

# Dual cross over relief, direct acting with anti-cavitation check valves

VSDI-VA-80

05.16.05 - X - Y - Z

RE 18308-20

Edition: 03.2016

Replaces: 04.2010



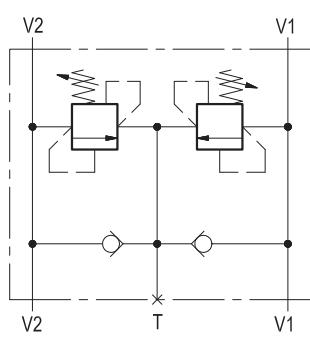
## Description

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) to prevent cavitation. An extra tank port (T), with 2 checks, allows to make up for any drain or exhausted flow and ensures that the motor is always full.

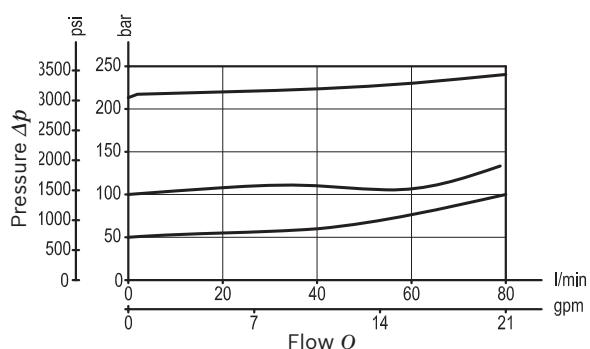
## Technical data

Operating pressure	up to 210 bar (3000 psi)
Max. flow	80 l/min. (21 gpm)
Weight	2.4 kg (5.3 lbs)
Manifold material	Aluminium
<p>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.</p>	
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.



## Characteristic curve



**Ordering code**

<b>05.16.05</b>	X	Y	Z
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Dual cross over relief, direct acting  
with anti-cavitation check valves

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)
<b>10</b> 30-100 (435-1450)	12 (174)	100 (1450)
<b>20</b> 80-250 (1160-3600)	27 (392)	200 (2900)

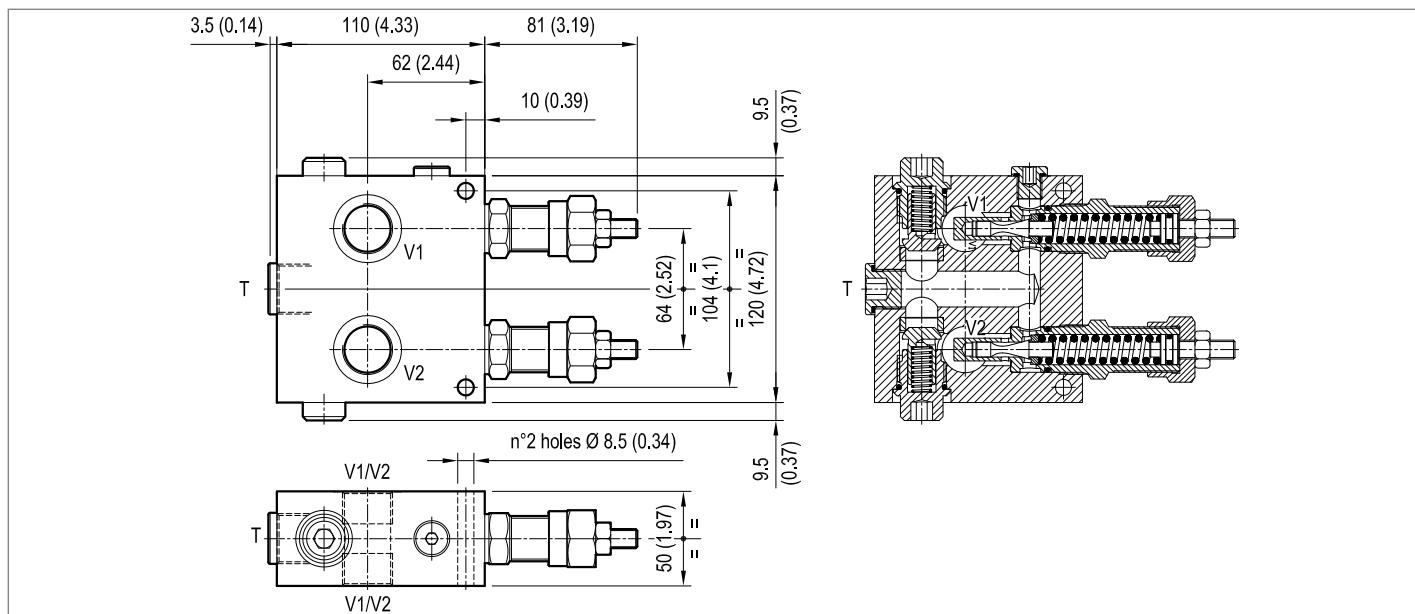
Tamper resistant cap  
ordering code 11.04.23.003

Mat. no. R930000754

**Preferred types**

Type	Material number
051605030310000	R930001368
051605030320000	R930001369

Type	Material number
051605030410000	R930001960
051605030420000	R930001370

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

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