

# PRESSURE REGULATORS

## SERIES MC

Ports G1/4, G3/8 and G1/2  
Modular



- Minimal pressure decreases
- Lockable knob with closure
- Integral return exhaust (relieving)
- Versions available:
  - Manifold
  - with by-pass valve

Series MC pressure regulators are available with ports G1/4, G3/8 and G1/2.  
Versions with secondary pressure relieving are usually available and all regulators can be panel mounted.

### General Data

|                                |                                                                                              |
|--------------------------------|----------------------------------------------------------------------------------------------|
| Construction                   | Modular, compact, diaphragm type                                                             |
| Materials                      | Zama, brass, nbr, technopolymer                                                              |
| Ports                          | G1/4, G3/8, G1/2                                                                             |
| Weight                         | 0,323 kg, 0,644 kg, 0,624 kg                                                                 |
| Mounting                       | In-line, wall or panel mounting (in any position)                                            |
| Operating temperature          | -5°C ÷ 50°C (with the dew point of the fluid lower than 2°C at the min. working temperature) |
| Finishing                      | Enamelled                                                                                    |
| Inlet pressure                 | 0 ÷ 16 bar                                                                                   |
| Outlet pressure                | 0.5 ÷ 10 bar (standard) or 0.5 ÷ 2 bar; 0.5 ÷ 4 bar and 0.5 ÷ 7 bar                          |
| Nominal flow                   | See flow diagrams on the following pages                                                     |
| Secondary pressure (relieving) | With relieving (standard)<br>without relieving                                               |
| Fluid                          | Compressed air                                                                               |

PRESSURE REGULATORS  
SERIES MC - CODING EXAMPLES

Coding Example

|    |                                                                                                                                                                                                                                                                                                                                       |    |   |   |   |   |   |   |    |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|---|---|---|---|---|----|
| MC | 2                                                                                                                                                                                                                                                                                                                                     | 02 | - | R | T | 0 | 2 | - | VS |
| MC | SERIES                                                                                                                                                                                                                                                                                                                                |    |   |   |   |   |   |   |    |
| 2  | SIZE<br>1 = G1/4<br>2 = G3/8 - G1/2                                                                                                                                                                                                                                                                                                   |    |   |   |   |   |   |   |    |
| 02 | PORTS<br>04 = G1/4<br>38 = G3/8<br>02 = G1/2                                                                                                                                                                                                                                                                                          |    |   |   |   |   |   |   |    |
| R  | REGULATOR                                                                                                                                                                                                                                                                                                                             |    |   |   |   |   |   |   |    |
| T  | WORKING PRESSURE<br>0 = 0,5 ÷ 10 bar (standard)<br>1 = 0,5 ÷ 4 bar<br>2 = 0,5 ÷ 2 bar (only G1/4)<br>7 = 0,5 ÷ 7 bar (only G1/4)<br>T = Calibrated *<br>B = Cocked *                                                                                                                                                                  |    |   |   |   |   |   |   |    |
| 0  | CONSTRUCTION<br>0 = Self-relieving (standard)<br>1 = Non-relieving<br>5 = Precise relieving                                                                                                                                                                                                                                           |    |   |   |   |   |   |   |    |
| 2  | PRESSURE GAUGE **<br>= Without pressure gauge (standard)<br>1 = With pressure gauge 0-2,5, with working pressure 0,5 ÷ 2 bar<br>2 = With pressure gauge 0-6, with working pressure 0,5 ÷ 4 bar<br>3 = With pressure gauge 0-10, with working pressure 0,5 ÷ 7 bar<br>4 = With pressure gauge 0-12, with working pressure 0,5 ÷ 10 bar |    |   |   |   |   |   |   |    |
| VS | FLOW DIRECTION<br>= Without by-pass valve (standard)<br>VS = With by-pass valve (only G1/4)                                                                                                                                                                                                                                           |    |   |   |   |   |   |   |    |

\*\* If the regulator is calibrated or locked, after the ports add the inlet pressure "■" and the outlet pressure "●"

INLET PRESSURE:

■ = enter the SUPPLY pressure value

OUTLET PRESSURE:

● = enter the OUTLET pressure value for the LOCKED regulator or the maximum value of the ADJUSTABLE pressure for the CALIBRATED regulator

Example of a calibrated regulator with Inlet Pressure = 6,3 bar and Outlet Pressure = 4,5 bar  
Complete part number: MC104-MT03-6,3-4,5

\*\* The pressure gauges are supplied disassembly  
for size 1 pressure gauge mod. M043-P.  
for size 2 pressure gauge mod. M053-P.

Pneumatic symbols

- PR03 = Regulator with relieving and by-pass valve  
PR04 = Regulator without relieving and with by-pass valve  
PR05 = Regulator without relieving and with pressure gauge  
PR06 = Regulator with relieving and pressure gauge  
PR07 = Regulator with relieving, by-pass valve and pressure gauge  
PR08 = Regulator without relieving with by-pass valve and pressure gauge

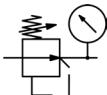
PR03



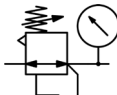
PR04



PR05



PR06



PR07



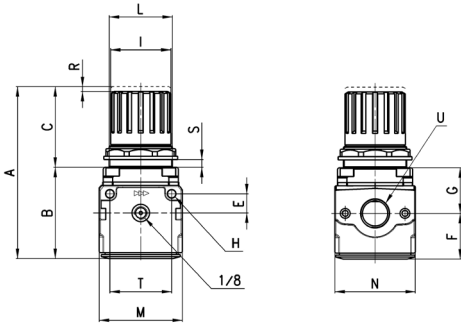
PR08



Pressure regulators Series MC

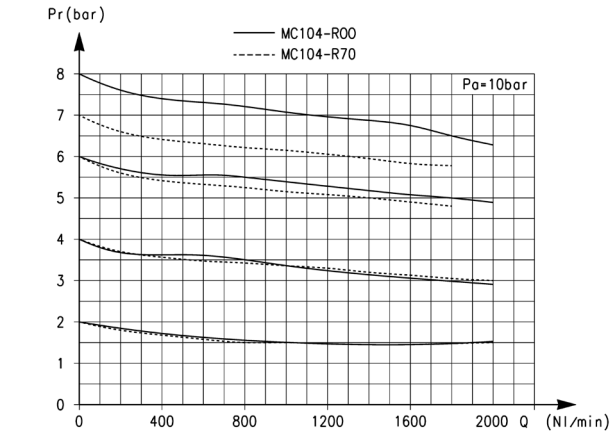


| Mod.      | A   | B  | C  | E  | F    | G    | H   | I  | L      | M  | N  | R   | S     | T  | U    |
|-----------|-----|----|----|----|------|------|-----|----|--------|----|----|-----|-------|----|------|
| MC104-R00 | 94  | 56 | 38 | 11 | 28,5 | 27,5 | 4,5 | 28 | 30x1,5 | 45 | 45 | 3   | 0 ÷ 6 | 35 | G1/4 |
| MC238-R00 | 127 | 67 | 60 | 14 | 34   | 35   | 5,5 | 45 | 47x1,5 | 62 | 60 | 3,5 | 0 ÷ 9 | 46 | G3/8 |
| MC202-R00 | 127 | 67 | 60 | 14 | 34   | 35   | 5,5 | 45 | 47x1,5 | 62 | 60 | 3,5 | 0 ÷ 9 | 46 | G1/2 |



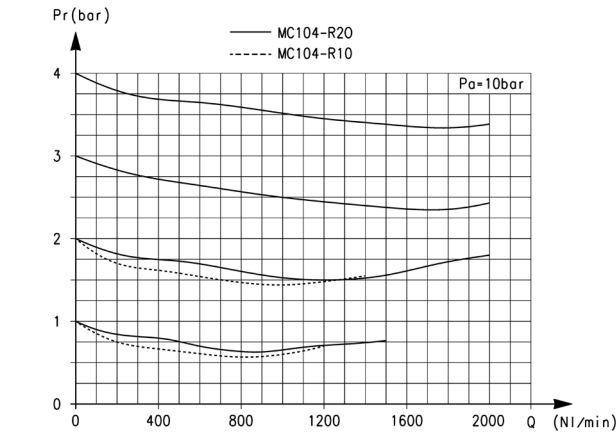
Flow diagrams

Flow diagrams for models: MC104-R00 and MC104-R70



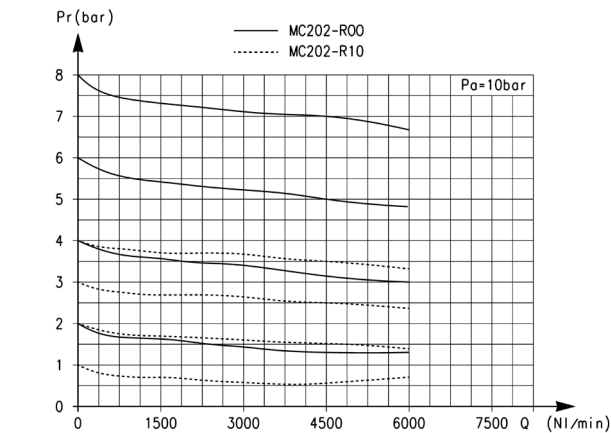
Pa = Inlet pressure (bar)  
Pr = Regulated pressure (bar)  
Q = Flow (NI/min)

Flow diagrams for models: MC104-R10 and MC104-R20



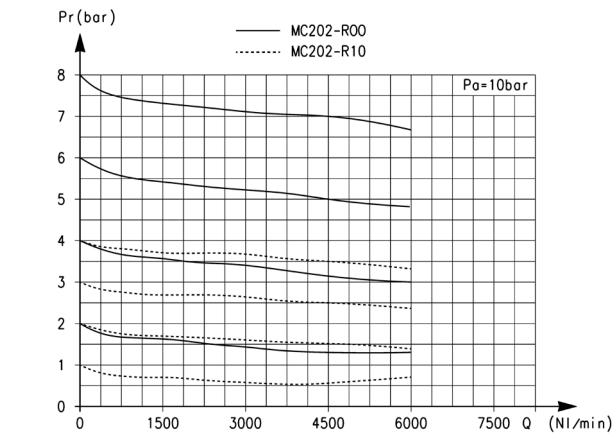
Pa = Inlet pressure (bar)  
Pr = Regulated pressure (bar)  
Q = Flow (NI/min)

Flow diagrams for models: MC202-R00 and MC202-R10



Pa = Inlet pressure (bar)  
Pr = Regulated pressure (bar)  
Q = Flow (NI/min)

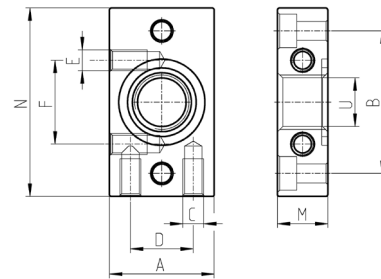
Flow diagrams for models: MC202-R00 and MC202-R10



Pa = Inlet pressure (bar)  
Pr = Regulated pressure (bar)  
Q = Flow (NI/min)

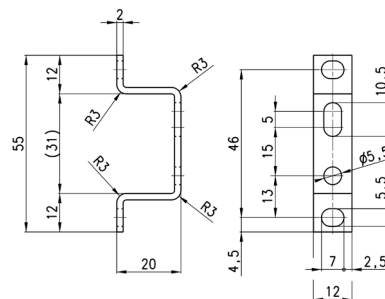
PRESSURE REGULATORS  
SERIES MC - ACCESSORIES

## Terminal flanges



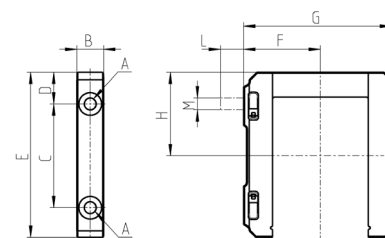
| Mod.     | A  | B    | C  | D  | E  | F  | N  | M  | U    | Size |
|----------|----|------|----|----|----|----|----|----|------|------|
| MC104-FL | 25 | 34   | M5 | 15 | M5 | 20 | 45 | 12 | G1/4 | 1    |
| MC238-FL | 35 | 44,5 | M5 | 20 | -  | -  | 60 | 14 | G3/8 | 2    |
| MC202-FL | 35 | 44,5 | M5 | 20 | -  | -  | 60 | 14 | G1/2 | 2    |

## Mounting bracket (kit B)



| Mod.     |
|----------|
| MC104-ST |

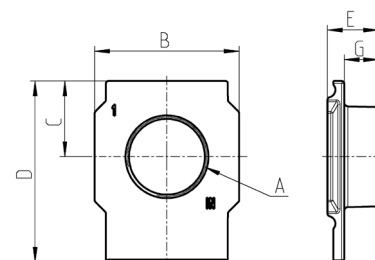
## Rapid clamp kit



| Mod.  | A   | B  | C  | D    | E    | F    | G    | H    | L  | M  | Notes                      |
|-------|-----|----|----|------|------|------|------|------|----|----|----------------------------|
| MX2-X | 5,2 | 12 | 46 | 14   | 73,5 | 37,5 | 70,5 | 37   | -  | -  |                            |
| MX2-Z | 5,2 | 12 | 46 | 14   | 73,5 | 37,5 | 70,5 | 37   | 14 | M5 | Kit with wall fixing screw |
| MX3-X | 6,2 | 14 | 54 | 16,5 | 86   | 40   | 77   | 43,5 | -  | -  |                            |
| MX3-Z | 6,2 | 14 | 54 | 16,5 | 86   | 40   | 77   | 43,5 | 13 | M6 | Kit with wall fixing screw |

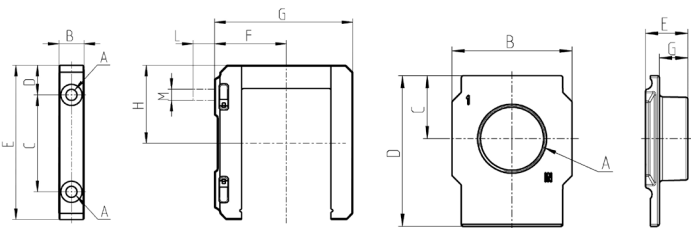
See the positioning scheme in the section "Series MX assembled FRL"

## Terminal flanges (IN/OUT)



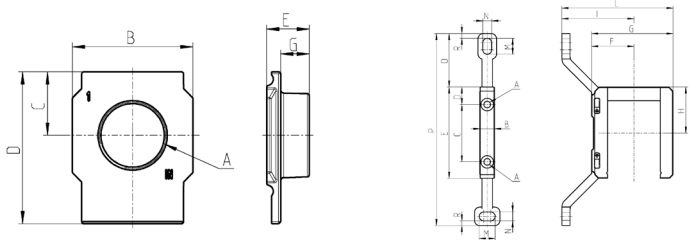
| Mod.       | A    | B  | C    | D    | E    | G    |
|------------|------|----|------|------|------|------|
| MX2-3/8-FL | G3/8 | 50 | 26,5 | 63,5 | 17   | 11   |
| MX2-1/2-FL | G1/2 | 50 | 26,5 | 63,5 | 17   | 11   |
| MX2-3/4-FL | G3/4 | 50 | 26,5 | 63,5 | 17   | 11   |
| MX3-3/4-FL | G3/4 | 58 | 30,5 | 73   | 20,5 | 13,5 |
| MX3-1-FL   | G1   | 58 | 30,5 | 73   | 20,5 | 13,5 |

Rapid clamps kit + flanges



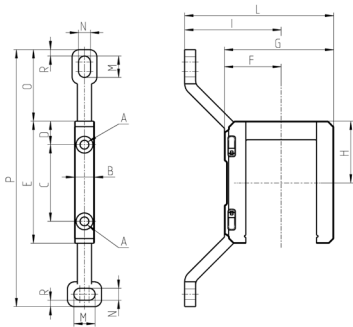
| Mod.       | A     | B   | C   | The kit is supplied with: |
|------------|-------|-----|-----|---------------------------|
| MX2-3/8-HH | G 3/8 | 174 | -   | 1x MX2-3/8-FL + 2x MX2-X  |
| MX2-1/2-HH | G 3/8 | 174 | -   | 1x MX2-1/2-FL + 2x MX2-X  |
| MX2-3/4-HH | G 3/4 | 174 | -   | 1x MX2-3/4-FL + 2x MX2-X  |
| MX2-3/8-JJ | G 3/8 | 174 | 140 | 1x MX2-3/8-FL + 2x MX2-Z  |
| MX2-1/2-JJ | G 1/2 | 174 | 140 | 1x MX2-1/2-FL + 2x MX2-Z  |
| MX2-3/4-JJ | G 3/4 | 174 | 140 | 1x MX2-3/4-FL + 2x MX2-Z  |
| MX3-3/4-HH | G 3/4 | 221 | -   | 1x MX3-3/4-FL + 2x MX3-X  |
| MX3-1-HH   | G 1   | 221 | -   | 1x MX3-1-FL + 2x MX3-X    |
| MX3-3/4-JJ | G 3/4 | 221 | 179 | 1x MX3-3/4-FL + 2x MX3-Z  |
| MX3-1-JJ   | G 1   | 221 | 179 | 1x MX3-1-FL + 2x MX3-Z    |

Rapid clamps kit with wall fixing brackets + flanges



| Mod.       | A     | B   | C   | The kit is supplied with: |
|------------|-------|-----|-----|---------------------------|
| MX2-3/8-KK | G 3/8 | 174 | 140 | 1x MX2-3/8-FL + 2x MX2-Y  |
| MX2-1/2-KK | G 1/2 | 174 | 140 | 1x MX2-1/2-FL + 2x MX2-Y  |
| MX2-3/4-KK | G 3/4 | 174 | 140 | 1x MX2-3/4-FL + 2x MX2-Y  |
| MX3-3/4-KK | G 3/4 | 221 | 179 | 1x MX2-3/4-FL + 2x MX2-Y  |
| MX3-1-KK   | G 1   | 221 | 179 | 1x MX2-1-FL + 2x MX2-Y    |

Rapid clamp kit with wall fixing brackets



| Mod.  | A   | B  | C  | D    | E    | F    | G    | H    | I    | L   | M  | N   | O    | P   | R   |
|-------|-----|----|----|------|------|------|------|------|------|-----|----|-----|------|-----|-----|
| MX2-Y | 5,2 | 12 | 46 | 14   | 73,5 | 32,5 | 70,5 | 37   | 70,5 | 103 | 12 | 6,5 | 42   | 152 | 4   |
| MX3-Y | 6,2 | 14 | 54 | 16,5 | 86   | 40   | 77   | 43,5 | 68   | 105 | 15 | 8,4 | 50,5 | 181 | 4,5 |