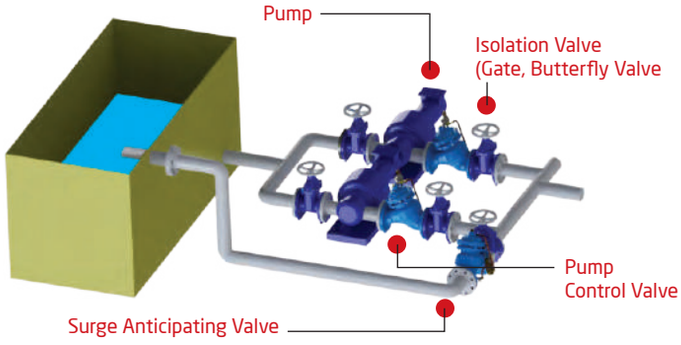
D = Diameter of surge anticipating valve (mm)

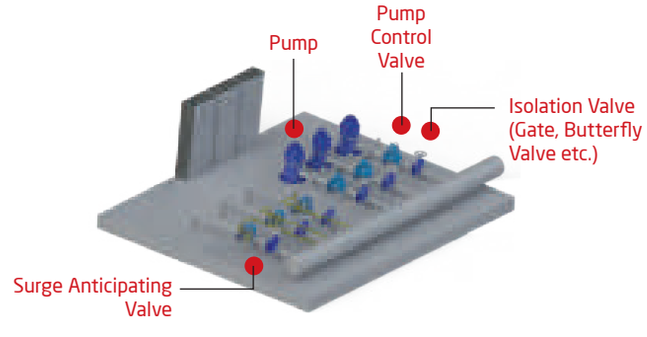
Q = System Flow Rate (m^3/h)

Hm = System Operating Pressure (meter → 1 bar ≈ 10 meter)

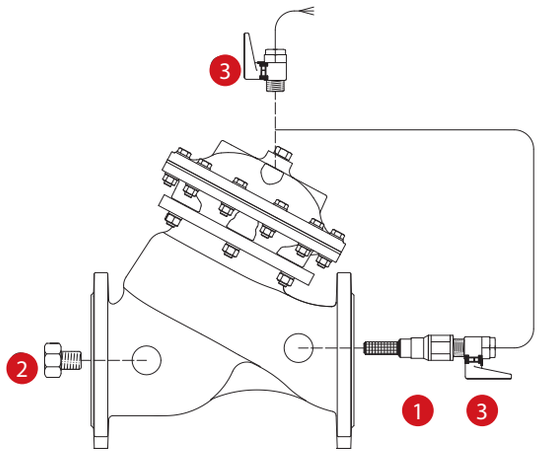
• Valve closing time is proportional with pipe length. As system pipe length increases, valve closing time should be increased.

TYPICAL APPLICATION





Asbir Surge Anticipating Valves protect pipe-line against to impacts due to water hammer and unexpected pump shut-off.



DESCRIPTION

Asbir "HCV" model valve is hydraulically controlled check valve which operates with line pressure and prevents back-flow in system. When downstream pressure value exceeds upstream pressure value, valve is closed as wholly sealed without causing surge. When upstream pressure value exceeds downstream pressure value, check valve is opened by itself slowly. So it damps pressure surges formed during start-up.

CONTROL SYSTEM COMPONENTS

1. In-line Finger Filter
2. Plug
3. Ball Valve

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

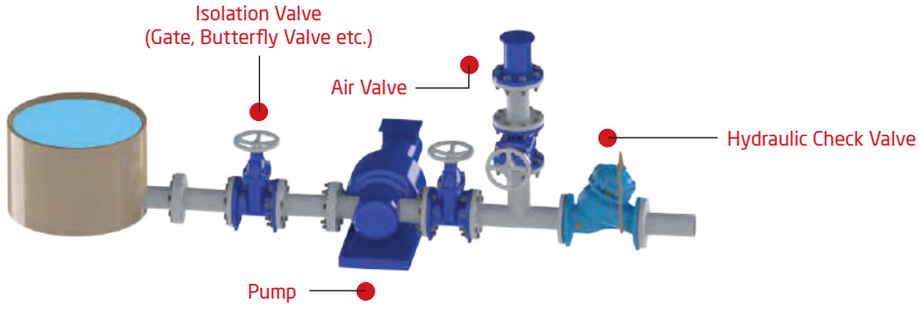
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

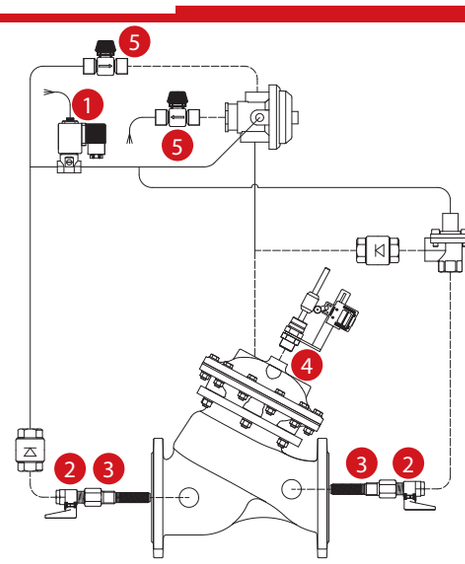
Maximum flow rate	: m^3/h	Valve connection type	: ---
Maximum network/line pressure	: bar	Maximum upstream pressure	: bar
Main line size	: mm		

TYPICAL APPLICATION



Asbir Hydraulic Check Valves prevent back-flow.

PC PUMP (BOOSTER) CONTROL VALVE



DESCRIPTION

Asbir "PC" model pump control valve is a control valve designed for putting booster type pumps into/out of service automatically which is used water network elevating lines. When start button is pressed, pump control valve is opened by itself slowly in comparison with booster pump until pump rotation will reach working rotation. When "stop" button is pressed, control valve is closed slowly without causing surge in the first plan. When pump control valve was closed as fully sealed, it is disengaged from system by means of "Limit Switch" on it. In situations like energy interruption, works as a check valve to prevent back-flow to pump and eliminates use of an extra check valve in the system.

CONTROL SYSTEM COMPONENTS

1. Solenoid Pilot Valve
2. Ball Valves
3. In-line Finger Filters
4. Limit Switch Assemble
5. Needle Valves

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

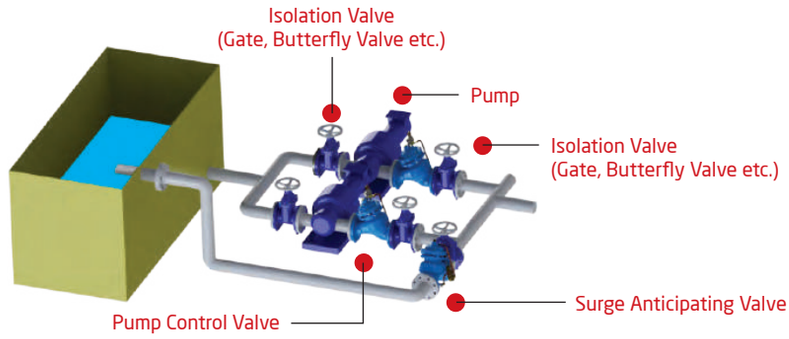
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

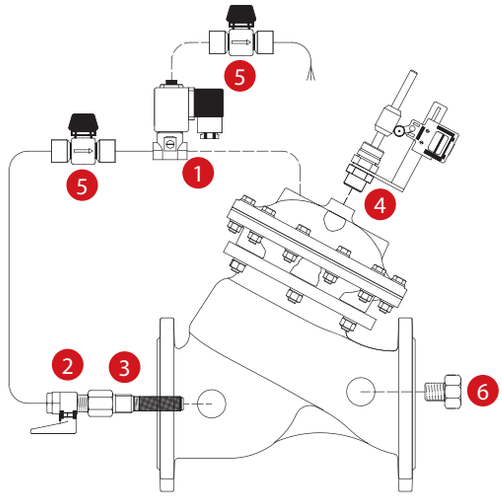
Maximum flow rate	: m^3/h	Main line size	: mm
Maximum network/line pressure	: bar	Valve connection type	: ---

TYPICAL APPLICATION



Asbir Pump Control Valves protect and control booster type pumps.

DEEP WELL (SUBMERSIBLE) PUMP CONTROL VALVE DPC



DESCRIPTION

Asbir "DPC" model deep-well pump control valve is a relief control valve designed for putting deep-well type pumps into/out of service automatically. Valve is connected on main line with a "TE" piece. Valve is in open position before pump operates. When pump starts up, valve is closed by itself slowly without causing surge and increases system pressure gradually. Before pump stops, valve opens by itself slowly and automatically and decreases system pressure gradually.

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

ORDER INFORMATION

Please submit following information to our sales department while ordering.

Maximum flow rate	: m^3/h
Valve connection type	: ---
Maximum network/line pressure	: bar
Maksimum pump pressure	: bar
Depth of the well	: m

CONTROL SYSTEM COMPONENTS

1. Solenoid Pilot Valve
2. Ball Valve
3. In-line Finger Filter
4. Limit Switch Assemble
5. Needle Valves
6. Plug

QUICK SIZING

•Deep-well Pump control valve is mounted on network in TE configuration since it is a electric activated release valve.

•Since valve's function is to release, valve diameter may be selected as equal to or in closest smaller size than main pipe diameter. Valve diameter should be selected as smaller than main pipe diameter. Following empirical formula may be used in determining diameter of deep-well pump control valve. Where;

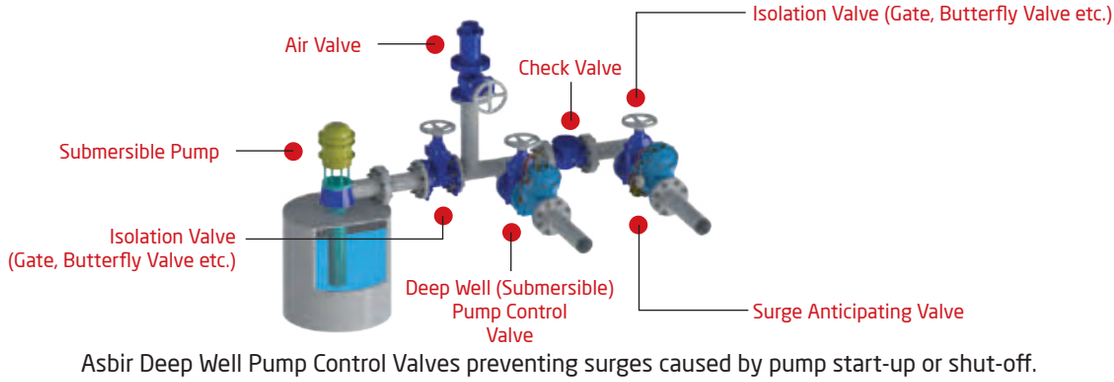
$$D=\sqrt{\frac{250xQ}{\sqrt{Hm}}}$$

D = Diameter of deep-well pump control valve (mm)

Q = System Flow Rate (m^3/h)

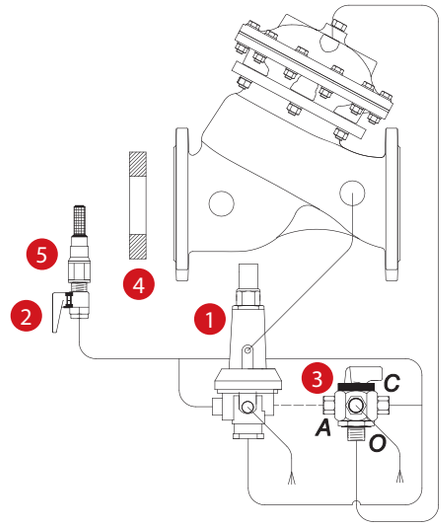
Hm = System Operating Pressure (meter → 1 bar ≈ 10 meter)

TYPICAL APPLICATION



Asbir Deep Well Pump Control Valves preventing surges caused by pump start-up or shut-off.

FE EXCESSIVE FLOW SHUT-OFF CONTROL VALVE



DESCRIPTION

Asbir "FE" model excessice flow shut-off control valve is activated by the line pressure. The valve is a hydraulic control valve closes drip tight when flow rate exceeds the set value. The valve is fully open when flow rate is below the set rate. A differantial 3 way pilot valve and orifis are on valve which immediately closes drip tihgt itself when flow rate exceeds the set value. This feature allows prevent waste water such as burst pipe damage. The valve is open manual after auto closing. It is set auto after the fully opening will be provided.

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

CONTROL SYSTEM COMPONENTS

1. Flow Rate Control Pilot
2. Ball Valve
3. 3-way Selector Valve
4. Orifice Plate
5. In-line Finger Filter

QUICK SIZING

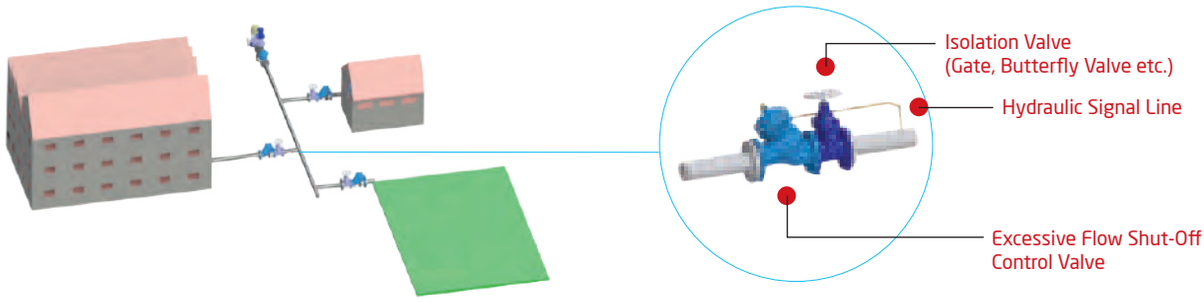
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

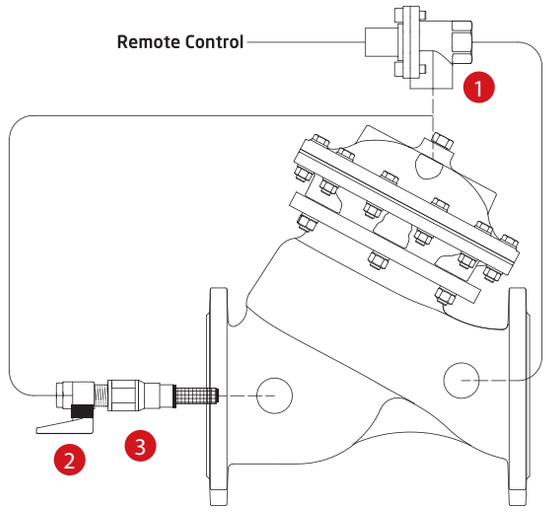
Please submit following information to our sales department while ordering.

Maximum flow rate	: m^3/h	Valve connection type	: ---
Maximum network/line pressure	: bar	Maximum upstream pressure	: bar
Main line size	: mm	Maximum Flow Rate for limiting	: m^3/h

TYPICAL APPLICATION



Asbir Excessive Flow Shut-off Valves prevent flood damages caused by pipe burst.



DESCRIPTION

Asbir "RC" model remote control valves are activated by hydraulic or pneumatic pressure command with the relay valve on main valve. The standard valve is normally closed The valve opens when the pressure signal received. Remote control valves are used in many automation systems.

CONTROL SYSTEM COMPONENTS

1. Accelerator Relay
2. Ball Valve
3. In-line Finger Filter

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

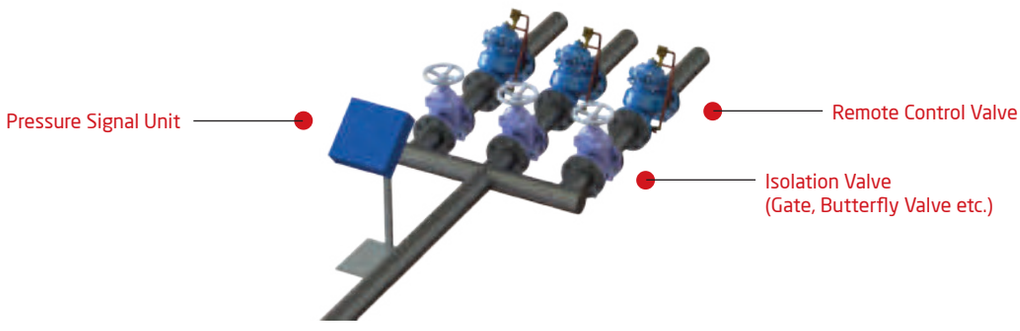
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

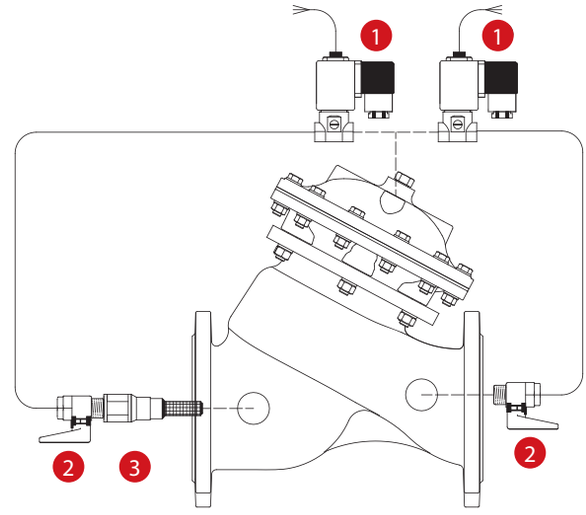
Maximum flow rate	: m^3/h	Main line size	: mm
Maximum network/line pressure	: bar	Valve connection type	: ---

TYPICAL APPLICATION



Asbir Remote Control Valves are activated by a remote pressure signal.

EC PLC CONTROLLED VALVE



DESCRIPTION

Asbir "EC" model PLC controlled valves are enabled local or remote control of various applications such as time related applications, different the batching operation of liquid, automatic control systems. The main valve is controlled by two solenoids that controlled by a PLC controller. The valve have simple and reliable design that works with low power

CONTROL SYSTEM COMPONENTS

1. Solenoid Pilot Valves
2. Ball Valves
3. In-line Finger Filter

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

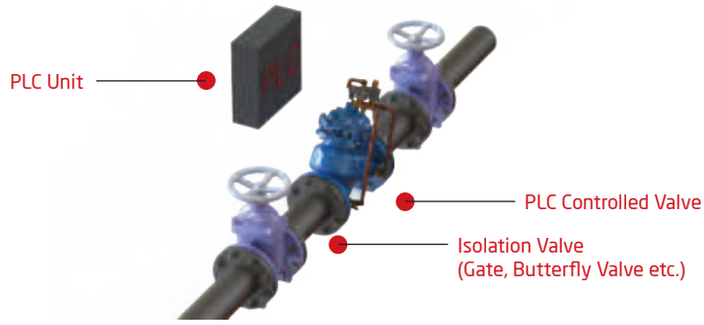
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

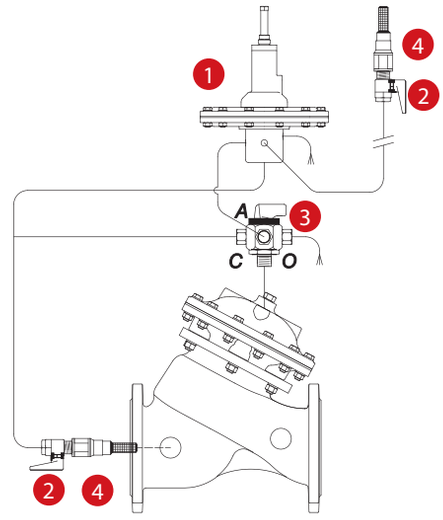
Please submit following information to our sales department while ordering.

Maximum flow rate	: m^3/h	Valve connection type	:
Maximum network/line pressure	: bar	Electric voltage value to be used	: volt
Main line size	: mm		

TYPICAL APPLICATION



Asbir PLC Controlled Valves control pressure or flow rate according to reciving signals from PLC Control unit.



DESCRIPTION

Asbir "ALT" model is an automatic, high sensitive pilot controlled, level control valve, activated by the static pressure of the tank tower. The high sensitive pilot valve opens or close the main valve in response to the static pressure of water level in tank. The pilot valve located outside the tank tower. There is no need any floats.

CONTROL SYSTEM COMPONENTS

1. Altitude Pilot
2. Ball Valves
3. 3-way Selector Valve
4. In-line Finger Filters

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

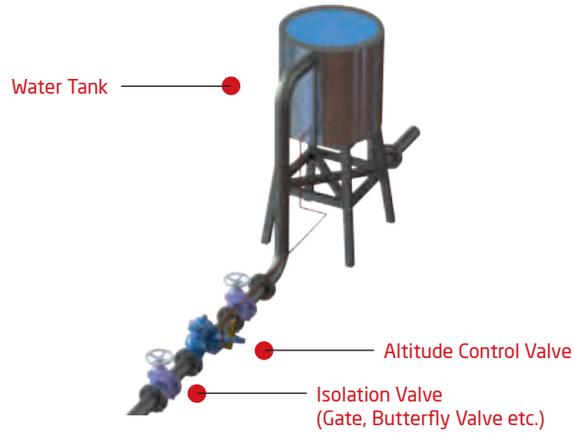
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

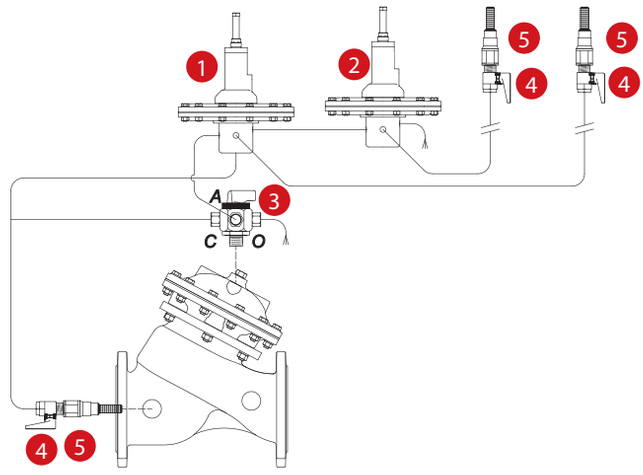
Maximum flow rate	: m³/h	Valve connection type	: ---
Maximum network/line pressure	: bar	Maximum Water Tank Height	: m
Main line size	: mm		

TYPICAL APPLICATION



Asbir Altitude Control Valves control the water volume without float in an elevated tank.

ALT-B BI-LEVEL ALTITUDE PILOT CONTROLLED LEVEL CONTROL VALVE



DESCRIPTION

Asbir "ALT-B" model is an automatic, high sensitive double pilot controlled, level control valve, activated by the static pressure of the tank tower. The high sensitive pilot valves opens or close the main valve in response to the static pressure of water level in tank. The pilot valves located outside the tank tower. There is no need any floats. One of the pilot valve control the main valve according to minimum water level. The other one control the main valve according to maximum water level.

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

CONTROL SYSTEM COMPONENTS

1. Altitude Pilot
2. Altitude Pilot
3. 3-way Selector Valve
4. Ball Valves
5. In-line Finger Filters

QUICK SIZING

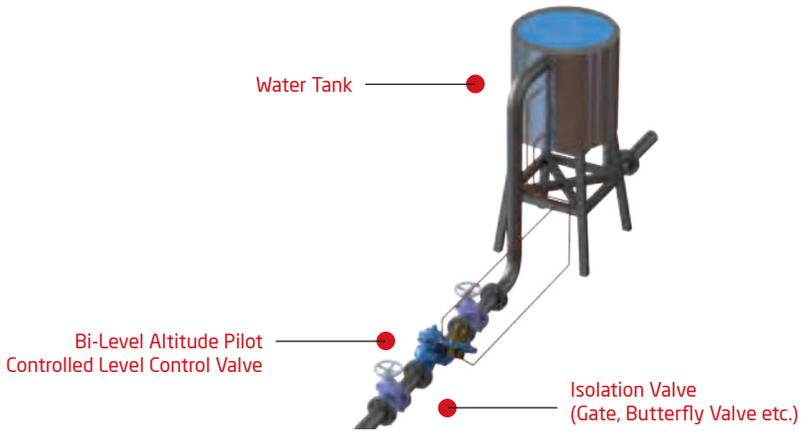
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

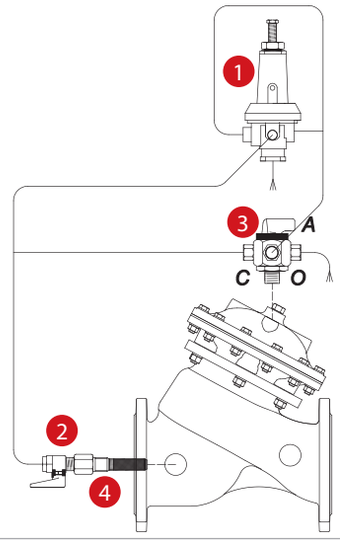
Please submit following information to our sales department while ordering.

Maximum flow rate	: m^3/h	Valve connection type	: ---
Maximum network/line pressure	: bar	Maximum Water Tank Height	: m
Main line size	: mm	Minimum Water Tank Height	: m

TYPICAL APPLICATION



Asbir Bi-Level Altitude Control Valves control the water volume without float in an elevated tank.



DESCRIPTION

Asbir "TSO" model two stage opening valve is used all lines will be fast filled, it can be used to prevent damage caused by fast filling. Until the low pressure port of the pilot is completely filled, flow of valve is restricted and then allowed to fully opening. It can be used with other control valves for filling the system with high water speed.

CONTROL SYSTEM COMPONENTS

1. Multifunctional Pilot
2. Ball Valve
3. 3-way Selector Valve
4. In-line Finger Filter

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

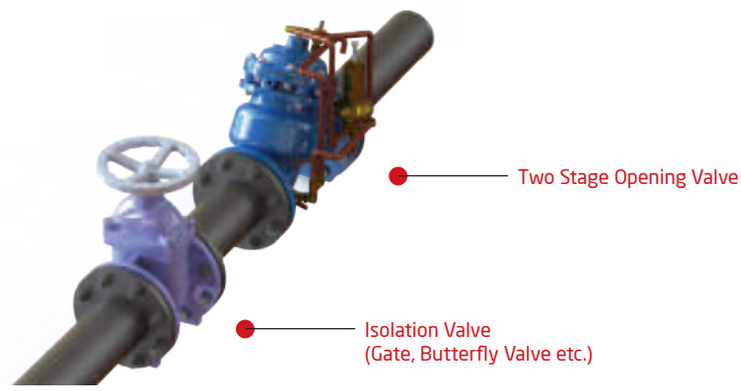
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

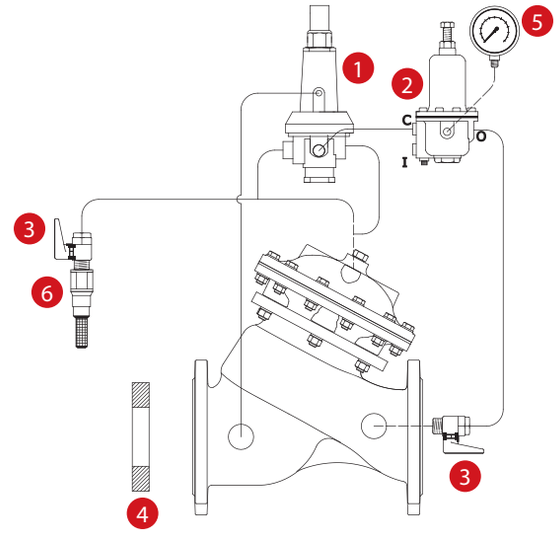
Maximum flow rate	: m^3/h	Main line size	: mm
Maximum network/line pressure	: bar	Valve connection type	: ---

TYPICAL APPLICATION



Asbir Two Stage Open Hydraulic Control Valves prevent water-hammer/surges caused by fast drained pipe filling.

FRPR FLOW RATE CONTROL and PRESSURE REDUCING VALVE



DESCRIPTION

Asbir "FRPR" model flow rate control and pressure reducing valves, independently provides two functions. Flow control being provided with 3 way differential pilot valve on the main valve which works line pressure without any energy, pressure reducing pilot valve control the downstream pressure of main valve. Flow rate control and pressure reducing valves decrease the valve number on lines used flow and pressure control to economize.

CONTROL SYSTEM COMPONENTS

1. Flow Rate Control Pilot
2. Pressure Reducing Pilot
3. Ball Valves
4. Orifice Plate
5. Pressure Gauge
6. In-line Finger Filter

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

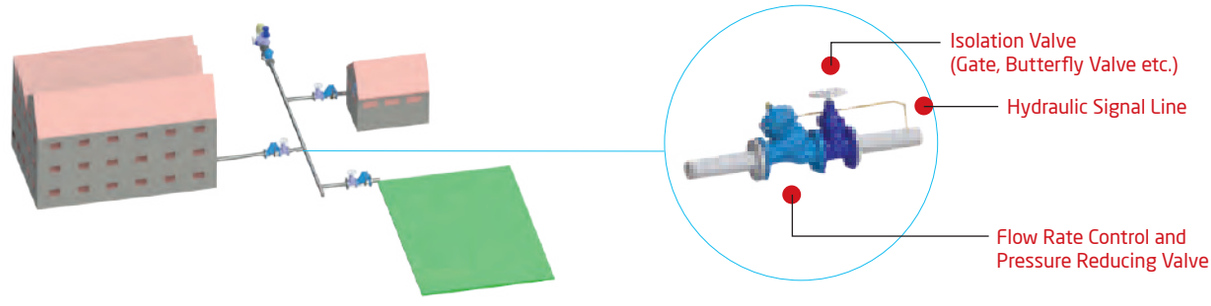
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

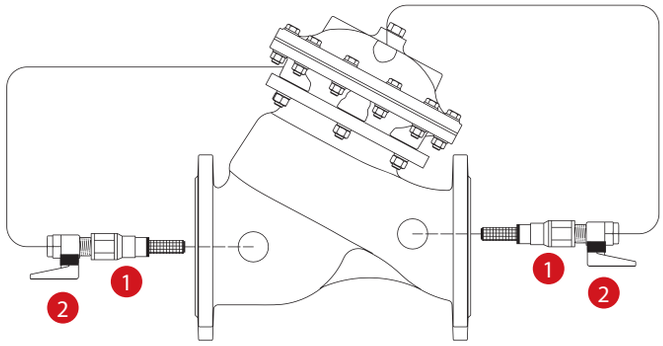
Maximum flow rate	: m³/h	Maximum upstream pressure	: bar
Maximum network/line pressure	: bar	Desired flow rate	: m³/h
Main line size	: mm	Minimum upstream pressure	: bar
Valve connection type	: ---	Desired downstream pressure	: bar

TYPICAL APPLICATION



Asbir Pressure Reducing and Flow Rate Control Valve is a combined hydraulic control valves which controls pressure and flow rate parameters.

NON-SLAM HYDRAULIC CHECK VALVE NSC



DESCRIPTION

Asbir "NSC" model valve is hydraulically controlled non-slam check valve which operates with line pressure and prevents back-flow in system. Valve works with double chambers. Upstream pressure controls one of chambers and downstream pressure controls the other one. When downstream pressure value exceeds upstream pressure value (back-flow), valve is closed as wholly sealed without causing surge because of double chambers. When upstream pressure value exceeds downstream pressure value, non-slam check valve is opened by itself slowly. So pressure surges formed during start-up, stop and working sysytems are dumped.

CONTROL SYSTEM COMPONENTS

1. In-line Finger Filter
2. Ball Valve

PURCHASE SPECIFICATIONS

The valve will be diaphragm actuated disc closing automatic hydraulic control valve which works with line pressure. Double-chamber diaphragm actuator provides quicker and non-impact opening/closing thanks to disc-closing valve design and prevents blockage by showing less sensitivity against solid substances within fluid.

QUICK SIZING

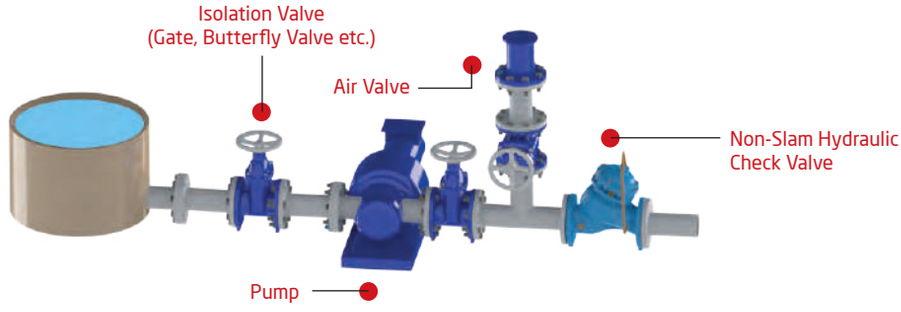
Valve size same as main line or one size smaller.
Maximum flow speed for continuous operation 5.5 m/sec (18 ft/sec)

ORDER INFORMATION

Please submit following information to our sales department while ordering.

Maximum flow rate	: m^3/h	Main line size	: mm
Maximum network/line pressure	: bar	Valve connection type	: ---
Maximum pump pressure	: bar		

TYPICAL APPLICATION



Asbir Non-Slam Check Valves prevent back-flow and provide smooth closing for avoiding pressure fluctuations.

600 SERIES

Asbir 600 series valves are the direct diaphragm closing automatic hydraulic control valves which work with line pressure. It ensures easy and smooth flow with minimum pressure losses thanks to excellent design of valve body and diaphragm.

Available Sizes: 1½" (40 mm) - 12" (300 mm)

Available Connection Types: Threaded, Flanged, Grooved End

500 SERIES

Asbir 500 series valves are direct diaphragm closing automatic hydraulic control valves which work with line pressure. They ensure easy and smooth flow with minimum pressure losses thanks to excellent design of valve body and diaphragm. Asbir 500 series hydraulic control valves are designed so that it can be used in potable water force network, agricultural irrigation, filtration, applications by even an unskilled personnel.

Available Sizes: 1½" (40 mm) - 4" (100 mm)

Available Connection Types: Threaded, Flanged

AAV SERIES - AIR VALVES

Asbir AAV Series Automatic Air Release Valves are the valves that operate with line pressure. Asbir AAV Series Automatic Air Release Valves are the air valves that provide the venting of the air during filling and preventing of vacuum by taking air into the installation during emptying, releasing of the air that accumulates in the installation during active operation with the help of pressure and that operates in automatic manner.

Available Sizes: 2" (50 mm) - 8" (200 mm)

Available Connection Types: Flanged

DELUGE VALVES

Asbir electrically activated deluge valves which are used for fire protection lines, open with an electric signal from a controller or a control board. Electrically activated deluge valves are used in fire protection lines with gas / smoke detectors and open nozzles / sprinklers. A 3 way solenoid valve on the deluge valve activates a relay pilot valve on the deluge valve. The relay pilot valve opens the deluge valve quickly and then the deluge valve lets water or foam concentration which is ready, flow to open nozzles / sprinklers. When the electric signal end, the deluge valve close tightly.

Available Sizes: 2" (50 mm) - 8" (200 mm)

Available Connection Types: Flanged

RESILIENT SEATED GATE VALVES

Valve is closed or opened by moving wedge upward or downward via threaded stem mounted in the body. Wedge is rubber coated and It is not used as a check valve and flow rate adjustments.

Available Sizes: 2" (50 mm) - 12" (300 mm)

Available Connection Types: Flanged

STRAINERS

Strainer is the installation equipment which separates dirt, sediments and various foreign substances which may exist in the fluid (cold water, hot water, superheated water and steam) physically thanksto its filter and prevent them to damage other equipment in installation. Strainers are used to protect equipments such as pumps, water counters and automatic check valves form foreign matters by being mounted on intake side of this equipment.

Available Sizes: 2" (50 mm) - 16" (400 mm)

Available Connection Types: Flanged

CHECK VALVES

Swing check valve permits that water passes toward flow direction and prevents water flow in counter direction. It is manufactured in such a way that it will be closed by its own weight or by a weight mechanism. It is used in especially pumping plants to prevent back flow in case pump becomes out of service. It may be used in hot and cold water plants and with each kind of acid free gases and liquids.

Available Sizes: 2" (50 mm) - 8" (200 mm)

Available Connection Types: Flanged

ALARM CHECK VALVES

Asbir FCV Alarm Check Valve is designed for wet applications where the water has no the danger of frost. The pressurized water which is inside of the pipe-line is discharged by sprinklers because of fire situation. When the discharged pressurized water system is supporting continuously, retard chamber is being full. Then, the pressure switch on the retard chamber is actuated. The pressure switch sends alarm information to fire warning system or the automation system. After the pressure switch is actuated, the water is delivered to the gong and releases a mechanical alarm.

Available Sizes: 2½" (65 mm) - 8" (200 mm)

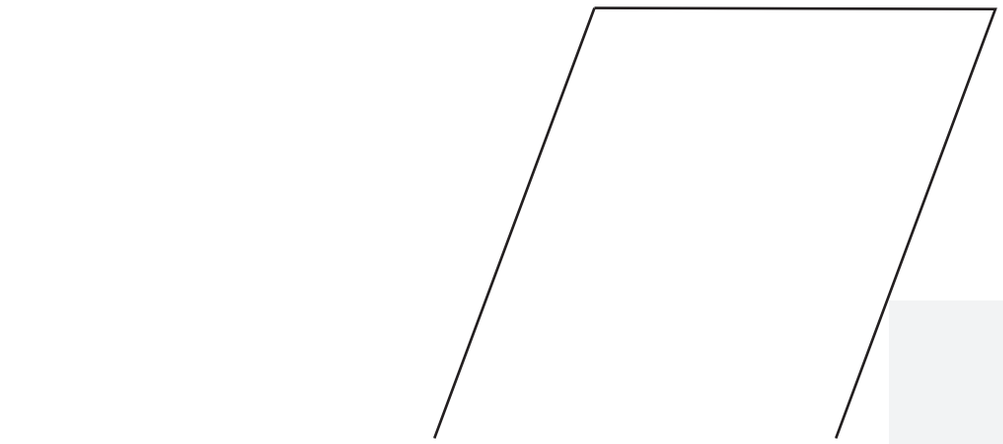
Available Connection Types: Flanged

OS&Y GATE VALVES

OS&Y Valve is a type of gate valve which is able to follow the opening/closing position by moving the stem up&down movement, is able to follow electronically the movement by adding a monitoring key, and full open position does not disrupt the flow. OS&Y Valve generates low head loss according to butterfly valves. Valve is closed or opened by moving wedge upward or downward via threaded stem mounted in the body. Wedge is rubber coated and It is not used as a check valve and flow rate adjustments.

Available Sizes: 2" (50 mm) - 8" (200 mm)

Available Connection Types: Flanged



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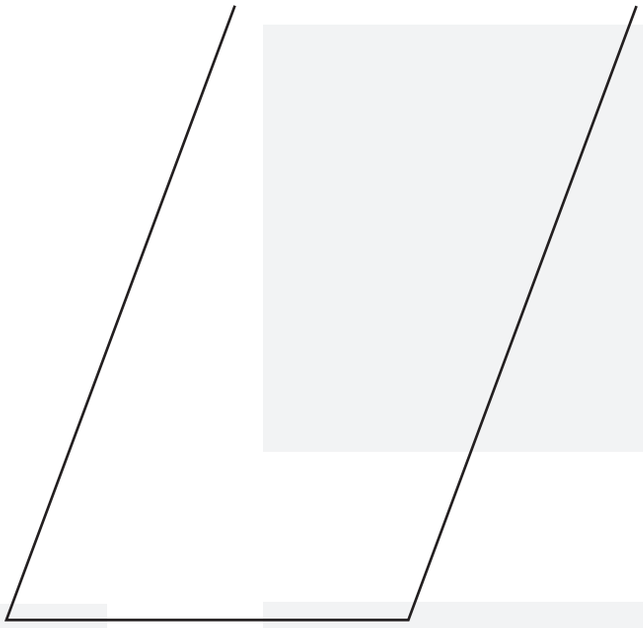

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