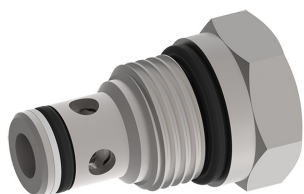


Cartridge Check Valve, Size SAE 08 / NG 5

$Q_{\max} = 10.0 \text{ gpm [38 l/min]}$, $p_{\max} = 5000 \text{ psi [350 bar]}$
 seat design, poppet style forward guided
 Series CVPF-08...



- Compact construction for cavity type C0820
- Wide selection of bias springs allows flexibility for back-pressure applications
- 100% performance-tested
- All exposed parts with zinc plating
- Can be fitted in a line-mounting body
- Replaces CVFP-08...

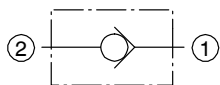
1 Description

This valve is a screw in cartridge type, guided poppet, hydraulic check valve. Use as a blocking or load holding device for 5000 psi (350 bar) applications. All external parts of the cartridge are zinc plated to DIN 50 979 and are thus sui-

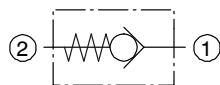
table for use in the harshest operating environments. If you intend to manufacture your own cavities or are designing a line-mounting installation, please refer to the section "Related data sheets".

2 Symbol

USASI:



ISO:



3 Technical data

General characteristics	Description, value, unit	
Designation	cartridge check valve	
Design	seat design, poppet style forward guided	
Mounting method	screw-in cartridge 3/4-16 UNF-2B	
Size	SAE 08 / NG 5, for cavity type C0820	
Weight	0.15 lbs	[0.07 kg]
Mounting attitude	unrestricted	
Ambient temperature range	-40 °F ... +248 °F	[-40 °C ... +120 °C]

Hydraulic characteristics	Description, value, unit	
Maximum operating pressure	5000 psi	[350 bar]
Maximum flow rate	10.0 gpm	[38 l/min]
Flow direction	shut-off direction 2 → 1	
Opening pressure 1 → 2	5 / 15 / 30 / 60 psi	[.35 / 1 / 2 / 4 bar]
Leakage flow rate	5 drops @ 5000 psi	[5 drops @ 350 bar]
Hydraulic fluid	HL and HLP mineral oil to DIN 51 524; for other fluids, please contact BUCHER	
Hydraulic fluid temperature range	-13 °F ... +176 °F	[-25 °C ... +80 °C]

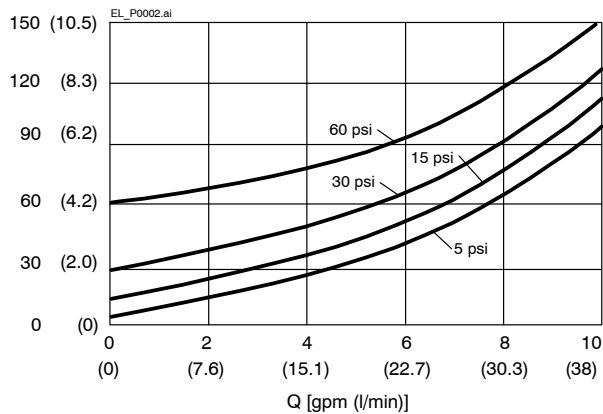
Hydraulic characteristics	Description, value, unit
Viscosity range	10...500 mm ² /s (cSt), recommended 15...250 mm ² /s (cSt)
Minimum fluid cleanliness Cleanliness class to ISO 4406 : 1999	class 20/18/15

4 Performance graphs

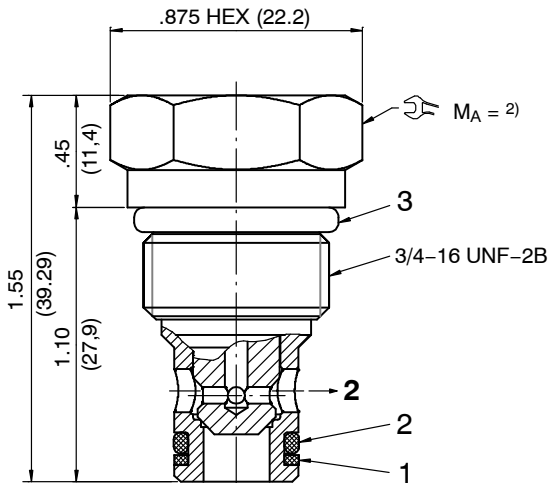
[measured with oil viscosity 33 mm²/s (cSt)]

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

Δp [psi (bar)]



5 Dimensions & sectional view



Tightening torque M_A ²⁾

Cavity type	C0820
When fitted in aluminium	25...30 ft-lbs (34 - 42 [Nm])
When fitted in steel	35...40 ft-lbs (47 - 54 [Nm])

6 Installation information



IMPORTANT!

When fitting the cartridges, use the specified tightening torque. No adjustments are necessary, since the cartridges are set in the factory.



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.

Seal kit

Item	Qty.	Description
1	1	Backup ring $\varnothing 9.5 \times 1.5$
2	1	O-ring no. 908 $\varnothing 0.644 \times 0.087$
3	1	O-ring $\varnothing 9.5 \times 1.5$



IMPORTANT!

Item no. 5207300004 = Seal kit NBR (Buna)
Item no. 5207300055 = Seal kit FKM (Viton)

7 Ordering code

CVPF - 08 - N - 0 - 005

CVPF	=	Check Valve Poppet-style Forward-guided
08	=	size SAE 08 / NG 5
N	=	NBR (Nitrile) seals (standard)
V	=	FKM (Viton) seals (special seals - please consult BUCHER)
0	=	cartridge only (standard)
02BA	=	line-mounting body G ¼ BSPP aluminum (on request)
02BS	=	line-mounting body G ¼ BSPP steel (on request)
06TA	=	line-mounting body SAE-#6 aluminum
06TS	=	line-mounting body SAE-#6 steel
		opening (crack) pressure
005	=	5 psi [.35 bar]
015	=	15 psi [1 bar]
030	=	30 psi [2 bar]
060	=	60 psi [4 bar]
120	=	120 psi [8 bar] (on request)

8 Related data sheets

Reference	(Old no.)	Description
520-P-000050		Form tools
520-P-000110	(0-011.0)	Cavity type C0820
520-P-000111	(0-011.1)	Line-mounting body, 8 Series – 2 way

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Classification: 430.315.340.305.310.330