

Part number:

Motion control valves



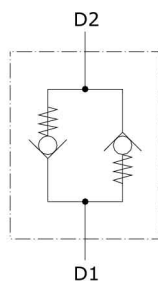
**Type VBD-VBD/VP
check valves**

- Double acting

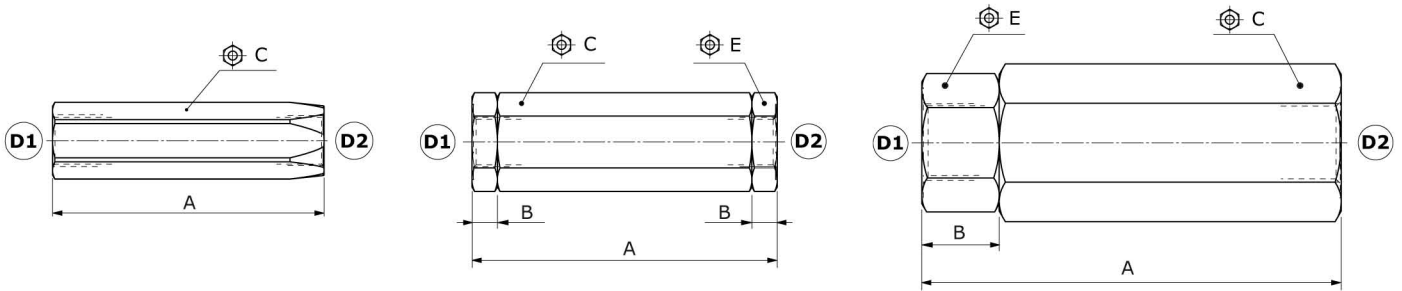
Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C (104°F) temperature.

	VBD/VP 38	VBD 38	VBD 12	VBD 34
Nominal flow	20 l/min (5.2 US gpm)	40 l/min (10.5 US gpm)	60 l/min (15.8 US gpm)	90 l/min (23.8 US gpm)
Max. pressure	350 bar (5100 psi)			
Oil leakage	0.5 cm ³ /min (0.030 in ³ /min) at 210 bar (3050 psi): at 75% of pressure setting			
Fluid	mineral based oil			
Viscosity	from 10 to 200 cSt			
Max. level of contamination	18/16/13 ISO4406			
Fluid temperature	with NBR seals: from -20°C (-4°F) to 80°C (176°F)			
Environmental temp. for working conditions	from -40°C (-40°F) to 100°C (212°F)			
Weight	Steel 0.21 kg (0.46 lb)	0.46 kg (1.01 lb)	0.54 kg (1.19 lb)	1.51 kg (3.33 lb)

NOTE - For different conditions, please contact Walvoil Sales Dpt.



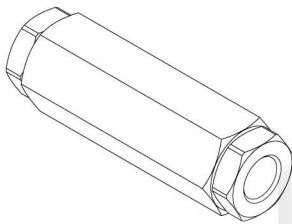
Dimensions



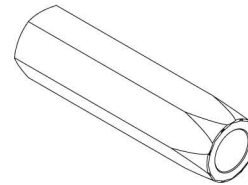
Valve type	All ports	Valve type	A	B	⌀C	⌀E
VBD 38/VP	G 3/8	VBD 38/VP	87-3.43	/	22	/
VBD 38	G 3/8	VBD 38	102-4.02	8.5-0.335	30	27
VBD 12	G 1/2	VBD 12	129-5.08	22-0.87	30	27
VBD 34	G 3/4	VBD 34	141-5.55	26-1.02	46	46
Valve type	All ports	Valve type	A	B	⌀C	⌀E
VBD 38/VP/SAE	SAE8	VBD 38/VP/SAE	87-3.43	/	22	/
VBD 38/SAE	SAE8	VBD 38/SAE	102-4.02	8.5-0.335	30	27

Ordering codes and description composition

Port size
VBD 38/Pa0.5-8
 Opening pressure (bar)



Port size
VBD/VP 38/Pa0.5-15
 Opening pressure (bar)



VBD complete valves

TYPE	CODE	DESCRIPTION
VBD 38/Pa0.5-8	1313020100	Steel body, opening pressure 0.5 bar (7.25 psi) and 8 bar (116 psi), G3/8 ports
VBD 12/Pa0.5-8	1313030100	Steel body, opening pressure 0.5 bar (7.25 psi) and 8 bar (116 psi), G1/2 ports
VBD 34/Pa0.5-8	1313040100	Steel body, opening pressure 0.5 bar (7.25 psi) and 8 bar (116 psi), G3/4 ports
VBD 38/Pa0.5-8/SAE	1313020100	Steel body, opening pressure 0.5 bar (7.25 psi) and 8 bar (116 psi), G3/8 ports

For configurations with special opening pressure or SAE threads please contact our Sales Dpt.

VBD/VP complete valves

TYPE	CODE	DESCRIPTION
Only G3/8 port configuration		
VBD/VP 38/Pa0.5-15	1313020902	Steel body, opening pressure 0.5 bar (7.25 psi) and 15 bar (217 psi)
VBD/VP 38/Pa0.5-20	1313020907	Steel body, opening pressure 0.5 bar (7.25 psi) and 20 bar (290 psi)
VBD/VP 38/Pa0.5-40	1313020900	Steel body, opening pressure 0.5 bar (7.25 psi) and 40 bar (580 psi)
VBD/VP 38/Pa0.5-60	1313020905	Steel body, opening pressure 0.5 bar (7.25 psi) and 60 bar (870 psi)
VBD/VP 38/Pa0.5-80	1313020901	Steel body, opening pressure 0.5 bar (7.25 psi) and 80 bar (1160 psi)

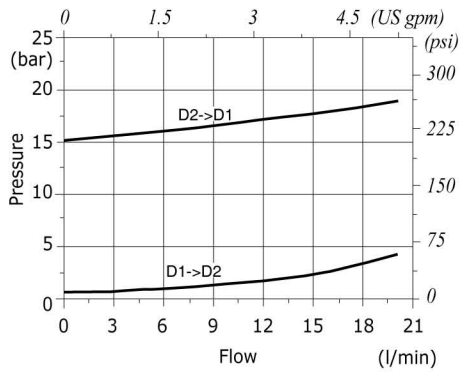
SAE8 port configuration

VBD/VP 38/Pa0.5-40/SAE	1313020909	Steel body, opening pressure 0.5 bar (7.25 psi) and 40 bar (580 psi)
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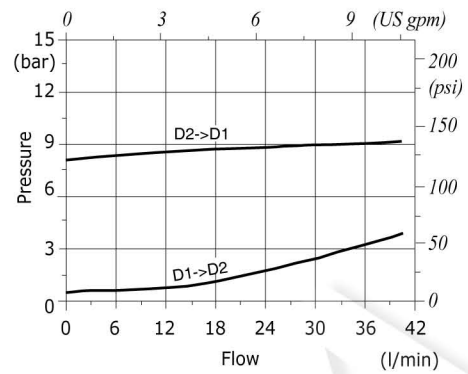
VBD/VP 38 pressure drop vs. flow

Opening pressure 0.5 bar (7.25 psi) and 15 bar (217 psi)



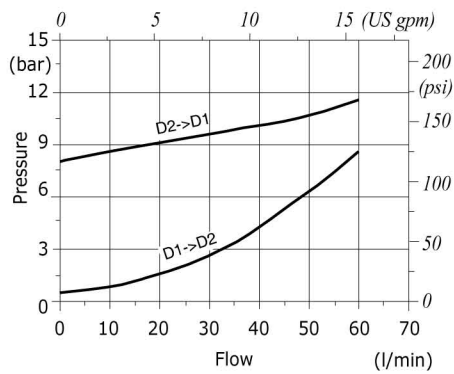
VBD 38 pressure drop vs. flow

Opening pressure 0.5 bar (7.25 psi) and 8 bar (116 psi)



VBD 12 pressure drop vs. flow

Opening pressure 0.5 bar (7.25 psi) and 8 bar (116 psi)



VBD 34 pressure drop vs. flow

Opening pressure 0.5 bar (7.25 psi) and 8 bar (116 psi)

