

# Counterbalance, relief compensated guided poppet type Common cavity, Size 08

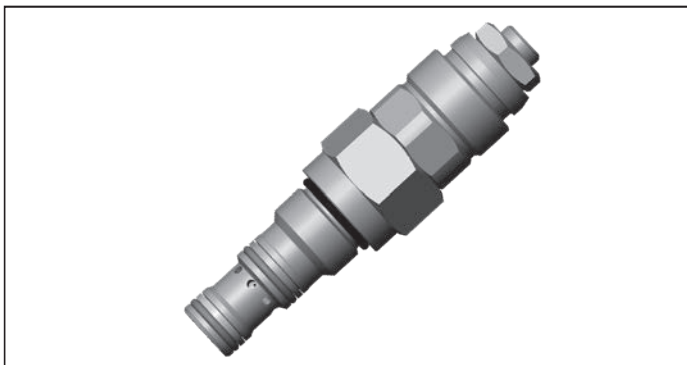
VBSP-08AA

04.54.04 - X - 56 - Z

**RE 18320-06**

Edition: 07.2023

Replaces: 01.2021

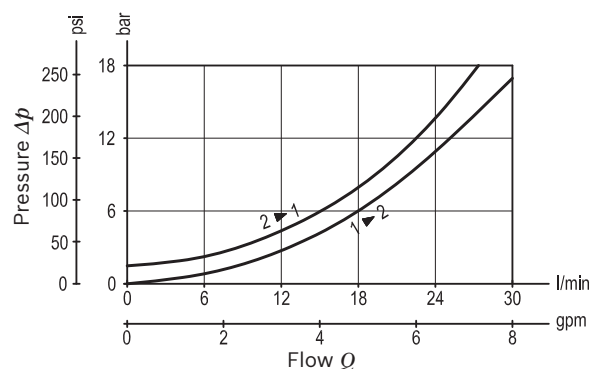


Technical data	
Max. operating pressure	350 bar (5000 psi)
Max. flow	30 l/min (8 gpm)
Max. internal leakage <sup>1)</sup>	15 drops/min.
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	34 - 41 Nm (25 - 30 ft-lbs)
Weight	0.18 kg (0.4 lbs)
MTTFD	150 years see RE 18350-51
Cavity	CA-08A-3C (see data sheet 18325-70)
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 <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 and maximum 1.5 times catalogue max nominal setting.

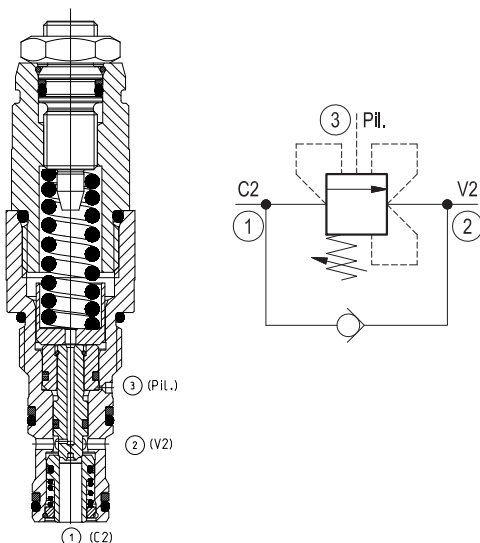
- 1) At 70% of pressure setting
- 2) Only external seals for 10 valves

### Characteristic curve



### 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. 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. Valve design prevents spring going solid and complete unscrewing during adjusting.



**Ordering code**

<b>04.54.04</b>	<b>X</b>	<b>56</b>	<b>Z</b>	<b>*</b>	<b>*</b>
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Counterbalance, relief compensated guided, poppet type

Pilot ratio

**03** 4:1 Without sealed pilot piston

**56** Common cavity, Size 08

Series M to Z  
unchanged performances and dimensions

**00** Standard (Buna)  
**V0** Viton (FKM)

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

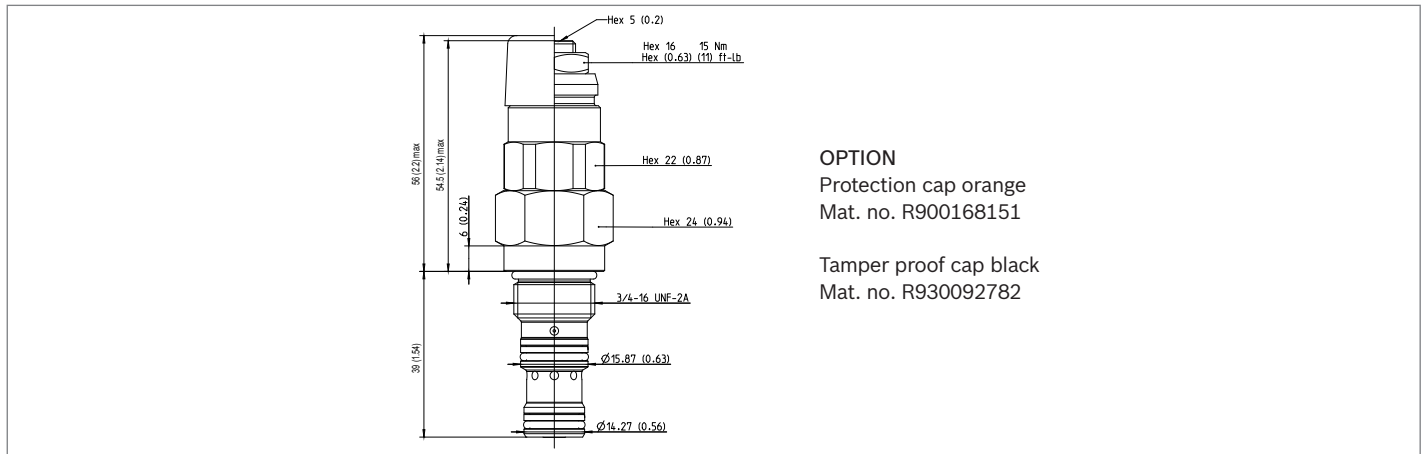
Note: Special settings available with optional tamperproof cap. Contact factory authorized representative for ordering code.

**Preferred types**

Type	Material number
04540403562000M	R930081298
04540403563500M	R930079955

Type	Material number

**Dimensions**



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