

Pilot operated check valves with pre-release

Type ERVPM

NG 10

up to 63 l/min, up to **500 bar**

Features

- Leakage free
- Load supported closing
- With pre-release



Design

- Cartridge with locking screw
- Control connection
- Movable valve elements (hardened)

Application

The ERVPM is used for leakage free shutoff and active opening of flow rates up to 63 l/min. Releasing takes place in two stages with a pilot pressure (unlock pressure) at port X. At low unlock pressure (from 1/10 of working pressure) opens only a smaller valve section. The complete cross section opens at 1/4 of the working pressure.

The compact design allows the integration directly to the cylinders and motors. Besides the load holding function this configuration provides a higher stiffness in the system.

Omitting the locking screw the pilot pressure port can be tubed directly at the outer face.



Technical Data

Hydraulic fluid	Mineral oil according to DIN 51524 (other fluids on request)
Fluid temperature range	- 25 up to 80 °C
Ambient temperature range	- 25 up to 80 °C
Viscosity range	5 up to 400 mm ² /s
Max. operating pressure connection A, P, X	500 bar
Max. flow rate	63 l/min
Filtration	According to ISO/DIN 4406 class 17/15/12
Cracking pressure (check valve RV)	0.3 ^{+0.1} bar
Unlock pilot pressure ratio	1. phase: 1:10 2. phase: 1:2.5
Min. unlock pilot pressure	2.5 ^{+0.5} bar
Pressure drop	1. phase: 200 bar at 50 l/min 2. phase: 6 bar at 50 l/min

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Type code

Example	ERV	P	M	-	10E	-	X	-	P	-	A		00
Pilot operated check valves													
Type	500												
Nominal size	10												
Valve type	...E												
Design	X Cartridge												
Seal material	P NBR												

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)

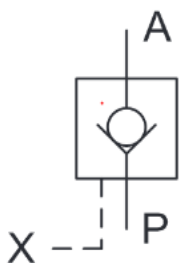
Product information

Ordering code	Item description	Seal material	Weight ca. [kg]	Part.-No.
ERVPM-10E-X-P-A*00	Pilot operated check valve	P [NBR]	0,066	on request

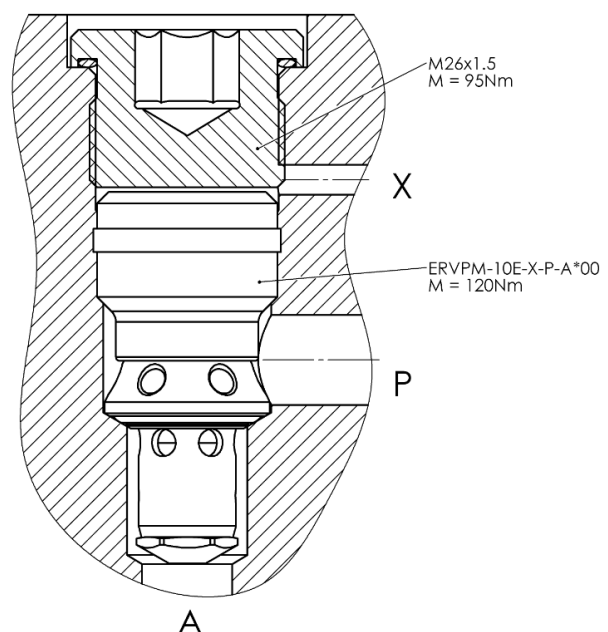
Accessories

Item description	Seal material	Part.-No.
Locking screw	V [FKM]	4002642

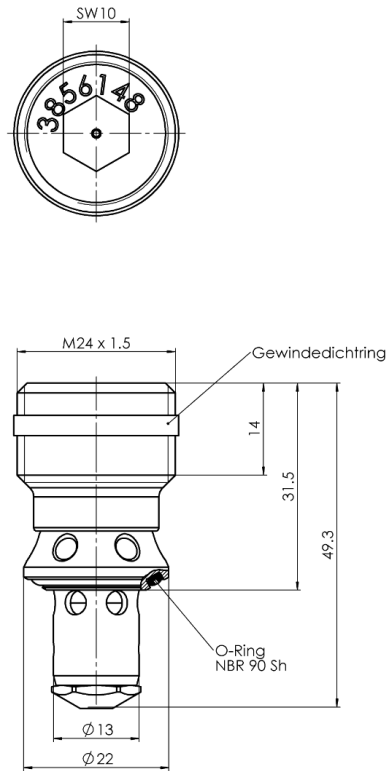
Hydraulic symbol



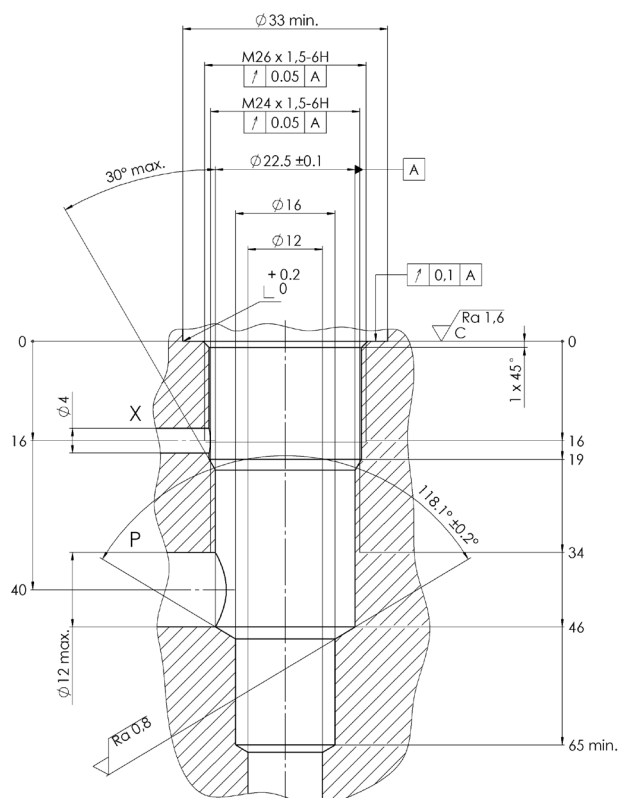
Mounting



Dimensional drawing

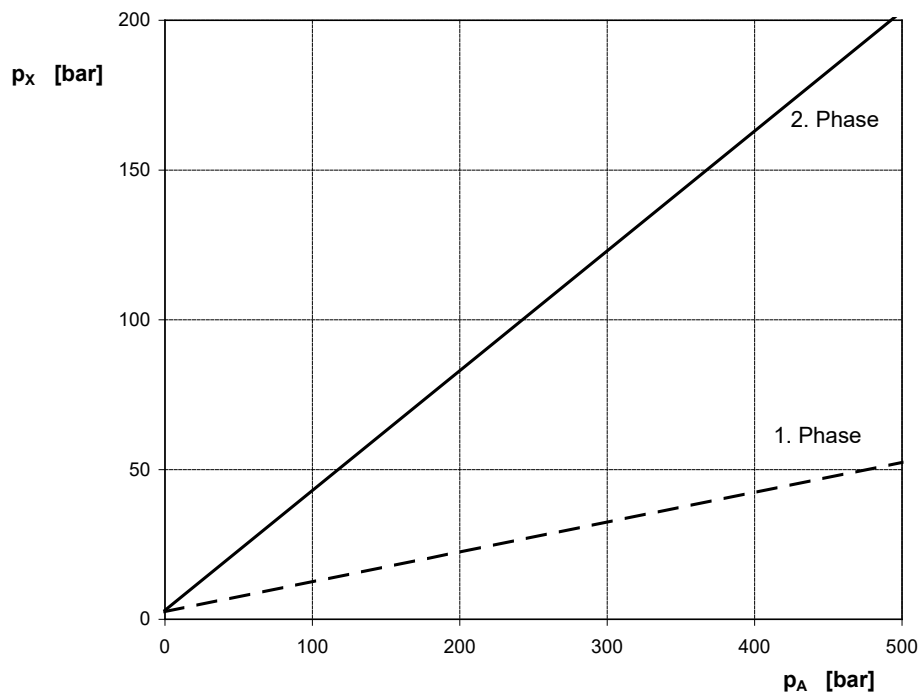


Mounting space

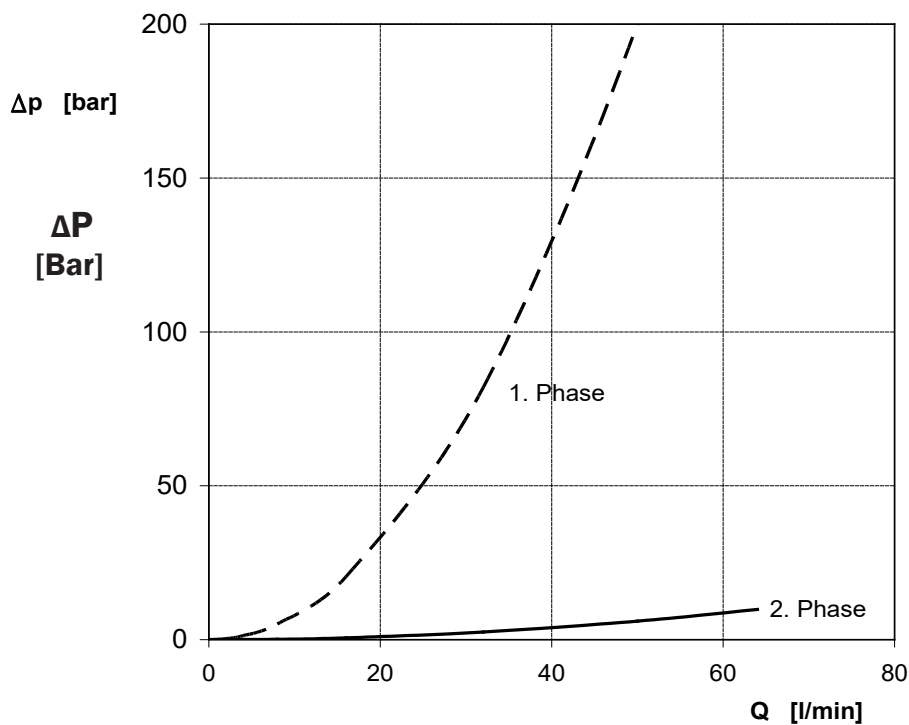


Characteristics

Unlock pilot pressure



Pressure drop



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.