

# LOCKABLE ISOLATION 3/2-WAY VALVES

## SERIES MC

Electropneumatic, pneumatic and manual version  
Ports G1/4, G3/8 and G1/2  
Modular



- Standard tamperproof lock-out (manual valve)
- Actuation at 24 V, 110 V or 230 V
- Exhaust in atmosphere

The 3-way lockable isolation valves are available in the electropneumatic, pneumatic and manual version and are designed to block the air inlet of the FRL group and so pressurise and depressurise the equipment.

Positioning of these valves is often before the FRL unit. The lockable isolation valves are available with ports G1/4, G3/8 and G1/2 and can be panel mounted.

### General Data

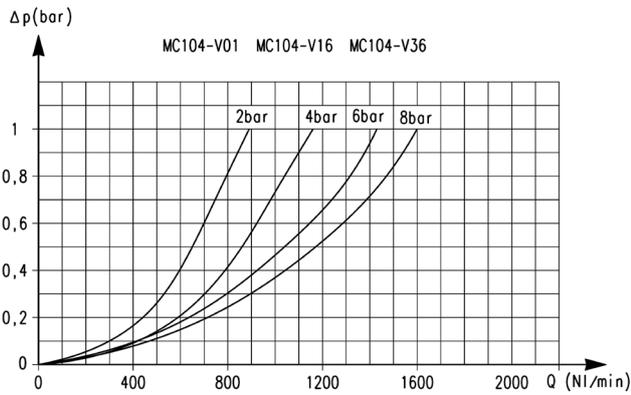
<b>Construction</b>	Modular compact, poppet-type
<b>Materials</b>	Zama, NBR, technopolymer
<b>Ports</b>	G1/4; G3/8; G1/2
<b>Weight</b>	0.277 kg 0.536 kg 0.514 kg
<b>Mounting</b>	In-line, wall or panel mounting (in any position)
<b>Operating temperature</b>	-5°C ÷ 50°C (with the dew point of the fluid lower than 2°C at the min. working temperature)
<b>Finishing</b>	Enamelled
<b>Operating pressure</b>	Manual valve: -0.8 bar ÷ 10 bar Electro-pneumatic valve: 2 bar ÷ 10 bar Pneumatic valve: -0.8 bar ÷ 10 bar (with pilot 2 ÷ 10 bar)
<b>Nominal exhaust flow at 6 bar with Δp = 1 bar</b>	G1/4 = 1080 NL/min G3/8 = 2380 NL/min G1/2 = 2380 NL/min
<b>Nominal flow</b>	See Flow diagrams
<b>Fluid</b>	Compressed air

LOCKABLE ISOLATION 3/2-WAY VALVES  
**SERIES MC - CODING EXAMPLES**

**Coding Examples**

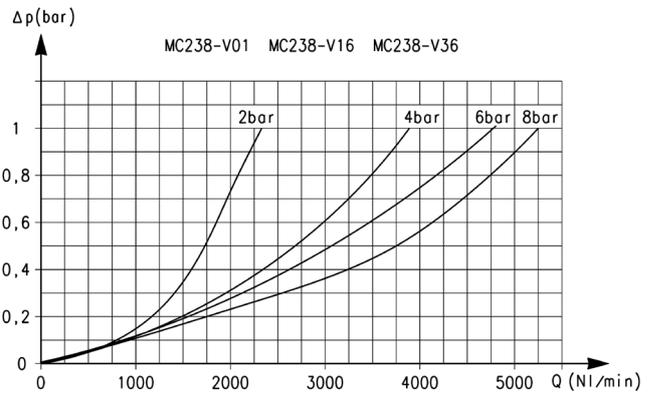
MC	2	02	V	16
<b>MC</b>	SERIES			
<b>2</b>	SIZE 1 = G1/4 2 = G3/8 - G1/2			
<b>02</b>	PORTS 04 = G1/4 38 = G3/8 02 = G1/2			
<b>V</b>	V = 3/2-WAY VALVE			
<b>16</b>	DESIGN TYPE 16 = electropneumatic 36 = pneumatic 01 = padlock valve (manual command)			

## Flow diagrams



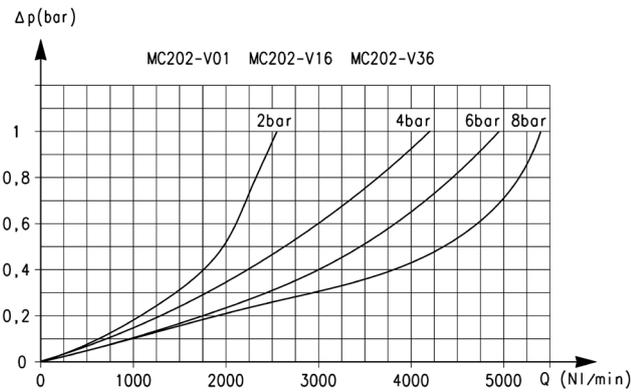
Flow diagram for models:  
 MC104-V01  
 MC104-V16  
 MC104-V36

$\Delta p$  = Pressure drop (bar)  
 Q = Flow (NI/min)



Flow diagram for models:  
 MC238-V01  
 MC238-V16  
 MC238-V36

$\Delta p$  = Pressure drop (bar)  
 Q = Flow (NI/min)



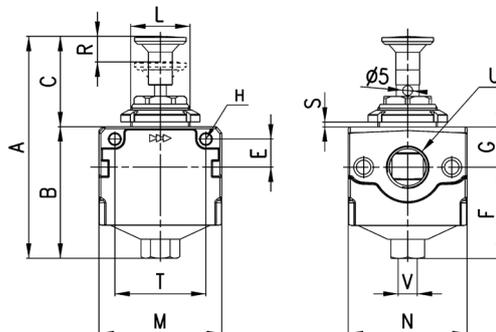
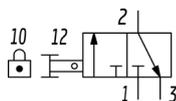
Flow diagram for models:  
 MC202-V01  
 MC202-V16  
 MC202-V36

$\Delta p$  = Pressure drop (bar)  
 Q = Flow (NI/min)

**LOCKABLE ISOLATION 3/2-WAY VALVES**  
**SERIES MC - DIMENSIONS**
**Lockable isolation valves - manual version**


Actuating force at 6 bar:

- MC104-V01 = 29N
- MC238-V01 = 31N
- MC202-V01 = 31N

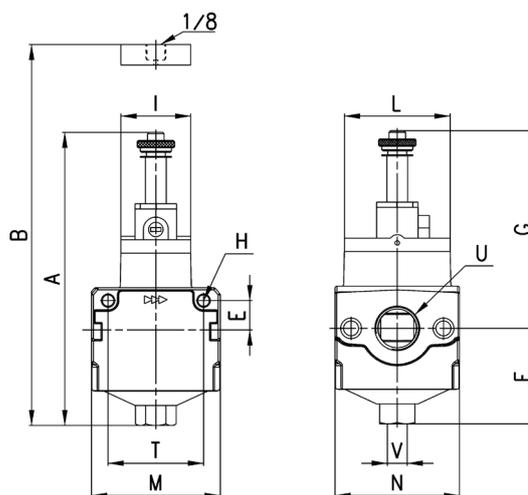
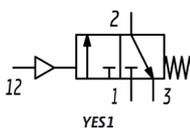
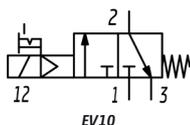


Mod.	A	B	C	E	F	G	H	L	M	N	R	S	T	U	V
MC104-V01	96,5	54,5	42	11	38,5	16	4,5	M30x1,5	45	45	9	0 ÷ 6	35	G1/4	G1/8
MC238-V01	113	67	46	14	46,5	20,5	5,5	M30x1,5	62	60	13	0 ÷ 6	46	G3/8	G1/4
MC202-V01	113	67	46	14	46,5	20,5	5,5	M30x1,5	62	60	13	0 ÷ 6	46	G1/2	G1/4

AIR TREATMENT

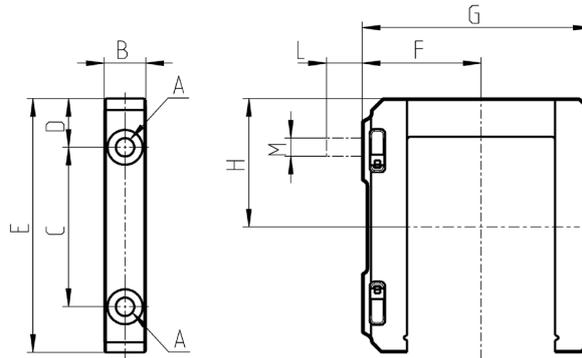
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**Lockable isolation valves - electro-/pneumatic version**


- EV10 = solenoid valve, 3/2 NC, monostable, with bistable manual override
- YES1 = pneumatically operated valve, 3/2, monostable, mechanical spring



Mod.	A	B	E	F	G	H	I	L	M	N	T	U	V	Symbol
MC104-V16	120	-	11	38,5	81,5	4,5	22	32	45	45	35	G1/4	G1/8	EV10
MC238-V16	142,5	-	14	46,5	96	5,5	33,5	51	62	60	46	G3/8	G1/4	EV10
MC202-V16	142,5	-	14	46,5	96	5,5	33,5	51	62	60	46	G1/2	G1/4	EV10
MC104-V36	-	77,5	11	38,5	-	4,5	22	32	45	45	35	G1/4	G1/8	VP01
MC238-V36	-	93,5	14	46,5	-	5,5	33,5	51	62	60	46	G3/8	G1/4	VP01
MC202-V36	-	93,5	14	46,5	-	5,5	33,5	51	62	60	46	G1/2	G1/4	VP01

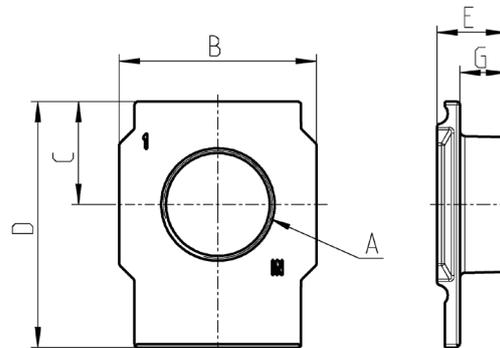
### Rapid clamp kit



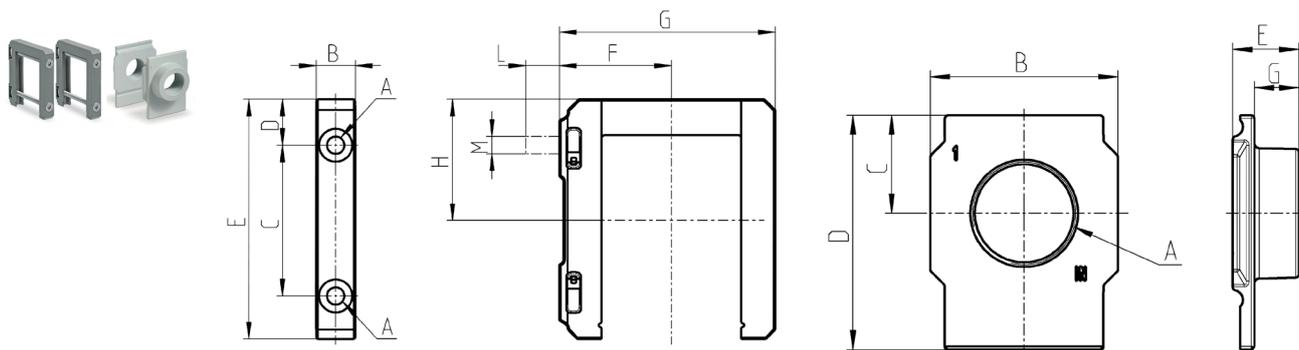
See the positioning scheme in the section "Series MX assembled FRI".

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

### Terminal flanges (IN/OUT)

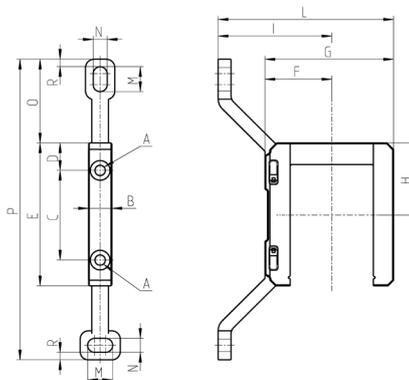


Mod.	A	B	C	D	E	G
MX2-3/8-FL	G3/8	50	26,5	63,5	17	11
MX2-1/2-FL	G1/2	50	26,5	63,5	17	11
MX2-3/4-FL	G3/4	50	26,5	63,5	17	11
MX3-3/4-FL	G3/4	58	30,5	73	20,5	13,5
MX3-1-FL	G1	58	30,5	73	20,5	13,5

**Rapid clamps kit + flanges**


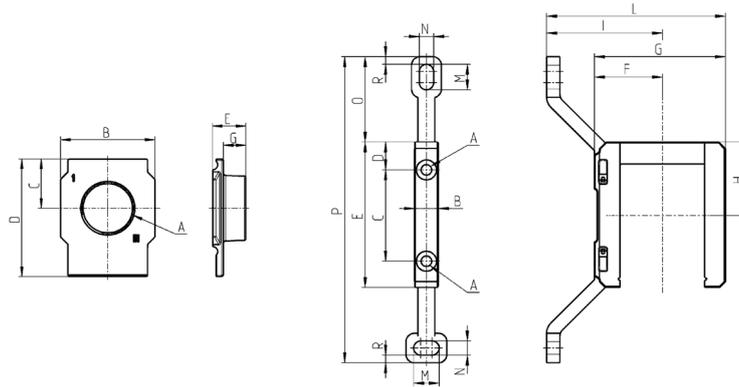
Mod.	A	B	C	The kit is supplied with:
MX2-3/8-HH	G 3/8	174	-	1x MX2-3/8-FL + 2x MX2-X
MX2-1/2-HH	G 3/8	174	-	1x MX2-1/2-FL + 2x MX2-X
MX2-3/4-HH	G 3/4	174	-	1x MX2-3/4-FL + 2x MX2-X
MX2-3/8-JJ	G 3/8	174	140	1x MX2-3/8-FL + 2x MX2-Z
MX2-1/2-JJ	G 1/2	174	140	1x MX2-1/2-FL + 2x MX2-Z
MX2-3/4-JJ	G 3/4	174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

AIR TREATMENT

**9**
**Rapid clamp kit with wall fixing brackets**


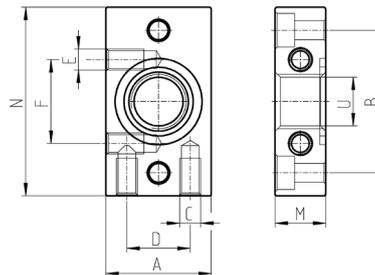
Mod.	A	B	C	D	E	F	G	H	I	L	M	N	O	P	R
MX2-Y	5,2	12	46	14	73,5	32,5	70,5	37	70,5	103	12	6,5	42	152	4
MX3-Y	6,2	14	54	16,5	86	40	77	43,5	68	105	15	8,4	50,5	181	4,5

### Rapid clamps kit with wall fixing brackets + flanges



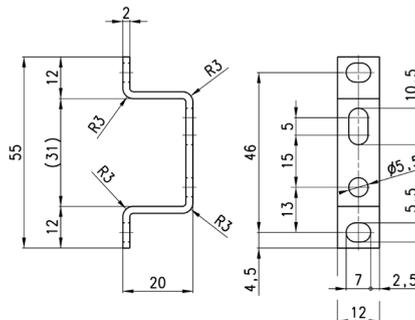
Mod.	A	B	C	The kit is supplied with:
MX2-3/8-KK	G 3/8	174	140	1x MX2-3/8-FL + 2x MX2-Y
MX2-1/2-KK	G 1/2	174	140	1x MX2-1/2-FL + 2x MX2-Y
MX2-3/4-KK	G 3/4	174	140	1x MX2-3/4-FL + 2x MX2-Y
MX3-3/4-KK	G 3/4	221	179	1x MX2-3/4-FL + 2x MX2-Y
MX3-1-KK	G 1	221	179	1x MX2-1-FL + 2x MX2-Y

### Terminal flanges (kit A)



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 for (kit B)



Mod.
MC104-ST