

Pilot operated check valves

Type ERV700

up to 700 bar

NG 6 up to 25 l/min



Features

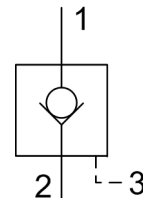
- Leakage free
- Ball-seat construction
- Load supported closing
- Porting NG 6 according to DIN 24340
- Advantageous release function
- Compact design
- Outer parts of cartridge are corrosion protected

Design

- Leakage free block of load pressure
- Intermediate plate
- Cartridge

Applications

The cartridge design allows a compact integration on cylinders and motors. This assembly offers an enhancement of the tractive strength and also a protection against pipe burst.



Technical data

Hydraulic fluid	mineral oil according to DIN 51524 (other fluids on request)
Fluid temperature range	- 20 bis 80 °C
Ambient temperature range	- 20 to 50 °C
Viscosity range	5 to 400 mm ² /s
Porting (Cartridge see page 2)	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
Pressure ratio	modular subplate (parts in body) $p_e/p = 1:5.4$ cartridge 1:7.2
Max. flow rate	25 l/min
Back pressure at 25 l/min	modular subplate (parts in body) 5 bar cartridge 30 bar
Cracking pressure check valve	modular subplate (parts in body) ca. 1 bar cartridge ca. 6 bar
Filtration (recommendation)	according to NAS 1638, class 6 or ISO/DIN 4406 17/15/12
Weight	see dimension drawings
Material/surface treatment	housing steel, galvanized, chromated outer parts cartridge corrosion protection

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Ordering code

Example	ERV	700	-	6	-	A	-	V	-			00
Pilot operated check valve												
Type	BV700											
Size	6											
Check valve	E Cartridge Modular subplate from: A block of port A B block of port B AB block of port A or B											
Seals	V (FPM) other seals on request											
												Special design 01 ... 99 (00 for standard)
												Part index Please leave it blank (small letters a – z; different letters do not effect interchangeability)
												Design revision see dimension drawings (capital letters A – Z; identical letters equal same connecting dimensions)

Accessories

For each intermediate plate valve the following is included:
4 pieces O-rings 9,25 x 1,78 mm 90°ShA article no. 4003217

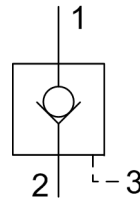
Tie bolts/ fixation screws and subplates are optional,
see technical data sheet AP700/RP700/EP700

Product information

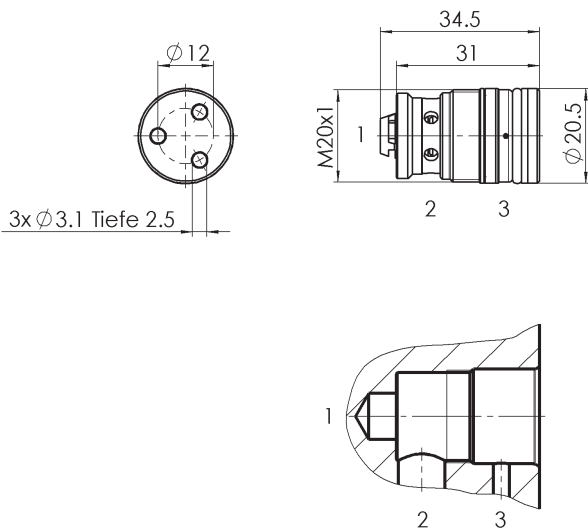
Screw-in cartridge, weight 0,055 kg

Type	Part number
ERV700-6-E-V-A*00	3683103

Symbol

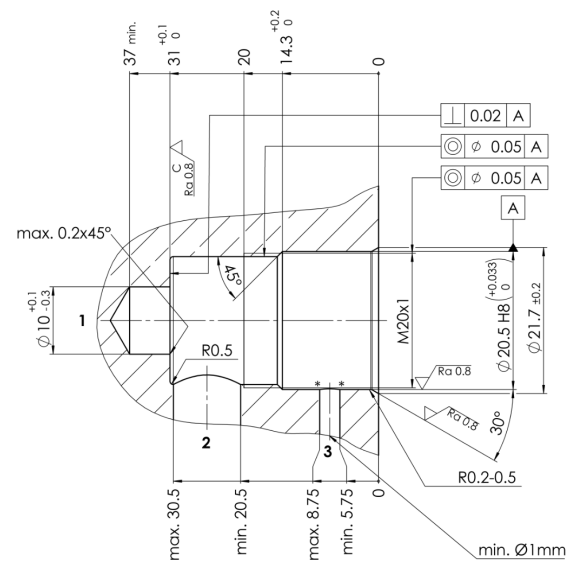


Dimensional drawing



Tightening torque: $M = 40 \text{ Nm}$

Bore dimension

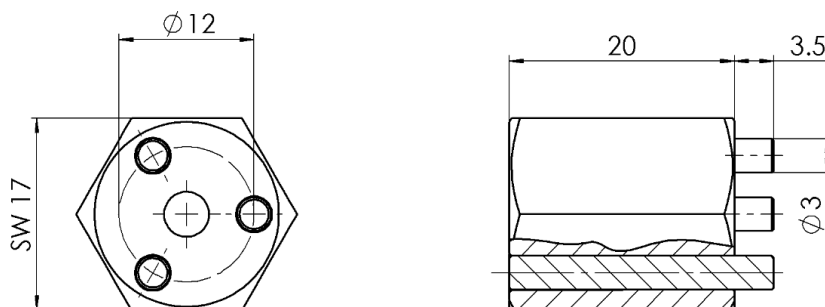


Steel yield strength $Rp0.2 \geq 450 \text{ N/mm}^2$
elongation at fracture $A_s \geq 10\%$

* Flat chamfer or rounding max. 0.5 mm wide

Assembly tool

Part number
3690831



Type ERV700

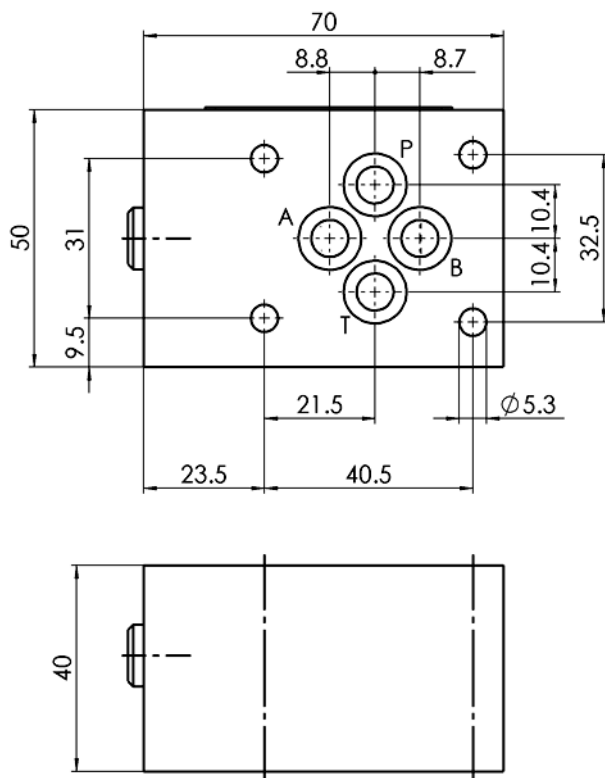
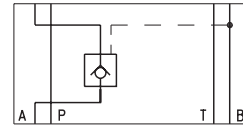
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Modular subplates

Check valve in A, weight 1,0 kg

Type	Part number
ERV700-6-A-V-A*00	3683082

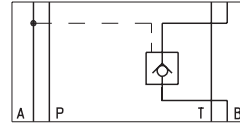
Symbol



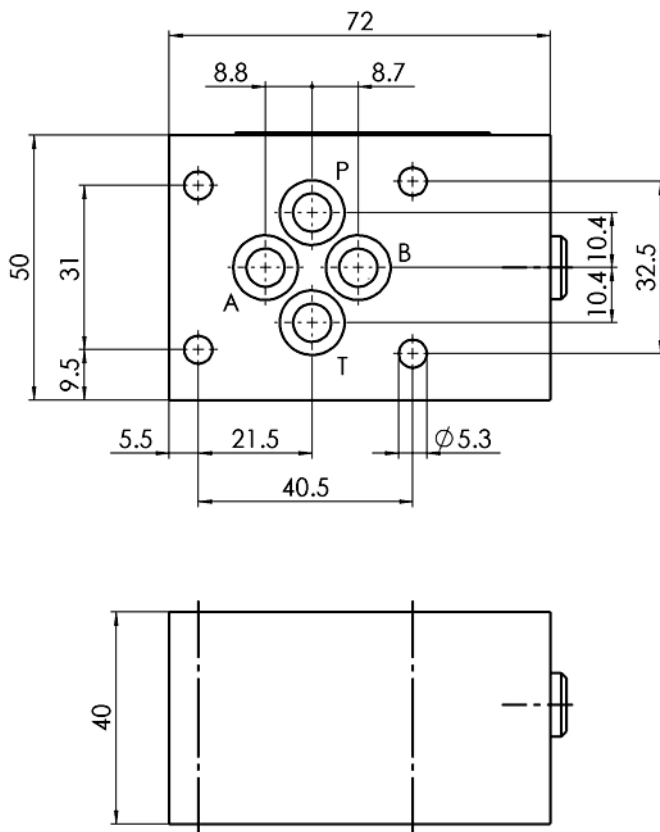
Check valve in B, weight 1,0 kg

Type	Part number
ERV700-6-B-V-A*00	3683100

Symbol



Dimensional drawing



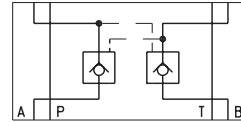
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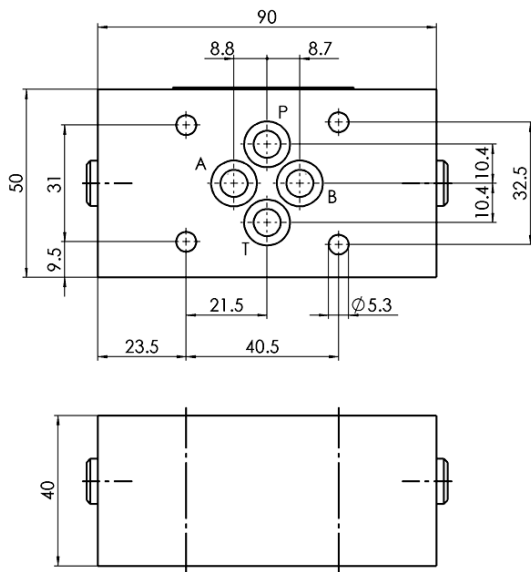
Check valve in A and B, weight 1,3 kg

Typ	Part number
ERV700-6-AB-V-A*00	3683080

Symbol



Dimensional drawing



Bieri Hydraulik AG

Könizstrasse 274
CH-3097 Liebefeld
Tel. +41 31 970 09 09 | Fax +41 31 970 09 10
info@bierihydraulics.com | www.bierihydraulics.com

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.