

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: 05.2020

Replaces: 11.2019



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)
Cavity	SUN T-11A
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

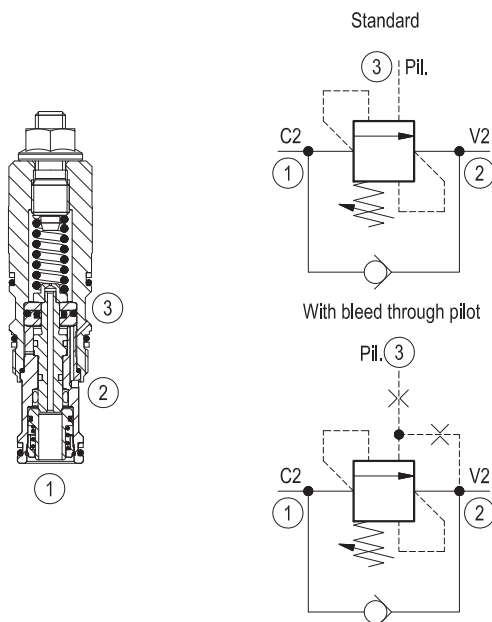
Description

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 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. Any back-pressure at 2 is additive to the pressure setting in all functions.

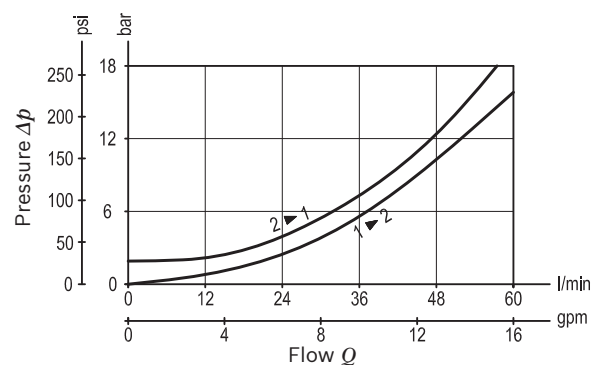
Pressure setting: at least 1.3 times the load induced pressure.

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	00	*
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Counterbalance, standard poppet type, differential area, counterclockwise adjustment

Series 0/A to L unchanged performances and dimensions

Version and options standard

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)

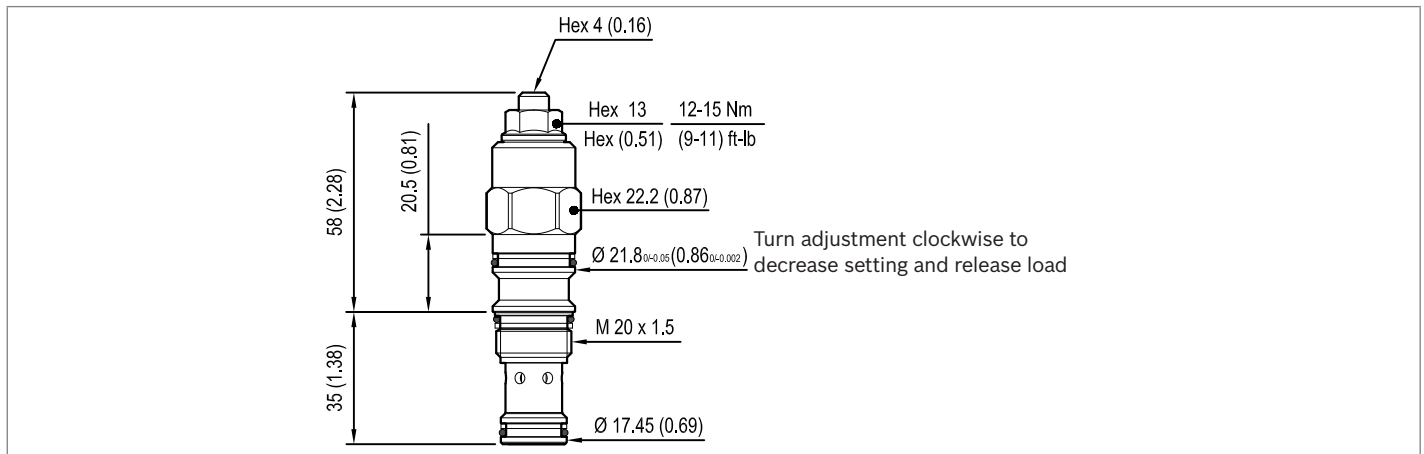
Note: Special settings available. Contact factory authorized representative for ordering code.

Preferred types

Type	Material number
045243032010000	R930006109
045243032020000	R930006110
045243032035000	R930006111
045243102020000	R930006112

Type	Material number
045243102035000	R930006113
045243312020000	R930006114
045243312035000	R930006115

Dimensions



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