



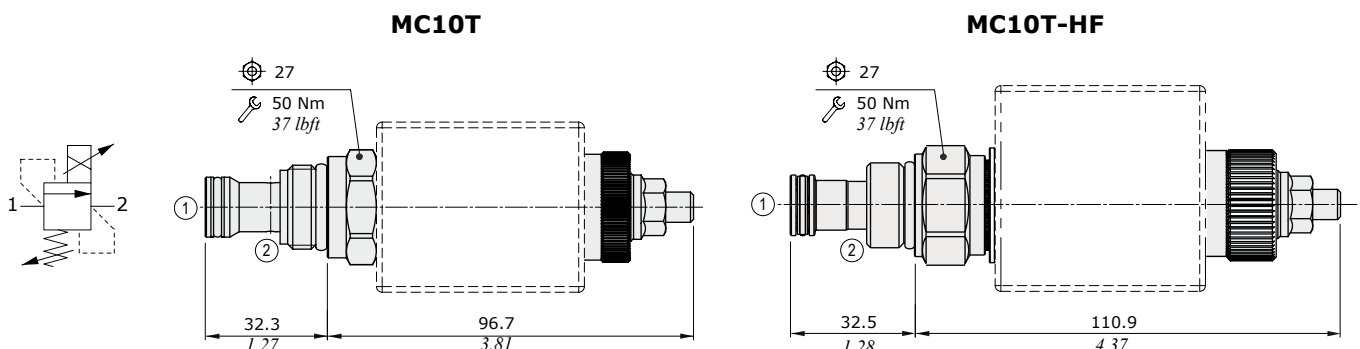
## MC10T - MC10T-HF type pressure relief valve - 2 way

- Solenoid proportional type, direct acting
- Decreasing pressure with increasing current (NC)
- Poppet type

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

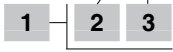
		MC10T	MC10T-HF
Max. flow		3 l/min (0.79 US gpm)	10 l/min (2.64 US gpm)
Max. pressure		350 bar (5100 psi)	250 bar (3600 psi)
Oil leakage	80% of max. pressure setting	0.25 cm <sup>3</sup> /min (0.015 in <sup>3</sup> /min)	0.50 cm <sup>3</sup> /min (0.030 in <sup>3</sup> /min)
Fluid		mineral based oil	
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	
Coil type*		BH or BQP19	BQP19
Nominal voltages		12 VDC - 24VDC	
Power rating		20.4 W (BH) - 15 W (BQP19)	15 W
Max control current		1 2V -> 1.70 A - 24 V -> 0.85 A (BH) 12 V-> 1.25 A - 24 V -> 0.63 A (BQP19)	12 V -> 1.25 A - 24 V -> 0.63 A
Dither frequency		150 Hz	
Hysteresis		<5%	
Weight		0.54 kg (1.19 lb)	0.87 kg (1.91 lb)

NOTE - For different conditions, please contact Walvoil Sales Dpt. - For coils further features see from page 206.

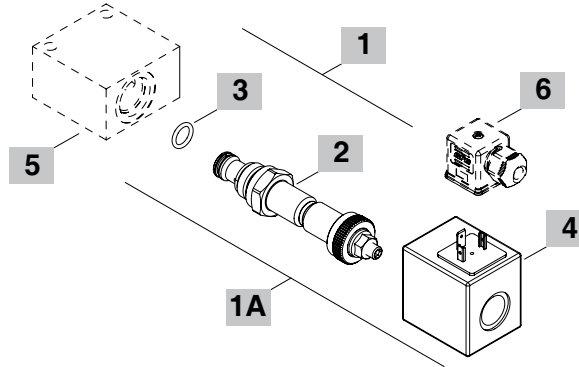


## Ordering codes and description composition

### MC10T/001B



### MC10T/031B



### 1 Cartridges

TYPE	CODE	DESCRIPTION
<b>MC10T/001B</b>	OMC10002047	Pressure range <b>1</b>
<b>MC10T/002B</b>	OMC10002048	Pressure range <b>2</b>
<b>MC10T/003B</b>	OMC10002049	Pressure range <b>3</b>
<b>MC10T-HF/003B</b>	OMC10002068	Pressure range <b>3</b>

### 1A Complete cartridges with coil

TYPE	CODE	DESCRIPTION
<b>MC10T/031B</b>	OMC10002019	Pressure range <b>1</b> , 12VDC
<b>MC10T/032B</b>	OMC10002020	Pressure range <b>2</b> , 12VDC
<b>MC10T/033B</b>	OMC10002021	Pressure range <b>3</b> , 12VDC

### 2 Pressure range

TYPE	DESCRIPTION
<b>MC10T</b>	
<b>1</b>	Pressure range 15÷130 bar (217÷1885 psi)
<b>2</b>	Pressure range 15÷170 bar (217÷2465 psi)
<b>3</b>	Pressure range 15÷210 bar (217÷3045 psi)
<b>MC10T-HF</b>	
<b>3</b>	Pressure range 20÷225 bar (290÷3260 psi)

Note: for further pressure range contact Sales Dept.

### 3 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.

### 4 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

Note: for HF version use only BQP19 coil  
For complete coils list see from page 206

### 5 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

Note: aluminium body can stand up to 210 bar (3050 psi)  
For steel bodies or different threading see from page 215

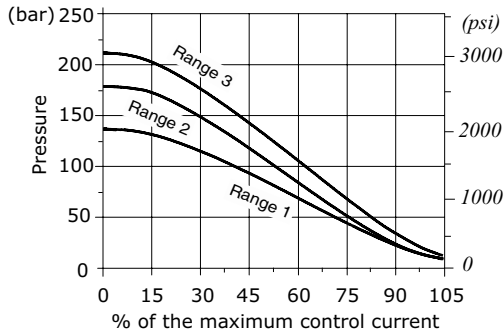
### 6 Connector

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

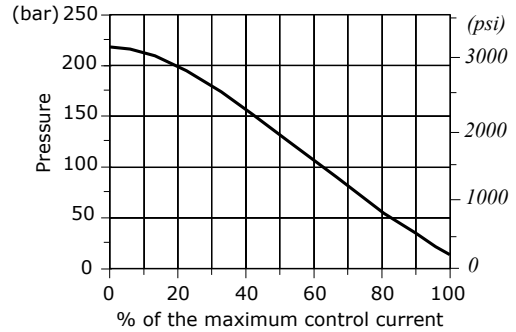
For complete connectors list see from page 206

**Rating diagrams**

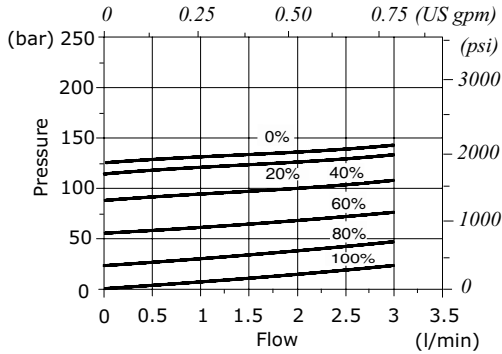
**MC10T pressure setting vs. % max. control current**  
at 1 l/min (0.26 US gpm)



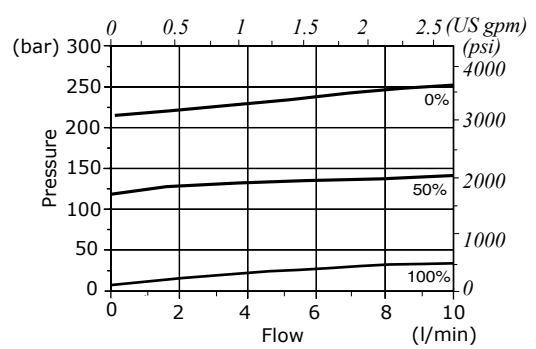
**MC10T-HF pressure setting vs. % max. control current**  
at 2 l/min (0.53 US gpm)



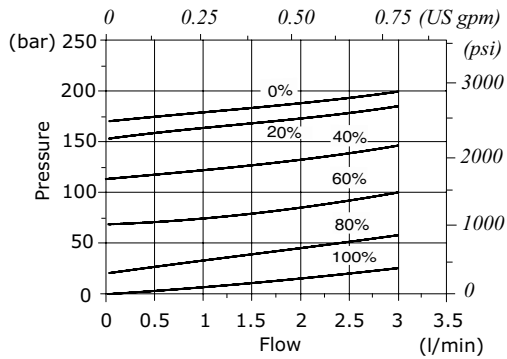
**MC10T pressure vs. flow 1->2**  
for % of control current - Pressure range 1 -



**MC10T-HF pressure vs. flow 1->2**  
for % of control current



**MC10T pressure vs. flow 1->2**  
for % of control current - Pressure range 2 -



**MC10T pressure vs. flow 1->2**  
for % of control current - Pressure range 3 -

