



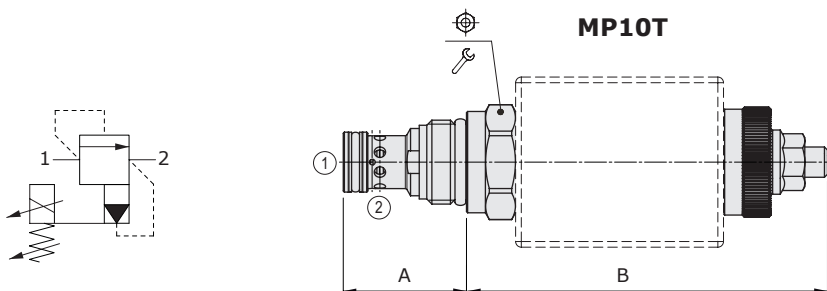
## MP..T Type pressure relief valves - 2 way

- Solenoid proportional type, pilot operated
- Decreasing pressure with increasing current (NC)
- Spool type
- 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
Max. flow		60 l/min (16 US gpm)	120 l/min (31.7 US gpm)
Max. pressure		350 bar (5100 psi)	
Oil leakage	at 80% of max. pressure setting	<150 cm <sup>3</sup> /min (9.15 in <sup>3</sup> /min)	<180 cm <sup>3</sup> /min (<10.1 in <sup>3</sup> /min)
Fluid		mineral based oil	
Viscosity		10-200 cSt	
Max level of contamination		18/16/13 ISO4406	
Fluid temperature	with NBR seals with FPM seals	from -20°C (-4°F) to 80°C (176°F)	from -20°C (-4°F) to 100°C (212°F)
Environmental temp. for working conditions		from -40°C (-40°F) to 100°C (212°F)	
Cavity		SAE 10/2	SAE 12/2
Coil type*		BH or BQP19	
Nominal voltages		12 VDC - 24 VDC	
Power rating		20.4 W (BH) - 15 W (BQP19)	
Max control current		12 V -> 1.70 A - 24 V -> 0.85 A (BH) 12 V -> 1.25 A - 24 V -> 0.63 A (BQP19)	
Dither frequency		200 Hz	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 206.

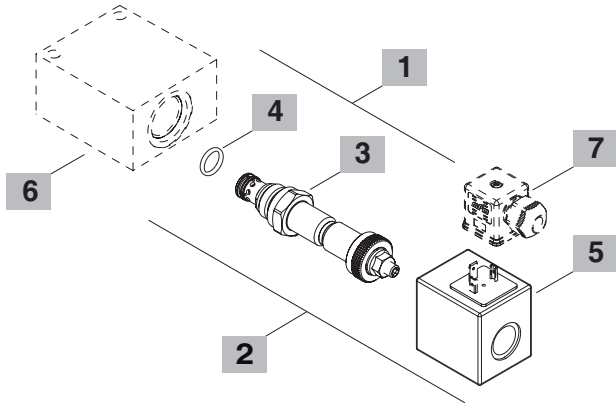


Valve type	A		B		⊕	⌘	Nm	lbft
	mm	in	mm	in				
MP10T	32.6	1.28	96.5	3.80	27	50	37	
MP12T	45	1.81	113	4.45	32	80	59	

## Ordering codes and description composition

MP10T/001B

MP10T/031B



### 3 Pressure range

TYPE	DESCRIPTION
<b>1</b>	Pressure range 8÷130 bar (116÷1900 psi)
<b>2</b>	Pressure range 8÷180 bar (116÷2600 psi)
<b>3</b>	Pressure range 8÷240 bar (116÷3500 psi)
<b>4</b>	Pressure range 8÷300 bar (116÷4350 psi)

Note: for further pressure range contact Sales Dept.

### 4 Seals

TYPE	DESCRIPTION
<b>B</b>	<b>NBR (Buna)</b> o-ring seals, std configuration
<b>V</b>	<b>FPM (Viton)</b> o-ring seals, contact Sales Dept.

### 1 Cartridges

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

### 5 Coils

TYPE	CODE	DESCRIPTION
<b>2) BH 12VDC</b>	4SLD001200	12VDC-ISO4400 coil
<b>3) BQP19 12VDC</b>	4SL5000126	12VDC-ISO4400 coil
<b>4) BH 24VDC</b>	4SLD002400	24VDC-ISO4400 coil
<b>5) BQP19 24VDC</b>	4SL5000245	24VDC-ISO4400 coil

For complete coils list see from page 206

### 2 Complete cartridges

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

### 6 Valve body

TYPE	CODE	DESCRIPTION
<b>SAE 10/2-G 3/8</b>	3CC1020C11	Aluminium body for cavity 10 valve, G 3/8 std thread
<b>SAE 12/2-G 1/2</b>	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 215

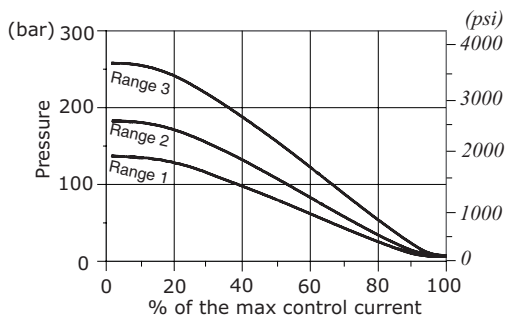
### 7 Connector

TYPE	CODE	DESCRIPTION
<b>ISO4400</b>	4CN1009995	Connector

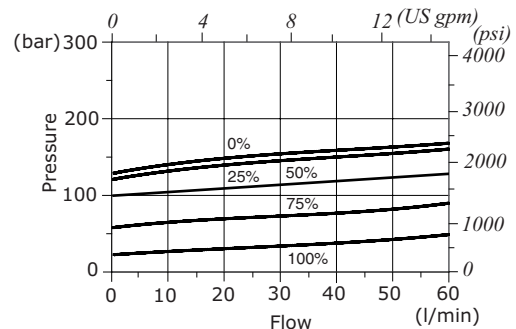
For complete connectors list see from page 206

## Rating diagrams

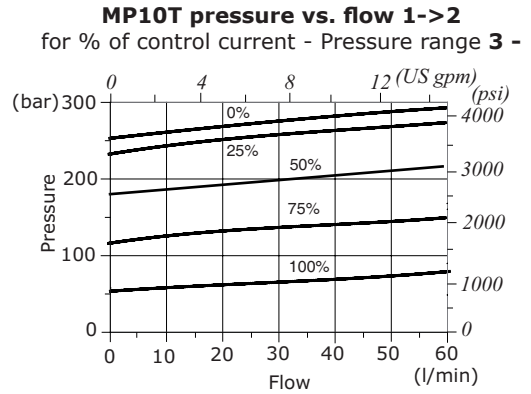
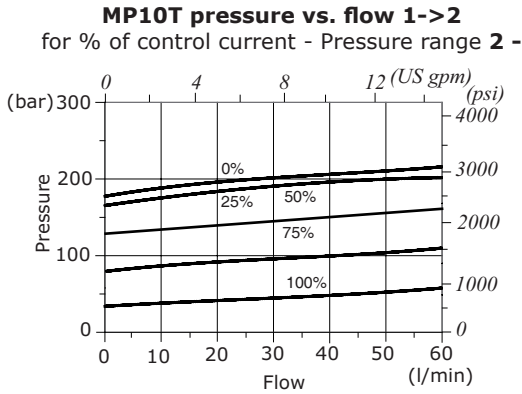
MP10T pressure setting vs. % max. control current  
at 5 l/min (1.32 US gpm)



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



**Rating diagrams**



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

