

Veljan flange mounted Check Valves VC5V, B-design series are direct operated BALL type design suitable for mounting directly on the delivery port of Veljan Vane Pumps or any SAE-61/SAE-62 port. These valves can be used in conjunction with Veljan VR5V/VR5U pressure control valves in stack formation. VC5V check valves are designed for use up to 6000 psi pressure and are available with a choice of 7.1, 14.2 and 28.4 PSI (0.5, 1.0 & 2.0 bar) cracking pressure springs in each size.

VC5V - B design check valves used in conjunction with VR5U unloader valves have an additional port X for providing the pilot to the VR5U valve. These check valves have zero leak from port-B to port-A and full flow in the opposite direction above the cracking pressure.

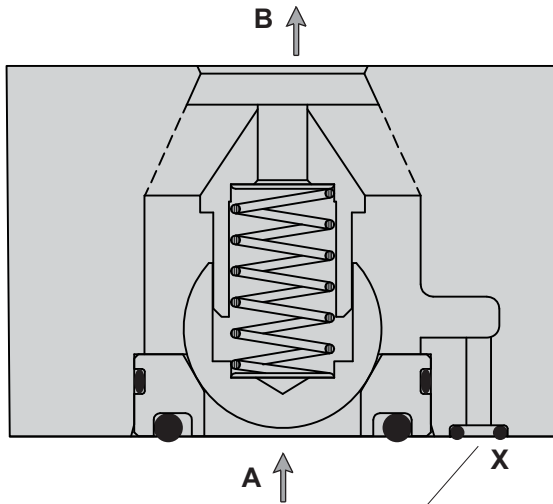
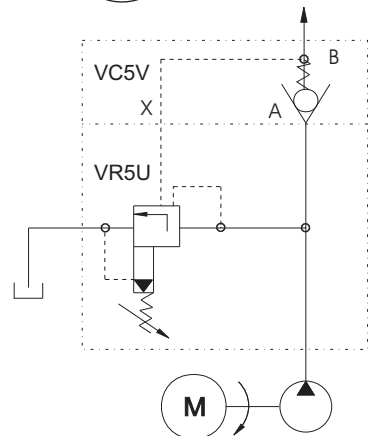
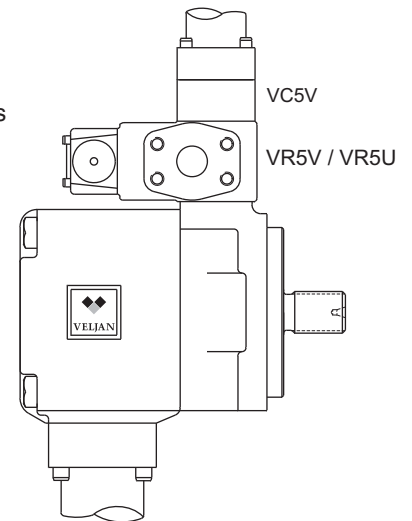
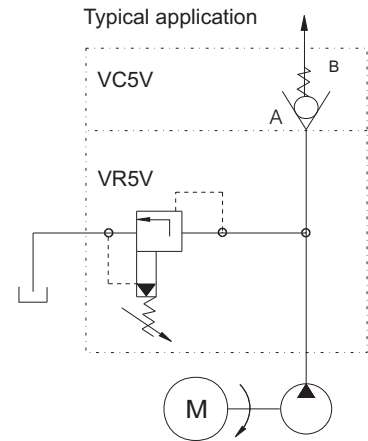
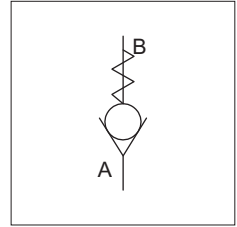
SPECIFICATIONS

General

- Type : Flange Mounted Check Valve
- Design : Spring loaded Ball
- Mounting : Inline SAE-61 / SAE-62 Flange
- Mounting position : Any
- Port sizes (nominal) : 3/4", 1", ,
- Direction of flow : A → B
- Ambient temperature : -20° C...+60° C (-4° F...+140° F)

Hydraulics

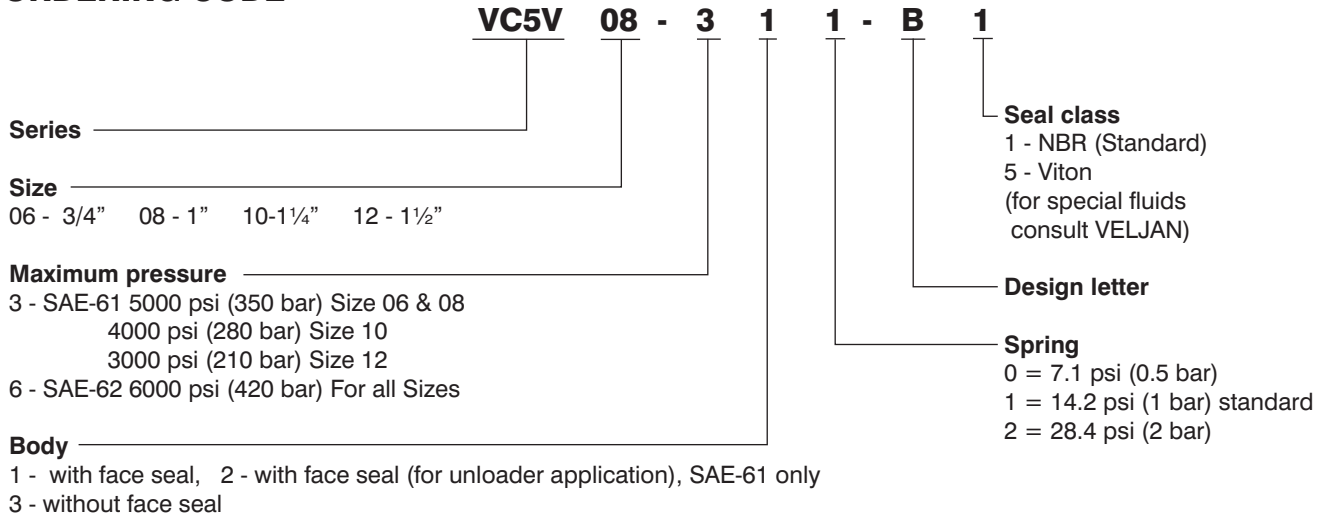
- Operating Pressure range : Minimum 0 psi (0 bar)
Maximum for SAE-61 5000 psi (350bar) size 6 & 8
4000 psi (280 bar) size 10
3000 psi (210 bar) size 12
SAE-62 6000 psi (420 bar) for all sizes
- Cracking pressure : 7.1 or 14.2 or 28.4 psi (0.5 or 1.0 or 2.0 bar)
- Maximum flow gpm (lpm) :
VC5V 06 (3/4") : 27 (100)
VC5V 08 (1") : 53 (200)
VC5V 10 (1 1/4") : 105 (400)
VC5V 12 (1 1/2") : 200 (750)
- Nominal flow gpm (lpm) : depends on pump delivery
- Fluid : Mineral oil as per DIN 51524/25
(for other fluids contact us)
- Fluid Temperature Range : -18° C...+80° C (0° F...+176° F)
- Viscosity recommended : 10 to 650 cSt (60 to 3900 SSU)



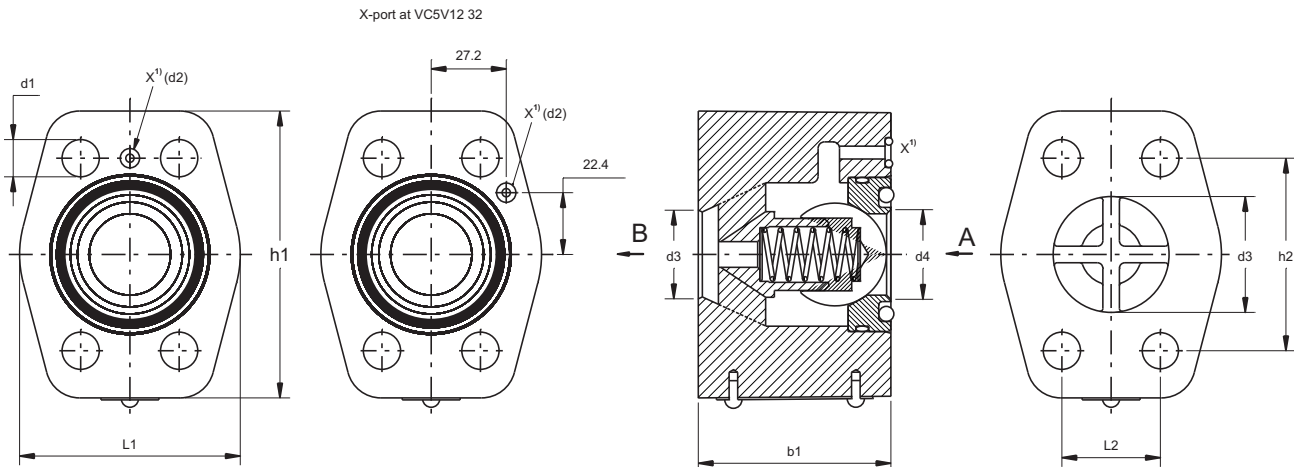
For unloader application only

CV

ORDERING CODE



Installation



¹⁾at SAE 61 only (for use with Unloading Valve R5U)

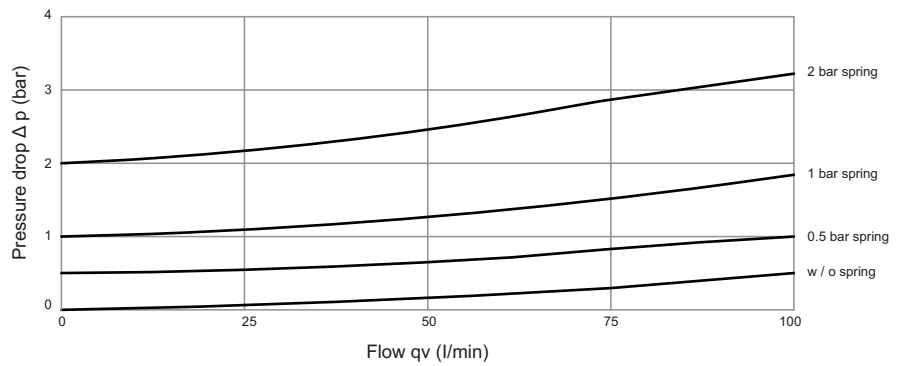
Dimensions

Series	Nominal Size		L1	L2	h1	h2	b1	d1	d2	d3 + 0.8	d4	weight
VC5V06	3/4"	SAE - 61	48	22.2	64	47.6	45	10.5	3	19	19	0.6 kg
		SAE - 62	48	23.8	64	50.8	45	10.5	-	19	19	0.6 kg
VC5V08	1"	SAE - 61	60	26.2	74	52.4	45	10.5	3	25	25	0.9 kg
		SAE - 62	60	27.8	74	57.2	45	12.5	-	25	25	0.9 kg
VC5V10	1 1/4"	SAE - 61	68	30.2	85	58.7	50	12.5	3	32	32	1.3 kg
		SAE - 62	68	31.8	85	66.7	50	13.5	-	32	32	1.3 kg
VC5V12	1 1/2"	SAE - 61	80	35.7	104	69.8	50	13.5	3	38	38	1.8 kg
		SAE - 62	80	36.5	104	79.4	50	17	-	38	38	1.8 kg

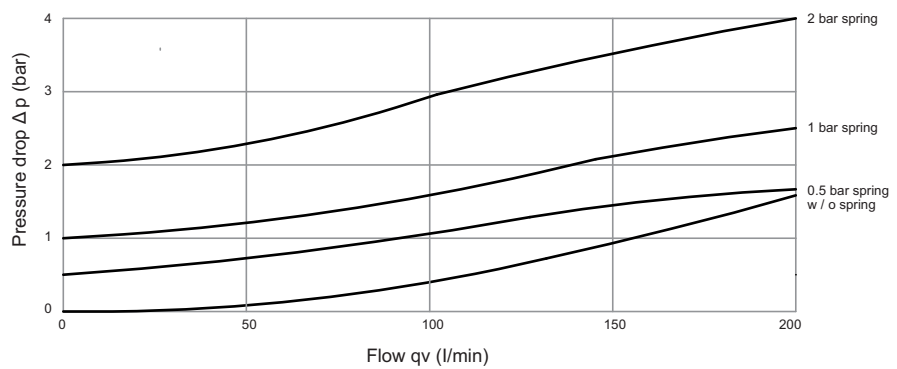
Δp - q_v - Characteristics

(Fluid 60 cSt at 40° C
Test temp. 50° C ± 10%)

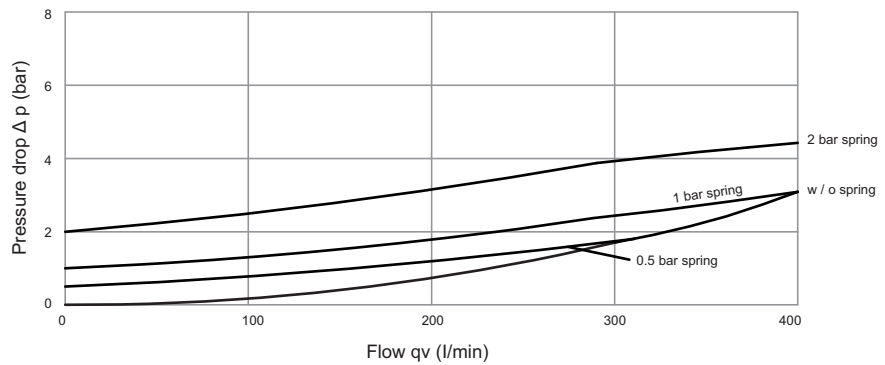
VC5V06



VC5V08



VC5V10



VC5V12

