

Counterbalance, relief compensated
poppet type differential area
Common cavity, Size 10

VBSP-10A

04.54.09 - X - 85 - Z

RE 18320-07

Edition: 02.2019

Replaces: 03.2016



Technical data

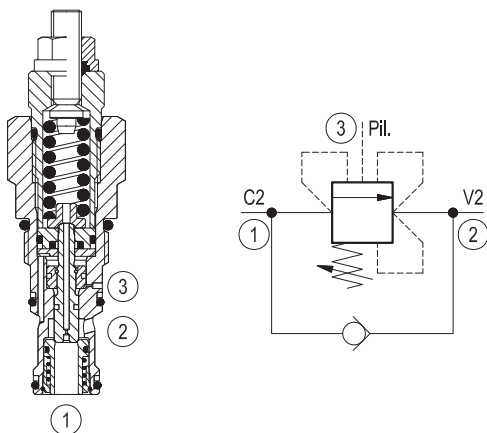
Max. operating pressure	350 bar (5000 psi)
Max. flow	60 l/min (16 gpm)
Max. internal leakage ¹⁾	15 drops/min.
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	41 - 47 Nm (30 - 35 ft-lbs)
Weight	0.2 kg (0.44 lbs)
Cavity	CA-10A-3C (see data sheet 18325-70)
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory
Seal kit ²⁾	Code: RG10A9010520100 material no: R901111367
Fluids	Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm ² /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.

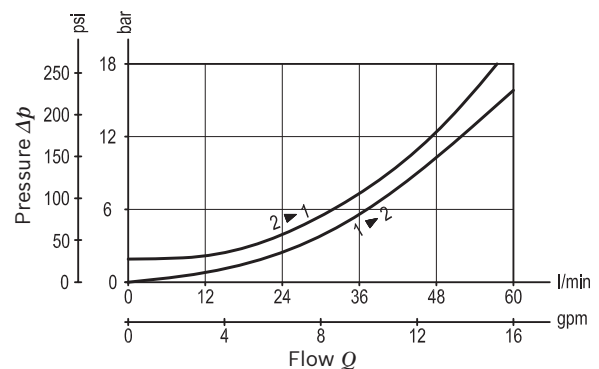
- 1) At 70% of pressure setting
- 2) Only external seals for 10 valves

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, 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. The valve applies a balanced piston design allowing relief operation at the valve setting independent of back-pressure at 2. However, the piloted opening of the valve remains subject to additive pressure at port 2.



Characteristic curve



Ordering code

04.54.09	X	85	Z	00	*
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Counterbalance, relief compensated, poppet type differential area

Pilot ratio

03 3:1 Without sealed pilot piston

85 Common cavity, Size 10

Series O/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
20	70-210 (1000-3000)	135 (1958)	200 (2900)
35	140-350 (2000-5000)	196 (2842)	350 (5000)

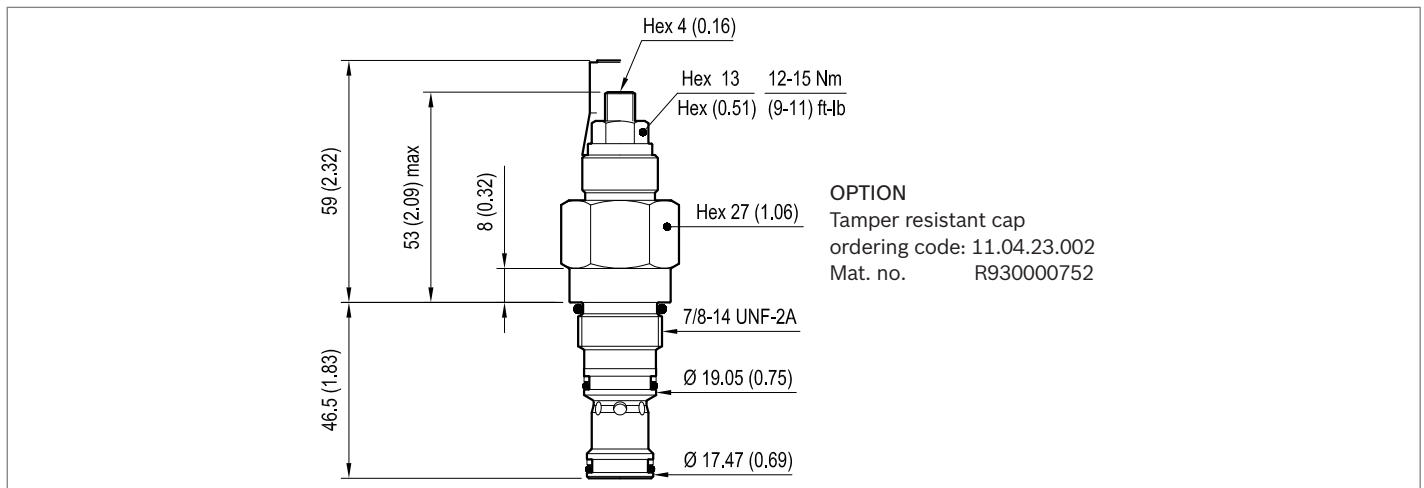
Note: Special settings available. Contact factory authorized representative for ordering code.

Preferred types

Type	Material number
04540903852000A	R901096060
04540903853500A	R901096062

Type	Material number

Dimensions



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