

## YDP-1F, 20F Type Differential Pressure Control Valve

This maintains the differential pressure of supply and return lines or the differential pressure of the inlet and outlet side of an instrument in a closed circuit.

### Features

- As an air-to-close differential pressure valve, it has a structure where the valve opens when the primary pressure goes up. It is installed in between the supply header and return header to control the differential pressure.
- As a self-control type, it does not require auxiliary power supply.
- As a complete balancing type, almost no changes in the set differential pressure resulting from pressure fluctuations.
- Structure is relatively simple, and offers superb durability.
- Convenient piping and handling.
- Separated diaphragm from the main body, not affected by temperature, resulting in outstanding durability.



YDP-1F



YDP-20F

### Specification

Type	YDP-1F	YDP-20F
Applicable pressure	Maximum 1,0MPa	Maximum 2,0MPa
Applicable fluid	Cold/hot water	
Fluid temperature	170°C below	
Differential pressure control range	0,05~0,30MPa	0,05~0,30MPa
		0,30~0,50MPa
Leakage allowance	0,5% less of rated flow	
Direction of installation	Horizontally or vertically	
End connection	KS 10K RF FLANGE	KS 20K RF FLANGE
Materials	Body	GC200
	Disc, Seat	CAC406
	Diaphragm	EPDM
Hydraulic test pressure	water pressure 1,5MPa	water pressure 3,0MPa

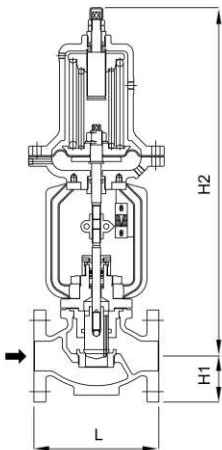
- ▶ When using the valve, install a strainer (40 Mesh or more) on the leaflet.
- ▶ 1kPa = 0,001 MPa

### Dimensions

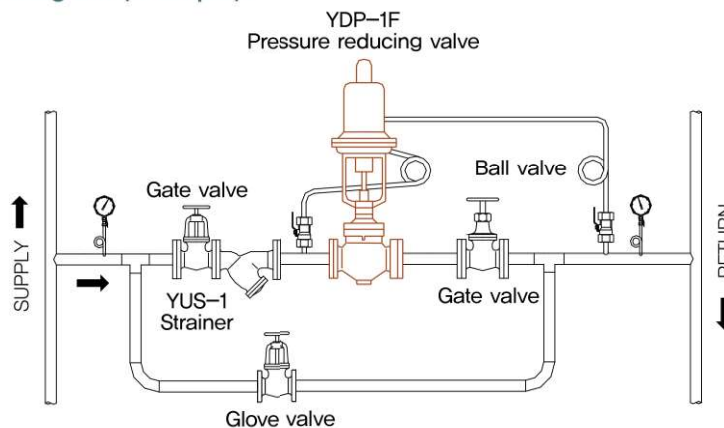
(mm)

Size	YDP-1F				YDP-20F				Cv
	L	H1	H2	Weight (kg)	L	H1	H2	Weight (kg)	
25(1")	184	62,5	559	24	197	62,5	559	24	8
32(1¼")	180	70	565	31	180	70	565	31	12,5
40(1½")	222	80	565	33	235	80	565	33	18
50(2")	254	95	586	47	267	95	586	47	43
65(2½")	276	115	610	51	292	115	610	51	64
80(3")	294	120	630	63	318	120	630	63	84
100(4")	352	130	650	77	368	130	650	77	152
125(5")	400	150	685	139	400	150	685	139	200
150(6")	451	180	715	168	473	180	715	168	288

### Dimensional drawing



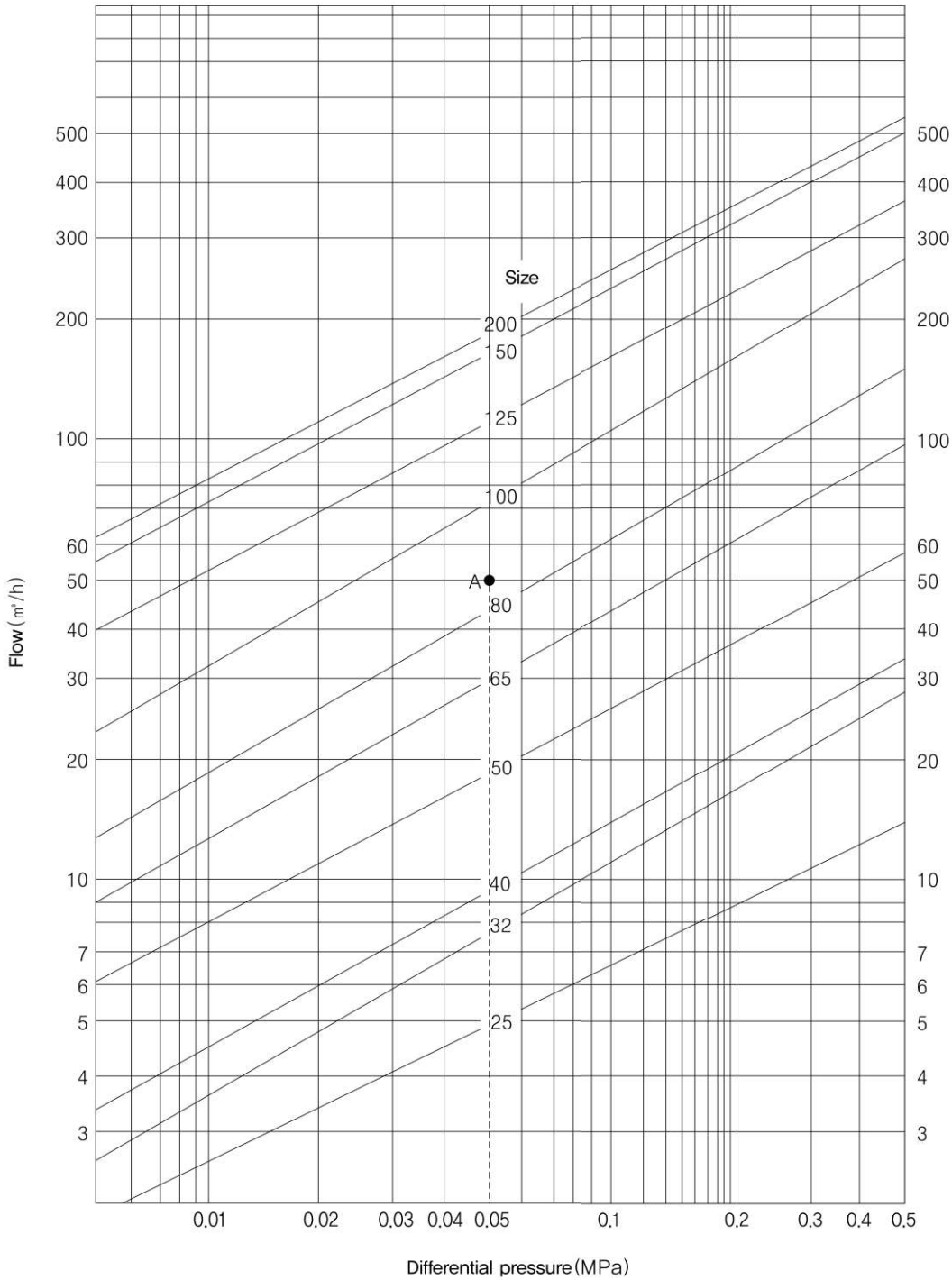
### Application Diagram (Example)



※ Install the pressure tube on the side of the main pipe.

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Chart on selecting a size



### How to determine the nominal diameter of a valve while viewing the diagram

- EX) If the pressure on the feed side is equal to 0,35mgL of the pressure of 0,35mgh maximum capacity of 0,35mgh
- 1) The supply side (Ps) and the differential pressure (Ps) ( $\Delta P$ ) will be 0,05 MPa ( $\Delta P = Ps - Pro - Pro - President$ ),
  - 2) The differential pressure rises vertically from 0,05 MPa to obtain a crossover point " A " with a 50 metre flow rate.
  - 3) The " A " point is between 80 and 100, so you have to choose 100.