

A close-up photograph of a hydraulic component, likely a valve or pump, showing a cylindrical shaft and a circular flange. The component is metallic and has a polished finish. The background is a gradient of blue and white.

# BIERI

## TOHIO®

**Bieri Hydraulik standard  
components from 500 up to 1000 bar**

**High pressure hydraulic  
systems for various applications**

**Including the new 500  serie**

Axial and radial piston pumps, valves, pressure switches, oil level switches and valve manifolds all from part of the standard Bieri product range.

The extensive Bieri product range includes hydraulic components for the most varied of requirements and applications. All, of course, featuring Bieri's well known, reliable «Made in Switzerland» quality.

[www.bierihydraulics.com](http://www.bierihydraulics.com)

# Pumps

high pressure pumps from 500 up to 1000 bar



## Axial piston pumps AKP

Suction and pressure side valve controlled  
High volumetric efficiency  
Compact design

Operating pressure up to 500 bar  
Displacement 0,10 bis 0,36 cm<sup>3</sup>/rev  
Speed range 100 bis 5000 min<sup>-1</sup>



## Radial piston pumps BRK

3-, 5- and 7-pistons  
Self priming, self venting  
Valve controlled  
High volumetric efficiency

Operating pressure 500 up to 1000 bar  
Displacement 0,24 up to 8,14 cm<sup>3</sup>/rev  
Speed range 500 up to 2000 min<sup>-1</sup>



## Radial piston pumps HRK

Compact design  
Direct installation of motor, no coupling, no bell-housing  
Version with hollow shaft  
with or without pressure relief valve.

Operating pressure up to 700 bar  
Displacement 0,12 up to 4,52 cm<sup>3</sup>/rev.  
Speed range 500 up to 3600 min<sup>-1</sup>



## Radial piston pumps SRK-ATEX

3-, 5- and 7-piston versions  
Self-priming and venting  
Suitable for use in explosive environments  
Class II: gases, vapours, mists

Operating pressure up to 700 bar  
Displacement 0,47 up to 6,33 cm<sup>3</sup>/rev.  
Speed range max. 1800 min<sup>-1</sup>

## Pumps

### multi-outlet and combination pumps from 500 up to 1000 bar

#### Combination pumps BKP

Combination of BRK pump and gear pump  
Outstanding energy efficiency ratio  
Fixed displacement, any installation position possible



Operating pressure LP up to 250 bar, operating pressure HP up to 1000 bar

Displacement LP 4,0 up to 61,1 cm<sup>3</sup>/rev.  
Displacement HP 0,47 up to 8,14 cm<sup>3</sup>/rev.  
Speed range max. 2000 min<sup>-1</sup>



#### Combination pumps SKP

2- and 3-piston high-pressure pumps. Suction and pressure side valve controlled. Integrated low-pressure shut-off valve and high-pressure relief valve. Design with hollow shaft.

Operating pressure LP 100 bar, operating pressure HP up to 700 bar

Displacement LP 4,45 up to 16,71 cm<sup>3</sup>/r.  
Displacement HP 0,45 up to 2,71 cm<sup>3</sup>/r.  
Speed range 500 up to 2000 min<sup>-1</sup>



#### Combination pumps KKP

Compact and lightweight. Integrated low-pressure shut-off valve and pressure relief valve. Self-venting. Design with hollow shaft.

Operating pressure LP 160 bar, operating pressure HP up to 700 bar

Displacement LP 0,35 bis 5,43 cm<sup>3</sup>/rev.  
Displacement HP 0,12 bis 2,71 cm<sup>3</sup>/rev.  
Speed range 500 up to 3600 min<sup>-1</sup>



#### Multi outlet pumps MRK

Various outlet pumps available on request.  
Self-priming, self-venting. Valve controlled.  
High volumetric efficiency. With key or hollow shaft.

Number of outlets 2 - 9  
Operating pressure up to 1000 bar  
Displacement/outlet 0,08 up to 7,20 cm<sup>3</sup>/rev.  
Speed range max. 2000 min<sup>-1</sup>





# Valves 700 bar



## Seated valves 2/2-, 3/2-, 3/3-, 4/2-way NG 4

- Seated valve WVH700  
solenoid or manually operated  
pneumatic or hydraulic operated

## Seated valves 2/2-, 3/2-, 3/3-, 4/2- and 4/3-way NG 6

- Seated valve WV700  
solenoid or manually operated  
pneumatic or hydraulic operated



## Pressure valves NG 6

As screw-in cartridges or sandwich valves  
Excellent pressure adjustment over the  
entire operating range

- Pressure relief valves DV700
- Unloading valves DA700
- Pressure reducing valves DM700
- Proportional pressure relief valves PDV700



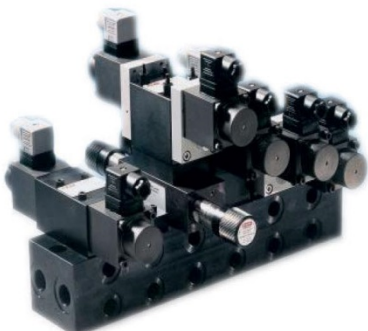
## Flow control valves NG 6

- Load holding and lowering valves SBV700
- Throttle valves / Throttle check valves SD700 / SDRV700



## Non-return valves NG 6

- Shut-off valves AV700
- Check valves ERV700



## Accessories NG 6

- Sub-plates and connection plates AP700 / RP700  
Compact circuit design with up to 6 control circuits

## Valves 500 bar

### Seated valves 2/2-, 3/2-, 3/3-, 4/2- und 4/3-way NG 4

- Seated valve WVM, 500 bar
- Controls:
- solenoid
  - manual crosswise or lengthwise
  - pneumatic
  - hydraulic
  - pin



### Pressure valves NG 4

- Pressure relief valves DVM
- Unloading valves DAM
- Pressure reducing valves DMM



### Flow control valves NG 4

- Throttle valves SDM
- Throtte check valves SDRVM



### Non-return valves NG 4

- Shut-off valves AVM
- Check valves ERVM
- Pilot operated check valves RVM



### Accessories NG 4

- For in-line mounting or valve bank assembly
- Sub-plates and end plates APH und EAP with accessories



# Valves

For in-line mounting up to 700 and up to 1000 bar



## Pressure relief valves DV2

Up to 12 l/min  
Poppet design  
Direct operated  
Max. pressure adjustable with lock nut



## Manual shut-off-valves SPV2

Up to 32 l/min  
Poppet design  
Leakage free  
Low operating force  
Inlet and outlet designed for max. pressure



## Manual shear valves HSV700

Up to 25 l/min  
3/2, 3/3- and 4/3-way valves  
For in-line mounting or plate arrangement NG6,  
DIN 24340  
Robust design  
Weight optimised

## Accessories

### Pressure switches, Oil level switches

#### Pressure switches with one switching point

Protection class IP 64  
Switching hysteresis of scale end value 5–10%  
No supply voltage required

With pressure adjusting scale  
7 Pressure ranges (60–1000 bar)  
Minimal dimensions  
Can be turned through 360° at full pressure



#### Pressure switches with two switching points

Protection class IP 54  
Switching hysteresis of scale end value 2–10%  
No supply voltage required

7 Pressure ranges (60–1000 bar)  
Suitable for panel mounting  
Indication of actual pressure and pressure settings



#### Oil level switches

Minimal dimensions  
Length up to 1200 mm

Various types available with 1 or 2 level contacts  
and additional temperature switch  
Temperature contact up to 90°C





BIERI Hydraulik AG specialises in high-pressure hydraulic components ranging from 500 up to 1000 bar.

The comprehensive BIERI product range includes a wide variety of piston pumps, all kinds of valves, as well as pressure switches and oil level switches. Appropriate accessories, such as connection and multi-station plates, complete the range.

Our products are used in a wide spectrum of industries, such as oil and gas extraction, medical technology, rescue technology, the machine tool industry and test bench and measuring technology, clearly demonstrating a guaranteed high level of quality.

With many years of experience combined with Swiss precision, we can guarantee you innovative solutions at the highest level.

Further information about our products and company can be found at [www.bierihydraulics.com](http://www.bierihydraulics.com)

### **Bieri Hydraulik in medical engineering**

Hydraulic components for operating tables, X-ray and CT-scan tables.



### **Bieri Hydraulik in industry**

Pumps for as example oil and gas production, the chemical industry or for crimping tools.

