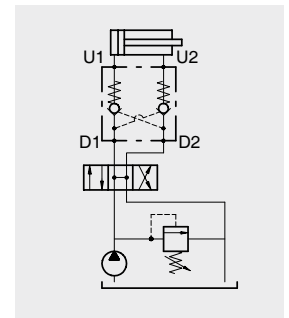


Operation

These valves allows oil flow from D1(D2) to U1 (U2) and stops it in the opposite way (from U1/U2 to D1/D2). Free oil flow from U1/U2 to D1/D2 is strictly possible when the pilot pressure in the opposite way is strong enough to open the valve poppet. To assert the minimum opening pressure divide the value of pressure in U1/U2 by the pilot ratio. To provide best valve performance from U1/U2 to D1/D2 make sure that no backpressure arises in D1/D2.



Performance

Body Valves

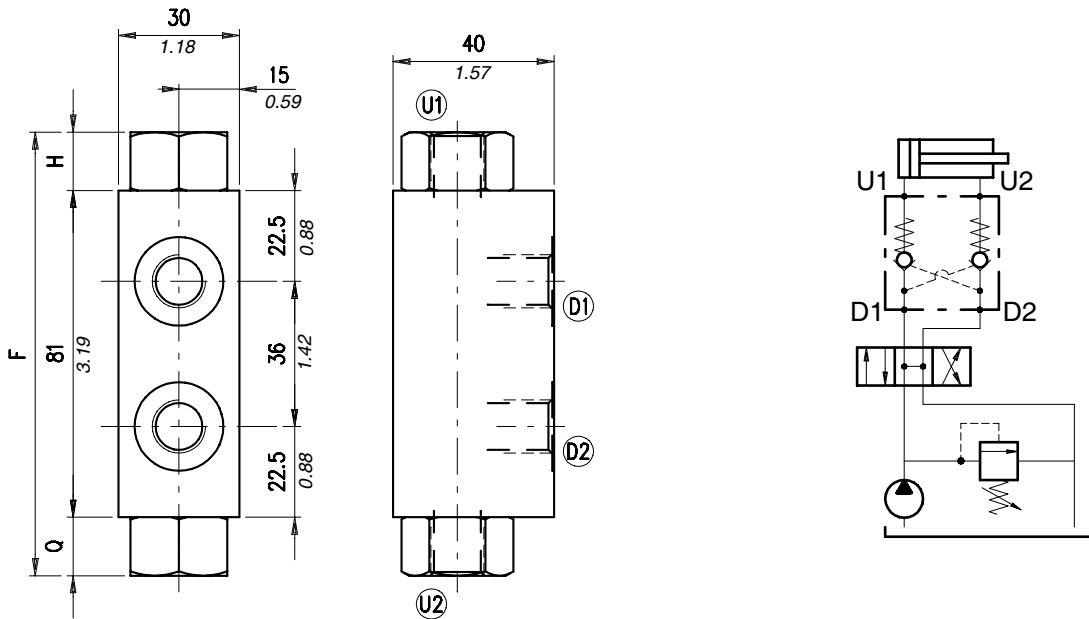
Type VBPDF-VBPDF	Maximum flow		Maximum pressure	Oil leaks from U1(U2) to D1(D2)	Pilot ratio	Weight		Cartridge valve
	l/min	US gpm				kg	lb	
VBPDF 14 (VP38)	(14) 15 (VP38) 25	4 6.6	210 bar -3050 psi (aluminium body) 350 bar -5100 psi (steel body)	0,10 cm <sup>3</sup> /min -61x10 <sup>-4</sup> in <sup>3</sup> /min. (2 drops) at 210 bar	1:4,5 <sup>1</sup> 1:3 <sup>2</sup>	(14) 0,40 (aluminium) 0,73 (steel) (VP38) 0,40 (aluminium) 0,74 (steel)	0.881 1.609 0.881 1.63	
VBPDF 38 (12)	(38) 35 (12) 50	9.2 13		0,25 cm <sup>3</sup> /min -15x10 <sup>-3</sup> in <sup>3</sup> /min. (5 drops) at 210 bar	1:4 <sup>1</sup> 1:6,3 <sup>2</sup> 1:7,5 <sup>2</sup>	(38) 0,78 (aluminium) 1,45 (steel) (12) 0,81 (aluminium) 1,45 (steel)	1.72 3.20 1.79 3.20	
VBPDF /XC 38 (12)	(38) 35 (12) 50	9.2 13		0,25 cm <sup>3</sup> /min -15x10 <sup>-3</sup> in <sup>3</sup> /min. (5 drops) at 210 bar	1:4 <sup>1</sup> 1:6,3 <sup>2</sup>	(38) 0,8 (aluminium) 1,1 (steel) (12) 0,62 (aluminium) 1,1 (steel)	1.76 2.43 1.37 2.43	
VBPDF 34	100	26		0,25 cm <sup>3</sup> /min -15x10 <sup>-3</sup> in <sup>3</sup> /min. (5 drops) at 210 bar	1:4,3	2,14 (aluminium) 4,30 (steel)	4.72 1.95	
VBPDF/T 38	25	6.6		0,10 cm <sup>3</sup> /min -61x10 <sup>-4</sup> in <sup>3</sup> /min. (2 drops) at 210 bar	1:4,5 <sup>1</sup> 1:3 <sup>2</sup>	0,63 (aluminium) 1,41 (steel)	1.39 3.10	see VUI 38 page 107
VBPDF/T 12	50	13		0,10 cm <sup>3</sup> /min -61x10 <sup>-4</sup> in <sup>3</sup> /min. (2 drops) at 210 bar	1:4 <sup>1</sup> 1:6,3 <sup>2</sup> 1:7,5 <sup>2</sup>	0,87 (aluminium) 1,824 (steel)	1.92 4.02	see VUI 12 page 108
VBPDF/T 34	100	26		0,10 cm <sup>3</sup> /min -61x10 <sup>-4</sup> in <sup>3</sup> /min. (2 drops) at 210 bar	1:4,3	2,30 (aluminium) 5,23 (steel)	5.07 11.53	see VUI 34 page 109
VBPDF/T 14 (VP38)/ SO	(14) 15 (VP38) 25	4 6.6		0,10 cm <sup>3</sup> /min -61x10 <sup>-4</sup> in <sup>3</sup> /min. (2 drops) at 210 bar	1:4,5 <sup>1</sup> 1:2,5 <sup>2</sup>	(14) 0,46 (aluminium) 0,76 (steel) (12) 0,46 (aluminium) 0,80 (steel)	1.01 1.67 1.01 1.76	
VBPDF 38/VG (12)/SO	(38/VG) 35 (12) 50	9.2 13		0,25 cm <sup>3</sup> /min -15x10 <sup>-3</sup> in <sup>3</sup> /min. (5 drops) at 210 bar	1:4 <sup>1</sup> 1:6,3 <sup>2</sup> 1:7,5 <sup>2</sup>	(38/VG) 0,80 (alumi- nium) 1,47 (steel) (12) 0,82 (aluminium) 1,49 (steel)	1.76 3.24 1.81 3.28	
VBPDF 14	15	4		0,10 cm <sup>3</sup> /min -61x10 <sup>-4</sup> in <sup>3</sup> /min. (2 drops) at 210 bar	1:4,5 <sup>1</sup> 1:2,5 <sup>2</sup>	0,47 (aluminium) 0,95 (steel)	1.04 2.09	see VUI 38 page 107
VBPDF 38 (12)	(38) 35 (12) 50	9.2 13		0,25 cm <sup>3</sup> /min -15x10 <sup>-3</sup> in <sup>3</sup> /min. (5 drops) at 210 bar	1:4 <sup>1</sup> 1:6,3 <sup>2</sup> 1:7,5 <sup>2</sup>	(38) 0,85 (aluminium) 1,82 (steel) (12) 0,85 (aluminium) 1,82 (steel)	1.87 2.61 1.87 2.61	see VUI 12 page 108
VBPDF 34	100	26		0,25 cm <sup>3</sup> /min -15x10 <sup>-3</sup> in <sup>3</sup> /min. (5 drops) at 210 bar	1:4,3	2,28 (aluminium) 5,10 (steel)	5.026 11.24	see VUI 34 page 109

<sup>1</sup> standard version <sup>2</sup> on request

# Type VBPDL 14 (VP38)

Pilot operated check valve,  
double acting, face mounting

## Dimensions and hydraulic circuit

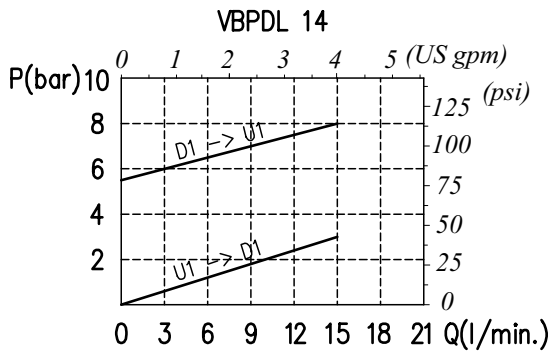


VBPDL	D1-D2	U1-U2	F	H	Q
14	G 1/4	G 1/4	110 - 4.33	14.5 - 0.57	14.5 - 0.57
VP 38	G 3/8	G 3/8	120 - 4.72	19.5 - 0.77	19.5 - 0.77

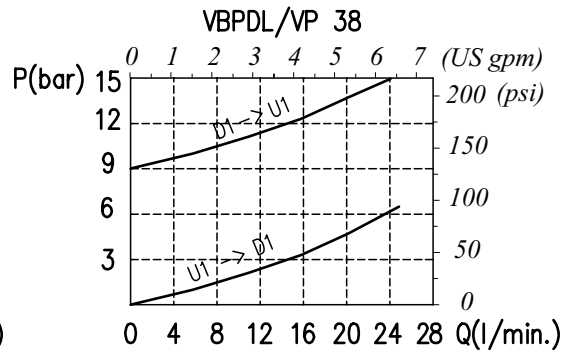
dimensions are in mm-in

## Rating diagrams

Typical pressure drop vs. flow characteristic

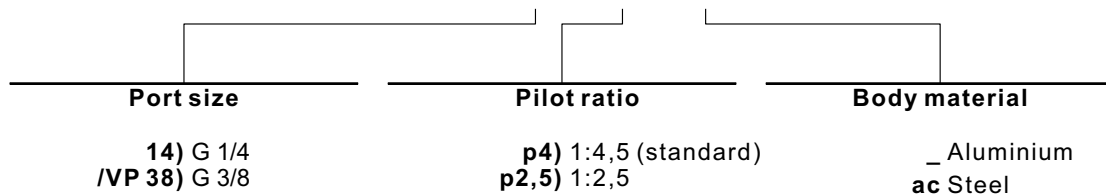


Typical pressure drop vs. flow characteristic

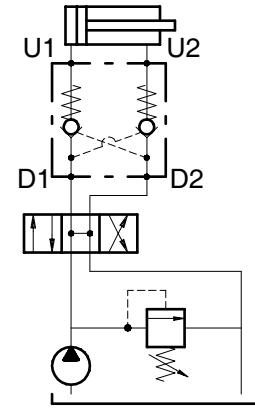
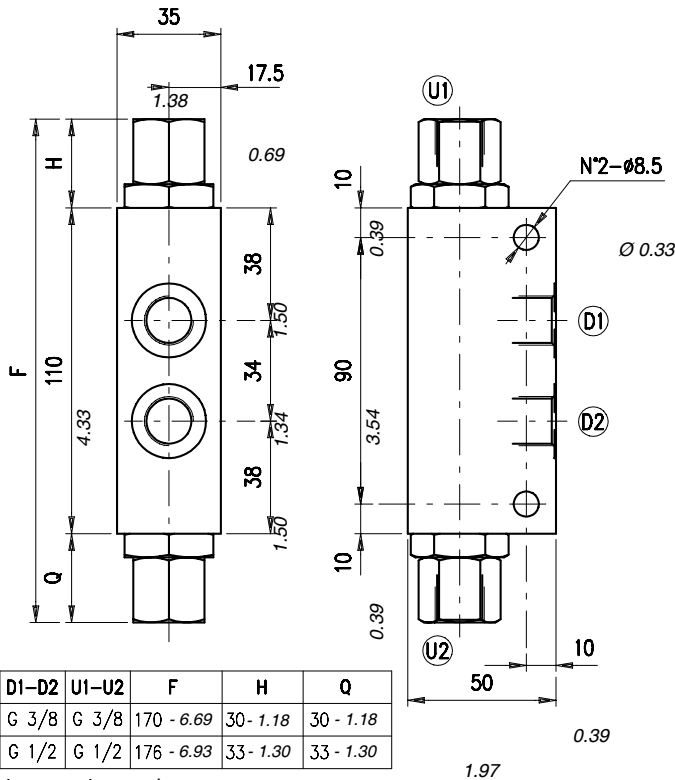


## Order code

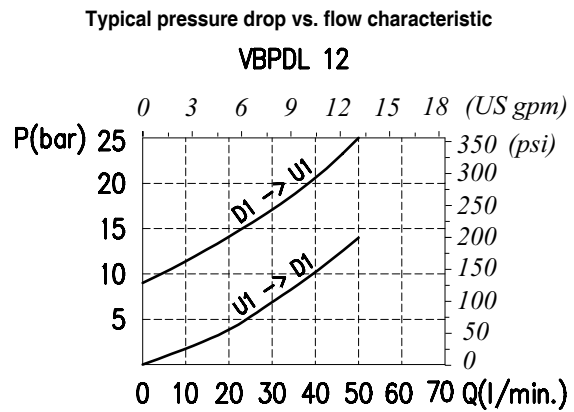
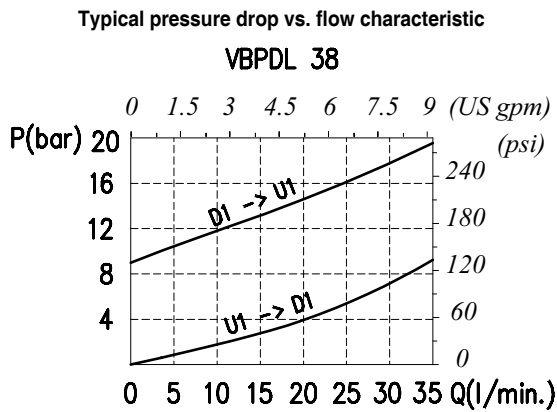
VBPDL □□ / □□ / □□



**Dimensions and hydraulic circuit**



**Rating diagrams**



**Order code**

**VBPDL □□ / □□ / □□**

