

ACTIVATED CARBON FILTERS

SERIES MD

Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with Ø 6, 8 and 10 mm
Modular assembly
Bowl with technopolymer cover and bayonet-type mounting



- Removal of oil, liquid and gaseous components from compressed air through the active carbons
- Air quality in compliance with ISO 8573-1 standard, Class [1:7:1]
- Visual blockage indicator
- Bowl locking system reducing the risk of accidents
- Additional air intakes with the same characteristics of the inlet air (line)

Within a battery of filters the activated carbon version is placed at the end because it requires a pre-filtering like the coalescing filter. Given the characteristic of this filter, it is recommended to replace the filter element at least every 6 months or 1000 working hours.

The operating principle is based on the adsorption characteristic of the filtering element which is composed of extremely porous fibers placed on different layers.

These fibers create a cross-linked and are thus able to adsorb wet parts and contaminants remaining in the passing air, for example oil vapours/smokes, as well as odours generated from these contaminants.

General Data

Construction	Modular, compact with activated carbon filtering element
Materials	See TABLE OF MATERIALS on the following page
Ports	With interchangeable cartridges: 1/8, 1/4 and 3/8 threaded or integrated with super-rapid fitting for tube with Ø 6, 8 and 10 mm
Mounting	Vertical in-line Wall-mounting by means of through holes in the body or with a support bracket
Working temperature	10°C ÷ 40°C (t max = 60°C)
Condensate drain	Not present
Quality of delivered air according to ISO 8573-1:2010	Class [1:7:1] (pre-filtering in Class [1:8:1] is recommended)
Working pressure	0,3 ÷ 16 bar
Nominal flow	See FLOW DIAGRAMS on the following pages
Filtering element	Activated carbon
Residual oil content	< 0,003 mg/m ³
Fluid	Compressed air

ACTIVATED CARBON FILTERS
SERIES MD - CODING EXAMPLES

Coding Example

MD	1	-	FCA	0	-	1/8
MD	SERIES					
1	DIMENSION 1 = 42 mm					
FCA	ACTIVATED CARBON FILTER					
0	VISUAL BLOCKAGE INDICATOR 0 = Not present 1 = Present					
1/8	PORTS (IN - OUT) * = Without cartridges 1/8 = G1/8 1/4 = G1/4 3/8 = G3/8 6 = Tube Ø6 8 = Tube Ø8 10 = Tube Ø10 * If the inlet (IN) cartridge is different from the outlet (OUT) cartridge, both dimensions shall be indicated. Example: MD1-FCA1-1/4-10.					

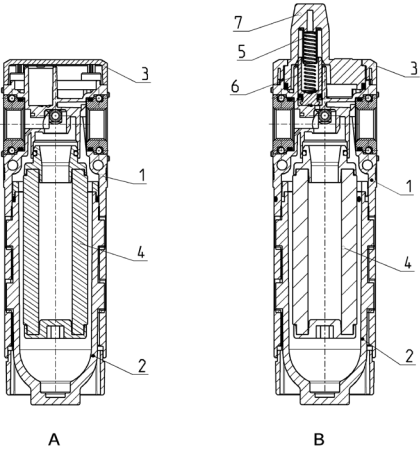
AIR TREATMENT

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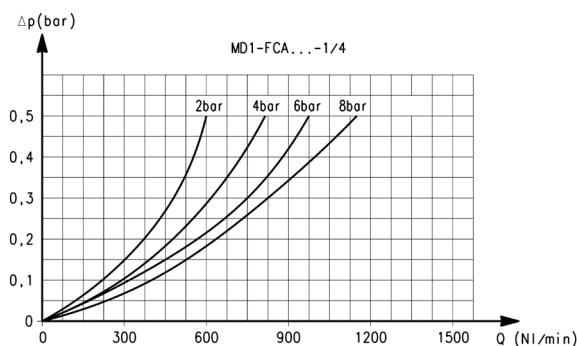
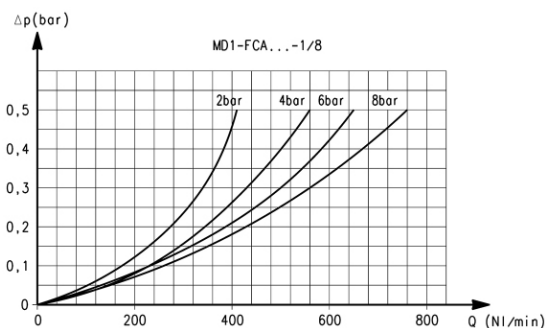
Series MD activated carbon filters - materials

- A = Filter
B = Filter with visual blockage indicator

PARTS	Materials
1 = Body	Polyamide
2 = Tank	Polycarbonate
3 = Covering	Polyamide
4 = Filtering element	Active carbons
5 = Upper spring	Stainless steel
6 = Piston	Anodized aluminium
7 = Visual blockage indicator	Polycarbonate
Seals	NBR



Flow diagrams



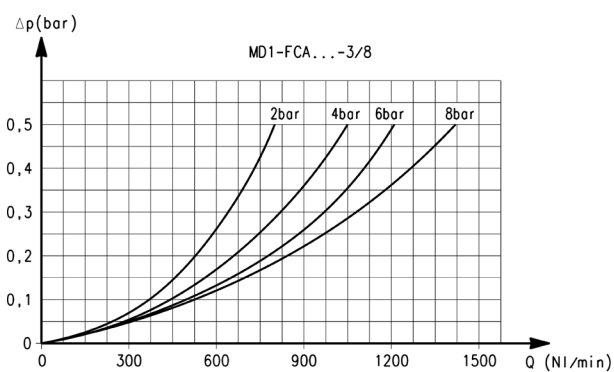
Ports with interchangeable 1/8 threaded cartridges

Δp = Pressure drop (bar)
Q = Flow (NL/min)

Ports with interchangeable 1/4 threaded cartridges

Δp = Pressure drop (bar)
Q = Flow (NL/min)

Flow diagram



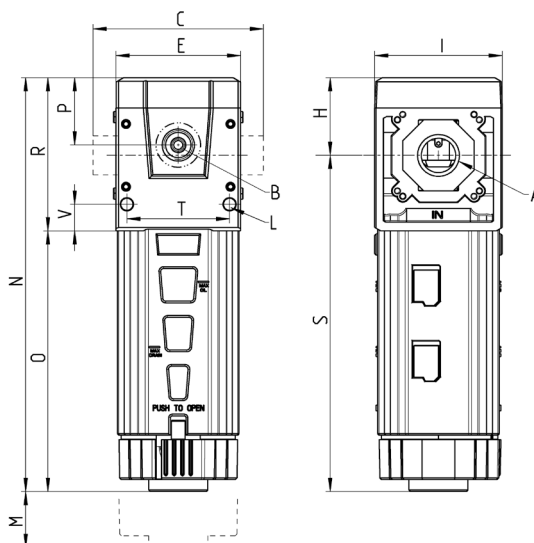
Ports with interchangeable 3/8 threaded cartridges

Δp = Pressure drop (bar)
Q = Flow (NL/min)

ACTIVATED CARBON FILTERS
SERIES MD - DIMENSIONS

Series MD activated carbon filters - dimensions

FC01 = Activated carbon filter



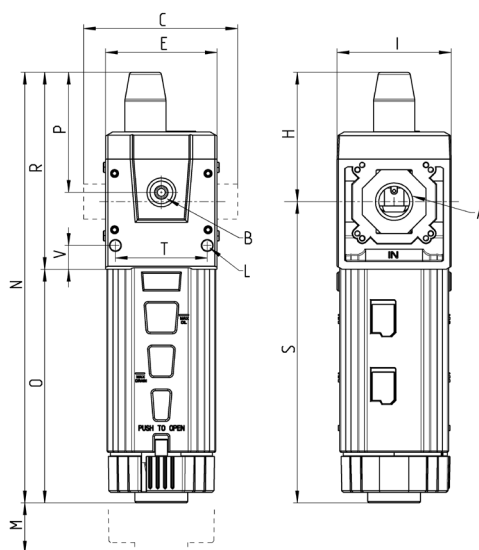
Mod.	A	B	C	E	H	I	L	M	N	O	P	R	S	T	V	Weight [kg]
MD1-FCA0	-	G1/8	42	42	26,2	43	Ø4	90	139,7	88	22,7	51,7	113,5	34,6	9	0,2
MD1-FCA0-1/8	G1/8	G1/8	42	42	26,2	43	Ø4	90	139,7	88	22,7	51,7	113,5	34,6	9	0,2
MD1-FCA0-1/4	G1/4	G1/8	42	42	26,2	43	Ø4	90	139,7	88	22,7	51,7	113,5	34,6	9	0,2
MD1-FCA0-3/8	G3/8	G1/8	42	42	26,2	43	Ø4	90	139,7	88	22,7	51,7	113,5	34,6	9	0,2
MD1-FCA0-6	Ø6	G1/8	47	42	26,2	43	Ø4	90	139,7	88	22,7	51,7	113,5	34,6	9	0,2
MD1-FCA0-8	Ø8	G1/8	62	42	26,2	43	Ø4	90	139,7	88	22,7	51,7	113,5	34,6	9	0,2
MD1-FCA0-10	Ø10	G1/8	67	42	26,2	43	Ø4	90	139,7	88	22,7	51,7	113,5	34,6	9	0,2

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Series MD activated carbon filters with visual indicator - dimensions

FC02 = Activated carbon filter with visual blockage indicator



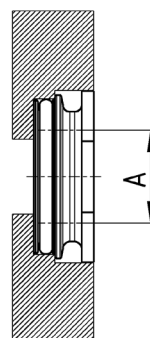
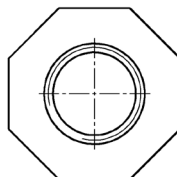
Mod.	A	B	C	E	H	I	L	M	N	O	P	R	S	T	V	Weight [kg]
MD1-FCA1	-	G1/8	42	42	48,7	43	Ø4	90	162,2	88	45,2	74,2	113,5	34,6	9	0,2
MD1-FCA1-1/8	G1/8	G1/8	42	42	48,7	43	Ø4	90	162,2	88	45,2	74,2	113,5	34,6	9	0,2
MD1-FCA1-1/4	G1/4	G1/8	42	42	48,7	43	Ø4	90	162,2	88	45,2	74,2	113,5	34,6	9	0,2
MD1-FCA1-3/8	G3/8	G1/8	42	42	48,7	43	Ø4	90	162,2	88	45,2	74,2	113,5	34,6	9	0,2
MD1-FCA1-6	Ø6	G1/8	47	42	48,7	43	Ø4	90	162,2	88	45,2	74,2	113,5	34,6	9	0,2
MD1-FCA1-8	Ø8	G1/8	62	42	48,7	43	Ø4	90	162,2	88	45,2	74,2	113,5	34,6	9	0,2
MD1-FCA1-10	Ø10	G1/8	67	42	48,7	43	Ø4	90	162,2	88	45,2	74,2	113,5	34,6	9	0,2

Threaded cartridges



Supplied with:

2x nickel-plated threaded cartridges
4x special white zinc-plated screws Ø4,5 TC/RC



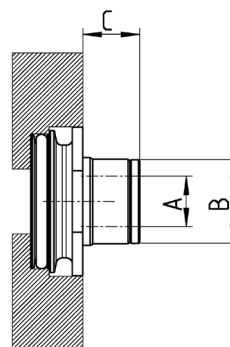
Mod.	A
MD1-A-1/8	G1/8
MD1-A-1/4	G1/4
MD1-A-3/8	G3/8
MD1-A-1/8TF	1/8 NPTF
MD1-A-1/4TF	1/4 NPTF
MD1-A-3/8TF	3/8 NPTF

Integrated cartridges with super-rapid fitting



Supplied with:

2x integrated nickel-plated cartridges with super-rapid fitting
4x special white zinc-plated screws Ø4,5 TC/RC



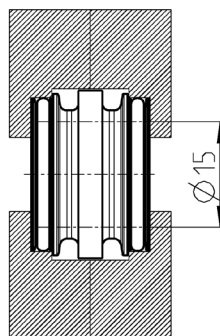
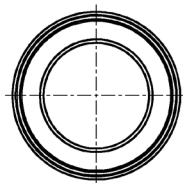
Mod.	A	B	C
MD1-A-6	Ø6	12,7	8,5
MD1-A-8	Ø8	14,2	10
MD1-A-10	Ø10	16,5	12,5
MD1-A04TF	Ø1/4"	12,7	8,5
MD1-A-05TF	Ø5/16"	14,2	10
MD1-A-06TF	Ø3/8"	16,5	12,5

Intermediate joining cartridge



Supplied with:

1x intermediate joining
cartridge
4x special white zinc-plated
screws Ø4,5 TC/RC



Mod.

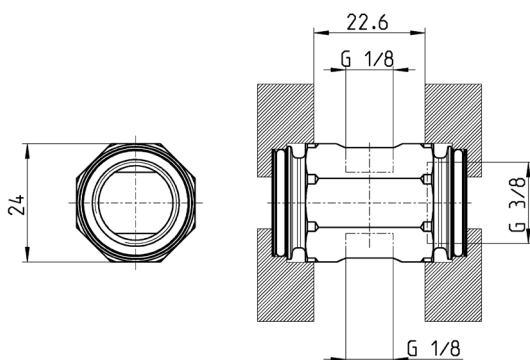
MD1-C

Screws for wall mounting



Supplied with:

2x white zinc-plated screws
M4x50



Mod.

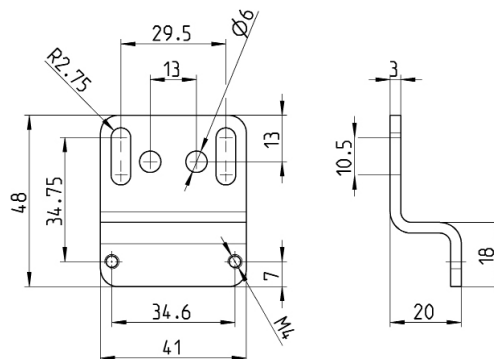
MD1-D

Rear bracket



Supplied with:

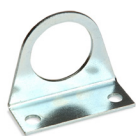
1x zinc-plated bracket
2x white zinc-plated screws
M4x50



Mod.

MD1-ST/1

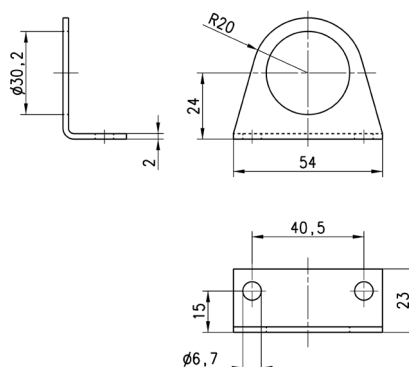
Mounting bracket Mod. C114-ST



For regulators and filter-regulators (G1/4 - G1/8)

Material:
zinc-plated steel

Supplied with:
1x bracket



Mod.

C114-ST

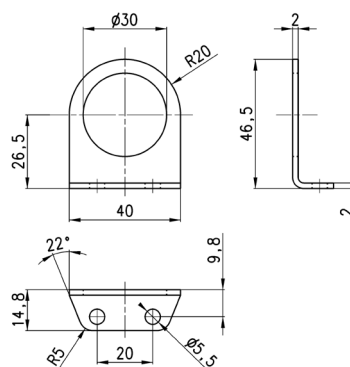
Mounting bracket Mod. C114-ST/1



For regulators and filter-regulators (G1/4 - G1/8)

Material:
zinc-plated steel

Supplied with:
1x bracket



Mod.

C114-ST/1

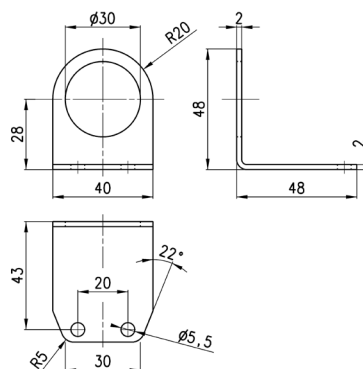
Mounting bracket Mod. C114-ST/2



For regulators and filter-regulators (G1/4 - G1/8)

Material:
zinc-plated steel

Supplied with:
1x bracket

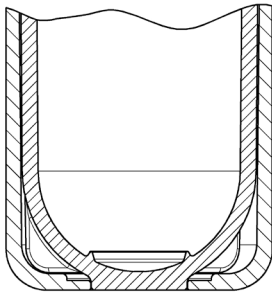


Mod.

C114-ST/2

ACTIVATED CARBON FILTERS
SERIES MD - ACCESSORIES

Closed bowl



Mod. filter	Closed bowl
N20...-FCA	N2-L71
MC104-FCA	MC1-L71
MC202-FCA	MC2-L71
MC238-FCA	MC2-L71
MX2...-FCA	MX2-L2-P
MX3...-FCA	MX3-L2-P
MD1-FCA..	MD1-FCASP01

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Activated carbon filter



Mod. filter	Activated carbon
N20...-FCA	MX1-F11
MC104-FCA	MX1-F11
MC202-FCA	MX2-F11
MC238-FCA	MX2-F11
MX2...-FCA	MX2-F11
MX3...-FCA	MX3-F11
MD1-FCA.. [*]	MD1-F11