

# Blow-off valve DS-01AN



- Mechanical blow-off valve
- Blow-off time and blow-off flow are adjustable

## How to order

DS - 01AN

- For CVA2 : CVA-DN  
CVA-DNS

## Specifications

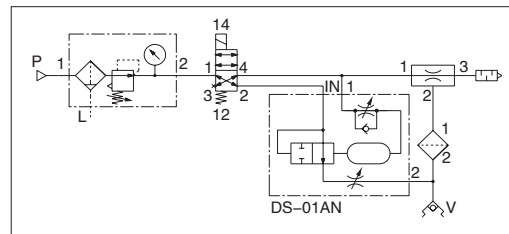
Description	Unit	DS-01AN
Fluid		Non-lubricated air / non-corrosive gas
Ambient temperature	°C	5 ~ 60 (without freezing)
Operating pressure range	MPa	0.3 ~ 0.6
Proof pressure	MPa	0.7
Blow-off time control range	s	0.2 ~ ∞
Vacuum (air) flow	ℓ /min(ANR)	160(max)
Mass	g	210

### ! CAUTION

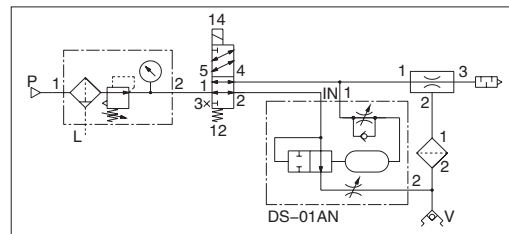
**! Vacuum break valves of type DS-01AN cannot be used for corrosive gases and flammable gases.**

- ◎ Always maintain a constant primary pressure, otherwise the blow-off time will fluctuate. When the control knob is turned clockwise, the blow-off time becomes longer. Set the optimum blow-off time in conformance with the type of work pieces, not too short and not too long.
- ◎ The vacuum break valves may blow off the air slightly before suction due to structural reasons (fore-blow). Usually, it does not cause any trouble, but in some cases suction may not be possible. In such a case, adding a speed controller to the piping between the vacuum break valve and the suction pads may reduce the fore-blow.
- ◎ For three-way valves, use the distribution type. If solenoid valves for driving single-acting air cylinders are used, air leakage may occur after vacuum generation.
- ◎ In case four-way valves or five-way valves are used, plug the EXT ports on these valves as shown in the figures. Otherwise, port IN and port 2 of DS-01AN are connected after vacuum generation, and air leakage may occur depending on the type of solenoid valves. In this case, manifold solenoid valves cannot be used. When using four-way valves or five-way valves, make sure to plug these ports; otherwise other devices may be negatively affected.
- ◎ In most cases, air leakage derives from the sealing applied to the solenoid valves. Ask the solenoid valve manufacturer for advice in this matter.
- ◎ Use solenoid valves with an orifice diameter of 3.0 mm or more. In vacuum break valves of type DS-01AN, the air entering from the IN port flows out from port 2 and is converted to vacuum break air. This air activates the inner pistons. At this moment, when the air flow entering the IN port is lower than 160 ℓ/min (ANR), the pistons cannot be activated, and the vacuum break air does not stop entering. Please note that, even with an orifice of a diameter of 3.0 mm or more, sufficient air flow cannot be secured in some cases depending on the size and length of piping.

Four-way valve

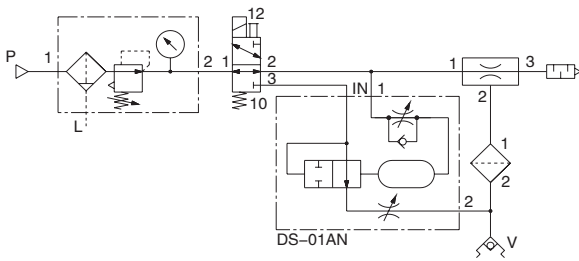


Five-way valve

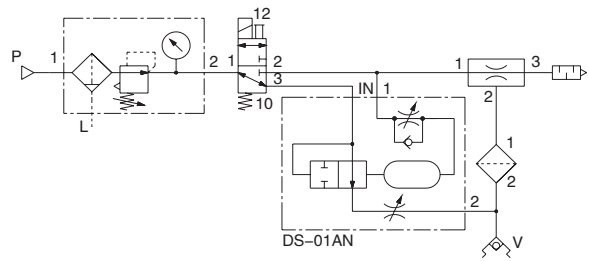


## Circuit

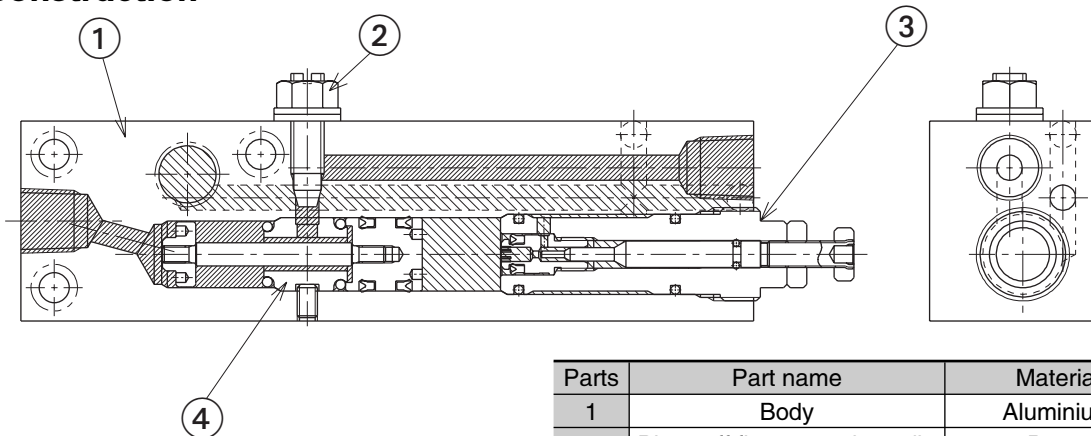
Normally open circuit



Normally closed circuit



## Construction



Parts	Part name	Material
1	Body	Aluminium
2	Blow-off flow control needle	Brass
3	Blow-off time control needle	Brass, SUS, NBR
4	Piston assembly	Brass, SUS, NBR

## Dimensions

(mm)

