Series MD
activated carbon filters

New

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 gas 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 (pag. 3/0.15.02)
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
Operating 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)
Operating pressure	0.3 ÷ 16 bar
Nominal flow	see FLOW DIAGRAMS on the following pages
Filtering element	active carbon
Residual oil content	< 0.003 mg/m³
Fluid	compressed air

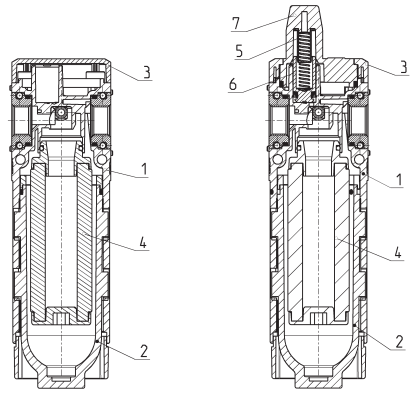
CODING EXAMPLE

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 * NOTE: if the inlet (IN) cartridge is different from the outlet (OUT) cartridge, both dimensions shall be indicated. Example: MD1-FCA1-1/4-10 For further information about condensate drains and filtering elements see the section 3/5.10.

Series MD activated carbon filters - materials

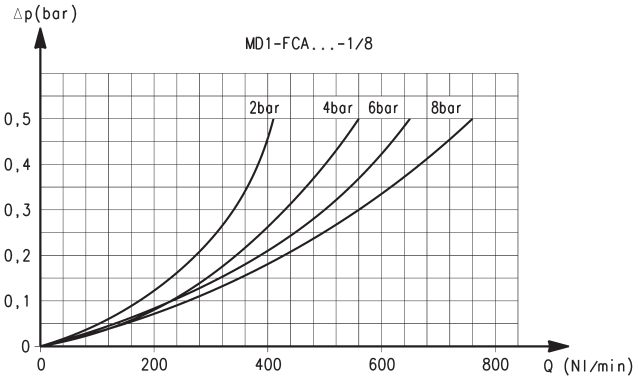
A = filter
B = filter with visual blockage indicator



A B

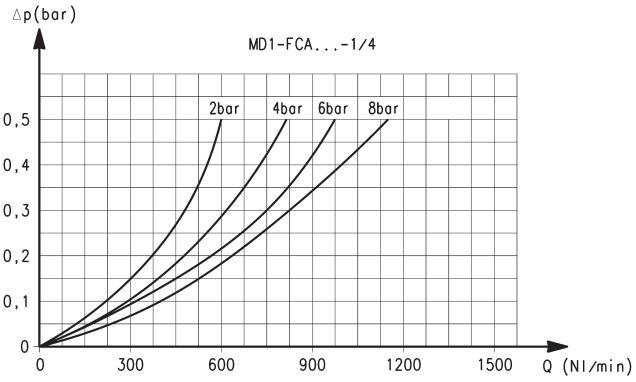
PARTS	MATERIALS
1 = Body	Polyamide
2 = Tank	Polycarbonate
3 = Covering	Polyamide
4 = Filtering element	Active carbons
5 = Upper spring	Stainless steel
6 = Piston	Anodized aluminium
7 = Visual blockage indicator	Polycarbonate
Seals	NBR

FLOW DIAGRAMS



Ports with interchangeable 1/8 threaded cartridges

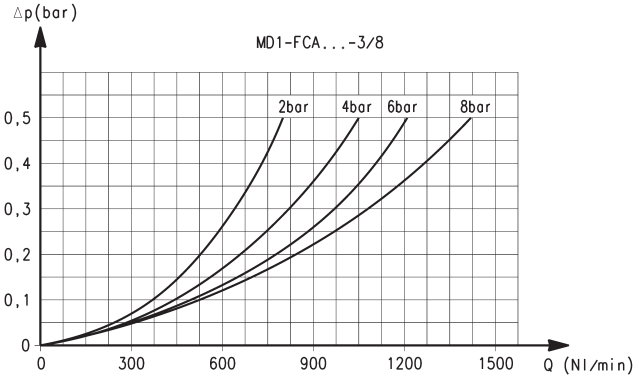
Δp = Pressure drop
Q = Flow



Ports with interchangeable 1/4 threaded cartridges

Δp = Pressure drop
Q = Flow

FLOW DIAGRAMS

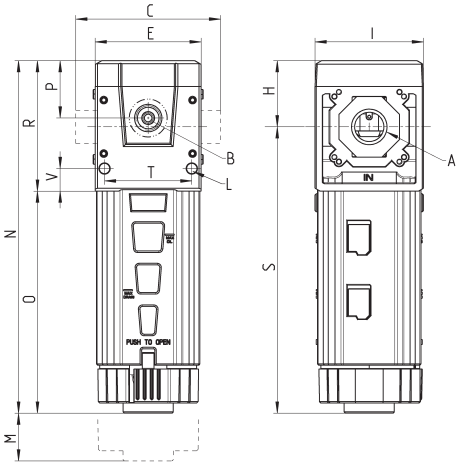


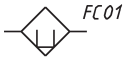
Ports with interchangeable 3/8 threaded cartridges

Δp = Pressure drop
Q = Flow

Series MD activated carbon filters - dimensions

PNEUMATIC SYMBOLS LEGEND:
FC01 = activated carbon filter



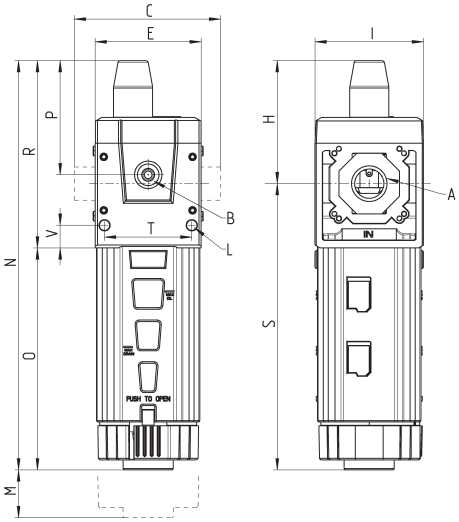


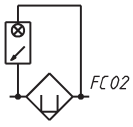
DIMENSIONS

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

Series MD activated carbon filters with visual indicator - dimensions

PNEUMATIC SYMBOLS LEGEND:
FC02 = activated carbon filter with visual blockage indicator





DIMENSIONS

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