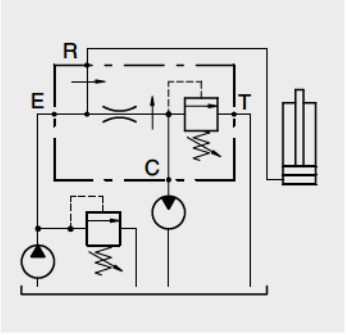
Operation

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



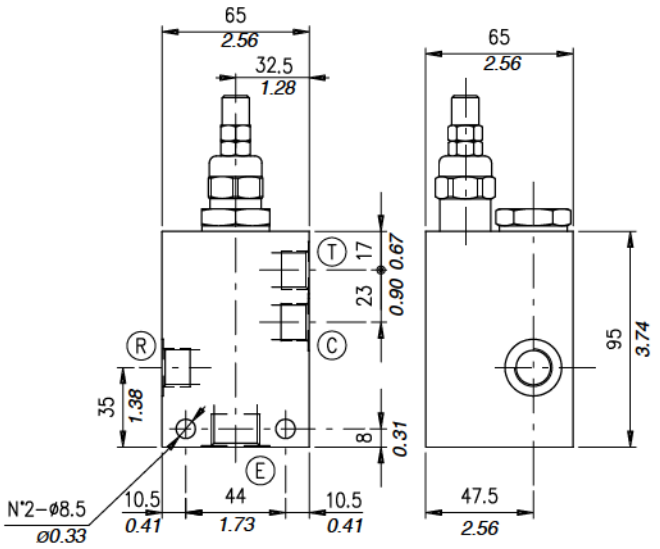
Performance

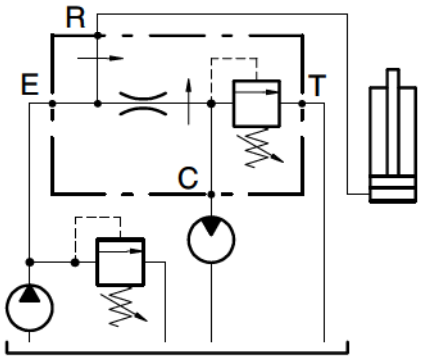
Body Valves

Type VPF/3/ EP..+VMP	Max flow in E		Flow regolated in C (l/min.) depending on the fixed orifice size														
			Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø
	l/min	*US gpm*	mm	1	1,5	2	2,5	2,8	3	3,5	3,8	4	4,5	5	5,5	6	6,5	7
			in	*0.040*	*0.059*	*0.079*	*0.098*	*0.11*	*0.12*	*0.14*	*0.15*	*0.16*	*0.18*	*0.20*	*0.21*	*0.24*	*0.25*	*0.27*
VPF/3/EP38 +VMP	60	*16*	l/min	1,5	2,8	5	7,5	9,8	10,3	15	22	26	-	-	-	-	-	-
			US gpm	*0.4*	*0.7*	*1.3*	*2*	*2.6*	*2.7*	*4*	*5.8*	*6.9*	-	-	-	-	-	-
VPF/3/EP12 +VMP	100	*26*	l/min	1,1	2,5	4	6	8,8	9,5	13	18	19,5	26	33	46	-	-	-
			US gpm	*0.29*	*0.66*	*1*	*1.6*	*2.3*	*2.5*	*3.4*	*4.7*	*5.1*	*6.9*	*8.7*	*12*	-	-	-
VPF/3/EP34 +VMP	150	*40*	l/min	1,7	3	5	7,5	-	11	16	-	20,5	26,5	38	43	55	68	88
			US gpm	*0.45*	*0.79*	*1.3*	*2*	-	*2.9*	*4.2*	-	*5.4*	*7*	*10*	*11*	*14*	*18*	*23*

Type VPF/3/ EP..+VMP	Values have been pointed out a the following cond.	Max. Press.	Weight	
			kg	*lb*
VPF/3/EP38 +VMP	flow in E: 40 l/min *(11 US gpm)* no load on both, R and C ports	210 bar *-3050 psi-* (aluminium body) 350 bar *-5100 psi-* (steel body)	1,30 (alum.) 2,94 (steel)	2,87 (alum.) 6,48 (steel)
VPF/3/EP12 +VMP	flow in E: 80 l/min *(21 US gpm)* no load on both, R and C ports		1,90 (alum.) 4,38 (steel)	4,19 (alum.) 9,66 (steel)
VPF/3/EP34 +VMP	flow in E: 100 l/min *(26 US gpm)* no load on both, R and C ports		3,12 (alum.) 6,77 (steel)	6,88 (alum.) 14,92 (steel)

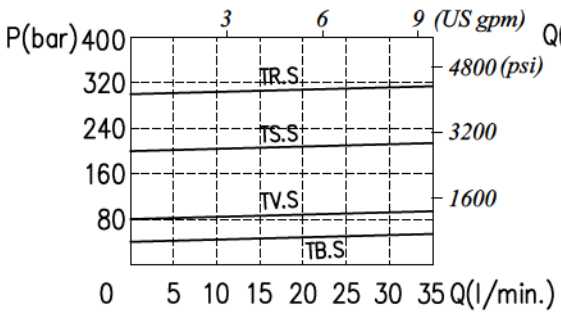
Dimensions and assembly diagram



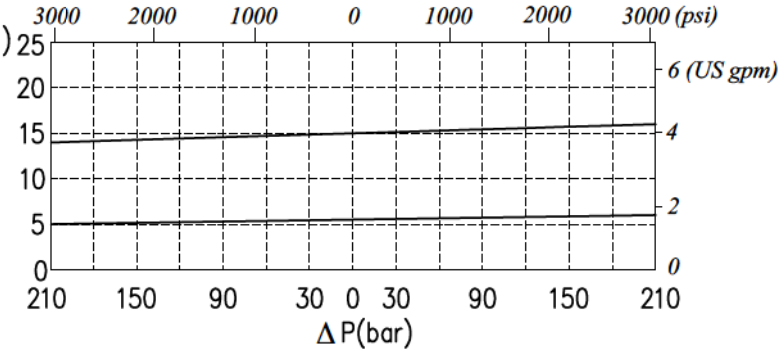


Rating diagrams

VMP operating diagram according to setting range



Compensation diagram in C changing the Δp between E and R



Order code

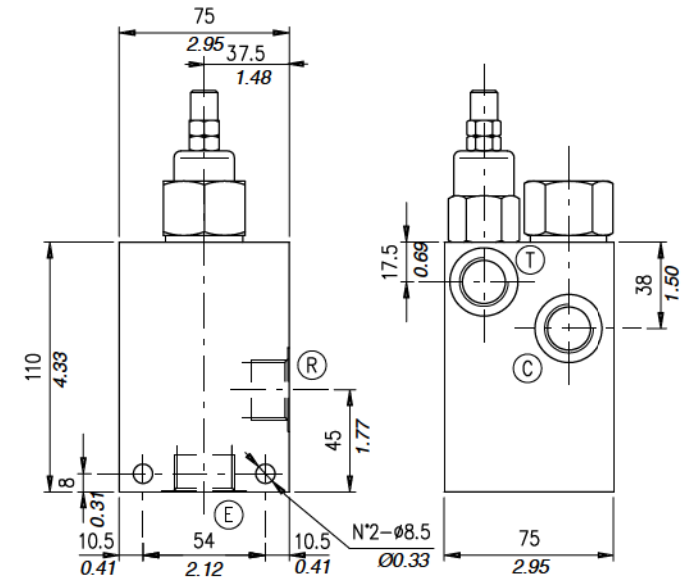
VPF /3 /EP 38 + VMP /DS □ / 5 .□ /□

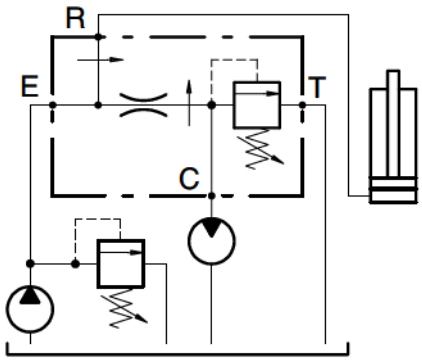
Fixed Orifice Size (mm)
- **1** *(3,93x10⁻² in)*
- **1,5** *(5,90x10⁻² in)*
- **2** *(7,87x10⁻² in)*
- **2,5** *(9,84x10⁻² in)*
- **2,8** *(11,02x10⁻² in)*
- **3** *(11,81x10⁻² in)*
- **3,5** *(13,77x10⁻² in)*
- **3,8** *(14,96x10⁻² in)*
- **4** *(15,74x10⁻² in)*

Pressure settings (bar)
- **TB** 0÷40 *(0÷580)*
- **TV** 20÷80 *(290÷1150 psi)*
- **TS** 50÷220 *(725÷3200 psi)*
- **TR** 180÷400 *(2600÷5800 psi)*

Body material
- _ Aluminium
- ac Steel

Dimensions and hydraulic circuit

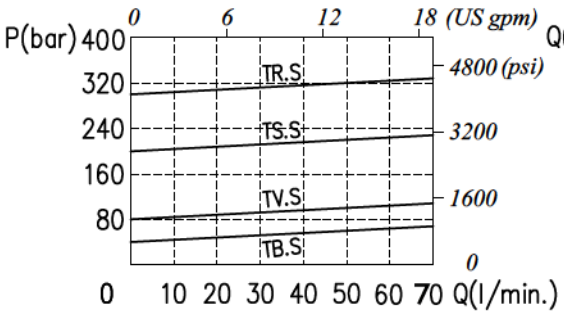




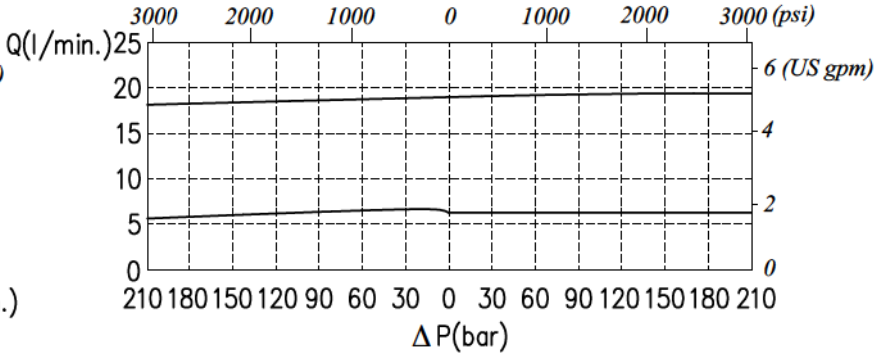
E–R	T–C
G 3/4	G 1/2

Rating diagrams

VMP operating diagram according to setting range



Compensation diagram in C changing the Δp between E and R



Order code

VPF /3 /EP 12 + VMP /DS □ / 10 .□ /□

Fixed Orifice Size

1 *(3,93x10² in)*
1,5 *(5,90x10² in)*
2 *(7,87x10² in)*
2,5 *(9,84x10² in)*
2,8 *(11,02x10² in)*
3 *(11,81x10² in)*
3,5 *(13,77x10² in)*
3,8 *(14,96x10² in)*
4 *(15,74x10² in)*
4,5 *(17,71x10² in)*
5 *(19,68x10² in)*
5,5 *(19,68x10² in)*

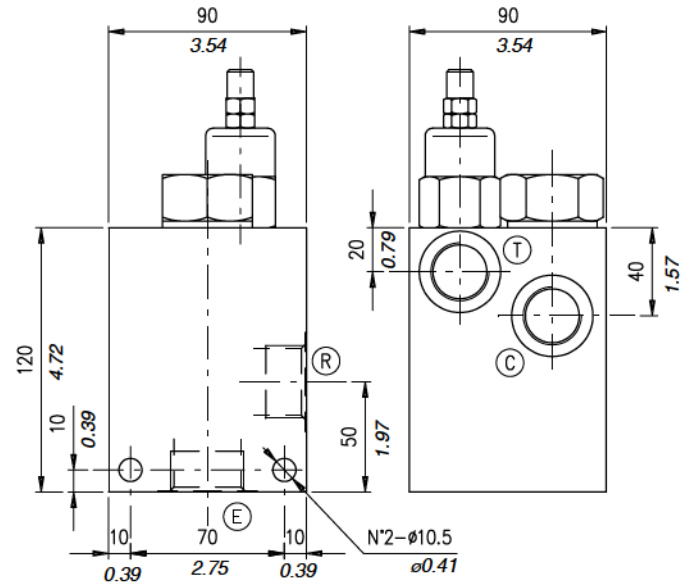
Pressure settings (bar)

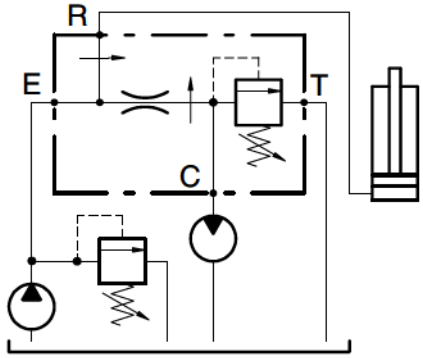
TB 0÷40 *(0÷580 psi)*
TV 20÷80 *(290÷1150 psi)*
TS 50÷220 *(725÷3200 psi)*
TR 180÷400 *(2600÷5800 psi)*

Body material

_ Aluminium
acSteel

Dimensions and hydraulic circuit

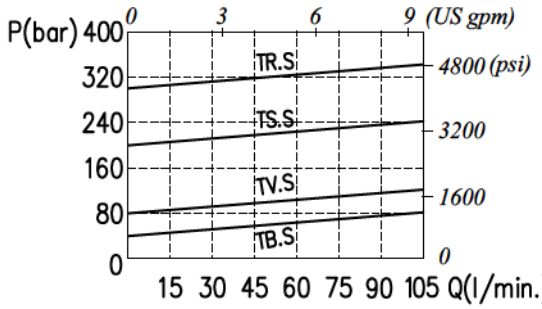




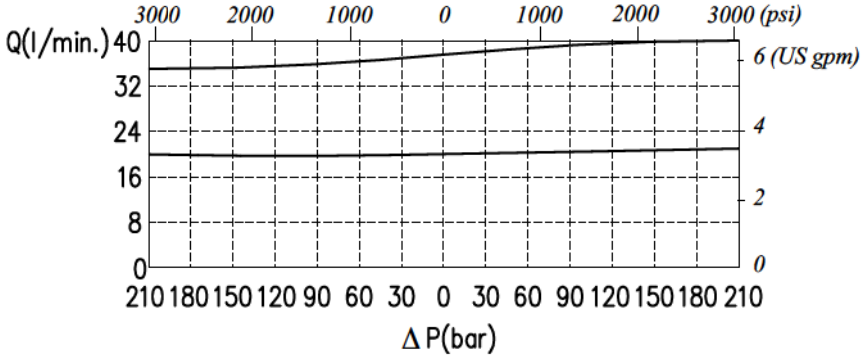
E–R	T–C
G 1	G 3/4

Rating diagrams

VMP operating diagram according to setting range



Compensation diagram in C changing the Δp between E and R



Order code

VPF /3 /EP 34 + VMP /DS □ / 20 .□ /□

Fixed Orifice Size

1 *(3,93x10² in)*
1,5 *(5,90x10² in)*
2 *(7,87x10² in)*
2,5 *(9,84x10² in)*
3 *(11,81x10² in)*
3,5 *(11,81x10² in)*
4 *(15,74x10² in)*
4,5 *(17,71x10² in)*
5 *(19,68x10² in)*
5,5 *(19,68x10² in)*
6 *(23,62x10² in)*
6,5 *(25,59x10² in)*
7 *(27,55x10² in)*

Pressure settings (bar)

TB 0÷40 *(0÷580 psi)*
TV 20÷80 *(290÷1150 psi)*
TS 50÷220 *(725÷3190 psi)*
TR 180÷400 *(2610÷5800 psi)*

Body material

_ Aluminium
acSteel