

Counterbalance, relief compensated
poppet type differential area
Common cavity, Size 12

VBSP-12A

04.54.08 - X - 57 - Z

RE 18320-08

Edition: 02.2019

Replaces: 03.2016



Technical data

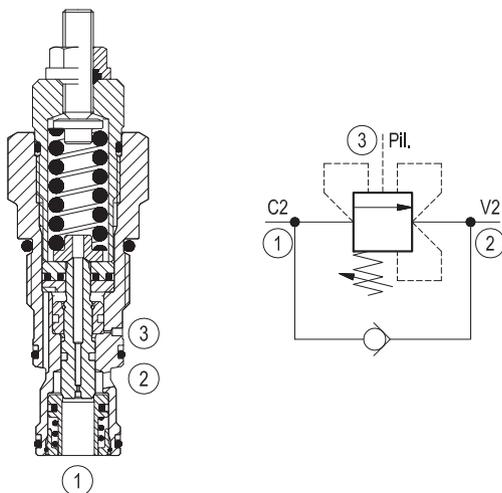
Max. operating pressure	350 bar (5000 psi)
Max. flow	120 l/min (32 gpm)
Max. internal leakage ¹⁾	15 drops/min.
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	81 - 95 Nm (60 - 70 ft-lbs)
Weight	0.39 kg (0.86 lbs)
Cavity	CA-12A-3C (see data sheet 18325-70)
Lines bodies and standard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

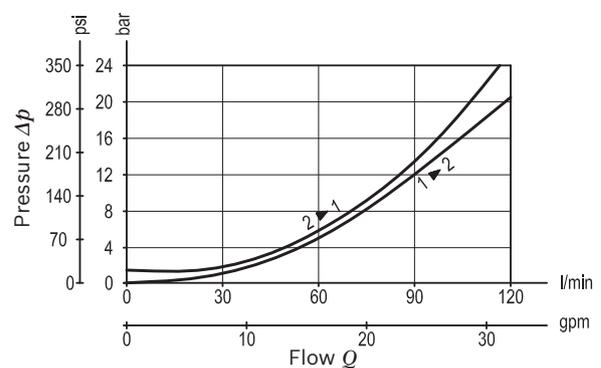
- 1) At 70% of pressure setting
- 2) Only external seals for 10 valves

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

04.54.08	X	57	Z	00	*
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Counterbalance, relief compensated, poppet type differential area

Pilot ratio
03 4:1 Without sealed pilot piston

57 Common cavity, Size 12

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)	50 (725)	200 (2900)
35	140-350 (2000-5000)	159 (2306)	350 (5000)

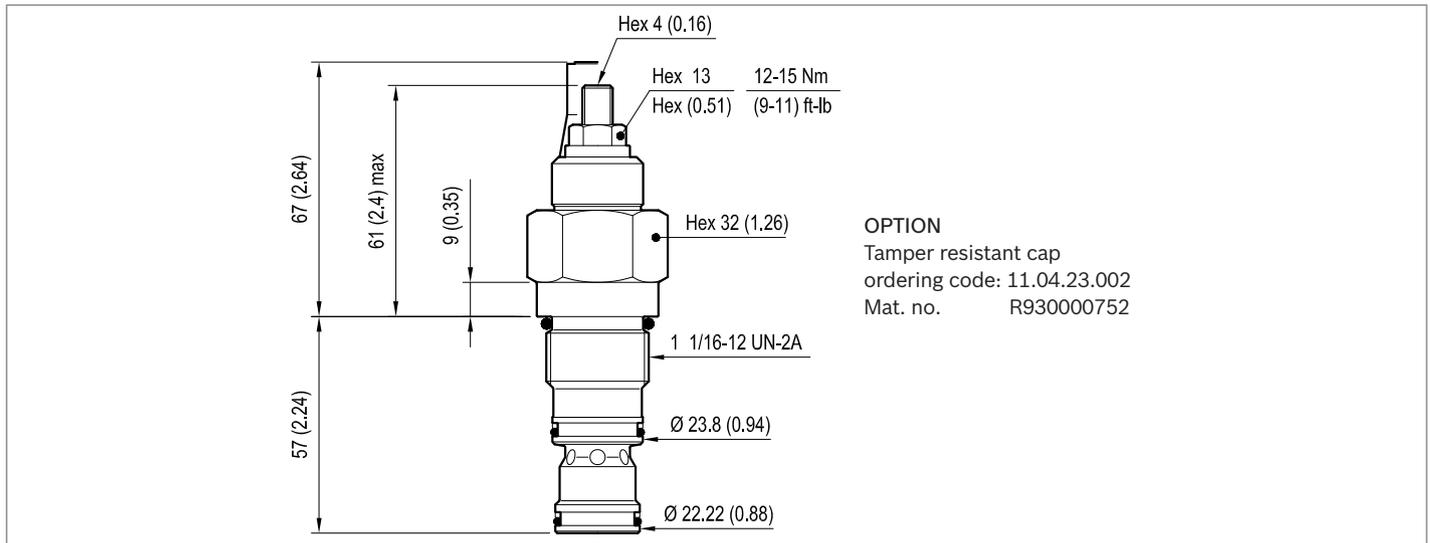
Note: Special settings available. Contact factory authorized representative for ordering code.

Preferred types

Type	Material number
045408035720000	R901096063
045408035735000	R901096064

Type	Material number

Dimensions



Bosch Rexroth Oil Control S.p.A.

Via Leonardo da Vinci 5
P.O. Box no. 5
41015 Nonantola – Modena, Italy
Tel. +39 059 887 611
Fax +39 059 547 848
compact-hydraulics-cv@boschrexroth.com
www.boschrexroth.com/compacthydraulics

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