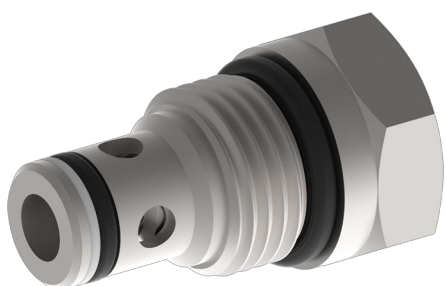


# Lock valve Check valve

$Q_{\max} = 37 \text{ l/min}$ ,  $p_{\max} = 350 \text{ bar}$   
poppet type, hydraulic operation  
Type series: CVPF-08-...



- Screw-in cartridge valve
- For cavity C0820
- All external parts zinc plated, chromited (CrVI-free)
- Installation in threaded port body type B0820
- Wide selection of bias springs allows flexibility for back-pressure application

## Description

This unit is a screw-in cartridge style, guided poppet, hydraulic check valve, for use as a blocking or load holding device for high pressure applications. This

valve allows free flow from port 1 to port 2 and blocks flow from port 2 to port 1 or holding a load.

## Symbol



## Technical data

General characteristics	Description, value, unit
Function group	Lock valve
Function	Check valve
Design	Screw-in cartridge valve
Controls	hydraulic operation
Characteristic	poppet type
Construction size	NG 5 / SAE 08
Thread size	3/4-16 UNF-2A
Mounting attitude	unrestricted

General characteristics	Description, value, unit
Weight	0.07 kg
Cavity acc. factory standard	For cavity C0820
Tightening torque steel	50.5 Nm
Tightening torque aluminium	37.5 Nm
Tightening torque tolerance	± 5 %
Minimum ambient temperature	- 30 °C
Maximum ambient temperature	+ 120 °C
Surface protection	All external parts zinc plated, chromited (CrVI-free)
Sealing material	see ordering code
Seal kit order number	NBR: SKN-0821/ FKM: SKV-0821

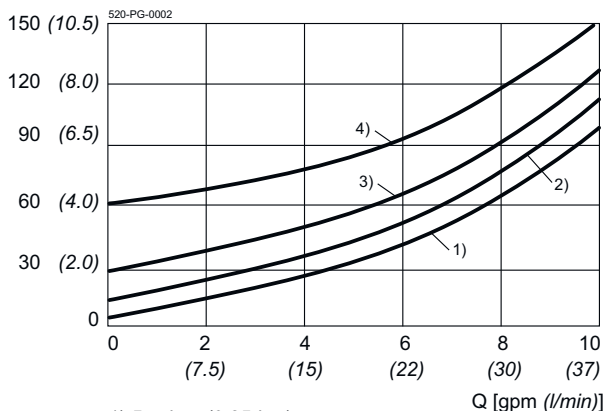
Hydraulic characteristics	Description, value, unit
Maximum operating pressure	350 bar
Maximum flow rate	37 l/min
Flow direction	see symbol
Hydraulic fluid	All general purpose hydraulic fluids such as MIL-H-5606, SAE-#10, SAE-#20, etc.
Minimum fluid temperature	- 25 °C
Maximum fluid temperature	+ 80 °C
Viscosity range	10 ... 500 mm <sup>2</sup> /s (cSt)
Recommended viscosity range	15 ... 250 mm <sup>2</sup> /s (cSt)
Minimum fluid cleanliness (cleanliness class according to ISO 4406:1999)	class 18/16/13
Internal leakage flow rate	5 drops/min maximum at 350 bar

## Performance graphs

measured with oil viscosity 28.5 mm<sup>2</sup>/s (cSt)

$\Delta p = f(Q)$  Pressure drop-flow rate characteristic

$\Delta p$  [psi (bar)]

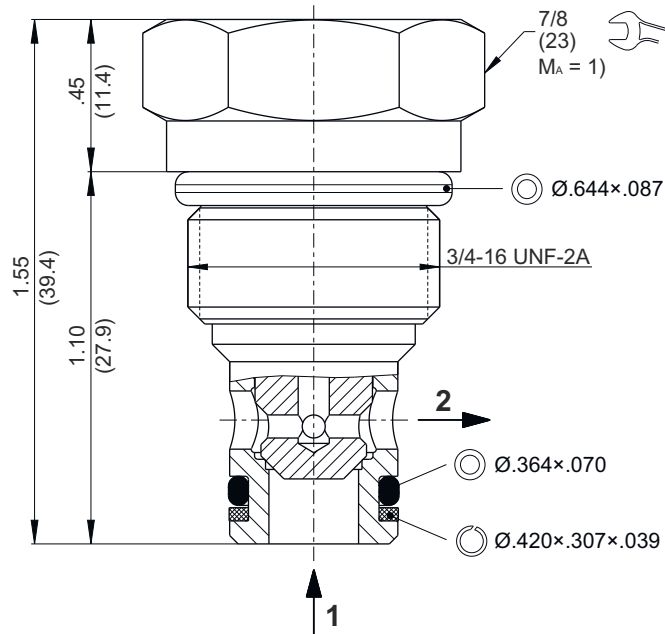


- 1) 5 psi (0.35 bar)
- 2) 15 psi (1 bar)
- 3) 30 psi (2 bar)
- 4) 60 psi (4 bar)

## Dimensions and sectional view

**Beispiel für die Masseinheit:**  
**Example for the dimensional units:**

.031 = 0.031" inch  
(0.79) = 0.79 mm millimeter



## Installation information



### ATTENTION!

Only qualified personnel with mechanical skills may carry out any maintenance work. Generally, the only work that should ever be undertaken is to check, and possibly replace, the seals. When changing seals, oil or grease the new seals thoroughly before fitting them.



### NOTE!

The seals are not available individually. The seal kit order number can be found in the chapter "Technical data".



### NOTE!

1) When fitting the screw-in cartridge valve, use the specified tightening torque. The value can be found in the chapter "Technical data".

Ordering code

e.g. CVPF - 08 - N - 0 - 005

- CVPF = spring loaded check valve
- 08 = nominal size SAE 08 / NG 5
- N = NBR (nitril-butadien-rubber / BUNA) seals (*standard*)
- V = FKM (fluorocarbon rubber / VITON) seals  
(*special seals - please consult BUCHER*)
- 0 = screw-in cartridge only
- 06TA = line-mounting body aluminum SAE #06 ports
- 06TS = line-mounting body steel SAE #06 ports
- 005 = opening pressure 5 psi / 0.35 bar
- 015 = opening pressure 15 psi / 1 bar
- 030 = opening pressure 30 psi / 2 bar
- 060 = opening pressure 60 psi / 4 bar
- 100 = opening pressure 100 psi / 7 bar

Related data sheets

Reference	Description
<a href="#">520-P-000050</a>	Form tools
<a href="#">520-P-000110</a>	Cavity Cavity C0820
<a href="#">520-P-000111</a>	Threaded port body B0820

[info.us@bucherhydraulics.com](mailto:info.us@bucherhydraulics.com)

[www.bucherhydraulics.com](http://www.bucherhydraulics.com)

© 2024 by Bucher Hydraulics Inc., Elgin, IL 60124, USA

All rights reserved.

Data is provided for the purpose of product description only, and must not be construed as warranted characteristics in the legal sense. The information does not relieve users from the duty of conducting their own evaluations and tests. Because the products are subject to continual improvement, we reserve the right to amend the product specifications contained in this catalogue.