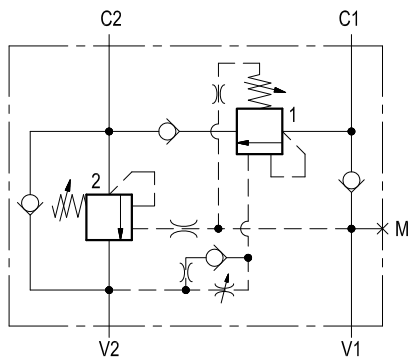


## Dual counterbalance with regenerative function

VBSO-DE-CR-33

05.44.13 - X - Y - Z



### Description

It provides static and dynamic control of load by regulating the flow IN and OUT of the cylinder, through ports C2 and C1. This valve module includes a pilot assisted counterbalance (2) on the line C2-V2 for control of the full bore side of the cylinder, a check valve between V1 and C1 which allows flow into the annular side and locks in reverse direction, a pilot assisted by-pass counterbalance "fully vented type" (1) which feeds into the full bore (C2) the flow coming out from the annular side (C1) in order to increase the extension speed. The valve (1) is internally vented into V1 which acts as "Tank" line during cylinder extension. The pilot line for the valve (1) has a one way adjustable cross-over drain for hydraulic damping.

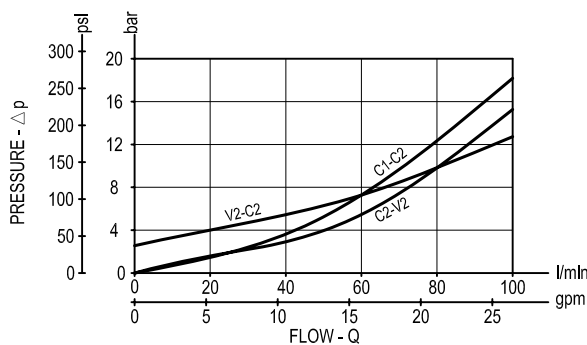
### Technical data

#### Hydraulic

|                    |             |                  |
|--------------------|-------------|------------------|
| Operating pressure | bar (psi)   | up to 210 (3000) |
| Max. flow          | l/min (gpm) | 100 (26)         |

Relief setting: at least 1.3 times the highest expected load.

### Performance

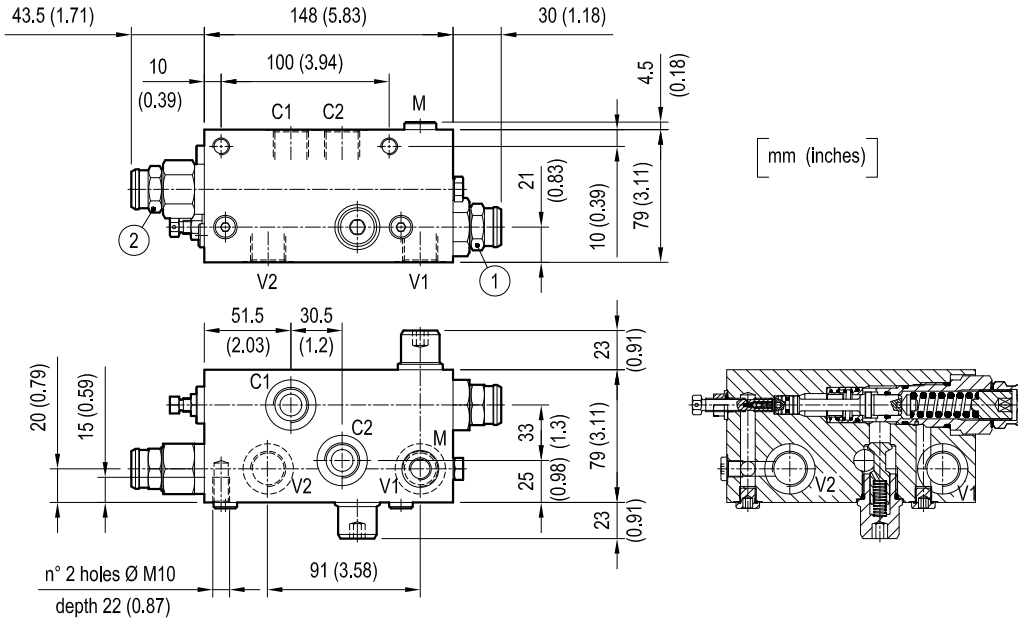


#### General

|  |                            |                                  |
|--|----------------------------|----------------------------------|
| 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)                   | 2.6 (5.7)                        |
| 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**

|          |   |   |   |
|----------|---|---|---|
| 05.44.13 | X | Y | Z |
|----------|---|---|---|

Dual counterbalance,  
with regenerative function

Pilot ratio

= 03 4:1

Port sizes

= 03 V1-V2 G 1/2 C1-C2 G 1/2 M G 1/4

**SPRINGS**

|      |         | Adj. pressure range<br>bar (psi) | Pres. increase<br>bar/turn<br>(psi/turn) | Std. setting<br>Q=5 (l/min.)<br>bar (psi) |
|------|---------|----------------------------------|--|---|
| = 35 | Valve 1 | 100-350<br>(1450-5000)           | 110<br>(1595)                            | 350<br>(5000)                             |
|      | Valve 2 | 100-350<br>(1450-5000)           | 110<br>(1595)                            | 350<br>(5000)                             |

Tamper resistant cap  
code 11.04.30.001  
R930005194



| Type            | Material number |
|-----------------|-----------------|
| 05441303033500E | R930001990      |
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| Type | Material number |
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