

# Single counterbalance with brake release port for winches

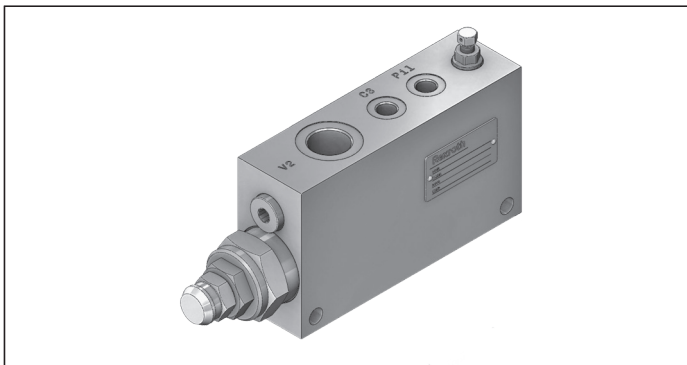
A-VBSO-SE-LA-42

08.37.70 - X - Y - Z

**RE 18308-36**

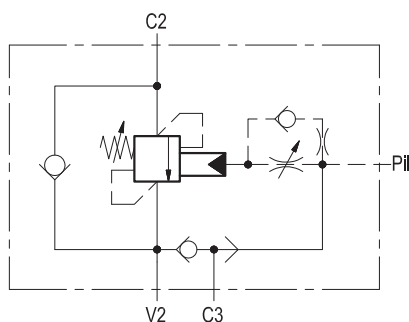
Edition: 06.2022

Replaces: 03.2016



## 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, differential area, relief function is activated and flow is relieved from C2 to V2. With pilot pressure at Pil, 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. Through port C3, an incorporated shuttle valve directs either Pil or V2 line pressure to the spring actuated brake for brake opening.

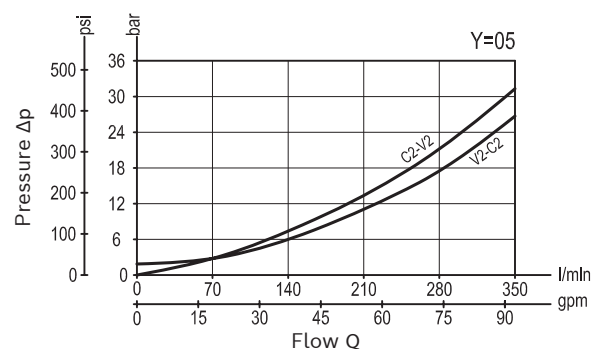


## Technical data

Max. operating pressure	410 bar (5945 psi)
Max. flow	up to 350 l/min. (93 gpm)
The high pilot ratio (13:1) has been developed for energy saving; for higher stability at all flows and pressures, the pilot line includes hydraulic damping.	
Relief setting: at least 1.3 times the highest expected load. In addition, both the relief setting and the pilot ratio must be determined also in order to achieve building-up of pilot pressure in Pil high enough to release the brake prior to any valve opening from C2 to V2.	
Weight	see "Dimensions"
Manifold material	Zinc plated steel
Fluid	Mineral oil (HL, HLP) according to DIN 51524
Fluid temperature range	-30 °C to 100 (-22 to 212 °F)
Viscosity range	10 to 500 mm <sup>2</sup> /s (cSt)
Recommended degree of fluid contamination	Class 19/17/14 according to ISO 4406
Other technical data	see data sheet 18350-50

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

## Characteristic curve



**Ordering code**

<b>08.37.70</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
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Pilot ratio

**13** 13:1

Port sizes	V2 - C2	C3 - Pil	
<b>04</b>	G 3/4	G 1/4	
<b>05</b>	G 1	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>	250-500 (3600-7250)	102 (1479)	500 (7250)

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
08377013043500A	R930006597
08377013053500A	R930006596

Type	Material number

**Dimensions**

50 (1.97)	100 (3.94)	150 (5.91)	11.5 (0.45)	31 (1.22)	45 (1.77)	47 (1.85)	173 (6.81)	18.5 (0.73)	10 (0.39)	109 (4.29)	4.5 (0.18)	61 (2.4)	10.5 (0.41)		G 1	6.7 (14.8)
50 (1.97)	100 (3.94)	150 (5.91)	11.5 (0.45)	31 (1.22)	45 (1.77)	47 (1.85)	173 (6.81)	19.5 (0.77)	10 (0.39)	99 (3.9)	4.5 (0.18)	61 (2.4)	10.5 (0.41)		G 3/4	6 (13.2)
S	L6	L5	L4	L3	L2	L1	L	H2	H1	H	I1	I	F	Y	Weight kg (lbs)	

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

<p><b>Bosch Rexroth Oil Control S.p.A.</b> 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</p>	<p>© This document, as well as the data, specifications and other information set forth in it, are the exclusive property of Bosch Rexroth Oil Control S.p.a.. It may not be reproduced or given to third parties without its consent. The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging. Subject to change.</p>
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