

Counterbalance, standard poppet type
differential area, counterclockwise adjustment
SUN cavity interchange, T-11A

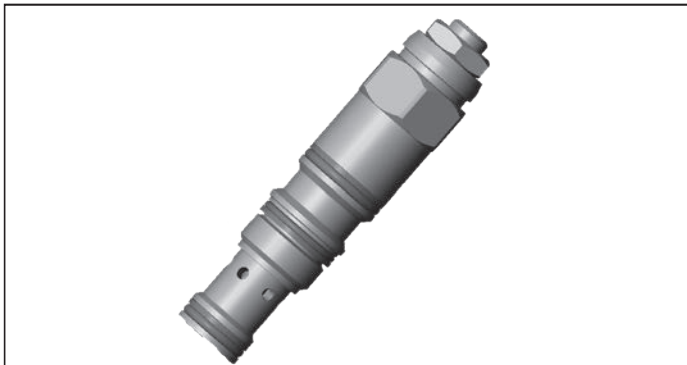
VBSN-08U-RS

04.52.43 - X - 20 - Z

RE 18320-17

Edition: 07.2023

Replaces: 01.2021



Technical data	
Max. operating pressure	350 bar (5000 psi)
Max. flow	60 l/min (16 gpm)
Max. internal leakage ¹⁾	5 drops/min.
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	40 - 50 Nm (30 - 37 ft-lbs)
Weight	0.19 kg (0.42 lbs)
MTTFD	150 years see RE 18350-51
Cavity	SUN T-11A
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: RG08U9020110100 material no: R901193388
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

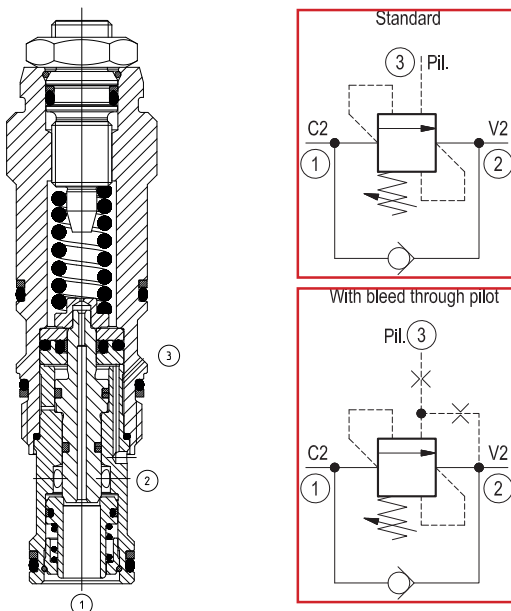
Description

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 (turn counterclockwise to increase setting - turn clockwise to decrease setting), the directing, 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. Any back-pressure at 2 is additive to the pressure setting in all functions. Valve design prevents spring going solid and complete unscrewing during adjusting.

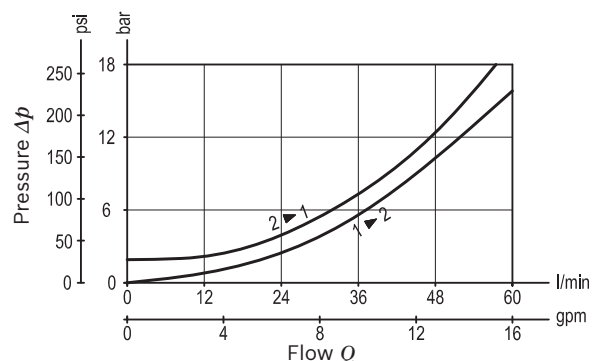
Pressure setting: at least 1.3 times the load induced pressure and maximum 1.5 times catalogue max nominal setting.

1) At 70% of pressure setting; 15 drops/min. with x=10

2) Only external seals for 10 valves



Characteristic curve



Ordering code

04.52.43	X	20	Z	*	*
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Counterbalance, standard poppet type, differential area, counterclockwise adjustment

Series M to Z
unchanged performances and dimensions

00 Standard (Buna)
V0 Viton (FKM)

Pilot ratio

03 3:1 standard version

10 8:1 standard version

31 1.5:1 with bleed through pilot
Without sealed pilot piston.

20 SUN cavity interchange, SIZE T-11A

SPRINGS

		Adj. press. range bar (psi)	Pressure increase bar/turn (psi/turn)	Cracking pressure bar (psi)
for X= 03	10	35-105 (500-1500)	26 (377)	70 (1000)
	20	70-210 (1000-3000)	106 (1537)	200 (2900)
	35	140-350 (2000-5000)	165 (2393)	350 (5000)
for X= 10	20	70-210 (1000-3000)	40 (580)	200 (2900)
	35	140-350 (2000-5000)	70 (1015)	350 (5000)
for X= 31	20	70-210 (1000-3000)	106 (1537)	200 (2900)
	35	140-350 (2000-5000)	165 (2393)	350 (5000)

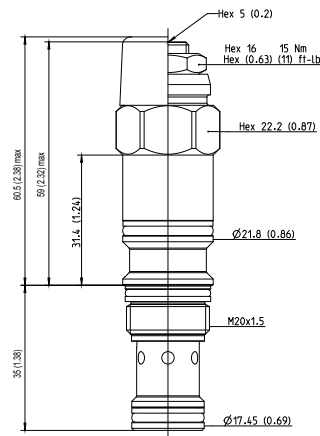
Note: Special settings available with optional tamperproof cap.
Contact factory authorized representative for ordering code.

Preferred types

Type	Material number
04524303201000M	R930081232
04524303202000M	R930081234
04524303203500M	R930081237
04524310202000M	R930081247

Type	Material number
04524310203500M	R930081249
04524331202000M	R930081367
04524331203500M	R930081369

Dimensions



Turn adjustment clockwise to decrease setting and release load

OPTION
Protection cap orange
Mat. no. R900168151

Tamper proof cap black
Mat. no. R930092782

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