

### **Poppet valve**

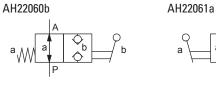
#### **Flange construction**

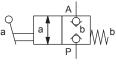
- hand operated
- ◆ 2/2-, 3/2- und 3/4-way
- normally open and normally closed
- $Q_{max} = 40 \text{ l/min}$
- ◆ p <sub>max</sub> = 350 bar

#### DESCRIPTION

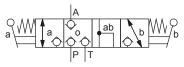
Direct operated 2/2-, 3/2 and 3/4-way poppet valve in flange construction. By means of the hand lever, the poppet valve spool is opened or closed acting against the spring. Due to the poppet spool construction with pressure compensation on both sides, the flow through the valve is possible in both directions. 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) 3 way (connections)			
2 switching positions 4 switching positions			
Nominal size 6			
Normally closed Normally open	Hand lever on A-side1aHand lever on B-sideOb		
Sealing material	NBR 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**

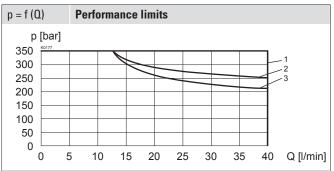
Designation	2/2-, 3/2- and 3/4-way poppet valve
Construction	Direct operated
Mounting	Flange construction
Nominal size	NG6 according to ISO 4401-03
Actuation	Hand operated
Ambient temperature	-25…+70 °C
Weight	1,70 kg (2/2- and 3/2-way) 2,50 kg (3/4-way)
MTTFd	150 years

# **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 drop / min) at 30 cSt
Fluid	Mineral oil, other fluid on request
Viscosity range	12 mm²/s320 mm²/s
Temperature range fluid	-25+70 °C (NBR) -20+70 °C (FKM)
Contamination efficiency	Class 20 / 18 / 14
Filtration	Required filtration grade ß 10…16 ≥ 75, 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**

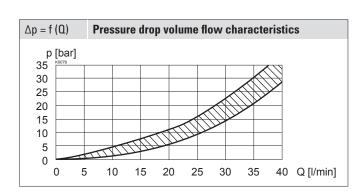
Mounting interface	ISO 4401-03
Contamination	ISO 4406
efficiency	

# 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

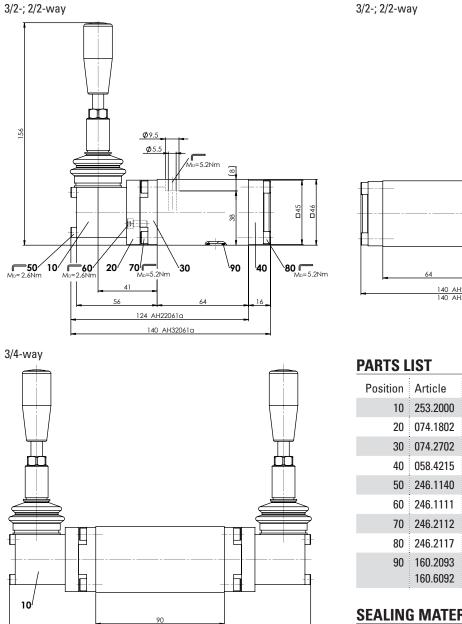




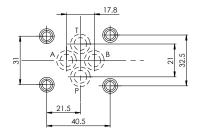
### **VALVES INSTALLED**

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

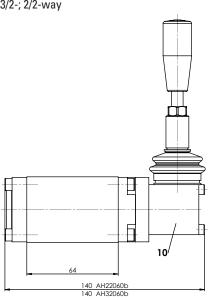
#### DIMENSIONS



#### **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 160.6092	O-ring ID 9,25 x 1,78 (NBR) 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 4 fixing holes for 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