Dual counterbalance with brake release port

VBSO-DE-VF-30-VSDI-FM

06.03.01 - X

RE 18308-58
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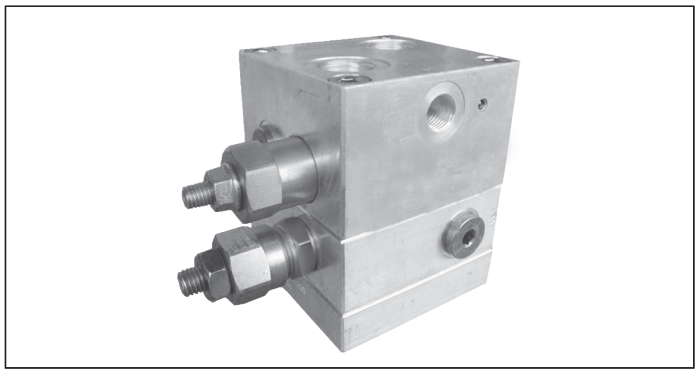


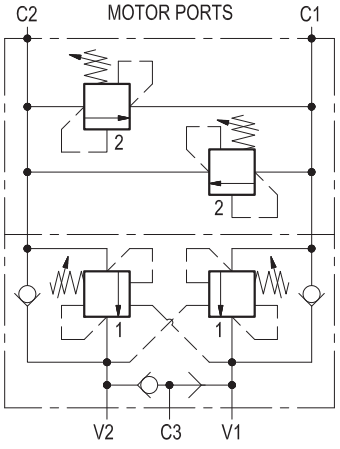
Technical data

Operating pressure	up to 210 bar (3000 psi)
Max. flow	60 l/min. (16 gpm)
Flangeable on SAUER-DANFOSS orbital motors OMS series.	
Relief setting: at least 1.3 times the highest expected load. In addition, both the relief setting and the pilot ratio must be determined in order to achieve building-up of pilot pressure in V1 or V2 high enough to release the brake prior to any valve opening.	
Weight	2.5 kg (5.5 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	10 to 500 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

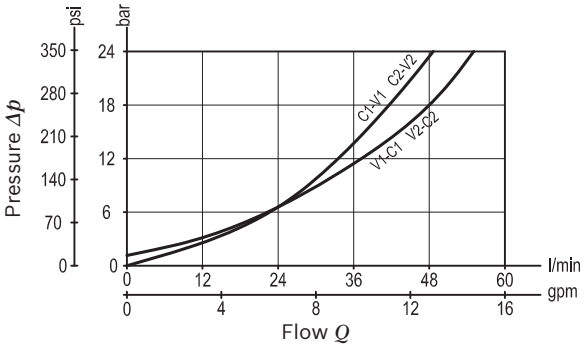
Note: for applications outside these parameters, please consult us.

Description

It provides static and dynamic motion control by regulating flow and pressure IN and OUT of the hydraulic motor at ports C1 and C2. It includes 2 motion control sections (ref. 2), each one composed by a check and a relief valve pilot assisted by pressure in the opposite line: the check allows free flow into the motor, then locks and prevents 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 motion. It also includes 2 cross-over direct operated relief sections (ref. 1) which control inlet pressure at starting and motor outlet pressure at stopping. Back-pressure at V1 or V2 is additive to the pressure settings in all functions. Through port C3, a shuttle valve directs either V1 or V2 line pressure to the spring actuated brake for brake releasing.



Characteristic curve



Ordering code

06.03.01	X

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Pilot ratio

014 4.2:1

017 11:1

Port sizes	V1 - V2	C1 - C2	C3
	G 1/2	G 1/2	G 1/4

		SPRINGS		
		Adj. pressure range bar (psi)	Pres. increase bar/turn (psi/turn)	Std. setting Q=5 (l/min.) bar (psi)
for X=**014**	Valve 1	60-210 (900-3000)	56 (812)	200 (2900)
	Valve 2	50-210 (725-3000)	47 (682)	130 (1900)
for X=**017**	Valve 1	60-250 (900-3600)	70 (1015)	250 (3600)
	Valve 2	30-100 (435-1450)	24 (348)	50 (725)

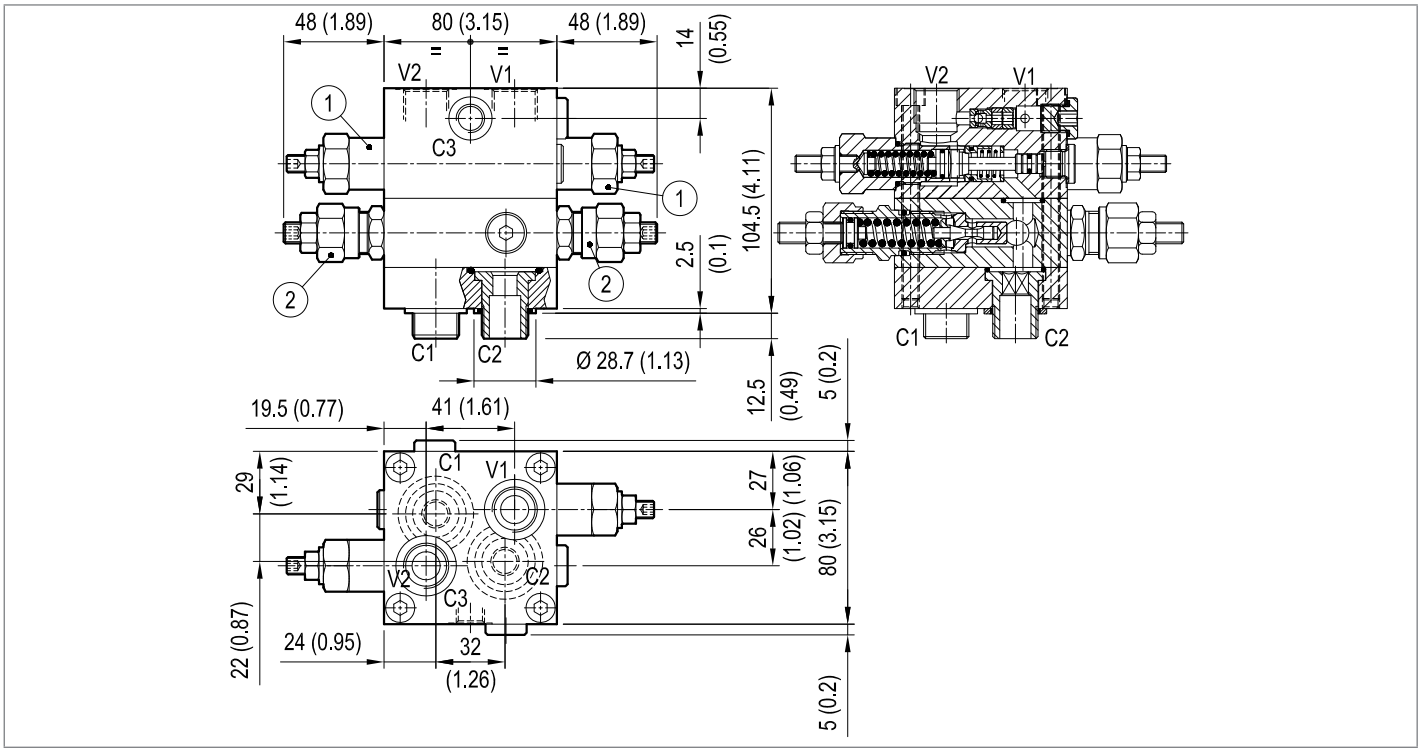
Tamper resistant cap
code 11.04.23.002 Mat.no. R930000752 for Valve 1
code 11.04.23.003 Mat.no. R930000754 for Valve 2

Preferred types

Type	Material number
060301014000000C	R930002740
060301017000000	R930001946

Type	Material number

Dimensions



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