

Part number:



HYDROMA
HYDRAULICKÉ SYSTÉMY

HIDROMA
SYSTEMS
UKŁADY HYDRAULICZNE

HYDROMA
ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

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

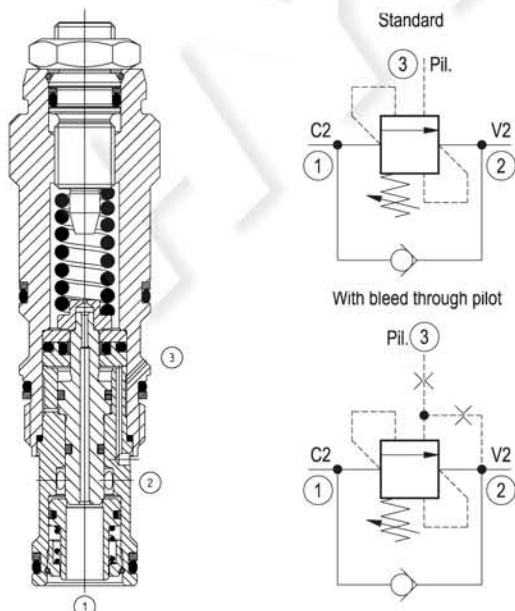
Edition: 05.2022

Replaces: 05.2020



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



Technical data

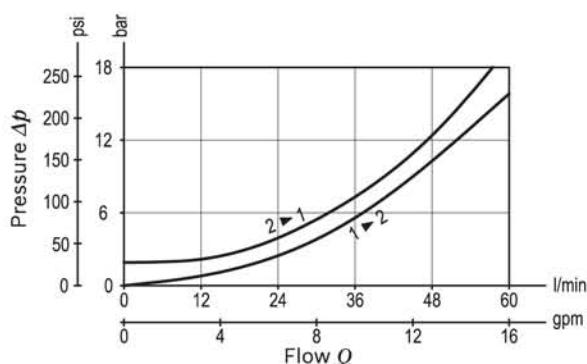
Max. operating pressure	350 bar (5000 psi)
Max. flow	60 l/min (16 gpm)
Max. internal leakage ¹⁾	5 drops/min.
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	40 - 50 Nm (30 - 37 ft-lbs)
Weight	0.19 kg (0.42 lbs)
MTTFD	150 years see RE 18350-51
Cavity	SUN T-11A
Adjustment	according 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

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

Ordering code		04.52.43	X	20	Z	*	*
Counterbalance, standard poppet type, differential area, counterclockwise adjustment		Series M to Z unchanged performances and dimensions					
		00 Standard (Buna) V0 Viton (FKM)					
Pilot ratio		SPRINGS					
							Adj. press. range bar (psi)
03 3:1 standard version		for X= 03	10	35-105 (500-1500)	26 (377)	70 (1000)	
10 8:1 standard version			20	70-210 (1000-3000)	106 (1537)	200 (2900)	
31 1.5:1 with bleed through pilot			35	140-350 (2000-5000)	165 (2393)	350 (5000)	
Without sealed pilot piston.		for X= 10	20	70-210 (1000-3000)	40 (580)	200 (2900)	
			35	140-350 (2000-5000)	70 (1015)	350 (5000)	
20 SUN cavity interchange, SIZE T-11A		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	Type	Material number
04524303201000M	R930081232	04524310203500M	R930081249
04524303202000M	R930081234	04524331202000M	R930081367
04524303203500M	R930081237	04524331203500M	R930081369
04524310202000M	R930081247		

Dimensions

Technical drawing of the VBSN-08U-RS counterbalance valve. The drawing shows a side view of the valve with various dimensions and labels. The dimensions are: 66.5 (2.62) max, 59 (2.32) max, 31.5 (1.24), 35 (1.38), and 17.45 (0.69). The labels are: Hex 5 (0.2), Hex 16 15 Nm Hex (0.63) (11) ft-lb, Hex 22.2 (0.87), Ø21.8 (0.86), M20x1.5, and Ø17.45 (0.69). The drawing also includes a note: Turn adjustment clockwise to decrease setting and release load.