

# Single counterbalance

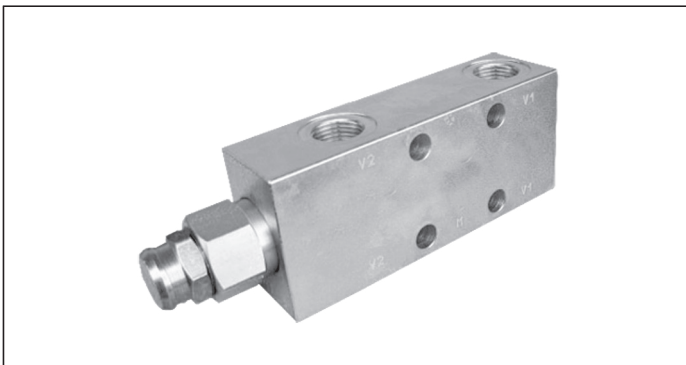
A-VBSO-SE-33-PL-FC2

08.45.94 - X - Y - Z

**RE 18307-46**

Edition: 03.2016

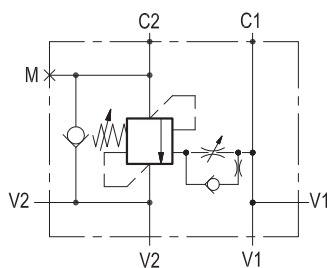
Replaces: 07.2012



## Description

When pressure at V2 rises above the spring bias pressure, the check seat is pushed away from the piston and flow is allowed from V2 to C2. When load pressure at C2 rises above the pressure setting, the direct operated relief function is activated and flow is relieved from C2 to V2. With pilot pressure at V1-C1, the pressure setting is reduced in proportion to the stated ratio of the valve, until opening and allowing flow from C2 to V2. The spring chamber is drained to V2, and any back-pressure at V2 is additive to the pressure setting in all functions. For safety and compactness, the C2 port is gasket mounted the actuator.

Note: port identified with M are not protected with calibrated orifice but in direct connection with pressure channels.



## Technical data

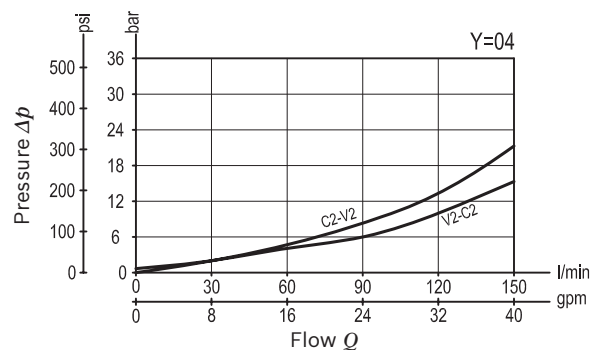
Max. operating pressure	410 bar (5945 psi)
Max. flow	150 l/min. (40 gpm)
Weight	see "Dimensions"
Manifold material	Zinc plated steel
Flange seal kit <sup>1)</sup>	E00000000000057 (R930060587)
Fluid	Mineral oil (HL, HLP) according DIN 51524
Fluid temperature range	-30 °C to 100 (-22 to 212 °F)
Viscosity range	5 to 800 mm <sup>2</sup> /s (cSt)
Recommended degree of fluid contamination	Class 19/17/14 according to ISO 4406
MTTFd	150 years see data sheet 18350-51
Other technical data	see data sheet 18350-50
Relief setting: at least 1.3 times the load induced pressure.	

The pilot line includes adjustable hydraulic damping, for fine tuning of stability and response.

Note: for applications outside these parameters, please consult us.

<sup>1)</sup> Seals for 5 valves.

## Characteristic curve



**Ordering code**

<b>08.45.94</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
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
Single counterbalance	
Pilot ratio	
<b>13</b>	4 : 1

Port sizes	V1 - V2 - C1	C2	M
<b>03</b>	G 1/2	Ø 12 (0.47)	G 1/4
<b>04</b>	G 3/4	Ø 12 (0.47)	G 1/4

	SPRINGS		
	Adj. pressure range bar (psi)	Pres. increase bar/turn (psi/turn)	Std. setting Q=5 (l/min) bar (psi)
<b>35</b>	150-350 (2175-5000)	110 (1595)	350 (5000)

Pressure setting up to 410 bar: code on request.

Tamper resistant cap code  
ordering code 11.04.30.001  
Mat. no. R930005194

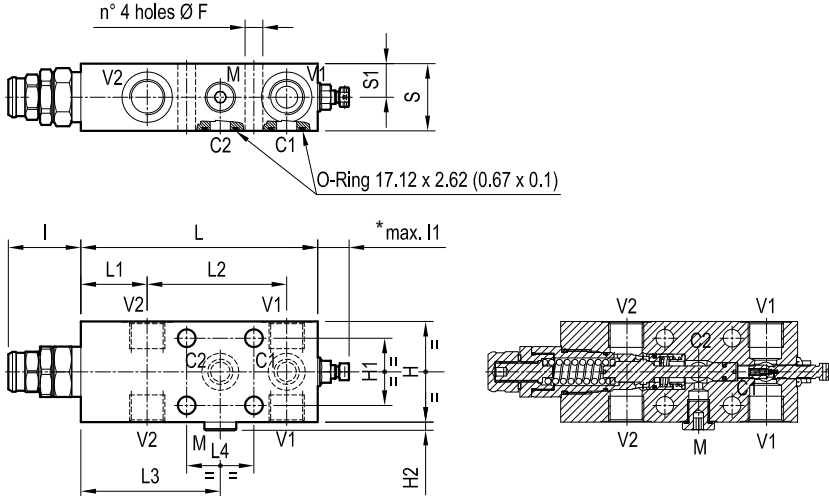


**Preferred types**

Type	Material number
08459413033500D	R930007165
08459413043500D	R930007466

Type	Material number

**Dimensions**



n° 4 holes Ø F

O-Ring 17.12 x 2.62 (0.67 x 0.1)

20 (0.79)	39.5 (1.56)	40 (1.58)	82 (3.23)	86 (3.39)	39 (1.54)	147 (5.79)	16 (0.63)	43 (1.69)	5 (0.2)	40 (1.58)	80 (3.15)	10.5 (0.41)			G 3/4	3 (6.61)
20 (0.79)	39.5 (1.56)	40 (1.58)	82 (3.23)	83 (3.27)	39 (1.54)	141 (5.55)	16.5 (0.65)	43 (1.69)	5 (0.2)	40 (1.58)	60 (2.36)	10.5 (0.41)			G 1/2	2.3 (5.07)
S1	S	L4	L3	L2	L1	L	I1	I	H2	H1	H	F			Y	Weight kg (lbs)

\* The adjusting screw can be completely unscrewed. Do not exceed the indicated protrusion range of the adjusted screw.

**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-pib@boschrexroth.com  
www.boschrexroth.com/compacthydraulics

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