

# Cartridge Check Valve, Size 10

Q<sub>max</sub> = 120 l/min, p<sub>max</sub> = 350 bar Poppet/seat version Series RVPA...



- Compact design for cavity type DC M24 x 1.5
- Virtually leak-free in no-flow direction
- Option of different opening pressures
- High flow rates with low ∆p
- · All exposed parts with zinc-nickel plating
- · Can be fitted in a line-mounting body

# 1 Description

Series RVPA... check valves are size 10, high performance screw-in cartridges with an M24 x 1.5 mounting thread. The poppet/seat design ensures that the cartridges are leaktight from B  $\rightarrow$  A. 6 variants with a fixed opening pressure are available (0.6 / 1.0 / 1.6 / 2.5 / 4.0 / 6.3 bar). These screwin cartridges are predominantly used in mobile and indus-

trial applications where leak-free shut-off in one direction is important. All external parts of the cartridge are zinc-nickel plated to DIN 50 979 and are thus suitable 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



### 3 Technical data

General characteristics	Description, value, unit
Designation	cartridge check valve
Design	Poppet/seat version
Mounting method	screw-in cartridge M24 x 1.5
Tightening torque	65 Nm ± 10 %
Size	size 10, cavity type DC
Weight	0.2 kg
Mounting attitude	unrestricted
Ambient temperature range	-25 °C +80 °C

Hydraulic characteristics	Description, value, unit
Maximum operating pressure	350 bar
Maximum flow rate	120 l/min
Flow direction	shut-off direction $B \rightarrow A$
Opening pressure	0.6 / 1.0 / 1.6 / 2.5 / 4.0 / 6.3 bar

Reference: 400-P-455101-EN-01

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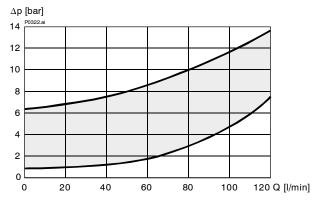
Issue: 09.2015 / Replaces: R-5 B



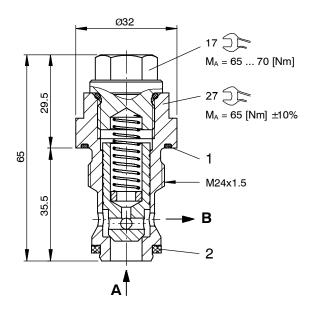
Hydraulic characteristics	Description, value, unit
Hydraulic fluid	HL and HLP mineral oil to DIN 51 524; for other fluids, please contact BUCHER
Hydraulic fluid temperature range	-25 °C +80 °C
Viscosity range	10650 mm <sup>2</sup> /s (cSt), recommended 15250 mm <sup>2</sup> /s (cSt)
Minimum fluid cleanliness 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



### 5 Dimensions & sectional view



### 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 NBR no. DS-044-N 1)

Item	Qty.	Description	
1	1	O-ring no. 021 Ø 23.52 x 1.78 N90	
2	1	Seal ring Ø 22.1 / 15.5 x 2.5	

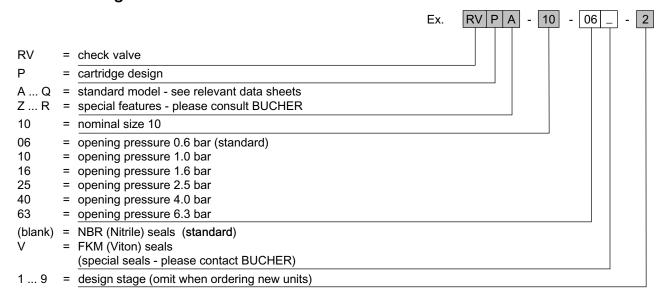


#### IMPORTANT!

1) Seal kit with FKM (Viton) seals no. DS-044-V



# 7 Ordering code



#### 8 Related data sheets

Reference	(Old no.)	Description
400-P-040011	(i-32)	The form-tool hire programme
400-P-060111	(i-45.1)	Cavity type DC
400-P-740101	(G-24.20)	Line-mounting body, type DC-12 (G 1/2")

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