

# Single counterbalance

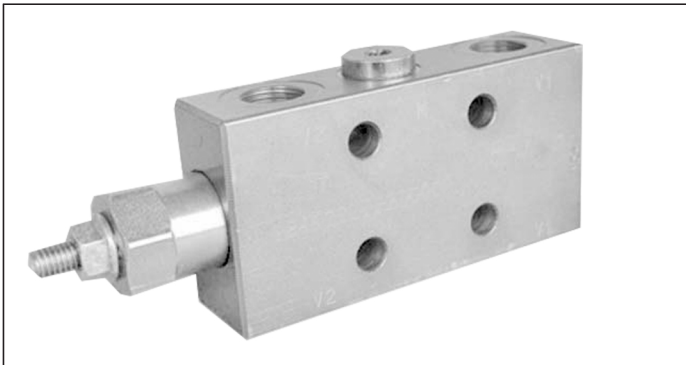
A-VBSO-SE-30-FC2-PI-PL

08.39.60 - X - Y - Z

**RE 18307-33**

Edition: 03.2016

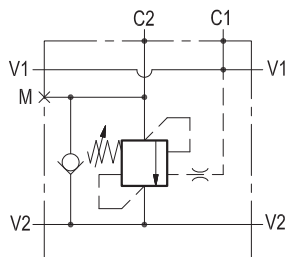
Replaces: 07.2012



## 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 back-pressure at V2 is additive to the pressure setting in all functions. For better safety and compact assembly, the C1 and C2 ports are gasket mounted directly on the actuator.

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



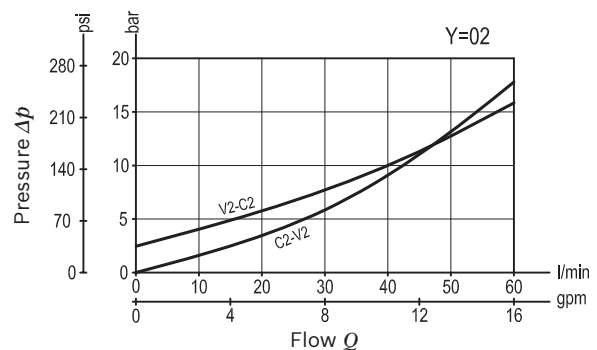
## Technical data

Max. operating pressure	410 bar (5945 psi)
Max. flow	60 l/min. (16 gpm)
Weight	see "Dimensions"
Manifold material	Zinc plated steel
Flange seal kit <sup>1)</sup>	E00000000000014 (R930005947)
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.	
For higher stability at all flows and pressures, the pilot line includes hydraulic damping.	

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

<sup>1)</sup> Seals for 10 valves.

## Characteristic curve



**Ordering code**

<b>08.39.60</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
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Single counterbalance


Pilot ratio

**03** 4.2 : 1

Port sizes	V1 - V2	C1 - C2	M
<b>02</b>	G 3/8	Ø 9 (0.35)	G 1/4
<b>03</b>	G 1/2	Ø 9 (0.35)	G 1/4

	SPRINGS		
	Adj. pressure range bar (psi)	Pres. increase bar/turn (psi/turn)	Std. setting Q=5 (l/min) bar (psi)
<b>20</b>	60-210 (870-3000)	63 (914)	200 (2900)
<b>35</b>	<b>180-350 (2610-5000)</b>	<b>138 (2001)</b>	<b>350 (5000)</b>

Pressure setting up to 410 bar: code on request.

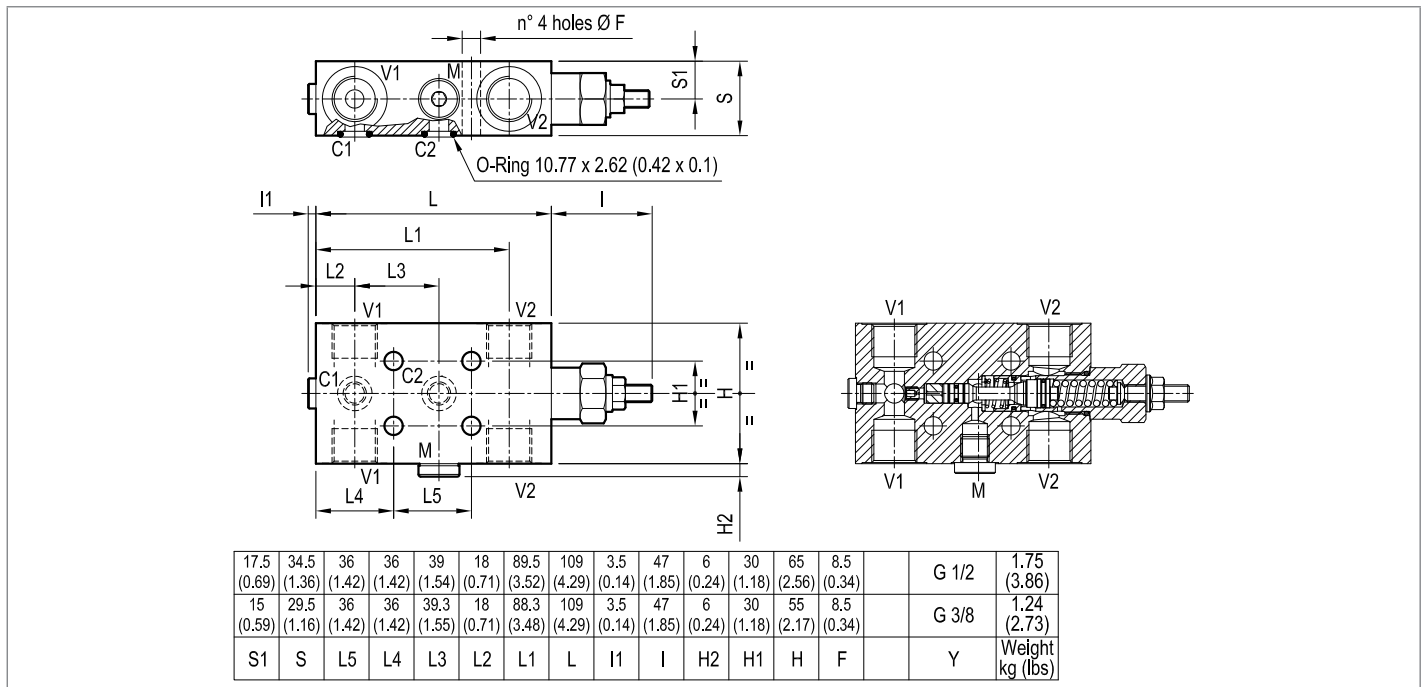
Tamper resistant cap code ordering code 11.04.23.002  
 Mat. no. R930000752 

**Preferred types**

Type	Material number
083960030220000	R930006768
<b>083960030235000</b>	<b>R930006444</b>
083960030320000	R930006772

Type	Material number
083960030335000	R930006773

**Dimensions**



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