



Type VMP/VE pressure relief valves

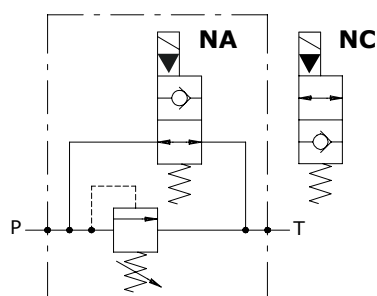
- Piloted operated
- With electric venting

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

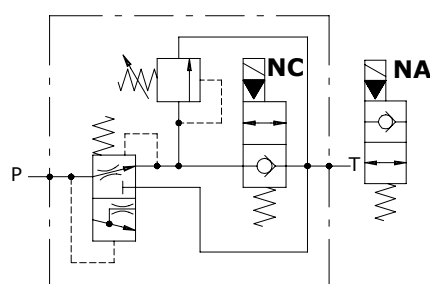
	VMP/VE 14	VMP/VE 38	VMP/VE 12	VMP/VE 34	VMP/VE 100	VMP/VE 114	
Nominal flow	20 l/min <i>(5.3 US gpm)</i>	35 l/min <i>(9.2 US gpm)</i>	90 l/min <i>(23.8 US gpm)</i>	90 l/min <i>(23.8 US gpm)</i>	150 l/min <i>(39.6 US gpm)</i>	250 l/min <i>(66 US gpm)</i>	
Max. pressure	Aluminium body = 210 bar <i>(3050 psi)</i> Steel body = 350 bar <i>(5100 psi)</i>						
Oil leakage at 80% of max. setting	3 cm³/min <i>(0.18 in³/min)</i>	3 cm³/min <i>(0.18 in³/min)</i>	200 cm³/min <i>(12.20 in³/min)</i>	200 cm³/min <i>(12.20 in³/min)</i>	200 cm³/min <i>(12.20 in³/min)</i>	200 cm³/min <i>(12.20 in³/min)</i>	
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 <i>(-4°F)</i> to 80°C <i>(176°F)</i>						
Environmental temp. for working conditions	from -40°C <i>(-40°F)</i> to 100°C <i>(212°F)</i>						
Weight	<i>aluminium</i>	0.67 kg <i>(1.48 lb)</i>	0.66 kg <i>(1.46 lb)</i>	1.42 kg <i>(3.13 lb)</i>	1.26 kg <i>(2.78 lb)</i>	1.92 kg <i>(4.23 lb)</i>	3.77 kg <i>(8.31 lb)</i>
	<i>steel</i>	1.13 kg <i>(2.49 lb)</i>	1.27 kg <i>(2.80 lb)</i>	2.58 kg <i>(5.69 lb)</i>	2.57 kg <i>(5.67 lb)</i>	3.95 kg <i>(8.71 lb)</i>	7.73 kg <i>(17.04 lb)</i>

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

VMP/VE 14-38



VMP/VE 12-34-100-114



Dimensions

Valve type	All ports
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VMP/VE 14 G1/4

VMP/VE 38 G3/8

Valve type	All ports
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VMP/VE 38/SAE SAE8

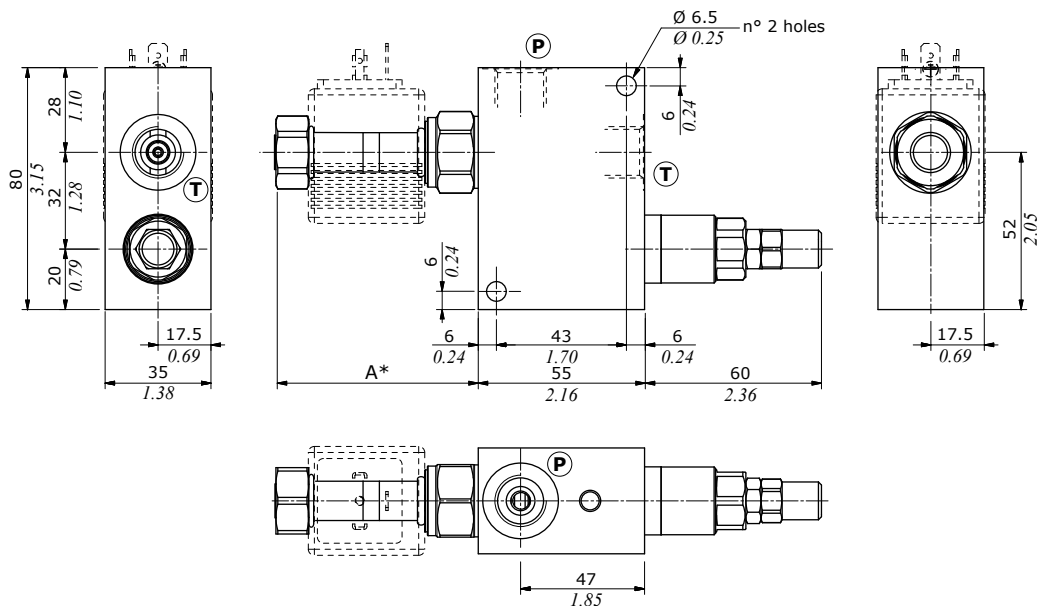
Dimensions are in mm-in

Valve type	A*
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VMP/VE 14 66.5-2.62

VMP/VE 38 66.5-2.62
VMP/VE 38/SAE 66.5-2.62

(*) With normally open valve



Valve type	All ports
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VMP/VE 12 G1/2

VMP/VE 34 G3/4

VMP/VE 100 G1"

VMP/VE 114 G1 1/4

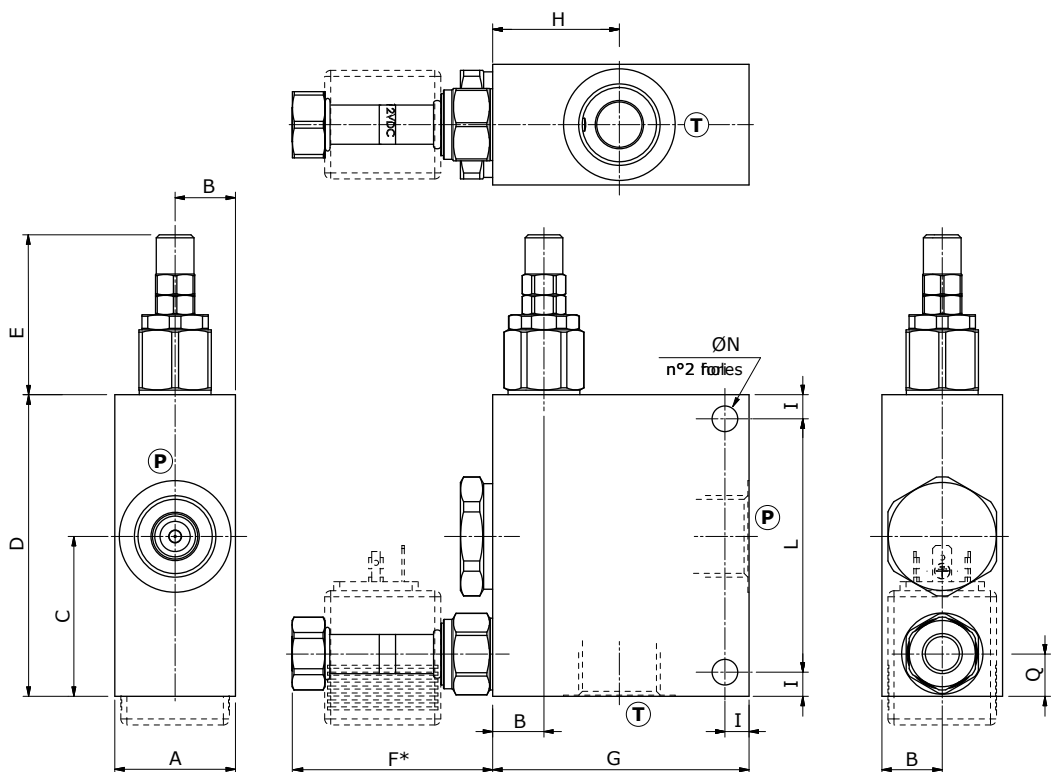
Valve type	All ports
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VMP/VE 12/SAE SAE10

VMP/VE 34/SAE SAE12

VMP/VE 100/SAE SAE16

Dimensions are in mm-in



Valve type	A	B	C	D	E	F*	G	H	I	L	ØN	Q
VMP/VE 12	40-1.57	20-0.70	53-2.09	100-3.93	51.5-2.03	66.5-2.62	85-3.35	42-1.65	8-0.31	84-3.31	8.5-0.33	14-0.55
VMP/VE 12/SAE	40-1.57	20-0.70	53-2.09	100-3.93	51.5-2.03	66.5-2.62	85-3.35	42-1.65	8-0.31	84-3.31	8.5-0.33	14-0.55
VMP/VE 34	40-1.57	20-0.70	53-2.09	100-3.93	51.5-2.03	66.5-2.62	85-3.35	42-1.65	8-0.31	84-3.31	8.5-0.33	14-0.55
VMP/VE 34/SAE	40-1.57	20-0.70	53-2.09	100-3.93	51.5-2.03	66.5-2.62	85-3.35	42-1.65	8-0.31	84-3.31	8.5-0.33	14-0.55
VMP/VE 100	50-1.97	25-0.98	60-2.36	110-4.33	53-2.09	66.5-2.62	100-3.94	50-1.97	10-0.40	90-3.54	10.5-0.41	17-0.67
VMP/VE 100/SAE	50-1.97	25-0.98	60-2.36	110-4.33	53-2.09	66.5-2.62	100-3.94	50-1.97	10-0.40	90-3.54	10.5-0.41	17-0.67
VMP/VE 114	70-2.75	35-2.75	72-2.83	130-5.12	53-2.09	66.5-2.62	130-5.12	62-2.44	12-0.47	106-4.17	12.5-0.49	18-0.71

(*) With normally open valve

Ordering codes and description composition

VMP/VE complete valves

With direct acting valves; standard setting is referred to 5 l/min (1.32 US gpm)

Configuration with G1/4 standard thread

TYPE: **VMP/VE 14/NA/5.TS.S/EC08M** CODE: 1116011104
DESCRIPTION: Aluminium body, range 50-220 bar (725-3200 psi).
Std setting 160 bar (2300 psi), with (NA) normally open solenoid valve
TYPE: **VMP/VE 14/NC/5.TS.S/EC08M** CODE: 1116011105
DESCRIPTION: As previous one, with (NC) normally closed solenoid valve

Configuration with G3/8 standard thread

TYPE: **VMP/VE 38/NA/5.TS.S/EC08M** CODE: 1116021104
DESCRIPTION: Aluminium body, range 50-220 bar (725-3200 psi).
Std setting 160 bar (2300 psi), with (NA) normally open solenoid valve
TYPE: **VMP/VE 38/NC/5.TS.S/EC08M** CODE: 1116021105
DESCRIPTION: As previous one, with (NC) normally closed solenoid valve
TYPE: **VMP/VE 38/NA/5.TR.S/EC08M/ac** CODE: 1116022101
DESCRIPTION: Steel body, range 180-350 bar (2600-5100 psi).
Std setting 280 bar (4050 psi), with (NA) normally open solenoid valve
TYPE: **VMP/VE 38/NC/5.TR.S/EC08M/ac** CODE: 1116022100
DESCRIPTION: As previous one, with (NC) normally closed solenoid valve

Configuration with G1/2 standard thread

TYPE: **VMP/VE 12/NA/03.TS.S/EC08M** CODE: 1116031102
DESCRIPTION: Aluminium body, range 50-200 bar (725-2900 psi).
Std setting 150 bar (2200 psi), with (NA) normally open solenoid valve
TYPE: **VMP/VE 12/NC/03.TS.S/EC08M** CODE: 1116031103
DESCRIPTION: As previous one, with (NC) normally closed solenoid valve
TYPE: **VMP/VE 12/NA/03.TR.S/EC08M/ac** CODE: 1116032100
DESCRIPTION: Steel body, range 180-350 bar (2600-5100 psi).
Std setting 250 bar (3600 psi), with (NA) normally open solenoid valve
TYPE: **VMP/VE 12/NC/03.TR.S/EC08M/ac** CODE: 1116032103
DESCRIPTION: As previous one, with (NC) normally closed solenoid valve

Configuration with G3/4 standard thread

TYPE: **VMP/VE 34/NA/03.TS.S/EC08M** CODE: 1116041102
DESCRIPTION: Aluminium body, range 50-200 bar (725-2900 psi).
Std setting 150 bar (2200 psi), with (NA) normally open solenoid valve
TYPE: **VMP/VE 34/NC/03.TS.S/EC08M** CODE: 1116041103
DESCRIPTION: As previous one, with (NC) normally closed solenoid valve
TYPE: **VMP/VE 34/NA/03.TR.S/EC08M/ac** CODE: 1116042100
DESCRIPTION: Steel body, range 150-350 bar (2175-5100 psi).
Std setting 250 bar (3600 psi), with (NA) normally open solenoid valve
TYPE: **VMP/VE 34/NC/03.TR.S/EC08M/ac** CODE: 1116042101
DESCRIPTION: As previous one, with (NC) normally closed solenoid valve

Configuration with G1" standard thread

TYPE: **VMP/VE 100/NA/03.TS.S/EC08M** CODE: 1116051102
DESCRIPTION: Aluminium body, range 50-200 bar (725-2900 psi).
Std setting 150 bar (2200 psi), with (NA) normally open solenoid valve
TYPE: **VMP/VE 100/NC/03.TS.S/EC08M** CODE: 1116051103
DESCRIPTION: As previous one, with (NC) normally closed solenoid valve
TYPE: **VMP/VE 100/NA/03.TR.S/EC08M/ac** CODE: 1116052100
DESCRIPTION: Steel body, range 150-350 bar (2175-5100 psi).
Std setting 250 bar (3600 psi), with (NA) normally open solenoid valve
TYPE: **VMP/VE 100/NC/03.TR.S/EC08M/ac** CODE: 1116052101
DESCRIPTION: As previous one, with (NC) normally closed solenoid valve

Configuration with G1"1/4 standard thread

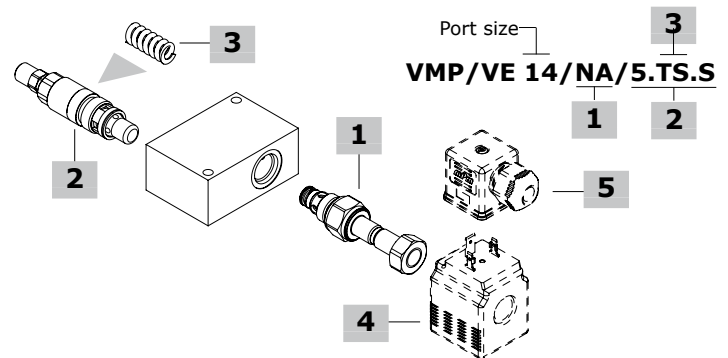
TYPE: **VMP/VE 114/NA/03.TS.S/EC08M** CODE: 1116061102
DESCRIPTION: Aluminium body, range 50-200 bar (725-2900 psi).
Std setting 150 bar (2200 psi), with (NA) normally open solenoid valve
TYPE: **VMP/VE 114/NC/03.TS.S/EC08M** CODE: 1116061103
DESCRIPTION: As previous one, with (NC) normally closed solenoid valve
TYPE: **VMP/VE 114/NA/03.TR.S/EC08M/ac** CODE: 1116062100
DESCRIPTION: Steel body, range 150-350 bar (2175-5100 psi).
Std setting 250 bar (3600 psi), with (NA) normally open solenoid valve
TYPE: **VMP/VE 114/NC/03.TR.S/EC08M/ac** CODE: 1116062101
DESCRIPTION: As previous one, with (NC) normally closed solenoid valve

Configuration with SAE8 standard thread

TYPE: **VMP/VE 38/NA/5.TS.S/EC08M/SAE** CODE: 1116021200
DESCRIPTION: Aluminium body, range 50-220 bar (725-3200 psi).
Std setting 160 bar (2300 psi), with (NA) normally open solenoid valve

Configuration with SAE10 standard thread

TYPE: **VMP/VE 12/NA/03.TS.S/EC08M** CODE: 1116031200
DESCRIPTION: Aluminium body, range 50-200 bar (725-2900 psi).
Std setting 150 bar (2200 psi), with (NA) normally open solenoid valve



VMP/VE complete valves

Configuration with SAE12 standard thread

TYPE: **VMP/VE 34/NA/03.TS.S/EC08M/SAE** CODE: 1116041201
DESCRIPTION: Aluminium body, range 50-200 bar (725-2900 psi).
Std setting 150 bar (2200 psi), with (NA) normally open solenoid valve

Configuration with SAE16 standard thread

TYPE: **VMP/VE 100/NA/03.TS.S/EC08M/SAE** CODE: 1116051200
DESCRIPTION: Aluminium body, range 50-200 bar (725-2900 psi).
Std setting 150 bar (2200 psi), with (NA) normally open solenoid valve

1 Solenoid valves

TYPE	CODE	DESCRIPTION
EC08M/10NB	0EC08002031	(NA) normally open, electric venting
EC08M/20NB	0EC08002032	(NC) normally closed, electric venting

Note: BER coils are required

2 Direct acting pressure relief valves

Standard setting is referred to 5 l/min (1.32 US gpm)

TYPE	CODE	DESCRIPTION
For G3/8, G1/4 and SAE8 ports configuration		
VMP 5/TS.S	1100520400	Setting range 50-220 bar (725-3200 psi) Standard setting 160 bar (2300 psi)
VMP 5/TR.S	1100520401	Setting range 180-350 bar (2600-5100 psi) Standard setting 280 bar (4050 psi)
For G1/2, G3/4, G1" and G1"1/4 ports configuration		
MC08A/0S2B	0MC08002000	Setting range 50-200 bar (725-2900 psi) Standard setting 150 bar (2200 psi)
MC08A/0S3B	0MC08002002	Setting range 150-350 bar (2200-5100 psi) Standard setting 250 bar (3600 psi)

3 Pressure setting springs

TYPE	CODE	DESCRIPTION
For VMP 5 valves		
TB	3MOL314311	Setting range 5-40 bar (72.5-580 psi)
TV	3MOL314330	Setting range 20-80 bar (290-1160 psi)
TS	3MOL315330	Setting range 50-220 bar (725-3200 psi)
TR	3ML1143600	Setting range 180-350 bar (2600-5100 psi)
For MC08A valves		
TB	3ML1092500	Setting range 5-50 bar (72.5-725 psi)
TS	3ML1092501	Setting range 50-200 bar (725-2900 psi)
TR	3ML1092502	Setting range 180-350 bar (2600-5100 psi)

4 Coil (not included)

TYPE	CODE	DESCRIPTION
BER 12VDC	4SLE001200A	12VDC-ISO4400, BER type coil

For complete coil list see from page 437

5 Connector (not included)

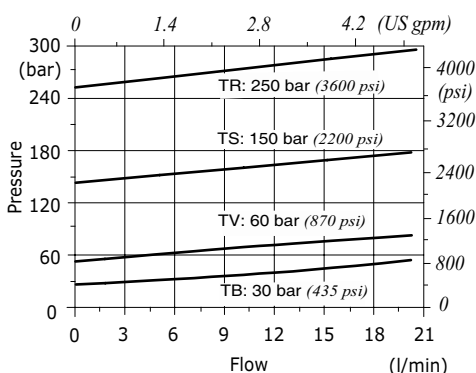
TYPE	CODE	DESCRIPTION
ISO4400	4CN1009995	Connector

For complete connectors list see from page 437
For other steel body configurations, other port sizes and configurations with FPM (Viton) seals please contact our Sales Dpt.

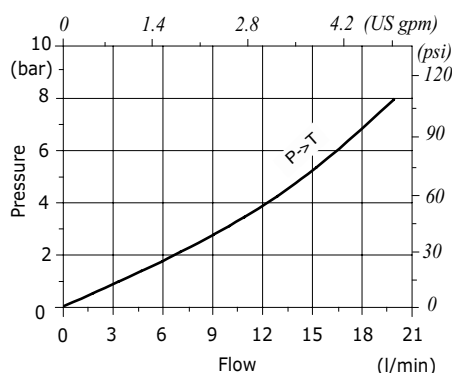
Rating diagrams

VMP/VE 14 pressure vs. flow

Std. setting @ 5 l/min (1.32 US gpm)

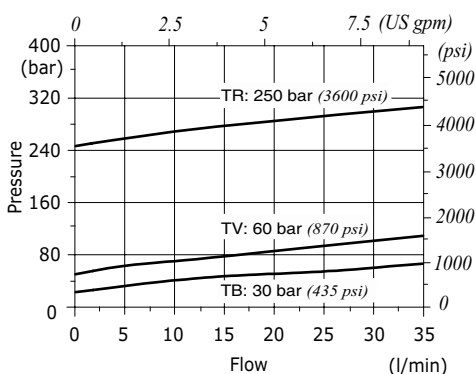


VMP/VE 14 pressure drop diagram

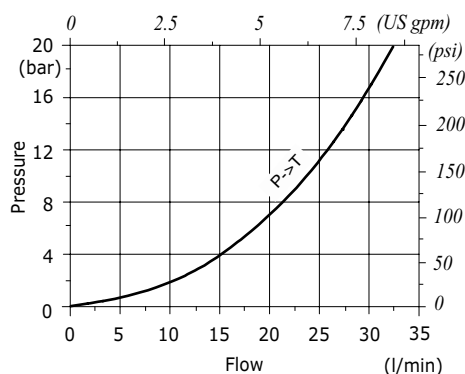


VMP/VE 38 pressure vs. flow

Std. setting @ 5 l/min (1.32 US gpm)

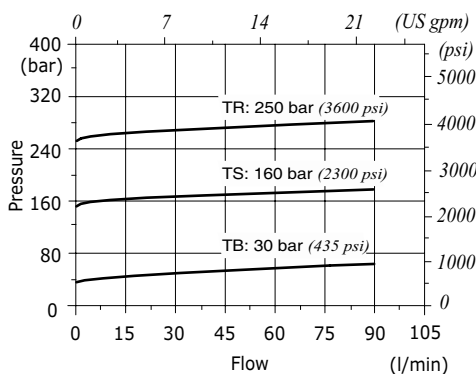


VMP/VE 38 pressure drop diagram

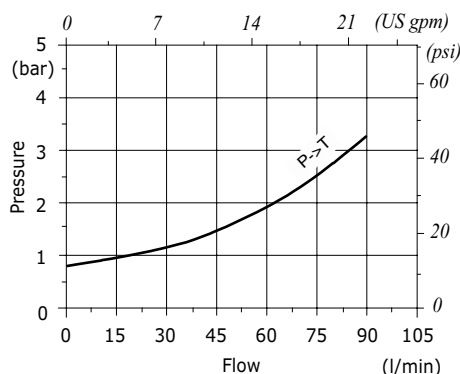


VMP/VE 12-34 pressure vs. flow

Std. setting @ 5 l/min (1.32 US gpm)

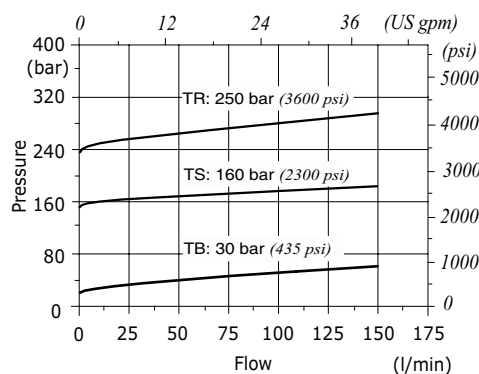


VMP/VE 12-34 pressure drop diagram

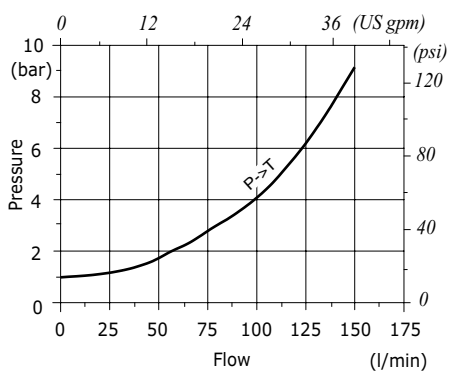


VMP/VE 100-114 pressure vs. flow

Std. setting @ 5 l/min (1.32 US gpm)



VMP/VE 100 pressure drop diagram



VMP/VE 114 pressure drop diagram

