

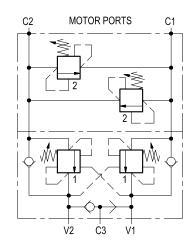
RE 18308-57/04.10 1/2

Replaces: RE 00171/02.07

# Dual counterbalance and cross over relief with brake release port

VBSO-DE-VF-30-VSDI-FM

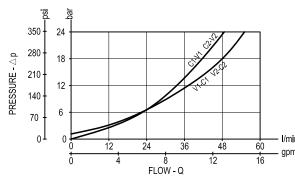
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**Description** 

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.

## **Performance**



### Technical data

# Hydraulic

Operating pressure	bar (psi)	up to 210 (3000)
Max flow	l/min (gpm)	60 (16)

Flangeable on SAUER-DANFOSS orbital motors OMP-OMR 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.

#### General

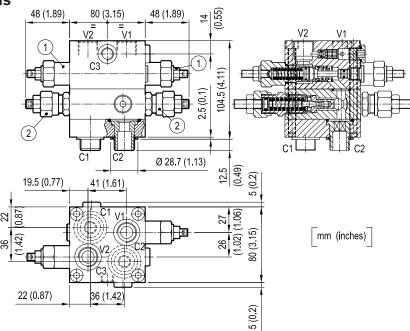
Manifold material	Aluminium	
Note: aluminium bodies are often strong enough for operating pressures		

exceeding 210 bar (3000 psi), depending from the fatigue life expected in the specific application. If in doubt, consult our Service Network.

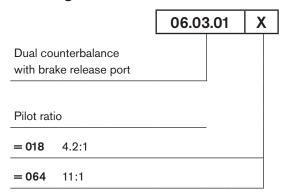
Weight	kg (lbs)	2.5 (5.5)
Fluid temperature range	°C (°F)	between -30 (-22) and +100 (212)
Other technical data		see data sheet RE 18350-50

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

#### **Dimensions**



# Ordering code



Port sizes	V1 - V2	C1 - C2	СЗ
	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 (I/min.) bar (psi)
for	Valve 1	60-210 (900-3000)	56 (812)	200 (2900)
X=018	Valve 2	50-210 (725-3000)	47 (682)	130 (1900)
for	Valve 1	60-250 (900-3600)	70 (1015)	250 (3600)
X=064	Valve 2	30-100 (435-1450)	24 (348)	50 (725)

lamper resistant cap		
code 11.04.23.002	R930000752	for Valve
code 11.04.23.003	R930000754	for Valve 2

Туре	Material number	Туре
06030101800000C	R930002745	
060301064000000	R930001945	

Material number

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Subject to change.