GD-21

Direct type	Pilot type	Diaphragm	Piston
Bellows	Internal sensing	External sensing	Stainless steel
Nylon	Low pressure	DP regulating	Pressure sustaining



■Features

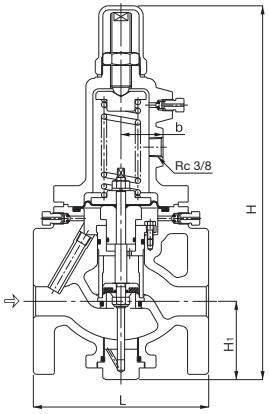
1. Most suitable for relief valve of a pump in closed circuit.
2. No leakage when closed due to single seat valve and valve disc.

■Specifications

Application		Cold and hot water
Regulating differential pressure		15A-80A (A) 0.05-0.25 MPa (B) 0.26-0.7 MPa 100A-150A (A) 0.05-0.25 MPa (B) 0.26-0.5 MPa
Fluid temperature		5-80°C
Material	Body	Ductile cast iron
	Valve seat	Stainless steel or bronze
	Valve disc	NBR
	Diaphragm	NBR
Connection		JIS 10K FF flanged
Inside surface treatment of body		15A-100A: Electrodeposition coating 125A-150A: Tar-based coating (black) or Electrodeposition coating

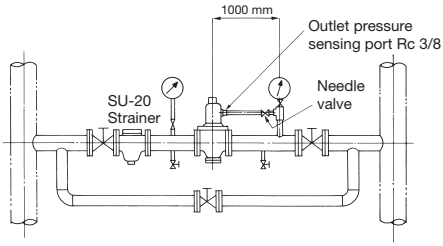
■Dimensions (mm) and Weights (kg)

Nominal size	L	H	H_1	d	Weight
15A	145	298	57	36	8.3
20A	150	298	57	36	8.3
25A	150	320	67	36	10.1
32A	195	400	76	48	17.4
40A	195	400	76	48	17.4
50A	195	414	81	48	19.3
65A	270	572	110	63	40.1
80A	270	597	125	63	43.8
100A	308	665	143	68	70.1
125A	380	874	179	115	144.1
150A	400	929	204	115	173.1



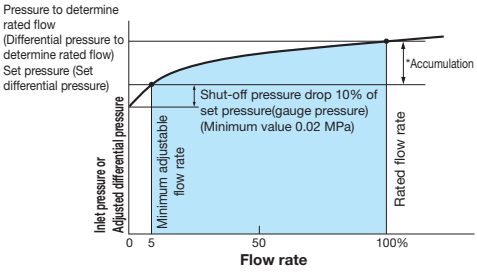
The material shapes are slightly different depending on the nominal size.

■Piping Example



* Install a needle valve to the outlet side of the product and plumb it to the pressure sensing pipe using copper piping.

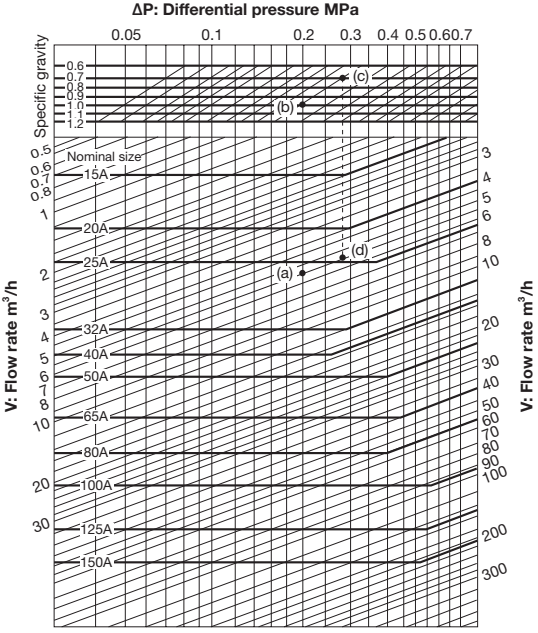
■Flow Characteristic Chart



* Accumulation

Set range MPa	Accumulation MPa
0.05-0.25	Within 0.05
0.26-0.7	Within 0.105

■GD-20R, GD-21 Nominal Size Selection Chart (For Liquid)



[Example]

When selecting the nominal size of a differential pressure regulating valve whose differential pressure (ΔP), specific gravity, and flow rate (V) are 0.2 MPa, 1 (water), and 5.5 m^3/h, respectively, first trace down vertically from the differential pressure (ΔP) of 0.2 MPa to find intersection point (a) with the flow rate (V) of 5.5 m^3/h. Since this intersection point (a) lies between nominal sizes 25A and 32A, select the larger one, 32A.

When the specific gravity is 0.7 under the same conditions, trace down vertically from the differential pressure (ΔP) of 0.2 MPa to find intersection point (b) with the specific gravity 1. Find intersection point (c) with the specific gravity of 0.7 by tracing horizontally to the slant lines from this intersection point (b). Then, find intersection point (d) with the flow rate (V) of 5.5 m^3/h by tracing down vertically from intersection point (c). Since this intersection point (d) lies between nominal sizes 20A and 25A, select the larger one, 25A.

* Select the GD-21 differential pressure regulating valve under a specific gravity of 1.