

# GP-1000H

THE GP-1000 SERIES PRESSURE REDUCING VALVES FOR THE GLOBAL MARKET REPRESENT A SIGNIFICANT ADVANCE TECHNOLOGY OVER THE PREVIOUS ALL OUR PRESSURE REDUCING VALVES, INCORPORATING AS THEY DO A NUMBER OF IMPROVEMENTS.

## ● Features

1. Performance is light-years ahead of conventional pressure reducing valves, and durability has been improved, too.
2. With a maximum reducing ratio of 20:1, systems, which previously required two stages, can now be handled in one stage.
3. Excellent sealability is due to the spherical surface of the main valve (enivalent to ANSI Class IV).
4. Internal structure is simple, but strong.
5. Specifications are conformed to HASS 106 (Heating, Air-conditioning and Sanitary Standard).
6. The material of gaskets is used non-asbestos.

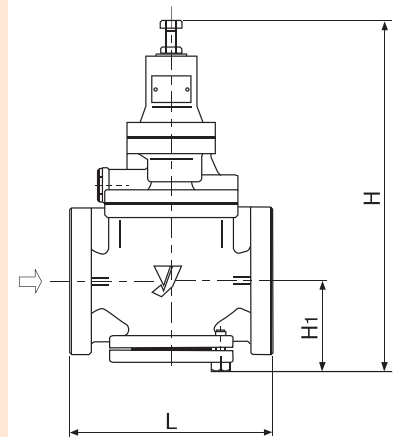
## ● Specification

Connection		JIS 16K FF Flanged
Nominal Size		15A ~ 100A
Application		Steam
Inlet Pressure		0.1~1.6MPa (1-16kgf/cm <sup>2</sup> G)
Reduced Pressure		(A)0.05~0.9MPa (0.5-9kgf/cm <sup>2</sup> G)
		(B)0.9~1.4MPa (9-14kgf/cm <sup>2</sup> G)
		90% or less of inlet pressure
Min. Differential Pressure		0.05MPa (0.5kgf/cm <sup>2</sup> )
Max. Pressure Reduction Ratio		20 : 1
Maximum Temperature		220°C
Valve Seat Leakage		0.01% or less of rate flow
Material	Body	Ductile cast iron
	Valve	Stainless steel
	Valve Seat	Stainless steel
	Piston / Cylinder	Stainless steel

- Adjusting handle type is also available. (GP-1□□1)
- Lower pressure model (0.03~0.15MPa(0.3~1.5kgf/cm<sup>2</sup>G)reduced pressure)is also available.(GP-1□□2)
- Stainless steel main components (including piston & cylinder) are also available. (GP-1□□□S)

## ● Dimensions and Weight

Nominal Size	L	H	H1	Weight (kg)
15A	150	285	64	8.0 (7.0)
20A	155	285	64	8.5 (7.0)
25A	160	300	67	10.0 (8.5)
32A	190	323	82	14.0 (12.0)
40A	190	323	82	14.5 (12.5)
50A	220	347	93	20.0 (18.0)
65A	245	357	100	30.0
80A	290	404	122	35.0
100A	330	450	144	52.5



## GP-2000

- Pilot operated diaphragm type
- Far superior capacity and performance
- Stable reduced pressure control
- Valve leakage meets ANSI class IV
- High reduction ratio (20:1)

Application	Steam
Inlet pressure	0.1~2.0MPa (1.0~20kgf/cm <sup>2</sup> G)
Reduced pressure	(A) 0.02~0.15MPa (0.2~1.5kgf/cm <sup>2</sup> G) (B) 0.1~1.4MPa (1.0~14kgf/cm <sup>2</sup> G)
Max. temperature	220°C
Connection	Scrd : JIS Rc (PT) screwed Flgd : JIS 20K RF, JIS 10K FF flanged
Material	Body : Ductile cast iron Main valve & seat : Stainless steel Pilot valve & seat : Stainless steel Diaphragm : Stainless steel
Size	Scrd : 1/2"~2" Flgd : 1/2"~8"



## GDK-2000

- For remote control

Application	Steam
Inlet pressure	0.1~2.0MPa (1.0~20kgf/cm <sup>2</sup> G)
Reduced pressure	0.05~1.4MPa (0.5~14kgf/cm <sup>2</sup> G)
Max. temperature	220°C
Connection	Scrd : JIS Rc (PT) screwed Flgd : JIS 20K RF, JIS 10K FF flanged
Material	Body : Ductile cast iron Valve & seat : Stainless steel Diaphragm : Stainless steel
Size	Scrd : 1/2"~2" Flgd : 1/2"~4"



## GP-1000

- Pilot operated piston type
- Superior durability
- Stable performance
- Valve leakage meets ANSI class IV
- High reduction ratio (20:1)

Application	Steam
Inlet pressure	0.1~1.0MPa (1.0~10kgf/cm <sup>2</sup> G)
Reduced pressure	0.05~0.9MPa (0.5~9.0kgf/cm <sup>2</sup> G)
Max. temperature	220°C
Connection	JIS 10K FF Flanged
Material	Body : Ductile cast iron Main valve & seat : Stainless steel Pilot valve & sea : Stainless steel Piston & Cylinder : Brass or bronze
Size	1/2"~4"



## GP-27

- Pilot operated piston type
- Reliable performance
- Large capacity while controlling reduced pressure
- Wide pressure range

Application	Steam
Inlet pressure	0.1~1.0MPa (1.0~10kgf/cm <sup>2</sup> G)
Reduced pressure	0.03~0.8MPa (0.3~8.0kgf/cm <sup>2</sup> G)
Max. temperature	220°C
Connection	JIS 10K FF Flanged
Material	Body : Cast iron Main valve & seat : Stainless steel Pilot valve & seat : Stainless steel Piston & Cylinder : Bronze
Size	5"~8"



## GD-6-6N



Model	GD-6N	GD-6	
Application	Steam	Water, Air, Oil, Non-corrosive fluids	
Inlet pressure	Max. 1.0MPa (10kgf/cm <sup>2</sup> G)		
Reduced pressure	(A) 0.02~0.1MPa (0.2~1.0kgf/cm <sup>2</sup> G)		
	(B) 0.1~0.4MPa (1.0~4.0kgf/cm <sup>2</sup> G)		
Max. temperature	220°C	80°C	
Connection	JIS Rc (PT) screwed		
Material	Body	Cast iron	
	Valve & seat	Stainless steel	FKM & brass or bronze
	Diaphragm	Stainless steel	
Size	3/8"~1"		

- Direct-acting type
- Easy installation and operation
- Integral strainer prevents dirt problem

## GD-30-30S



Model	GD-30	GD-30S	
Application	Steam, Air	Steam	
Inlet pressure	Max. 1.7Mpa (17kgf/cm <sup>2</sup> G)	Max. 2.0Mpa (20kgf/cm <sup>2</sup> G)	
Reduced pressure	(A) 0.02~0.1MPa (0.2~1.0kgf/cm <sup>2</sup> G)		
	(B) 0.05~0.4MPa (0.5~4.0kgf/cm <sup>2</sup> G)		
	(C) 0.35~1.0Mpa (3.5~10kgf/cm <sup>2</sup> G)		
Max. temperature	210°C	220°C	
Connection	JIS Rc (PT) screwed		
Material	Body	Bronze	Stainless steel
	Valve & seat	Stainless steel	Stainless steel
	Bellows	Phosphor bronze	Stainless steel
Size	1/2"~1", 1-1/2", 2"	1/2"~1"	

- Direct-acting type
- Small, compact and advance design
- Superior performance and durability
- Easy adjustment with handle
- Integral strainer prevents dirt problem
- Wetted parts stainless steel(GD-30S)

## GD-45



Application	Steam
Inlet pressure	Max. 2.0Mpa (20kgf/cm <sup>2</sup> G)
Reduced pressure	(A) 0.02~0.1Mpa (0.2~1.0kgf/cm <sup>2</sup> G)
	(B) 0.05~0.4Mpa (0.5~4.0kgf/cm <sup>2</sup> G)
	(C) 0.35~1.0Mpa (3.5~10kgf/cm <sup>2</sup> G)
Max. temperature	220°C
Connection	JIS Rc (PT) screwed
Material	Body : Ductile cast iron
	Valve & seat : Stainless steel
	Bellows : Phosphor bronze
Size	1/2"~1"

- Direct-acting type
- Small and compact
- Superior performance and durability
- Easy installation and operation
- Integral strainer prevents dirt problem

## GD-200



Model	GD-200	GD-200H	GD-200C
Application	Water, Oil (Kerosene, Heavy oil A/B), Air, Non-corrosive fluids		
Inlet pressure	Max. 1.0MPa (10kgf/cm <sup>2</sup> G)	Max. 2.0MPa (20kgf/cm <sup>2</sup> G)	Max. 1.0MPa (10kgf/cm <sup>2</sup> G)
Reduced pressure	1/2"~3" : (A) 0.05~0.25MPa (0.5~2.5kgf/cm <sup>2</sup> G) (B) 0.26~0.7MPa (2.6~7.0kgf/cm <sup>2</sup> G)		
	4"~6" : (A) 0.05~0.25MPa (0.5~2.5kgf/cm <sup>2</sup> G) (B) 0.26~0.5MPa (2.6~5.0kgf/cm <sup>2</sup> G)		
Max. temperature	80°C		60°C
Connection	JIS 10K FF flanged	JIS 20K RF flanged	JIS 10K FF flanged
Material	Body	Ductile cast iron	
	valve & seat	NBR & stainless steel	
	Bellows	NBR	
Size	1/2"~6"		

- Direct-acting type
- Stable reduced pressure against fluctuation of inlet pressure because of pressure balance mechanism
- Nylon 11 coating both inside and outside of GD-200C body

## GD-24

- Direct-acting type
- Small and compact
- Superior performance and durability
- Easy installation and operation
- Integral strainer prevents dirt problem

Application	Water
Inlet pressure	0.2~1.6MPa(2~16kgf/cm <sup>2</sup> G)
Reduced pressure	0.05~0.55MPa(0.5~5.5kgf/cm <sup>2</sup> G)
Max. temperature	80°C
Connection	JIS Rc (PT) screwed
Material	Body : Bronze
	Valve & seat : Brass & Stainless steel
	Valve Disc : Urethane rubber
	Diaphragm : NBR
Size	1/2"~2"



## GD-41-43

- Direct-acting type
- SCS14A/SUS316 stainless steel for wetted parts
- Material identification for recycling
- Stable pressure control by pressure balance structure

Model	GD-41	GD-43-10	GD-43-20
Application	Water, Air, Non-corrosive gases, Steam for washing/sterilization		
Inlet pressure	0.07~2.0MPa (0.7~20kgf/cm <sup>2</sup> G)	0.07~1.0MPa (0.7~10kgf/cm <sup>2</sup> G)	0.07~2.0MPa (0.7~10kgf/cm <sup>2</sup> G)
Reduced pressure	(A) 0.02~0.1MPa (0.1~1.0kgf/cm <sup>2</sup> G)		
	(B) 0.1~0.25MPa (1.0~2.5kgf/cm <sup>2</sup> G)		
	(C) 0.25~0.5MPa (2.5~5.0kgf/cm <sup>2</sup> G)		
Temperature	5~90°C *2		
Connection	JIS Rc(PT) screwed	JIS 10K FF flanged	JIS 20K RF flanged
	Body : stainless steel		
Material	valve & seat : Synthetic rubber & stainless steel		
	Diaphragm : Synthetic rubber & PTFE		
Size	1/2"~1"		



## GD-400SS

- For extremely low pressure control
- Max. reduction ratio is 400:1.
- GD-400SS : Wetted parts stainless steel

Model	GD-400	GD-400SS	
Application	Air, N <sub>2</sub> gas, CO <sub>2</sub> gas		
Inlet pressure	2.5~400kPa (0.025~4kgf/cm <sup>2</sup> G)		
Reduced pressure	(A) 0.5~1.4MPa (0.005~0.014kgf/cm <sup>2</sup> G)		
	(B) 1.2~3.3MPa (0.012~0.033kgf/cm <sup>2</sup> G)		
	(C) 3.0~8.0MPa (0.03~0.08kgf/cm <sup>2</sup> G)		
	(D) 7.0~20MPa (0.07~0.2kgf/cm <sup>2</sup> G)		
Temperature	5~60°C		
Connection	JIS 10K FF flanged		
Material	Body	Cast iron	
	Valve	Stainless steel	
	Diaphragm	Synthetic rubber	
	Trim	Synthetic rubber	
Size	1/2"~1"		





## GD-26




- Direct-acting type
- Anti-corrosion material for wetted parts
- Low noise and stable pressure control
- Integral strainer prevents dirt problem
- Closed construction so that no leakage to outside

Model	GD-26	GD-26S	GD-26G	GD-26Gs	
Application	Water		Air, Non-corrosive gases		
Inlet pressure	Max . 1.0MPa (10kgf/cm <sup>2</sup> G)				
Reduced pressure	(A) 0.05~0.35MPa (0.5~3.5kgf/cm <sup>2</sup> G)				
	(B) 0.3~0.7MPa (3.0~7.0kgf/cm <sup>2</sup> G)				
Temperature	5~90°C				
Connection	JIS Rc (PT) screwed				
Material	Body	Bronze	Stainless steel	Bronze	Stainless steel
	Valve	Synthetic rubber			
	Seat	Bronze	Stainless steel	Bronze	Stainless steel
	Diaphragm	Synthetic rubber			
Size	1/2"~2"	3/4"~2"	1/2"~2"	3/4"~2"	



# Variation

Feature	Diaphragm / Carbon steel	Low pressure	Low pressure / balance type
Model	GP-12/22	GD-4	GD-4B
Picture			
Application	Steam	Air, Non-corrosive gases	
Inlet pressure	0.1~3.0MPa	Max.300kPa	Max.800kPa(3/4"-2") Max.500kPa(2-1/2"-6")
Reduced pressure	0.02~0.21MPa 0.14~0.7MPa 0.56~1.75MPa	2~200kPa *Contact us on pressure range for each valve.	
Max. temperature	260°C	80°C	
Connection	GP-12 : JIS Rc screwed GP-22 : JIS 30K RF flanged	JIS 10K FF flanged	
Material	Body	Cast carbon steel	Cast iron
	Main valve	Stainless steel	NBR (3/4"-2") Stainless steel (2-1/2"-6")
	Main valve seat	Stainless steel	Stainless steel
	Pilot valve	Stainless steel	-
	Pilot valve seat	Stainless steel	-
	Diaphragm	Stainless steel	NBR
Size	1/2"~2"	3/4"~6"	
Others			

Feature	316 Stainless steel	General air regulator	Piston type	Piston type / balance type
Model	GD-8N	GD-9	GD-7	GD-7B
Picture				
Application	Pure Water, Air, N <sub>2</sub> , CO <sub>2</sub> , Ar	Air, Non-corrosive gases	Water, Oil, Non-corrosive liquids	
Inlet pressure	0.1~1.0MPa	0.1~0.99MPa	0.1~1.0MPa	
Reduced pressure	0.05~0.7MPa	0.05~0.85MPa	3/4"~2" (A) 0.05~0.25MPa (B) 0.25~0.45MPa (C) 0.45~0.7MPa*1	2-1/2"~6" (A) 0.05~0.2MPa (B) 0.2~0.5MPa (C) 0.5~0.7MPa*1
Max. temperature	60°C	60°C	80°C *2	
Connection	JIS Rc screwed	JIS Rc screwed	JIS 10K FF flanged	
Material	Body	316 Stainless steel	Aluminium die casting	Cast iron *3
	Valve	316 Stainless steel	NBR	Phosphor bronze *4
	Valve seat	316 Stainless steel	Aluminium die casting	Phosphor bronze *4
	Diaphragm	PTFE	NBR	Piston : Bronze *4
Size	1/8"~1/2"	1/4"~1"	3/4"~6"	
Others			*1 : 0.7~1.6MPa is also available as GD-7H or GD-7BH. *2 : Max. 120 °C is also available. *3 : Cast carbon steel is also available. *4 : Stainless steel is also available.	