

# Counterbalance, standard poppet type zero differential area Common cavity, Size 20

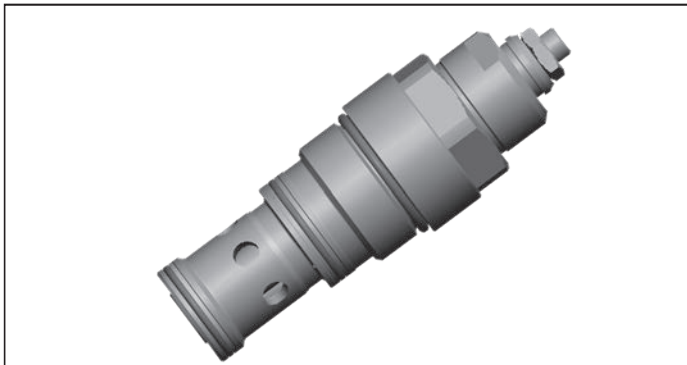
VBSZ-20A

04.52.41 - X - 58 - Z

**RE 18319-99**

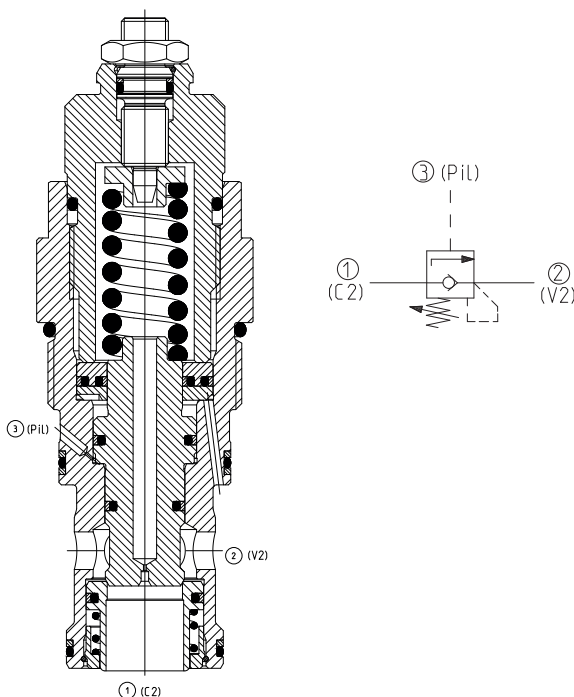
Edition: 07.2023

Replaces: 01.2021



## Description

When pressure at 2 rises above the check spring bias pressure, the seat is pushed away from the piston and flow is allowed from 2 to 1. Reverse flow is locked, unless the pilot pressure at 3 rises above the piston spring bias pressure (adjustable). Any back-pressure at 2 is additive to the pressure setting. Valve design prevents spring going solid and complete unscrewing during adjusting.



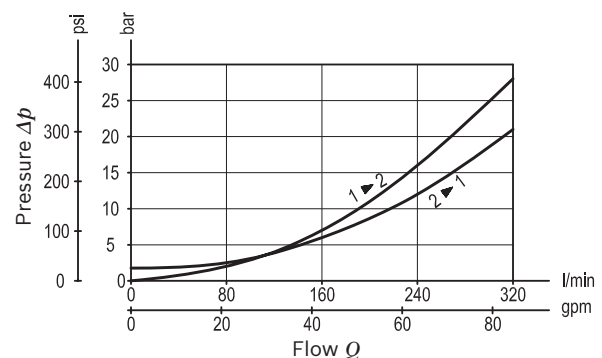
## Technical data

Max. operating pressure	350 bar (5000 psi)
Max. flow	320 l/min (85 gpm)
Max. internal leakage <sup>1)</sup>	15 drops/min.
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	128 - 149 Nm (95 - 110 ft-lbs)
Weight	1.12 kg (2.5 lbs)
MTTFD	150 years see RE 18350-51
Cavity	CA-20A-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	Code: RG20A9010530100 material no: R901111397
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.

<sup>1)</sup> At 70% of pressure setting

## Characteristic curve



Ordering code

04.52.41	X	58	Z	*	*
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Counterbalance,  
standard poppet type zero differential  
area

O-Ring on pilot piston

27 With O-Ring

58 Common cavity, Size 20

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) cracking pressure
20	10-30 (145-450)	10 (145) 15 (220)

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

Preferred types

Type	Material number
04524127582000M	R930081387

Type	Material number

Dimensions

