

# Type VPR/2/RL flow control pressure compensated valves

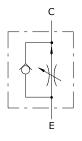
- 2 way
- With reverse free flow check

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

	VPR/2/RL 38	VPR/2/RL 12	VPR/2/RL 34	VPR/2/RL 100			
Nominal flow "Qc"	30 l/min (7.9 US gpm)	50 l/min (13.2 US gpm)	90 l/min (23.8 US gpm)	150 l/min (39.6 US gpm)			
Nominal flow "SB"*	15 l/min (4.0 US gpm)	25 l/min (6.6 US gpm)	45 l/min (11.9 US gpm)	75 l/min (19.8 US gpm)			
Max. pressure	Aluminium body = 210 bar $(3050 \text{ psi})$ Steel body = 350 bar $(5100 \text{ psi})$						
Fluid	mineral based oil						
Viscosity	/iscosity from 10 to 200 cSt						
Max. level of contaminat							
Fluid temperature		with NBR seals from -20					
Environmental temperature from -40°C (-40°F) to 100°C (212°F)							
Weight alumin	<i>ium</i> 1.09 kg (2.40 lb)	1.06 kg (2.34 lb)	2.15 kg <i>(4.73 lb)</i>	5.14 kg <i>(11.33 lb)</i>			
	teel 2.41 kg (5.31 lb)	2.43 kg (5.36 lb)	4.60 kg (10.14 lb)	11.13 kg <i>(24.54 lb)</i>			

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

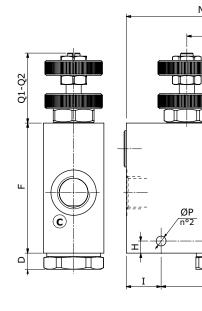
**\*"SB"** execution (sensibilized adjustment)

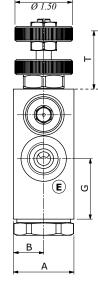




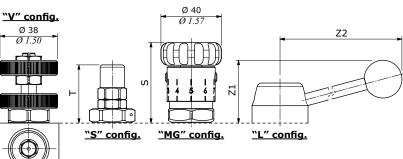
# VPR/2/RL

# **Dimensions**-





Ø 38



Valve type	All ports	Valve type	All ports
VPR/2/RL 38	G3/8	VPR/2/RL 38/SAE	SAE8
VPR/2/RL 12	G1/2	VPR/2/RL 12/SAE	SAE10
VPR/2/RL 34	G3/4	VPR/2/RL 34/SAE	SAE12
VPR/2/RL 100	G1″		

Ι

TiT

Ν

R

V

 $\oplus$ 

м

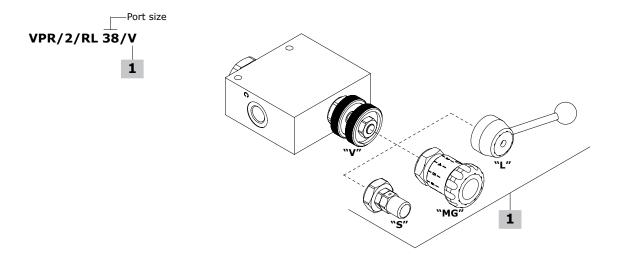
#### Dimensions are in mm-in

Valve type	Α	В	D	F	G	н	I	L	м	Ν	ØP	Q1	Q2*	R	S	т	v	<b>Z1</b>	Z2
VPR/2/RL 38	40	20	11	86	40	8	23	64	8	95	6.5	46.3	52.6	55	53.3	38.5	23	47.6	101.3
VPR/2/RL 38/SAE	1.57	<i>0.78</i>	0.43	<i>3.38</i>	1.57	0.31	<i>0.90</i>	2.51	0.31	<i>3.74</i>	<i>0.25</i>	<i>1.82</i>	<i>2.07</i>	2.16	<i>2.10</i>	<i>1.51</i>	<i>0.91</i>	1.87	<i>3.99</i>
VPR/2/RL 12	40	20	11	86	40	8	23	64	8	95	6.5	46.3	53.1	55	53.3	38.5	23	47.6	101.3
VPR/2/RL 12/SAE	1.57	0.78	0.43	3.38	1.57	0.31	0.90	2.51	0.31	<i>3.74</i>	<i>0.25</i>	<i>1.82</i>	<i>2.09</i>	2.16	<i>2.10</i>	<i>1.51</i>	<i>0.91</i>	1.87	<i>3.99</i>
VPR/2/RL 34	50	25	10.5	100	47	10	38	84	8	130	8.5	41.5	50.5	72	49.50	38.5	30	50.1	103.6
VPR/2/RL 34/SAE	1.97	0.98	<i>0.41</i>	<i>3.94</i>	1.85	<i>0.39</i>	1.50	<i>3.31</i>	0.31	5.12	<i>0.33</i>	<i>1.73</i>	<i>1.99</i>	2.83	<i>1.95</i>	<i>1.51</i>	1.18	<i>1.97</i>	<i>4.08</i>
VPR/2/RL 100	70 2.75	35 0.53	13.5 <i>0.53</i>	140 5.51	58 2.28	10 <i>0.39</i>	50 1.97	100 <i>3.94</i>	10 <i>0.39</i>	160 1.50	10.5 <i>0.41</i>	52 2.05	-	91 3.58	52.5 <i>2.06</i>	41.5 <i>1.63</i>	37 1.46	50.5 <i>1.99</i>	107.3 <i>4.22</i>

(\*) For "SB" execution (sensibilized adjustment)



# Ordering codes and description composition



VPR/2/RL complete valves							
ТҮРЕ	CODE	DESCRIPTION					
Adjustment kit type "V" (handwheel)							
VPR/2/RL 38/V	1611021100	Aluminium body, G3/8 ports					
VPR/2/RL 12/V	1611031100	Aluminium body, G1/2 ports					
VPR/2/RL 34/V	1611041100	Aluminium body, G3/4 ports					
VPR/2/RL 100/V	1611051100	Aluminium body, G1" ports					
VPR/2/RL 38/V/ac	1611022100	Steel body, G3/8 ports					
VPR/2/RL 12/V/ac	1611032100	Steel body, G1/2 ports					
VPR/2/RL 34/V/ac	1611042100	Steel body, G3/4 ports					
VPR/2/RL 100/V/ac	1611052100	Steel body, G1" ports					
VPR/2/RL 38/V/SAE	1611021200	Aluminium body, SAE8 ports					
VPR/2/RL 12/V/SAE	1611031200	Aluminium body, SAE10 ports					
VPR/2/RL 34/V/SAE	1611041200	Aluminium body, SAE12 ports					
Adjustment kit type "MG" (handknob)							
VPR/2/RL 38/MG	1611021101	Aluminium body G3/8 ports					
VPR/2/RL 12/MG	1611031101	Aluminium body G1/2 ports					
VPR/2/RL 34/MG	1611041101	Aluminium body G3/4 ports					
VPR/2/RL 100/MG	1611051101	Aluminium body G1" ports					
<u>Adjustment kit type "L" (lever)</u>							
VPR/2/RL 38/L	1611021102	Aluminium body G3/8 ports					
VPR/2/RL 12/L	1611031102	Aluminium body G1/2 ports					
VPR/2/RL 34/L	1611041102	Aluminium body G3/4 ports					
VPR/2/RL 100/L	1611051102	Aluminium body G1" ports					
For other steel body configurations, SAE thread and configurations with							

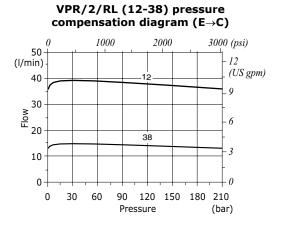
FPM (Viton) seals, please contact our Sales Dpt.

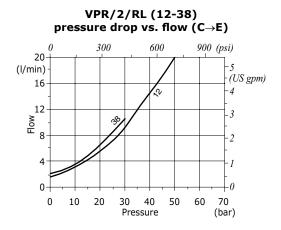
### 1 Adjustment kit

TYPE	CODE	DESCRIPTION				
For VPR/2/RL 38 valve						
V.SB	5KT6200200	"V" handwheel type in "SB" configuration				
		(sensibilized adjustment)				
V	5KT6130200	"V" handwheel type				
MG	5KT6200202	"MG" handknob type				
S	5KT6200211	"S" screw type				
For VPF	R/2/RL 12 val	<u>ve</u>				
V.SB	5KT6130301	"V" handwheel type in "SB" configuration				
		(sensibilized adjustment)				
V	5KT6130200	"V" handwheel type				
MG	5KT6200202	"MG" handknob type				
S	5KT6200211	"S" screw type				
For VPF	R/2/RL 34 val	<u>ve</u>				
V	5KT6130401	"V" handwheel type				
MG	5KT6200400	"MG" handknob type				
S	5KT6130404	"S" screw type				
V.SB	5KT6130402	"V" handwheel type in "SB" configuration				
		(sensibilized adjustment)				
For VPR/2/RL 100 valve						
V	5KT6340603	"V" handwheel type				
MG	5KT6200605	"MG" handknob type				
S	5KT6200604	"S" screw type				



## **Rating diagrams**





VPR/2/RL 34

pressure drop vs. flow ( $C \rightarrow E$ )

Pressure

500

0

20-

16

(l/min)-

12-×01

4

0

0

15

30 45 60 75

1000

1500 (psi)

•4

. 3

- 2

1

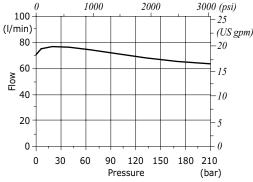
-0

(bar)

90 105

(US gpm)

VPR/2/RL 34 pressure compensation diagram ( $E \rightarrow C$ )



3000 (psi) 1000 2000 (US gpm)

VPR/2/RL 34 pressure drop vs. flow ( $C \rightarrow E$ ) 1000 2000 3000 (psi) 0 10 2.5 (l/min) (US gpm) 8 2 6 1.5 Flow Δ 1 2 0.5 - 0 0 0 30 60 90 120 150 180 210 (bar) Pressure

