



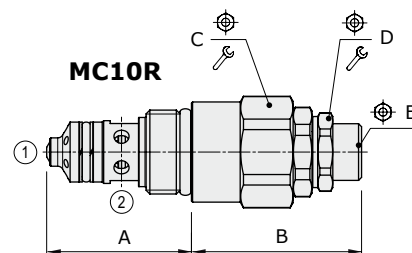
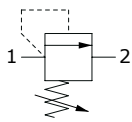
MC..R type pressure relief valves - 2 way

- Direct acting
- Poppet type
- From SAE08 to SAE10 cavities

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

| | MC08R | MC09R | MC10R |
|--|----------------------------------|---|------------------------|
| Nominal flow | 25 l/min (6.6 US gpm) | 35 l/min (9.2 US gpm) | 50 l/min (13.2 US gpm) |
| Max. pressure | | 350 bar (5100 psi) | |
| Oil leakage | 80% of max. pressure setting | 2 cm ³ /min (0.122 in ³ /min) | |
| Fluid | | mineral based oil | |
| Viscosity | | 10-200 cSt | |
| Max level of contamination | | 20/18/14 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 -20°C (-4°F) to 50°C (122°F) | |
| Cavity | SAE 08/2 A | SAE 9/2 A | SAE 10/2 A |
| Weight | 0.170 kg (0.37 lb) | 0.230 kg (0.51 lb) | 0.315 kg (0.69 lb) |

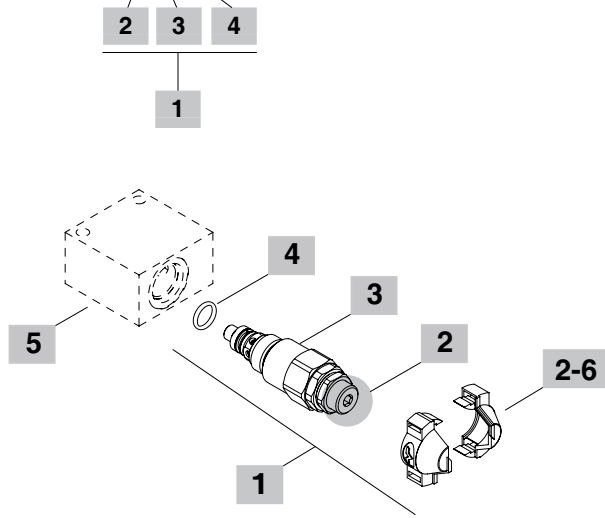
NOTE - For different conditions, please contact Walvoil Sales Dpt.



| Valve type | A | | B | | C | | | D | | | |
|------------|------|------|------|------|----|----|----|----|------|----|----|
| | mm | in | mm | in | mm | mm | mm | Nm | lbft | | |
| MC08R | 34 | 1.34 | 46.6 | 1.83 | 24 | 19 | 5 | 30 | 22 | 25 | 18 |
| MC09R | 33.8 | 1.33 | 46.6 | 1.83 | 24 | 19 | 5 | 42 | 31 | 25 | 18 |
| MC10R | 38.3 | 1.50 | 44.4 | 1.75 | 27 | 19 | 5 | 50 | 37 | 25 | 18 |

Ordering codes and description composition

MC08R/OY1B



1 Cartridges

| TYPE | CODE | DESCRIPTION |
|--------------------------|-------------|------------------|
| SAE cavity 08/2 A | | |
| MC08R/OY1B | OMC08002050 | Pressure range 1 |
| MC08R/OY2B | OMC08002051 | Pressure range 2 |
| MC08R/OY3B | OMC08002052 | Pressure range 3 |
| SAE cavity 09/2 A | | |
| MC09R/OY1B | OMC09002000 | Pressure range 1 |
| MC09R/OY2B | OMC09002001 | Pressure range 2 |
| MC09R/OY3B | OMC09002002 | Pressure range 3 |
| SAE cavity 10/2 A | | |
| MC10R/OY1B | OMC10002023 | Pressure range 1 |
| MC10R/OY2B | OMC10002024 | Pressure range 2 |
| MC10R/OY3B | OMC10002025 | Pressure range 3 |

2 Adjustments

| TYPE | DESCRIPTION |
|------|---|
| Y | With screw |
| X | Valve set with antitampering cap (part code: see point 6) |

3 Pressure range

Standard setting is referred to 5 l/min (1.32 US gpm) flow

| TYPE | DESCRIPTION |
|------|--|
| 1 | Pressure range 10÷120 bar (145÷1740 psi); Std. setting 80 bar (1160 psi) |
| 2 | Pressure range 40÷200 bar (580÷2900 psi); Std. setting 175 bar (2540 psi) |
| 3 | Pressure range 200÷350 bar (2900÷5100 psi); Std. setting 250 bar (3600 psi) |

4 Seals

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

5 Valve body

| TYPE | CODE | DESCRIPTION |
|-----------------------|------------|---|
| SAE 08/2-G 3/8 | 3CC0820C11 | Aluminium body for cavity 08 valve, G 3/8 std thread |
| SAE 09/2-G 3/8 | 3CC0920C11 | Aluminium body for cavity 09 valve, G 3/8 std thread |
| 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

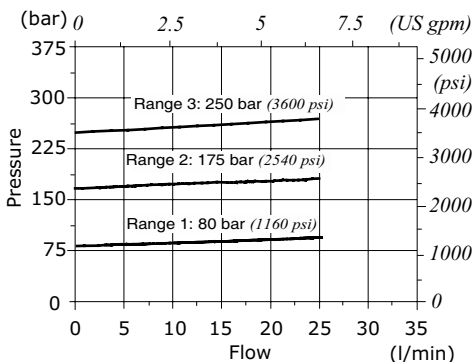
6 Accessories

| TYPE | CODE | DESCRIPTION |
|------|------------|------------------------|
| - | 4COP126301 | Antitampering cap (X2) |

Rating diagrams

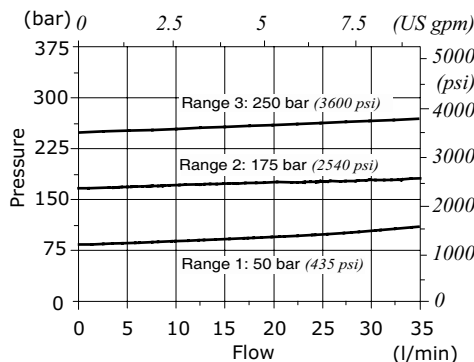
MC08R pressure vs. flow

Std. setting at 5 l/min (1.32 US gpm)



MC09R pressure vs. flow

Std. setting at 5 l/min (1.32 US gpm)



MC10R pressure vs. flow

Std. setting at 5 l/min (1.32 US gpm)

