

Type VPF/3/EP+VMP

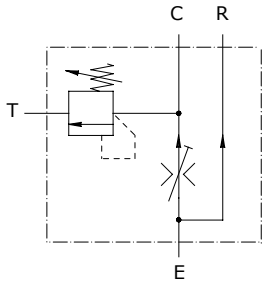
flow control pressure compensated valves

- 3 ways
- Exceeding flow to pressure
- Whit costant flow in "C"
- With pressure relief valve

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

		VPF/3/EP 38+VMP	VPF/3/EP 12+VMP	VPF/3/EP 34+VMP
Nominal flow		60 l/min *(15.8 US gpm)*	100 l/min *(26.4 US gpm)*	150 l/min *(39.6 US gpm)*
Max. pressure			Aluminium body = 210 bar *(3050 psi)* Steel body = 350 bar *(5100 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 temperature for working conditions			from -40°C *(-40°F)* to 100°C *(212°F)*	
Weight	*aluminium*	1.30 kg *(2.87 lb)*	1.90 kg *(4.19 lb)*	3.15 kg *(6.94 lb)*
	steel	2.94 kg *(6.48 lb)*	4.38 kg *(9.66 lb)*	6.92 kg *(15.26 lb)*

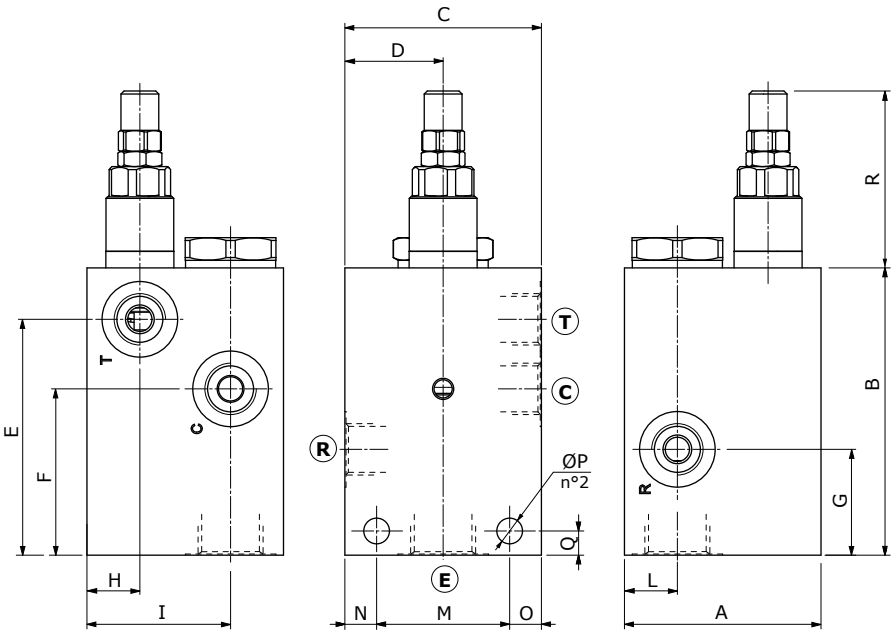
NOTE - For different conditions, please contact Walvoil Sales Dpt.



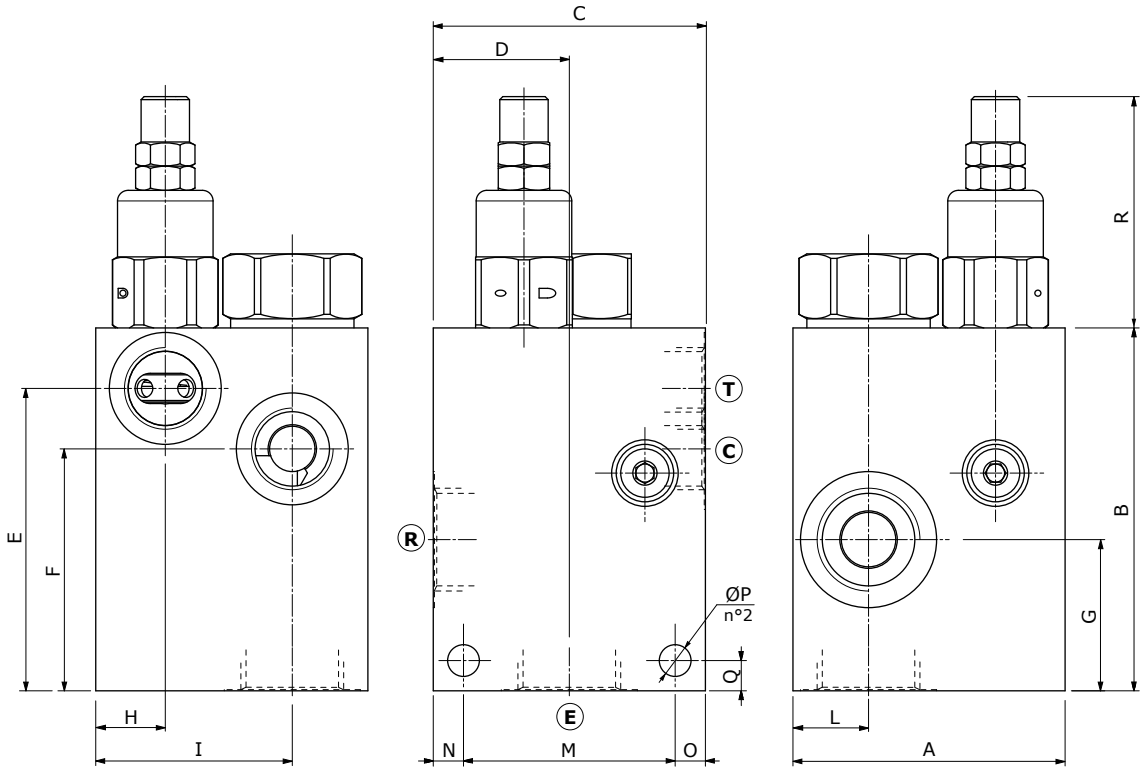
Dimensions

Valve type	E	R	C	T
VPF/3/EP 35+VMP	G1/2	G3/8	G3/8	G3/8
VPF/3/EP 12+VMP	G3/4	G3/4	G1/2	G1/2
VPF/3/EP 34+VMP	G1"	G1"	G3/4	G3/4

VPF/3/EP 38+VMP - VPF/3/EP 12+VMP



VPF/3/EP 34+VMP



Dimensions are in mm-*in*

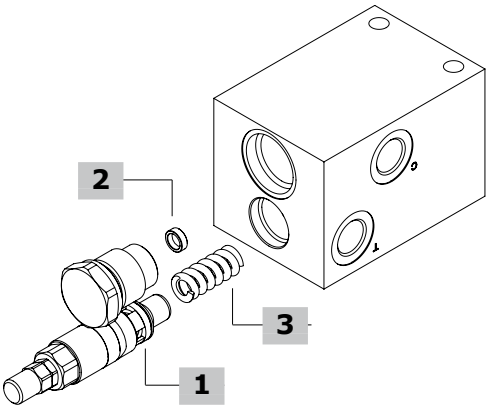
Valve type	A	B	C	D	E	F	G	H	I	L	M	N	O	ØP	Q	R
VPF/3/EP 38+VMP	65 *2.56*	95 *3.74*	65 *2.56*	32.5 *1.28*	78 *3.07*	55 *2.17*	35 *1.38*	17.5 *0.69*	47.5 *1.87*	17.5 *0.69*	44 *1.73*	10.5 *0.413*	10.5 *0.413*	8.5 *0.335*	8 *0.315*	58.5 *2.30*
VPF/3/EP 12+VMP	75 *2.95*	110 *4.33*	75 *2.95*	37.5 *1.48*	92.5 *3.64*	72 *2.83*	45 *1.77*	17.5 *0.69*	55 *2.17*	20 *0.79*	54 *2.13*	10.5 *0.413*	10.5 *0.413*	8.5 *0.335*	8 *0.315*	67 *2.64*
VPF/3/EP 34+VMP	90 *3.54*	120 *4.72*	90 *3.54*	45 *1.77*	100 *3.94*	80 *3.15*	50 *1.97*	23 *0.91*	65 *2.56*	25 *0.98*	70 *2.76*	10 *0.394*	10 *0.394*	10.5 *0.413*	10 *0.394*	76.5 *3.01*

Ordering codes and description composition

Port size

VPF/3/EP 38+VMP/Ds1/5.TS

1 **2** **3**



VPF/3/EP complete valves

TYPE: **VPF/3/EP 38+VMP/Ds1/5.TS** CODE: 1642021100
DESCRIPTION**:** Aluminium body, G3/8 ports, fixed orifice Ø1 mm-*0.039 in* (Qc 1.2 l/min-*0.31 US gpm*), range 50-220 bar *(725-3200 psi)*
TYPE: **VPF/3/EP 12+VMP/Ds2/10.TS** CODE: 1642031102
DESCRIPTION**:** Aluminium body, G1/2 ports, fixed orifice Ø2 mm-*0.078 in* (Qc 4 l/min-*1.05 US gpm*), range 50-220 bar *(725-3200 psi)*
TYPE: **VPF/3/EP 34+VMP/Ds3/20.TS** CODE: 1642041105
DESCRIPTION**:** Aluminium body, G3/4 ports, fixed orifice Ø3 mm-*0.12 in* (Qc 11 l/min-*2.9 US gpm*), range 50-220 bar *(725-3200 psi)*
TYPE: **VPF/3/EP 38+VMP/Ds1/5.TS/ac** CODE: 1642022101
DESCRIPTION**:** Steel body, 3/8 ports, fixed orifice Ø1 mm-*0.039 in* (Qc 1.2 l/min-*0.31 US gpm*), range 50-220 bar *(725-3200 psi)*
TYPE: **VPF/3/EP 12+VMP/Ds2/10.TS/ac** CODE: 1642032100
DESCRIPTION: Steel body, 1/2 ports, fixed orifice Ø2 mm-*0.078 in* (Qc 4 l/min-*1.05 US gpm*), range 50-220 bar *(725-3200 psi)*
TYPE: **VPF/3/EP 34+VMP/Ds3/20.TS/ac** CODE: 1642042103
DESCRIPTION: Steel body, 3/4 ports, fixed orifice Ø3 mm-*0.12 in* (Qc 11 l/min-*2.9 US gpm*) range 50-220 bar *(725-3200 psi)*
For other steel body configurations, SAE thread and configurations with FPM (Viton) seals, please contact our Sales Dpt.

3 Pressure setting springs

TYPE	CODE	DESCRIPTION
For VPF/3/EP 38+VMP valve		
TB	3MOL314311	Setting range 5-40 bar *(72.5-580 psi)*
TV	3MOL314330	Setting range 20-80 bar *(290-1150 psi)*
TS	3MOL315330	Setting range 50-220 bar *(725-3200 psi)*
TR	3ML1143600	Setting range 180-350 bar *(2600-5075 psi)*
For VPF/3/EP 12+VMP valve		
TB	3MOL316410	Setting range 5-40 bar *(72.5-580 psi)*
TV	3ML1154300	Setting range 20-80 bar *(290-1150 psi)*
TS	3MOL317420	Setting range 50-220 bar *(725-3200 psi)*
TR	3MOL317440	Setting range 180-350 bar *(2600-5075 psi)*
For VPF/3/EP 34+VMP valve		
TB	3ML1184300	Setting range 5-40 bar *(72.5-580 psi)*
TV	3ML1174500	Setting range 20-80 bar *(290-1150 psi)*
TS	3ML1204200	Setting range 50-220 bar *(725-3200 psi)*
TR	3ML1214500	Setting range 180-350 bar *(2600-5075 psi)*

1 Direct acting pressure relief valves

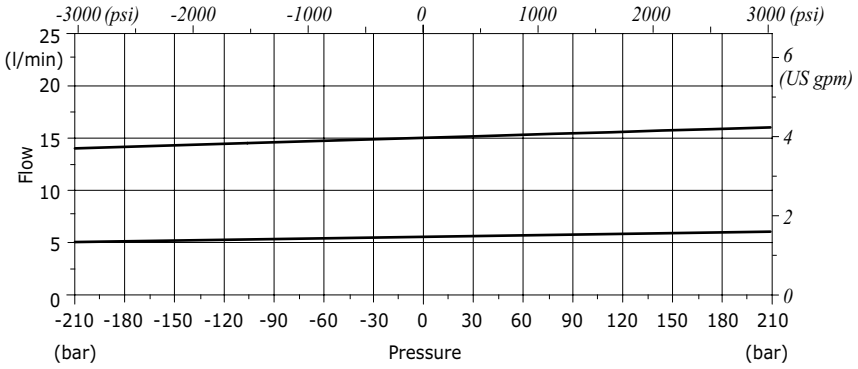
TYPE	CODE	DESCRIPTION
VMP 5/TS.S	1100520400	For VPF/3/EP 38+VMP valve Setting range 50-220 bar *(725-3200 psi)*
VMP 10/TS.S	1100530400	For VPF/3/EP 12+VMP valve Setting range 50-220 bar *(725-3200 psi)*
VMP 20/TS.S	1100540400	For VPF/3/EP 34+VMP valve Setting range 50-220 bar *(725-3200 psi)*

2 Fixed orifice

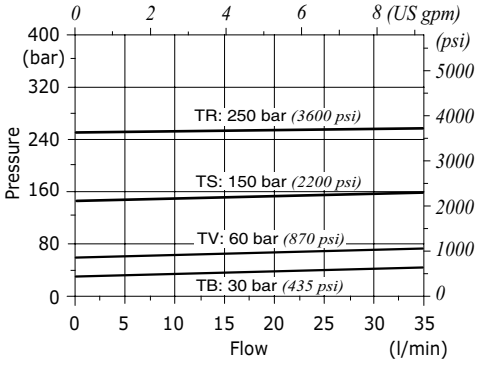
TYPE	CODE	DESCRIPTION
For VPF/3/EP 38+VMP valve		
Ds1	3DF1091000	Ø1 mm-*0.039 in* (Qc 1.2 l/min-*0.31 US gpm*)
Ds1,5	3DF1091500	Ø1.5 mm-*0.059 in* (Qc 2.8 l/min-*0.73 US gpm*)
Ds2	3DF1092000	Ø2 mm-*0.079 in* (Qc 5 l/min-*1.32 US gpm*)
Ds2,5	3DF1092500	Ø2.5 mm-*0.098 in* (Qc 7.5 l/min-*1.98 US gpm*)
Ds2,8	3DF1092800	Ø2.8 mm-*0.11 in* (Qc 9.5 l/min-*2.5 US gpm*)
Ds3	3DF1093000	Ø3 mm-*0.12 in* (Qc 11 l/min-*2.9 US gpm*)
Ds3,5	3DF1093500	Ø3.5 mm-*0.14 in* (Qc 16 l/min-*4.2 US gpm*)
Ds3,8	3DF1093800	Ø3.8 mm-*0.15 in* (Qc 20 l/min-*5.9 US gpm*)
Ds4	3DF1094000	Ø4 mm-*0.16 in* (Qc 23 l/min-*6 US gpm*)
For VPF/3/EP 12+VMP valve		
Ds1	3DF1111000	Ø1 mm-*0.039 in* (Qc 1.1 l/min-*0.29 US gpm*)
Ds1,5	3DF1111500	Ø1.5 mm-*0.059 in* (Qc 2.5 l/min-*0.66 US gpm*)
Ds2	3DF1112000	Ø2 mm-*0.079 in* (Qc 4 l/min-*1.05 US gpm*)
Ds2,5	3DF1112500	Ø2.5 mm-*0.098 in* (Qc 6.5 l/min-*1.72 US gpm*)
Ds2,8	3DF1112800	Ø2.8 mm-*0.11 in* (Qc 8 l/min-*2.1 US gpm*)
Ds3	3DF1113000	Ø3 mm-*0.12 in* (Qc 9.5 l/min-*2.5 US gpm*)
Ds3,5	3DF1113500	Ø3.5 mm-*0.14 in* (Qc 13 l/min-*3.43 US gpm*)
Ds3,8	3DF1113800	Ø3.8 mm-*0.15 in* (Qc 16 l/min-*4.22 US gpm*)
Ds4	3DF1114000	Ø4 mm-*0.16 in* (Qc 18 l/min-*4.75 US gpm*)
Ds4,5	3DF1114500	Ø4.5 mm-*0.18 in* (Qc 25 l/min-*6.6 US gpm*)
Ds5	3DF1115000	Ø5 mm-*0.2 in* (Qc 32 l/min-*8.45 US gpm*)
Ds5,5	3DF1115000	Ø5.5 mm-*1.2 in* (Qc 41 l/min-*10.83 US gpm*)
For VPF/3/EP 34+VMP valve		
Ds1	3DF1151000	Ø1 mm-*0.039 in* (Qc 1.3 l/min-*0.34 US gpm*)
Ds1,5	3DF1151500	Ø1.5 mm-*0.059 in* (Qc 3 l/min-*0.4 US gpm*)
Ds2	3DF1152000	Ø2 mm-*0.079 in* (Qc 5 l/min-*1.32 US gpm*)
Ds2,5	3DF1152500	Ø2,5 mm-*0.14 in* (Qc 7.5 l/min-*1.98 US gpm*)
Ds3	3DF1153000	Ø3 mm-*0.15 in* (Qc 11 l/min-*2.9 US gpm*)
Ds3,5	3DF1153500	Ø3,5 mm-*0.15 in* (Qc 15 l/min-*3.96 US gpm*)
Ds4	3DF1154000	Ø4 mm-*0.16 in* (Qc 20.5 l/min-*5.41 US gpm*)
Ds4,5	3DF1154500	Ø4.5 mm-*0.18 in* (Qc 26.5 l/min-*7 US gpm*)
Ds5	3DF1155000	Ø5 mm-*0.2 in* (Qc 33 l/min-*8.72 US gpm*)
Ds5,5	3DF1155500	Ø5.5 mm-*1.2 in* (Qc 42 l/min-*11.09 US gpm*)
Ds6	3DF1156000	Ø6 mm-*0.18 in* (Qc 52 l/min-*13.74 US gpm*)
Ds6,5	3DF1156500	Ø6.5 mm-*0.2 in* (Qc 63 l/min-*16.64 US gpm*)
Ds7	3DF1157000	Ø7 mm-*1.2 in* (Qc 77 l/min-*20.34 US gpm*)

Rating diagrams

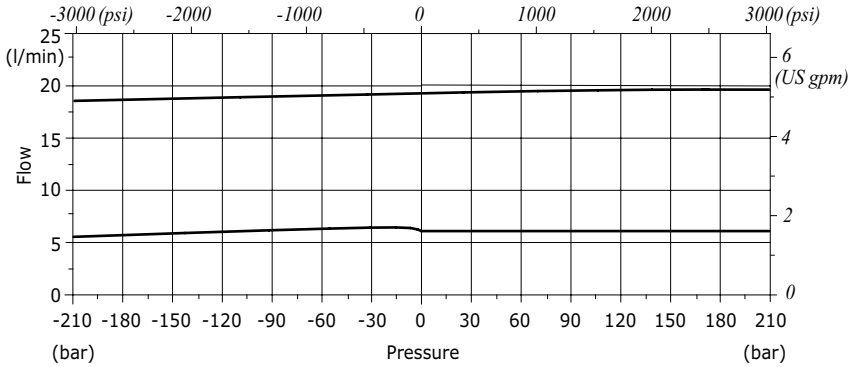
VPF/3/EP 38+VMP compensation diagram in C changing the Δp between E and R



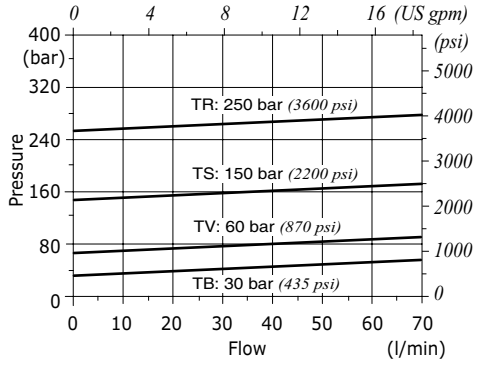
VPF/3/EP 38+VMP
Std. setting at 5 l/min *(1.32 US gpm)*



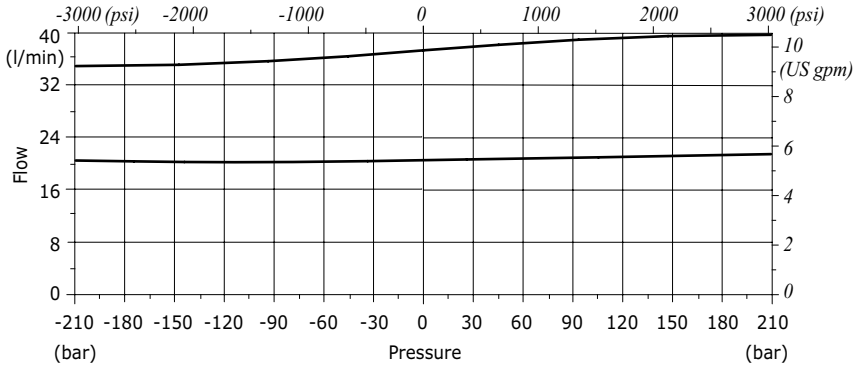
VPF/3/EP 12+VMP compensation diagram in C changing the Δp between E and R



VPF/3/EP 12+VMP
Std. setting at 5 l/min *(1.32 US gpm)*



VPF/3/EP 34+VMP compensation diagram in C changing the Δp between E and R



VPF/3/EP 34+VMP
Std. setting at 5 l/min *(1.32 US gpm)*

