

## Directional seated valves type VZP

These type VZP use spring-loaded balls or cones as valve elements and therefore do not show any leakage.

The twin layout of the 3/2- and 2/2-way directional seated valves means that all functional elements for valve function and actuation share one housing, making them very compact.

Depending on pairing, these valves can fulfil either one 4/4-, 4/3-, 3/3-way function or two independent 3/2- and 2/2-way functions. When compared with individual valves for manifold mounting of conventional layout, the twin design is more advantageous due to lower spatial requirements and the possibility to directly mount pressure switches for monitoring the consumer pressure. This compact design offers particular advantages in type BVZP valve banks consisting of several valves of this type connected in parallel.

### Features and benefits:

- Good price-performance ratio
- Max. operating pressures up to 450 bar
- Adapter plates for flange-mounting on compact hydraulic power packs
- Option to incorporate additional functions in the sub-plate, such as pressure switches, throttle and check valve combinations etc.

### Intended applications:

- Machine tools (cutting and non-cutting)
- Mining machinery (incl. oil production)
- Clamping equipment, punching tools, jigs
- Rubber and plastics machinery



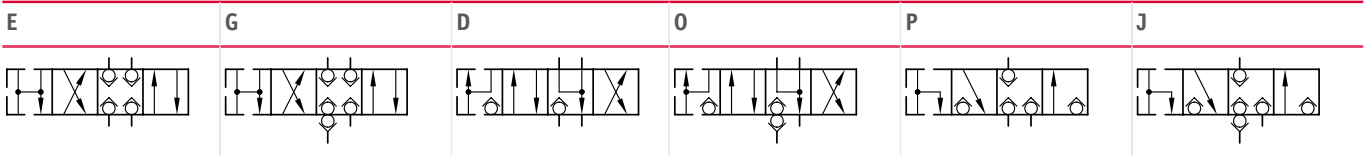
<b>Nomenclature:</b>	Directional seated valve, zero leakage
<b>Design:</b>	Individual valve, manifold mounting
<b>Actuation:</b>	Solenoid
<b>p<sub>max</sub>:</b>	250 ... 450 bar
<b>Q<sub>max</sub>:</b>	5 ... 15 lpm

### Design and order coding example

<b>VZP1</b>	<b>H</b>	<b>12B1,0</b>	<b>- G12</b>
		<b>Solenoid voltage</b>	12V DC, 24V DC, 110V AC, 230V AC <ul style="list-style-type: none"> <li>■ Versions with M12-plug and 8-Watt solenoid</li> </ul>
		<b>Additional elements</b>	<ul style="list-style-type: none"> <li>■ Indiv. valves with check valve insert in gallery P</li> <li>■ Indiv. valves with return pressure stop in gallery R</li> <li>■ Pressure switch for the consumer ports</li> </ul>
		<b>Function</b>	<ul style="list-style-type: none"> <li>■ 4/2-way functions via directional spool valve</li> <li>■ 4/3-way directional seated valve (G, D, E, O)</li> <li>■ 3/3-way directional seated valve (J, P)</li> <li>■ 2/2- and 3/2-way directional seated valve (F, D - H, M, N, R)</li> </ul>
<b>Basic type, size</b>	Twin valve type VZP, size 1 <ul style="list-style-type: none"> <li>■ Connection blocks for pipe connection</li> </ul>		

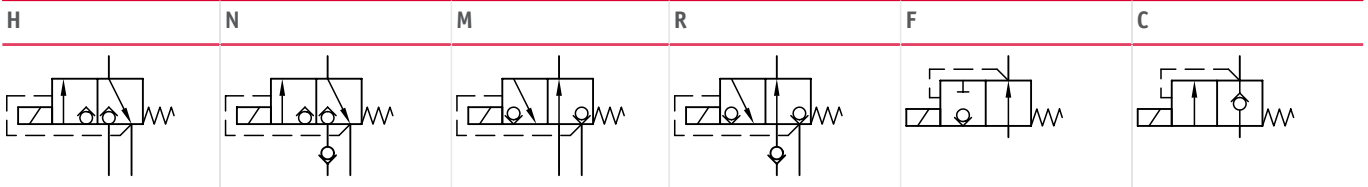
## Function

Cone seated valves with 4/3- (4/4-) or 3/3- (3/4-) way functions up to 400 bar



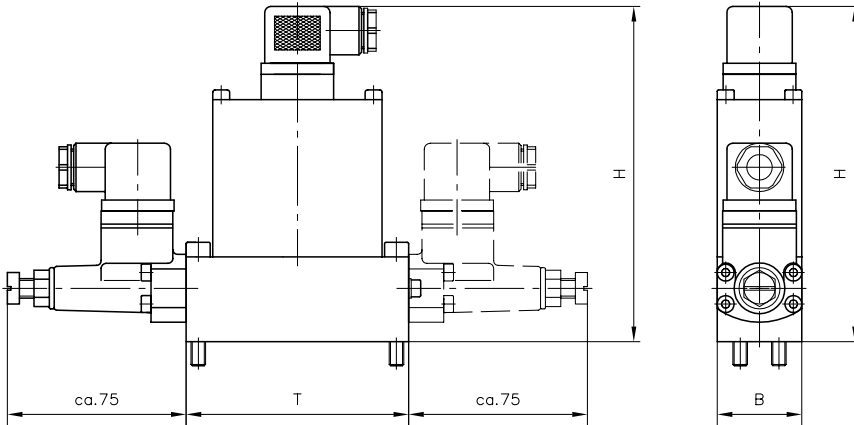
- The 4. shifting position illustrates mode, when both solenoids are energized

Ball seated valves with 3/2- (2/2-) way functions up to 450 bar (always two valve functions in one valve body)



## General parameters and dimensions

VZP 1 (example with mounted pressure switches)



	$Q_{\max}$ [lpm]	$p_{\max}$ [bar]	Dimensions [mm]			m [kg]
			H	B	T	
VZP 1	5... 15	250... 450	137... 142	35... 39	92	1.9... 2.2

- Weight m [kg] +0.3 kg per mounted pressure switch

### Associated technical data sheets:

- Directional seated valves type VZP: [D 7785 A](#)

### Valve banks:

- Type BVZP: [D 7785 B](#)

### Accessories:

- Pressure switches type DG 3.., DG 5E: [D 5440](#), [D 5440 E/1](#)

### Plugs:

- With LEDs or to support the EMV etc.: [D 7163](#)