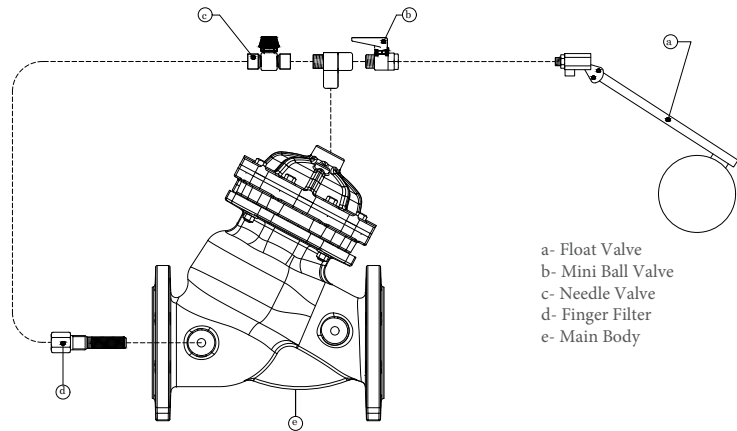




Technical Drawing



Product Description

BKV 116 Series Horizontal Float Level Control Valves are hydraulic control valves that maintain the water level within desired ranges in large surface area tanks or low volume reservoirs. The main valve is automatically controlled by a 2-way horizontal float. Mounted at the tank or reservoir inlets, the main valve closes completely and leak-proof without creating a shock when the water level reaches its maximum. When the water level falls below the float, the main valve fully opens, ensuring the tank or reservoir remains continuously full. The valve automatically adjusts the water inlet flow rate to the tank according to the flow within the tank.

Features

- Operates with mains pressure and requires no extra energy.
- Easy maintenance.
- Adjustable opening and closing speed.
- Low cavitation risk.

Adjustment

- Mount the float-operated pilot valve, indicated by "a", securely according to the water level in the tank or reservoir.
- Connect one end of the hydraulic pressure signal tube, supplied with the valve, to the ball valve indicated by "b", and the other end to the float-operated pilot valve.
- Open the ball valves indicated by "b".
- Adjust the opening and closing speed of the main valve using the needle valve indicated by "c".

Production Standards

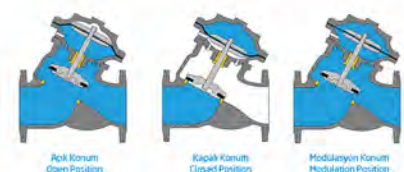
DN40	⇒	DN500
Pressure Range		1 bar ⇒ 16 bar
Connection		Flanged EN1092-2
Paint		Electrostatic Powder Coating
Temperature		-10 °C +80 °C

Application Areas

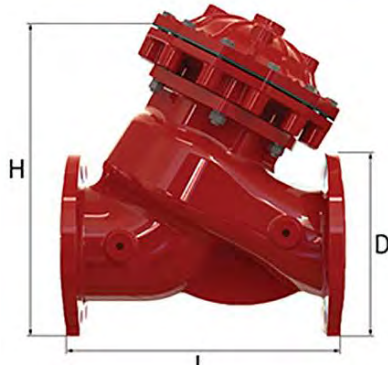
- Agricultural irrigation
- Fire extinguishing
- Industrial applications
- Irrigation and drinking water systems

Working Principle

- Closed position: The valve is closed by applying pressure to the diaphragm with fluid pressure.
- Open position: Internal line pressure moves the diaphragm upwards, allowing flow.
- Modulation position: The diaphragm remains in a fixed position by balancing the internal and external line pressures.



Nominal Diameter	1 1/2" DN40	2" DN50	2 1/2" DN65	3" DN80	4" DN100	5" DN125	6" DN150	8" DN200	10" DN250	12" DN300	14" DN350	16" DN400	18" DN450	20" DN500
Product code	YF16YFV 40	YF16YFV 50	YF16YFV 65	YF16YFV 80	YF16YFV 100	YF16YFV 125	YF16YFV 150	YF16YFV 200	YF16YFV 250	YF16YFV 300	YF16YFV 350	YF16YFV 400	YF16YFV 450	YF16YFV 500



Recommended Work Values

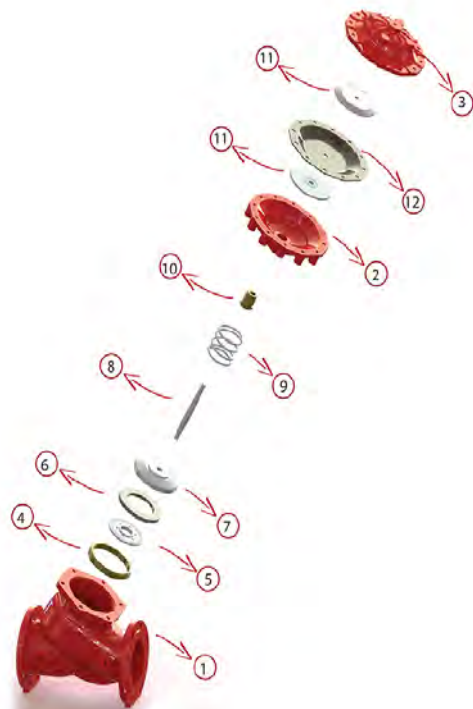
Working Pressure	Standard	1-16 bar (10-240 psi)
Temperature	Min.working temperature	-10°C
	Max.working temperature	+80°C
Connections	Flanged	EN 1092-2 ISO 7005-2
	Threaded	ISO (BSP) - ANSI (NPT)
Paint Coating	Standard	Polyester
	Opsiyonel	Epoxy

Y-Type Control Valve Size and Weight Chart

DN		L		D		H		Weight	
inch	mm	inch	mm	inch	mm	inch	mm	lbs	kg
1 ½"	40	8,5	215	5,9	150	10,6	270	33	15
2"	50	8,7	220	6,5	165	10,6	270	35	16
2 ½"	65	8,7	220	7,3	185	11,2	285	39	18
3"	80	10,60	270	7,9	200	13,4	340	59	27
4"	100	12,80	325	8,7	220	15,4	390	85	39
5"	125	13,20	335	9,8	250	16,5	420	97	44
6"	150	16,93	430	11,2	285	20,5	520	200	91
8"	200	21,26	540	13,4	340	26,0	660	399	181
10"	250	24,60	625	15,9	405	30,5	775	590	268
12"	300	26,97	685	18,3	465	31,9	810	661	300
14"	350	34,3	870	20,5	520	41,9	1065	1569	712
16"	400	34,3	870	23,0	585	43,1	1095	1598	725
18"	450	43,9	1115	56,3	1430	53,7	1365	3042	1380
20"	500	43,9	1115	56,3	1430	53,7	1365	3086	1400

NOTE: Weight and valve height (h) do not include accessories.

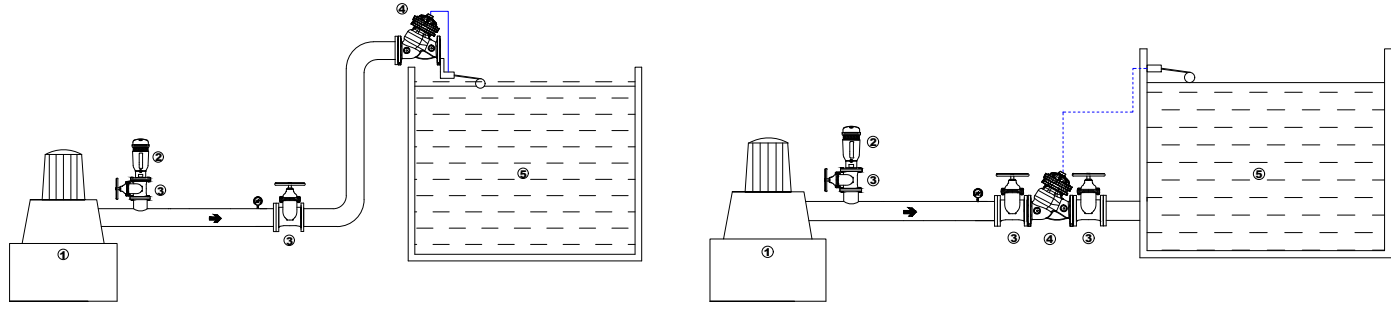
Ana Parçalar



1	Body	GGG40 (EN-GJS 400-15) Cast iron
2	Intermediate Body	GGG40 (EN-GJS 400-15) Cast iron
3	Lid	GGG40 (EN-GJS 400-15) Cast iron
4	Sealing Bushing	Brass/Bronze
5	Flap Pressing Cover	Paslanmaz
6	Flap Seal	Buna-N
7	Flap	Stainless
8	Shaft	Stainless
9	Spring	Stainless
10	Intermediate Body Shaft Bearing	Brass/Bronze
11	Diaphragm Pressing Disc	Stainless
12	Diaphragm	Nopren (Nylon based)

Maximum Working Pressure		Maximum Working Pressure		Body Test Pressure	
BAR	PSI	BAR	PSI	BAR	PSI
10	145	11	160	15	217
16	232	17,6	255	24	348
25	363	27,5	399	37,5	544

Example Application

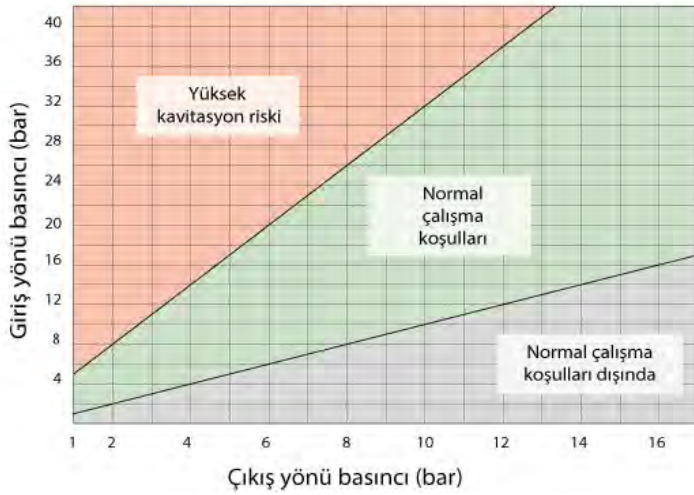


- 1- Pump
- 2- Air Vent
- 3- Isolation Valve
- 4- Horizontal Float Level Control Valve
- 5- Reservoir
- 6- Float Switch

Flow Analysis Table

Nominal Diameter	mm	50	65	80	100	125	150	200	250	300	350	400	450	500
	Inch	2"	2½"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"
kv	m ³ /h- 1 ar	70	73	167	215	224	503	830	1300	1800				
		44	46	96	168	171	388	685	1054	1565				

Cavitation Graph



Pressure Loss Graph

