

Counterbalance, standard poppet type
differential area, counterclockwise adjustment
SUN cavity interchange, T-17A

VBSN-16U-RS

04.52.45 - X - 47 - Z

RE 18320-19

Edition: 06.2019

Replaces: 03.2016



Technical data	
Max. operating pressure	420 bar (6000 psi)
Max. flow	240 l/min (63 gpm)
Max. internal leakage ¹⁾	15 drops/min.
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	200 - 215 Nm (148 - 159 ft-lbs)
Weight	0.8 kg (1.76 lbs)
Cavity	SUN T-17A
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory
Seal kit ²⁾	Code: RG16U9020110100 material no: R930000995
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

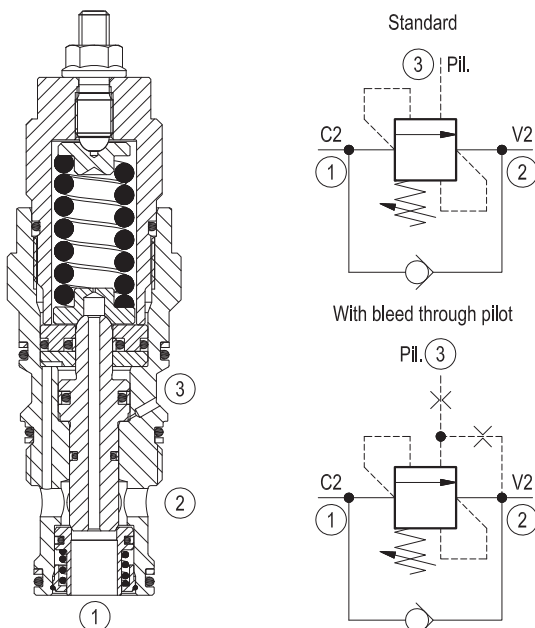
Description

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.

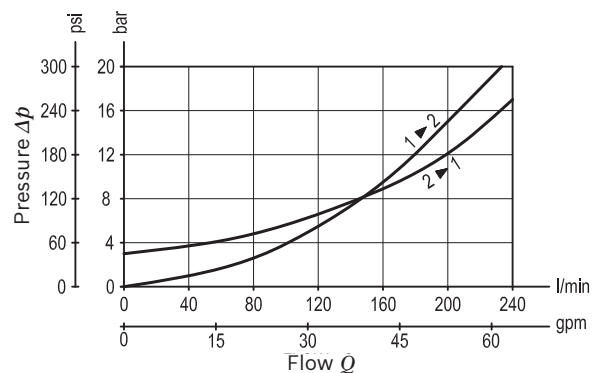
Pressure setting: at least 1.3 times the load induced pressure.

1) At 70% of pressure seals setting

2) Only external seals for 10 valves



Characteristic curve



Ordering code

04.52.45	X	47	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
47 SUN cavity interchange, T-17A

		SPRINGS		
		Adj. press. range bar (psi)	Pressure increase bar/turn (psi/turn)	Std. setting bar (psi) cracking pressure
for X= 03	20	70-280 (1000-4000)	80 (1160)	200 (2900)
	40	200-420 (2900-6000)	118 (1711)	350 (5000)
for X= 10	20	70-280 (1000-4000)	49 (711)	200 (2900)
	40	200-420 (2900-6000)	77 (1117)	350 (5000)
for X= 42	20	70-280 (1000-4000)	80 (1160)	200 (2900)
	40	200-420 (2900-6000)	118 (1711)	350 (5000)

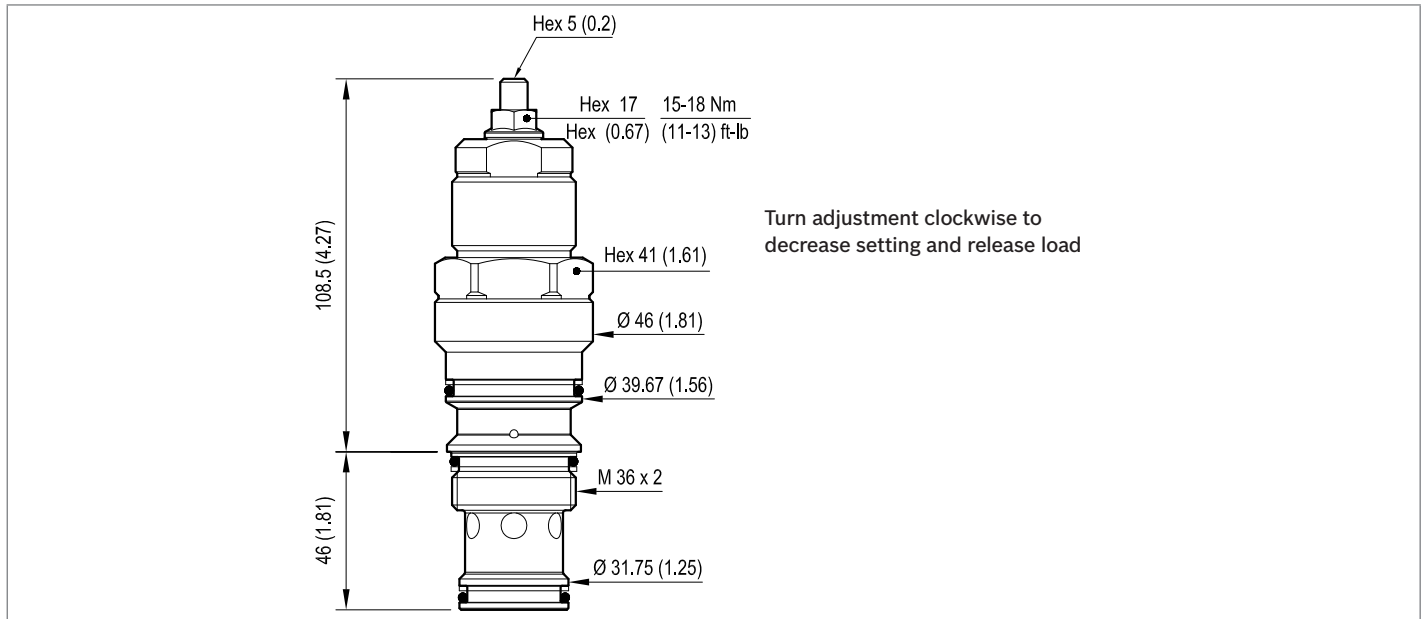
Note: Special settings available. Contact factory authorized representative for ordering code.

Preferred types

Type	Material number
045245034720000	R930000051
045245034740000	R930000052
045245104720000	R930000053

Type	Material number
045245104740000	R930000054
045245424720000	R930000055
045245424740000	R930000056

Dimensions



Bosch Rexroth Oil Control S.p.A.

Via Leonardo da Vinci 5
 P.O. Box no. 5
 41015 Nonantola – Modena, Italy
 Tel. +39 059 887 611
 Fax +39 059 547 848
 compact-hydraulics-cv@boschrexroth.com
 www.boschrexroth.com/compacthydraulics

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