

# Shut-off valves

Type AV700 up to 700 bar NG 6 up to 25 l/min

# **Features**

- Safe operation
- Suitable for bi-directional flow
- Leak free
- Porting NG 6 according to DIN 24340



# Design

- As cartridge
- As modular valve

# **Applications**

Shut-off valves are used for manually opening and closing a channel.

They can also be used as drainage valves against the tank line. Shut-off valves are suitable for bidirectional flow.



# **Technical data**

Hydraulic fluid	Mineral oil according to DIN 51524 (other fluids on request)
Fluid temperature range	– 20 to 80 °C
Ambient temperature range	– 30 to 50 °C
Viscosity range	5 to 400 mm <sup>2</sup> /s
Porting	NG 6 according to DIN 24340/ISO 4401/CETOP RP 121 H
Max. operating pressure connection P, A, B	700 bar
Max. pressure admissible connection T	350 bar
Max. flow rate	25 I/min
Pressure drop at 25 l/min (Valve fully open)	15 bar
Filtration (recommendation)	According to NAS 1638, class 6 or ISO/DIN 4406 17/15/12
Weight	See dimensional drawings
Material/surface treatment	Steel parts:galvanized, black chromatedCartridge:steelAdjusting knob:cast iron

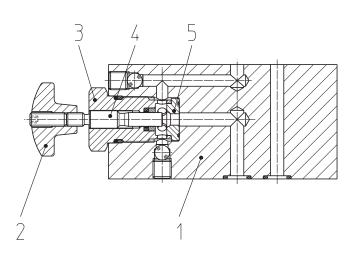
to 700 bar NG 6 up to 25 I/min

# **Order code**

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Shut-off valves																	pecial design
Туре	BV700															1 -	1 99 00 for standard)
Port size	6																ndex
Model	E (screw PP (shut AA (shur-	-off va	lve	in P											(sm	nall ers	e leave blank letters a-d; defferent do not effect interchan- ity)
	AT (shut- PT (shut-																
Max. pressure	700 bar							1						Cap	ital I	ette	<b>ision</b> ers A-Z; identical letters e connecting dimensions
Cartridge model	S (star ki K (lockin		dle)														
Seal material	V (FPM) other sea	al mat	eria	als o	n re	que	st										

# **Function and design**

The shut-off valve comprises a cartridge and the valve body (1) in intermediate plate design. The cartridge consists of adjusting knob (2), spindle (4), seat (5) and cartridge (3). The spindle design allows easy adjustability even at high pressure. A hexagon opening in the adjusting knob allows more sensitive adjustment by means of an allen-key. If the spindle is fully screwed in, the relevant channel is closed and leak free.



to 700 bar NG 6 up to 25 l/mi

# **Product information**

#### Screw-in cartridge with star knob, weight 0,12 kg

Type description	Seal material	Part no.
AV700-6-E-700-S-V-A*00	star knob	3678553
AV700-6-E-700-K-V-A*00	locking handle	4052128

#### **Dimensional drawing**

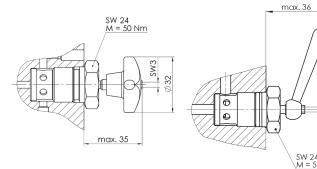
Screw-in cartridge with star knob

Screw-in cartridge with locking handle

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SW3

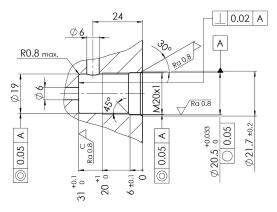
SW 24 M = 50 Nm



# Hydraulic schematics



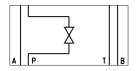
#### **Bore dimensions**



#### Shut-off valve in P

Type description	Seal material	Part no.
AV700-6-PP-700-S-V-A*00	star knob	3678565
AV700-6-PP-700-K-V-A*00	locking handle	4052131

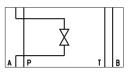
#### **Hydraulic schematics**



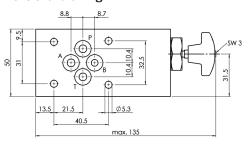
# Ahut-off valve in A

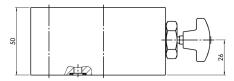
Type description	Seal material	Part no.
AV700-6-AA-700-S-V-A*00	star knob	3678548
AV700-6-AA-700-K-V-A*00	locking handle	4052132

#### **Hydraulics schematics**

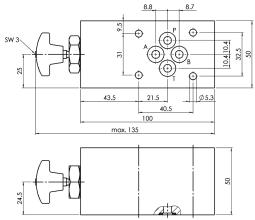


### **Dimensional drawing**





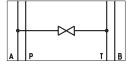
#### **Dimensional drawing**



### Shut-off valve A to T

Type description	Seal material	Part no.
AV700-6-AT-700-S-V-A*00	star knob	3678551
AV700-6-AT-700-K-V-A*00	locking handle	4052133

#### **Hydraulic schematics**



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<u>32.5</u> 50



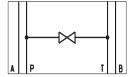
max. 135

40.5

#### Shut-off valve P to T

Type description	Seal material	Part no.
AV700-6-PT-700-S-V-A*00	star knob	3678566
AV700-6-PT-700-K-V-A*00	locking handle	4052134

#### Hydraulic schematics



# **Accessories**

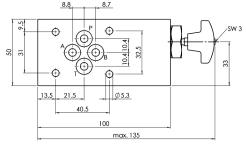
For each valve the following is included: 4 pieces 0-rings 9,25 x 1,78 mm, 90°ShA

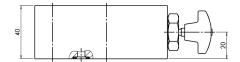
Tie bolts/fixing screws and subplates are optionally available, see technical data sheet AP700/RP700/EP700

# Bieri Hydraulik AG

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**Dimensional drawing** 





The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department. Subject to technical modifications.