



Type VODL/N1116 - VODL/R1116 counterbalance valves

- Double acting
- Load Sensitive (type N)
- Relief Compensated (type R)

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

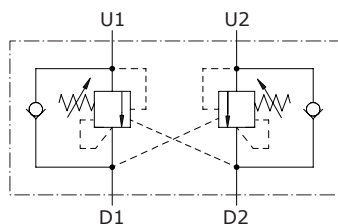
VODL/N1116 (38-12) - VODL/R1116 (38-12)

Nominal flow	60 l/min (15.9 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
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)

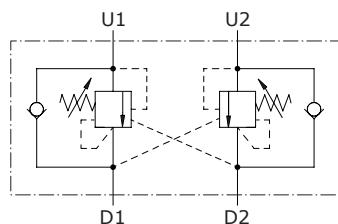
Weight	aluminium	VODL/N1116/38: 0.91 kg (2.01 lb) - VODL/N1116/12: 1.13 kg (2.49 lb)
	steel	VODL/R1116/38: 1.06 kg (2.34 lb) - VODL/R1116/12: 1.29 kg (2.84 lb)
		VODL/N1116/38: 1.91 kg (4.21 lb) - VODL/N1116/12: 2.55 kg (5.62 lb)
		VODL/R1116/38: 2.06 kg (4.54 lb) - VODL/R1116/12: 2.69 kg (5.93 lb)

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

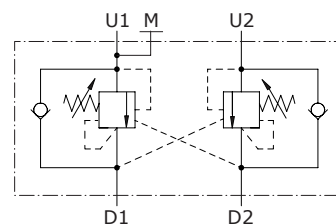
VODL/N1116
VODL/N1116/F2



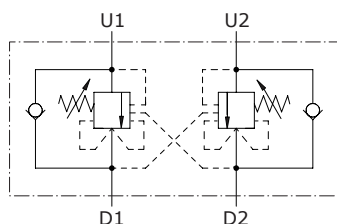
VODL/N1116/PB



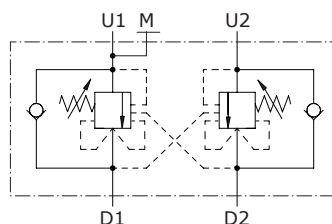
VODL/N1116/F1



VODL/R1116
VODL/R1116/F2

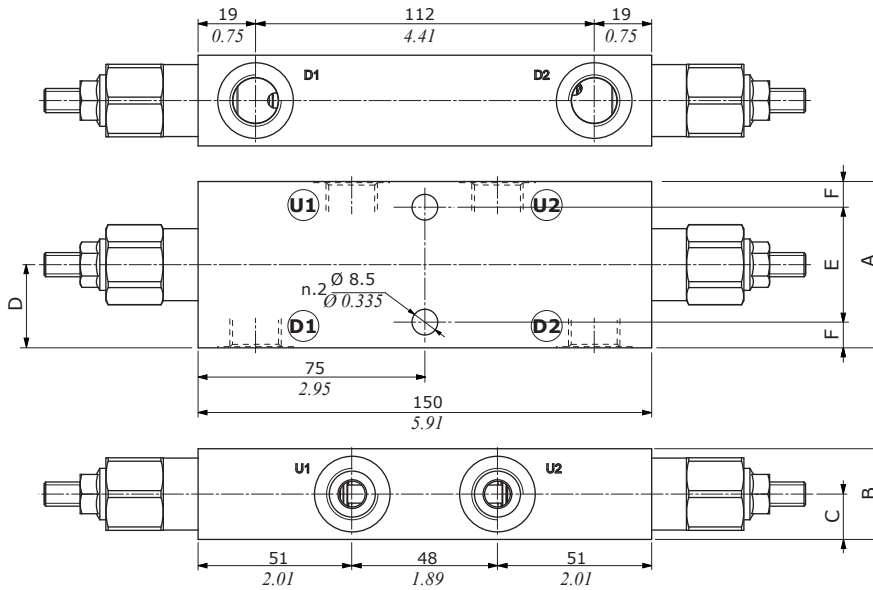


VODL/R1116/F1

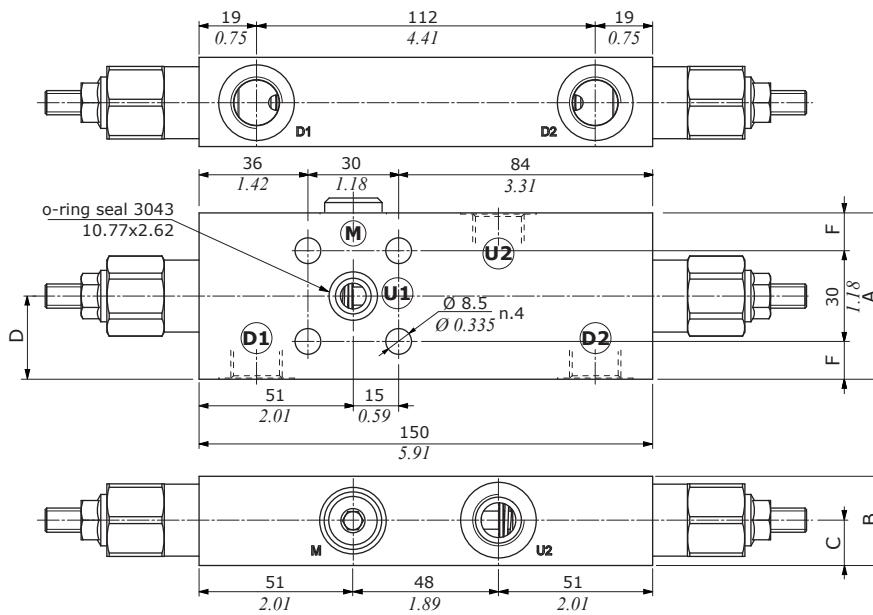


Dimensions

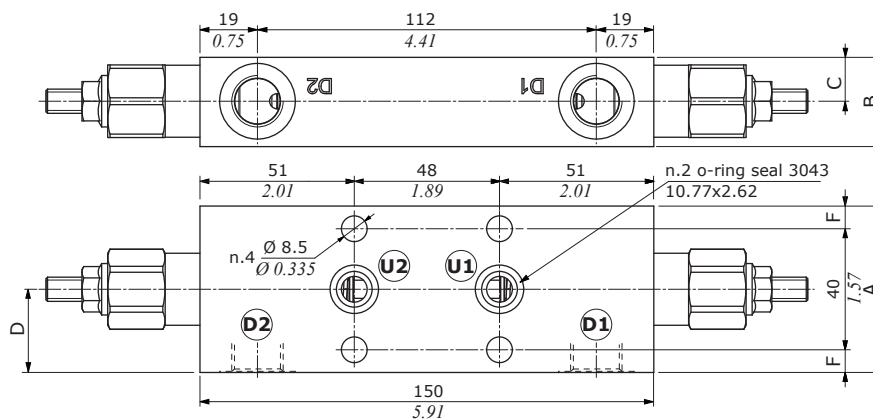
VODL/...1116/38 - VODL/...1116/12

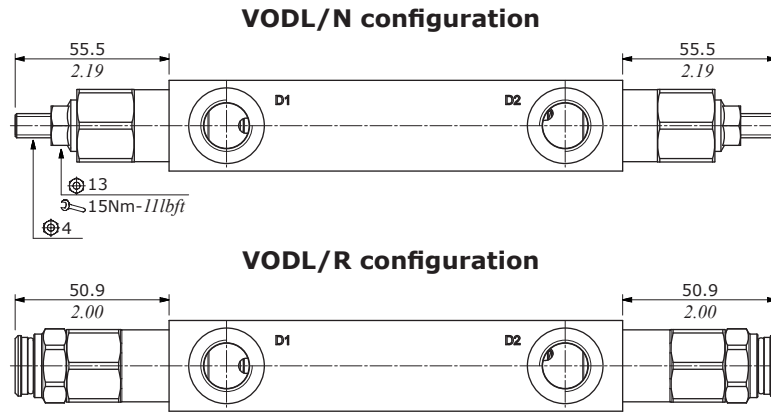


VODL/...1116/38F1 - VODL/...1116/12F1



VODL/...1116/38F2 - VODL/...1116/12F2





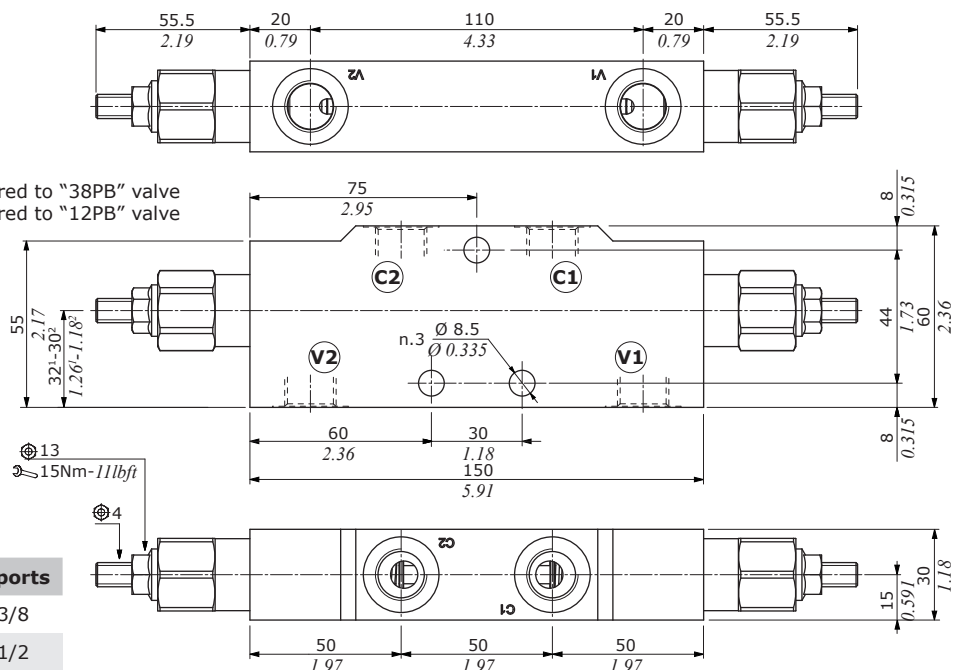
Valve type	D1	D2	U1	U2	M
VODL/...1116/38	G3/8	G3/8	G3/8	G3/8	-
VODL/...1116/12	G1/2	G1/2	G1/2	G1/2	-
VODL/...1116/38F1	G3/8	G3/8	Ø8.5 - Ø0.335	G3/8	G1/4
VODL/...1116/12F1	G1/2	G1/2	Ø8.5 - Ø0.335	G1/2	G1/4
VODL/...1116/38F2	G3/8	G3/8	Ø8.5 - Ø0.335	Ø8.5 - Ø0.335	-
VODL/...1116/12F2	G1/2	G1/2	Ø8.5 - Ø0.335	Ø8.5 - Ø0.335	-

Dimensions are in mm-in

Valve type	A	B	C	D	E	F	G
VODL/...1116/38	55	30	15	27.5	38	8.5	8.5
VODL/...1116/S8	2.17	1.18	0.59	1.08	1.50	0.334	0.334
VODL/...1116/12	65	35	17.5	32.5	43	11	11
VODL/...1116/S10	2.26	1.38	0.69	1.28	1.69	0.433	0.433
VODL/...1116/38F1	55	29.5	15	27.5	30	7.5	7.5
VODL/...1116/s8F1	2.17	1.16	0.59	1.08	1.18	0.295	0.295
VODL/...1116/12F1	65	34.5	17	32.5	30	17.5	17.5
VODL/...1116/S10F1	2.26	1.36	0.67	1.28	1.18	0.69	0.69
VODL/...1116/38F2	55	29.5	14.5	27.5	40	7.5	7.5
VODL/...1116/S8F2	2.17	1.16	0.57	1.08	1.57	0.295	0.295
VODL/...1116/12F2	65	34.5	17	32.5	40	12.5	12.5
VODL/...1116/S10F2	2.26	1.36	0.67	1.28	1.57	0.49	0.49

Valve type	D1	D2	U1	U2	M
VODL/...1116/S8	SAE8	SAE8	SAE8	SAE8	-
VODL/...1116/S10	SAE10	SAE10	SAE10	SAE10	-
VODL/...1116/S8F1	SAE8	SAE8	Ø8.5 - Ø0.335	SAE8	G1/4
VODL/...1116/S10F1	SAE10	SAE10	Ø8.5 - Ø0.335	SAE10	G1/4
VODL/...1116/S8F2	SAE8	SAE8	Ø8.5 - Ø0.335	Ø8.5 - Ø0.335	-
VODL/...1116/S10F2	SAE10	SAE10	Ø8.5 - Ø0.335	Ø8.5 - Ø0.335	-

VODL/N1116/38PB - VODL/N1116/12PB

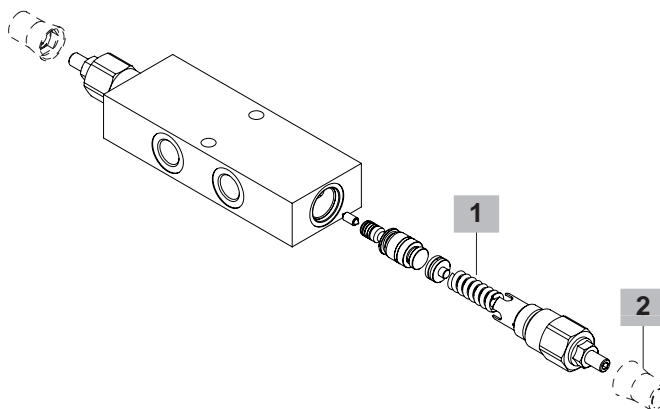
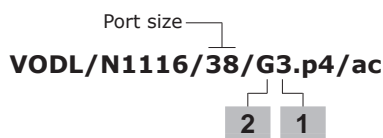


NOTES

- (1): dimension referred to "38PB" valve
- (2): dimension referred to "12PB" valve

Valve type	All ports
VODL/N1116/38PB	G3/8
VODL/N1116/12PB	G1/2

Ordering codes and description composition



VODL/N1116 complete valves

Load sensitive (N) configuration with G3/8 thread

Pilot ratio 1:4

TYPE: **VODL/N1116/38/G3.p4/ac** CODE: 1554322103
DESCRIPTION: Steel body, range 5-210 bar (72.5-3050 psi), std setting 150 bar (2175 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/N1116/38/G5.p4/ac** CODE: 1554322100
DESCRIPTION: Steel body, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/N1116/38/G5.p4** CODE: 1554321100
DESCRIPTION: Aluminium body, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Pilot ratio 1:8

TYPE: **VODL/N1116/38/G5.p8/ac** CODE: 1554322106
DESCRIPTION: Steel body, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Zero differential pilot ratio

TYPE: **VODL/N1116/38/G3.p0/ac** CODE: 1554322108
DESCRIPTION: Steel body, range 5-210 bar (72.5-3050 psi), std setting 150 bar (2175 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/N1116/38/G5.p0/ac** CODE: 1554322109
DESCRIPTION: Steel body, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Load sensitive (N) configuration with G3/8 thread and F1 flange

TYPE: **VODL/N1116/38F1/G5.p4/ac** CODE: 1555122100
DESCRIPTION: Steel body, 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/N1116/38F1/G5.p8/ac** CODE: 1555122101
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/N1116/38F1/G5.p0/ac** CODE: 1555122102
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Load sensitive (N) configuration with G3/8 thread and F2 flange

TYPE: **VODL/N1116/38F2/G5.p4/ac** CODE: 1555122103
DESCRIPTION: Steel body, 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/N1116/38F2/G5.p8/ac** CODE: 1555122104
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/N1116/38F2/G5.p0/ac** CODE: 1555122105
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

VODL/N1116 complete valves

Load sensitive (N) configuration with SAE8 thread

Pilot ratio 1:4

TYPE: **VODL/N1116/S8/G3.p4/ac** CODE: 1554322200
DESCRIPTION: Steel body, range 5-210 bar (72.5-3050 psi), std setting 150 bar (2175 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/N1116/S8/G5.p4/ac** CODE: 1554322201
DESCRIPTION: Steel body, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/N1116/S8/G5.p4** CODE: 1554321200
DESCRIPTION: Aluminium body, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Pilot ratio 1:8

TYPE: **VODL/N1116/S8/G5.p8/ac** CODE: 1554322204
DESCRIPTION: Steel body, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Zero differential pilot ratio

TYPE: **VODL/N1116/S8/G3.p0/ac** CODE: 1554322206
DESCRIPTION: Steel body, range 5-210 bar (72.5-3050 psi), std setting 150 bar (2175 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/N1116/S8/G5.p0/ac** CODE: 1554322207
DESCRIPTION: Steel body, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Load sensitive (N) configuration with SAE8 thread and F1 flange

TYPE: **VODL/N1116/S8F1/G5.p4/ac** CODE: 1555122200
DESCRIPTION: Steel body, 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/N1116/S8F1/G5.p8/ac** CODE: 1555122201
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/N1116/S8F1/G5.p0/ac** CODE: 1555122202
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Load sensitive (N) configuration with SAE8 thread and F2 flange

TYPE: **VODL/N1116/S8F2/G5.p4/ac** CODE: 1555122203
DESCRIPTION: Steel body, 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/N1116/S8F2/G5.p8/ac** CODE: 1555122204
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/N1116/S8F2/G5.p0/ac** CODE: 1555122205
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

VODL/N1116 complete valves

Load sensitive (N) configuration with G1/2 thread

TYPE: **VODL/N1116/12/G5.p4/ac** CODE: 1554332100
DESCRIPTION: Steel body, pilot ratio 1:4, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/12/G5.p8/ac** CODE: 1554332101
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/12/G5.p0/ac** CODE: 1554332102
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/12/G5.p4** CODE: 1554331100
DESCRIPTION: Aluminium body, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Load sensitive (N) configuration with G1/2 thread and F1 flange

TYPE: **VODL/N1116/12F1/G5.p4/ac** CODE: 1555132100
DESCRIPTION: Steel body, pilot ratio 1:4, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/12F1/G5.p8/ac** CODE: 1555132101
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/12F1/G5.p0/ac** CODE: 1555132102
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Load sensitive (N) configuration with G1/2 thread and F2 flange

TYPE: **VODL/N1116/12F2/G5.p4/ac** CODE: 1555132103
DESCRIPTION: Steel body, pilot ratio 1:4, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/12F2/G5.p8/ac** CODE: 1555132104
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/12F2/G5.p0/ac** CODE: 1555132105
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

For other configurations please contact our Sales Dpt.

VODL/N1116 complete valves

Load sensitive (N) configuration with SAE10 thread

TYPE: **VODL/N1116/S10/G5.p4/ac** CODE: 1554332200
DESCRIPTION: Steel body, pilot ratio 1:4, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/S10/G5.p8/ac** CODE: 1554332201
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/S10/G5.p0/ac** CODE: 1554332202
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/S10/G5.p4** CODE: 1554331201
DESCRIPTION: Aluminium body, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Load sensitive (N) configuration with SAE10 thread and F1 flange

TYPE: **VODL/N1116/S10F1/G5.p4/ac** CODE: 1555132200
DESCRIPTION: Steel body, pilot ratio 1:4, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/S10F1/G5.p8/ac** CODE: 1555132201
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/S10F1/G5.p0/ac** CODE: 1555132202
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Load sensitive (N) configuration with SAE10 thread and F2 flange

TYPE: **VODL/N1116/S10F2/G5.p4/ac** CODE: 1555132203
DESCRIPTION: Steel body, pilot ratio 1:4, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/S10F2/G5.p8/ac** CODE: 1555132204
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)
TYPE: **VODL/N1116/S10F2/G5.p0/ac** CODE: 1555132205
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

For other configurations please contact our Sales Dpt.

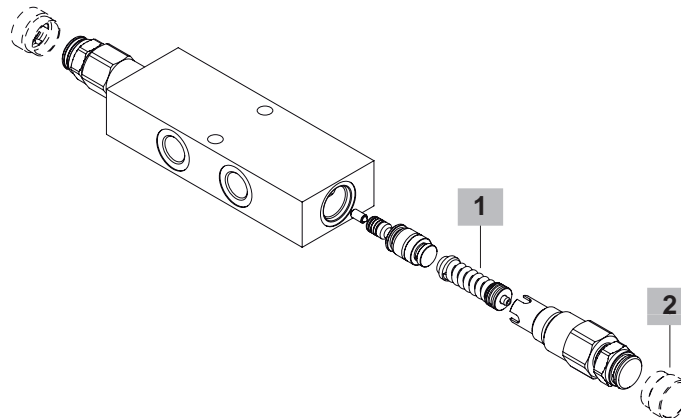
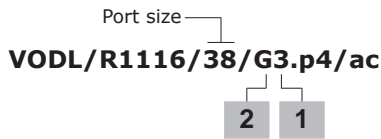
1 Pressure setting spring

TYPE	CODE	DESCRIPTION
For 1:4 and zero differential pilot ratio		
3	3ML1133201	For range 5-210 bar (72.5-3050 psi)
5	3ML1133200	For range 50-350 bar (72.5-5075 psi)
For 1:8 pilot ratio		
5	3ML1133201	For range 5-350 bar (72.5-5075 psi)

2 Setting type

TYPE	CODE	DESCRIPTION
G	-	Screw setting
Z	4COP120420	Antitampering cap

Ordering codes and description composition



VODL/R1116 complete valves

Relief compensated (R) configuration with G3/8 thread

Pilot ratio 1:4

TYPE: **VODL/R1116/38/G3.p4/ac** CODE: 1554422101
DESCRIPTION: Steel body, range 5-210 bar (72.5-3050 psi), std setting 150 bar (2175 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/38/G5.p4/ac** CODE: 1554422100
DESCRIPTION: Steel body, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/38/G5.p4** CODE: 1554421100
DESCRIPTION: aluminium body configuration range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Pilot ratio 1:8

TYPE: **VODL/R1116/38/G5.p8/ac** CODE: 1554422104
DESCRIPTION: Steel body, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Zero differential pilot ratio

TYPE: **VODL/R1116/38/G3.p0/ac** CODE: 1554422106
DESCRIPTION: Steel body, range 5-210 bar (72.5-3050 psi), std setting 150 bar (2175 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/38/G5.p0/ac** CODE: 1554422107
DESCRIPTION: Steel body, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Relief compensated (R) configuration with G3/8 thread and F1 flange

TYPE: **VODL/R1116/38F1/G5.p4/ac** CODE: 1555022100
DESCRIPTION: Steel body, 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/R1116/38F1/G5.p8/ac** CODE: 1555022101
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/38F1/G5.p0/ac** CODE: 1555022102
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Relief compensated (R) configuration with G3/8 thread and F2 flange

TYPE: **VODL/R1116/38F2/G5.p4/ac** CODE: 1555022103
DESCRIPTION: Steel body, 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/R1116/38F2/G5.p8/ac** CODE: 1555022104
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/38F2/G5.p0/ac** CODE: 1555022105
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

VODL/R1116 complete valves

Relief compensated (R) configuration with SAE8 thread

Pilot ratio 1:4

TYPE: **VODL/R1116/S8/G3.p4/ac** CODE: 1554422200
DESCRIPTION: Steel body, range 5-210 bar (72.5-3050 psi), std setting 150 bar (2175 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/S8/G5.p4/ac** CODE: 1554422201
DESCRIPTION: Steel body, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/S8/G5.p4** CODE: 1554421200
DESCRIPTION: aluminium body configuration range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Pilot ratio 1:8

TYPE: **VODL/R1116/S8/G5.p8/ac** CODE: 1554422204
DESCRIPTION: Steel body, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Zero differential pilot ratio

TYPE: **VODL/R1116/S8/G3.p0/ac** CODE: 1554422206
DESCRIPTION: Steel body, range 5-210 bar (72.5-3050 psi), std setting 150 bar (2175 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/S8/G5.p0/ac** CODE: 1554422207
DESCRIPTION: Steel body, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Relief compensated (R) configuration with SAE8 thread and F1 flange

TYPE: **VODL/R1116/S8F1/G5.p4/ac** CODE: 1555022200
DESCRIPTION: Steel body, 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/R1116/S8F1/G5.p8/ac** CODE: 1555022201
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/S8F1/G5.p0/ac** CODE: 1555022202
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Relief compensated (R) configuration with SAE8 thread and F2 flange

TYPE: **VODL/R1116/S8F2/G5.p4/ac** CODE: 1555022203
DESCRIPTION: Steel body, 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/R1116/S8F2/G5.p8/ac** CODE: 1555022204
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/S8F2/G5.p0/ac** CODE: 1555022205
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Ordering codes and description composition

VODL/R1116 complete valves

Relief compensated (R) configuration with G1/2 thread

TYPE: **VODL/R1116/12/G5.p4/ac** CODE: 1554432101
DESCRIPTION: Steel body, pilot ratio 1:4, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/12/G5.p8/ac** CODE: 1554432100
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/12/G5.p0/ac** CODE: 1554432102
DESCRIPTION: Steel body, zero differential pilot ratio. Range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/12/G5.p4** CODE: 1554431100
DESCRIPTION: Aluminium body, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Relief compensated (R) configuration with G1/2 thread and F1 flange

TYPE: **VODL/R1116/12F1/G5.p4/ac** CODE: 1555032103
DESCRIPTION: Steel body, pilot ratio 1:4, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/12F1/G5.p8/ac** CODE: 1555032104
DESCRIPTION: pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/12F1/G5.p0/ac** CODE: 1555032105
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

Relief compensated (R) configuration with G1/2 thread and F2 flange

TYPE: **VODL/R1116/12F2/G5.p4/ac** CODE: 1555032100
DESCRIPTION: Steel body, pilot ratio 1:4, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/12F2/G5.p8/ac** CODE: 1555032101
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/12F2/G5.p0/ac** CODE: 1555032102
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

For other configurations please contact our Sales Dpt.

VODL/R1116 complete valves

Relief compensated (R) configuration with SAE10 thread

TYPE: **VODL/R1116/S10/G5.p4/ac** CODE: 1554432200
DESCRIPTION: Steel body, pilot ratio 1:4, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/S10/G5.p8/ac** CODE: 1554432201
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/S10/G5.p0/ac** CODE: 1554432202
DESCRIPTION: Steel body, zero differential pilot ratio. Range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/S10/G5.p4** CODE: 1554431200
DESCRIPTION: Aluminium body, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Relief compensated (R) configuration with SAE10 thread and F1 flange

TYPE: **VODL/R1116/S10F1/G5.p4/ac** CODE: 1555032200
DESCRIPTION: Steel body, pilot ratio 1:4, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/S10F1/G5.p8/ac** CODE: 1555032201
DESCRIPTION: pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/S10F1/G5.p0/ac** CODE: 1555032202
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

Relief compensated (R) configuration with SAE10 thread and F2 flange

TYPE: **VODL/R1116/S10F2/G5.p4/ac** CODE: 1555032203
DESCRIPTION: Steel body, pilot ratio 1:4, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/S10F2/G5.p8/ac** CODE: 1555032204
DESCRIPTION: Steel body, pilot ratio 1:8, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

TYPE: **VODL/R1116/S10F2/G5.p0/ac** CODE: 1555032205
DESCRIPTION: Steel body, zero differential pilot ratio, range 50-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) 5 l/min (1.32 US gpm)

For other configurations please contact our Sales Dpt.

1 Pressure setting spring

TYPE	CODE	DESCRIPTION
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For 1:4 and zero differential pilot ratio

3	3ML1133201	For range 5-210 bar (72.5-3050 psi)
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5	3ML1133200	For range 50-350 bar (72.5-5075 psi)
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For 1:8 pilot ratio

5	3ML1133201	For range 5-350 bar (72.5-5075 psi)
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2 Setting type

TYPE	CODE	DESCRIPTION
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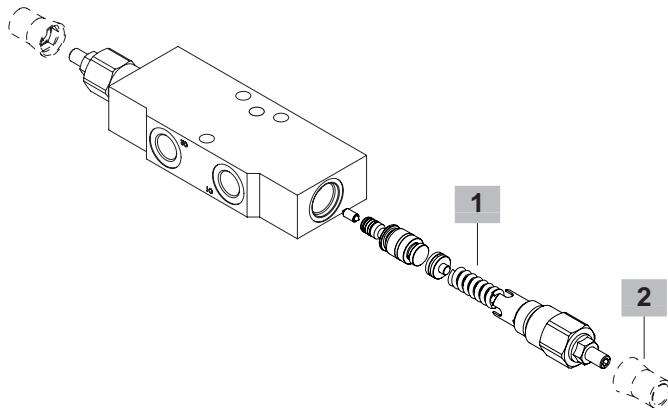
G	-	Screw setting
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Z	4COP130200	Antitampering cap
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Rating diagrams

Port size
VODL/N1116/38PB/G3.p4/ac

2 1



1 Pressure setting spring

TYPE	CODE	DESCRIPTION
For 1:4 and zero differential pilot ratio		
3	3ML1133201	For range 5-210 bar (72.5-3050 psi)
5	3ML1133200	For range 50-350 bar (725-5075 psi)
For 1:8 pilot ratio		
5	3ML1133201	For range 5-350 bar (72.5-5075 psi)

2 Setting type

TYPE	CODE	DESCRIPTION
G	-	Screw setting
Z	4COP120420	Antitampering cap

VODL/N1116/PB complete valves

Load sensitive (N) configuration with G3/8 thread

Pilot ratio 1:4

TYPE: **VODL/N1116/38PB/G3.p4/ac** CODE: 1555422101
DESCRIPTION: Steel body, range 5-210 bar (72.5-3050 psi), std setting 150 bar (2175 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/N1116/38PB/G5.p4/ac** CODE: 1555422100
DESCRIPTION: Steel body, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Pilot ratio 1:8

TYPE: **VODL/N1116/38PB/G5.p8/ac** CODE: 1555422102
DESCRIPTION: Steel body, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Zero differential pilot ratio

TYPE: **VODL/N1116/38PB/G5.p0/ac** CODE: 1555422103
DESCRIPTION: Steel body, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Load sensitive (N) configuration with G1/2 thread

Pilot ratio 1:4

TYPE: **VODL/N1116/12PB/G3.p4/ac** CODE: 1555432101
DESCRIPTION: Steel body, range 5-210 bar (72.5-3050 psi), std setting 150 bar (2175 psi) @ 5 l/min (1.32 US gpm)

TYPE: **VODL/N1116/2PB/G5.p4/ac** CODE: 1555432100
DESCRIPTION: Steel body, range 50-350 bar (725-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Pilot ratio 1:8

TYPE: **VODL/N1116/12PB/G5.p8/ac** CODE: 1555432102
DESCRIPTION: Steel body, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

Zero differential pilot ratio

TYPE: **VODL/N1116/12PB/G5.p0/ac** CODE: 1555432103
DESCRIPTION: Steel body, range 5-350 bar (72.5-5075 psi), std setting 280 bar (4060 psi) @ 5 l/min (1.32 US gpm)

For other configurations please contact our Sales Dpt.

Rating diagrams

**VODL/(N-R) 1116 (38-12) pressure drop vs. flow
from D1->U1 and U1->D1 (D2->U2 and U2->D2)**

