

Butterfly valves BVG, BVA, BVH, BVHS, BVHM

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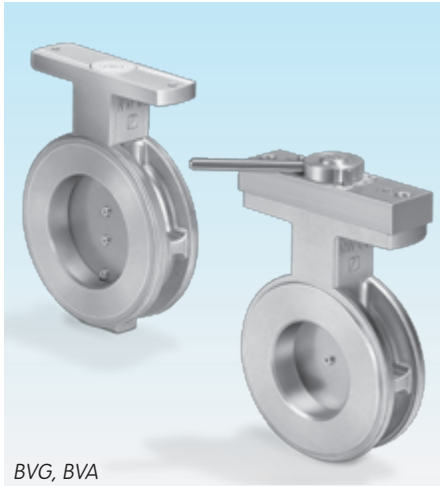
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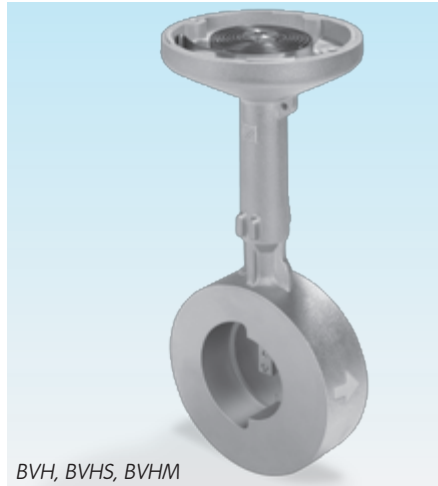
- For gas, air, hot air and flue gas
- Low leakage rate and pressure loss
- High control accuracy
- BVG and BVA with reduced nominal diameters
- BVG and BVA with reduced nominal diameters
- Butterfly valve can be mounted directly onto the actuators IC 20 or IC 40
- Suitable for intermittent operation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



elster
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BVG, BVA



BVH, BVHS, BVHM

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

BVH, BVHM, BVHS for
hot air and flue gas

Application

The butterfly valves BVG, BVA, BVH, BVHM and BVHS 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.

Flow rates can be set and fixed using a lever, for example to limit the high-fire rate on the burner. A scale indicates the set angle of opening.

BVG, BVA

Butterfly valves 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.

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.

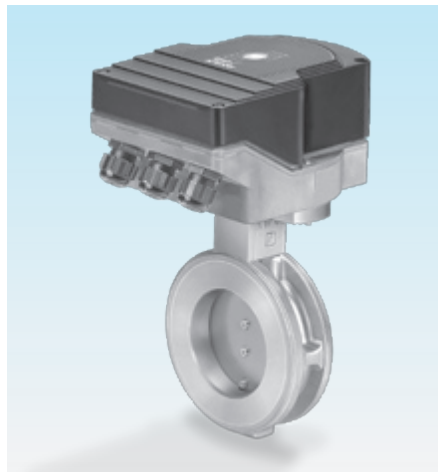
Using a spiral spring which compensates for the play in combination with the actuator IC 40 it is possible to move the valve disc to the required angle with almost zero hysteresis.

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

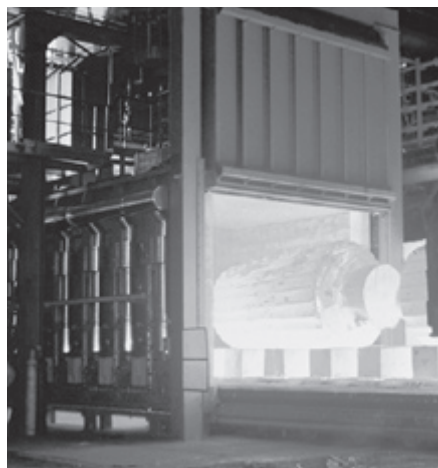
Well suited to intermittent operation due to the large number of operating cycles in conjunction with the solenoid actuator MB 7.



Butterfly valve with
actuator

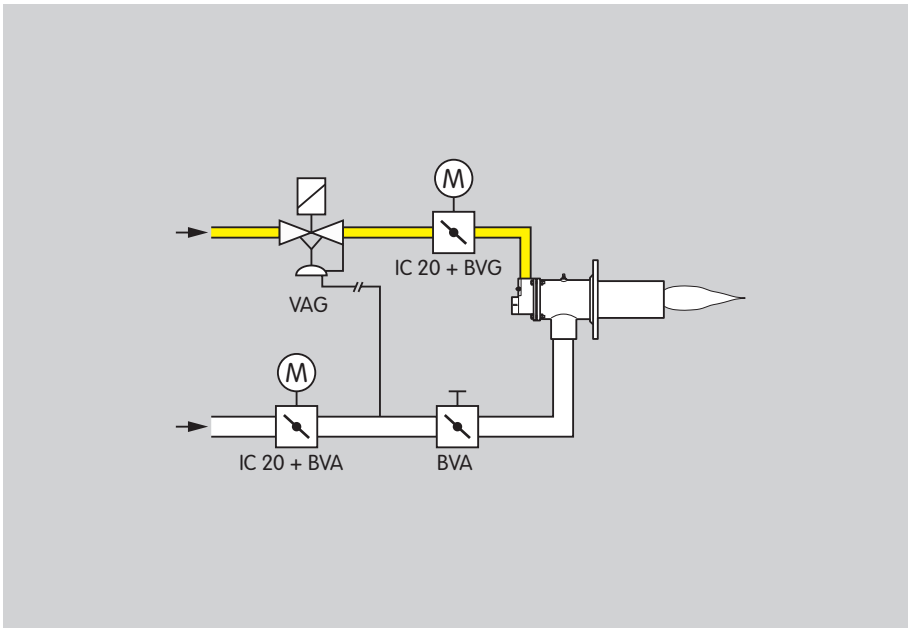


Roller hearth kiln in
the ceramics industry



Forging furnace

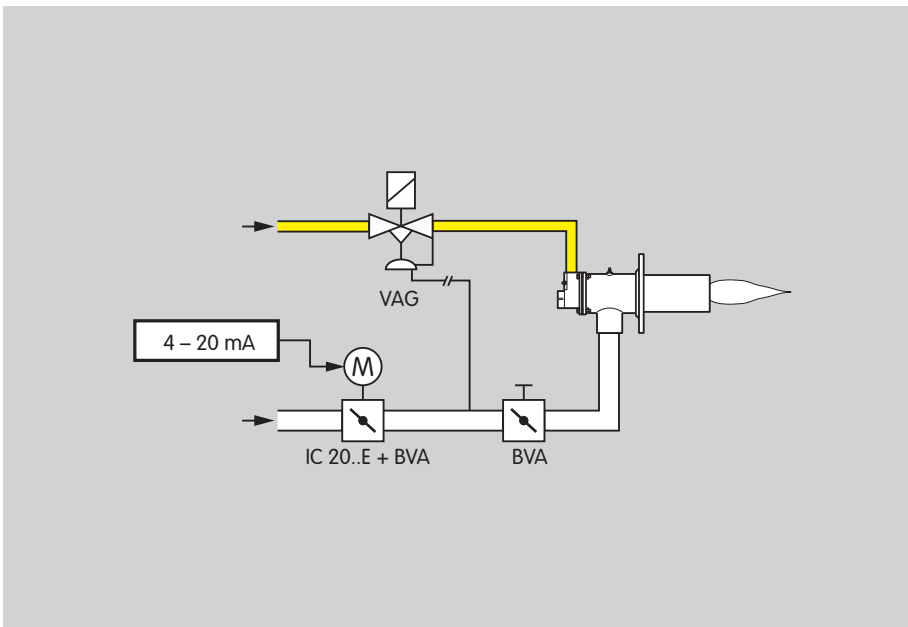
Example applications



BVG, lambda correction

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

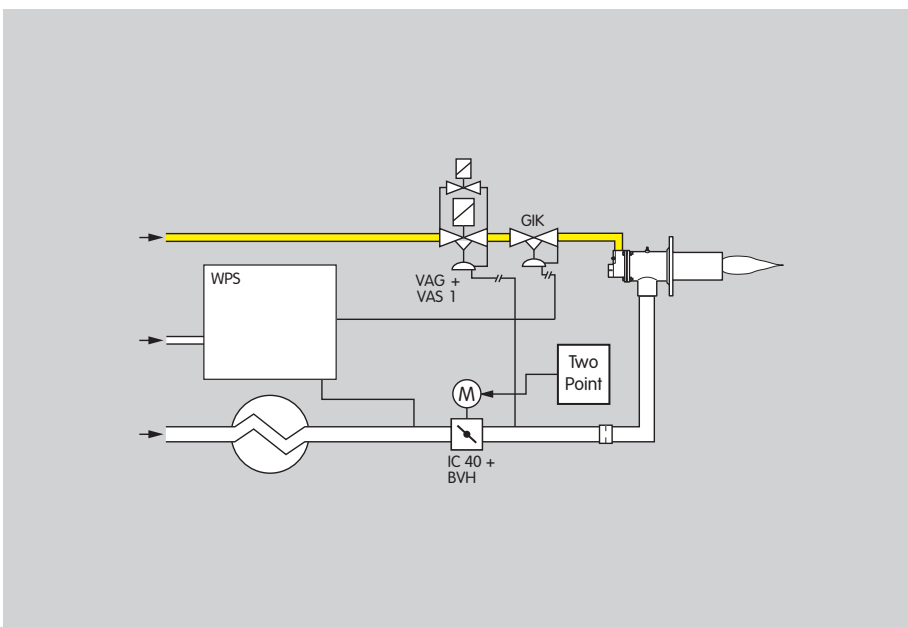
The butterfly valve with manual adjustment is used to adjust the high-fire rate.



BVA, adjusting the burner output

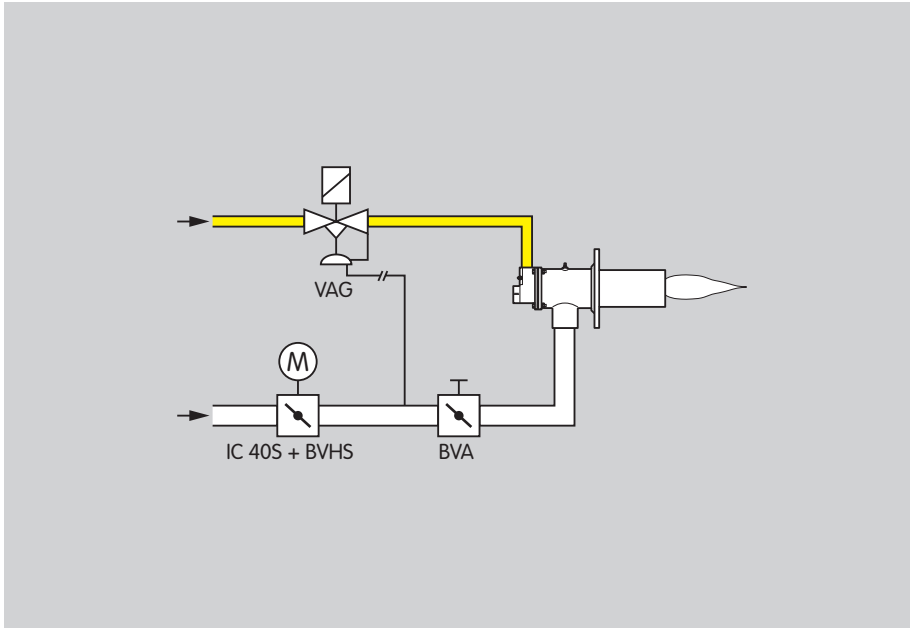
In pneumatic systems the butterfly valve with mounted actuator IC 20..E determines the air volume for the required burner output.

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



BVH, hot air compensation

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

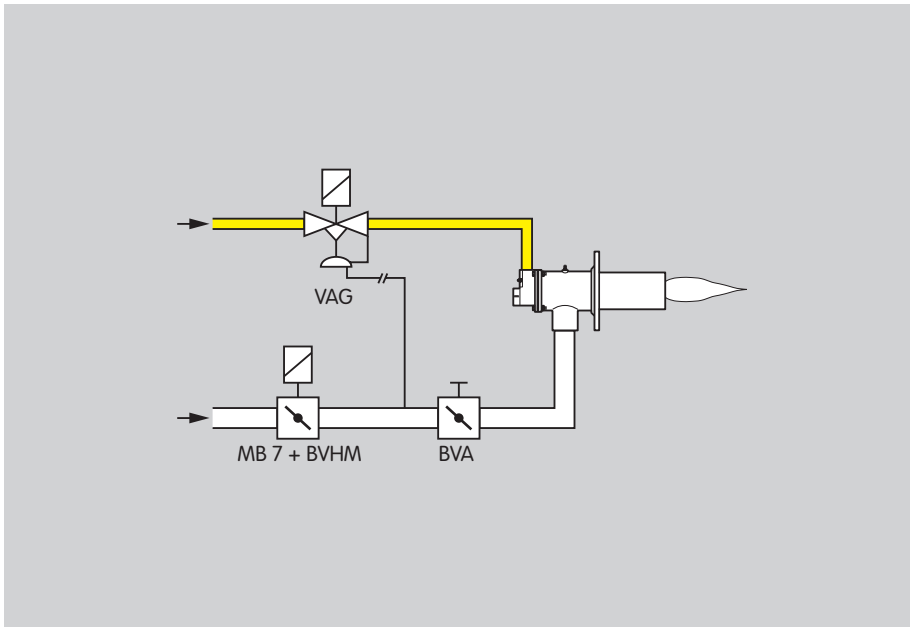


BVHS, safety closing function in the event of a mains voltage failure

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 on the air side 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, BVA

Gas type:
BVG: Natural gas, town gas, LPG and other non-aggressive fuel gas,
BVA: Air.

Housing material: AlSi,
Valve disc: Aluminium,
Drive shaft: Stainless steel,
Seals: HNBR.

DN: 40 to 150, Reduction by 2 nominal sizes is possible.

Inlet pressure p_e : max. 500 mbar (7.25 psi).

Pressure differential between inlet pressure p_e 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_e : max. 150 mbar (2,16 psi).

Pressure differential between inlet pressure p_e and outlet pressure p_d :
max. 150 mbar (2,16 psi).

Medium temperature: -20 to 450 °C
(-4 to +840 °F),

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

Certification

BVG

The butterfly valve BVG is EC type-tested and certified pursuant to

- Gas Appliances Directive (90/396/EEC) on the basis of EN 13611/EN 161.

BVHM

FM approved

Factory Mutual Research Class: 7400 Process Control Valves

Designed for applications pursuant to NFPA 85 and NFPA 86.

Maintenance cycles

The butterfly valves BVG, BVA, BVH, BVHM and BVHS require little maintenance.

We recommend a function check once a year.



Selection

	40	50	65	80	100	125	150	/25–/125	T	Z	W	01	05	A*
BVG	●	●	●	●	●	●	●	●		●			●	
BVG	●	●	●	●	●	●	●	●	●		●		●	
BVA	●	●	●	●	●	●	●	●		●			●	
BVH	●	●	●	●	●					●		●		●
BVH	●	●	●	●	●				●		●	●		●
BVHS	●	●	●	●	●					●		●		●
BVHS	●	●	●	●	●				●		●	●		●
BVHM	●	●	●	●	●					●		●		●
BVHM	●	●	●	●	●				●		●	●		●

* If "none", this specification is omitted.

Example:

BVA 50Z05

Type code

Code	Description
BVG	Butterfly valve for gas
BVA	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
T	T-product
Z	For fitting between two flanges to EN-1092
W	For fitting between two ANSI flanges
	Max. inlet pressure $p_{e \max}$
01	150 mbar (2.18 psig)
05	500 mbar (7.25 psig)
A*	With stop bar *

* If "none", this specification is omitted.

Detailed information on this product

www.docuthek.com

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