

Series MD pressure filter-regulators

Ports with interchangeable cartridges: threaded (1/8, 1/4, 3/8) or integrated with super-rapid fitting for tube with \emptyset 6, 8 and 10 mm Modular assembly

Bowl with technopolymer cover and bayonet-type mounting



- » Filtering between 25 μm or 5 μm
- » Minimum pressure drops
- » Knob with position lock
- » Tamper-proof system (lockable regulator)
- » Bowl locking system reducing the risk of accidents

Series MD filter-regulators integrate filter and pressure reducer in one unit, thus reducing their dimensions.

The by-pass valve allows the fast exhaust of the air introduced. The different springs enable a more accurate adjustment of the pressure.

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.

GENERAL DATA

Construction	modular, compact with filtering element in HDPE
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 diameters of 6, 8 and 10 mm
Condensate capacity	24 cm ³
Mounting	in-line; wall-mounting by means of through holes in the body or with a support bracket; panel mounting
Operating temperature	-5°C \div 50°C up to 16 bar (with the dew point of the fluid lower than 2°C at the min. working temperature)
Condensate drain	semi-automatic manual, automatic protected depressurisation, direct G1/8 exhaust
Quality of delivered air according to ISO 8573-1 2010	Class 6.8.4 with 5 μm filtering element Class 7.8.4 with 25 μm filtering element
Inlet pressure	0.3 ÷ 16 bar
Nominal flow	see FLOW DIAGRAMS on the following pages
Fluid	compressed air

SERIES MD FILTER-REGULATORS

CODING EXAMPLE

MD	1	-	FR	0	0	0	0	_	1/8

								1		-					
MD	SERIES														
1	DIMENSION: 1 = 42 mm														
FR	FILTER-REGULATOR														
0	0 = 25 μm with rel 1 = 5 μm with rel 2 = 25 μm withou 3 = 5 μm withou 4 = 25 μm with re	elieving lieving ut relieving * t relieving *		on) AND DESIGN TYP	E:										

4 = 25 μm with relieving and by-pass valve 6 = 25 μm without relieving, with by-pass valve * 7 = 5 μm without relieving, with by-pass valve *

* this option is available with semiautomatic-manual drain only

O DRAINING OF CONDENSATE (further details in the dedicated section): 0 = semiautomatic-manual drain

0 = semiautomatic-manual drain 5 = automatic drain, protected depressurisation 8 = direct G1/8 exhaust

OPERATING PRESSURE (1 bar = 14,5 psi): 0 = 0,5 ÷ 10 bar 2 = 0 ÷ 2 bar 4 = 0 ÷ 4 bar

7 = 0.5 ÷ 7 bar

PRESSURE GAUGE:
0 = without pressure gauge (with 1/8 port)

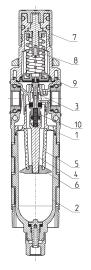
1/8 PORTS (IN - OUT)*:

= without cartridges
1/8 = G1/8
1/4 = G1/4
3/8 = G3/8
6 = tube Ø6
8 = tube Ø8
10 = tube Ø10

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-FR0000-1/4-1/8

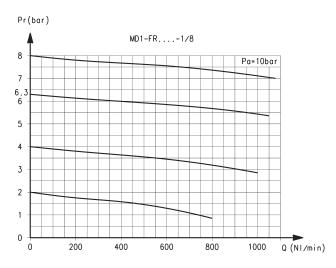
Series MD filter-regulators - materials

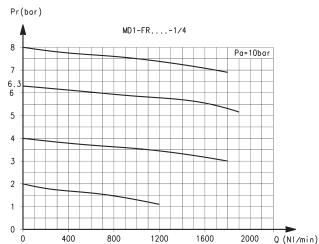


PARTS	MATERIALS	
1 = Body	Polyamide	
2 = Tank	Polycarbonate	
3 = Poppet	Brass	
4 = Valve guide	Polyacetal	
5 = Filtering element	Polyethylene	
6 = Separation deflector	Polyacetal	
7 = Knob	Polyamide	
8 = Upper spring	Zinc-plated steel	
9 = Diaphragm	NBR	
10 = Lower spring	Stainless steel	
Seals	NBR	

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FLOW DIAGRAMS





Ports with interchangeable G1/8 threaded cartridges

Pr = Regulated pressure (bar)

Q = Flow (Nl/min)

Pa = Inlet pressure (bar)

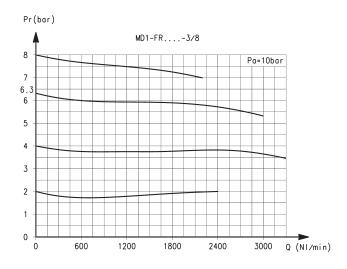
Ports with interchangeable G1/4 threaded cartridges

Pr = Regulated pressure (bar)

Q = Flow (Nl/min)

Pa = Inlet pressure (bar)

FLOW DIAGRAM



Ports with interchangeable G3/8 threaded cartridges

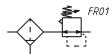
Products designed for industrial applications. General terms and conditions for sale are available on www.camozzi.com

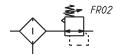
Pr = Regulated pressure (bar)

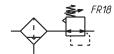
Q = Flow (Nl/min)

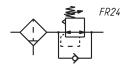
Pa = Inlet pressure (bar)

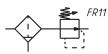
PNEUMATIC SYMBOLS

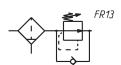


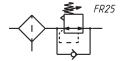


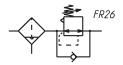












FR01 = filter-regulator with relieving and semi-automatic manual drain

FR02 = filter-regulator with relieving and direct G1/8 exhaust

FR11 = filter-regulator without relieving, with semi-automatic manual drain

FR13 = filter-regulator without relieving, with by-pass valve and semi-automatic manual drain

FR18 = filter-regulator with relieving and automatic/depressuring drain

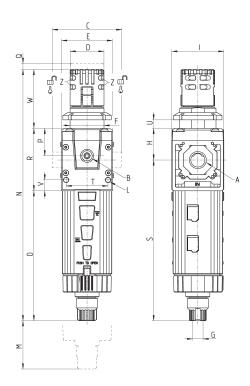
FR24 = filter-regulator with relieving, by-pass valve and semi-automatic manual drain

FR25 = filter-regulator with relieving, by-pass valve and direct G1/8 exhaust

FR26 = filter-regulator with relieving, by-pass valve and automatic/depressuring drain

Series MD filter-regulators - dimensions





Mod.	Α	В	С	D	Ε	F	G	Н	- 1	L	М	N	0	Р	Q	R	S	T	U	V	W	Z	Weight (Kg)
MD1-FR0000	-	G1/8	42	Ø28	42	M28X1,5	G1/8	26.2	43	Ø4	110	208.2	107.7	22.7	4	51.7	133.2	34.6	0 ÷ 11	9	48.8	Ø3.2	0.2
MD1-FR0000-1/8	G1/8	G1/8	42	Ø28	42	M28X1,5	G1/8	26.2	43	Ø4	110	208.2	107.7	22.7	4	51.7	133.2	34.6	0 ÷ 11	9	48.8	Ø3.2	0.2
MD1-FR0000-1/4	G1/4	G1/8	42	Ø28	42	M28X1,5	G1/8	26.2	43	Ø4	110	208.2	107.7	22.7	4	51.7	133.2	34.6	0 ÷ 11	9	48.8	Ø3.2	0.2
MD1-FR0000-3/8	G3/8	G1/8	42	Ø28	42	M28X1,5	G1/8	26.2	43	Ø4	110	208.2	107.7	22.7	4	51.7	133.2	34.6	0 ÷ 11	9	48.8	Ø3.2	0.2
MD1-FR0000-6	Ø6	G1/8	47	Ø28	42	M28X1,5	G1/8	26.2	43	Ø4	110	208.2	107.7	22.7	4	51.7	133.2	34.6	0 ÷ 11	9	48.8	Ø3.2	0.2
MD1-FR0000-8	Ø8	G1/8	62	Ø28	42	M28X1,5	G1/8	26.2	43	Ø4	110	208.2	107.7	22.7	4	51.7	133.2	34.6	0 ÷ 11	9	48.8	Ø3.2	0.2
MD1-FR0000-10	Ø10	G1/8	67	Ø28	42	M28X1.5	G1/8	26.2	43	Ø4	110	208.2	107.7	22.7	4	51.7	133.2	34.6	0 ÷ 11	9	48.8	Ø3.2	0.2