

### **Poppet valve**

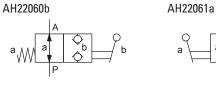
#### **Flange construction**

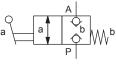
- hand operated
- ◆ 2/2-, 3/2- und 3/4-way
- normally open and normally closed
- $Q_{max} = 40 \text{ l/min}$
- ◆ p <sub>max</sub> = 350 bar

#### DESCRIPTION

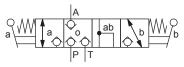
Direct operated 2/2-, 3/2 and 3/4-way poppet valve in flange construction. By means of the hand lever, the poppet valve spool is opened or closed acting against the spring. Due to the poppet spool construction with pressure compensation on both sides, the flow through the valve is possible in both directions. The seat spool guide is sealed by means of an O-ring. The metallically sealing seat closes the valve virtually leak free.

#### **SYMBOL**





AH3406



# **TYPE CODE**

| 2/2 or 3/2 way execution                       |  | A H 🗌 2 06 | - # |
|--|--|------------|-----|
| 3/4 way execution                              |  | A H 3 4 06 | # _ |
| International standard interface ISO           |  |            |     |
| Hand lever                                     |  |            |     |
| 2 way (connections)<br>3 way (connections)     |  |            |     |
| 2 switching positions<br>4 switching positions |  |            |     |
| Nominal size 6                                 |  |            |     |
| Normally closed<br>Normally open               | Hand lever on A-side1aHand lever on B-sideOb |            |     |
| Sealing material                               | NBR<br>FKM (Viton) D1                        |            |     |
| Design index (subject to ch                    | ange)  |            |     |
| 1.11-5140                                      |  |            |     |

#### NG6 ISO 4401-03



#### **APPLICATION**

AH32060b

Poppet valves are used where tight closing functions of the valve are essential like leakage-free load holding, clamping or gripping.

AH32061a



### **GENERAL SPECIFICATIONS**

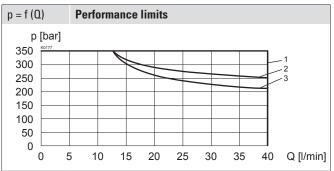
| Designation         | 2/2-, 3/2- and 3/4-way poppet valve             |
|---------------------|---|
| Construction        | Direct operated                                 |
| Mounting            | Flange construction                             |
| Nominal size        | NG6 according to ISO 4401-03                    |
| Actuation           | Hand operated                                   |
| Ambient temperature | -25…+70 °C                                      |
| Weight              | 1,70 kg (2/2- and 3/2-way)<br>2,50 kg (3/4-way) |
| MTTFd               | 150 years                                       |

# **HYDRAULIC SPECIFICATIONS**

| Working pressure            | p <sub>max</sub> = 350 bar   |
|-----------------------------|--|
| Maximum volume flow         | Q <sub>max</sub> = 40 l/min, see characteristic                    |
| Volume flow direction       | Any (see characteristic)   |
| Leakage oil                 | Seat tight, max. 0,05 ml / min (approx. 1<br>drop / min) at 30 cSt |
| Fluid                       | Mineral oil, other fluid on request                                |
| Viscosity range             | 12 mm²/s320 mm²/s  |
| Temperature range<br>fluid  | -25+70 °C (NBR)<br>-20+70 °C (FKM)                                 |
| Contamination<br>efficiency | Class 20 / 18 / 14   |
| Filtration                  | Required filtration grade ß 10…16 ≥ 75,<br>see data sheet 1.0-50   |

# **PERFORMANCE SPECIFICATIONS**

Oil viscosity  $\upsilon = 30 \text{ mm}^2/\text{s}$ 



|          | Flow direction |       |       |       |
|----------|----------------|-------|-------|-------|
| Туре     | P - A          | A - T | A - P | T - A |
| AH22061a | 1              | -     | 1     | -     |
| AH22060b | 1              | -     | 3     | -     |
| AH32061a | 1              | 2     | 1     | 1     |
| AH32060b | 1              | 1     | 2     | 1     |
| AH3406   | 1              | 1     | 1     | 1     |

# **ACTUATION**

| Actuation       | Hand lever   |
|-----------------|--|
| Actuation angle | $\alpha_{\rm b} = 6^{\circ}$   |
| Actuation force | F <sub>b</sub> = 20 - 120 N (depending on flow direction and pressure) |

## **STANDARDS**

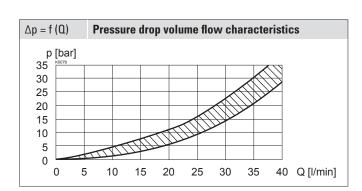
| Mounting interface | ISO 4401-03 |
|--------------------|-------------|
| Contamination      | ISO 4406    |
| efficiency         |             |

# ACCESSORIES

| Fixing screws              | Data sheet 1.0-60  |
|----------------------------|--------------------|
| Threaded subplates         | Data sheet 2.9-30  |
| Multi-station subplates    | Data sheet 2.9-60  |
| Horizontal mounting blocks | Data sheet 2.9-100 |
| Technical explanations     | Data sheet 1.0-100 |
| Filtration                 | Data sheet 1.0-50  |

## **SURFACE TREATMENT**

- The valve body is painted with a two component paint
- The hand lever housing, the screws and the cover are zinc coated

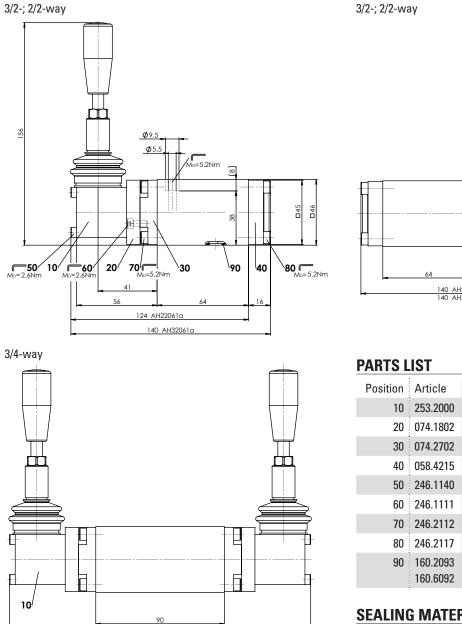




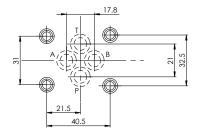
### **VALVES INSTALLED**

The central functioning element is the poppet valve cartridge NG6, data sheet 1.11-2030.

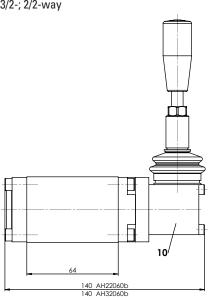
#### DIMENSIONS



#### **HYDRAULIC CONNECTION**



211



|          | -                    |  |
|----------|----------------------|--|
| Position | Article              | Description  |
| 10       | 253.2000             | Hand control head BHII                                     |
| 20       | 074.1802             | Flange squarre   |
| 30       | 074.2702             | Flange square  |
| 40       | 058.4215             | Cover  |
| 50       | 246.1140             | Socket head screw M4 x 40 DIN 912                          |
| 60       | 246.1111             | Socket head screw M4 x 10 DIN 912                          |
| 70       | 246.2112             | Socket head screw M5 x 12 DIN 912                          |
| 80       | 246.2117             | Socket head screw M5 x 16 DIN 912                          |
| 90       | 160.2093<br>160.6092 | O-ring ID 9,25 x 1,78 (NBR)<br>O-ring ID 9,25 x 1,78 (FKM) |

#### **SEALING MATERIAL**

NBR or FKM (Viton) as standard, choice in the type code

# **INSTALLATION NOTES**

| Mounting type     |  | Flange mounting<br>4 fixing holes for<br>socket head screws M5 x 45    |
|-------------------|--|--|
| Mounting position |  | Any, preferably horizontal   |
| Tightening torque |  | Fixing screws M <sub>p</sub> = 5,2 Nm (screw quality 8.8, zinc coated) |
| Note!             | The length of the fixing screw depends on the base material of the connection element. |  |



rial of the connection element.

Wandfluh AG Postfach CH-3714 Frutigen Tel. +41 33 672 72 72 Fax +41 33 672 72 12 sales@wandfluh.com