

Pilot operated check valves

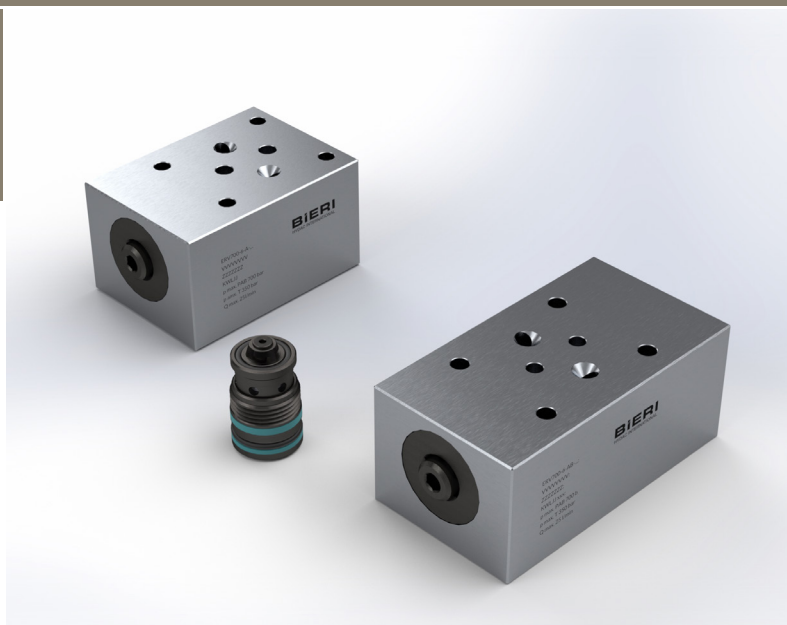
Type ERV700

up to 700 bar

NG 6 up to 25 l/min

Features

- Poppet tight
- Ball-seat construction
- Load supported closing
- Porting NG 6 according to DIN 24340
- Compact design
- Outer parts of cartridge are corrosion protected

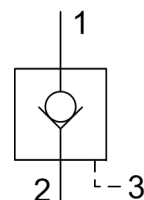


Applications

The cartridge design allows a compact integration on cylinders and motors. This assembly offers an enhancement of the tractive strength and also an increase in system stiffness.

Design

- Leakage free block of lead pressure
- As Cartridge or as Intermediate plate available



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 ² /s	
Porting (Cartridge see page 3)	NG 6 according to DIN 24340 / ISO 4401 / CETOP RP 121 H	
Max. operating pressure connection P, A, B (1,2,3)	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 overlook "product information"	
Material	valve body	stainless steel
	outer parts cartridge	stainless steel

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Ordering code

Example	ERV	700	-	6	-	A	-	V	-			00
Pilot operated check valves												
Type	700 bar											
Size	6											
Check valve	E Cartridge Modular subplate form: A block of port A B block of port B AB block of port A or B											
Seal material	V (FPM) other seal materials on request											
Design 00 ... 99 for internal purposes												
Index Please leave blank For internal purposes												
Design revision Please leave blank For internal purposes												

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

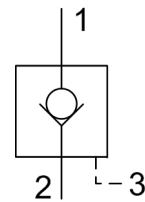
Tie bolts/fixation screws and subplates are optional, see technical data sheet AP700/RP700/EP700

Product information

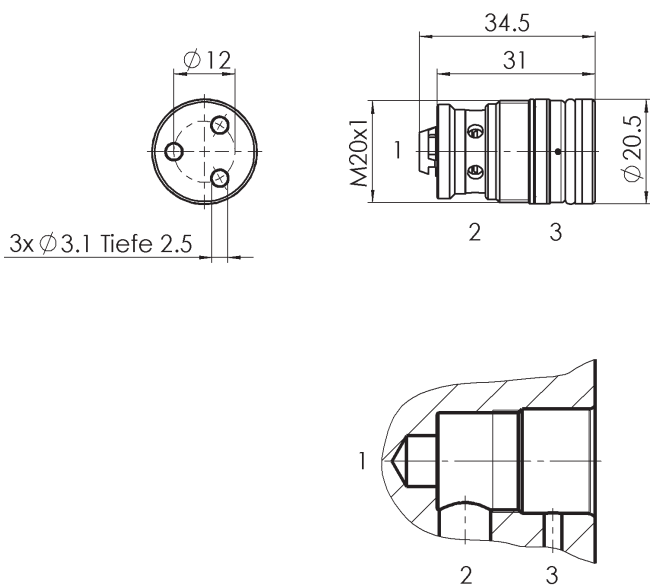
Screw-in cartridge

Type	Weight [kg]	Part number
ERV700-6-E-V-A*00	0.055	3683103

Symbol

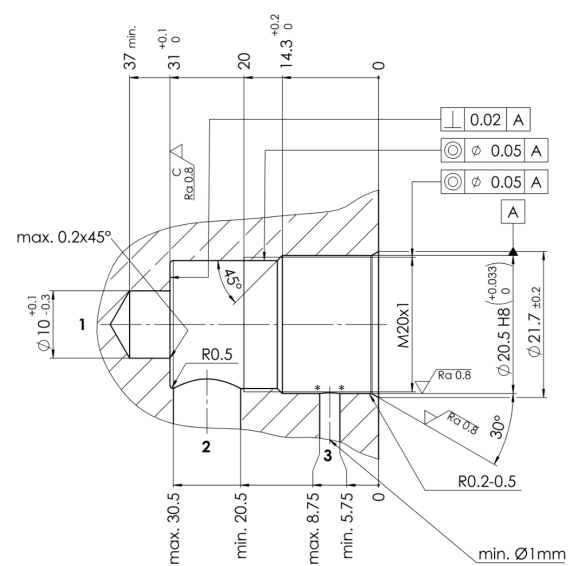


Dimensional drawing



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

cavity dimension

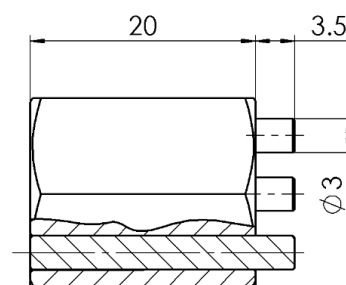
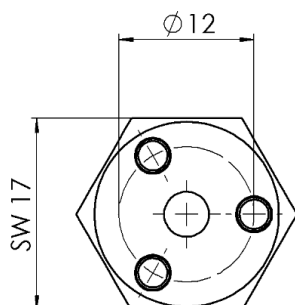


Steel yield strength $R_{p0.2} \geq 450 \text{ N/mm}^2$
elongation at fracture $A_s \geq 10\%$

* Flat chamfer or rounding max. 0.5 wide

Assembly tool

Name	Weight [g]	Part number
Pin wrench	0.33	3690831

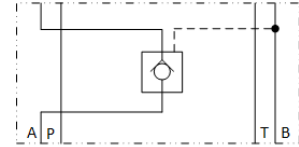
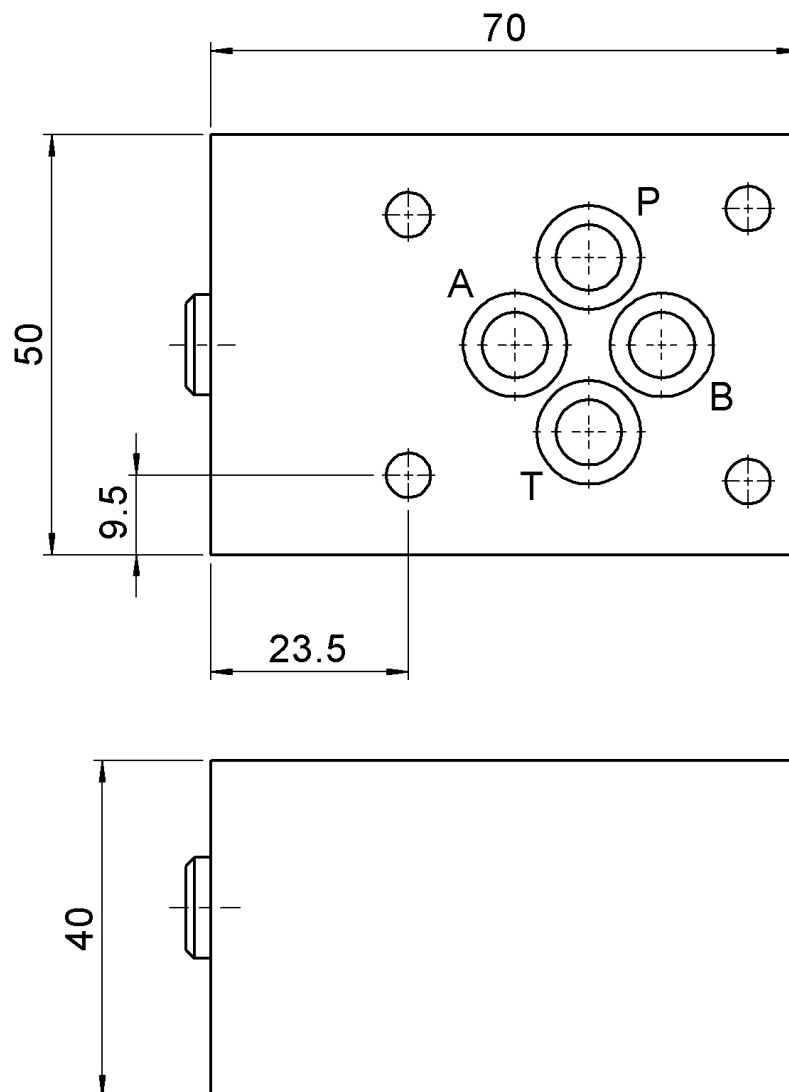


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Modular subplates**Check valve in A**

Type	Weight [kg]	Part number
ERV700-6-A-V-A*00	1.0	3683082

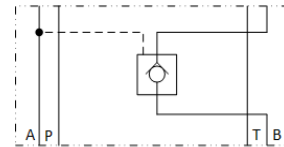
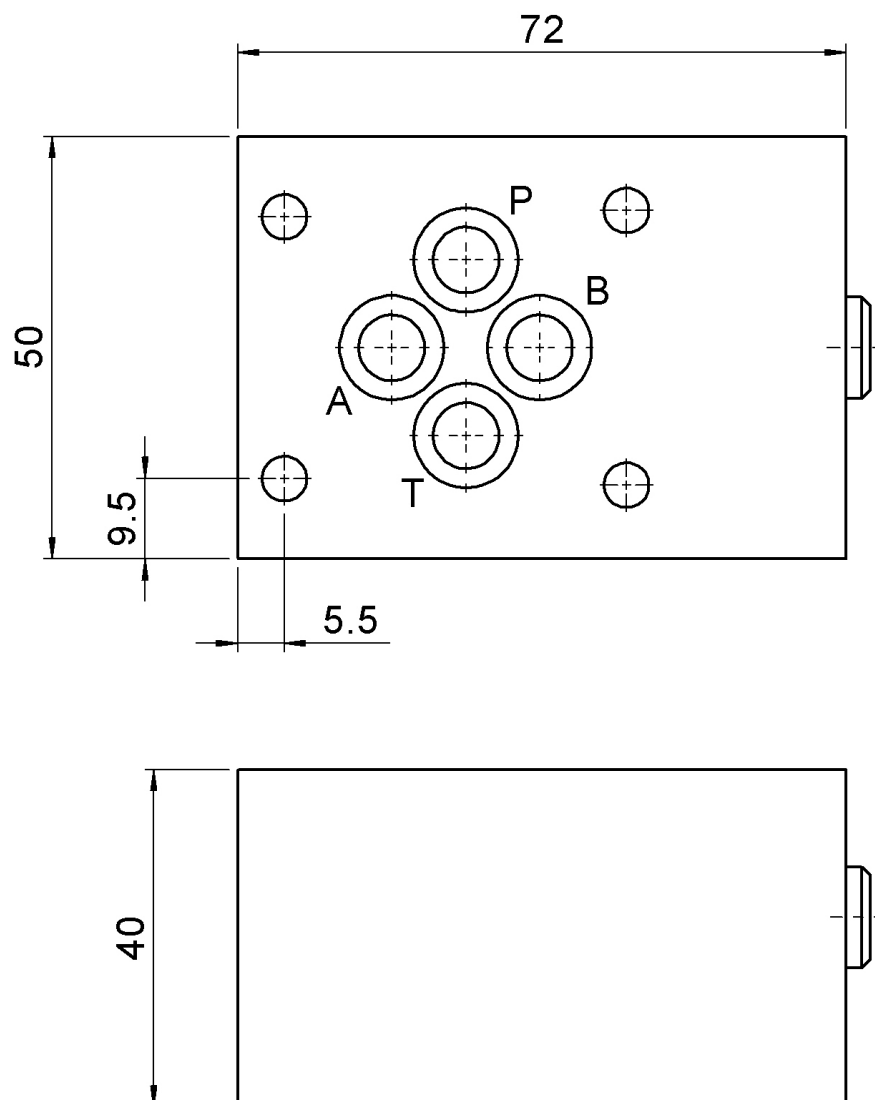
Symbol**Dimensional drawing**

Type ERV700

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Check valve in B

Type	Weight [kg]	Part number
ERV700-6-B-V-A*00	1.0	on request

Symbol**Dimensional drawing**

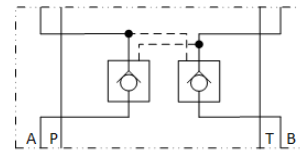
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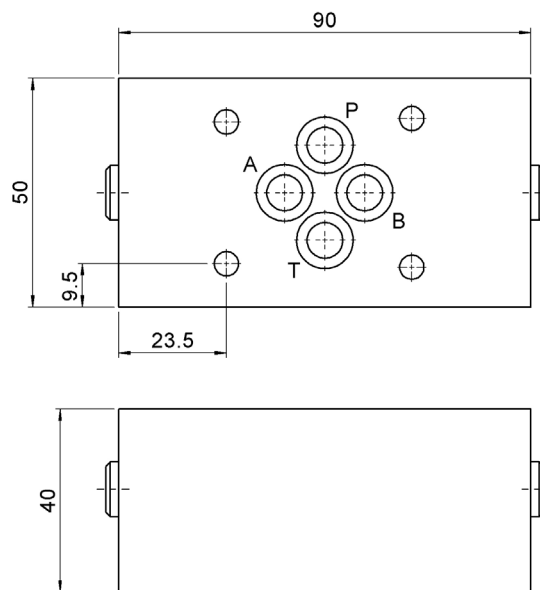
Check valve in A and B

Type	Weight [kg]	Part number
ERV700-6-AB-V-A*00	1.3	3683080

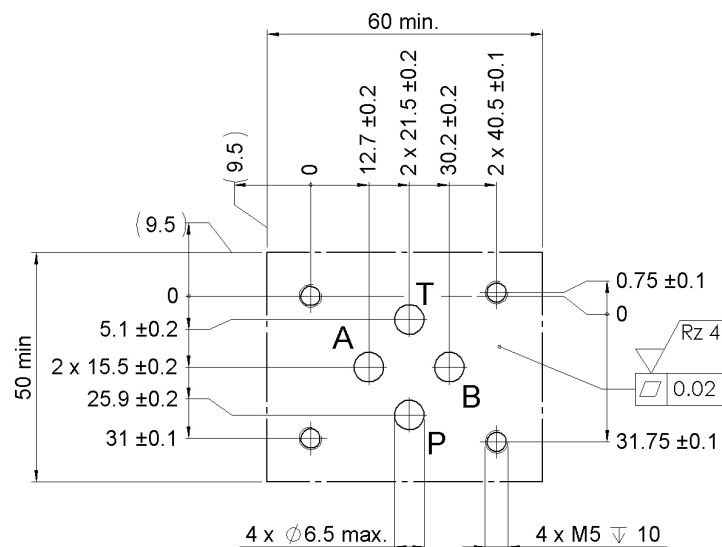
Symbol



Dimensional drawing



Drilling pattern



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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.