

Pilot operated check valves

Type ERV700

up to 700 bar

NG 6 up to 25 l/min



Features

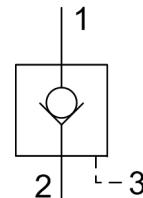
- Poppet tight
- Ball-seat construction
- Load supported closing
- Porting NG 6 according to DIN 24340
- Compact design
- Outer parts of cartridge are corrosion protected

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 "product information"
Material	valve body steel galvanized, black 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 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

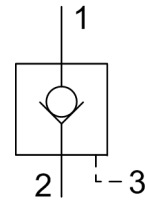
Tie bolts/fixation screws and subplates are optional, see technical data sheet AP700/RP700/EP700

Product information

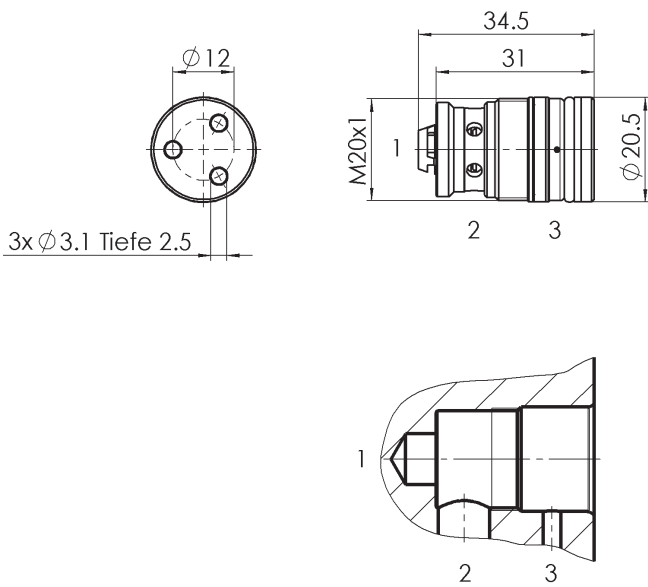
Screw-in cartridge

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

Symbol

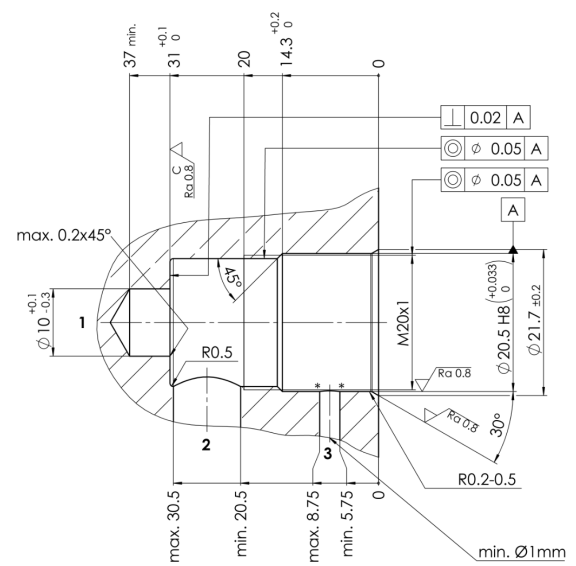


Dimensional drawing



Tightening torque: M = 40 Nm

cavity dimension

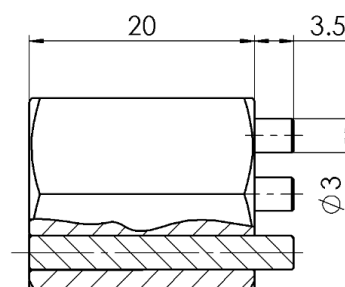
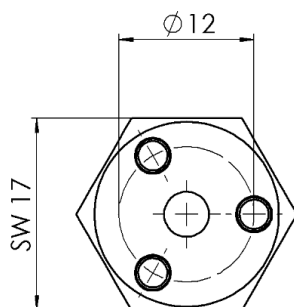


Steel yield strength $R_{p0.2} \geq 450 \text{ N/mm}^2$
elongation at fracture $A_s \geq 10\%$

* Flat chamfer or rounding max. 0.5 wide

Assembly tool

Name	Weight [g]	Part number
Pin wrench	0.33	3690831



Type ERV700

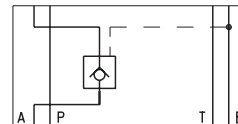
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Modular subplates

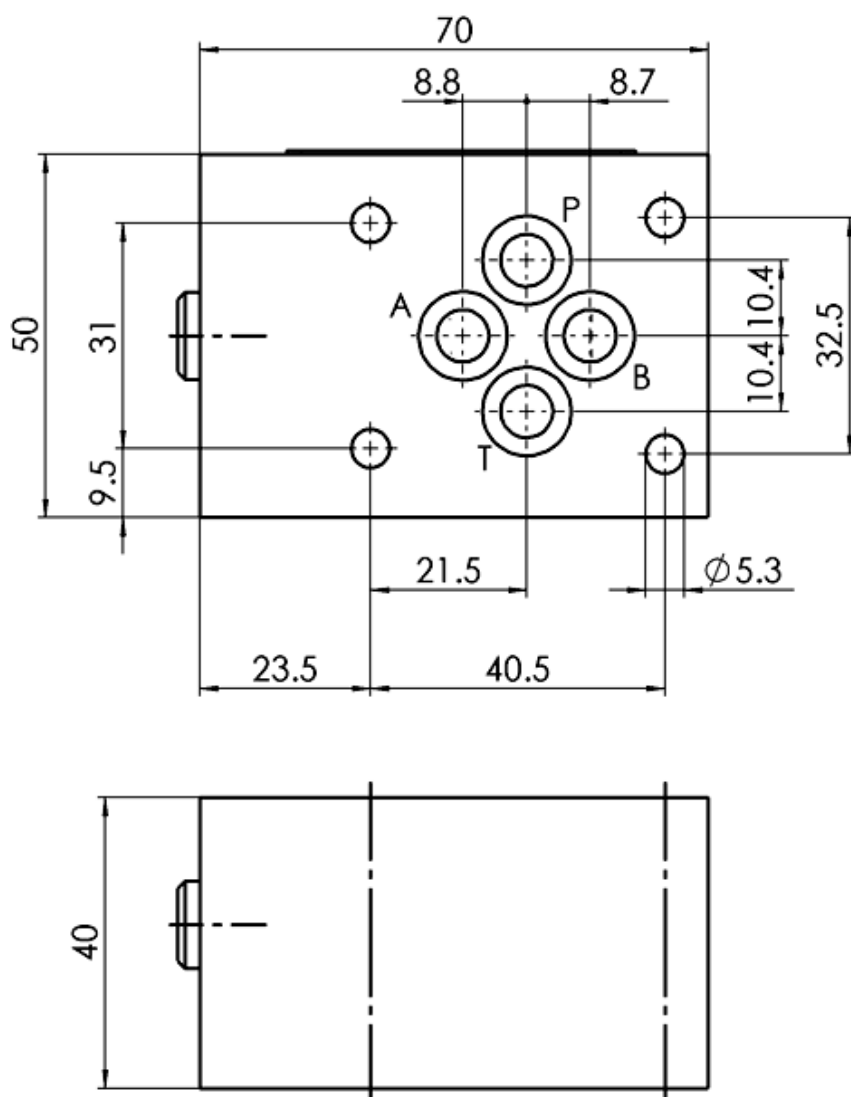
Check valve in A

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

Symbol



Dimensional drawing

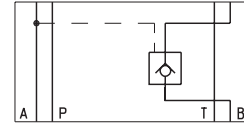


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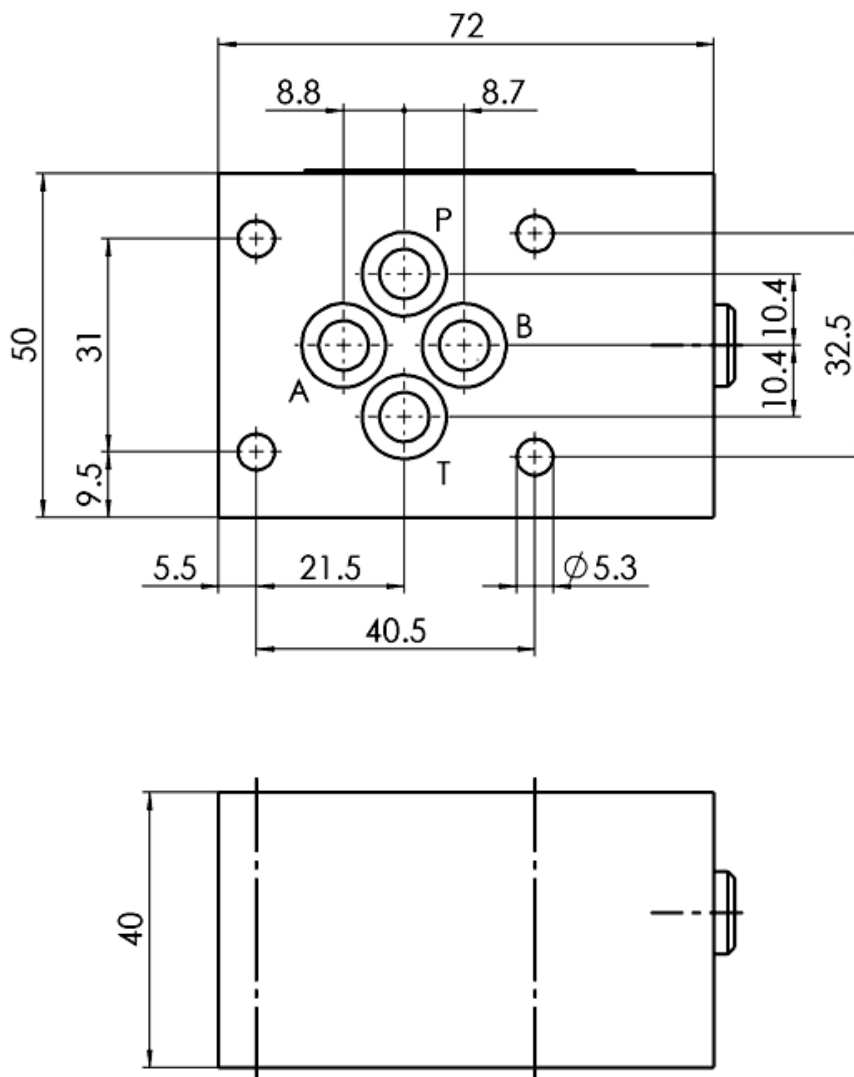
Check valve in B

Symbol

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



Dimensional drawing



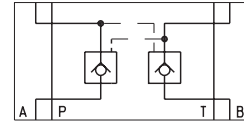
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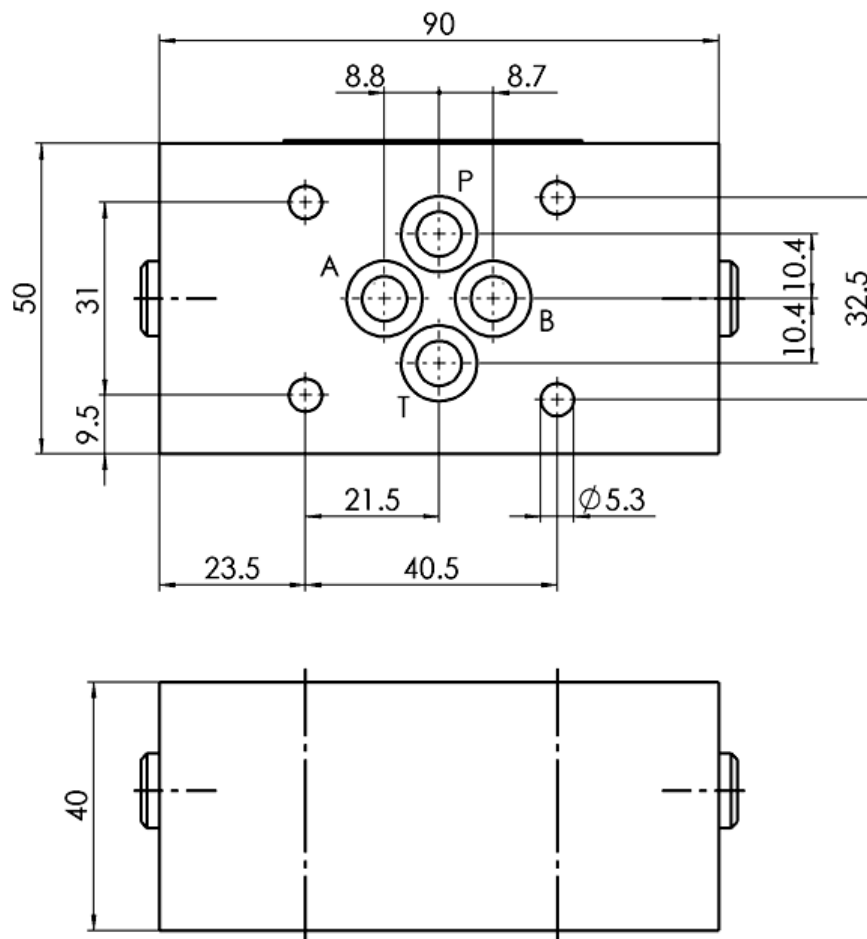
Check valve in A and B

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

Symbol



Dimensional drawing



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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.