



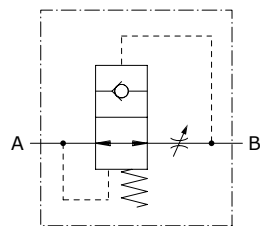
## Type VB check valves

- Hose burst valve
- Automatic stop for sudden flow increase

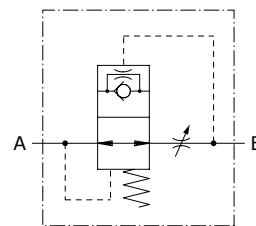
Technical specifications and diagrams are measured with mineral oil ISO VG32 at 40°C (104°F) temperature.

	VB 14	VB 38	VB 12	VB 34	VB 100	
Max. flow	30 l/min (7.9 US gpm)	45 l/min (11.9 US gpm)	65 l/min (17.2 US gpm)	170 l/min (44.9 US gpm)	225 l/min (59.4 US gpm)	
Max. pressure	350 bar (5100 psi)					
Fluid	mineral based oil					
Viscosity	10-200 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	0.01 kg (0.022 lb)	0.015 kg (0.033 lb)	0.025 kg (0.055 lb)	0.045 kg (0.099 lb)	0.098 kg (0.22 lb)

**NOTES - Replace the valve after each operation.** For different conditions, please contact Walvoil Sales Dpt.



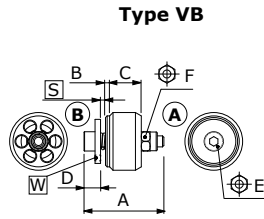
### With metering hole



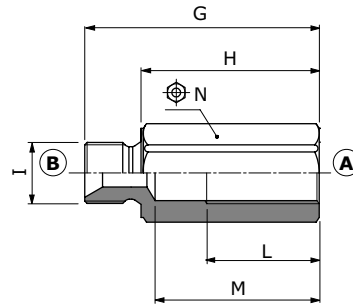
NOTE - For valve with optional calibration hole, please contact our Sales Dpt.

### Dimension

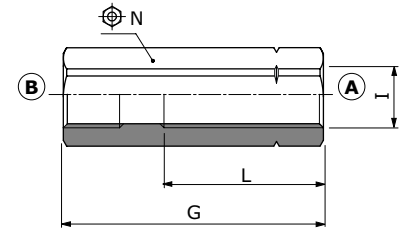
Valve type	All ports
<b>VB 14</b>	G 1/4
<b>VB 38</b>	G 3/8
<b>VB 12</b>	G 1/2
<b>VB 34</b>	G 3/4
<b>VB 100</b>	G 1



Housing type VB/M



Housing type VB/F



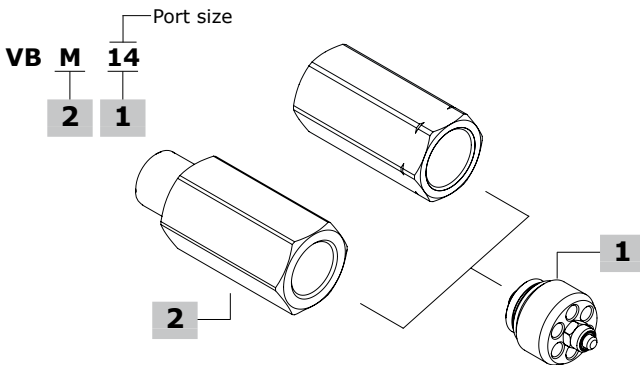
Dimensions are in mm-in

Valve type	A	B	C	D	⌀E	⌀F
<b>VB 14</b>	19 0.75	1 0.039	7 0.27	5 0.2	5.5	2.5
<b>VB 38</b>	23 0.9	1.5 0.059	9.5 0.37	5 0.2	5.5	2.5
<b>VB 12</b>	29 1.14	1.5 0.059	11.5 0.45	6 0.23	7	3
<b>VB 34</b>	34 1.34	2.5 0.098	15.5 0.61	6 0.23	7	3
<b>VB 100</b>	40 1.57	1.5 0.059	18.5 0.73	8.5 0.33	8	4

Housing type	G	H	I	L	M	⌀N	
<b>M</b>	<b>01</b>	50 - 1.97	38 - 1.50	G 1/4	23 - 0.9	31 - 1.22	19
	<b>02</b>	60 - 2.36	48 - 1.89	G 3/8	30 - 1.18	43 - 1.69	22
	<b>03</b>	63 - 2.48	49 - 1.93	G 1/2	33 - 1.30	45 - 1.77	27
	<b>04</b>	75 - 2.95	59 - 2.32	G 3/4	36 - 1.42	50 - 1.97	32
	<b>05</b>	88 - 3.46	70 - 2.75	G 1	46 - 1.81	60 - 2.36	41
<b>F</b>	<b>01</b>	50 - 1.97	-	G 1/4	20 - 0.79	-	19
	<b>02</b>	58 - 2.28	-	G 3/8	27 - 1.06	-	22
	<b>03</b>	60 - 2.36	-	G 1/2	33 - 1.30	-	27
	<b>04</b>	76 - 2.99	-	G 3/4	36 - 1.42	-	32
	<b>05</b>	85 - 3.35	-	G 1	46 - 1.81	-	41

NOTE - The setting of **S** is recommended to be 1.5 - 2 times the maximum descent flow  
W= optional calibration hole

### Ordering codes and description composition



#### VB complete valves

Cartridge with steel housing

TYPE	CODE	DESCRIPTION
<b>VB/M 14 S=1</b>	1431210100	Male-female G1/4 ports
<b>VB/F 14 S=1</b>	1431110100	Female-female G1/4 ports
<b>VB/M 38 S=1,5</b>	1431220100	Male-female G3/8 ports
<b>VB/F 38 S=1,5</b>	1431120100	Female-female G3/8 ports
<b>VB/M 12 S=1,8</b>	1431230100	Male-female G1/2 ports
<b>VB/F 12 S=1,8</b>	1431130100	Female-female G1/2 ports
<b>VB/M 34 S=2,2</b>	1431240100	Male-female G3/4 ports
<b>VB/F 34 S=2,2</b>	1431140100	Female-female G3/4 ports
<b>VB/M 100 S=2,6</b>	1431250100	Male-female G1 ports
<b>VB/F 100 S=2,6</b>	1431150100	Female-female G1 ports

For different configurations, SAE thread and valve with optional calibration hole, please contact our Sales Dpt.

#### 1 Cartridge

TYPE	CODE	DESCRIPTION
<b>VB 14 S=1</b>	1431010100	G1/4, "S" standard setting 1, standard flow rate 18.5 l/min (4.89 US gpm)
<b>VB 38 S=1,5</b>	1431020100	G3/8, "S" standard setting 1.5, standard flow rate 35.5 l/min (9.38 US gpm)
<b>VB 12 S=1,8</b>	1431030100	G1/2, "S" standard setting 1.9, standard flow rate 60 l/min (15.85 US gpm)
<b>VB 34 S=2,2</b>	1431040100	G3/4, "S" standard setting 2.2, standard flow rate 149 l/min (39.36 US gpm)
<b>VB 100 S=2,6</b>	1431050100	G1, "S" standard setting 2.6, standard flow rate 190 l/min (50.19 US gpm)

For different configurations or SAE thread please contact our Sales Dpt.

#### 2 Housing

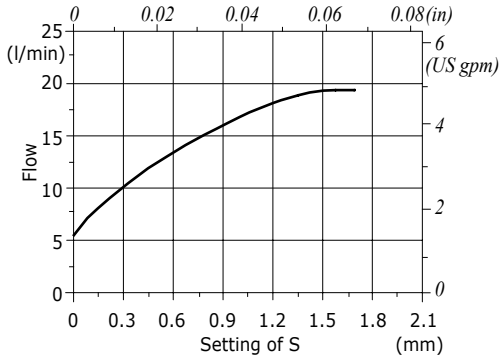
M-F (male-female) or F-F (female-female) steel housing

TYPE	CODE	DESCR.	TYPE	CODE	DESCR.
<b>MF14</b>	CMFVUBA01	G1/4, M-F	<b>MF04</b>	CMFVUBA04	G3/4, M-F
<b>FF14</b>	CFFVUBA-VSC01	G1/4, F-F	<b>FF04</b>	CFFVUBA04	G3/4, F-F
<b>MF02</b>	CMFVUBA02	G3/8, M-F	<b>MF05</b>	CMFVUBA05	G1, M-F
<b>FF02</b>	CFFVUBA02	G3/8, F-F	<b>FF05</b>	CFFVUBA04	G1, F-F
<b>MF03</b>	CMFVUBA03	G1/2, M-F			
<b>FF03</b>	CFFVUBA03	G1/2, F-F			

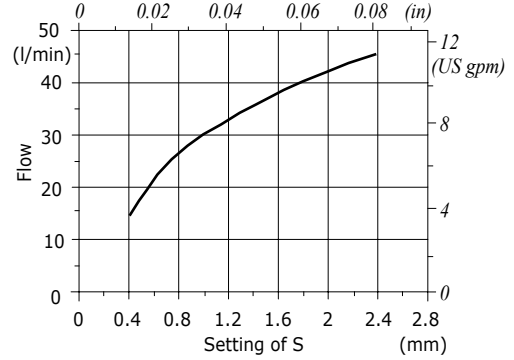
**Rating diagrams**

The diagrams represent nominal values measured by the manufacturer (with  $\pm 10\%$  tolerance) which must be adapted to the customer's actual working conditions; please contact Walvoil Sales Dpt.

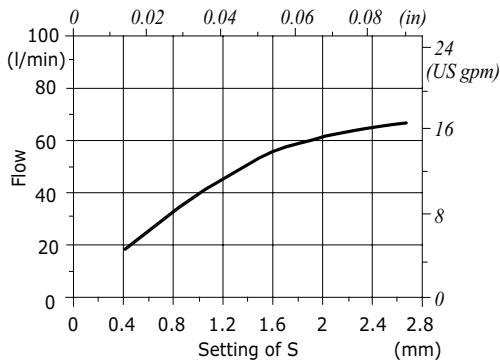
**VB G 1/4 flow vs. setting of S**



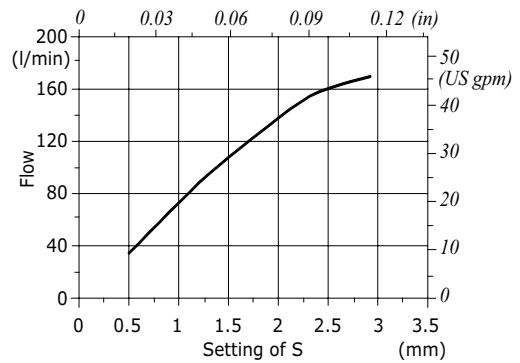
**VB G 3/8 flow vs. setting of S**



**VB G 1/2 flow vs. setting of S**



**VB G 3/4 flow vs. setting of S**



**VB G 1 flow vs. quote S**

