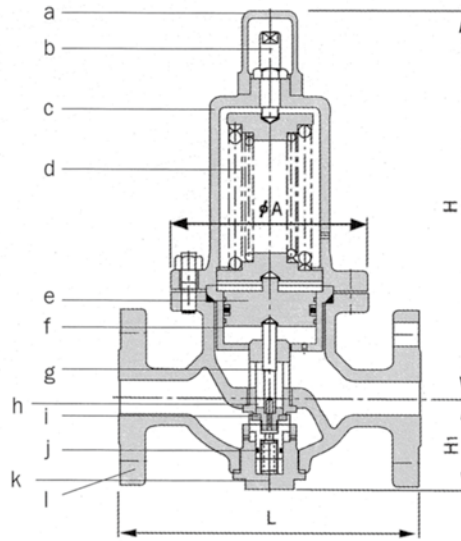


PRESSURE REDUCING VALVE

Model
JRV-SF31

Direct Acting Type(Piston)

for air and gas



This model is a direct operated pressure reducing valve suitable for application at the high pressured air and gas service line up to 30kgf/cm²(0.3MPa) & requiring the stable flow from small one to large capacity.

The pressure balanced disc constantly and stably regulates the secondary pressure, regardless of the primary pressure variation.

MATERIALS (Standard)

No	Part	Materials (standard)
a	Cap	Cast iron
b	Adjusting screw	Brass
c	Bonnet	Cast steel
d	Spring (double)	Spring steel
e	Piston	Brass or Bronze
f	Cylinder	Stainless steel
g	Stem	Stainless steel
h	Seat	Stainless steel
i	Disc	S.Steel tipped with FPM
j	Recovery spring	Stainless steel
k	Plug	Brass
i	Body	Cast steel

SPECIFICATIONS

No	Kind	Standard
1	Inlet pressure	Max. 30kgf/cm ² (0.3MPa)
2	Outlet pressure	0.35~5, 5~15kgf/cm ² (0.035~0.5, 0.5~1.5 MPa)
3	Max reducing ratio	10 : 1
4	Working temp.	Max. 80°C
5	Working fluid	Air, gas
6	Connection*	Flanged 16K, 20K, 30K

- Minimum pressure differential across the disc :
0.5kgf/cm²(0.05MPa)
- Hydrostatic test pressure : 1.5 times the flange pressure rating

DIMENSIONS

(mm)

Size mm(inch)	Connection Flange rating	End to end L	Height		Dia. φ A	Cv value	Weight kg(approx.)
			H _i	H			
15(1/2")	16, 20K	214	67	284	148	1	15.0
	30K	220					
20(3/4")	16, 20K	218	67	284	148	2.5	15.5
	30K	220					
25(1")	16, 20K	218	67	284	148	4	16.0
	30K	226					
32(1 1/4")	16, 20K	260	85	328	166	6.3	25.5
	30K	268					
40(1 1/2")	16, 20K	260	85	328	166	8	25.5
	30K	268					

- Our standard products conform to KS flange, ANSI & DIN flange are available upon request.

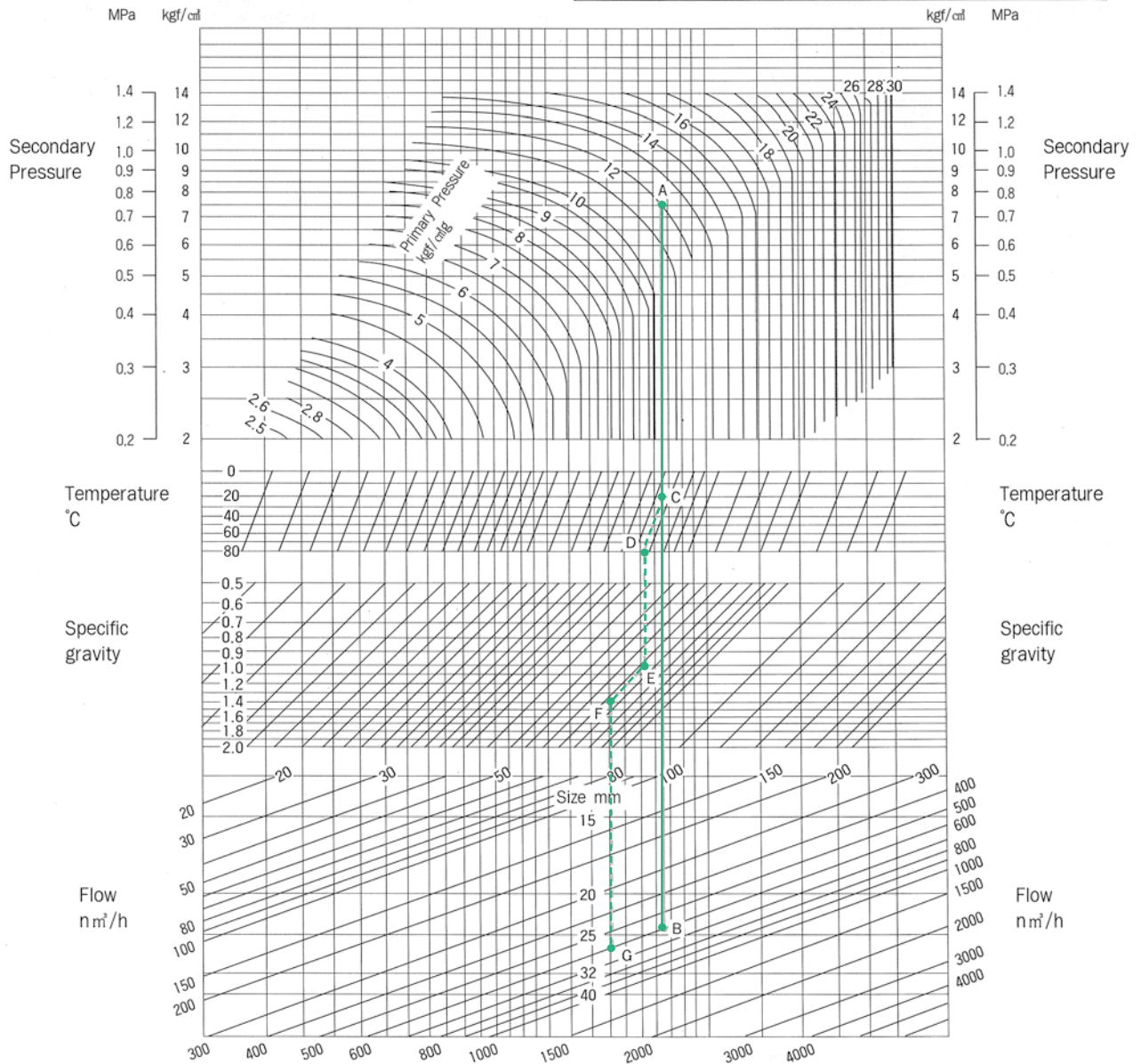
Valve size selecting chart for JRV-SF31 (for air)

This valve size selecting chart is based on air (20°C). For gas other than air, convert them into air prior to using this chart. To convert gas to air:

$$\text{Gas flow} \times \text{Conversion factor} = \text{Air converted flow}$$

Conversion factor (temp.: 5-60°C)

Fluid name	Gas constant R (kg.m/kg°C)	Conversion factor
Dry air	29.27	1.000
Nitrogen gas	30.26	0.984
Metane gas	52.89	0.744
City gas	44.63	0.810



Oblique line : Flow
Horizontal line : Size

How to use the chart

Where,
 Primary pressure : 12kgf/cm²{1.2MPa}
 Secondary pressure : 7.5kgf/cm²{0.75MPa}
 Air temperature : 20°C
 Specific gravity (air) : 1
 Flow : 600Nm³/h

Obtain a cross point "A" on the vertical line down from primary pressure 12kgf/cm²{1.2MPa} with horizontal line of secondary pressure 7.5kgf/cm²{0.75MPa}. Obtain a cross point "B" on the vertical line down from the point "A" with the oblique line of Flow 600Nm³/h. As this point "B" is between size 20 and 25mm, select safer size 25mm.

Where,
 Same conditions except
 Fluid temperature : 80°C
 Specific gravity : 1.4

Obtain a cross point "C" on the vertical line down from the cross point "A" with the horizontal line of temperature 20°C. Obtain a point "D" by moving to the parallel line of temperature 80°C from the point "C". Obtain a cross point "E" on the line of specific gravity. Obtain a point "F" by moving to parallel line of specific gravity 1.4 from the point "E". Obtain a cross point "G" on the vertical line down from the point "F" with the oblique line of flow 600Nm³/h. As the point "G" is between size 25 and 32mm, select safer size 32mm.