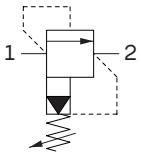
MP..M type
pressure relief valves - 2 way

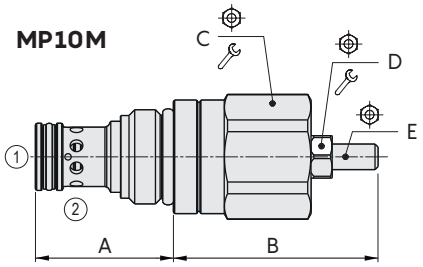
- Pilot operated
- Spool type
- Mechanical control with screw adjustments
- Different springs available to vary pressure range
- The backpressure values on line 2 must be added to valve nominal setting

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

		MP10M	MP12M	MP16M
Nominal flow		120 l/min *(31.7 US gpm)*	200 l/min *(52.8 US gpm)*	400 l/min *(105.67 US gpm)*
Max. pressure		Port 1= 350 bar *(5100 psi)* Port 2= 30 bar *(435 psi)*		350 bar *(5100 psi)*
Oil leakage	at 80% of max. pressure setting	25 cm^3/min *(1.525 in^3/min)*		100 cm^3/min *(6.102 in^3/min)*
Fluid		mineral based or sinthetic hydraulic fluid with lubricating properties		
Viscosity		10-200 cSt		12-400 cSt
Max level of contamination		18/16/13 ISO4406		20/18/14 ISO4406
Fluid temperature	with NBR seals+Polyurethane with FPM seals	from -25°C *(-13°F)* to 90°C *(194°F)* from -20°C *(-4°F)* to 110°C *(230°F)*		
Environmental temp. for working conditions		from -20°C *(-4°F)* to 60°C *(140°F)*		
Cavity		SAE 10/2	SAE 12/2	SAE 16/2
Weight		0.190 kg *(0.42 lb)*	0.300 kg *(0.66 lb)*	0.490 kg *(1.080 lb)*

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

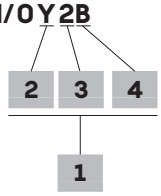


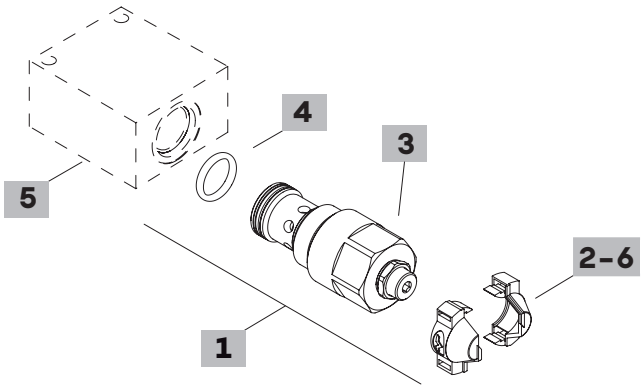


Valve type	A		B		C			D			E
	mm	*in*	mm	*in*		Nm	*lbft*		Nm	*lbft*	
MP10M	32.6	*1.28*	48.3	*1.90*	27	50	*37*	10	6.6	*4.9*	3
MP12M	45	*1.77*	46.9	*1.85*	32	80	*59*	10	6.6	*4.9*	3
MP16M	45.2	*1.78*	49.8	*1.96*	36	100	*74*	19	20	*15*	5

Ordering codes and description composition

MP16M/0Y2B





1 Cartridges

TYPE	CODE	DESCRIPTION
SAE cavity 10/2		
MP10M/0G1B	0MP10002091	Pressure range **1**
MP10M/0G2B	0MP100020A00	Pressure range **2**
MP10M/0G3B	0MP10002093	Pressure range **3**
SAE cavity 12/2		
MP12M/0G1B	0MP12002046	Pressure range **1**
MP12M/0G2B	0MP12002047	Pressure range **2**
MP12M/0G3B	0MP12002048	Pressure range **3**
SAE cavity 16/2		
MP16M/0Y1B	0MP16002017	Pressure range **1**
MP16M/0Y2B	0MP16002013	Pressure range **2**
MP16M/0Y3B	0MP16002014	Pressure range **3**

2 Adjustments

TYPE	DESCRIPTION
G/Y	With screw
X	Valve set with antitampering cap (part code: see point **6**)

3 Pressure range

TYPE	DESCRIPTION
1	Pressure range 5÷50 bar *(72.5÷725 psi)*;
2	Pressure range 50÷220 bar *(725÷3190 psi)*;
3	Pressure range 150÷350 bar *(2175÷5100 psi)*;

4 Seals

TYPE	DESCRIPTION
B	**NBR (Buna)+Polyurethane** o-ring seals, std configuration
V	**FPM (Viton)** o-ring seals, contact Sales Dept

5 Valve body

TYPE	CODE	DESCRIPTION
SAE10/2-SAE8	3CC1020K11	Aluminium body for cavity 10 valve, SAE8 std thread
SAE12/2-SAE10	3CC1220L11	Aluminium body for cavity 12 valve, SAE10 std thread
SAE16/2-SAE12	3CC1620M11	Aluminium body for cavity 16 valve, SAE12 std thread

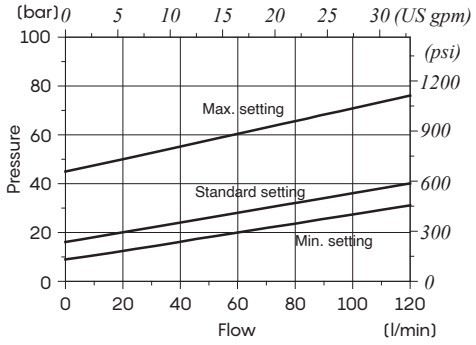
Note: aluminium body can stand up to 210 bar *(3050 psi)*
For steel bodies or different threading see from page 208

6 Accessories

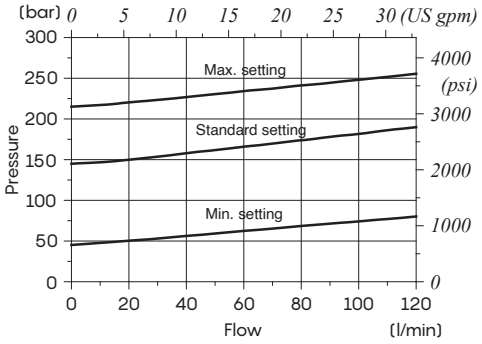
TYPE	CODE	DESCRIPTION
-	4COP116420	Cap (for MP10M / MP12M)
-	4COP126300	Antitampering cap (x2) (for MP16M)

Rating diagrams

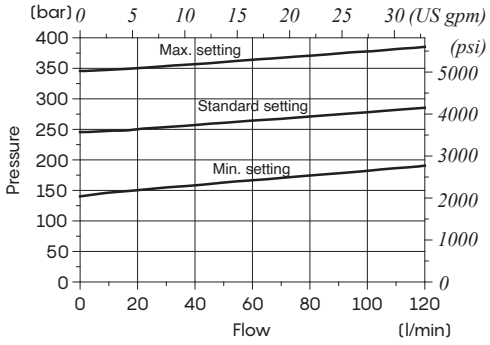
MP10M pressure vs. flow
Std. setting at 5 l/min *(1.32 US gpm)*



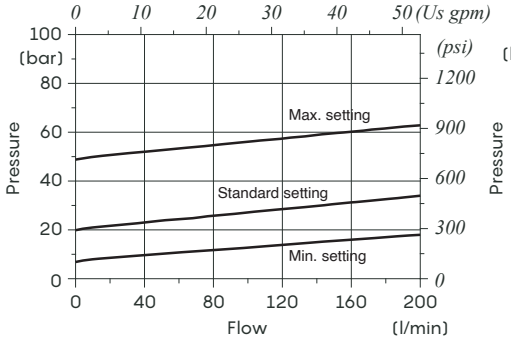
MP10M pressure vs. flow
Std. setting at 5 l/min *(1.32 US gpm)*



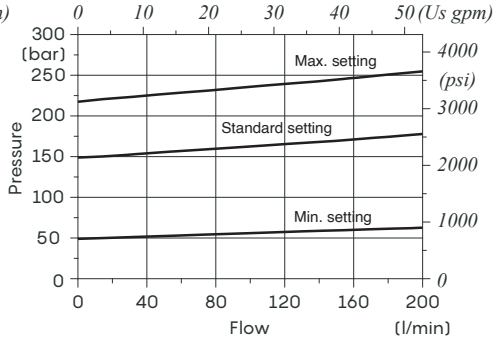
MP10M pressure vs. flow
Std. setting at 5 l/min *(1.32 US gpm)*



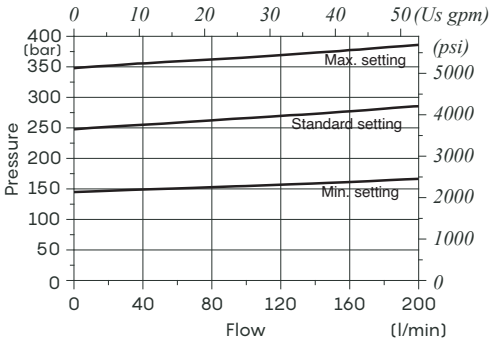
MP12M pressure vs. flow
Std. setting at 5 l/min *(1.32 US gpm)*



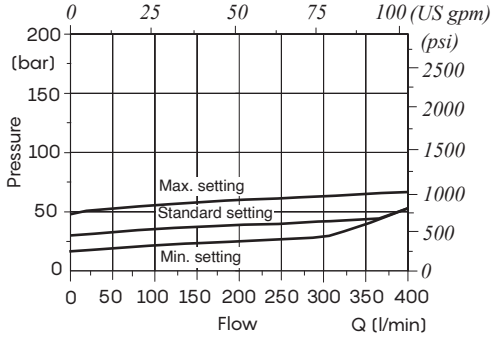
MP12M pressure vs. flow
Std. setting at 5 l/min *(1.32 US gpm)*



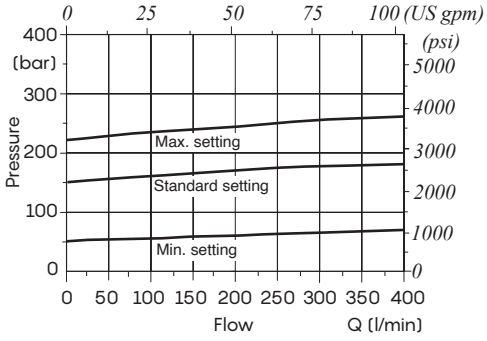
MP12M pressure vs. flow
Std. setting at 5 l/min *(1.32 US gpm)*



MP16M pressure vs. flow
Std. setting at 5 l/min *(1.32 US gpm)*



MP16M pressure vs. flow
Std. setting at 5 l/min *(1.32 US gpm)*



MP16M pressure vs. flow
Std. setting at 5 l/min *(1.32 US gpm)*