Butterfly valves BVG, BVGF, BVA, BVAF, BVH, BVHS, BVHM

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- For gas, air, hot air and flue gas
- Low leakage rate and pressure loss
- High control accuracy
- BVG and BVA with reduced nominal diameters
- Butterfly valve can be mounted directly onto the actuator IC 20 or IC 40
- Suitable for intermittent operation
- BVGF, BVAF work clearance-free
- Low-maintenance operation
- BVG: EC type-tested and certified
- BVHM: FM approved
- BVG: certified pursuant to GOST-TR



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BVG for gas, BVA for air. These butterfly valves can be fitted with an adapter set with square shaft, free shaft end or manual adjustment, for instance.

BVG, BVA

Application

The butterfly valves are designed to adjust volumes of gas, cold and hot air and flue gas on various appliances and flue gas lines. They are designed for control ratios up to 1:10, and with the mounted actuator IC 20 or IC 40 they are suitable for regulating flow rates for modulating or stage-controlled combustion processes.

BVG, BVA

Using the adapter set with manual adjustment, flow rates can be set and fixed, for example to limit the high-fire rate on the burner. A scale indicates the set angle of opening.

Butterfly valves BVG, BVGF, BVA and BVAF with reduced nominal diameter (reduced by one or two nominal sizes) can be used to achieve higher control accuracy. This will mean that complex reducing fittings will no longer be required.

BVGF, BVAF

In case of change of direction, the butterfly valve adjusts to the setpoint without delay. The butterfly valve thus reaches the required position more quickly.

BVH, BVHS, BVHM

BVH

The butterfly valve BVH is used for processes that require the very precise adjustment of the flow rate or low leakage. In conjunction with the stop bar, the valve disc ensures very low leakage rates.

Using a spiral spring which compensates for the play in combination with the actuator IC 40 it is possible to move the valve disc to the required angle with almost zero hysteresis.

BVHS

The butterfly valve BVHS with safety closing function, is used with the actuator IC 40S in systems where it is important that in the event of a mains voltage failure the valve closes preventing air streaming into the furnace without being under control.

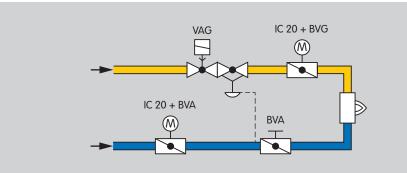
BVHM

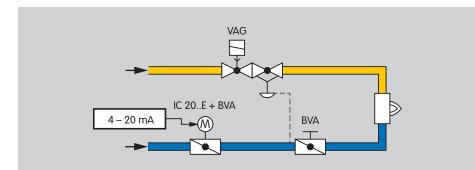
Well suited to intermittent operation due to the large number of operating cycles in conjunction with the solenoid actuator MB 7. BVH, BVHM, BVHS for hot air and flue gas

Butterfly valves BVGF and BVAF work clearance-free.



Example of applications





BVG, BVGF, lambda correction

If the burner is to be operated with excess gas or air for reasons of the process operation, the butterfly valve BVG, BVGF can be used to correct the lambda value.

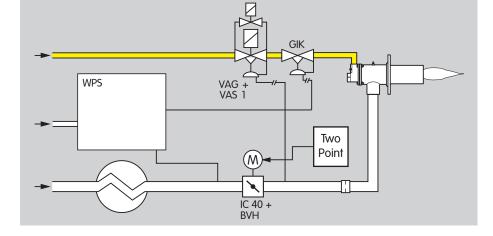
The butterfly valve with manual adjustment is used to adjust the high-fire rate.

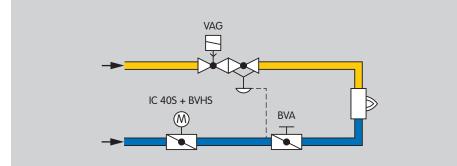
BVA, BVAF, adjusting the burner capacity

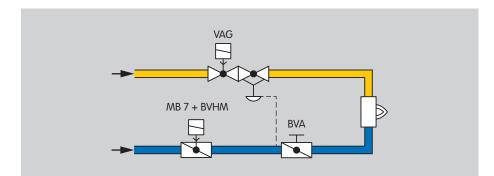
In pneumatic systems, the butterfly valve with mounted actuator IC 20..E determines the air volume for the required burner capacity. The butterfly valve with manual adjustment is used to adjust the high-fire rate.



The butterfly valve BVH is used on burners that are operated with preheated combustion air at temperatures of up to 450°C (840°F). Hot air compensation.







BVHS, safety closing function in the event of a mains voltage failure

The safety closing function ensures that in the event of a mains voltage failure air cannot stream into the furnace without being under control.

The BVHS is installed in the air circuit together with the actuator IC 40S.

The butterfly valve with manual adjustment is used to adjust the high-fire rate.

BVHM, large number of operating cycles for intermittent operation

The butterfly valve BVHM features flow adjustment for low-fire and high-fire rate. The valve stop ensures low leakage rates. With fitted solenoid actuator MB 7, the valve is suitable for intermittent operation.

Technical data

BVG, BVGF, BVA, BVAF

Gas type:

BVG, BVGF: natural gas, town gas, LPG and other non-aggressive fuel gases. BVGF: biologically produced methane (max. 0.1 %-by-vol. H₂S).

BVA, BVAF: air.

The gas must be dry in all conditions and must not contain condensate.

Housing material: AlSi, valve disc: aluminium, drive shaft: stainless steel, seals: HNBR.

DN: 40 to 150.

Type code

reduction by 2 nominal sizes is possible.

Inlet pressure p_u: max. 500 mbar (7.25 psi). Pressure differential between inlet pressure p_{μ} and outlet pressure p_{d} : max. 150 mbar (2.16 psi).

Medium temperature: -20 to +60°C (-4 to +140°F), Ambient temperature: -20 to +60°C (-4 to

+140°F).

BVH, BVHM, BVHS

Gas type: air and flue gas. DN: 40 to 100.

Housing material: GGG, valve disc: stainless steel, drive shaft: stainless steel.

Inlet pressure p_u: max. 150 mbar (2.16 psi). Pressure differential between inlet pressure p_{ii} and outlet pressure p_{d} : max. 150 mbar (2.16 psi).

Medium temperature: -20 to +450°C $(-4 \text{ to } +840^{\circ}\text{F}),$ Ambient temperature: -20 to +60°C (-4 to +140°F).

Code	Description
BVG	Butterfly valve for gas
BVGF	Clearance-free butterfly valve for gas
BVA	Butterfly valve for air
BVAF	Clearance-free butterfly valve for air
BVH	Butterfly valve for hot air and flue gas up to 450°C
BVHS	Butterfly valve for hot air and flue gas up to 450°C with safety closing function (only in conjunction with actuator IC 40S)
BVHM	Butterfly valve for hot air and flue gas up to 450°C (only in conjunction with solenoid actuator MB 7)
DN 40-150	Nominal diameter DN
DN /25-125	Reduced to nominal diameter DN
Z	For fitting between two flanges to EN 1092
W	For fitting between two ANSI flanges
	Max. inlet pressure p _{u max.}
01	150 mbar (2.18 psig)
05	500 mbar (7.25 psig)
A*	With stop bar

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