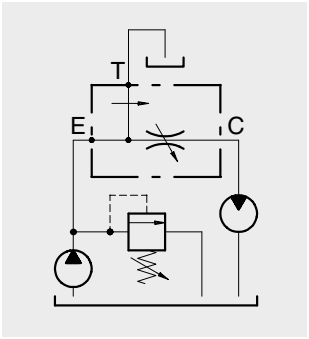
Operation

The valve is designed to provide flow adjustment from E to C by a variation of the oil flow section. Exceeding flow is concurrently sent to tank T. Best performance of the valve is assured when the flow in E is at least 10% bigger than in C. Pressure variations in C do not alter the checked oil flow. On the contrary, eventual back pressure in T may cause inconstant capacity in C. Use of a pressure relief valve between the pump and the flow regulator is strictly recommended.

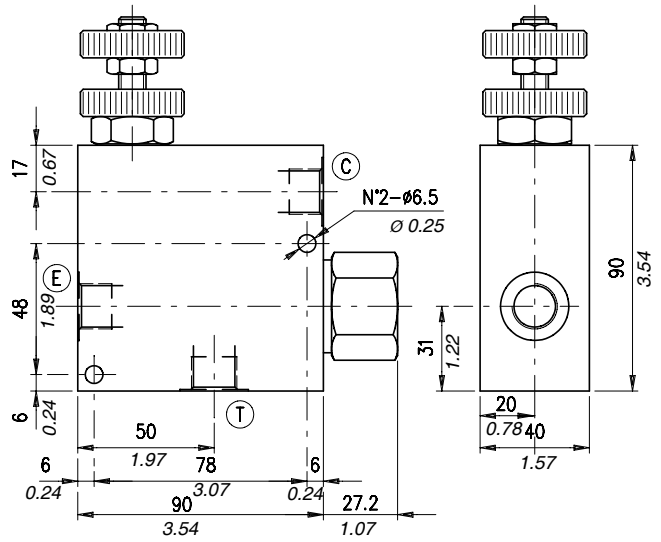


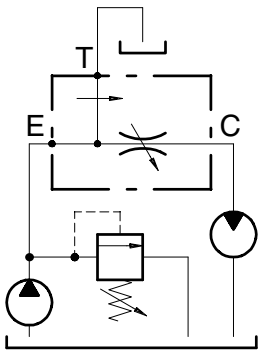
Performance

Body Valves

Type VPR/3/ET..	Flow		Max. pressure	Weight	
	l/min	*US gpm*		kg	*lb*
VPR/3/ET 38	E=50 C=30	*E=13 C=7.9*	210 bar *-3050 psi-* (aluminium body) 350 bar *-5100 psi-* (steel body)	1,07 (aluminium) 2,48 (steel)	*2,36 (aluminium) 5,47 (steel)*
VPR/3/ET 12	E=90 C=50	*E=24 C=13*		1,02 (aluminium) 2,43 (steel)	*2,25 (aluminium) 5,36 (steel)*
VPR/3/ET 34	E=150 C=90	*E=40 C=24*		2,22 (aluminium) 4,42 (steel)	*4,89 (aluminium) 9,74 (steel)*
VPR/3/ET 100	E=240 C=150	*E=63 C=40*		4,00 (aluminium) 9,00 (steel)	*8,82 (aluminium) 19,84 (steel)*
VPR/3/ET 114	E=350 C=250	*E=92 C=66*		9,50 (aluminium) 23,90 (steel)	*20,94 (aluminium) 52,69 (steel)*

Dimensions and hydraulic circuit

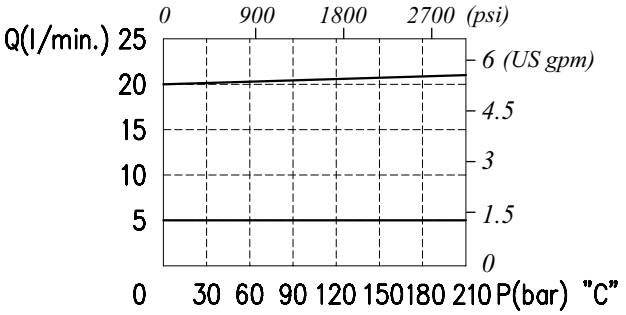




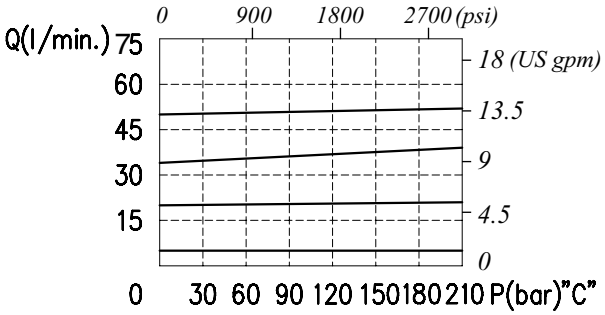
VPR/3/ET	E	T	C
38	G 3/8	G 3/8	G 3/8
12	G 1/2	G 1/2	G 1/2

Rating diagrams

Pressure compensation diagram (38) E-->C



Pressure compensation diagram (12) E-->C



Order code

VPR /3 /ET □ / □ / □

Port size

38 G 3/8
12 G 1/2

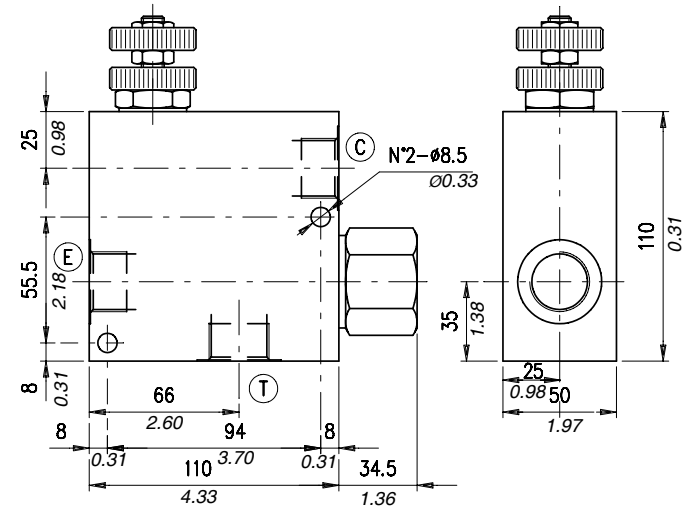
Adjustments (see page 122)

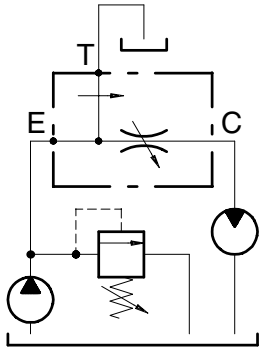
S (screw)
V (handknob)
L (lever)
MG (handknob calibrated *m.a*)
MGB (handknob calibrated *f.a*)

Body material

_ Aluminium
ac Steel

Dimensions and hydraulic circuit

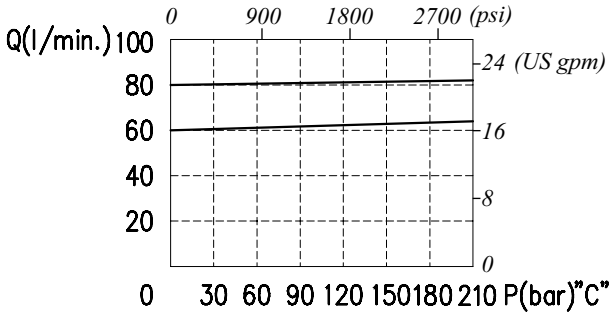




E	T	C
G 3/4	G 3/4	G 3/4

Rating diagrams

Pressure compensation diagram E-->C



Order code

VPR /3 /ET 34 / □ / □

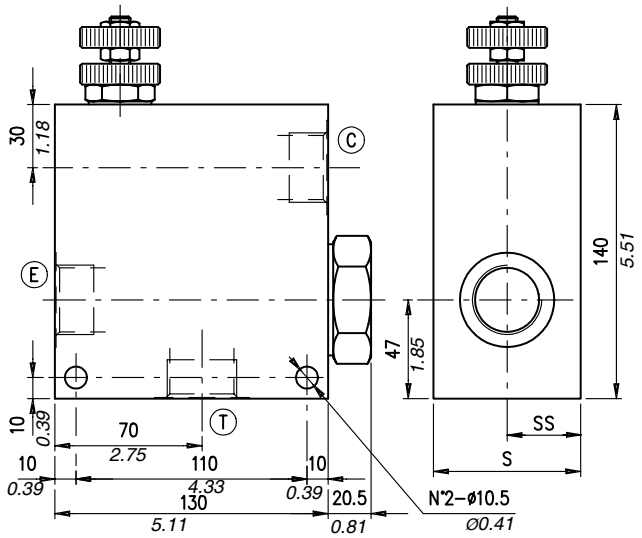
Adjustments
(see page 122)

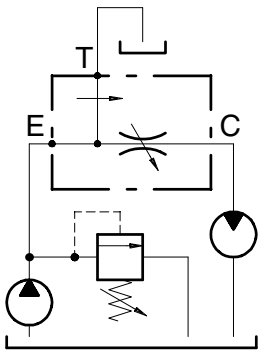
S (screw)
V (handknob)
L (lever)
MG (handknob calibrated *m.a*)
MGB (handknob calibrated *f.a*)

Body material

_Aluminium
ac Steel

Dimensions and hydraulic circuit





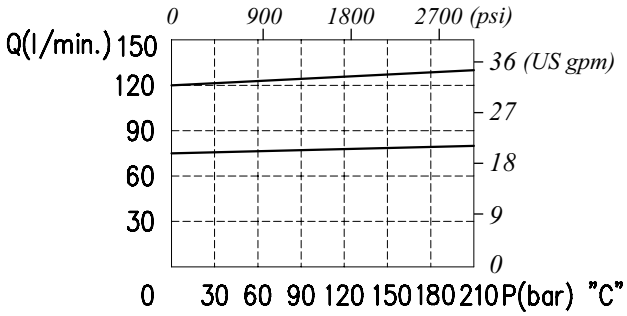
E	T	C
G 1	G 1	G 1

S	SS	Material
70 - *2.75*	35 - *1.38*	Aluminium
65 - *2.56*	32.5 - *1.28*	Steel

Dimensions are in mm - *in*

Rating diagrams

Pressure compensation diagram E-->C



Order code

VPR /3 /ET 100 / ☐ / ☐

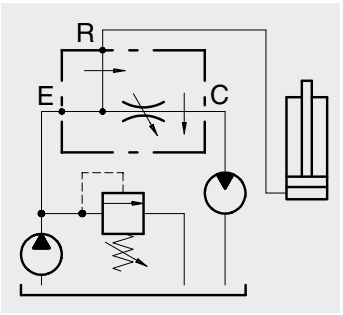
Adjustments
(see page 122)

S (screw)
V (handknob)
L (lever)
MG (handknob calibrated *m.a*)
MGB (handknob calibrated *f.a*)

Body material

_Aluminium
ac Steel

Operation



The valve is designed to keep constant flow in C (3) and concurrently discharge exceeding flow in R (2) for other applications. Best performance of the valve is assured when the flow in E (1) is at least 10% bigger than in C (3).
Pressure variations in C (3) and R (2) do not alter the constant flow in C (3).
Make sure that a pressure relief valve is always used between the pump and the valve.

Performance

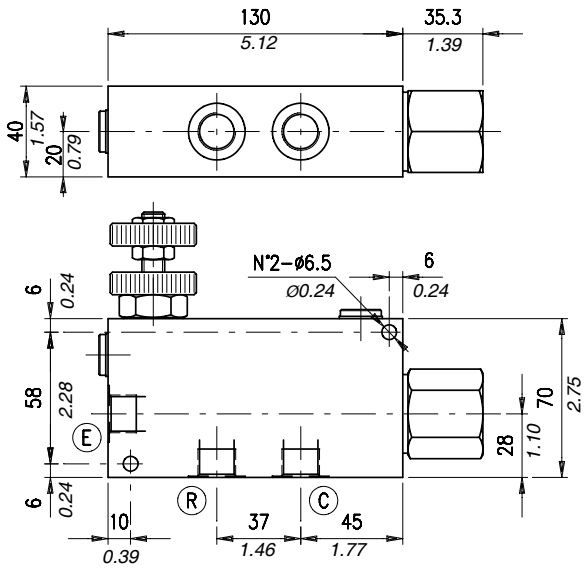
Body Valves

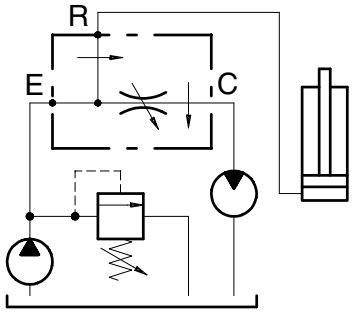
Type VPR/3/EP	Flow		Max. pressure	Weight	
	l/min	*US gpm*		kg	*lb*
VPR/3/EP 38	E = 50 Qmax. in C=30	*E = 13 Qmax. in C =7.9*	210 bar *-3050 psi-* (aluminium body) 350 bar *-5100 psi-* (steel body	1,25 (alum.) 2,85 (steel)	*2,75 (alum.) 6,28 (steel)*
VPR/3/EP 12	E = 90 Qmax in C=50	*E = 24 Qmax. in C=13*		1,35 (alum.) 2,80 (steel)	*2,98 (alum.) 6,17 (steel)*
VPR/3/EP 34	E=150 C=90	*E=40 C=24*		2,46 (alum.) 4,95 (steel)	*5,42 (alum.) 10,91 (steel)*
VPR/3/EP 100	E=240 C=150	*E=63 C=40*		5,15 (alum.) 9,45 (steel)	*11,35 (alum.) 20,83 (steel)*
VPR/3/EP 114	E=450 C=250	*E=119 C=66*		7,45 (alum.) 15,80 (steel)	*16,42 (alum.) 34,83 (steel)*

Cartridges

Type PP...A	Flow		Max. pressure	Weight kg *lb*	Cavities and tools
	l/min	*US gpm*			
PP08A	"1"=20 "3"=10	*"1"=5.3 "3"=2.6*	350 bar *-5100 psi-*	0,15 *0.33*	see page 130 SAE 8/3
PP10A	"1"=50 "3"=30	*"1"=13 "3"=8*		0,20 *0.44*	see page 130 SAE 10/3
PP12A	"1"=90 "3"=50	*"1"=24 "3"=13*		0,42 *0.92*	see page 130 SAE 12/3
PP16A	"1"=150 "3"=90	*"1"=40 "3"=24*		0,57 *1.26*	see page 130 SAE 16/3

Dimensions and hydraulic circuit

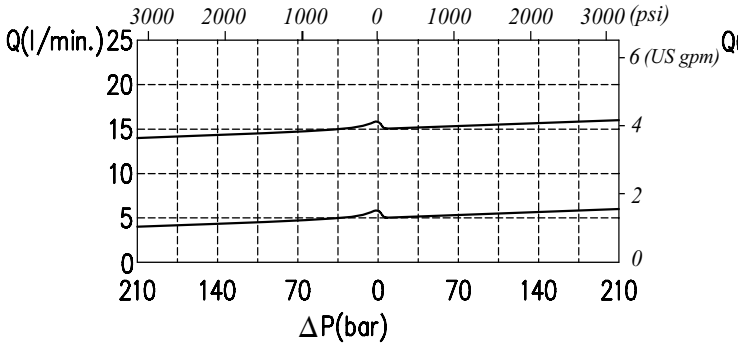




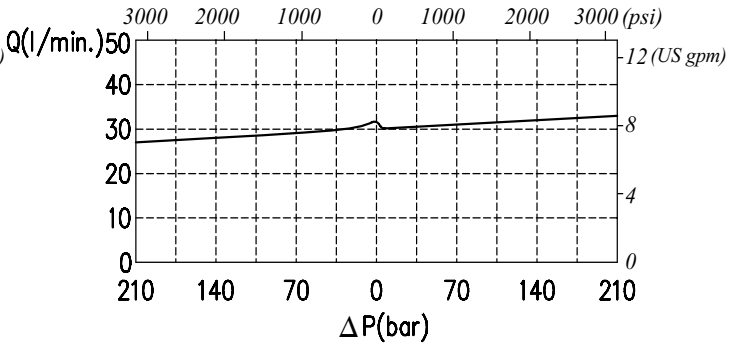
VPR/3/EP	E	R	U
38	G 3/8	G 3/8	G 3/8
12	G 1/2	G 1/2	G 1/2

Rating diagrams

Compensation diagram (38) in C changing the Δp between E and R



Compensation diagram (12) in C changing the Δp between E and R



Order code

VPR /3 /EP □ / □ / □

Port size

38 G 3/8
12 G 1/2

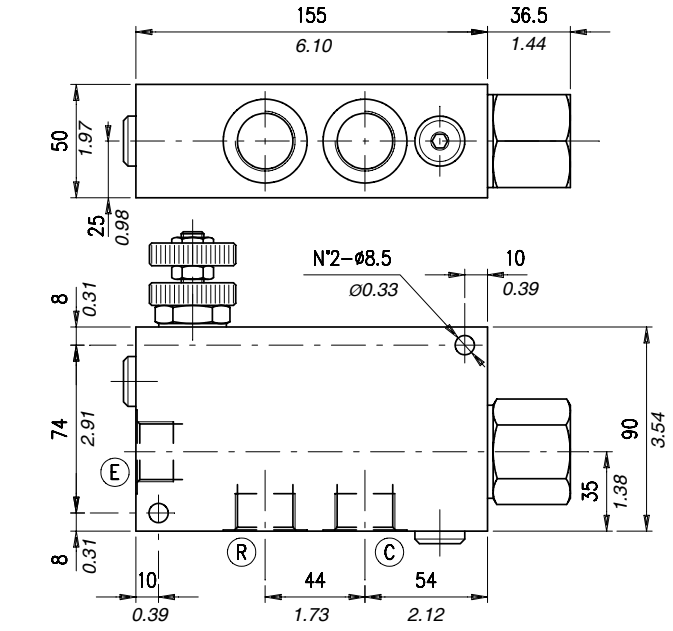
Adjustments
(see page 122)

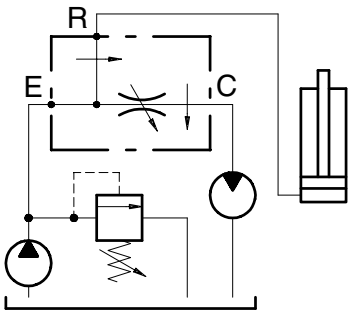
S (screw)
V (handknob)
L (lever)
MG (handknob calibrated *m.a*)
MGB (handknob calibrated *f.a*)

Body material

_Aluminium
ac Steel

Dimensions and hydraulic circuit

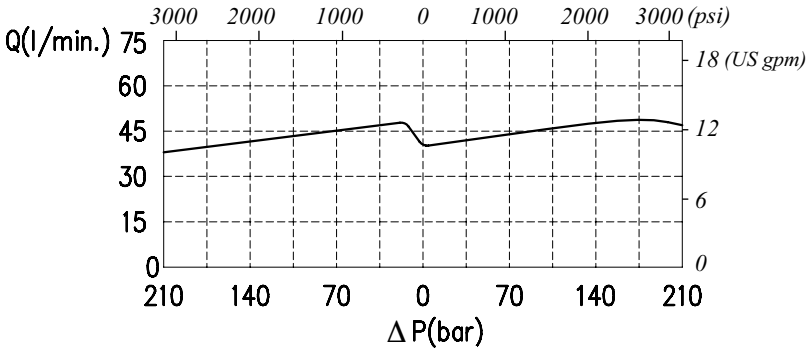




E	R	U
G 3/4	G 3/4	G 3/4

Rating diagrams

Compensation diagram in C changing the Δp between E and R



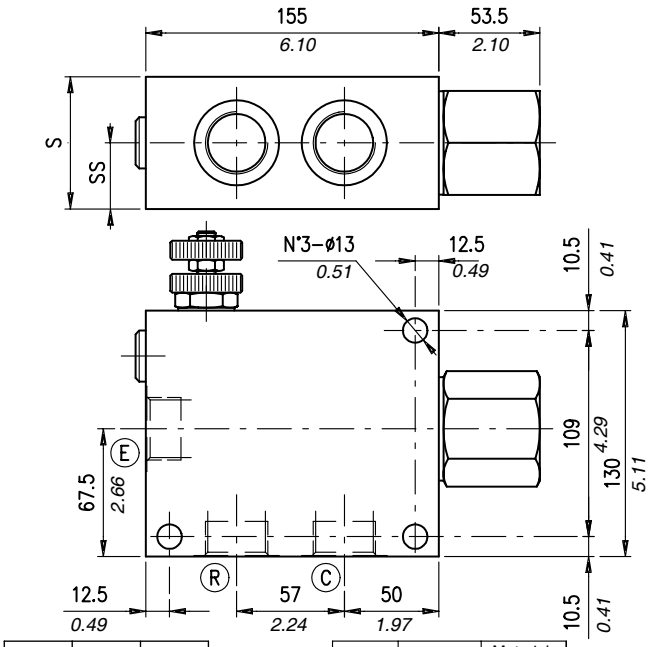
Order code

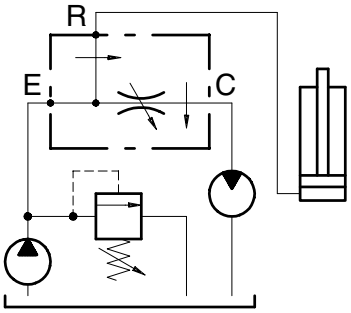
VPR /3 /EP 34 / □ / □

Adjustments
(see page 122)
S (screw)
V (handknob)
L (lever)
MG (handknob calibrated *m.a*)
MGB (handknob calibrated *f.a*)

Body material
_Aluminium
ac Steel

Dimensions and hydraulic circuit





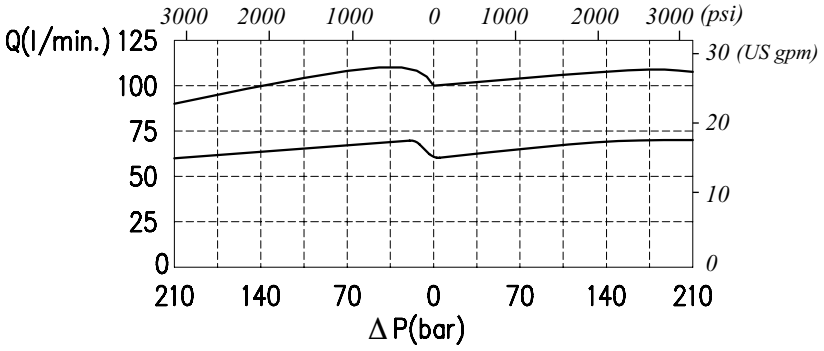
E	R	U
G 1	G 1	G 1

S	SS	Material
70 -2.75	35 - 1.38	Aluminium
65 -2.56	32.5 - 1.28	Steel

Dimensions are in mm - *in*

Rating diagrams

Compensation diagram in C changing the Δp between E and R



Order code

VPR /3 /EP 100 / □ / □

Adjustments
(see page 122)
S (screw)
V (handknob)
L (lever)
MG (handknob calibrated *m.a*)
MGB (handknob calibrated *f.a*)

Body material
_Aluminium
ac Steel