

Counterbalance, vented guided poppet type Common cavity, Size 16

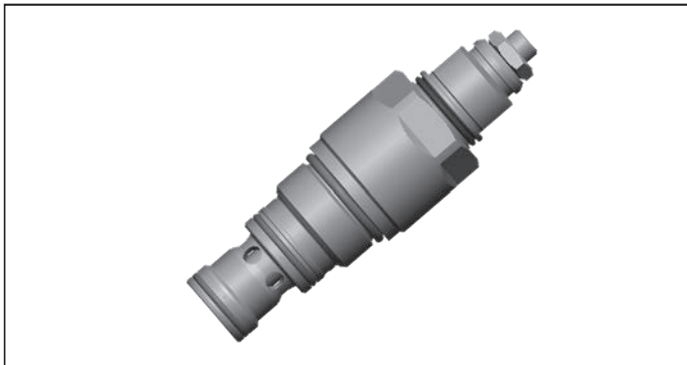
VBST-16A

04.59.27 - X - 27 - Z

RE 18320-14

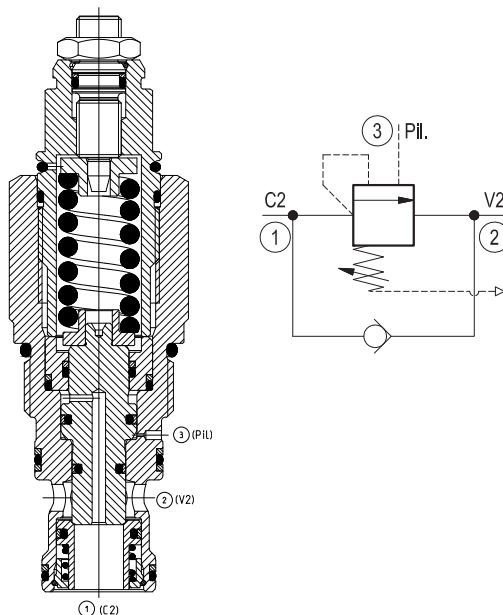
Edition: 07.2023

Replaces: 01.2021



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 vented to atmosphere allowing operation of all functions independent of back-pressure at 2. Valve design prevents spring going solid and complete unscrewing during adjusting.



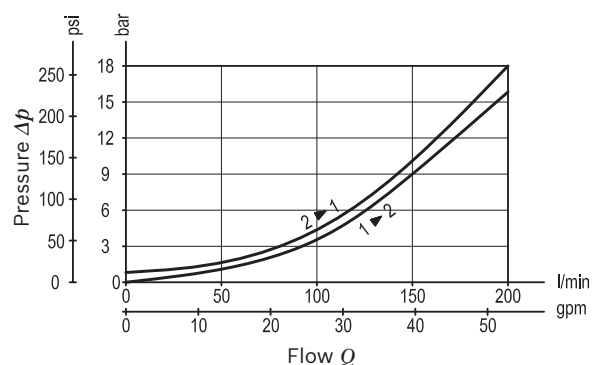
Technical data

Max. operating pressure	350 bar (5000 psi)
Max. flow	200 l/min (53 gpm)
Max. internal leakage ¹⁾	15 drops/min.
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	108 - 122 Nm (80 - 90 ft-lbs)
Weight	0.55 kg (1.21 lbs)
MTTFD	150 years see RE 18350-51
Cavity	CA-16A-3C (see data sheet 18325-70)
Adjustment	according to ISO 4413 with sealed adjustment screw to prevent oil leakage during adjustment
Salt spray test	500h according to DIN EN ISO 9227:2017-07
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory
Seal kit ²⁾	Code: RG16A9010530100 material no: R930001200
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 and maximum 1.5 times catalogue max nominal setting.

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

Characteristic curve



Ordering code

04.59.27	X	27	Z	*	*
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Counterbalance, vented guided poppet type

Pilot ratio

03 4:1

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Series M to Z
unchanged performances and dimensions

00 Standard (Buna)
VO Viton (FKM)

SPRINGS		
Adj. press. range bar (psi)	Pressure increase bar/turn (psi/turn)	Std. setting bar (psi) Q=5 l/min
35 140-350 (2000-5000)	83.5 (1210)	350 (5000)

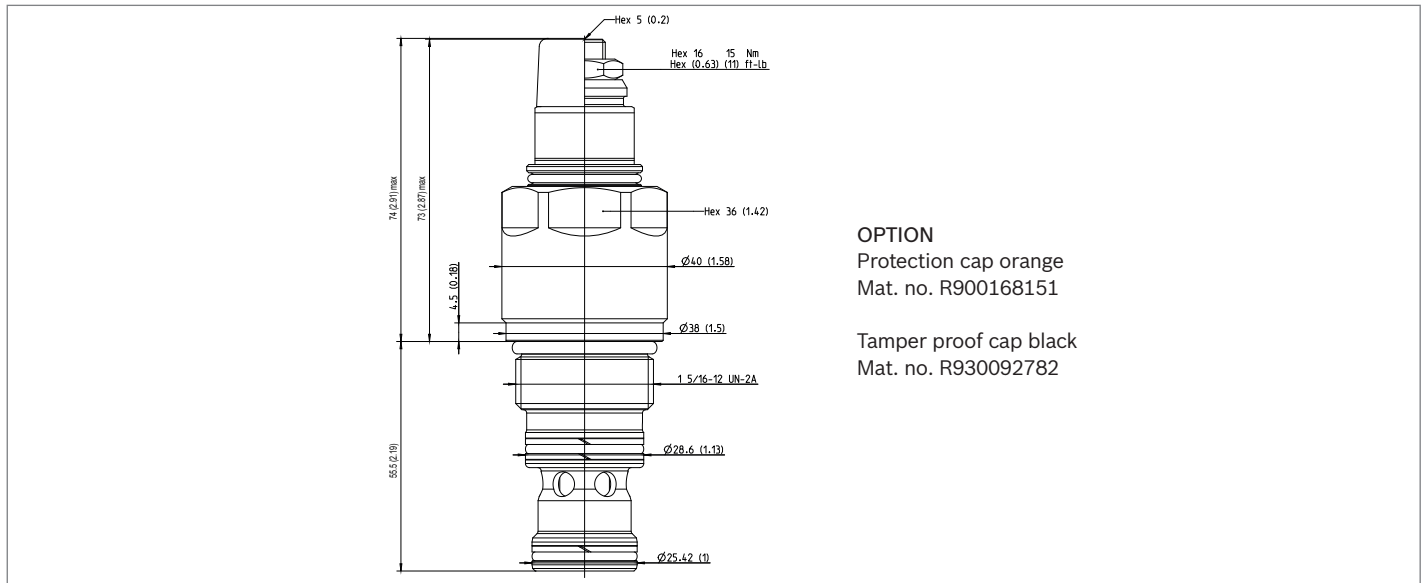
Note: Special settings available with optional tamperproof cap. Contact factory authorized representative for ordering code.

Preferred types

Type	Material number
04592703273500M	R930081339

Type	Material number

Dimensions



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