

Part number:

**HYDROMA**

HYDRAULICKÉ SYSTÉMY

**HIDROMA  
SISTEMS**

UKŁADY HYDRAULICZNE

**HYDROMA**

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

## Dual counterbalance

VBSO-DE

05.42.01 - X - Y - Z

**RE 18307-63**

Edition: 03.2016

Replaces: 04.2010



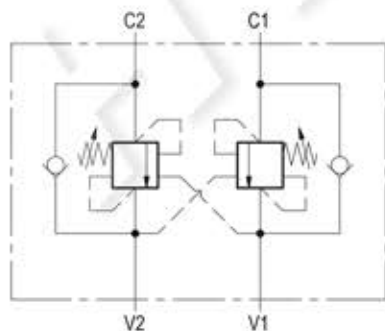
### Technical data

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 <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.	

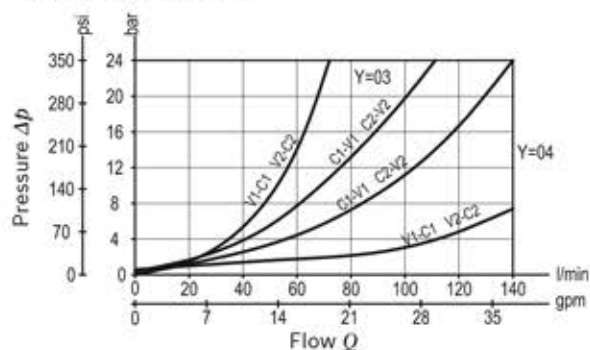
Note: for applications outside these parameters, please consult us.

### 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.



### Characteristic curve



Ordering code

<b>05.42.01</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
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Dual counterbalance

Pilot ratio

**03** 8.2 : 1

**10** 3.2 : 1

Port sizes	V1 - V2	C1 - C2	
<b>03</b>	G 1/2	G 1/2	
<b>04</b>	G 3/4	G 3/4	

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

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

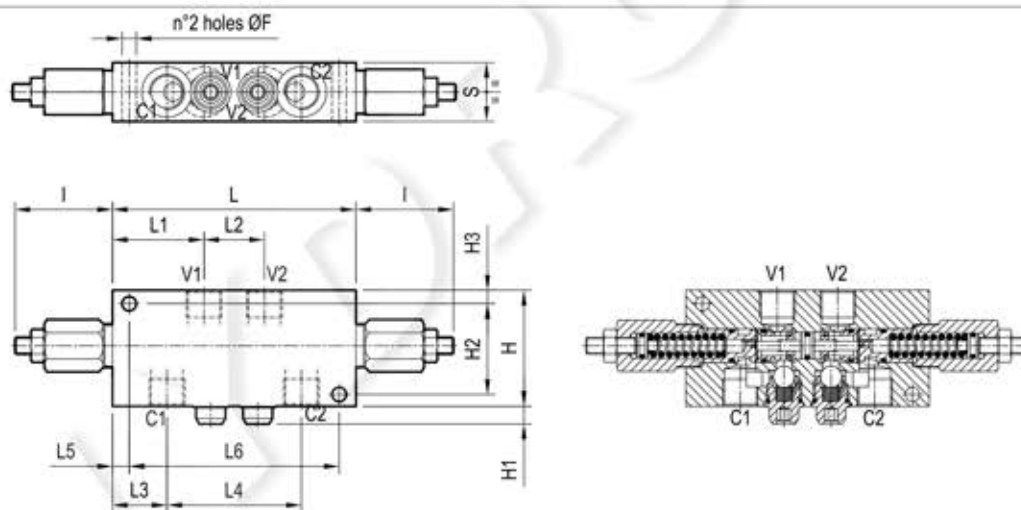


Preferred types

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

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

Dimensions



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)