



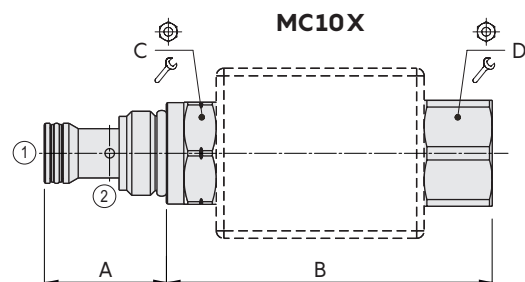
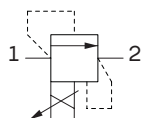
MC10X - MC10X-HF type pressure relief valves - 2 way

- Solenoid proportional type, direct acting
- Poppet type
- Decreasing pressure with increasing current (N.C)
- System of purging of air
- Applications for low flow rates (max. 10 l/min - 2.64 US gpm)

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	at 80% of max. pressure setting	0.25 cm ³ /min (0.015 in ³ /min)	0.50 cm ³ /min (0.030 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	
Coil type*		BH or BQP19	BQP19
Nominal voltages		12VDC - 24VDC	
Power rating		33 W (BH) - 15 W (BQP19)	15 W
Max. control current		12V->1.70 A - 24V->0.85 (BH) 12V->1.25 A - 24V->0.63 A (BQP19)	12V->1.25 A - 24V->0.63 A
Dither frequency		150 Hz	
Hysteresis		<5%	
Weight		0.760 kg (1.67 lb)	0.863 kg (1.90 lb)

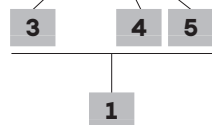
NOTE - For different conditions, please contact Walvoil Sales Dpt. - *For coils further features see from page 201.



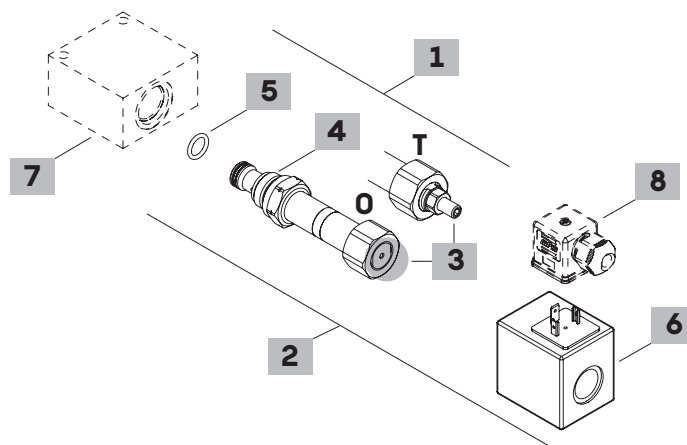
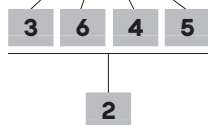
Valve type	A		B				C		D			
			N / O without emergency		T screw							
	mm	in	mm	in	mm	in	Nm	lbf·ft	Nm	lbf·ft	Nm	lbf·ft
MC10X	32.3	1.27	86.2	3.39	-	-	27	50	37	28	5	3.7
MC10X-HF	32.5	1.28	94.5	3.72	116.5	4.59	27	50	37	28	5	3.7

Ordering codes and description composition

MC10X/001B



MC10X/031B



1 Cartridges

TYPE	CODE	DESCRIPTION
MC10X/001B	OMC10002050	Pressure range 1
MC10X/002B	OMC10002051	Pressure range 2
MC10X/003B	OMC10002052	Pressure range 3

2 Complete cartridges with coil

TYPE	CODE	DESCRIPTION
MC10X/031B	OMC10002039	Pressure range 1 , 12VDC
MC10X/032B	OMC10002040	Pressure range 2 , 12VDC
MC10X/033B	OMC10002041	Pressure range 3 , 12VDC
MC10X-HF/033B	OMC10002064	Pressure range 3 , 12VDC
MC10X-HF/T33B	OMC10002089	Pressure range 3 , 12VDC

3 Emergency

TYPE	DESCRIPTION
0	Without override
T	With screw

4 Pressure range

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

MC10X-HF

3	Pressure range 3÷230 bar (43÷3330 psi);
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Note: for further pressure range contact Sales Dept

5 Seals

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

6 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

Note: for HF version use only BQP19 coil

For complete coils list see from page 201

7 Valve body

TYPE	CODE	DESCRIPTION
SAE10/2-SAE8	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 208

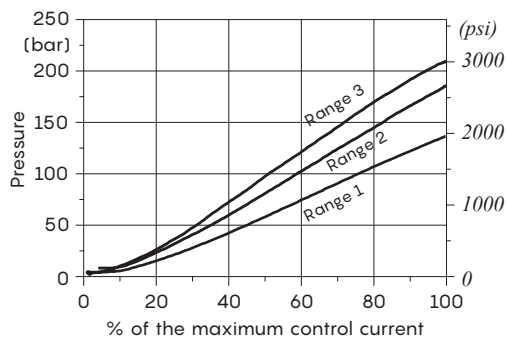
8 Connector

TYPE	CODE	DESCRIPTION
ISO4400	4CN1009995B	Connector

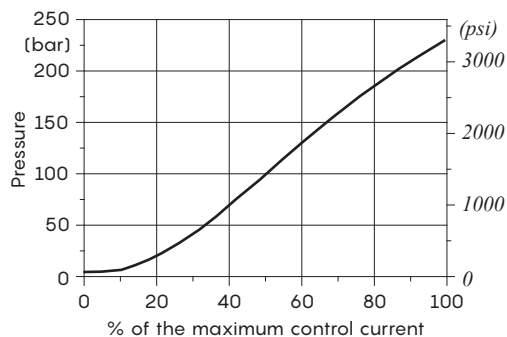
For complete connectors list see from page 201

Rating diagrams

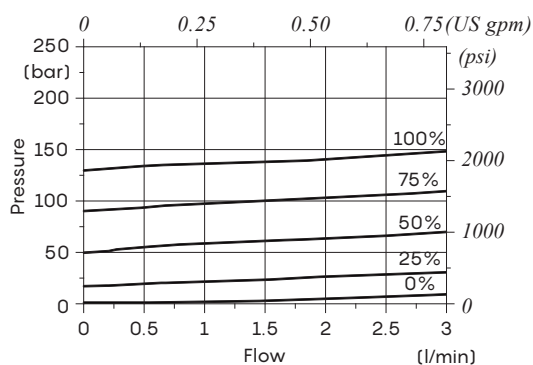
MC10X pressure setting vs. % max. control current
at 1 l/min (0.26 US gpm)



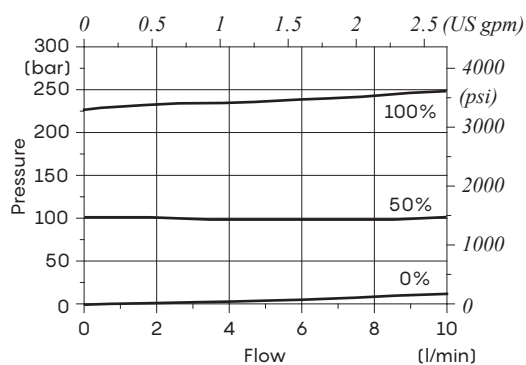
MC10X-HF pressure setting vs. % max. control current
at 2 l/min (0.53 US gpm)



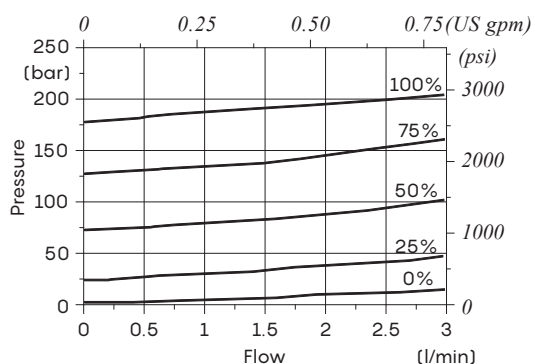
MC10X pressure vs. flow 1->2
for % of control current - Pressure range 1



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

