Series MD coalescing filters

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

- High performance and high purity compressed air
- Air quality according to ISO 8573-1:2010 standard, Classes 1.8.1 and 2.8.2
- Visual blockage indicator
- Condensate drain options: semi-automatic manual, automatic protected depressurisation, direct G1/8 exhaust
- Bowl locking system reducing the risk of accidents
- Additional air intakes with the same characteristics of the inlet air (line)

The coalescing filter is a fine oil separator filter that removes the solids with dimensions from 0.1 to 5 µm and oil vapours with a concentration from 0.01 to 0.1 mg/m³. For a correct fucntioning they require a pre-filtering. Given the characteristic of this filter, it is recommended to replace the filter element at least every 12 months or 8000 working hours.

Thanks to the solution adopted for the pneumatic connection, it is possible to equip the same element with interchangeable cartridges that can either be threaded, or with an integrated super-rapid fitting, both types available in different sizes. Intermediate cartridges can be also integrated to join multiple functions or with derivation to draw air. An additional air intake, with the same characteristic of the outlet air, is available on the front side and on the rear one. This intake can be used by utilities with limited consumption.

GENERAL DATA

Construction	modular, compact with filtering element in BOROSILICATE
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
Condensate capacity	24 cm³
Fixing	vertical in-line; wall-mounting by means of through holes in the body or with a support bracket
Operating temperature	-5°C ÷ 50°C up to 16 bar
Condensate drain	semi-automatic manual, automatic protected depressurisation, direct G1/8 exhaust
Quality of delivered air according to ISO 8573-1:2010	Class 2.8.2 with 1 µm filtering element (pre-filtering with Class 6.8.4 is recommended) Classe 1.8.1 with 0.01 µm filtering element (pre-filtering with Classe 2.8.2 is recommended)
Operating pressure	0.3 ÷ 16 bar
Nominal flow	see FLOW DIAGRAMS on the following pages
Oil retain efficiency	99.80% (0.01µm) 97% (1µm)
Particles retain efficiency	99.99999% (0.01µm) 99.999% (1µm)
Fluid	compressed air

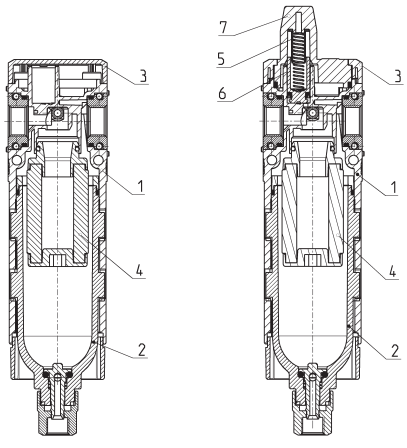
CODING EXAMPLE

MD	1	-	FC	0	0	0	-	1/8

MD	SERIES
1	DIMENSION: 1 = 42 mm
FC	COALESCING FILTER
0	FILTERING ELEMENT (further details in the dedicated section): 0 = 0,01 µm 1 = 1 µm
0	DRAINING OF CONDENSATE (further details in the dedicated section): 0 = semiautomatic-manual drain 5 = automatic drain, protected depressurisation 8 = direct G1/8 exhaust
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-FC000-1/4-10

Series MD coalescing filters - materials

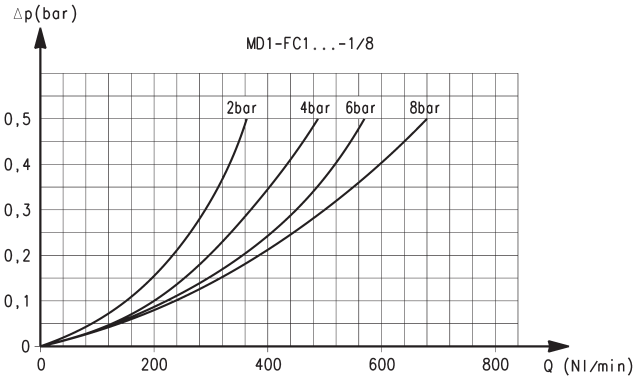
A = filter
B = filter with visual blockage indicator



A B

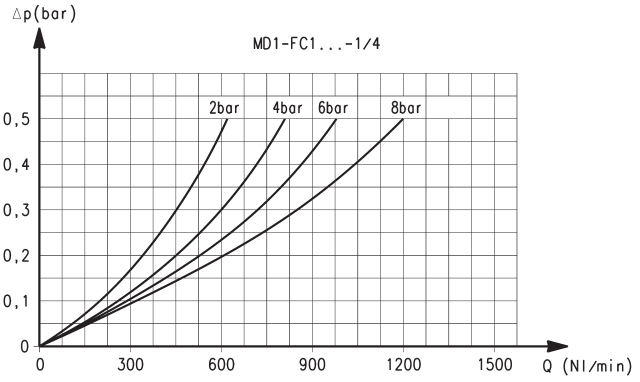
PARTS	MATERIALS
1 = Body	Polyamide
2 = Tank	Polycarbonate
3 = Covering	Polyamide
4 = Filtering element	Borosilicate
5 = Upper spring	Stainless steel
6 = Piston	Anodized aluminium
7 = Visual blockage indicator	Polycarbonate
Seals	NBR

FLOW DIAGRAMS for models with 1 µm filtering element



Ports with interchangeable 1/8 threaded cartridges

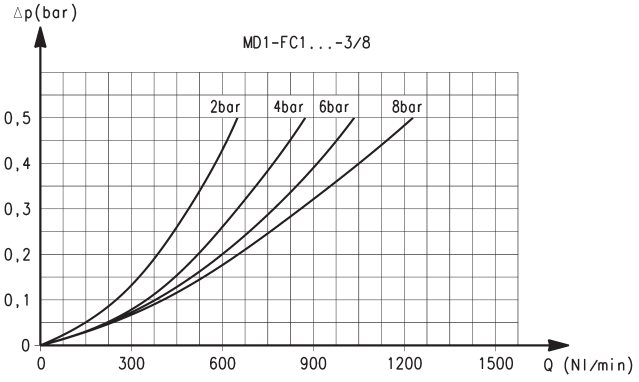
Δp = Pressure drop (bar)
Q = Flow (Nl/min)



Ports with interchangeable 1/4 threaded cartridges

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

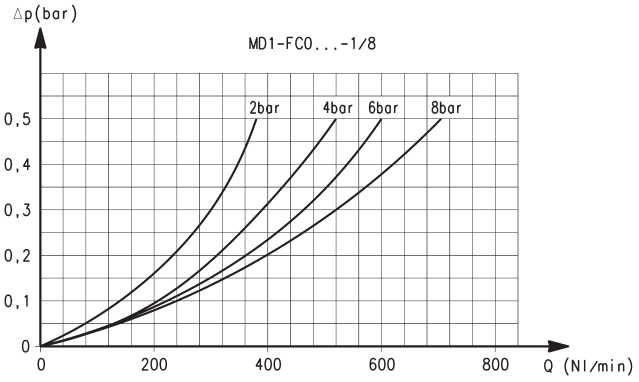
FLOW DIAGRAM for models with 1 µm filtering element



Ports with interchangeable 3/8 threaded cartridges

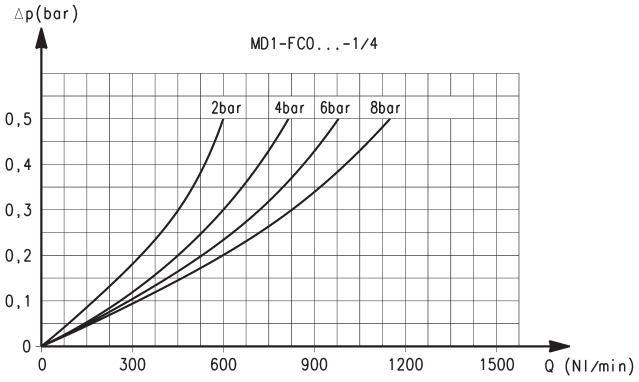
Δp = Pressure drop (bar)
Q = Flow (Nl/min)

FLOW DIAGRAMS for models with 0.01 µm filtering element



Ports with interchangeable 1/8 threaded cartridges

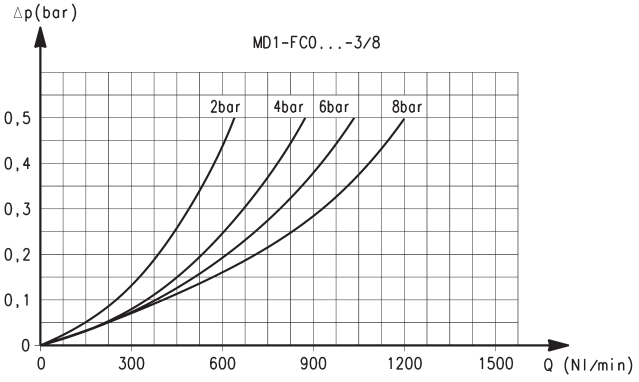
Δp = Pressure drop (bar)
Q = Flow (Nl/min)



Ports with interchangeable 1/4 threaded cartridges

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

FLOW DIAGRAM for models with 0.01 µm filtering element

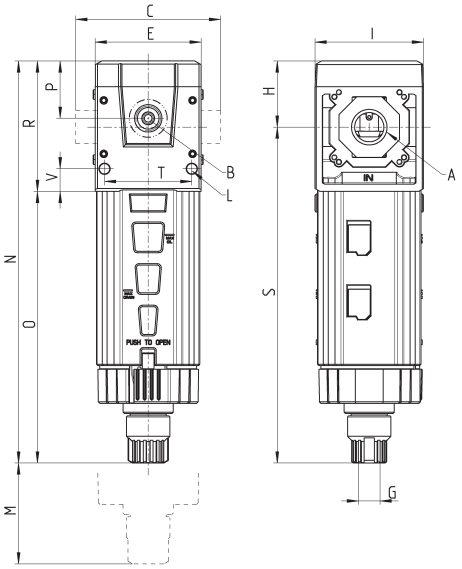


Ports with interchangeable 3/8 threaded cartridges

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

Series MD coalescing filters - dimensions

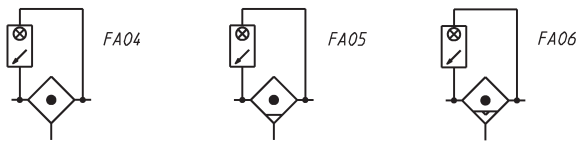
FA01 = coalescing filter with direct G1/8 exhaust
FA02 = coalescing filter with semi-automatic manual drain
FA03 = coalescing filter with automatic/depressuring drain

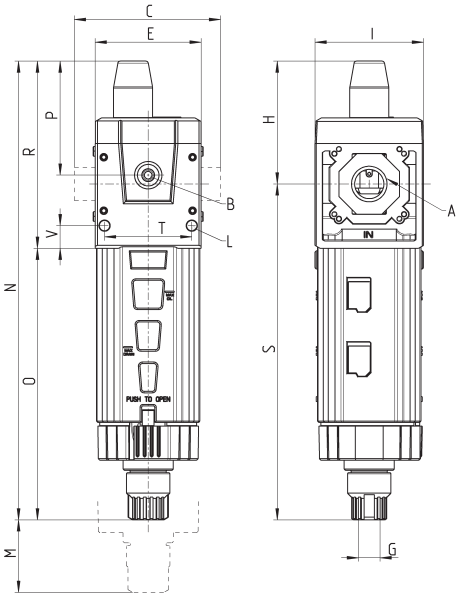


DIMENSIONS																	
Mod.	A	B	C	E	G	H	I	L	M	N	O	P	R	S	T	V	Weight (Kg)
MD1-FC000	-	G1/8	42	42	G1/8	26.2	43	Ø4	90	159.4	107.7	22.7	51.7	133.2	34.6	9	0.2
MD1-FC000-1/8	G1/8	G1/8	42	42	G1/8	26.2	43	Ø4	90	159.4	107.7	22.7	51.7	133.2	34.6	9	0.2
MD1-FC000-1/4	G1/4	G1/8	42	42	G1/8	26.2	43	Ø4	90	159.4	107.7	22.7	51.7	133.2	34.6	9	0.2
MD1-FC000-3/8	G3/8	G1/8	42	42	G1/8	26.2	43	Ø4	90	159.4	107.7	22.7	51.7	133.2	34.6	9	0.2
MD1-FC000-6	Ø6	G1/8	47	42	G1/8	26.2	43	Ø4	90	159.4	107.7	22.7	51.7	133.2	34.6	9	0.2
MD1-FC000-8	Ø8	G1/8	62	42	G1/8	26.2	43	Ø4	90	159.4	107.7	22.7	51.7	133.2	34.6	9	0.2
MD1-FC000-10	Ø10	G1/8	67	42	G1/8	26.2	43	Ø4	90	159.4	107.7	22.7	51.7	133.2	34.6	9	0.2

Series MD coalescing filters with visual indicator - dimensions

FA04 = coalescing filter with direct G1/8 exhaust and visual blockage indicator
FA05 = coalescing filter with semi-automatic manual drain and visual blockage indicator
FA06 = coalescing filter with automatic/depressuring drain and visual blockage indicator





DIMENSIONS																	
Mod.	A	B	C	E	G	H	I	L	M	N	O	P	R	S	T	V	Weight (Kg)
MD1-FC001	-	G1/8	42	42	G1/8	48.7	43	Ø4	90	181.9	107.7	45.2	74.2	133.2	34.6	9	0.2
MD1-FC001-1/8	G1/8	G1/8	42	42	G1/8	48.7	43	Ø4	90	181.9	107.7	45.2	74.2	133.2	34.6	9	0.2
MD1-FC001-1/4	G1/4	G1/8	42	42	G1/8	48.7	43	Ø4	90	181.9	107.7	45.2	74.2	133.2	34.6	9	0.2
MD1-FC001-3/8	G3/8	G1/8	42	42	G1/8	48.7	43	Ø4	90	181.9	107.7	45.2	74.2	133.2	34.6	9	0.2
MD1-FC001-6	Ø6	G1/8	47	42	G1/8	48.7	43	Ø4	90	181.9	107.7	45.2	74.2	133.2	34.6	9	0.2
MD1-FC001-8	Ø8	G1/8	62	42	G1/8	48.7	43	Ø4	90	181.9	107.7	45.2	74.2	133.2	34.6	9	0.2
MD1-FC001-10	Ø10	G1/8	67	42	G1/8	48.7	43	Ø4	90	181.9	107.7	45.2	74.2	133.2	34.6	9	0.2