You can believe in.

PRESSURE REDUCING VALVE

GD-41 · 43

ISO 14001 9001

The pressure reducing valve models GD-41 and GD-43 are compact stainless steel pressure reducing valve designed primarily for regulating fluids, such as cold water, hot water and air. They can be also applicable for regulating steam used for cleaning and sterilizing of pipes. For example, they are used in brewery, drinking water processing plant and facilities where cleaning and sterilizing treatment are required.

Features

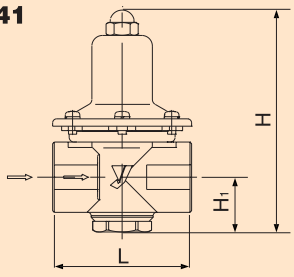
1. Space-saving and resource-saving (valve casing and bottom cap are marked with material components for easier classified recycling of resources) were realized.
2. The valve itself is corrosion resistant because stainless steel is used at wetted part.
3. The fluid contact area of the diaphragm is coated with teflon to minimize degradation caused by fluid and to have good durability.
4. Rubber parts of the pressure reducing valve are made of special high-corrosion resistant fluororubber.
5. The valve structure is pressure balancing mechanism. The valve can retains the secondary pressure constantly even with the fluctuation of the primary pressme.
6. Even if the dinphragm is damaged, the fluild will not leak because of special casting design.
7. The pressure reducing valve is capable of carrying steam for cleaning and sterilizing of pipes and systems.

Specification

TYPE	GD-41	GD-43-10	GD-43-20
Connection	JIS Rc (PT) screwed	JIS10K FF Flanged	JIS20K RF Flanged
Nominal Size	15A, 20A, 25A		
Application Fluid	Cold/hot water, air, carbon dioxide gas, nitrogen gas, cleaning/sterilizing steam*1		
Inlet Pressure	0.07～2.0MPa (For cleaning/sterilizing steam: 0.2MPa max.)		
Reduced Pressure	(A) : 0.02～0.1MPa {0.2～1.0kgf/cm^{2}G} (B) : 0.1～0.25MPa {1.0～2.5kgf/cm^{2}G} (C) : 0.25～0.5MPa {2.5～5.0kgf/cm^{2}G}		
Min. Differential Pressure	0.05MPa {0.5kgf/cm^2}		
Max. Pressure Reduction Ratio	10:1 (cold/hot water) 20:1 (air, carbon dioxide gas, nitrogen gas)		
Operating temperature	5～90℃ (Max. temperature 130℃ for cleaning/sterilizing steam. Minimum interval between steam blows must be 4 hours.)		
Standard factory pressure setting	Spring A	Spring B	Spring C
	0.05MPa	0.1MPa	0.3MPa

*1:Max. temperature 130℃, for continuous flow within 30minutes

GD-41



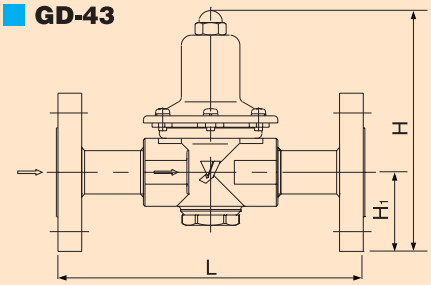
Cv Value

Nominal Size	15A	20A	25A
Cv Value	0.4	0.6	0.8

Dimensions and Weight

Nominal Size	JIS RC					JIS 10KFF				JIS 20KRF				
	d	L	H1	H	Weight	L	H1	H	Weight	L	H1	H	f	Weight
15A	1/2"	85	34	136	1.2	195	34	136	2.6	195	34	136	1	2.8
20A	3/4"				1.1				2.9					3.0
25A	1"				1.0				3.7					4.0

GD-43



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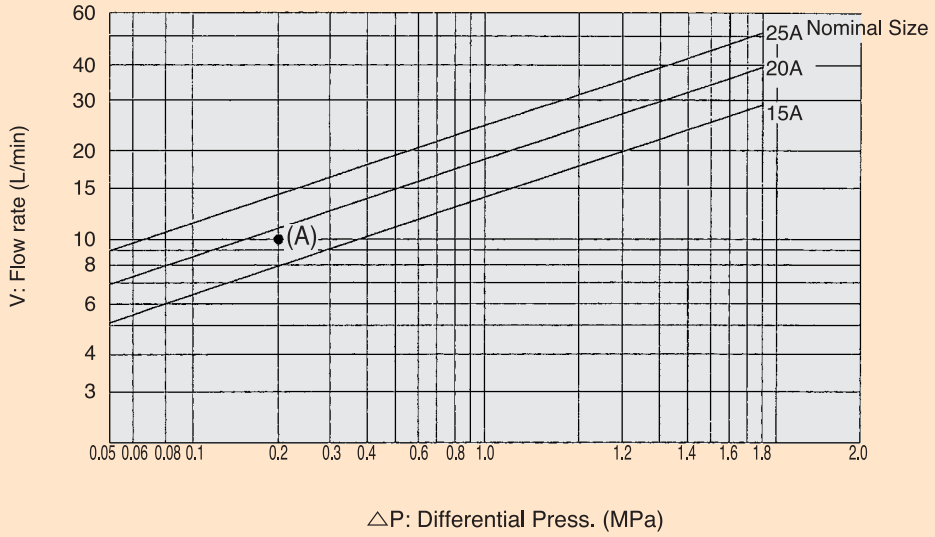
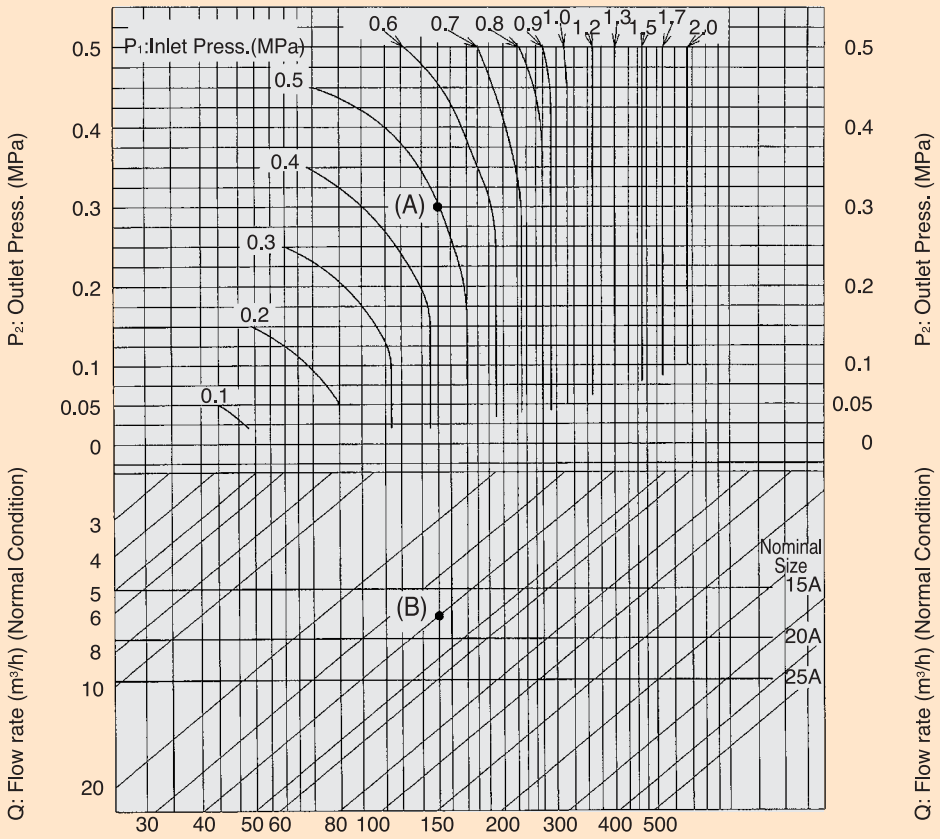
Nominal Size Selection Chart (For Cold/hot water at 20℃)



[Example]

Determine the nominal diameter for a pressure reducing valve of Inlet pressure 0.5MPa, Outlet pressure 0.3MPa, flow rate 10 L/min.
On the bottom horizontal line of the figure above, start at the point 0.2 (pressure difference between inlet and outlet of the valve 0.2MPa) and go straight up along the line to the point A where the line crosses the flow rate 10 L/min line. This intersecting point A is between nominal diameter 15A and 20A. Select the larger one, 20A, which is the required nominal diameter.

Nominal Size Selection Chart (For Air at 20℃)



[Example]

Determine the nominal size for a pressure reducing valve of Inlet pressure 0.5MPa, Outlet pressure 0.3MPa, flow rate 40m³/h (Normal condition).
First locate the point A where the line of Inlet pressure 0.5MPa and the line of Outlet pressure 0.3MPa intersect. From the pint A, go straight down along the line to the point B where it crosses the 40m³/h (Normal condition) flow rate line.
This point B is between nominal diameter 15A and 20A. Select the larger one, 20A, which is the required nominal size.

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Printed in Japan. 056-00-20-03