

# Two stage valves type NE

Two stage valves are used for hydraulic systems fed by two stage pumps (low and high pressure). They unit the flow from both pumps, automatically switch the low pressure circuit to idle circulation as soon as the adjusted pressure is achieved or exceeded by the high pressure circuit and safeguard both pumps from excessive pressure above the set figures. These valves are intended for use together with 3/3- or 4/3-way directional valves controlling hydraulic cylinders. Bottom ram presses and single acting hydraulic cylinders are better controlled by switch units type CR.

**Nomenclature:** Two stage valve (high pressure (HP) / low pressure (LP) stage)

**Design:** Individual valve for pipe connection

**Adjustability:** Tool adjustable

**p<sub>max</sub>:** 500 ... 700 (HP) / 30 ... 80 (LP) bar

**Q<sub>max</sub>:** 25 (HP) / 180 (LP) lpm



## Basic types and general parameters

| Basic type and size | Pressure<br>p <sub>max</sub> (bar) |            | Flow<br>Q <sub>max</sub> (lpm) |     | Tapped ports<br>(BSPP) |       |       | Symbol |              |
|---------------------|------------------------------------|------------|--------------------------------|-----|------------------------|-------|-------|--------|--------------|
|                     | HP                                 | LP         | HP                             | LP  | A, R                   | HP    | NP    | NE 20  | NE 70, NE 80 |
| NE 20               | 20 ... 700                         | 16 ... 80  | 10                             | 40  | G 1/2                  | G 1/4 | G 1/2 |        |              |
| NE 70               | (0) ... 500                        | (0) ... 60 | 16                             | 100 | G 1                    | G 1/4 | G 3/4 |        |              |
| NE 80               | (0) ... 500                        | (0) ... 30 | 25                             | 180 | G 1 1/4                | G 3/8 | G 1   |        |              |

LP Low pressure  
 HP High pressure

## Additional versions

- For direct mounting of valve banks type VB (type NE 21)
- For direct mounting onto hydraulic power packs type MP and RZ

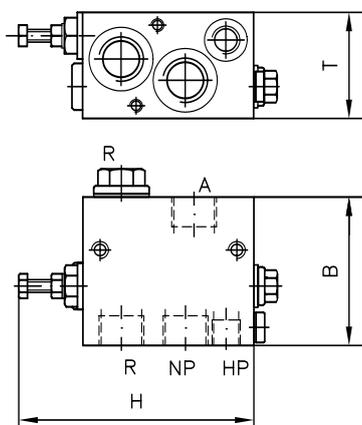
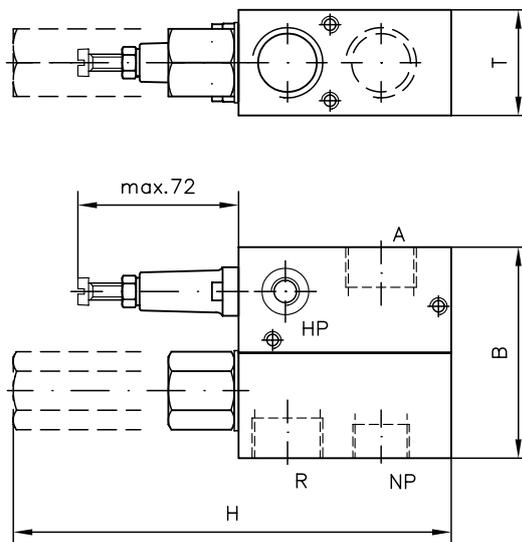
## Order examples

### NE 20 - 650/20

Two stage valve NE 20, factory set to 650 bar (high pressure), 20 bar (low pressure)

### NE 70 - 500/10

Two stage valve NE 70, factory set to 500 bar (high pressure), 10 bar (low pressure)

**Dimensions****Type NE 20****Type NE 70, NE 80**

| Basic type | H   | B   | T  | m (kg) |
|------------|-----|-----|----|--------|
| NE 20      | 110 | 70  | 50 | 2.1    |
| NE 70      | 131 | 100 | 50 | 3.4    |
| NE 80      | 259 | 120 | 60 | 7.0    |

All dimensions in mm, subject to change without notice!

**Additional information**

- Two stage valves type NE D 7161
- Hydraulic power packs type MP, MPN, MPW D 7200, D 7200 H, D 7207
- Two stage pump type RZ D 6910, D 6910 H
- Circulation valve type CNE D 7710 NE
- Two stage connection block type NA D 6905 A/1

- Switch unit (for presses) type CR D 7150
- Directional seated valves type VB D 7302
- See also section "Devices for special applications" (Press control, Devices for up to 700 bar)

For page and section of the devices additionally listed, see type index