

Dual counterbalance

RE 18307-63

Edition: 03.2016

05.42.01 - X - Y - Z Replaces: 04.2010





Description

It provides static and dynamic control of load by regulating the flow IN and OUT of the actuator, through ports C1 and C2. This valve module includes 2 sections, each one composed by a check and a relief valve pilot assisted by pressure in the opposite line: the check section allows free flow into the actuator, then holds the load against reverse movement; with pilot pressure applied at the line across, the pressure setting of the relief is reduced in proportion to the stated ratio until opening and allowing controlled reverse flow. Back-pressure at V1 or V2 is additive to the pressure setting in all functions.

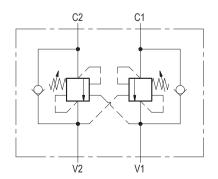
Technical data

Operating pressure	up to 210 bar (3000 psi)
Max. flow	see performance graph
Weight	1.4 kg (3.1 lbs)
Manifold material	Aluminium

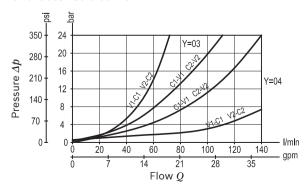
Note: aluminium bodies are often strong enough for operating pressures exceeding 210 bar (3000 psi), depending from the fatigue life expected in the specific application. If in doubt, consult our Service Network.

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
Other technical data	see data sheet 18350-50
Relief setting: at least 1.3 times the highest expected load.	

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



Characteristic curve



Ordering co	ode	05.42.	01 >	(Y
Dual counter	balance			
Pilot ratio				
03 8.2	: 1			
10 3.2	: 1			
Port sizes	V1 - V2	C1 - C2		
03	G 1/2	G 1/2		
04	G 3/4	G 3/4		

	SPRINGS		
	Adj. pressure	Pres. increase	Std. setting
	range	bar/turn	Q=5 (I/min)
	bar (psi)	(psi/turn)	bar (psi)
20	60-210	64	200
20	(900-3000)	(928)	(2900)
35	120-350	106	350
JD	(1750-5000)	(1537)	(5000)

Tamper resistant cap code ordering code 11.04.23.003
Mat. no. R930000754

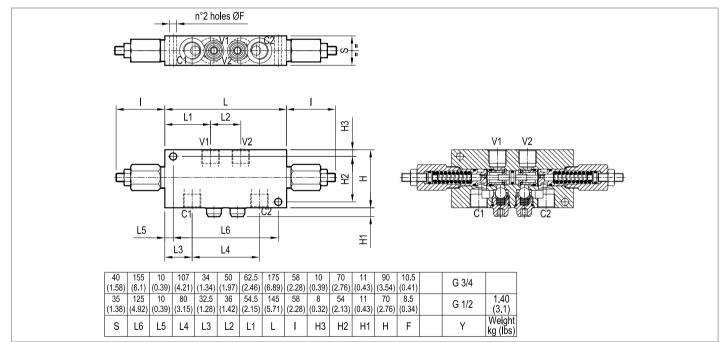
Z

Preferred types

Туре	Material number	
054201030320000	R930001758	
05420103033500A	R930001761	
054201030420000	R930001771	
05420103043500A	R930001773	

Туре	Material number
054201100320000	R930005704
05420110033500A	R930001776
054201100420000	R930000981
05420110043500A	R930001781

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-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.