

Counterbalance, standard poppet type
differential area, counterclockwise adjustment
SUN cavity interchange, T-2A

VBSN-12U-RS

04.52.44 - X - 86 - Z

RE 18320-18

Edition: 02.2019

Replaces: 03.2016



Technical data

Max. operating pressure	350 bar (5000 psi)
Max. flow	120 l/min (32 gpm)
Max. internal leakage ¹⁾	15 drops/min.
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	60 - 70 Nm (44 - 52 ft-lbs)
Weight	0.37 kg (0.82 lbs)
Cavity	SUN T-2A
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory
Seal kit ²⁾	Code: RG12U9020110100 material no: R930005599
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

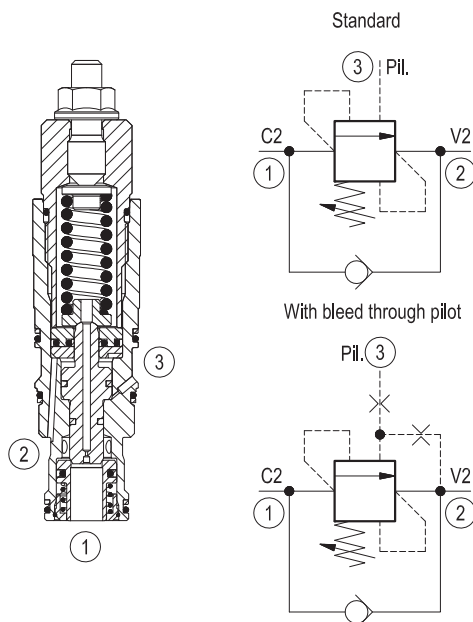
Description

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.

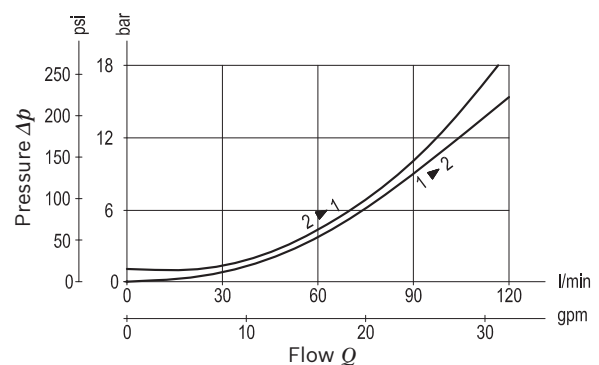
Pressure setting: at least 1.3 times the load induced pressure.

1) At 70% of pressure setting

2) Only external seals for 10 valves



Characteristic curve



Ordering code

04.52.44	X	86	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 4:1 standard version

10 8:1 standard version

42 2:1 with bleed through pilot

Without sealed pilot piston.

86 SUN cavity interchange, T-2A

SPRINGS

		Adj. press. range bar (psi)	Pressure increase bar/turn (psi/turn)	Std. setting bar (psi) cracking pressure
for X= 03	20	70-210 (1000-3000)	40 (580)	200 (2900)
	35	140-350 (2000-5000)	125 (1813)	350 (5000)
for X= 10	20	70-210 (1000-3000)	53 (769)	200 (2900)
	35	140-350 (2000-5000)	79 (1146)	350 (5000)
for X= 42	20	70-210 (1000-3000)	40 (580)	200 (2900)
	35	140-350 (2000-5000)	125 (1813)	350 (5000)

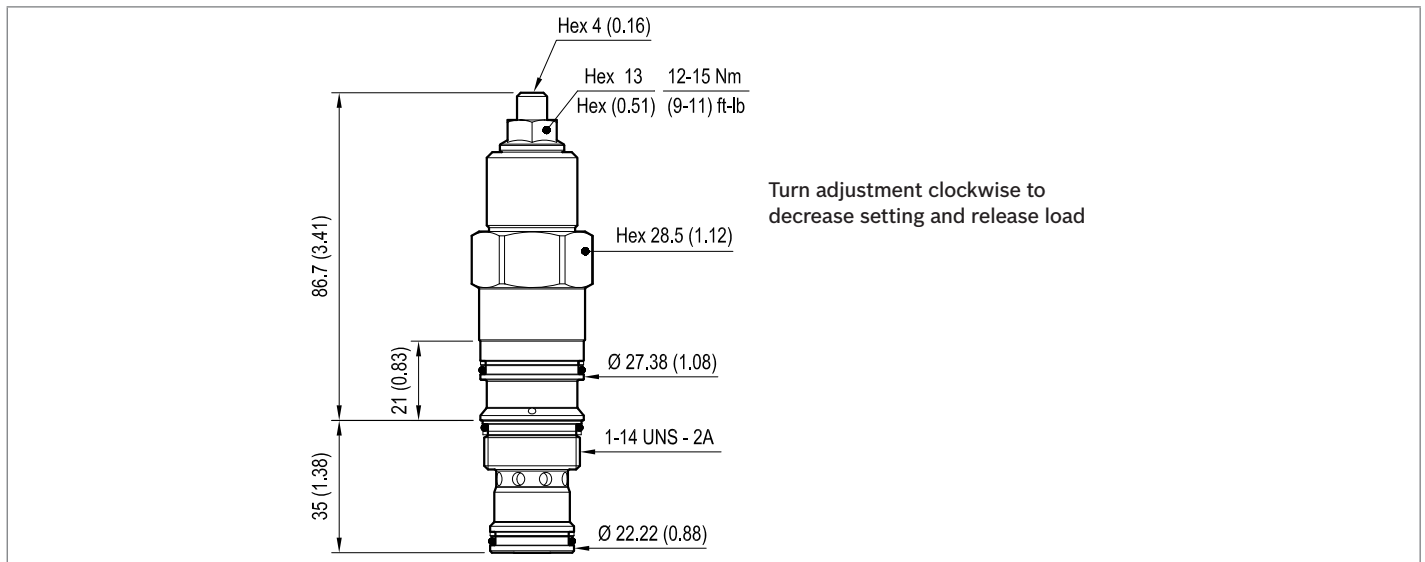
Note: Special settings available. Contact factory authorized representative for ordering code.

Preferred types

Type	Material number
045244038620000	R930006116
045244038635000	R930006117
045244108620000	R930006118

Type	Material number
045244108635000	R930006119
045244428620000	R930006120
045244428635000	R930006121

Dimensions



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