

Pilot operated check, dual

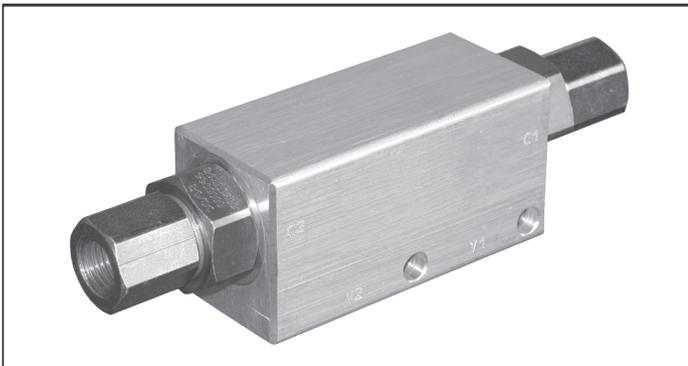
VSO-DE-DL

05.53.03 - X - 09 - Z

RE 18307-21

Edition: 09.2019

Replaces: 03.2016



Technical data

Max operating pressure port C2-C1	350 bar (5000 psi)
Max operating pressure port V2-V1	210 bar (3000 psi)
Max. flow	20 l/min. (5 gpm)
Weight	0.7 kg (1.5 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.

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 ² /s (cSt)
Recommended degree of fluid contamination	Class 19/17/14 according to ISO 4406
Other technical data	see data sheet 18350-50

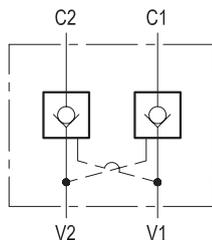
The version with O-Ring and heavier spring is generally recommended.

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

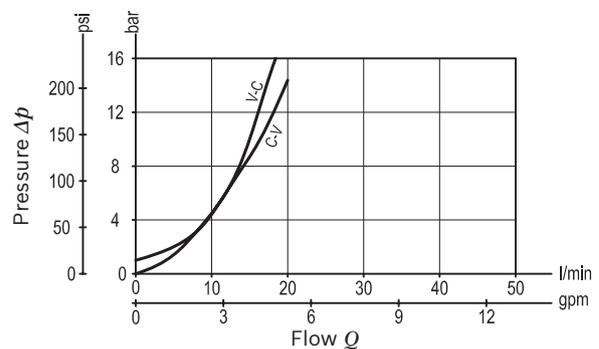
Description

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.

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



Characteristic curve



Ordering code

05.53.03	X	09	Z
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O-Ring on pilot piston	Pilot ratio
00 No O-Ring	4 : 1
10 With O-Ring	4 : 1
37 No O-Ring	9 : 1

Port sizes	V1 - V2	C1 - C2	
09	G 1/4	G 1/4	

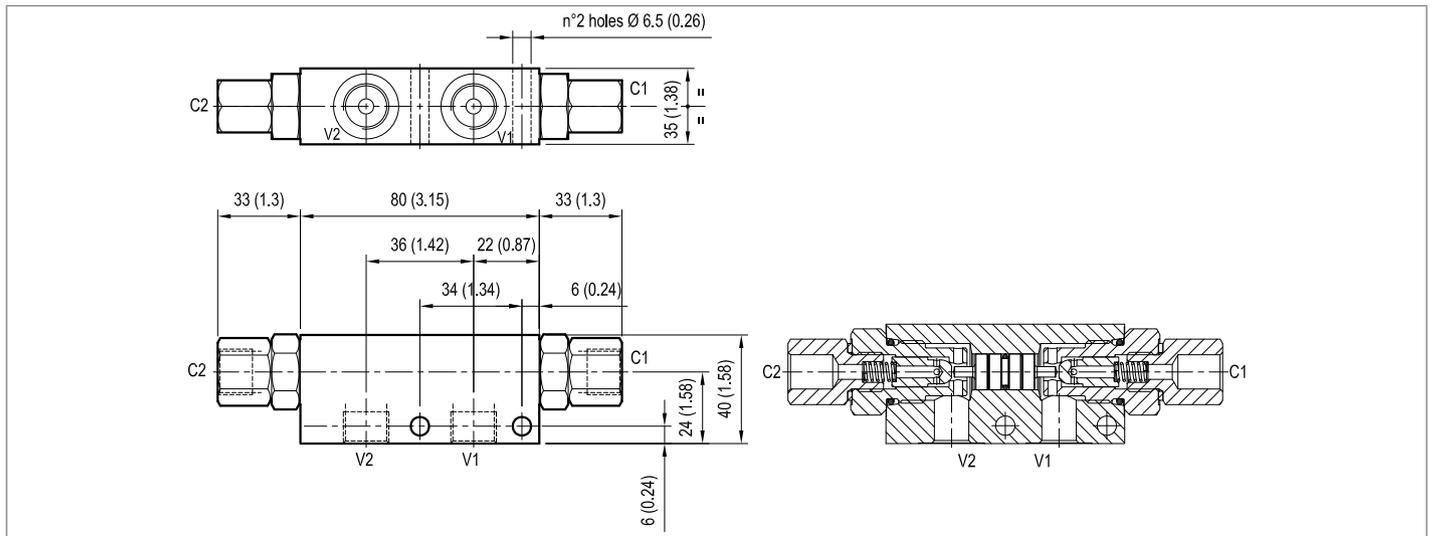
SPRINGS	
Cracking pressure bar (psi)	
00	only for X=00 and X=37 3 (44)
01	only for X=00, X=10 and X=37 8 (116)

Preferred types

Type	Material number
055303000900000	R930002424
055303370900000	R930002437
055303100901000	R930002433

Type	Material number
055303370901000	R930002438
055303000901000	R930002425

Dimensions



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