

Part number:

HYDROMA

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SYSTEMS**

UKŁADY HYDRAULICZNE

HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

Counterbalance valves

Hydraulic diagram	Type	Execution	Operation/ Features	Max. flow up to		Max. press. up to		Page
				l/min	US gpm	bar	psi	
	VODL/N1516/CS	double acting	load sensitive	160	42.3	400 steel body	5800 steel body	45
	VODL/V1516/CS	double acting	vented	160	42.3	400 steel body	5800 steel body	45
	VOSL	single acting	load sensitive	180	47.6	210 alum. body 350 steel body	3050 alum. body 5100 steel body	51
	VOSL/CC	single acting	relief compensated	180	47.6	210 alum. body 350 steel body	3050 alum. body 5100 steel body	55
	VOSL/SC	single acting		180	47.6	210 alum. body 350 steel body	3050 alum. body 5100 steel body	59
	VOSL/SC/CC	single acting		180	47.6	210 alum. body 350 steel body	3050 alum. body 5100 steel body	63
	VOSLP	single acting	with external pilot	180	47.6	210 alum. body 350 steel body	3050 alum. body 5100 steel body	67
	VOSLP/CC	single acting	relief compensated, with external pilot	180	47.6	210 alum. body 350 steel body	3050 alum. body 5100 steel body	71
	VOSLP/SC	single acting	load sensitive, with external pilot	180	47.6	210 alum. body 350 steel body	3050 alum. body 5100 steel body	75
	VOSLP/SC/RO	single acting	load sensitive, with external pilot, bolt connection	180	47.6	210 alum. body 350 steel body	3050 alum. body 5100 steel body	79
	VOSLP/SC/CC	single acting	relief compensated, with external pilot	180	47.6	210 alum. body 350 steel body	3050 alum. body 5100 steel body	83
	VOSL/ML	single acting	load sensitive, CETOP flange connection	70	18.5	210 alum. body 350 steel body	3050 alum. body 5100 steel body	87



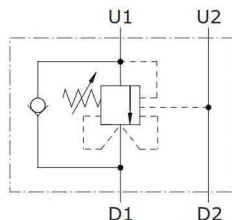
Type VOSL/SC/CC counterbalance valves

- Single acting

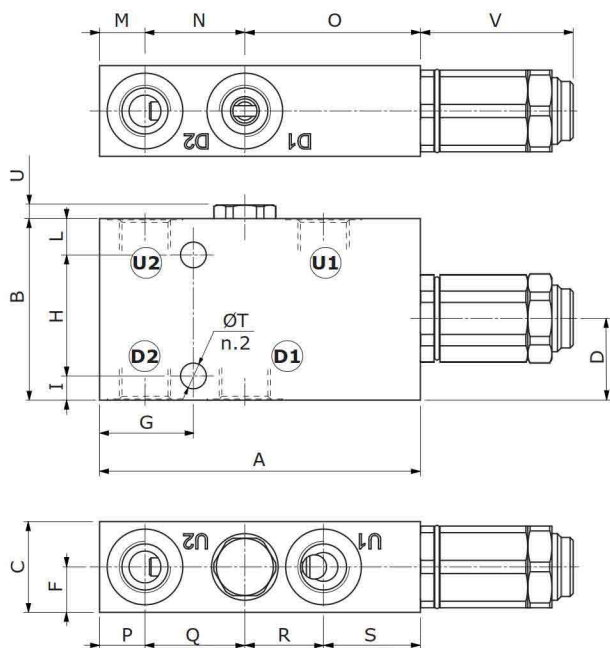
Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C (104°F) temperature.

	VOSL/SC/CC 38	VOSL/SC/CC 12	VOSL/SC/CC 34	VOSL/SC/CC 100	
Nominal flow	40 l/min (10.6 US gpm)	75 l/min (19.8 US gpm)	120 l/min (31.7 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	0.83 kg (1.83 lb)	1.11 kg (2.45 lb)	1.53 kg (3.37 lb)	3.18 kg (7.01 lb)
	steel	1.56 kg (3.44 lb)	2.32 kg (5.11 lb)	3.39 kg (7.47 lb)	7.69 kg (16.9 lb)

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



Dimensions



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

Dimensions are in mm-in

Valve type	A	B	C	D	F	G	H	I	L	M	N	O	P	Q	R	S	ØT	U	V
VOSL/SC 38/CC	106	60	30	27	15	31	40	8	12	15	33	58	15	33	26	32	8.5	4.5	51
	4.17	2.36	1.18	1.06	0.89	1.22	1.57	0.315	0.472	0.59	1.30	2.28	0.59	1.30	1.02	1.26	0.335	0.177	2.01
VOSL/SC/CC 12	116	70	35	31	17.5	36	48	8	14	16	40	60	16	40	28	32	8.5	4.5	51
	4.57	2.76	1.38	1.22	0.69	1.42	1.89	0.315	0.55	0.63	1.57	2.36	0.63	1.57	1.10	1.26	0.335	0.177	2.01
VOSL/SC/CC 34	136	90	40	36	20	44	70	10	10	20	48	68	20	48	34	34	10.5	5.5	51
	5.35	3.54	1.57	1.42	0.79	1.73	2.76	0.394	0.394	0.79	1.89	2.68	0.79	1.89	1.34	1.34	0.413	0.217	2.01
VOSL/SC/CC 100	185	100	60	38	30	62	80	10	10	32	70	83	32	70	48	35	10.5	12.5	51
	7.28	3.94	2.36	1.50	1.18	2.44	3.15	0.394	0.394	1.26	2.76	3.27	1.26	2.76	1.89	1.38	0.413	0.492	2.01

Ordering codes

VOSL/SC/CC complete valves

TYPE: **VOSL/SC/CC 38/TR.S.p4.PG** CODE: 1525021102

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: **VOSL/SC/CC 12/TR.S.p7.PG** CODE: 1525031102

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: **VOSL/SC/CC 34/TR.S.p7.PG** CODE: 1525041102

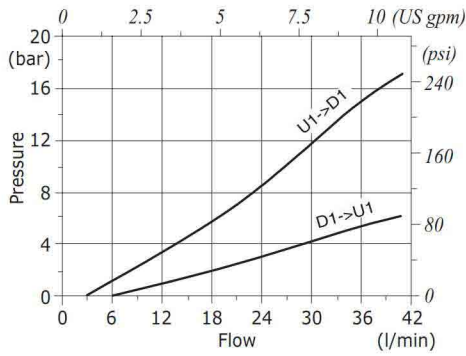
DESCRIPTION: Aluminium body, G3/4 ports, pilot ratio 1:7, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VOSL/SC/CC 100/TR.S.p7.PG** CODE: 1525051102

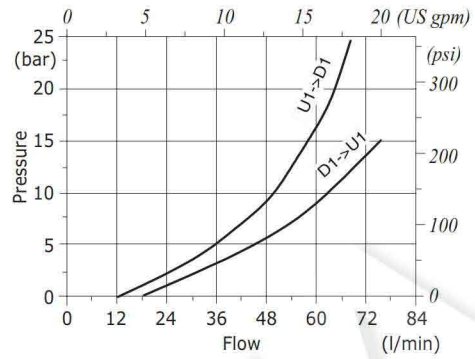
DESCRIPTION: Aluminium body, G1" ports, pilot ratio 1:7, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Note: for further configurations and steel body ask to Sales Dept.

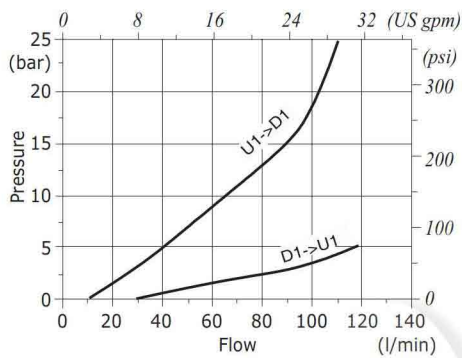
VOSL/SC 38 pressure drop vs. flow from D1->U1 and U1->D1



VOSL/SC 12 pressure drop vs. flow from D1->U1 and U1->D1



VOSL/SC 34 pressure drop vs. flow from D1->U1 and U1->D1



VOSL/SC 100 pressure drop vs. flow from D1->U1 and U1->D1

