

# Dual counterbalance

### VBSO-DE



#### 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.

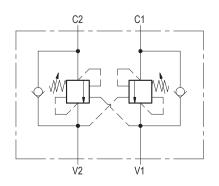
## 05.42.01 - X - Y - Z

**RE 18307-63** Edition: 08.2020 Replaces: 03.2016

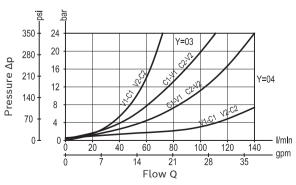
### Technical data

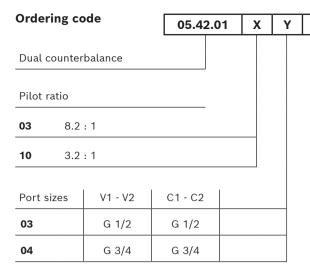
Operating pressure	up to 210 bar (3000 psi)	
Max. flow	see performance graph	
Weight	1.4 kg (3.1 lbs)	
Manifold material	Aluminium	
Note: aluminium bodies are often strong enough for operating pressures exceeding 210 bar (3000 psi), depending from the fatigue life expected in the specific application. 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)	
MTTFD	150 years see RE 18350-51	
Viscosity range	5 to 800 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	
Relief setting: at least 1.3 times the highest expected load.		

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



#### **Characteristic curve**





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

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

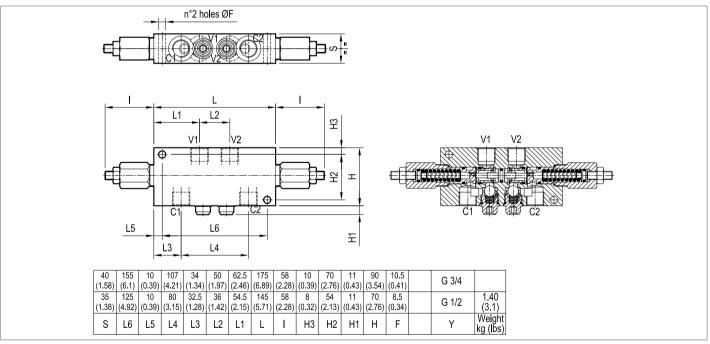
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#### **Preferred types**

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.

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