

# Pilot operated check, dual

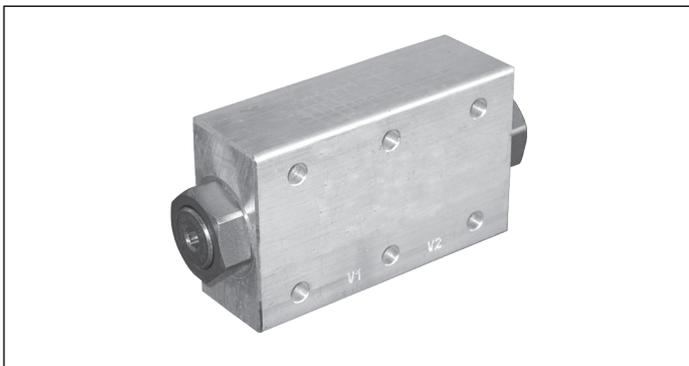
VSO-DE-FC2

05.53.44 - X - Y - Z

**RE 18307-19**

Edition: 09.2019

Replaces: 03.2016



## Technical data

Operating pressure	up to 210 bar (3000 psi)
Max. flow	30 l/min. (8 gpm)
Pilot ratio	7 : 1
Weight	0.9 kg (1.98 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.	
Flange kit code <sup>1)</sup>	E00000000000029 (R930001056)
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
The version with O-Ring and heavier spring is generally recommended.	

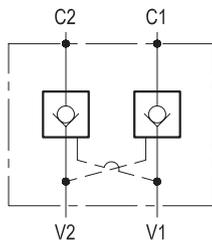
Note: for applications outside these parameters, please consult us.

<sup>1)</sup> Seal for 10 valves.

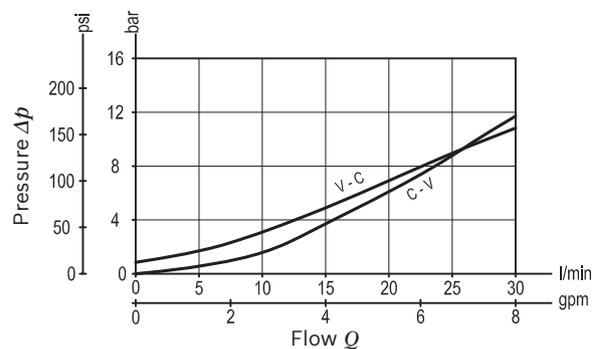
## Description

Flow is allowed to pass in one direction (V1 to C1 or V2 to C2), then the valve remains closed (checked) in both reverse directions (C1 to V1 or C2 to V2) in order to hold and lock in position the cylinder or other actuators; reverse flow is possible only when sufficient pilot pressure is applied at V2 or V1, which act as cross connected pilot ports, and the pilot piston lifts the poppet from its seat overcoming cylinder port pressure. For better safety and compact assembly, C1 and C2 ports are flanged (gasket mounted) directly on the actuator.

In case of valve application in redundancy systems it is especially recommended to use version with sealed pilot piston.



## Characteristic curve



**Ordering code**

<b>05.53.44</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
-----------------	----------	----------	----------

Pilot operated check, dual

O-Ring on pilot piston

**00** No O-Ring

**10** With O-Ring

SPRINGS	
Cracking pressure bar (psi)	
<b>00</b>	only for X=00 1 (15)
<b>01</b>	only for X=00 and X=10 4.5 (65)

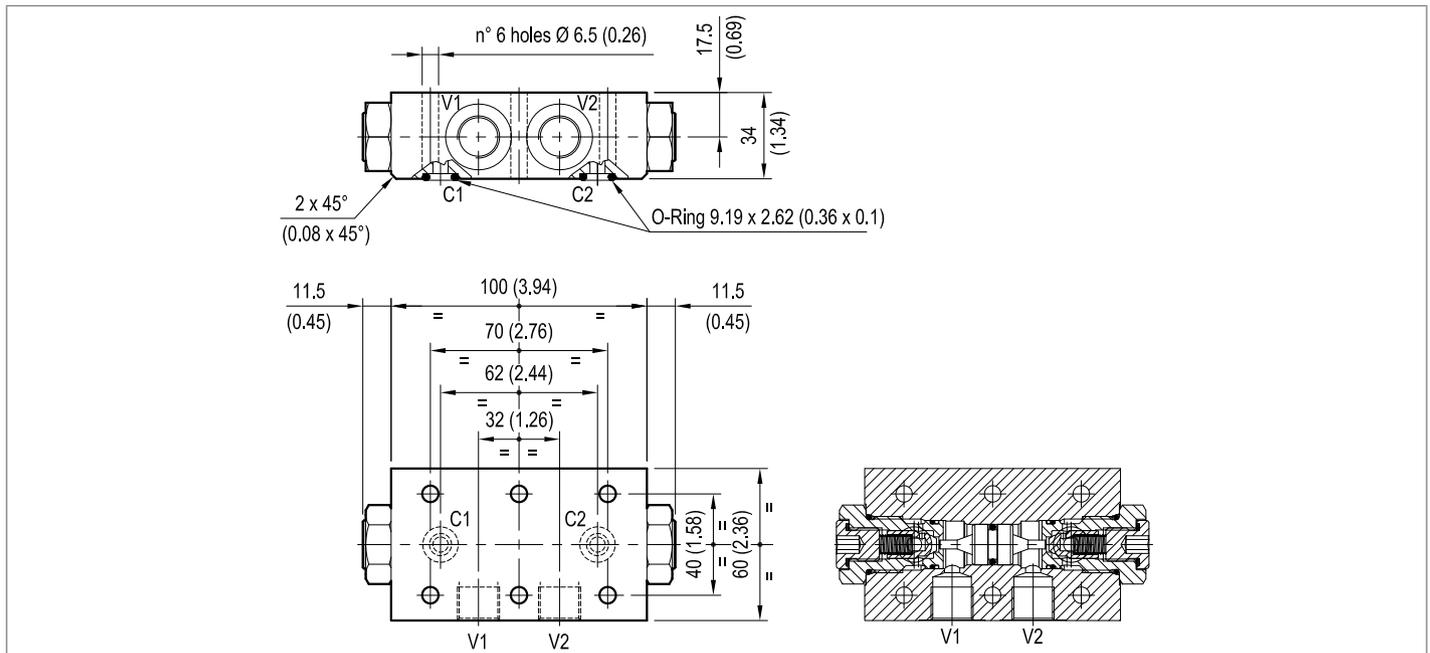
Port sizes	V1 - V2	C1 - C2	
<b>02</b>	G 3/8	∅ 6 (0.24)	

**Preferred types**

Type	Material number
055344000200000	R930002457
055344000201000	R930002459

Type	Material number
055344100201000	R930002461

**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.