



## Measurement parameters and standards

valid for WEBER-HYDRAULIK control blocks and hydraulic systems\*

120611\_mess\_norm\_EN  
01.2024

### Measurement and test conditions

- Unless otherwise noted, all measurements are made using mineral oil-based hydraulic oil according to DIN 51524 type HLPD 32
- Oil temperature  $35\text{ °C} \pm 3\text{ °C}$
- Viscosity ISO VG 32 cSt
- Purity level (DIN EN ISO 4406) 17/15/12

### Applied standards

- Fluid technology: DIN EN ISO 4413
- Hydraulic fluids: DIN 51524
- Filtration: ISO 4406

### Tolerances and test parameters

The characteristics of hydraulic valves always depend on the operating and test conditions, especially pressure, volume flow, temperature, oil viscosity, measuring method, etc. For performance details (diagrams), see the data sheets and catalogues of the individual valves/control blocks.

Typical test tolerances (individual supplier settings may vary) are listed below:

#### Adjustable pressure valves (especially pressure relief valves)

Nominal pressure  $\pm 5\text{ bar}$  or  $\pm 5\%$ , whichever is higher;  
flow rate at 6 l/min

#### Non-adjustable pressure valves (especially pressure relief valves)

Nominal pressure  $\pm 10\text{ bar}$  or  $\pm 10\%$ , whichever is higher;  
flow rate at 6 l/min

#### Flow control valves

Nominal volume flow  $\pm 10\%$  \*\*

#### Counterbalance valves

Volume flow = 0.0 l/min at nominal pressure - 10%  
Volume flow  $\Rightarrow$  0.1 l/min at nominal pressure + 10%  
Leak test at nominal pressure - 25%

#### Gas precharge pressure accumulator

Nominal value  $\pm 5\text{ bar}$  or  $\pm 5\%$ , whichever is higher;  
at 20 °C gas temperature (hydraulically tested)

#### Nozzles

Nominal diameter  $\pm 0.02\text{ mm}$  (hydraulic test individually defined)

\* Valid for products manufactured at the Wörth an der Isar location

\*\*  $\Delta p$  individually depends on the hydraulic circuit and test setup