

# Counterbalance, standard guided poppet type

## Common cavity, Size 08

VBSN-08AA

04.52.20 - X - 56 - Z

**RE 18320-01**

Edition: 09.2017

Replaces: 03.2016



### Technical data

Max. operating pressure	350 bar (5000 psi)
Max. flow	30 l/min (8 gpm)
Max. internal leakage <sup>1)</sup>	15 drops/min.
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	34 - 41 Nm (25 - 30 ft-lbs)
Weight	0.18 kg (0.4 lbs)
MTTFD	150 years see RE 18350-51
Cavity	CA-08A-3C (see data sheet 18325-70)
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory
Seal kit <sup>2)</sup>	Code: RG08A9010520100 material no: R901101592
Fluids	Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm <sup>2</sup> /s (cSt)
Recommended degree of fluid contamination	Nominal value max. 10µm (NAS 8) / ISO 4406 19/17/14
Installation position	No restrictions
Other Technical Data	See data sheet 18350-50

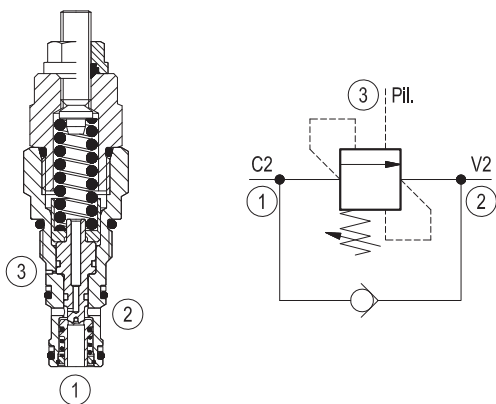
Pressure setting: at least 1.3 times the load induced pressure.

1) At 70% of pressure setting

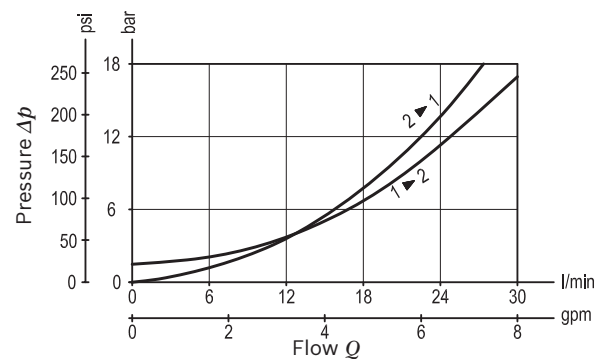
2) Only external seals for 10 valves

### Description

When pressure at 2 rises above the spring bias pressure, the check seat is pushed away from the piston and flow is allowed from 2 to 1. When load pressure at 1 rises above the pressure setting, the direct-acting, relief function is activated and flow is relieved from 1 to 2. With pilot pressure at 3, the pressure setting is reduced in proportion to the stated ratio of the valve, until fully open with free-flow from 1 to 2. The spring chamber is drained to 2, and any back-pressure at 2 is additive to the pressure setting in all functions.



### Characteristic curve



**Ordering code**

<b>04.52.20</b>	<b>X</b>	<b>56</b>	<b>Z</b>	<b>00</b>	<b>*</b>
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Counterbalance,  
standard guided poppet type  
poppet type

Series 0/A to L  
unchanged performances and dimensions

Version and options standard

Pilot ratio

<b>03</b>	4:1
<b>33</b>	4:1 With sealed pilot (for Z=20 only)

**56** Common cavity, Size 08

SPRINGS			
	Adj. press. range bar (psi)	Pressure increase bar/turn (psi/turn)	Std. setting bar (psi) Q=5 l/min.
<b>15</b>	70-150 (1000-2200)	72.5 (1051)	150 (2200)
<b>20</b>	100-210 (1450-3000)	109 (1581)	200 (2900)
<b>35</b>	200-350 (2900-5000)	137 (1987)	350 (5000)

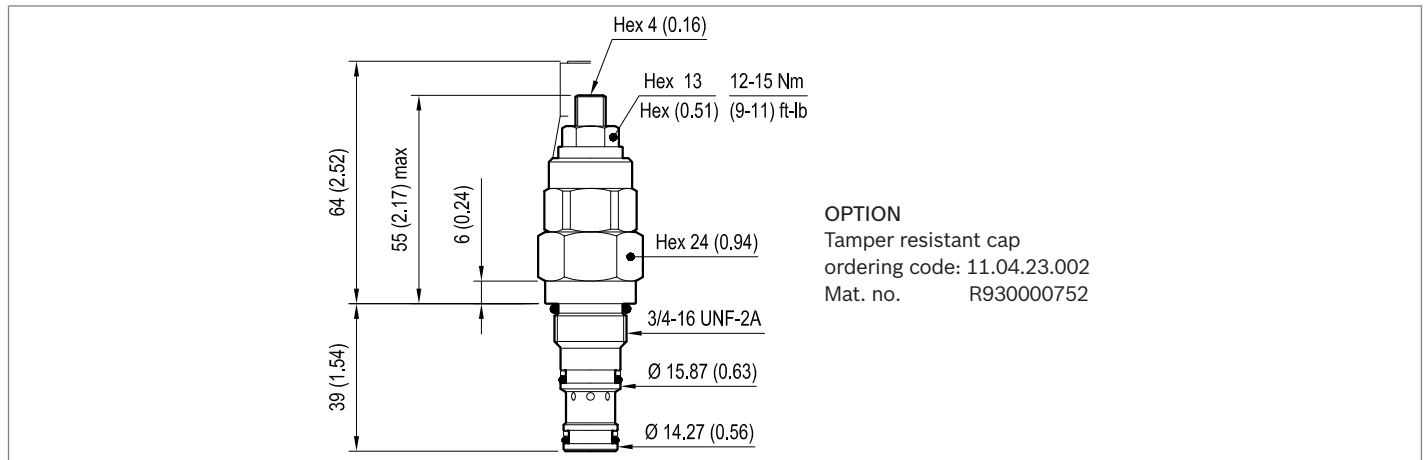
Note: Special settings available. Contact factory authorized representative for ordering code.

**Preferred types**

Type	Material number
045220035615000	R901161990
045220035620000	R901095960
045220035635000	R901095961
04522033562000A	R930006428

Type	Material number

**Dimensions**



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