

# Dual cross over relief, direct acting

VSDI-80

05.16.01 - X - Y - Z

**RE 18308-19**

Edition: 03.2016

Replaces: 04.2010



### Technical data

Operating pressure	up to 210 bar (3000 psi)
Max. flow	80 l/min. (21 gpm)
Weight	1.63 kg (3.6 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.

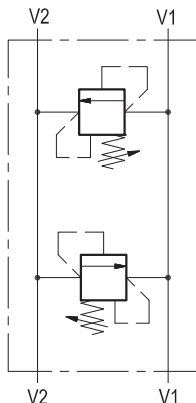
For relief cartridge details, see RE 18318-25 (VS-80 041105X99Z)  
Each cartridge can be individually pressure set. For best protection, the valve should be fitted as close to the actuator as possible.

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

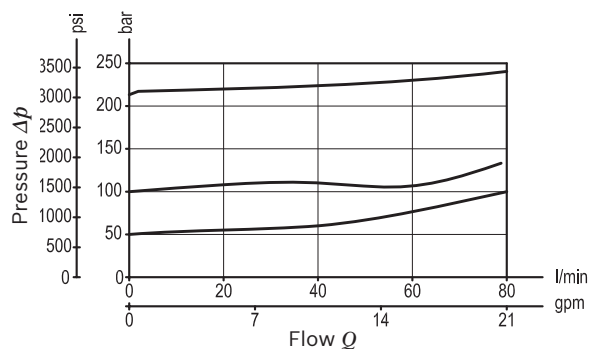
Note: for applications outside these parameters, please consult us.

### Description

It relieves the inlet pressure from either one of the supply lines and it protects motors or hydraulic actuators from shocks or pressure surges induced by changes in direction or by sudden stops. The dual relief is of the cross over type, and exhausted oil is transferred to the other line (from V1 into V2 and vice-versa), without the necessity of a separate tank line: this feature also prevents cavitation when used in conjunction with closed centre directional valve.



### Characteristic curve



**Ordering code**

<b>05.16.01</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
-----------------	----------	----------	----------

Dual cross over relief, direct acting

Adjustments

**03** Leakproof hex. socket screw



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

SPRINGS		
Adj. pressure range bar (psi)	Pres. increase bar/turn (psi/turn)	Std. setting Q=5 (l/min) bar (psi)
30-100 (435-1450)	12 (174)	100 (1450)
<b>80-250 (1160-3600)</b>	<b>27 (392)</b>	<b>200 (2900)</b>

Tamper resistant cap  
ordering code 11.04.23.003  
Mat. no. R930000754

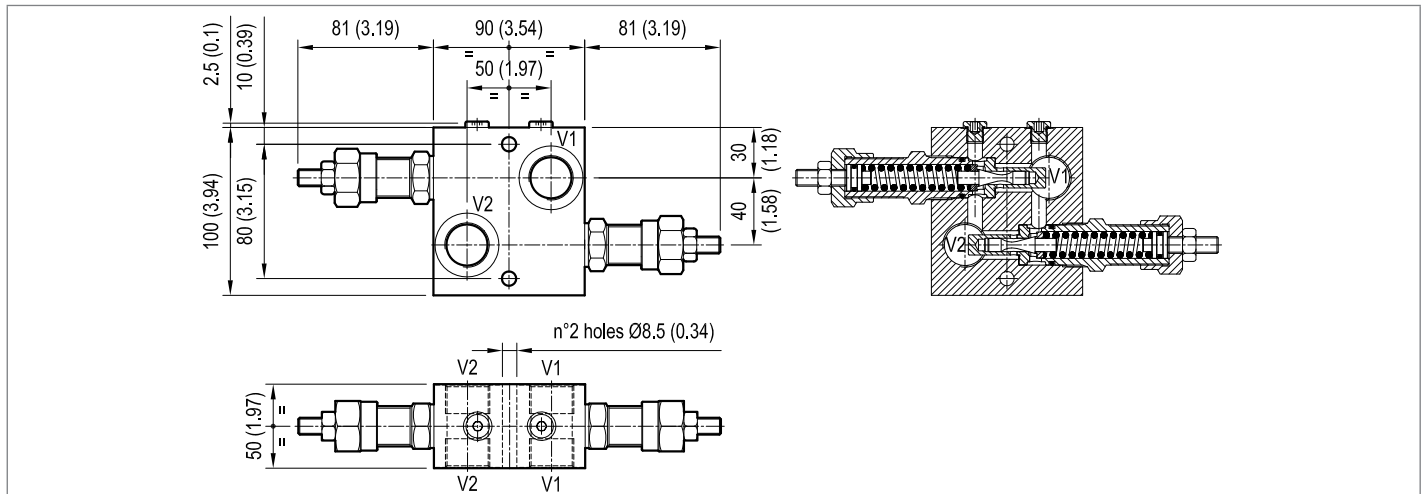


**Preferred types**

Type	Material number
051601030310000	R930001348
051601030320000	R930001349

Type	Material number
051601030410000	R930001959
<b>051601030420000</b>	<b>R930001350</b>

**Dimensions**



**Bosch Rexroth Oil Control S.p.A.**

Via Leonardo da Vinci 5  
P.O. Box no. 5  
41015 Nonantola - Modena, Italy  
Tel. +39 059 887 611  
Fax +39 059 547 848  
compact-hydraulics-pib@boschrexroth.com  
www.boschrexroth.com/compacthydraulics

© This document, as well as the data, specifications and other information set forth in it, are the exclusive property of Bosch Rexroth Oil Control S.p.a.. It may not be reproduced or given to third parties without its consent. The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging. Subject to change.