

Counterbalance, standard poppet type  
differential area  
Common cavity, Size 12

VBSN-12A

04.52.28 - X - 57 - Z

**RE 18320-03**

Edition: 01.2010

Replaces: 01.2006

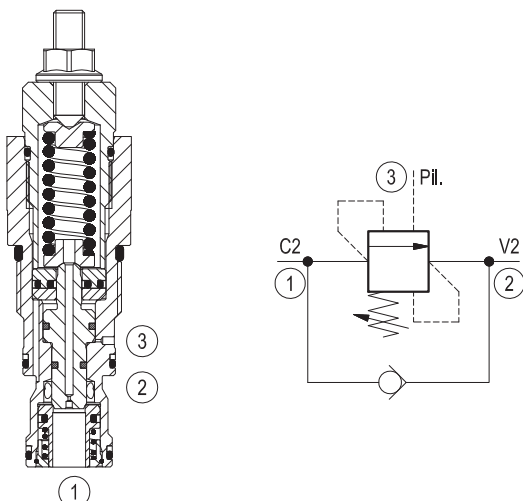


Technical data	
Max. operating pressure	350 bar (5000 psi)
Max. flow	120 l/min (32 gpm)
Max. internal leakage <sup>1)</sup>	15 drops/min.
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	81 - 95 Nm (60 - 70 ft-lbs)
Weight	0.39 kg (0.86 lbs)
Cavity	CA-12A-3C (see data sheet 18325-70)
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory
Seal kit <sup>2)</sup>	Code: RG12A9010520100 material no: R901111379
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

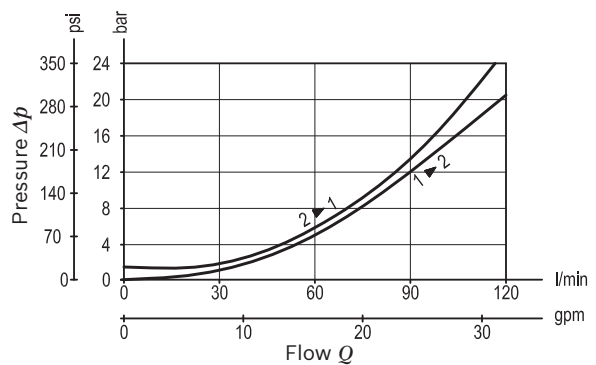
- 1) At 70% of pressure setting
- 2) Only external seals for 10 valves

**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, differential area 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>04.52.28</b>	<b>X</b>	<b>57</b>	<b>Z</b>	<b>00</b>	<b>*</b>
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Counterbalance,  
standard poppet type, differential area

Pilot ratio

**03** 4:1

**10** 8:1

**57** Common cavity, Size 12

Series 0/A to L  
unchanged performances and dimensions

Version and options standard

		SPRINGS		
		Adj. press. range bar (psi)	Pressure increase bar/turn (psi/turn)	Std. setting bar (psi) Q=5 l/min
for X= 03	<b>20</b>	70-210 (1000-3000)	50 (725)	200 (2900)
	<b>35</b>	140-350 (2000-5000)	159 (2306)	350 (5000)
for X= 10	<b>20</b>	70-210 (1000-3000)	42 (609)	200 (2900)
	<b>35</b>	140-350 (2000-5000)	67 (972)	350 (5000)

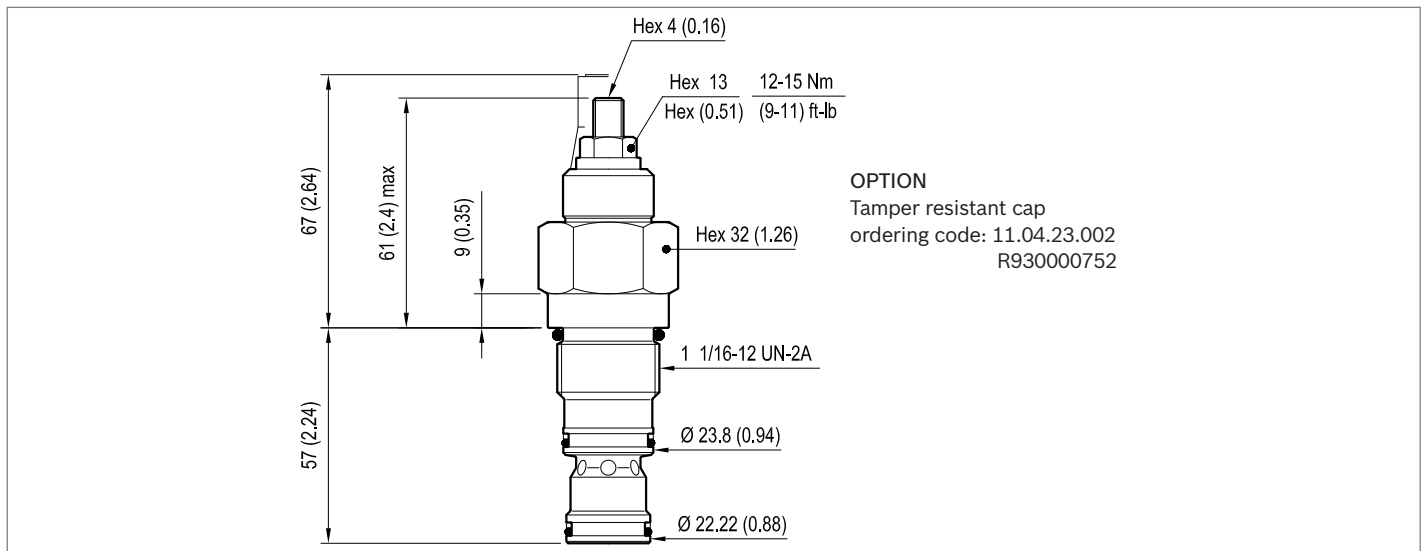
Note: Special settings available. Contact factory authorized representative for ordering code.

**Preferred types**

Type	Material number
045228035720000	R901096043
045228035735000	R901096044
045228105720000	R901096045
045228105735000	R901096046

Type	Material number

**Dimensions**



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