

## 2/2-way valves G 1/4 to G 2

For neutral fluids with high particle contamination

Externally actuated seat valves

Seat valves

Internal thread G 1/4 to G 2 resp. 1/4 NPT to 2 NPT

Operating pressure 0.2 to 16 bar

82160

82260

### Pilot pressure (min. = operating pressure, max. 16 bar)

G 1/4 - G 1/2	max. 6 bar higher than operating pressure
1/4 NPT - 1/2 NPT	max. 6 bar higher than operating pressure
G 3/4 - G 2	max. 1 bar higher than operating pressure
3/4 NPT - G 2 NPT	max. 1 bar higher than operating pressure

### Description (standard valve)

Type:	pressure actuated seat valve with diaphragm actuator
Switching function:	normally closed with pilot pressure
Flow direction:	determined
Fluid temperature:	-10 °C up to max. +90 °C
Ambient temperature:	-10 °C up to max. +60 °C
Differential pressure:	0.2 bar required
Mounting position:	as required
Pilot fluid:	air max. +60 °C
Viscosity:	up to 80 mm <sup>2</sup> /s



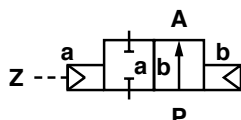
### Material

Body:	Brass (CW617N)
Cover:	Brass (2.0402)
Internal parts:	Brass, Stainless steel
Seat seal:	NBR
Main sealing element:	Fabric reinforced NBR diaphragm with valve plate
Valve seat:	Brass

### Features

- 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

### Symbol



### Ordering information

To order, quote model number from table overleaf, e.g. 8216400.0000 for a DN 25 valve.

## Characteristic data

### Valves

Part Number	Nominal Diameter (mm)	Connection size	Pilot connection	Operating pressure *		kv-value ** (Base m³/h)	Weight (kg)
				min. (bar)	max. (bar)		
8216000.0000 8226000.0000	8	G 1/4 1/4 NPT	G 1/4	0.2	16	1.7	0.50
8216100.0000 8226100.0000	10	G 3/8 3/8 NPT	G 1/4	0.2	16	3.4	0.45
8216200.0000 8226200.0000	12	G 1/2 1/2 NPT	G 1/4	0.2	16	4.0	0.40
8216300.0000 8226300.0000	20	G 3/4 3/4 NPT	G 1/4	0.2	16	11.0	1.15
8216400.0000 8226400.0000	25	G 1 1 NPT	G 1/4	0.2	16	13.0	1.00
8216500.0000 8226500.0000	32	G 1 1/4 1 1/4 NPT	G 1/4	0.2	16	28.0	2.35
8216600.0000 8226000.0000	40	G 1 1/2 1 1/2 NPT	G 1/4	0.2	16	31.0	2.10
8216700.0000 8226700.0000	50	G 2 2 NPT	G 1/4	0.2	16	46.0	3.35

\* for gases and liquid fluids up to 80 mm²/s (cSt)

\*\* C<sub>v</sub>-value (US) ≈ kv-value x 1.2

## Further Options (Valves)

XXXX03.XXXX

Fabric diaphragm FPM  
with valve plate  
T<sub>max.</sub> +110 °C  
Operating pressure 0.2 to 16 bar  
Control pressure = operating pressure  
**G 1/4 to G 1/2:**  
max. control pressure 6 bar  
over operating pressure  
but max. control pressure 16 bar  
**G 3/4 to G 2:**  
max. control pressure 1 bar  
over operating pressure  
but max. control pressure 16 bar

XXXXX53.XXXX

suitable for vacuum with pressure spring under  
diaphragm, FPM-fabric diaphragm  
T<sub>max.</sub> +110 °C  
Operating pressure –0.9 to 16 bar  
Control pressure 2 to 16 bar  
max. control pressure 6 bar  
over operating pressure

XXXXX54.XXXX

suitable for vacuum with pressure spring under  
diaphragm, FPM-fabric diaphragm  
T<sub>max.</sub> +90 °C  
Operating pressure –0.9 to 16 bar  
Control pressure 2 to 16 bar  
max. control pressure 6 bar  
over operating pressure

XXXX51.XXXX

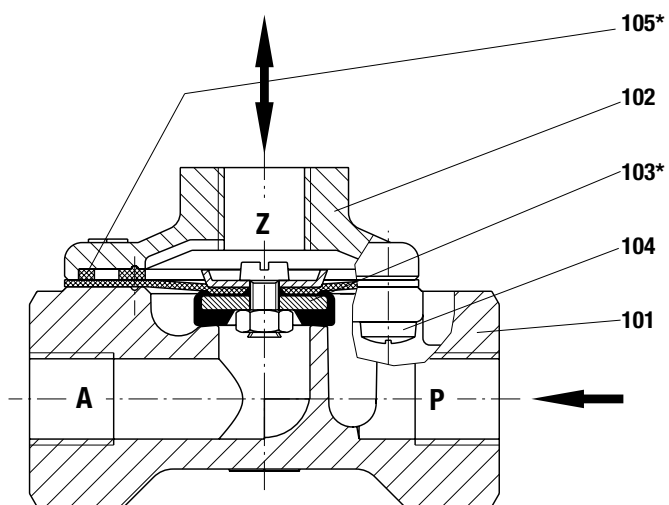
Fabric diaphragm NBR with valve plate  
T<sub>max.</sub> +90 °C  
Operating pressure 0.2 to 16 bar  
Control pressure = operating pressure  
**G 3/4 to G 2:**  
max. control pressure 6 bar  
over operating pressure  
but max. control pressure 16 bar

On request

Further versions

XXXX52.XXXX

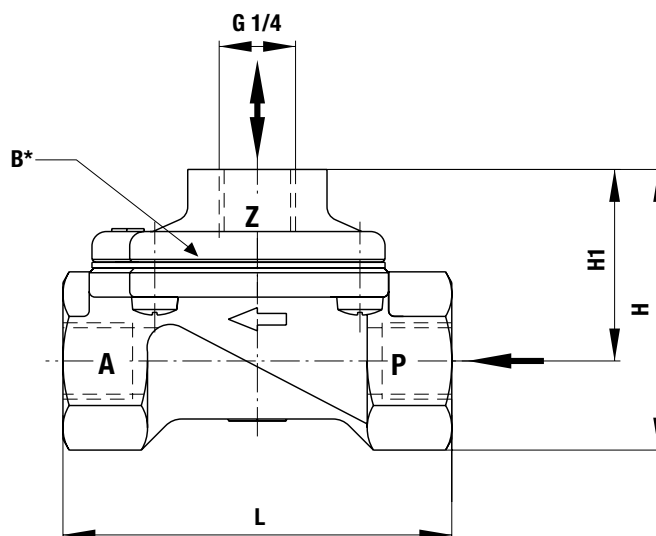
Fabric diaphragm FPM with valve plate  
T<sub>max.</sub> +110 °C  
Operating pressure 0.2 to 16 bar  
Control pressure = operating pressure  
**G 3/4 to G 2:**  
max. control pressure 6 bar  
over operating pressure  
but max. control pressure 16 bar

**Section View**

- 101 Valve body
- 102 Valve cover
- \*103 Diaphragm
- 104 Oval head cap screw up to G 1/2  
Allen head screw from G 3/4
- \*105 Gasket, not for G 3/4 and G1

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

## General Dimensions



Part Number	Nominal Diameter (mm)	Connection size	L (mm)	B* (mm)	H (mm)	H1 (mm)
8216000.0000 8226000.0000	8	G 1/4 1/4 NPT	67	44	48	33
8216100.0000 8226100.0000	10	G 3/8 3/8 NPT	67	44	48	33
8216200.0000 8226200.0000	12	G 1/2 1/2 NPT	67	44	48	33
8216300.0000 8226300.0000	20	G 3/4 3/4 NPT	95	70	81	57
8216400.0000 8226400.0000	25	G 1 1 NPT	95	70	81	57
8216500.0000 8226500.0000	32	G 1 1/4 1 1/4 NPT	132	96	103	70
8216600.0000 8226600.0000	40	G 1 1/2 1 1/2 NPT	132	96	103	70
8216700.0000 8226700.0000	50	G 2 2 NPT	160	112	121	81

B\* = maximum width

### Note to Pressure Equipment Directive (PED):

The valves of this series are according to Art. 3 § 3 of the Pressure Equipment Directive (PED) 97/23/EG.

This means interpretation and production are in accordance to engineers practice wellknown in the member countries.  
A certificate of conformity ist not designated.