Level Regulating Valve type

Type LCD2・LCD3 Level Regulating Valve

For liquid

Features

- Float and valve body connect each other directly.
  Easy to use and everlasting due to simple construction which is installed tank directly.
- Control the level correctly and quickly
- Double seated valve allows superior characteristics
- Inspection hole allows to inspect internal without taking off the valve.

Specifications

Type		Internal float		External float	
Model		LCD2		LCD3	
Flow		Outflow	Inflow	Outflow	Inflow
Size		25－100			
Inlet max. pressure		1.0MPa			
Max. temperature		60℃			
Material	Body, casing	Cast iron			
	Valve disc, seat	Stainless steel			
	Float	Stainless steel			
Viscosity		200mm^2/s			
Specific gravity		Min. 0.9			
Connection		Flanged JIS10KFF			
Seat leakage		0.5 % of rated flow or less			

Note : Stainless cast steel body is available on request

Outflow type : The valve will open by the level rising.
Liquid level is controlled by discharging.

Inflow type : The valve will open by the level falling.
Liquid level is controlled by supplying.

Cv values

Size	25	40	50	65	80	100
Max. differential pressure (MPa)	0.9	0.7	0.6	0.45	0.4	0.3
Cv	6	10	16	23	35	50

Dimensions and weights

(mm, kg)

Size		25	40	50	65	80	100
L		180	195	200	220	250	310
H_1		107	117	117	122	145	160
H_2		207	217	217	222	244	259
Weight	LCD2	48	52	52	60	135	140
	LCD3	88	95	95	100	175	180

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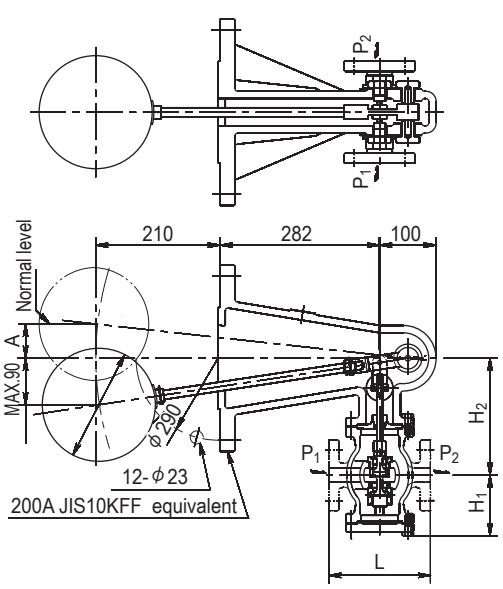
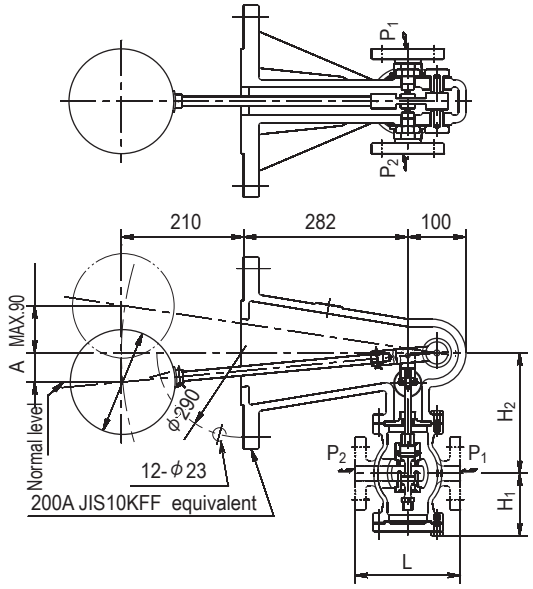
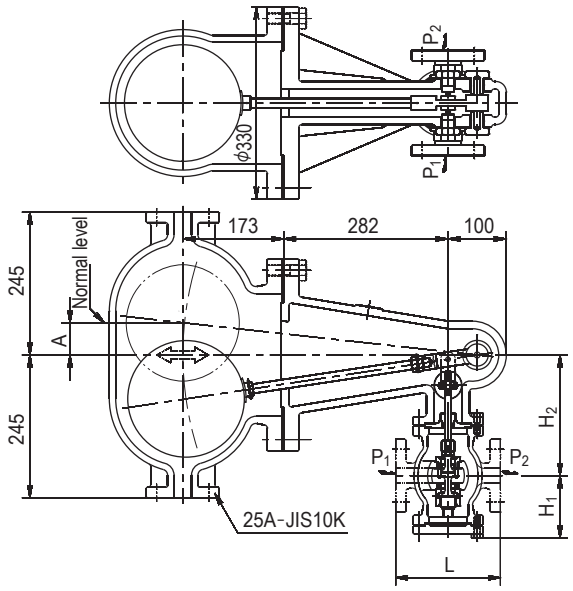
Construction



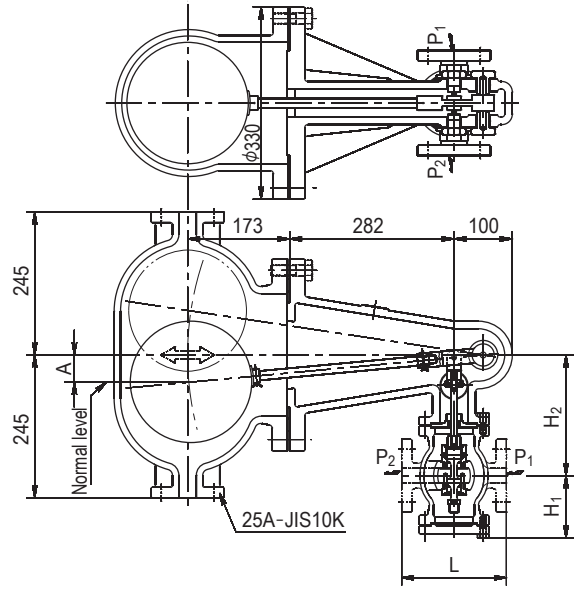
LCD2 (Inflow)



LCD2 (Outflow)



LCD3 (Inflow)



LCD3 (Outflow)

Operation

1. Level regulating valve consist of float and casing to detect liquid level, lever frame work to transmit float movement to valve disc and body to control the flow.
2. Normal valve is applied for outflow and reverse valve applied for inflow.
3. In case of outflow, rising liquid level make float and lever to rise up, discharge liquid by valve opening and liquid level fall will down. Falling level make valve to close and decrease discharge flow.
4. In case of inflow, falling liquid level make float and lever to fall down, supply liquid by valve opening and liquid level will rise up. Rising level make valve to close and decrease supply flow.

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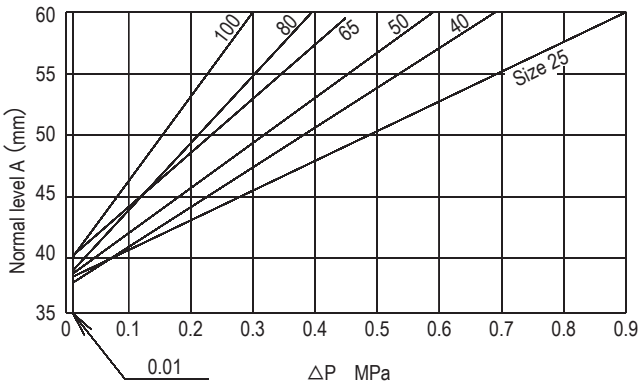
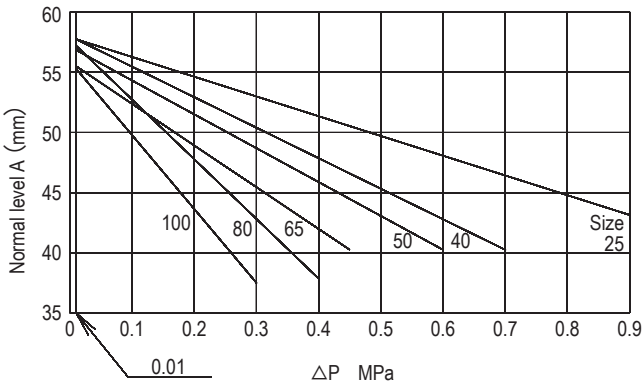
Normal level A

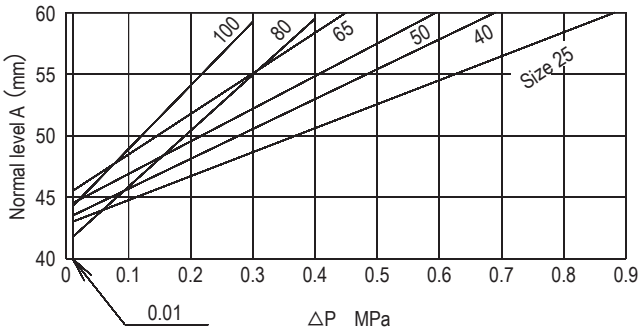
Following charts show the required level A against pressure difference.



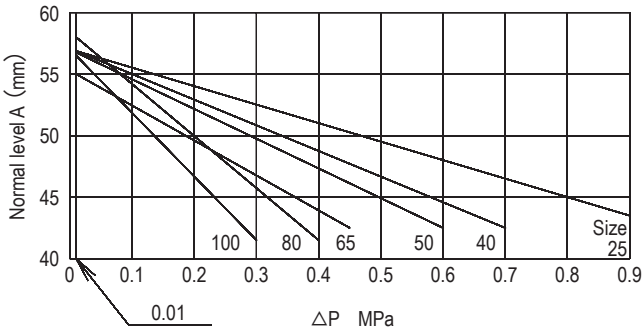
LCD2 (Inflow)



LCD2 (Outflow)



LCD3 (Inflow)



LCD3 (Outflow)

Sizing

1. Please select suitable size by Cv calculation.
   Level regulating valve can control the flow until 10% of rated Cv.
2. Excess pressure difference prevent normal operation.
3. Each construction and part except assembling work are same for both inflow type and outflow type.

Inquiry

Please specify followings at inquiry.

1. Inflow or outflow
2. Valve size or piping size
3. Fluid information : Name, inlet pressure, temperature (max., nor., min.), viscosity
4. Max. allowable pressure drop of valve at max. flow
5. Control range and accuracy of liquid level
6. Material for fluid contact if necessary
7. Connection code
8. Others