GD-200 Series

Direct type	Pilot type	Piston	Diaphragm
Bellows	Internal sensing	External sensing	Stainless steel
With handle	Built-in strainer	Low pressure	Remote
Valve leakage 0	JWWA	Nylon	

JWWA approval (GD-200C-N)



GD-200

■Features

1. Pressure balance structure can keep the reduced pressure at a constant level without being affected by inlet pressure.
2. Highly wear-resistance and durability of stainless steel made valve seat.
3. Maintenance and inspection can be conducted easily by disassembling simply from the upper side.
4. A rubber disc prevents leakage when the valve is closed.
5. The GD-200C-N provides excellent corrosion resistance due to inner and outer body surface coated with Nylon 11.
6. Horizontal or vertical installation is possible. (For above 80A, horizontal piping with upward posture.)



GD-200C-N

■Specifications

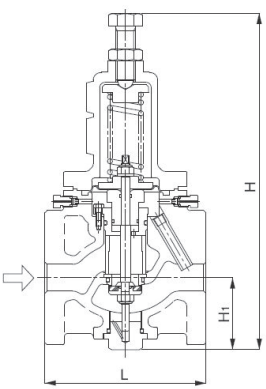
Model		GD-200	GD-200C-N	GD-200H
Application		Cold and hot water, Oil (kerosene, heavy oils A and B), Air, Other non-dangerous fluids	Cold and hot water	Cold and hot water, Oil (kerosene, heavy oils A and B), Air, Other non-dangerous fluids
Inlet pressure		1.0 MPa or less		2.0 MPa or less
Reduced pressure		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		15A-50A (A) 0.05-0.25 MPa (B) 0.26-0.7 MPa (C) 0.5-1.0 MPa 65A-80A (A) 0.05-0.25 MPa (B) 0.26-0.7 MPa (C) 0.5-0.9 MPa 100A-150A (A) 0.05-0.25 MPa (B) 0.26-0.5 MPa (C) 0.5-0.75 MPa
Minimum differential pressure		0.05 MPa		
Maximum pressure reduction ratio		10:1		
Minimum adjustable flow rate		Water: 5 L/min Air: 10 m^3/h (standard condition)	5 L/min	Water: 5 L/min Air: 10 m^3/h (standard condition)
Application temperature		5-80°C	5-60°C	5-80°C
Fluid viscosity		600 cSt or less	-	600 cSt or less
Material	Body	Ductile cast iron		
	Valve seat	Stainless steel		
	Valve disc	NBR	EPDM or FKM	NBR
	Diaphragm	NBR	EPDM or FKM	NBR
	Connection	JIS 10K FF flanged		JIS 20K RF flanged
Inside surface treatment of body		15A-100A:Electrodeposition coating 125-150A:Tar-based coating(black) or electrodeposition coating	Nylon 11 (inside and outside surfaces of body)	15A-100A: Electrodeposition coating 125-150A: Tar-based coating(black) or electrodeposition coating

· GD-200, 200C-N , 200H: Available with FKM type (except for GD-200H(C) of 65A to 150A).
· GD-200, 200H: Available with pressure gauge (JIS Rc1/4). JIS Rc3/8 is also available upon request.
· GD-200C-N: The size of pressure gauge port is Rc3/8. Avaiable to manufacture with pressure gauge as option. (75ϕ for 0.5 MPa and 1.0 MPa).
· Use on a compressed air system with dry air from oil–free compressors may cause deterioration of rubber parts in a very short time (ozone crack). Please consult with us before such installation.

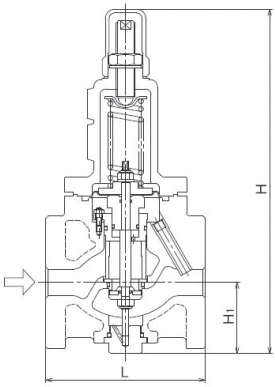


GD-200C-N

■Dimensions (mm) and Weights (kg)



GD-200 · 200H



GD-200C-N

· Parts structure will be differ depend on size.
· Parts structure differs depending on the size.

· GD-200, 200H

(mm)

Nominal size	L	H	H_1	Weight	
				GD-200	GD-200H
15A	145	310	57	8.2	8.2
20A	150	310	57	8.2	8.2
25A	150	333	67	10.0	10.0
32A	195	397	76	17.3	17.3
40A	195	397	76	17.3	17.3
50A	195	415	81	19.2	19.2
65A	270	555	110	40.0	40.0
80A	270	582	125	43.7	43.7
100A	308	645	143	70.0	70.7
125A	380 (384)	849	179	144.0	145.0
150A	400 (404)	918	204	173.0	175.0

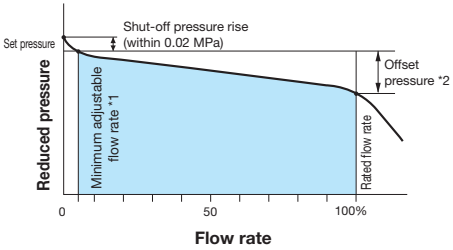
* The above values in parentheses are the dimensions of the GD-200H.

· GD-200C-N

(mm)

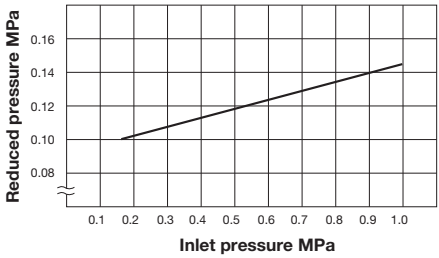
Nominal size	L	H	H_1	Weight
				GD-200C-N
15A	145	296	57	8.3
20A	150	296	57	8.3
25A	150	318	67	10.1
32A	195	398	76	17.4
40A	195	398	76	17.4
50A	195	412	81	19.3
65A	270	575	110	45.0
80A	270	600	125	50.0
100A	308	670	143	75.0
125A	384	900	179	145.0
150A	404	960	204	180.0

Flow Characteristic Chart



*1 Minimum adjustable flow rate
For water: 5 L/min
For air: 10 m^3/h (standard condition)

Pressure Characteristic Chart

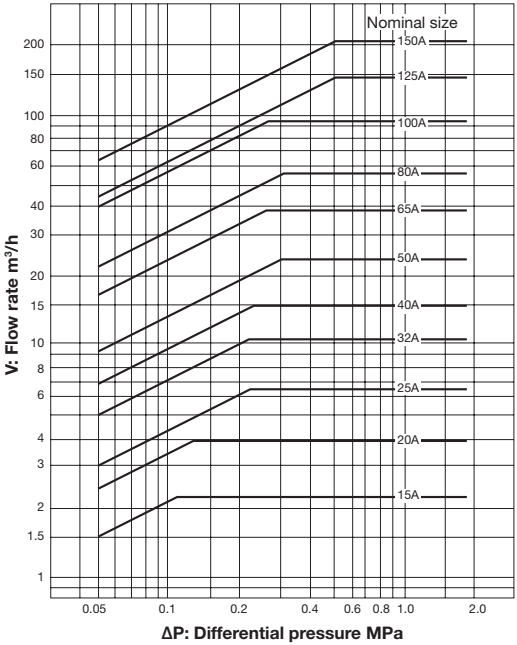


This chart shows variation in reduced pressure when the inlet pressure of 1.0 MPa is changed between 0.15 MPa and 1.0 MPa while the reduced pressure is set at 0.10 MPa.

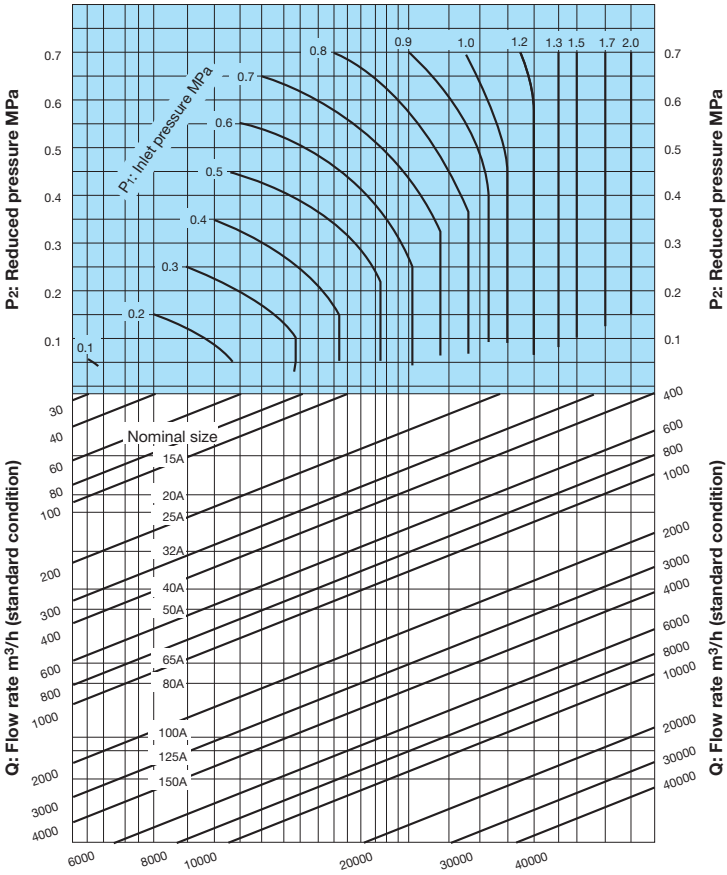
*2 Offset pressure

Nominal size	Pressure range	Offset pressure
15A-50A	(A), (B)	Setting range 0.05-0.7 MPa Within 0.05 MPa
	(C)	Setting range 0.5-1.0 MPa Within 0.11 MPa
65A,80A	(A), (B)	Setting range 0.05-0.7 MPa Within 0.05 MPa
	(C)	Setting range 0.5-0.9 MPa Within 0.11 MPa
100A	(A), (B)	Setting range 0.05-0.5 MPa Within 0.05 MPa
	(C)	Setting range 0.5-0.75 MPa Within 0.11 MPa
125A-150A	(A)	Setting range 0.05-0.25 MPa Within 0.05 MPa
	(B)	Setting range 0.26-0.5 MPa Within 0.07 MPa
	(C)	Setting range 0.5-0.75 MPa Within 0.11 MPa

■Nominal Sizes Selection Chart (For Water)



■GD-200 series, GD-20 Nominal Sizes Selection Chart (For Air)



* Set the safety factor at 80 to 90%.

■GD-200 · GD-200H · GD-20 Flow Rate Table for Liquid

(m³/h)

P1 (MPa)	P2 (MPa)	15A	20A	25A	32A	40A	50A	65A	80A	100A	125A	150A
2.0	0.2-1.0	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.0	204.0
1.9	0.19-1.0	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.0	204.0
1.8	0.18-1.0	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.0	204.0
1.7	0.17-1.0	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.0	204.0
1.6	0.16-1.0	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.0	204.0
1.5	0.15-1.0	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.0	204.0
1.4	0.14-0.9	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.0	204.0
	1	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	129.9	187.1
1.3	0.15-0.8	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.3	204.0
	0.9	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	130.0	187.1
	1	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	112.5	162.0
1.2	0.12-0.7	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.3	204.0
	0.8	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	129.9	187.1
	0.9	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	112.5	162.1
	1	2.2	3.9	6.4	9.8	14.6	19.6	34.3	44.1	83.3	91.8	132.3
1.1	0.11-0.6	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.0	204.0
	0.7	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	129.9	187.1
	0.8	2.2	3.9	6.4	10.8	14.6	23.7	39.0	54.0	94.0	112.5	162.1
	0.9	2.2	3.9	6.1	9.8	14.6	19.6	34.3	44.1	83.3	91.8	132.3
	1	2.1	3.4	4.3	6.9	10.3	13.8	24.2	31.1	58.9	64.9	93.6
1	0.1-0.5	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.0	204.0
	0.6	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	129.9	187.1
	0.7	2.2	3.9	6.4	10.8	14.6	23.7	42.0	54.0	94.0	112.5	162.1
	0.8	2.2	3.9	6.4	9.8	14.6	19.6	34.3	44.1	83.3	91.8	132.3
	0.9	2.2	3.4	4.3	6.9	10.3	13.8	24.3	31.1	58.9	64.9	93.5
0.9	0.09-0.4	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.0	204.0
	0.5	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	129.9	187.1
	0.6	2.2	3.9	6.4	10.8	14.6	23.7	39.0	54.0	94.0	112.5	162.1
	0.7	2.2	3.9	6.1	9.8	14.6	19.6	34.3	44.1	83.3	91.8	132.3
	0.8	2.1	3.4	4.3	6.9	10.3	13.8	24.3	31.2	58.9	64.9	93.6
0.8	0.08-0.3	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.0	204.0
	0.4	2.2	3.9	6.4	10.8	14.6	23.7	39.0	54.0	94.0	129.9	187.1
	0.5	2.2	3.9	6.4	10.8	14.6	23.7	39.0	54.0	94.0	112.5	162.1
	0.6	2.2	3.9	6.1	9.8	14.6	19.6	34.3	44.1	83.3	91.8	132.3
	0.7	2.1	3.4	4.3	6.9	10.3	13.8	24.2	31.2	58.9	64.9	93.6
0.7	0.07-0.2	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.3	204.0
	0.3	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	129.9	187.1
	0.4	2.2	3.9	6.4	10.8	14.6	23.7	39.0	54.0	94.0	112.5	162.0
	0.5	2.2	3.9	6.1	9.8	14.7	19.6	34.3	44.1	83.3	91.8	132.3
	0.6	2.1	3.4	4.3	6.9	10.3	13.8	24.3	31.1	58.9	64.9	93.5
0.6	0.1	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	145.0	204.0
	0.2	2.2	3.9	6.4	10.8	14.6	23.7	39.0	55.0	94.0	129.9	187.1
	0.3	2.2	3.9	6.4	10.8	14.6	23.7	42.0	54.0	94.0	112.5	162.1
	0.4	2.2	3.9	6.1	9.8	14.7	19.6	34.3	44.1	83.3	91.8	132.3
	0.5	2.1	3.4	4.3	6.9	10.4	13.9	24.3	31.2	58.9	64.9	93.5
0.5	0.1	2.2	3.9	6.4	14.6	15.4	23.7	39.0	55.0	94.0	129.9	187.1
	0.2	2.2	3.9	6.4	14.6	15.4	23.7	39.0	54.0	94.0	112.5	162.1
	0.3	2.2	3.9	6.4	9.8	14.7	19.6	34.3	44.1	83.3	91.8	132.3
	0.4	2.1	3.4	4.3	6.9	10.4	13.8	24.3	31.1	58.9	64.9	93.6
0.4	0.1	2.2	3.9	6.4	10.8	14.6	23.6	39.0	54.0	94.0	112.5	162.1
	0.2	2.2	3.9	6.1	9.8	14.6	19.6	34.3	44.1	83.3	91.8	132.3
	0.3	2.1	3.4	4.3	6.9	10.3	13.8	24.3	31.1	58.9	64.9	93.5
0.3	0.1	2.2	3.9	6.1	9.8	14.6	19.6	34.3	44.1	83.3	91.8	132.3
	0.2	2.1	3.4	4.3	6.9	10.3	13.8	24.2	31.1	58.9	64.9	93.6
0.2	0.1	2.1	3.4	4.3	6.9	10.3	13.8	24.2	31.1	58.9	64.9	93.6
0.1	0.05	1.5	2.4	3.1	4.9	7.3	9.8	17.1	22.0	41.6	45.9	66.2