



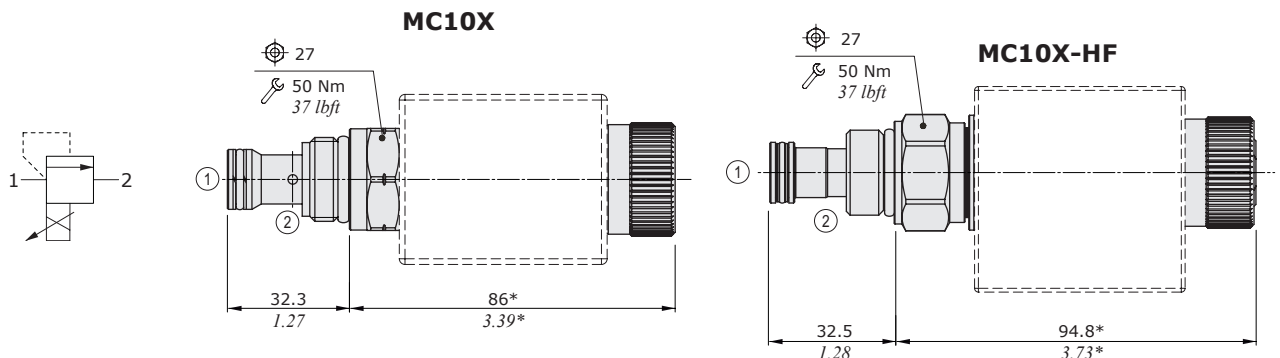
## MC10X - MC10X-HF type pressure relief valve - 2 way

- Solenoid proportional type, direct acting
- Poppet type

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

	MC10X	MC10X-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)
		0.5 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 - 24 VDC	
Power rating	20.4 W (BH) - 15 W (BQP19)	15 W
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)	12 V -> 1.25 A - 24 V -> 0.63 A
Dither frequency	150 Hz	
Hysteresis	<5%	
Weight	0.760 kg (1.67 lb)	0.863 kg (1.90 lb)

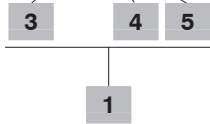
NOTE - For different conditions, please contact Walvoil Sales Dpt. - For coils further features see from page 206.



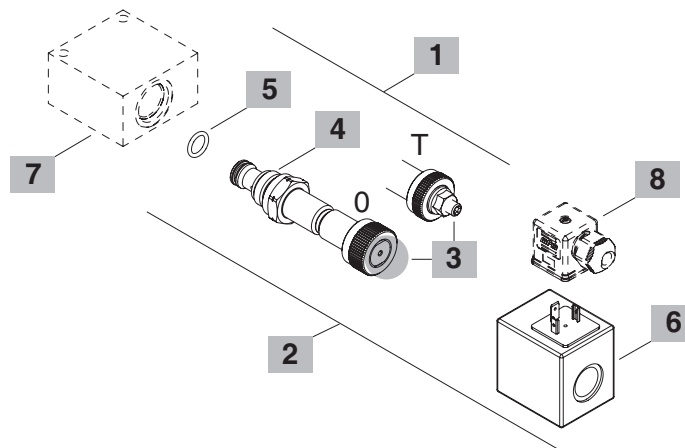
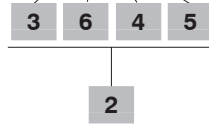
NOTE (\*): dimension for configuration without override, for dimensions with different type of emergency see page 213.

## Ordering codes and description composition

### MC10X/001B



### MC10X/031B



### 1 Cartridges

TYPE	CODE	DESCRIPTION
MC10X/001B	0MC10002050	Pressure range <b>1</b>
MC10X/002B	0MC10002051	Pressure range <b>2</b>
MC10X/003B	0MC10002052	Pressure range <b>3</b>
MC10X-HF/003B	0MC10002064	Pressure range <b>3</b>
MC10X-HF/T03B	0MC10002063	Pressure range <b>3</b>

### 2 Complete cartridges with coil

TYPE	CODE	DESCRIPTION
<i>Note: not for MC10X-HF</i>		
MC10X/031B	0MC10002039	Pressure range <b>1</b> , 12VDC
MC10X/032B	0MC10002040	Pressure range <b>2</b> , 12VDC
MC10X/033B	0MC10002041	Pressure range <b>3</b> , 12VDC

### 3 Emergency

TYPE	DESCRIPTION
<b>0</b>	Without override
<b>T</b>	With screw

### 4 Pressure range

TYPE	DESCRIPTION
<b>MC10X</b>	
<b>1</b>	Pressure range 7÷120 bar (102÷1740 psi)
<b>2</b>	Pressure range 7÷170 bar (102÷2450 psi)
<b>3</b>	Pressure range 7÷210 bar (102÷3050 psi)

### MC10X-HF

<b>3</b>	Pressure range 3÷230 bar (43÷3330 psi)
----------	--

Note: for further pressure range contact Sales Dept.

### 5 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.

### 6 Coil

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

### 7 Valve body

TYPE	CODE	DESCRIPTION
<b>SAE 10/2-SAE8</b>	3CC1020K11	Aluminium body for cavity 10 valve, SAE8 std thread

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

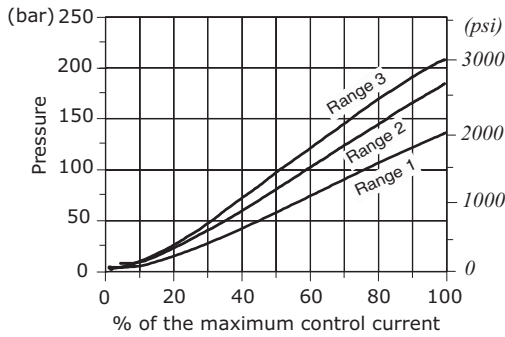
### 8 Connector

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

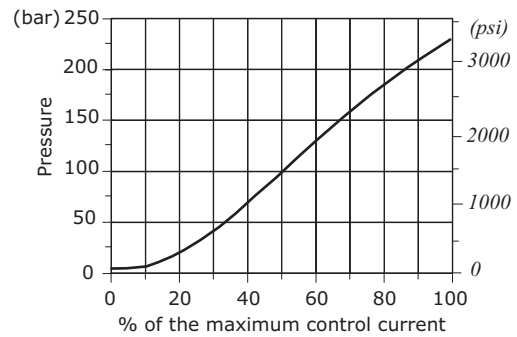
For complete connectors list see from page 206

**Rating diagrams**

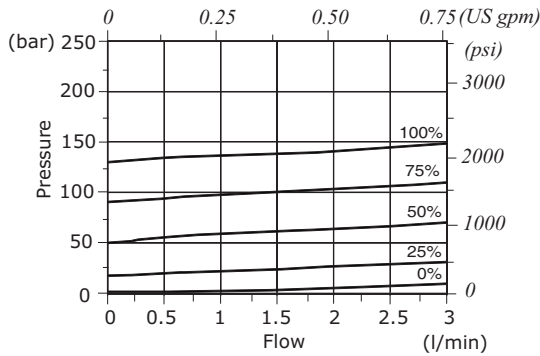
**MC10X pressure setting vs. % max. control current**  
at 1 l/min (0.26 US gpm)



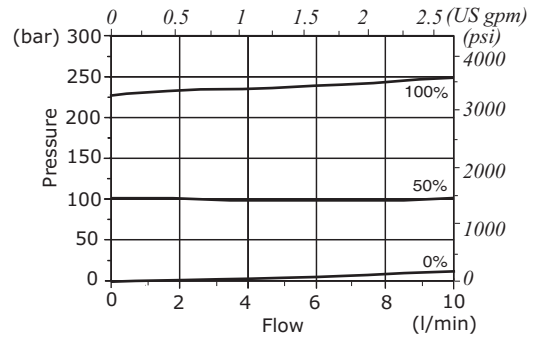
**MC10X-HF pressure setting vs. % max. control current**  
at 2 l/min (0.53 US gpm)



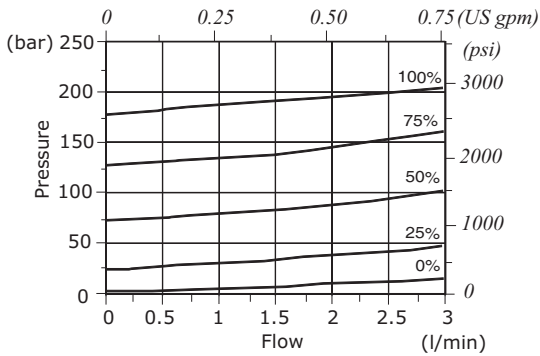
**MC10X pressure vs. flow 1->2**  
for % of control current - Pressure range 1 -



**MC10X-HF pressure vs. flow 1->2**  
for % of control current



**MC10X pressure vs. flow 1->2**  
for % of control current - Pressure range 2 -



**MC10X pressure vs. flow 1->2**  
for % of control current - Pressure range 3 -

