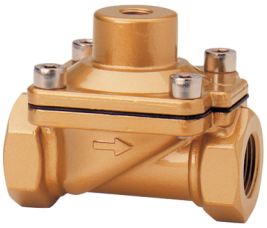
82160
2/2-way seat valves

- **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**



Technical features

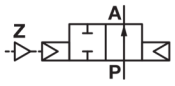
Medium:
Neutral fluids with high particle contamination
Pilot fluid:
Air max. +60°C (+140°F)
Switching function:
Normally closed with pilot pressure
Operation:
Externally actuated seat valves
Type:
Pressure actuated seat valve with diaphragm actuator

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 mm²/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 (mm)	Pilot connection	Flow kv value *1) (m³/h)	Operating pressure *2) (bar)	Operating pressure *2) (psi)	Weight (kg)	Model
	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

*1) Cv-value (US) ≈ kv value x 1,2
*2) For gases and liquid fluids up to 80 mm²/s (cSt)

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Option selector

82★6★★★.0000.00000

Thread form	Substitute
ISO G	**0**

Port size	Substitute
1/4	**0**
3/8	**1**
1/2	**2**
3/4	**3**
1	**4**
1 1/4	**5**
1 1/2	**6**
2	**7**

Valve options	Substitute
Fabric diaphragm FPM with valve plate $T_{max.}$ +110°C Operating pressure 0,2 ... 16 bar Control pressure = Operating pressure G1/4 ... 1/2: max. control pressure 6 bar over operating pressure but max. control pressure 16 bar G3/4 ... 2: max. control pressure 1 bar over operating pressure but max. control pressure 16 bar	**03**
Fabric diaphragm NBR with valve plate $T_{max.}$ +90°C Operating pressure 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	**51**
Fabric diaphragm FPM with valve plate $T_{max.}$ +110°C Operating pressure 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	**52**
Suitable for vacuum with pressure spring under diaphragm, FPM-fabric diaphragm $T_{max.}$ +110°C Operating pressure –0,9 ... 16 bar Control pressure 2 ... 16 bar max. control pressure 6 bar over operating pressure	**53**
Suitable for vacuum with pressure spring under diaphragm, NBR-fabric diaphragm $T_{max.}$ +90°C Operating pressure –0,9 ... 16 bar Control pressure 2 ... 16 bar max. control pressure 6 bar over operating pressure	**54**

Further options on request!

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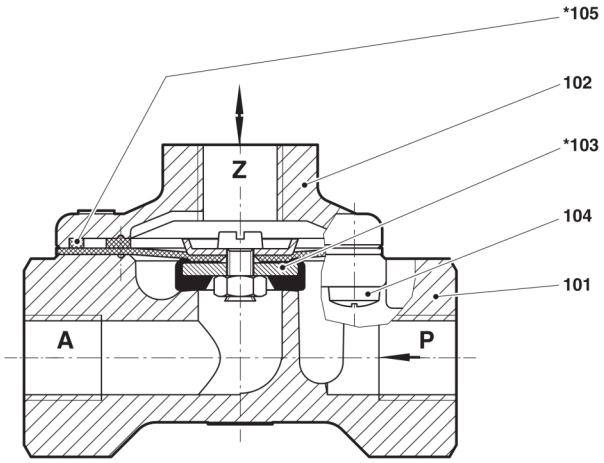
Section View

G1/4 ... 2



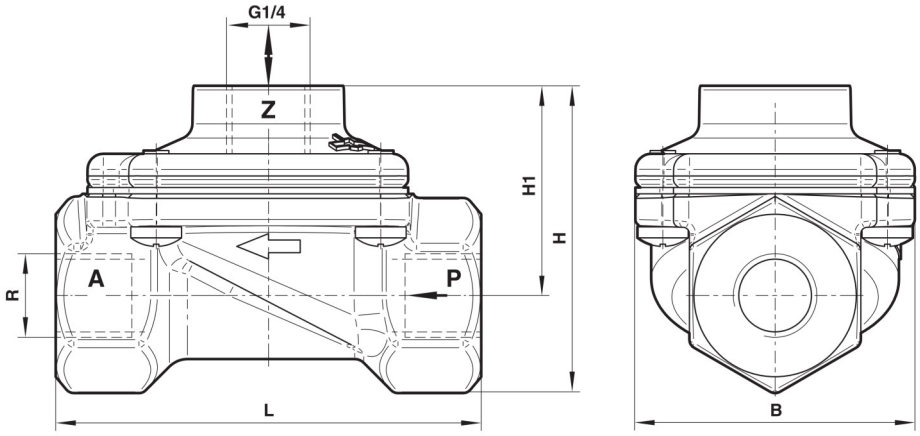
No.	Description
101	Valve body
102	Valve cover
***103**	Diaphragm
104	Oval head cap screw up to G1/2 Allen head screw from G3/4
***105**	Gasket, not for G3/4 and G1

* These individual parts form a complete wearing unit.
When ordering spare parts please state Model No. and Series No.

Dimensions

G1/4 ... 2

Dimensions in mm
Projection/First angle



Port size R	B *3)	H	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

*3) max. depth