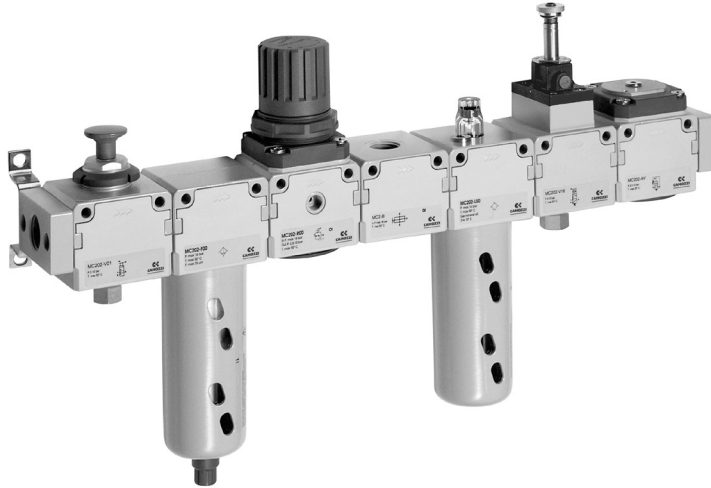


# Series MC assembled FRL

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

SERIES MC ASSEMBLED FRL



- » Clean design
- » Great modularity
- » Easy maintenance

The FRL Series MC in the assembled version can be easily assembled by means of modular tie rods on which it is possible to mount the single elements without any limits in the composition. The FRL groups Series MC are available already mounted (with a single code).

The connections can be made directly on the elements or on the terminal flanges (Kit A) with the advantage that in case of maintenance the group can be extracted without disconnecting the tubing. The version with flanges is supplied without tie-rods.

## GENERAL DATA

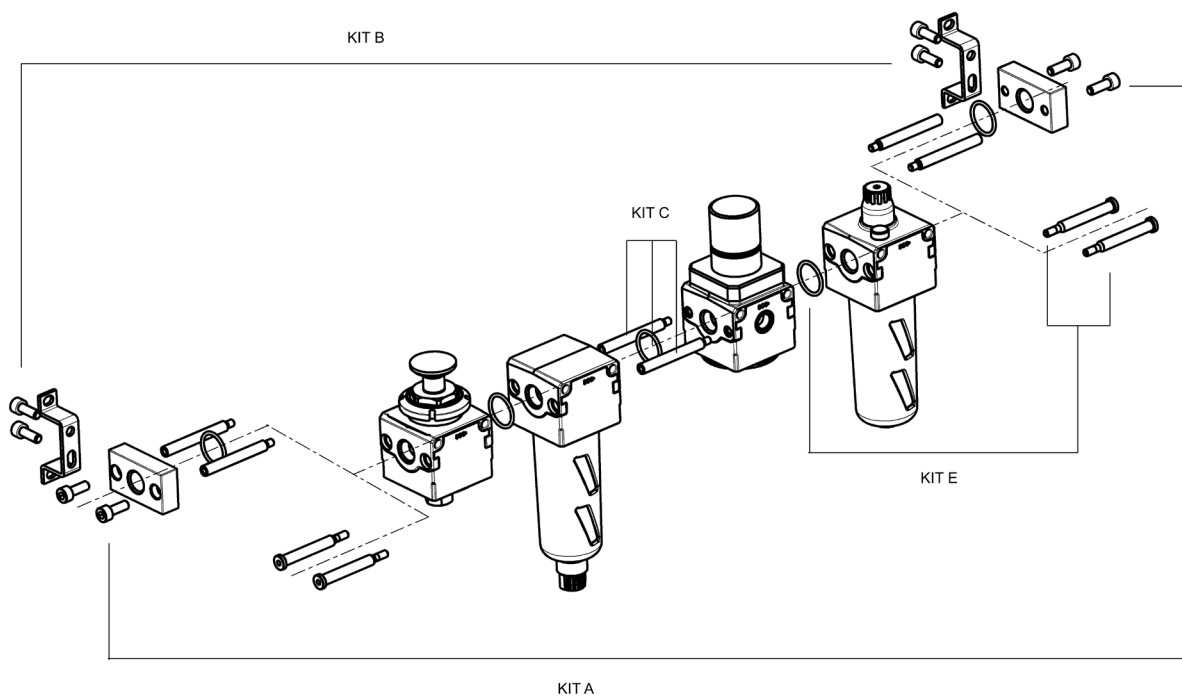
<b>Construction</b>	modular, compact
<b>Materials</b>	zama, NBR, technopolymer
<b>Ports</b>	G1/4 - G3/8 - G1/2
<b>Mounting</b>	vertical, in-line or wall-mounting
<b>Operating temperature</b>	-5°C ÷ 50°C at 10 bar (with the dew point of the fluid lower than 2°C at the min. working temperature)
<b>Finish</b>	enamelled
<b>Flow</b>	determined at 6 bar inlet supply with ΔP 1 bar (ΔP 0,5 only for FRL)

## COMPOSITION OF THE KITS

- EXAMPLE BODY TYPE [ M ] with female no through threads: - regulator - filter-regulator - Manifold regulator group, an assembly of more manifold regulators counts as a body type "M".

- EXAMPLE BODY TYPE [ P ] with through holes:  
- filter - lubricator - soft start valve - take off block - isolation valve

The "x" in the codes in the following table refer to the size, see MC Accessories in the section 3/2.44.

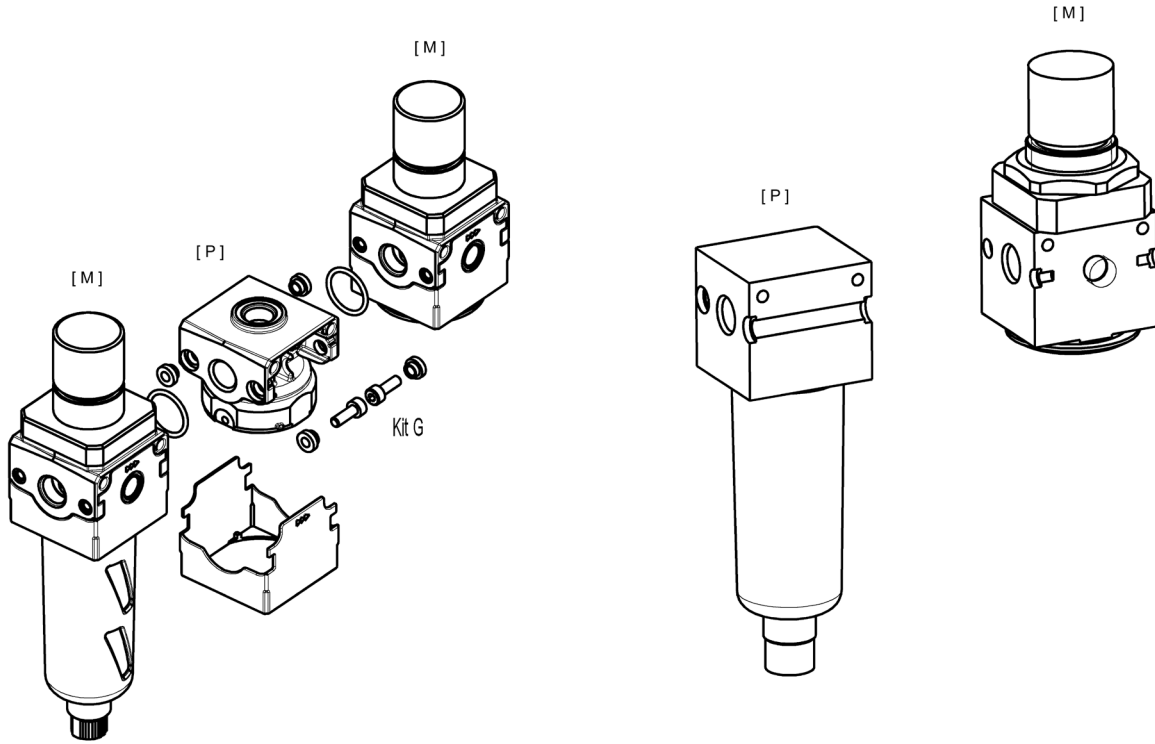


Mod.	Description	Supplied with:
MCxxx-FL	Kit A	1 right flange 1 left flange 4 screws - 2 O-ring
MCxxx-ST	Kit B	2 brackets + 4 screws
MCx-TMF	Kit C	2 tie rods male-female 1 O-ring
MCx-TFF	Kit D	2 tie rods female-female
MCx-VM	Kit E	2 male screws 1 O-ring
MCx-VMF	Kit F	2 male screws 2 female screws 1 O-ring
MCx-VMD	Kit G	4 screws 4 spacers + 2 O-ring To be used on a body type "P" positioned in between two body types "M".

**ASSEMBLY EXAMPLE WITH AND WITHOUT TERMINAL FLANGES**

- the body types [M] are with female no through threads
- the body types [P] are with through holes

SERIES MC ASSEMBLED FRL



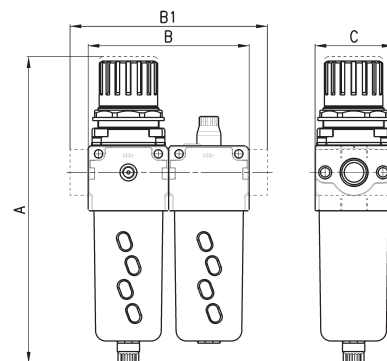
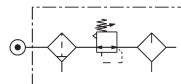
Assembly between types P and M	KIT for ass. without terminal flanges	KIT for ass. with terminal flanges
P + M	1 kit E	1 Kit A + 1 Kit C
M + P	1 kit E	1 Kit A + 1 Kit C
P + P	1 Kit F	1 Kit A + 1 Kit C + 1 Kit D
P + M + P	2 Kit E	1 Kit A + 2 Kit C
P + P + P	1 Kit F + 1 Kit C	1 Kit A + 2 Kit C + 1 Kit D
M + P + P	1 Kit E + 1 Kit C	1 Kit A + 2 Kit C
M + P + M	1 Kit G	1 Kit A + 1 Kit G
P + M + P + P	2 Kit E + 1 Kit C	1 Kit A + 3 Kit C
P + P + M + P + P	2 Kit E + 2 Kit C	1 Kit A + 4 Kit C

## CODING EXAMPLE

<b>MC</b>	<b>2</b>	<b>02</b>	<b>-</b>	<b>C</b>	<b>-</b>	<b>5</b>	<b>-</b>	<b>FL</b>
<b>MC</b>	MC = SERIES							
<b>2</b>	SIZE 1 = G1/4 2 = G3/8 - G1/2							
<b>02</b>	PORT 04 = G1/4 38 = G3/8 02 = G1/2							
<b>C</b>	ASSEMBLY GROUP C = D + L E = V01 + D + L FRL = F + R + L GN = D + L + V16 + AV HNA = V01 + D + L + V16 + AV + PRESS NO HNC = V01 + D + L + V16 + AV + PRESS NC N = V01 + D PN = D + V16 + AV QN = V01 + D + V16 + AV TN = V01 + D + L + V16 + AV U = F13 + FB3 (only for 3/8 - 1/2) ZNA = V01 + D + V16 + AV + PRESS NO ZNC = V01 + D + V16 + AV + PRESS NC							
<b>5</b>	FILTERING ELEMENT 5 = 5 µm (standard) 25 = 25 µm (upon request)							
<b>FL</b>	VERSION FL = with terminal flanges (without brackets)							
LEGEND: D = Filter-regulator 0.5-10 bar, semi-automatic-manual drain with relieving, filtering element 5 µm or 25 µm L = Lubricator V01 = 3/2-way manually operated valve F = Filter 5 µm or 25 µm R = Regulator 0.5-10 bar with relieving V16 = 3/2-way electropneumatically operated valve AV = Soft start valve PRESS NO = Pressure switch, Normally Open PRESS NC = Pressure switch, Normally Closed F13 = Filter 5 µm with automatic drain FB3 = Coalescing filter 0.01 µm with automatic drain								

## Assembly group C

Components:  
Filter-regulator  
Lubricator

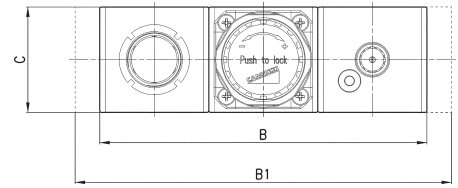
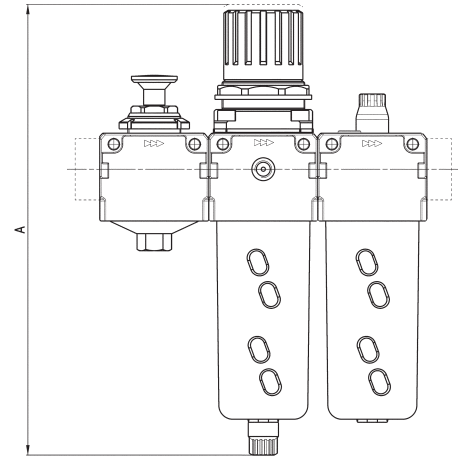


DIMENSIONS					
Mod.	A	B	B1	C	Flow rate (NL/min)
MC104-C-5	193,5	90	-	45	1450
MC238-C-5	256,5	124	-	60	4800
MC202-C-5	256,5	124	-	60	4900
MC104-C-5-FL	193,5	-	114	45	1450
MC238-C-5-FL	256,5	-	152	60	4800
MC202-C-5-FL	256,5	-	152	60	4900

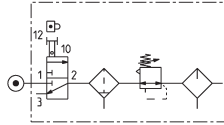
### Assembly group E



Components:  
Lockable isolation 3/2-way valve  
Filter-regulator  
Lubricator



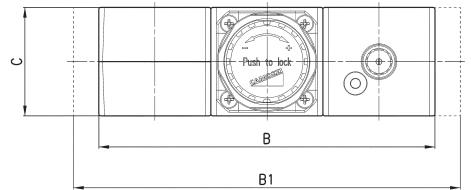
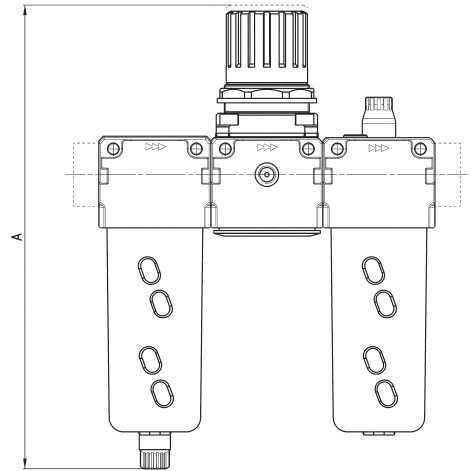
DIMENSIONS					
Mod.	A	B	B1	C	Flow rate (NI/min)
MC104-E-5	193,5	135	-	45	1450
MC238-E-5	256,5	186	-	60	4800
MC202-E-5	256,5	186	-	60	4950
MC104-E-5-FL	193,5	-	159	45	1450
MC238-E-5-FL	256,5	-	214	60	4800
MC202-E-5-FL	256,5	-	214	60	4950



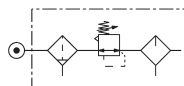
### Assembly group FRL



Components:  
Filter  
Regulator  
Lubricator



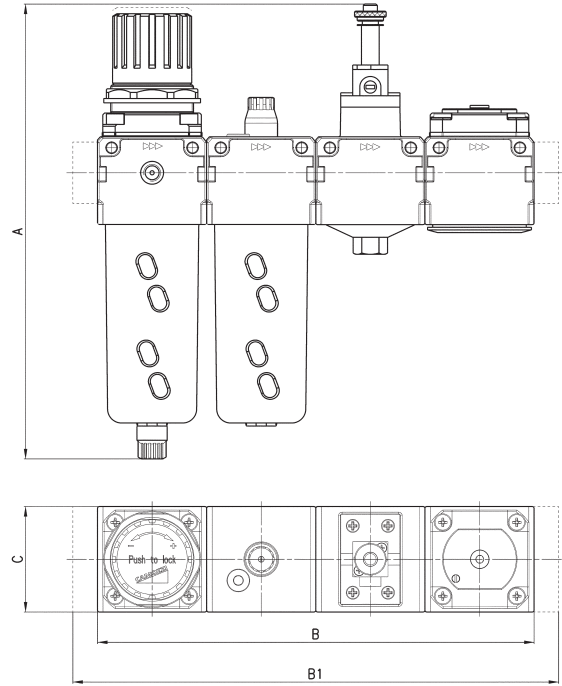
DIMENSIONS					
Mod.	A	B	B1	C	Flow rate (NI/min)
MC104-FRL-5	193	135	-	45	1450
MC238-FRL-5	256,5	186	-	60	4800
MC202-FRL-5	256,5	186	-	60	4900
MC104-FRL-5-FL	193,5	-	159	45	1450
MC238-FRL-5-FL	256,5	-	214	60	4800
MC202-FRL-5-FL	256,5	-	214	60	4900



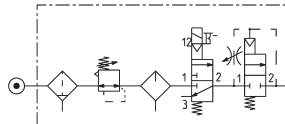
**Assembly group GN**



- Components:
- Filter-regulator
- Lubricator
- Lockable isolation 3/2-way valve
- Soft start valve



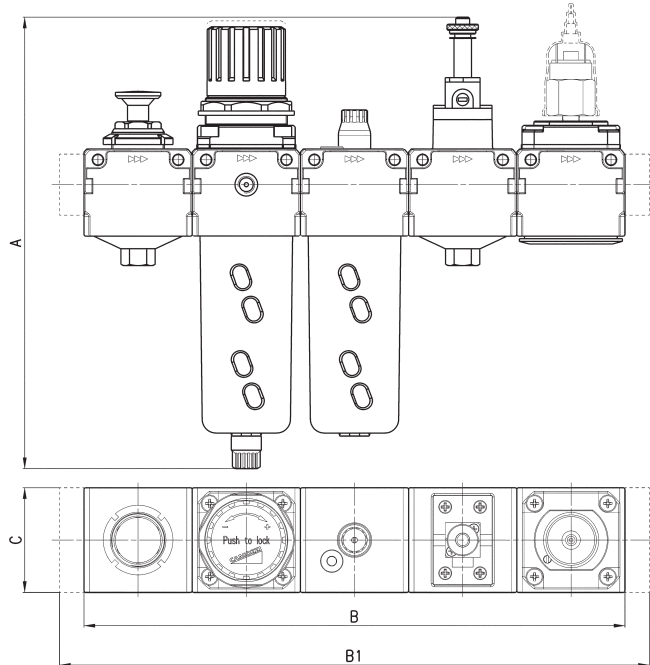
DIMENSIONS					
Mod.	A	B	B1	C	Flow rate (NI/min)
MC104-GN-5	208	180	-	45	1450
MC238-GN-5	259	248	-	60	4800
MC202-GN-5	259	248	-	60	4900
MC104-GN-5-FL	208	-	204	45	1450
MC238-GN-5-FL	259	-	276	60	4800
MC202-GN-5-FL	259	-	276	60	4950



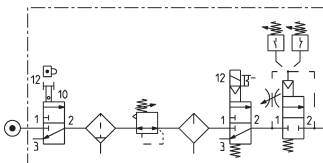
**Assembly group HN...**



- Components:
- Lockable isolation 3/2-way valve
- Filter-regulator
- Lubricator
- Lockable isolation 3/2-way valve
- Soft start valve + pressure switch (NC)



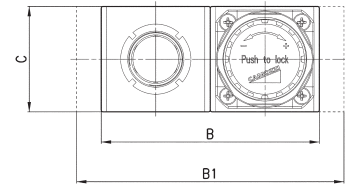
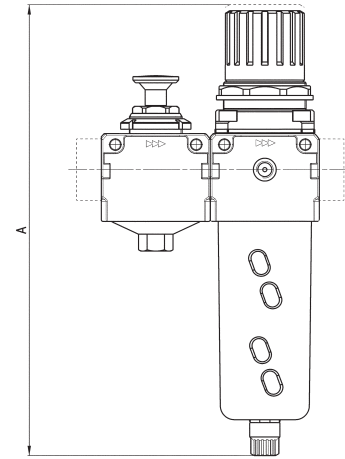
DIMENSIONS					
Mod.	A	B	B1	C	Flow rate (NI/min)
MC104-HN...-5	208	225	-	45	1450
MC238-HN...-5	259	310	-	60	4800
MC202-HN...-5	259	310	-	60	4950
MC104-HN...-5-FL	208	-	249	45	1450
MC238-HN...-5-FL	259	-	338	60	4800
MC202-HN...-5-FL	259	-	338	60	4950



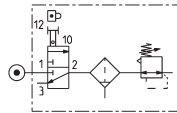
### Assembly group N



Components:  
Lockable isolation 3/2-way valve  
Filter-regulator



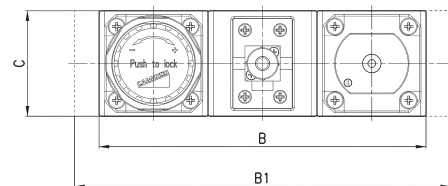
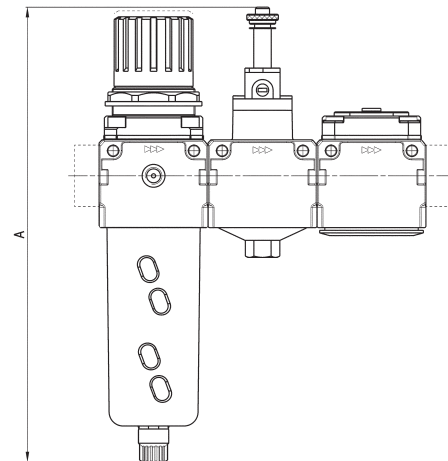
DIMENSIONS					
Mod.	A	B	B1	C	Flow rate (NI/min)
MC104-N-5	193,5	90	-	45	1450
MC238-N-5	256,5	124	-	60	4800
MC202-N-5	256,5	124	-	60	4950
MC104-N-5-FL	193,5	-	114	45	1450
MC238-N-5-FL	256,5	-	152	60	4800
MC202-N-5-FL	256,5	-	152	60	4950



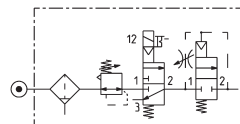
### Assembly group PN



Components:  
Filter-regulator  
Lockable isolation 3/2-way valve  
Soft start valve



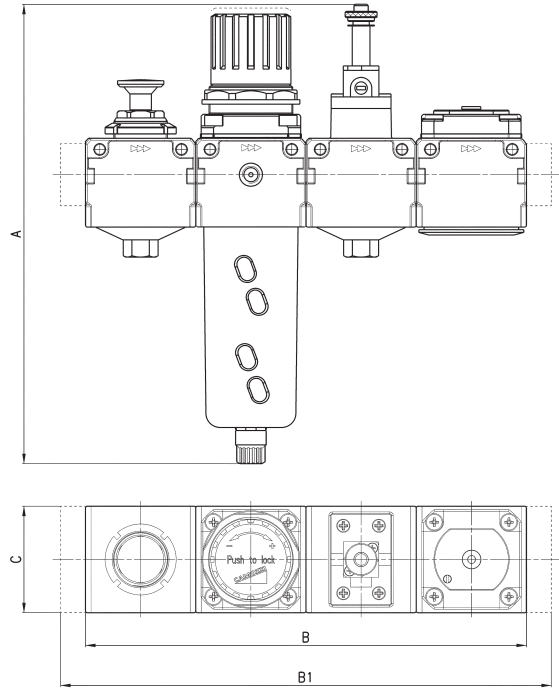
DIMENSIONS					
Mod.	A	B	B1	C	Flow rate (NI/min)
MC104-PN-5	208	135	-	45	1450
MC238-PN-5	259	186	-	60	4800
MC202-PN-5	259	186	-	60	4950
MC104-PN-5-FL	208	-	159	45	1450
MC238-PN-5-FL	259	-	214	60	4800
MC202-PN-5-FL	259	-	214	60	4950



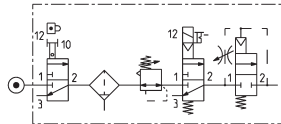
**Assembly group QN**



Components:  
Lockable isolation 3/2-way valve  
Filter-regulator  
Lockable isolation 3/2-way valve  
Soft start valve



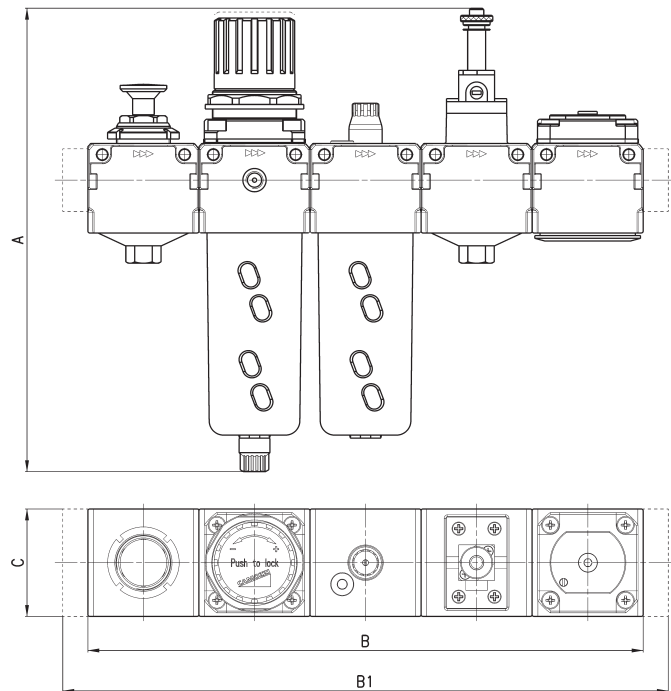
DIMENSIONS					
Mod.	A	B	B1	C	Flow rate (NI/min)
MC104-QN-5	208	180	-	45	1450
MC238-QN-5	259	248	-	60	4800
MC202-QN-5	259	248	-	60	4950
MC104-QN-5-FL	208	-	204	45	1450
MC238-QN-5-FL	259	-	276	60	4800
MC202-QN-5-FL	259	-	276	60	4950



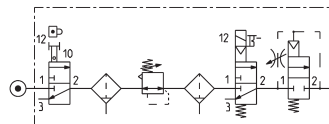
**Assembly group TN**



Components:  
Lockable isolation 3/2-way valve  
Filter-regulator  
Lubricator  
Lockable isolation 3/2-way valve  
Soft start valve



DIMENSIONS					
Mod.	A	B	B1	C	Flow rate (NI/min)
MC104-TN-5	208	225	-	45	1450
MC238-TN-5	259	310	-	60	4800
MC202-TN-5	259	310	-	60	4950
MC104-TN-5-FL	208	-	249	45	1450
MC238-TN-5-FL	259	-	338	60	4800
MC202-TN-5-FL	259	-	338	60	4950

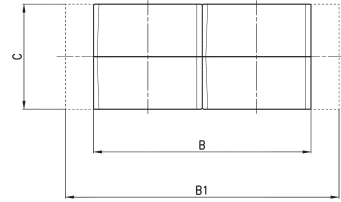
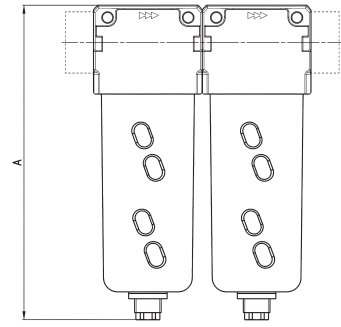




### Assembly group U



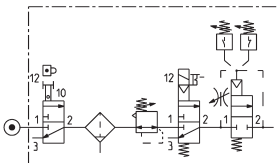
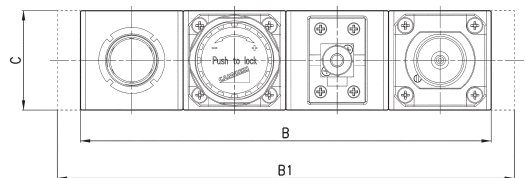
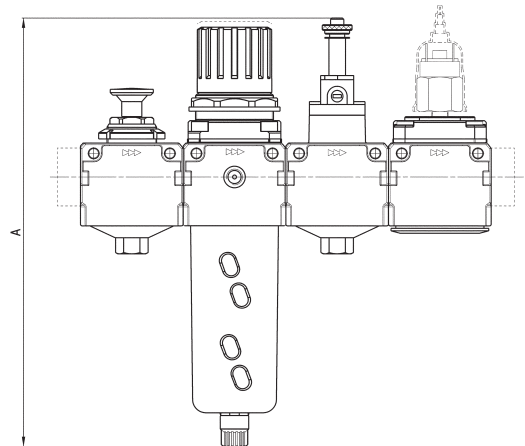
Components:  
Filter  
Coalescing filter



DIMENSIONS					
Mod.	A	B	B1	C	Flow rate (NI/min)
MC238-U-5	180	124	-	60	2050
MC202-U-5	180	124	-	60	2300
MC238-U-5-FL	180	-	152	60	2050
MC202-U-5-FL	180	-	152	60	2300

### Assembly group ZN...

Components:  
Lockable isolation 3/2-way valve  
Filter-regulator  
Lockable isolation 3/2-way valve  
Soft start valve + pressure switch  
(NO or NC)



DIMENSIONS					
Mod.	A	B	B1	C	Flow rate (NI/min)
MC104-ZN...-5	208	180	-	45	1450
MC238-ZN...-5	259	248	-	60	4800
MC202-ZN...-5	259	248	-	60	4950
MC104-ZN...-5-FL	208	-	204	45	1450
MC238-ZN...-5-FL	259	-	276	60	4800
MC202-ZN...-5-FL	259	-	276	60	4950