



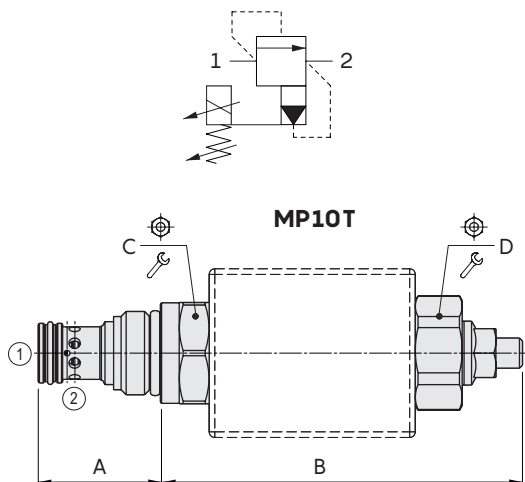
MP..T type pressure relief valves – 2 way

- Solenoid proportional type, direct acting
- Spool type
- Decreasing pressure with increasing current (N.C)
- Applications for high flow rates (max. 200 l/min – 52.8 US gpm)
- System of purging of air
- From SAE10 to SAE12 cavities

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

		MP10T	MP12T
Nominal flow		120 l/min (31.7 US gpm)	200 l/min (52.8 US gpm)
Max. pressure		350 bar (5100 psi)	
Oil leakage	at 80% of max. pressure setting	<150 cm ³ /min (9.15 in ³ /min)	<200 cm ³ /min (<12.2 in ³ /min)
Fluid		mineral based or synthetic hydraulic fluid with lubricating properties	
Viscosity		10-200 cSt	
Max level of contamination		18/16/13 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
Coil type*		BH or BQP19	
Nominal voltages		12VDC – 24VDC	
Power rating		33 W (BH) – 15 W (BQP19)	
Max. control current		12V->1.70 A – 24V->0.85 (BH) 12V->1.25 A – 24V->0.63 A (BQP19)	
Dither frequency		200 Hz	
Hysteresis		<5%	
Weight		0.77 kg (1.70 lb)	0.92 kg (2.03 lb)

NOTE – For different conditions, please contact Walvoil Sales Dpt. – *For coils further features see from page 201.



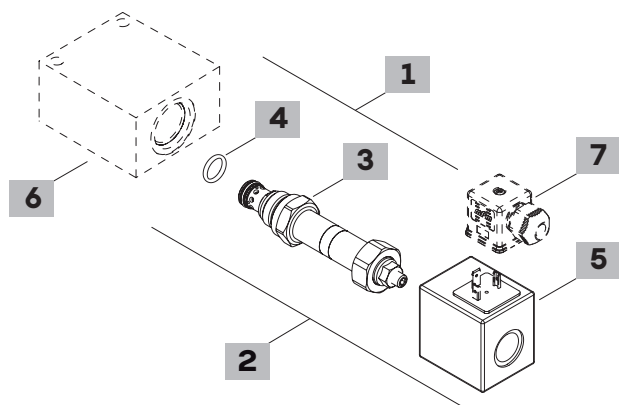
Valve type	A		B		C		D	
	mm	in	mm	in	Nm	lbf	Nm	lbf
MP10T	32.6	1.28	100	3.94	27	50	37	28
MP12T	45	1.81	115	4.53	32	85	62.7	28

Ordering codes and description composition

MP10T/001B



MP10T/031B



1 Cartridges

TYPE	CODE	DESCRIPTION
SAE cavity 10/2		
MP10T/001B	OMP10002051	Pressure range 1
MP10T/002B	OMP10002052	Pressure range 2
MP10T/003B	OMP10002053	Pressure range 3
MP10T/004B	OMP100020A02	Pressure range 4
SAE cavity 12/2		
MP12T/001B	OMP12002028	Pressure range 1
MP12T/002B	OMP12002029	Pressure range 2
MP12T/003B	OMP12002030	Pressure range 3
MP12T/004B	OMP12002035	Pressure range 4

2 Complete cartridges

TYPE	CODE	DESCRIPTION
SAE cavity 10/2		
MP10T/031B	OMP10002035	Pressure range 1 , 12VDC
MP10T/032B	OMP10002036	Pressure range 2 , 12VDC
MP10T/033B	OMP10002037	Pressure range 3 , 12VDC
SAE cavity 12/2		
MP12T/031B	OMP12002020	Pressure range 1 , 12VDC
MP12T/032B	OMP12002021	Pressure range 2 , 12VDC
MP12T/033B	OMP12002022	Pressure range 3 , 12VDC
MP12T/034B	OMP12002027	Pressure range 4 , 12VDC

3 Pressure range

TYPE	DESCRIPTION
1	Pressure range 8+130 bar (116÷1900 psi)
2	Pressure range 8+180 bar (116÷2600 psi)
3	Pressure range 8+240 bar (116÷3500 psi)
4	Pressure range 8+300 bar (116÷4350 psi);

Note: for further pressure range contact Sales Dept

4 Seals

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

5 Coils

TYPE	CODE	DESCRIPTION
2) BH 12VDC	4SLD001200A	12VDC-ISO4400 coil
3) BQP19 12VDC	4SL5000126A	12VDC-ISO4400 coil
4) BH 24VDC	4SLD002400A	24VDC-ISO4400 coil
5) BQP19 24VDC	4SL5000245A	24VDC-ISO4400 coil

For complete coils list see from page 201

6 Valve body

TYPE	CODE	DESCRIPTION
SAE10/2-G 3/8	3CC1020C11	Aluminium body for cavity 10 valve, G 3/8 std thread
SAE12/2-G 1/2	3CC1220D11	Aluminium body for cavity 12 valve, G 1/2 std thread

Note: aluminium body can stand up to 210 bar (3050 psi)

For steel bodies or different threading see from page 208

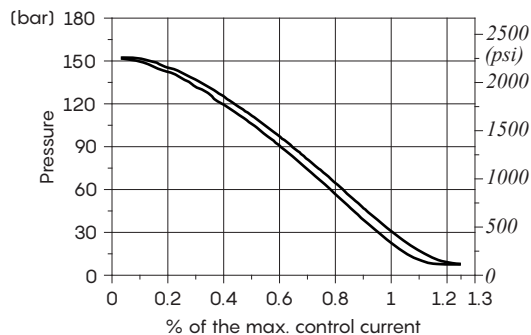
7 Connector

TYPE	CODE	DESCRIPTION
ISO4400	4CN1009995B	Connector

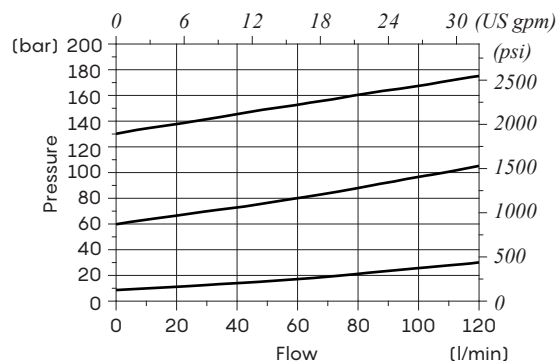
For complete connectors list see from page 201

Rating diagrams

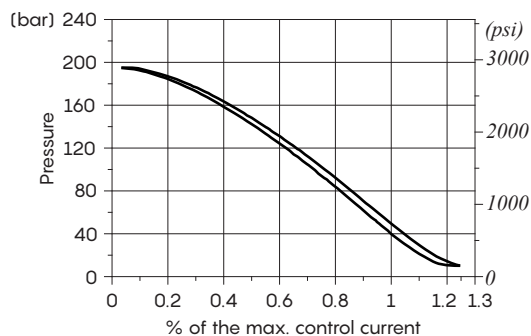
MP10T pressure setting vs. % max. control current
at 5 l/min (1.32 US gpm)



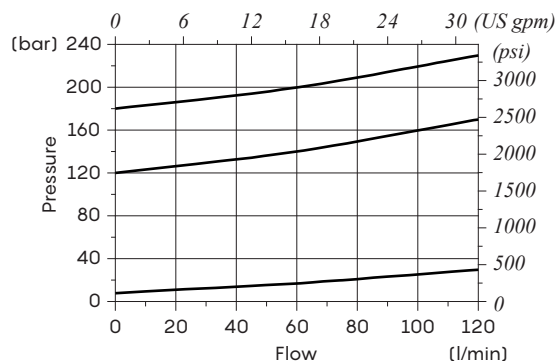
MP10T pressure vs. flow 1->2
for % of control current - Pressure range 1



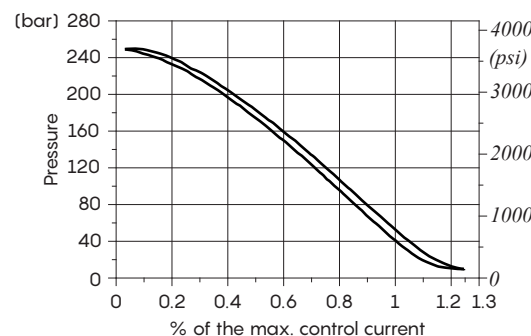
MP10T pressure setting vs. % max. control current
at 5 l/min (1.32 US gpm)



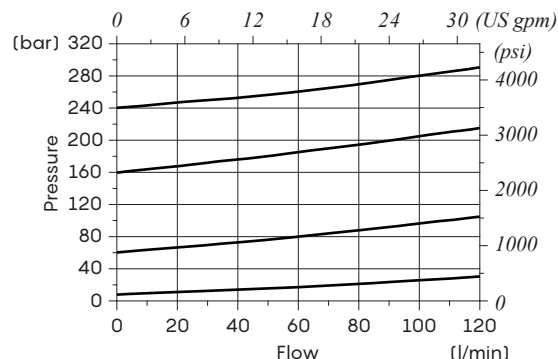
MP10T pressure vs. flow 1->2
for % of control current - Pressure range 2



MP10T pressure setting vs. % max. control current
at 5 l/min (1.32 US gpm)

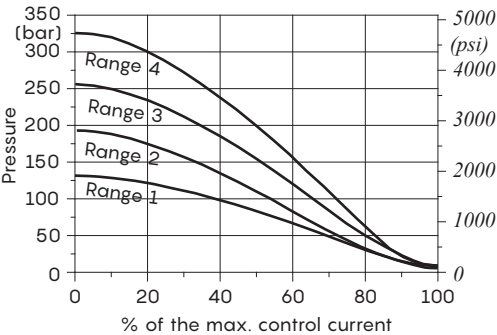


MP10T pressure vs. flow 1->2
for % of control current - Pressure range 3

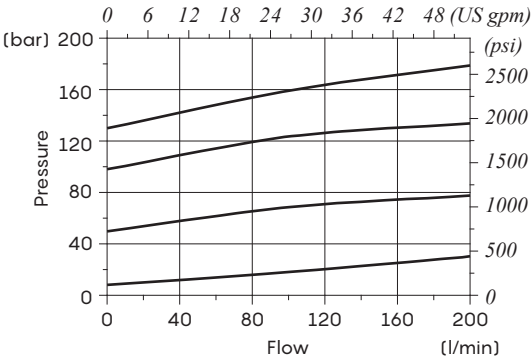


Rating diagrams

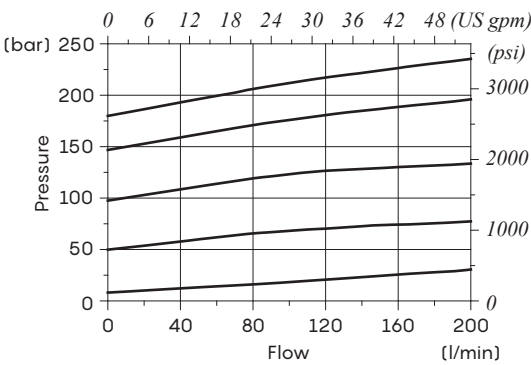
MP12T pressure setting vs. % max. control current
at 10 l/min (2.6 US gpm)



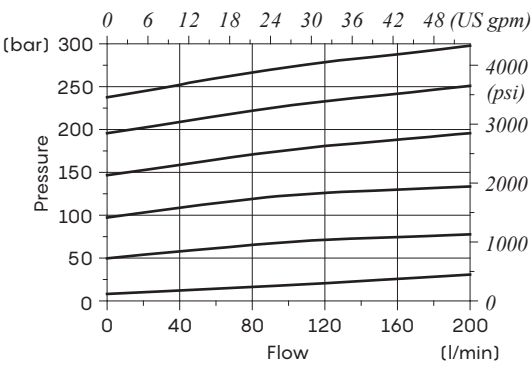
MP12T pressure vs. flow 1->2
for % of control current - Pressure range 1



MP12T pressure vs. flow 1->2
for % of control current - Pressure range 2



MP12T pressure vs. flow 1->2
for % of control current - Pressure range 3



MP12T pressure vs. flow 1->2
for % of control current - Pressure range 4

