



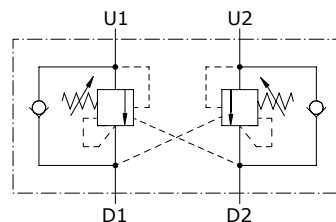
Type VODL counterbalance valves

- Double acting
- Load sensitive

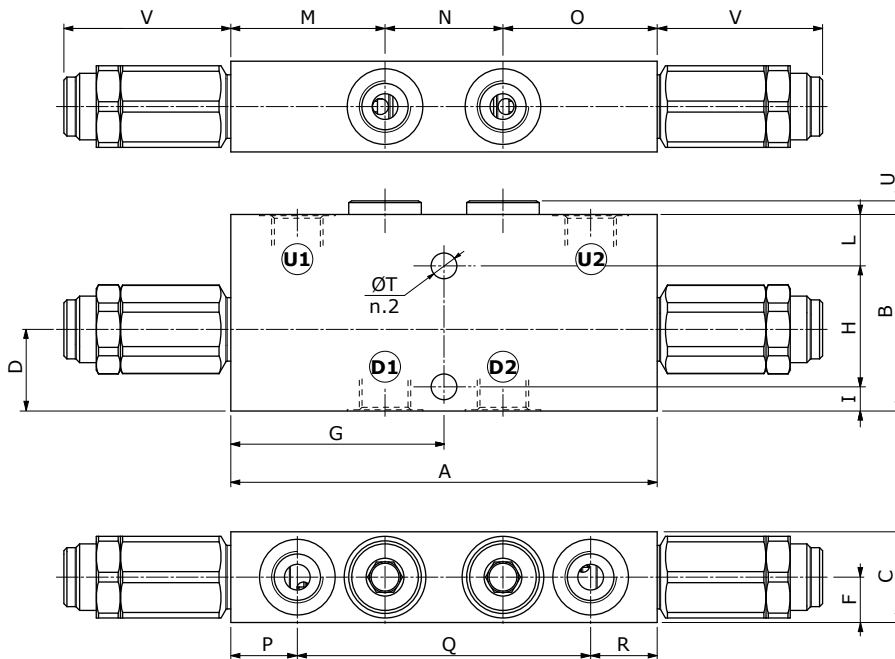
Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C (104°F) temperature.

	VODL 38	VODL 12	VODL 34	VODL 100	
Nominal flow	35 l/min (9.2 US gpm)	70 l/min (18.5 US gpm)	100 l/min (26.4 US gpm)	180 l/min (47.6 US gpm)	
Max. pressure	Aluminium body = 210 bar (3050 psi) Steel body = 350 bar (5100 psi)				
Oil leakage	0.25 cm ³ /min - 0.015 in ³ /min. (5 drops) at 210 bar - 3050 psi at 80% 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	aluminium	1.32 kg (2.91 lb)	1.69 kg (3.73 lb)	2.92 kg (6.44 lb)	4.75 kg (10.47 lb)
	steel	2.39 kg (5.27 lb)	2.95 kg (6.50 lb)	5.13 kg (11.31 lb)	9.60 kg (21.16 lb)

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



Dimensions



Valve type	D1	D2	U1	U2
VODL 38	G3/8	G3/8		
VODL 12	G1/2	G1/2		
VODL 34	G3/4	G3/4		
VODL 100	G1"	G1"		

Dimensions are in mm-in

Valve type	A	B	C	F	G	H	I	L	M	N	O	P	Q	R	ØT	U	V
VODL 38	141	65	30	15	70.5	40	8	17	51	39	51	22	97	22	8.5	4.5	55
	5.55	2.56	1.18	0.59	2.76	1.57	0.315	0.67	2.01	1.54	2.01	0.87	3.82	0.87	0.335	0.177	2.17
VODL 12	149	70	34.5	17.25	74.5	48	8	14	50.5	48	50.5	21.5	106	21.5	8.5	4.5	50.5
	5.87	2.76	1.36	0.68	2.93	1.89	0.315	0.551	1.99	1.89	1.99	0.85	4.17	0.85	0.335	0.177	1.99
VODL 34	184	90	40	20	92	70	10	10	65	54	65	30	124	30	10.5	5.5	61
	7.25	3.54	1.57	0.79	3.62	2.76	0.394	0.394	2.56	2.13	2.56	1.18	4.88	1.18	0.413	0.217	2.40
VODL 100	218	100	60	30	109	80	10	10	76	66	76	30	158	30	10.5	12.5	61
	8.58	3.94	2.36	1.18	4.29	3.15	0.394	0.394	2.99	2.60	2.99	1.18	6.22	1.18	0.413	0.492	2.40

Ordering codes

VODL complete valves

TYPE: **VODL 38/TR.S.p4** CODE: 1550021102

DESCRIPTION: Aluminium body, G3/8 ports, pilot ratio 1:4, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL 12/TR.S.p7** CODE: 1550031102

DESCRIPTION: Aluminium body, G1/2 ports, pilot ratio 1:7, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL 34/TR.S.p7** CODE: 155041102

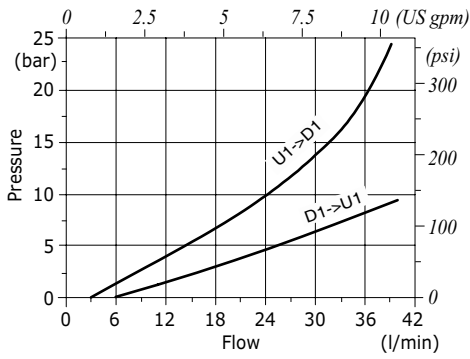
DESCRIPTION: Aluminium body, G3/4 ports, pilot ratio 1:7, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL 100/TR.S.p7** CODE: 1550051102

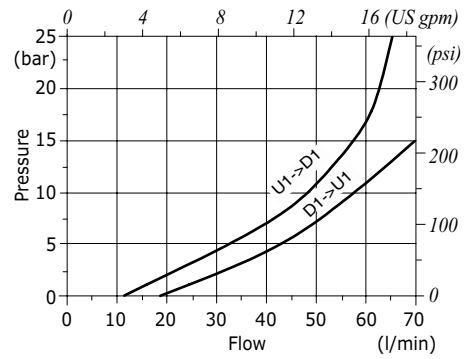
DESCRIPTION: Aluminium body, G1" ports, pilot ratio 1:7, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

For other configurations, SAE thread and steel body, please contact our Sales Dept.

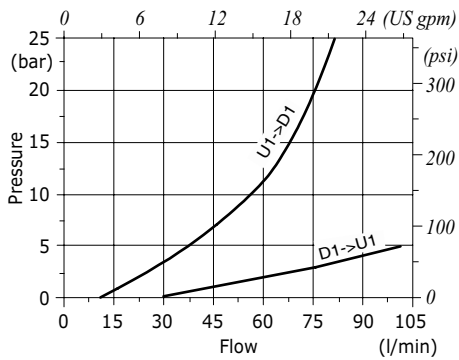
VODL 38 pressure drop vs. flow from D1->U1 and U1->D1



VODL 12 pressure drop vs. flow from D1->U1 and U1->D1



VODL 34 pressure drop vs. flow from D1->U1 and U1->D1



VODL 100 pressure drop vs. flow from D1->U1 and U1->D1

