

## Directional poppet valves

### Type WV1000

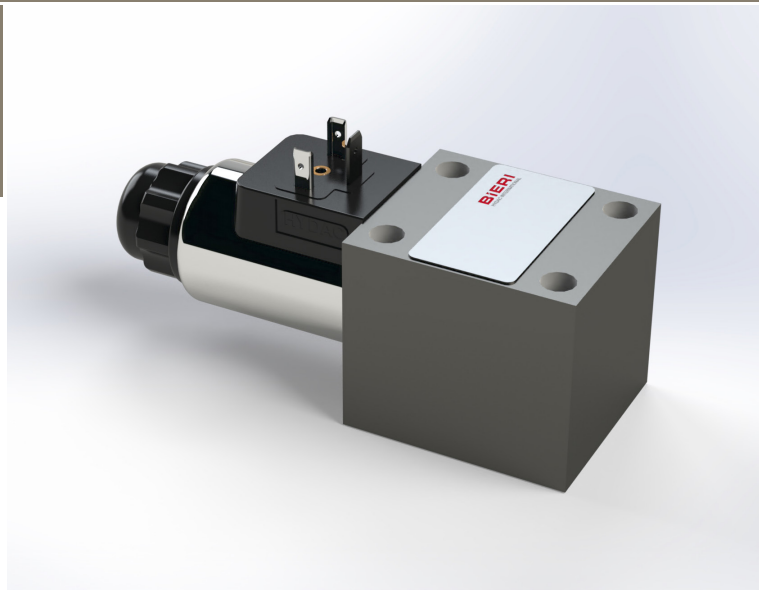
NG 6 Bieri  
up to 25 l/min, up to **1000 bar**

#### Features

- Directly operated
- Poppet tight (bidirectional)
- High operational safety and reliable switching
- High corrosion resistance
- All connections can be loaded to the maximum operating pressure
- Replacement of coils without opening of the pressure tight spaces

#### Applications

- Portable power units
- Control of cylinders as superior and space-saving alternatives to spool valves which require additional leakage free shutoff valves
- Forming technology - clamping
- Presses, test benches and systems
- Lifting and transport systems
- Hydraulic tools
- Accumulator charging systems
- Seat-tight pilot control of passive and/or active logic valves



#### Design

- Patented valve-design
- Pressure compensated design of hardened and specially grinded valve cones
- Strong return springs
- Hidden manual override
- Available as 2/2 directional poppet valve with solenoid actuation
- 360° turnable and exchangeable plug-in coil

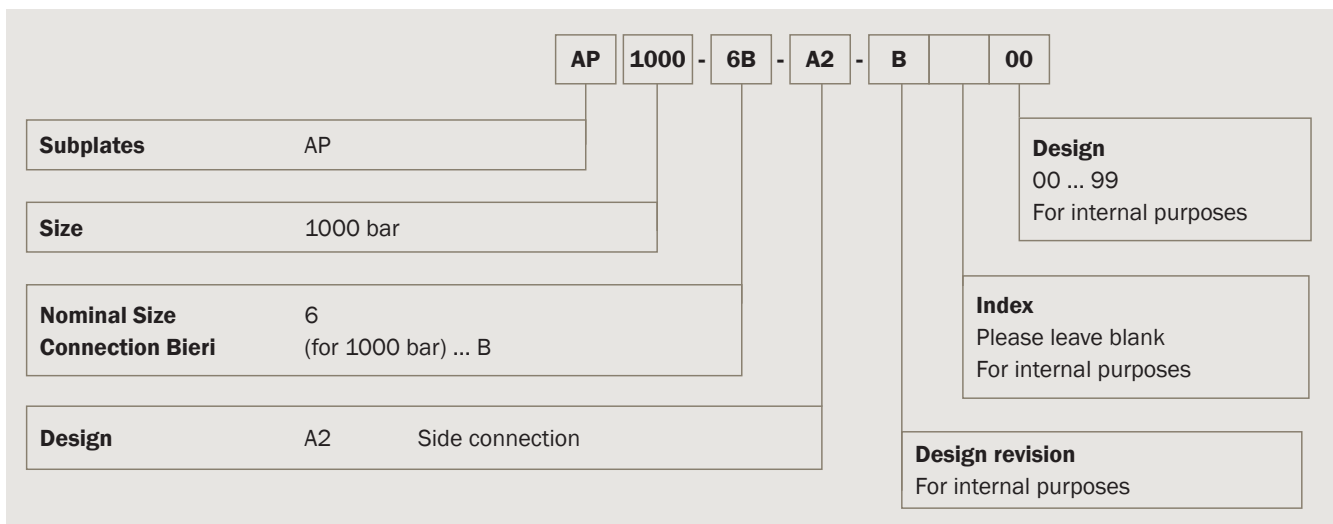
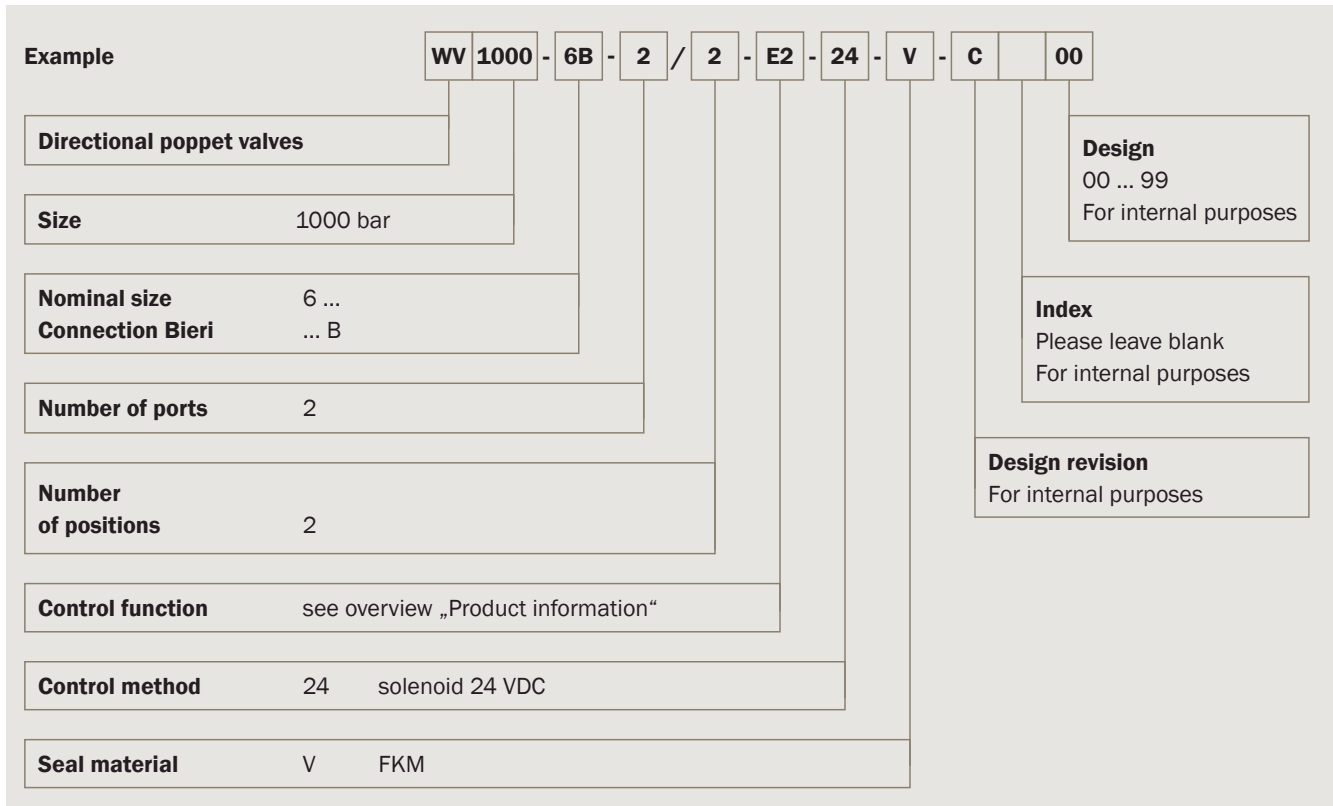
#### Technical data

Hydraulic fluid	Mineral oil according to DIN 51524 (other fluids on request)
Fluid temperature range	- 20 to 80 °C
Ambient temperature range	- 30 to 50 °C
Viscosity range	5 to 400 mm <sup>2</sup> /s
Porting	NG 6 according to Bieri standard
Max. operating pressure connection P, A, B	1000 bar
Max. operating pressure connection T	350 bar
Max. flow rate	25 l/min, see switching capacity diagram page 5
Filtration (recommendation)	according to NAS 1638 class 6 resp. ISO/DIN 4406 17/15/12
Duty cycle ED	100 %
Solenoid voltage (nominal power)	24 VDC (26.7 W)
Tolerance	+/- 10 %
Switching time	see table on page 5
Degree of protection	IP 65 according to EN 60529 / DIN 40050 (or according coil choice)
Weight	1,25 kg
Material	Corrosion resistant steel Solenoid coil: ZnNi-plated (1000 h salt spray test)

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## Type code



## Product information

### Drilling pattern

Valve type	2/2			
Control function	E4	E2	BE4	BE2
Part No.	4648056	4639646	4648061	4648060
Symbol				

### Subplate

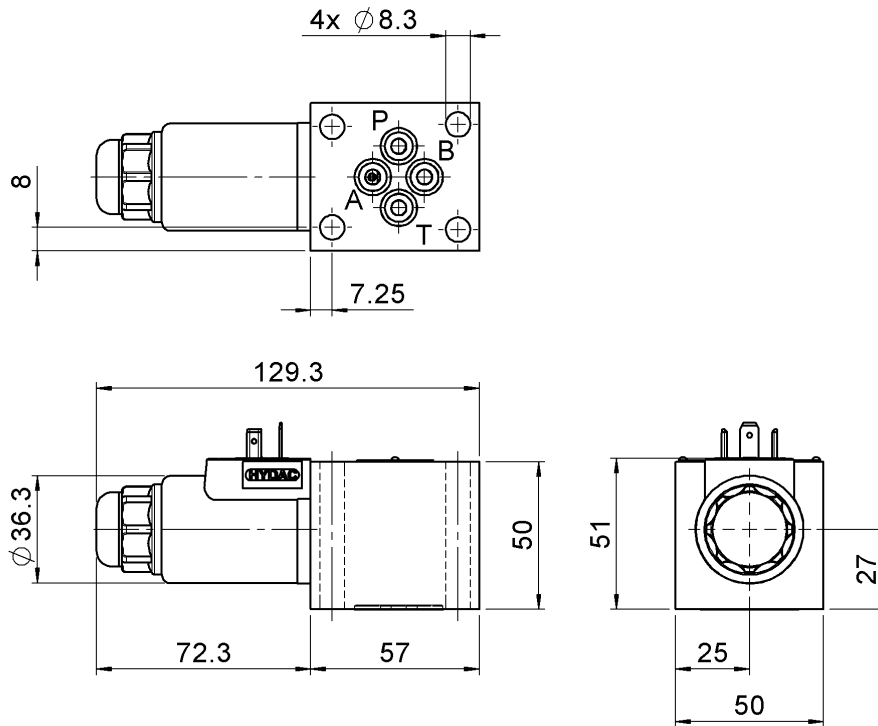
Design	A2
Part No.	4809173
Symbol	

Type WV1000

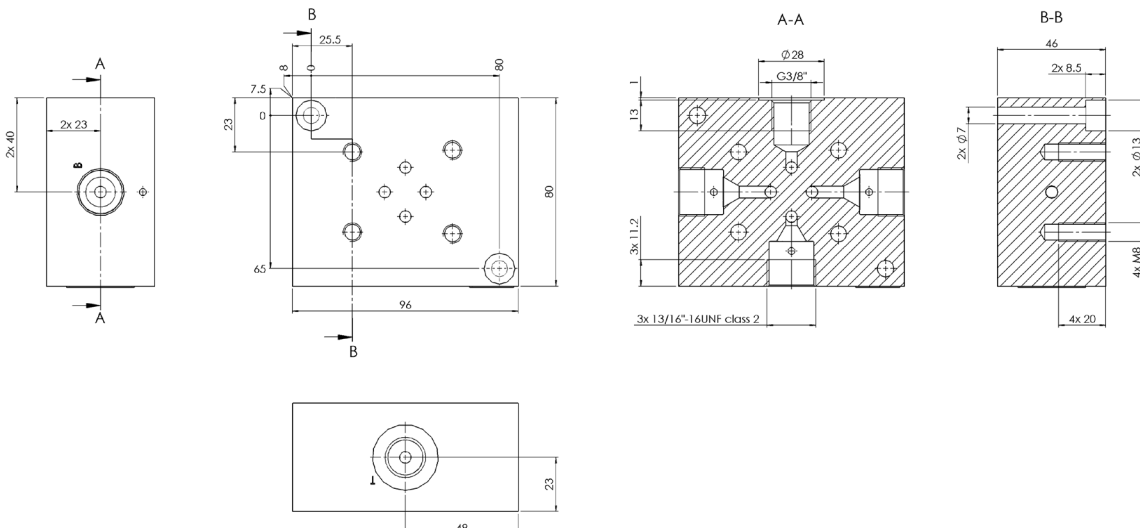
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Dimensional drawing

Directional poppet valves



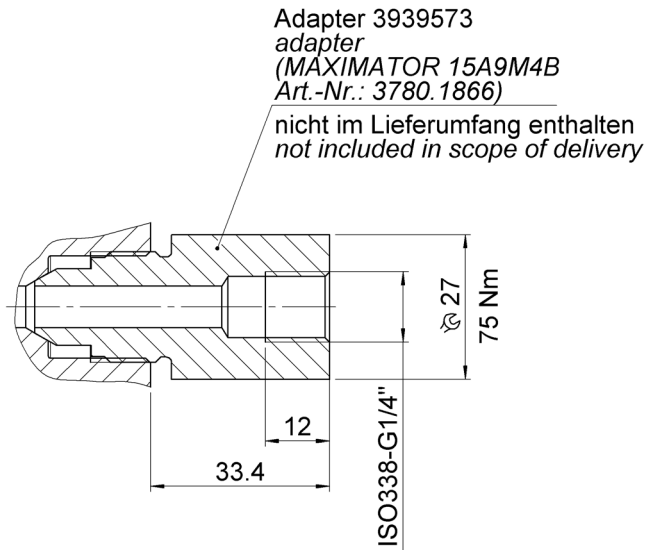
Subplate



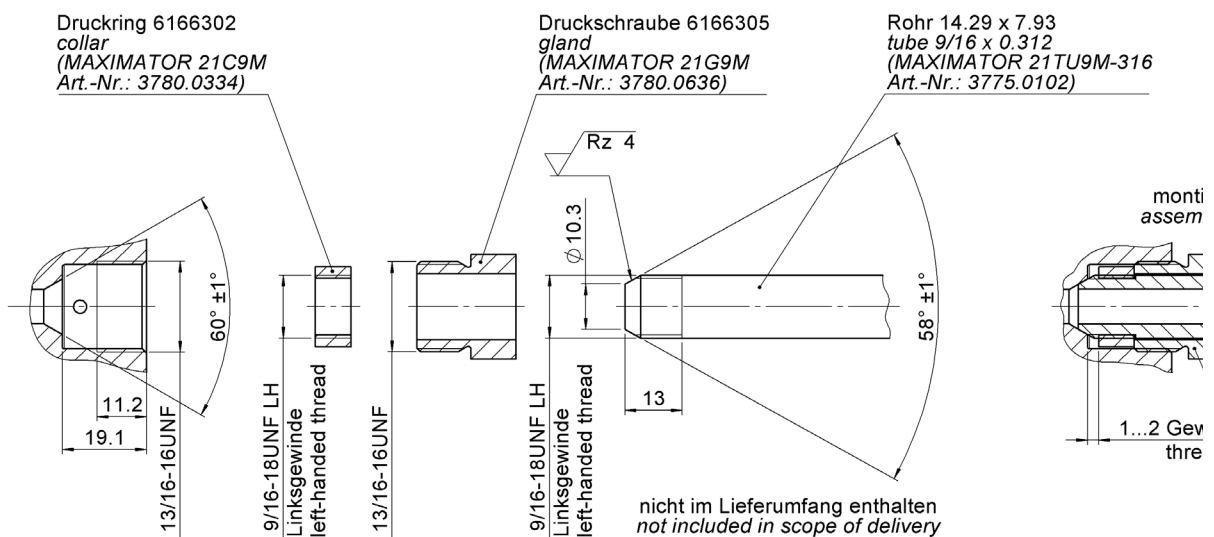
## Accessories

Item description	Part no.
adapter G1/4" MAXIMATOR	3939573

### Anschluss "P" mit System-Anschluss G1/4" Connection "P" with system adapter G1/4"



### Anschluss "P" mit MAXIMATOR-Verrohrung Connection "P" with MAXIMATOR piping

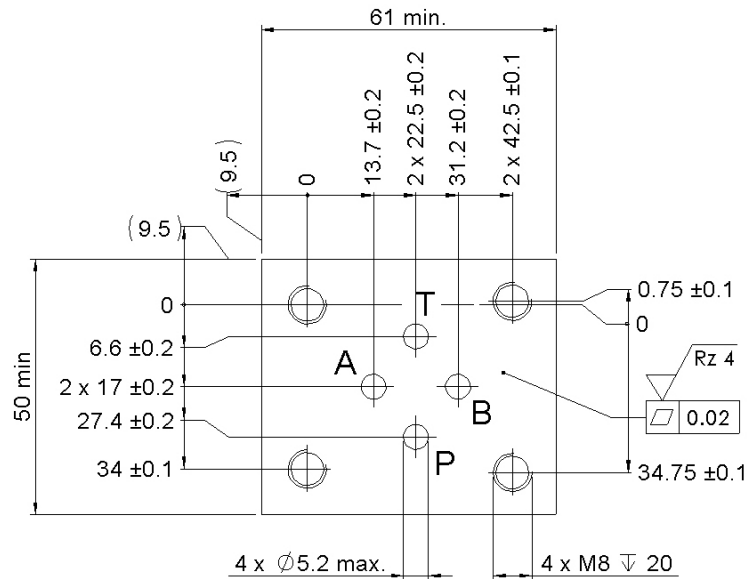


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**Drilling pattern**

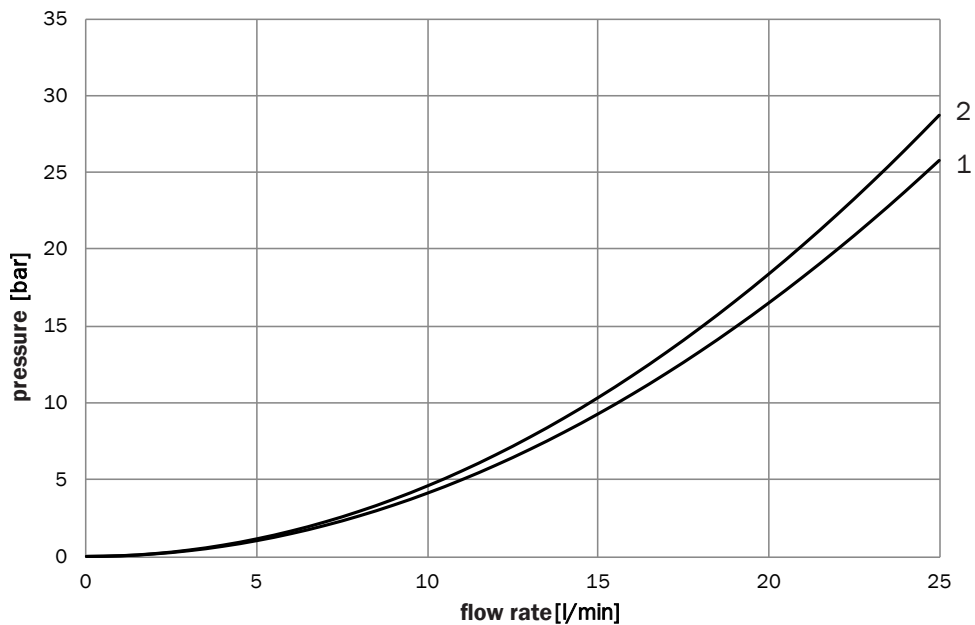
acc. to Bieri standard



Valve fastening: M8x60 screws, quality 8.8

**Pressure drop**

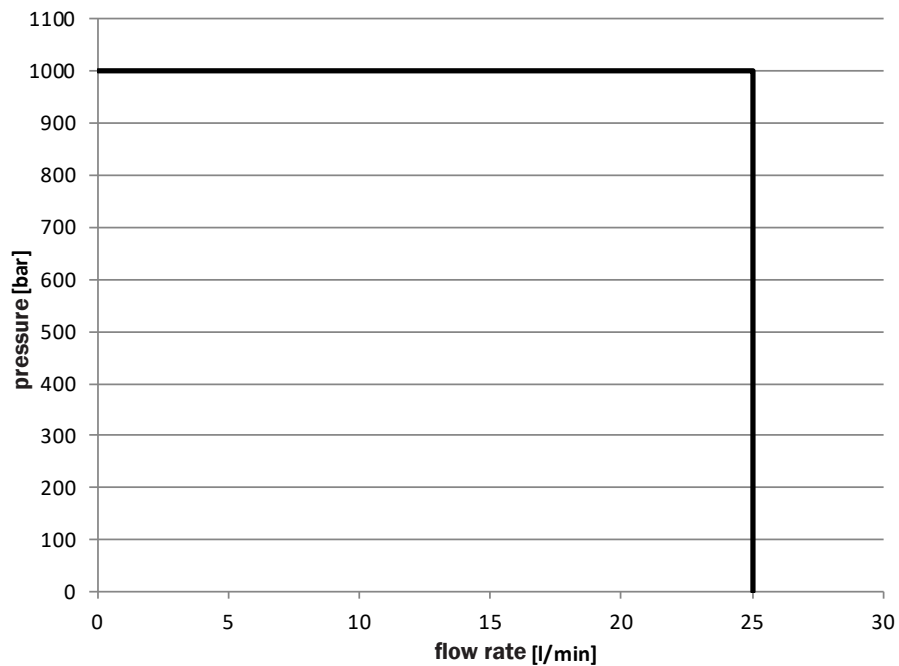
( $v = 15 \text{ mm}^2/\text{s}$ )



Valve type	Control funktion	a (switched)		0 (initial position)	
		P - A	P - T	P - A	P - T
2/2	E4		2		
2/2	BE4				2
2/2	E2	1			
2/2	BE2			2	

## Hydraulic switching capacity

Hydraulic switching capacity at nominal operating voltage and at operating temperature  
Switch on current  $I_{ON} \geq 0.7 \times I_N$



## Switching times

Valve type	Control function	Switching on [ms]*		Switching off [ms]*
		at operating temperature (0.7 x I <sub>N</sub> )	cold (1 x I <sub>N</sub> )	
2/2	E4, E2, BE4, BE2	40	35	15

\* indicative values

**Type WV1000**NG 6 Bieri  
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Voltage	DC voltage
Tolerance	+/- 10%
Nominal power	26,7 W
Nominal voltage	24 V
Nominal current	1,1 A (valid at R 21,2 Ohm)
Duty cycle	100%
Protection class (standard version)	IP65 acc. EN 60529 / DIN 40050 at correct assembly on cable socket

**Plug for solenoid**

Part description	Part No.
Plug for solenoid grey	6132484
Plug for solenoid black	3728850

**Spare parts**

	Part description	Part No.
Seal kit	4 x O-Ring 6,07 x 1,78 (FKM) 4 x Support ring 12,4 / 9,5 x 1,4	4644322

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The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.