



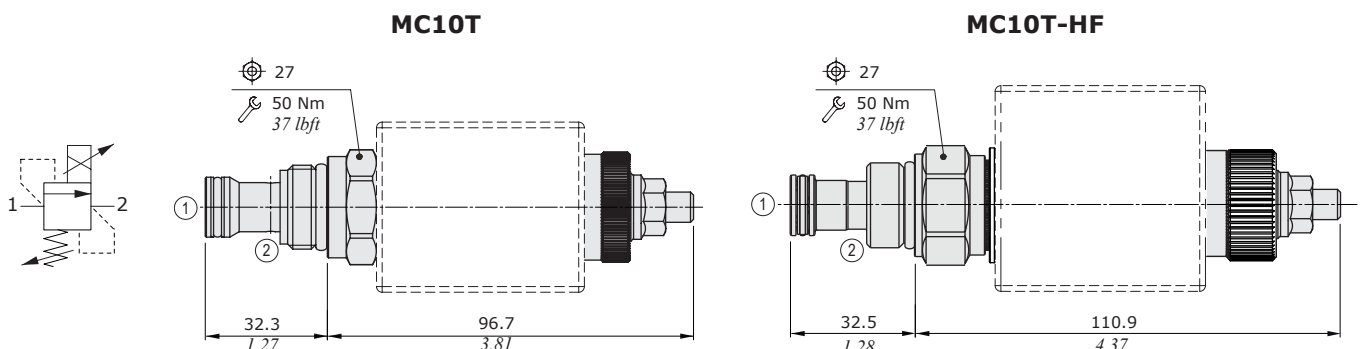
MC10T - MC10T-HF type pressure relief valve - 2 way

- 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 ³ /min (0.015 in ³ /min) | 0.50 cm ³ /min (0.030 in ³ /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.

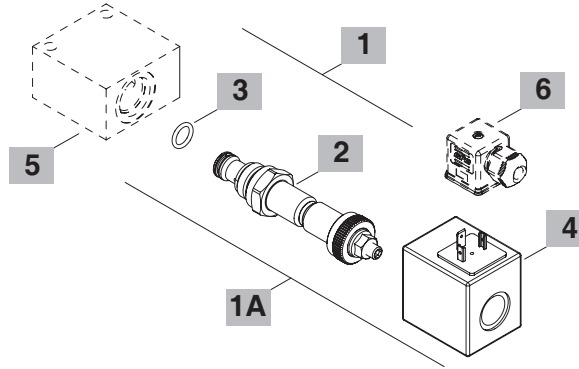


Ordering codes and description composition

MC10T/001B



MC10T/031B



1 Cartridges

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

1A Complete cartridges with coil

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

2 Pressure range

| TYPE | DESCRIPTION |
|--------------|--|
| MC10T | |
| 1 | Pressure range 15÷130 bar (217÷1885 psi) |
| 2 | Pressure range 15÷170 bar (217÷2465 psi) |
| 3 | Pressure range 15÷210 bar (217÷3045 psi) |

MC10T-HF

| | |
|----------|--|
| 3 | Pressure range 20÷225 bar (290÷3260 psi) |
|----------|--|

Note: for further pressure range contact Sales Dept.

3 Seals

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

4 Coils

| TYPE | CODE | DESCRIPTION |
|-----------------------|------------|--------------------|
| 2) BH 12VDC | 4SLD001200 | 12VDC-ISO4400 coil |
| 3) BQP19 12VDC | 4SL5000126 | 12VDC-ISO4400 coil |
| 4) BH 24VDC | 4SLD002400 | 24VDC-ISO4400 coil |
| 5) BQP19 24VDC | 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 |
|-----------------------|------------|--|
| SAE 10/2-G 3/8 | 3CC1020C11 | Aluminium body for cavity 10 valve, G 3/8 std thread |

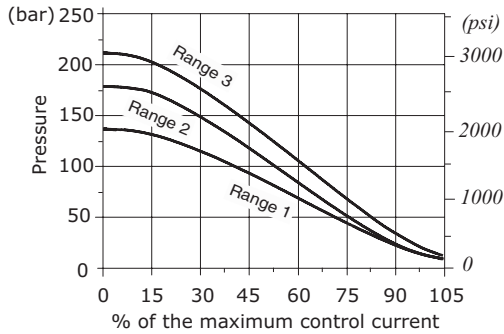
Note: aluminium body can stand up to 210 bar (3050 psi)
For steel bodies or different threading see from page 215

6 Connector

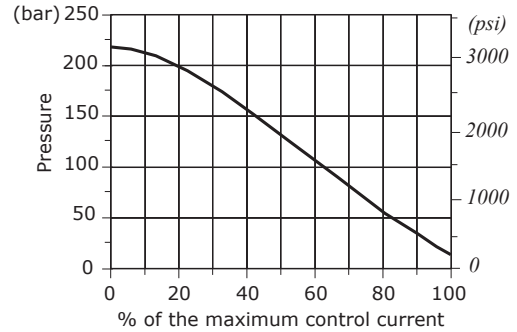
| TYPE | CODE | DESCRIPTION |
|----------------|------------|-------------|
| ISO4400 | 4CN1009995 | Connector |

For complete connectors list see from page 206

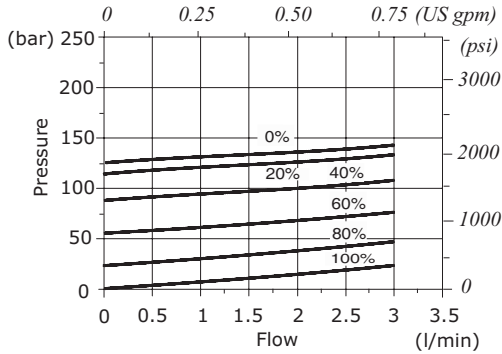
MC10T pressure setting vs. % max. control current
at 1 l/min (0.26 US gpm)



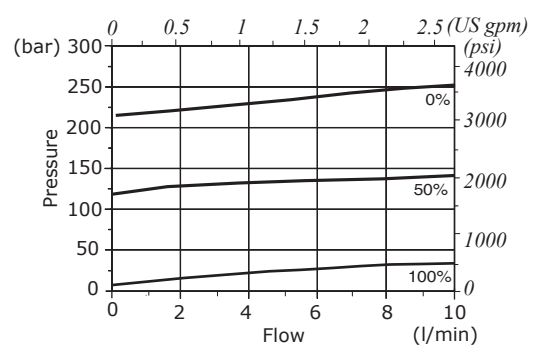
MC10T-HF pressure setting vs. % max. control current
at 2 l/min (0.53 US gpm)



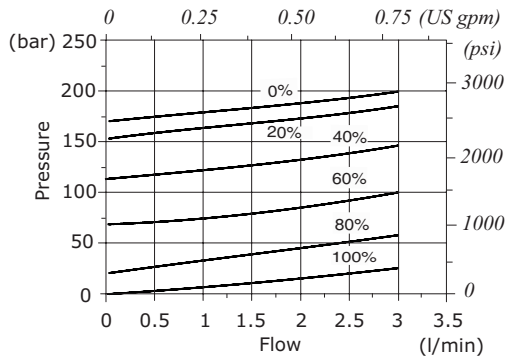
MC10T pressure vs. flow 1->2
for % of control current - Pressure range 1 -



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 -

