

Single counterbalance

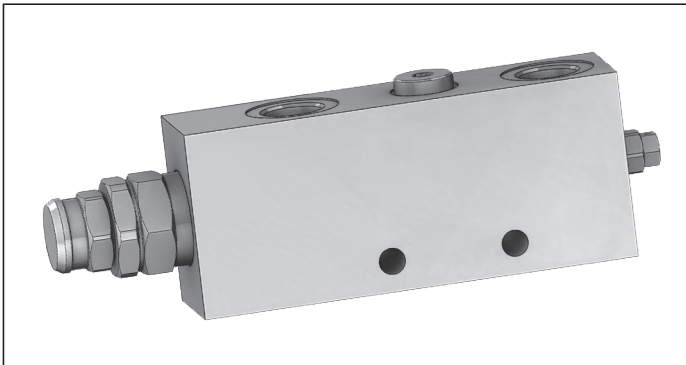
A-VBSO-SE-33-PL

08.45.85 - X - Y - Z

RE 18307-44

Edition: 03.2016

Replaces: 07.2012



Technical data

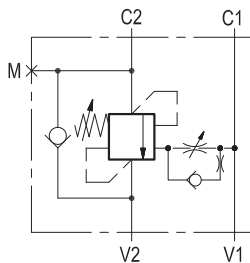
Max. operating pressure	410 bar (5945 psi)
Max. flow	150 l/min. (40 gpm)
Weight	see "Dimensions"
Manifold material	Zinc plated steel
Fluid	Mineral oil (HL, HLP) according DIN 51524
Fluid temperature range	-30 °C to 100 (-22 to 212 °F)
Viscosity range	5 to 800 mm ² /s (cSt)
Recommended degree of fluid 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.

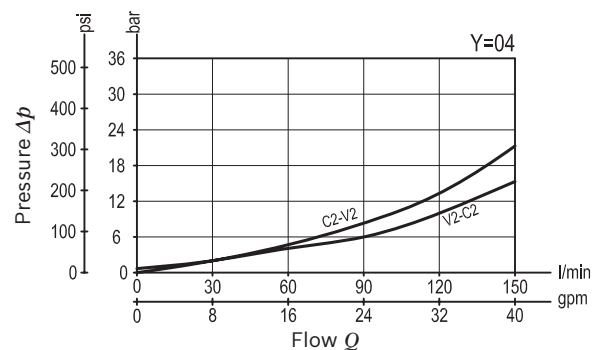
Description

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 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.

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



Characteristic curve



Ordering code


08.45.85	X	Y	Z
-----------------	----------	----------	----------

Single counterbalance	
Pilot ratio	
13	4 : 1

Port sizes	V1 - V2	C1 - C2	M
03	G 1/2	G 1/2	G 1/4
04	G 3/4	G 3/4	G 1/4

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

Pressure setting up to 410 bar: code on request.

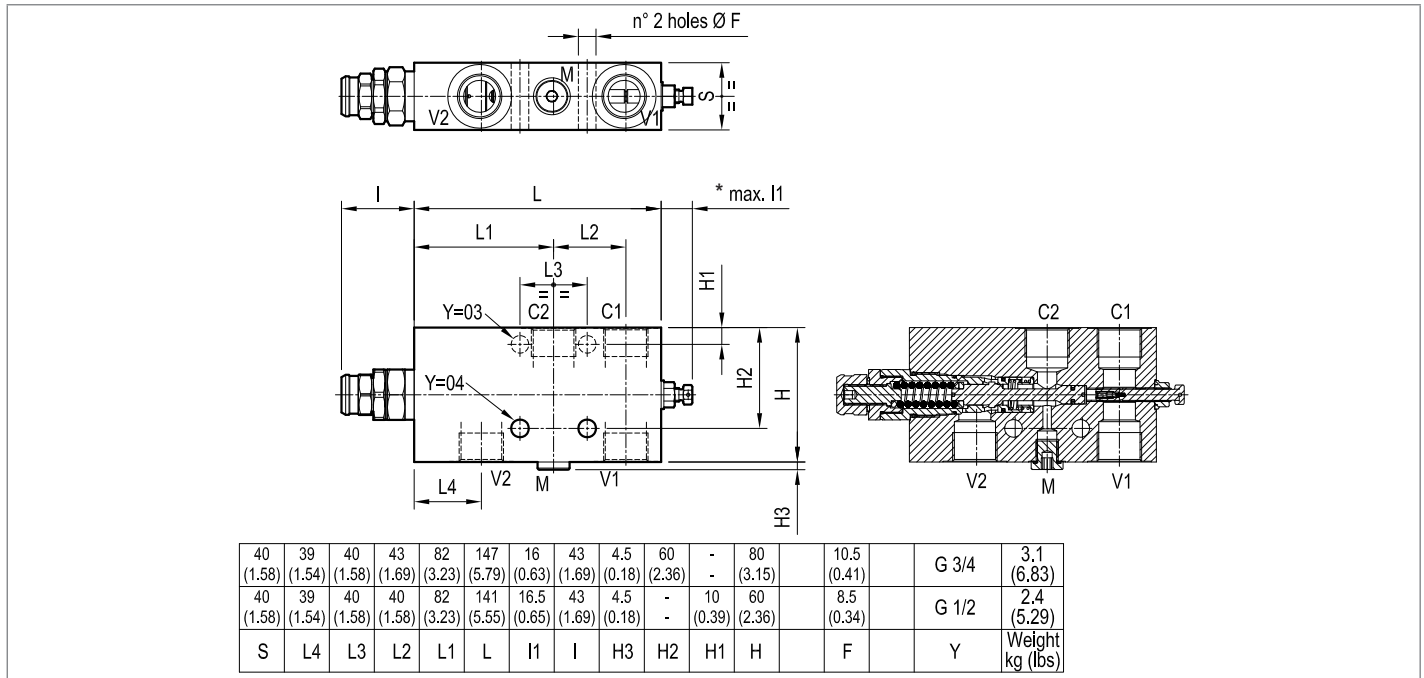
Tamper resistant cap code ordering code 11.04.30.001
 Mat. no. R930005194 

Preferred types

Type	Material number
08458513033500D	R930007102
08458513043500D	R930007142

Type	Material number

Dimensions



* 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

© 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.