

## Single counterbalance with brake release port for winches flangeable

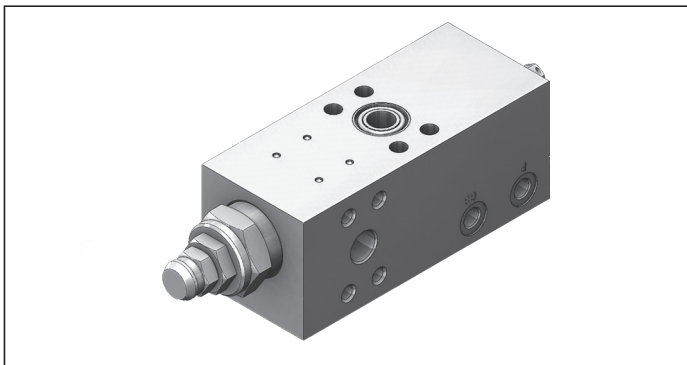
A-VBSO-SE-FA-42

08.45.38 - X - Y - Z

**RE 18308-42**

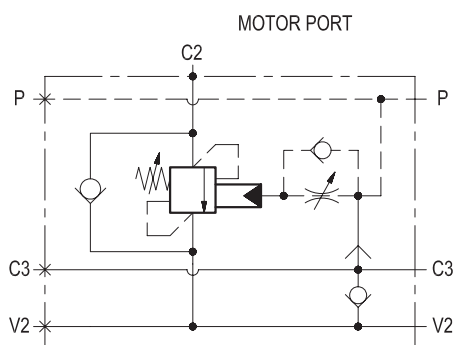
Edition: 03.2016

Replaces: 12.2015



### Description

When pressure at V2 rises above the spring bias pressure, the check seat is pushed away from the piston and flow is allowed from V2 to C2. When load pressure at C2 rises above the pressure setting, the direct operated, differential area, relief function is activated and flow is relieved from C2 to V2. With pilot pressure at P, the pressure setting is reduced in proportion to the stated ratio of the valve, until opening and allowing flow from C2 to V2. The spring chamber is drained to V2, and any back-pressure at V2 is additive to the pressure setting in all functions. Through port C3, an incorporated shuttle valve directs either P or V2 line pressure to the spring actuated brake for brake opening.



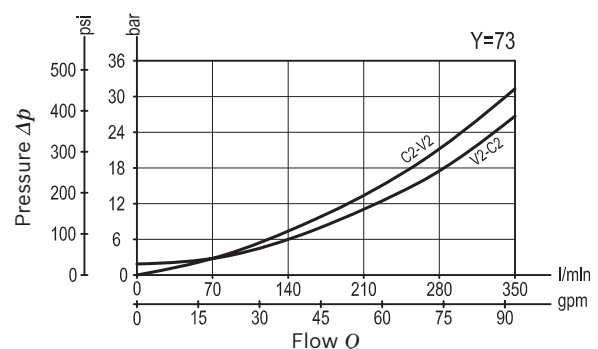
### Technical data

|                                                                                                                                                                                                                                                                                   |                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Max. operating pressure                                                                                                                                                                                                                                                           | 410 bar (5945 psi)                        |
| Max. flow                                                                                                                                                                                                                                                                         | 350 l/min. (93 gpm)                       |
| The high pilot ratio (13:1) has been developed for energy saving; for higher stability at all flows and pressures, the pilot line includes hydraulic damping.                                                                                                                     |                                           |
| The C2 port is designed with "SAE flange" pattern in order to be gasket mounted directly to the motor.                                                                                                                                                                            |                                           |
| Relief setting: at least 1.3 times the highest expected load. In addition, both the relief setting and the pilot ratio must be determined also in order to achieve building-up of pilot pressure in V1 high enough to release the brake prior to any valve opening from C2 to V2. |                                           |
| Weight                                                                                                                                                                                                                                                                            | see "Dimensions"                          |
| Manifold material                                                                                                                                                                                                                                                                 | Zinc plated steel                         |
| Flange seal kit <sup>1)</sup>                                                                                                                                                                                                                                                     | E00000000000002 (R930004532)              |
| 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 <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                   |

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

<sup>1)</sup> Seals for 10 valves

### Characteristic curve



**Ordering code**

|                 |          |          |          |
|-----------------|----------|----------|----------|
| <b>08.45.38</b> | <b>X</b> | <b>Y</b> | <b>Z</b> |
|-----------------|----------|----------|----------|

Single counterbalance,  
with brake release port for winches  
flangeable

Pilot ratio

**13** 13:1

| Port sizes | V2 - C2          | C3 - P |  |
|------------|------------------|--------|--|
| <b>72</b>  | 3/4<br>SAE6000   | G 1/4  |  |
| <b>73</b>  | 1 SAE6000        | G 1/4  |  |
| <b>64</b>  | 1-1/4<br>SAE6000 | G 1/4  |  |

**SPRINGS**

|           | Adj. pressure<br>range<br>bar (psi) | Pres. increase<br>bar/turn<br>(psi/turn) | Std. setting<br>Q=5 (l/min)<br>bar (psi) |
|-----------|-------------------------------------|------------------------------------------|------------------------------------------|
| <b>35</b> | 250-500<br>(3625-7250)              | 102<br>(1479)                            | 500<br>(7250)                            |

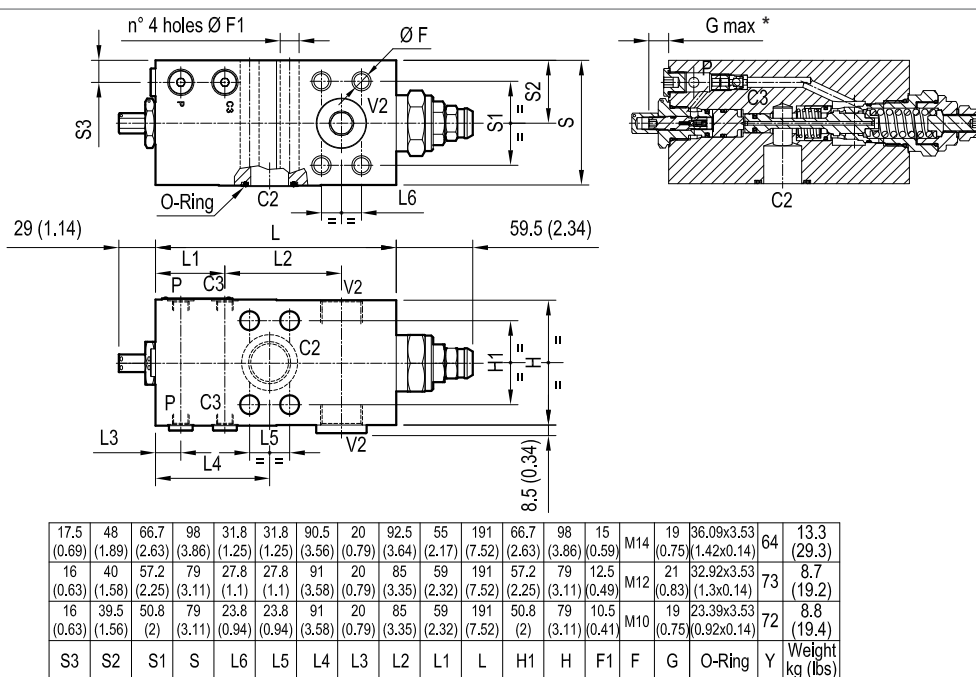
Pressure setting up to 410 bar: code on request.

Tamper resistant cap  
ordering code 11.04.30.001  
Mat. no. R930005194

**Preferred types**

| Type            | Material number |
|-----------------|-----------------|
| 08453813723500E | R930050895      |
| 08453813733500G | R930050897      |

| Type            | Material number |
|-----------------|-----------------|
| 08453813643500E | R930051159      |

**Dimensions**

\* The adjusting screw can be completely unscrewed. Do not exceed the indicated protrusion range of the adjusted screw.

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