

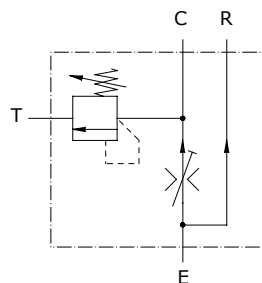
Type VPF/3/EP+VMP flow control pressure compensated valves

- 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	<i>aluminium</i>	1.30 kg (2.87 lb)	1.90 kg (4.19 lb)	3.15 kg (6.94 lb)
	<i>steel</i>	2.94 kg (6.48 lb)	4.38 kg (9.66 lb)	6.92 kg (15.26 lb)

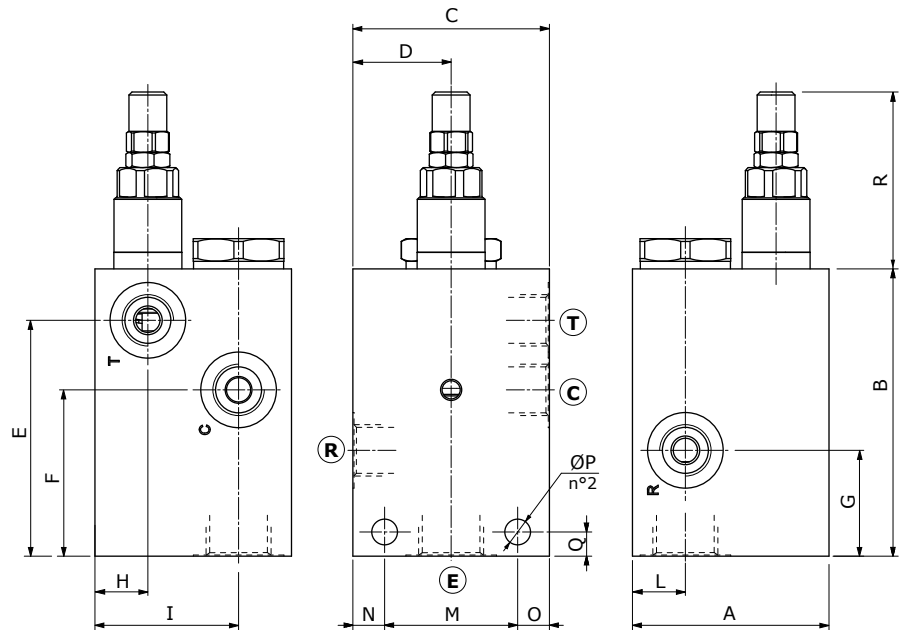
NOTE - For different conditions, please contact Walvoil Sales Dpt.



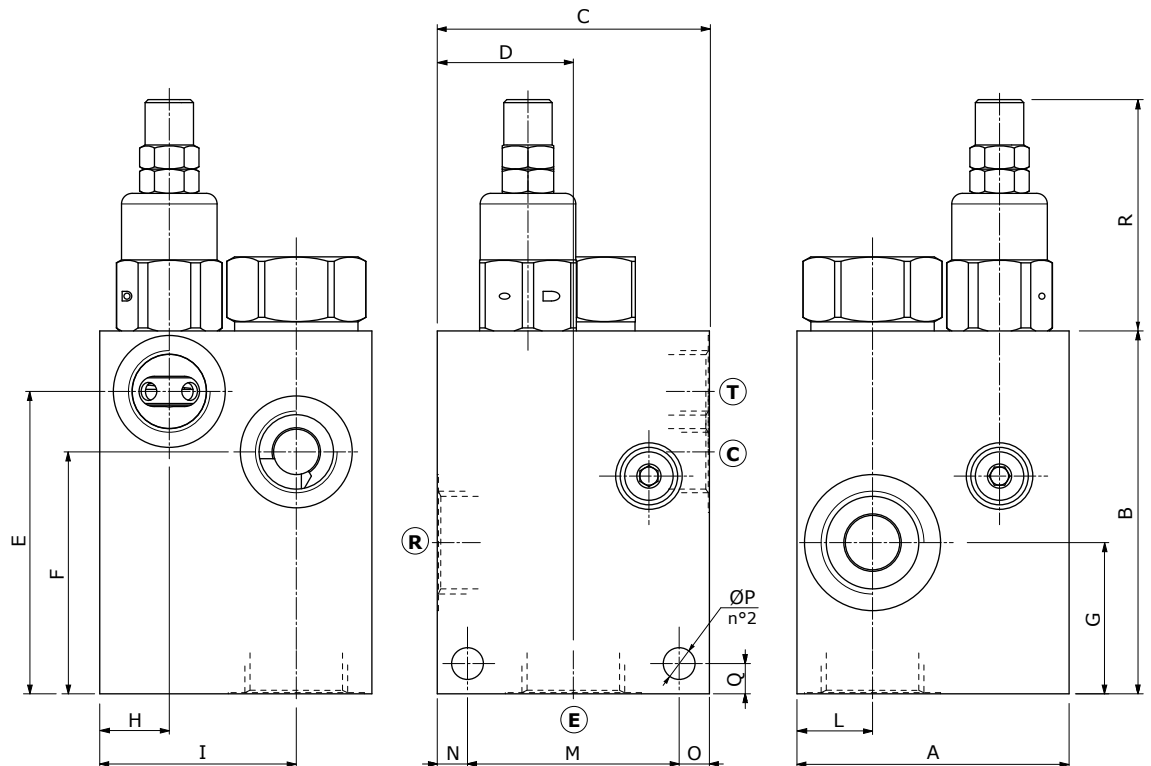
Dimensions

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

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 34+VMP



Dimensions are in mm-in

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

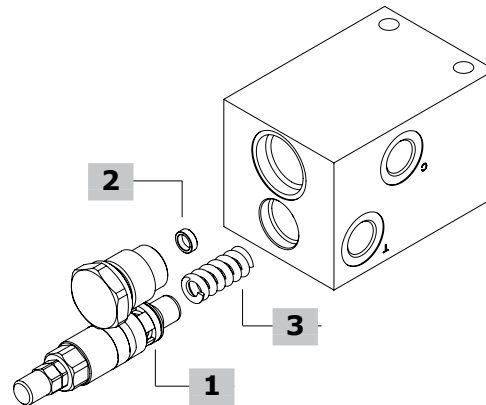
Flow control valves

Flow control pressure compensated valves

VPF/3/EP+VMP

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

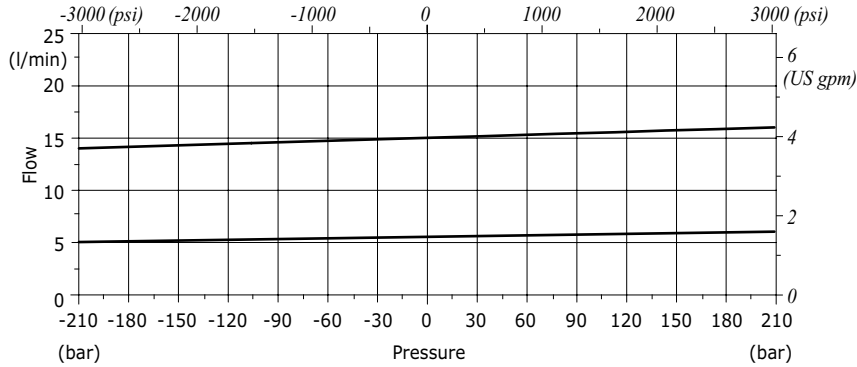
TYPE	CODE	DESCRIPTION
VMP 5/TS.S	1100520400	For VPF/3/EP 38+VMP valve Setting range 50-220 bar (725-3200 psi)
VMP 10/TS.S	1100530400	For VPF/3/EP 12+VMP valve Setting range 50-220 bar (725-3200 psi)
VMP 20/TS.S	1100540400	For VPF/3/EP 34+VMP valve Setting range 50-220 bar (725-3200 psi)

2 Fixed orifice

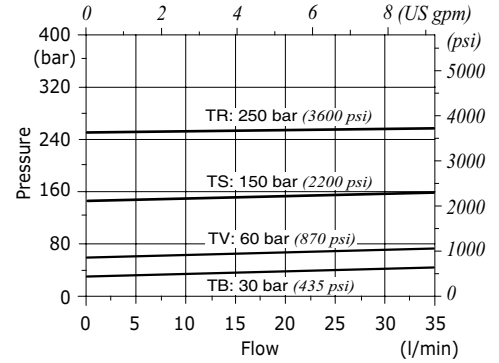
TYPE	CODE	DESCRIPTION
For VPF/3/EP 38+VMP valve		
Ds1	3DF1091000	Ø1 mm-0.039 in (Qc 1.2 l/min-0.31 US gpm)
Ds1,5	3DF1091500	Ø1.5 mm-0.059 in (Qc 2.8 l/min-0.73 US gpm)
Ds2	3DF1092000	Ø2 mm-0.079 in (Qc 5 l/min-1.32 US gpm)
Ds2,5	3DF1092500	Ø2.5 mm-0.098 in (Qc 7.5 l/min-1.98 US gpm)
Ds2,8	3DF1092800	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-0.2 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-0.2 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-0.2 in (Qc 77 l/min-20.34 US gpm)

Rating diagrams

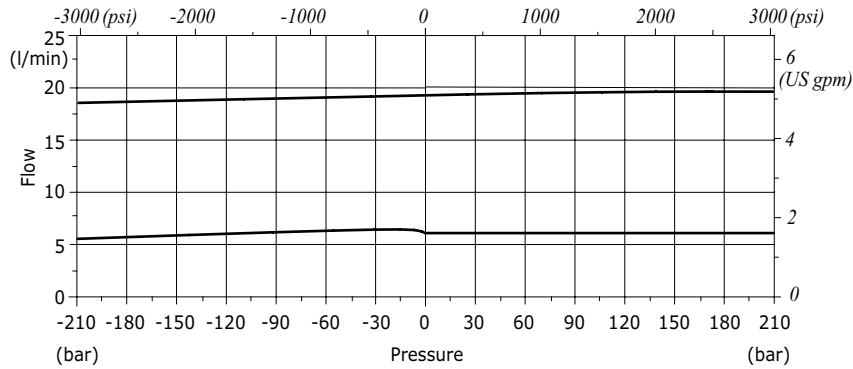
VPF/3/EP 38+VMP compensation diagram in C changing the Δp between E and R



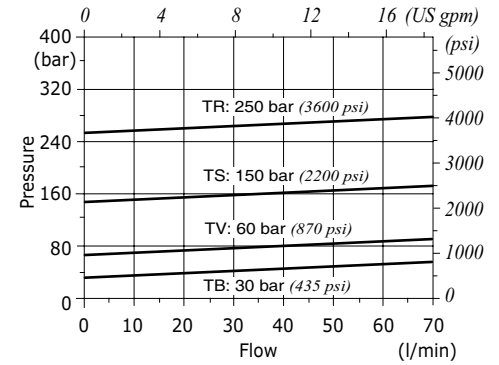
VPF/3/EP 38+VMP
Std. setting at 5 l/min (1.32 US gpm)



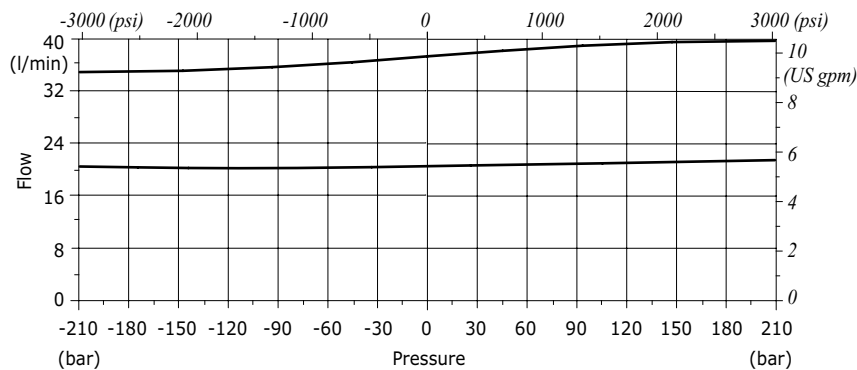
VPF/3/EP 12+VMP compensation diagram in C changing the Δp between E and R



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)

