

Part number:

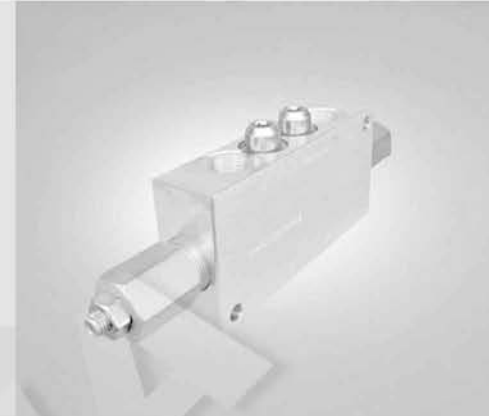
**HYDROMA**  
HYDRAULICKÉ SYSTÉMY

**HIDROMA**  
SYSTEMS  
UKŁADY HYDRAULICZNE

**HYDROMA**  
ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

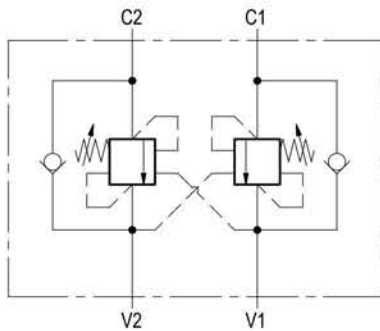
RE 18307-63/04.10 1/2  
Replaces: RE 00171/02.07

# Dual counterbalance



VBSO-DE

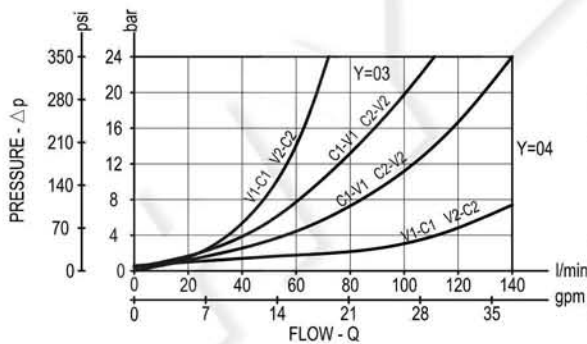
05.42.01 - X - Y - Z



## 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.

## Performance



## Technical data

### Hydraulic

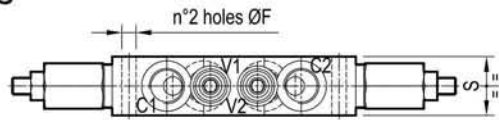
Operating pressure	bar (psi)	up to 210 (3000)
Max. flow:	see performance graph	
Relief setting:	at least 1.3 times the highest expected load.	

### General

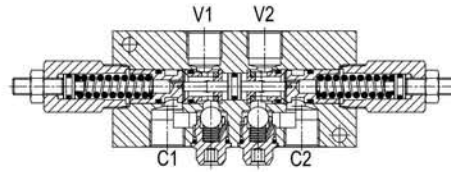
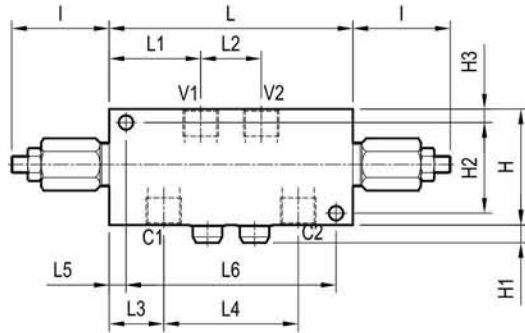
Manifold material	Aluminium	
Note: aluminium bodies are often strong enough for operating pressures exceeding 210 bar (3000 psi), depending from the fatigue life expected in the specific application. If in doubt, consult our Service Network.		
Weight	kg (lbs)	1.40 (3.09)
Fluid temperature range	°C (°F)	between -30 (-22) and +100 (212)
Other technical data	see data sheet RE 18350-50	

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

Dimensions



[ mm (inches) ]



40 (1.58)	155 (6.1)	10 (0.39)	107 (4.21)	34 (1.34)	50 (1.97)	62.5 (2.46)	175 (6.89)	58 (2.28)	10 (0.39)	70 (2.76)	11 (0.43)	90 (3.54)	10.5 (0.41)	G 3/4	
35 (1.38)	125 (4.92)	10 (0.39)	80 (3.15)	32.5 (1.28)	36 (1.42)	54.5 (2.15)	145 (5.71)	58 (2.28)	8 (0.32)	54 (2.13)	11 (0.43)	70 (2.76)	8.5 (0.34)	G 1/2	1.40 (3.1)
S	L6	L5	L4	L3	L2	L1	L	I	H3	H2	H1	H	F	Y	Weight kg (lbs)

Ordering code

05.42.01	X	Y	Z
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Dual counterbalance

Pilot ratio

= 03 8.2:1

= 10 3.2:1

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

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

Type	Material number
054201030320000	R930001758
05420103033500A	R930001761
054201030420000	R930001771
05420103043500A	R930001773
054201100320000	R930005704
05420110033500A	R930001776
054201100420000	R930000981
05420110043500A	R930001781

Type	Material number