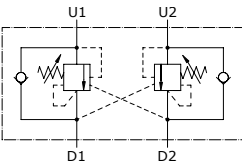


Type VODL counterbalance valves

- Double acting
- Load sensitive

VODL 38/TR.S.p4

Type	Selection 1	Selection 2	Nominal flow	Max. pressure	ports	weight
			l/min(US gpm)	bar(psi)		Kg(lb)
VODL 38	TR.S	p4/p7	35(9.2)	210(3050)	All G3/8	1.32(2.91)
VODL 38 ac			35(9.2)	350(5100)	All G3/8	2.39(5.27)
VODL 12			70(18.5)	210(3050)	All G1/2	1.69(3.73)
VODL 12 ac			70(18.5)	350(5100)	All G1/2	2.95(6.50)
VODL 34			100(26.4)	210(3050)	All G3/4	2.92(6.44)
VODL 34 ac			100(26.4)	350(5100)	All G3/4	5.13(11.31)
VODL 100			180(47.6)	210(3050)	All G1"	4.75(10.47)
VODL 100 ac			180(47.6)	350(5100)	All G1"	9.60(21.16)

Hydraulic diagram	Type	Execution	Operation/ Features	Max. flow up to		Max.press. up to	
				l/min	US gpm	bar	psi
	VODL	double acting	load sensitive	180	47.6	210 alum. body 350 steel body	3050 alum. body 5100 steel body

Ordering codes and description

Selection 1

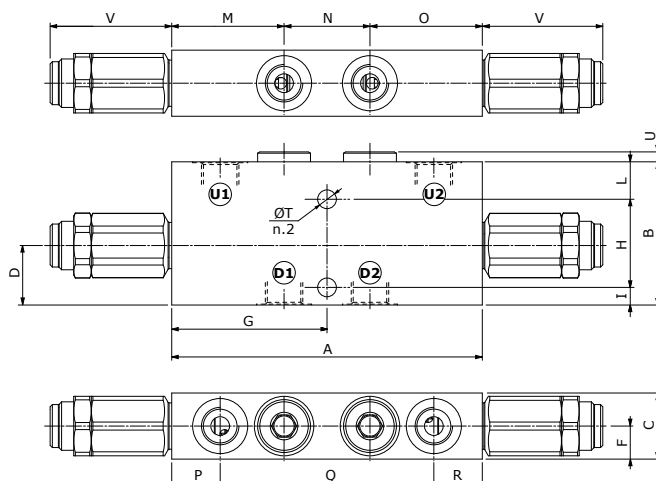
TYPE	DESCRIPTION
TR.S	range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Selection 2

TYPE	DESCRIPTION
p4	pilot ratio 1:4
p7	pilot ratio 1:7

VODL

Dimensions

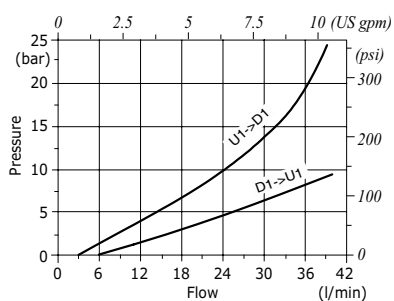


Dimensions are in mm-in

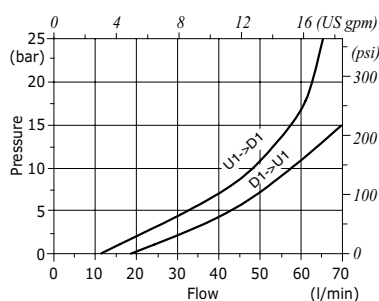
Valve type	A	B	C	F	G	H	I	L	M	N	O	P	Q	R	ØT	U	V
VODL 38	141 5.55	65 2.56	30 1.18	15 0.59	70.5 2.76	40 1.57	8 0.315	17 0.67	51 2.01	39 1.54	51 2.01	22 0.87	97 3.82	22 0.87	8.5 0.335	4.5 0.177	55 2.17
VODL 12	149 5.87	70 2.76	34.5 1.36	17.25 0.68	74.5 2.93	48 1.89	8 0.315	14 0.551	50.5 1.99	48 1.89	50.5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

Rating diagrams

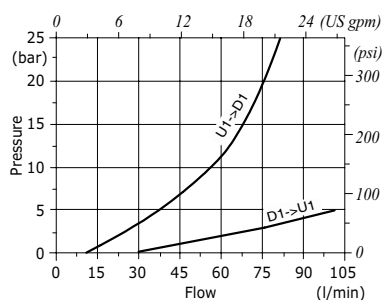
**VODL 38 pressure drop vs. flow
from D1->U1 and U1->D1**



**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**

