

# Industrial Automation

**IMI Buschjost** 

## 82160 2/2-way seat valves

- Port size: DN 8 ... 50,
   G1/4 ... 2 (ISO G)
- For fluids with high particle contamination
- Fluid isolated from valve actuator
- Optimised dimensions and weight
- Vacuum version as an option
- Compact valve for industrial applications
- International approvals



C€ KK

## **Technical features**

#### Medium:

Neutral fluids with high particle contamination

#### Pilot fluid:

Air max. +60°C (+140°F)

## Switching function:

Normally closed with pilot pressure

## Operation:

Externally actuated seat valves

## Type:

Pressure actuated seat valve with diaphragm actuator

## Mounting position:

Optional

## Flow direction:

Determined

## Port size:

G1/4, G3/8, G1/2, G3/4, G1, G1 1/4, G1 1/2, G2

## Pilot connection:

G1/4

## Operating pressure:

0,2 ... 16 bar

## Differential pressure:

0,2 bar required

## Pilot pressure:

G1/4 ... 1/2 max. 6 bar higher than

operating pressure

G3/4 ... 2

max. 1 bar higher than operating pressure

### Fluid temperature:

-10 ... +90°C (+14 ... +194°F)

## Ambient temperature:

−10 ... +60°C (+32 ... +140°F)

### Viscosity:

Max. to 80 mm<sup>2</sup>/s

#### Material:

Body: Brass (CW617N) Cover: Brass (2.0402)

Seat seals: NBR

Internal parts: Brass, Stainless

steel

Main sealing element: Fabric reinforced NBR diaphragm with valve plate

Valve seat: Brass

#### Technical data - standard models

Symbol	Port size	Orifice	Pilot connection	Flow kv value *1)	Operating pressure *2)		Weight	Model
		(mm)		(m³/h)	(bar)	(psi)	(kg)	
Z A T P	G1/4	8	G1/4	1,7	0,2 16	2,9 232	0,5	8216000.0000.00000
	G3/8	10	G1/4	3,4	0,2 16	2,9 232	0,45	8216100.0000.00000
	G1/2	12	G1/4	4	0,2 16	2,9 232	0,4	8216200.0000.00000
	G3/4	20	G1/4	11	0,2 16	2,9 232	1,15	8216300.0000.00000
	G1	25	G1/4	13	0,2 16	2,9 232	1	8216400.0000.00000
	G1 1/4	32	G1/4	28	0,2 16	2,9 232	2,35	8216500.0000.00000
	G1 1/2	40	G1/4	31	0,2 16	2,9 232	2,1	8216600.0000.00000
	G2	50	G1/4	46	0,2 16	2,9 232	3,35	8216700.0000.00000

<sup>\*1)</sup> Cv-value (US) ≈ kv value x 1,2

<sup>\*2)</sup> For gases and liquid fluids up to 80 mm<sup>2</sup>/s (cSt)



#### 82\*6\*\*\*.0000.00000 **Option selector** Thread form Substitute < Valve options Substitute ISO G Fabric diaphragm FPM 0 03 with valve plate T<sub>max.</sub> +110°C Operating pressure 0,2 ... 16 bar Port size Substitute 1/4 0 Control pressure = Operat-3/8 ing pressure G1/4 ... 1/2: 1/2 2 3/4 max. control pressure 6 bar over operating pressure 1 4 but max. control pressure 11/4 5 16 bar G3/4 ... 2: 1 1/2 6 max. control pressure 1 bar 2 over operating pressure but max. control pressure 16 bar Fabric diaphragm NBR with valve plate T<sub>max.</sub> +90°C Operating pressure 51 0,2 ... 16 bar Control pressure = Operating pressure max. control pressure 6 bar over operating pressure but max. control pressure Fabric diaphragm FPM with valve plate T<sub>max.</sub> +110°C Operating pressure 52 0,2 ... 16 bar Control pressure = Operating pressure G3/4 ... 2: max. control pressure 6 bar over operating pressure but max. control pressure 16 bar Suitable for vacuum with 53 pressure spring under diaphragm, FPM-fabric diaphragm T<sub>max.</sub> +110°C Operating pressure –0,9 ... 16 bar Control pressure 2 ... 16 bar max. control pressure 6 bar over operating pressure Suitable for vacuum with 54 pressure spring under diaphragm, NBR-fabric

over operating pressure

Further options on request!

Control pressure 2 ... 16 bar max. control pressure 6 bar

diaphragm T<sub>max</sub> +90°C Operating pressure -0,9 ... 16 bar



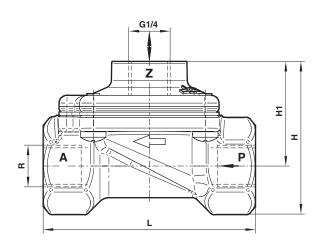
## **Dimensions**

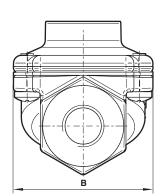
G1/4 ... 2

Dimensions in mm Projection/first angle









Port size R	B *3)	н	H1	L	Model
G1/4	44	48	33	67	8216000.0000.00000
G3/8	44	48	33	67	8216100.0000.00000
G1/2	44	48	33	67	8216200.0000.00000
G3/4	70	81	57	95	8216300.0000.00000
G1	70	81	57	95	8216400.0000.00000
G 1 1/4	96	103	70	132	8216500.0000.00000
G1 1/2	96	103	70	132	8216600.0000.00000
G2	112	121	81	160	8216700.0000.00000

<sup>\*3)</sup> max. depth

## Note to Pressure Equipment Directive (PED):

The valves of this series up to and including DN 25 (G1) are according to Art. 4 § 3 of the Pressure Equipment Directive (PED) 2014/68/EU. This means interpretation and production are in accordance to engineers practice wellknown in the member countries. A certificate of conformity is not designated.

## For valves > DN 25 (G1) Art. 4 $\S$ (1) Letter d) applies:

The basic requirements of the Enclosure I of the PED must be fulfilled. The CE-sign at the valve refers to the PED. A certificate of conformity of this directive will be available on request.