

Series MD pressure filter-regulators

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



- » 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 which can be threaded or with an integrated super-rapid fitting, both in different sizes. Intermediate cartridges can be also integrated to join multiple functions or with derivation to draw air.

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TREATMENT

GENERAL DATA

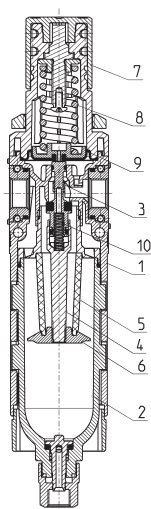
Construction	modular, compact with filtering element in HDPE
Materials	see TABLE OF MATERIALS (pag. 3/0.30.02)
Ports	with interchangeable cartridges: 1/8, 1/4 and 3/8 threaded or integrated with super-rapid fitting for tube with diameters of 6, 8 and 10 mm
Condensate capacity	24 cc
Mounting	in-line; wall-mounting by means of through holes in the body or with a support bracket; panel mounting
Operating temperature	-5°C ÷ 50°C up to 16 bar (with the dew point of the fluid lower than 2°C at the min. working temperature)
Porosity of the filtering element	25 µm (standard) 5 µm
Condensate drain	semi-automatic manual (standard); depressurization, protected; without drain with G1/8 port
Quality of delivered air according to ISO 8573-1 2010 standard	Class 6.8.4 with 5 µm filtering element Class 7.8.4 with 25 µm filtering element
Operating pressure	0,3 ÷ 16 bar
Nominal flow	see FLOW DIAGRAMS (pag. 3/0.30.03)
Fluid	compressed air

CODING EXAMPLE

MD	1	-	FR	0	0	0	0	-	1/8
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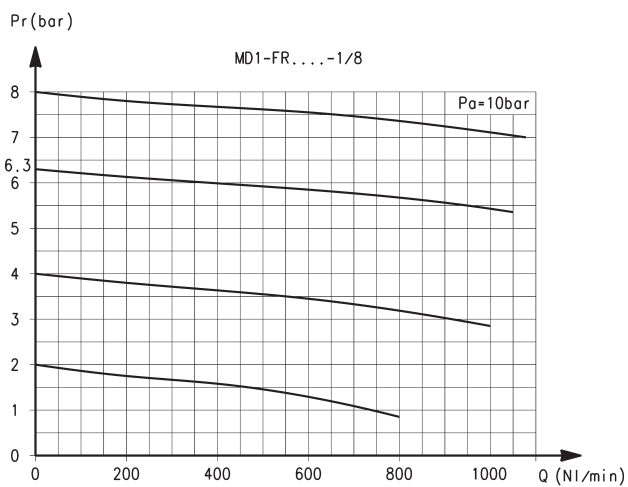
MD	SERIES
1	DIMENSION: 1 = 42 mm
FR	FILTER-REGULATOR
0	FILTERING ELEMENT WITH DESIGN TYPE: 0 = 25 µm with relieving 1 = 5 µm with relieving 2 = 25 µm without relieving (with semiautomatic-manual drain only) 3 = 5 µm without relieving (with semiautomatic-manual drain only) 4 = 25 µm with relieving VS version 5 = 5 µm with relieving VS version 6 = 25 µm without relieving VS version (with semiautomatic-manual drain only) 7 = 5 µm without relieving VS version (with semiautomatic-manual drain only)
0	CONDENSATE DRAIN: 0 = semiautomatic-manual 5 = depressurization, protected 8 = without drain, with G1/8 port
0	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
0	PRESSURE GAUGE: 0 = without pressure gauge (with 1/8 port)
1/8	PORTS (IN - OUT)*: = without ports 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 port is different from the outlet port, both values shall be indicated. Example: MD1-FR0000-1/8-1/4

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

FLOW DIAGRAMS

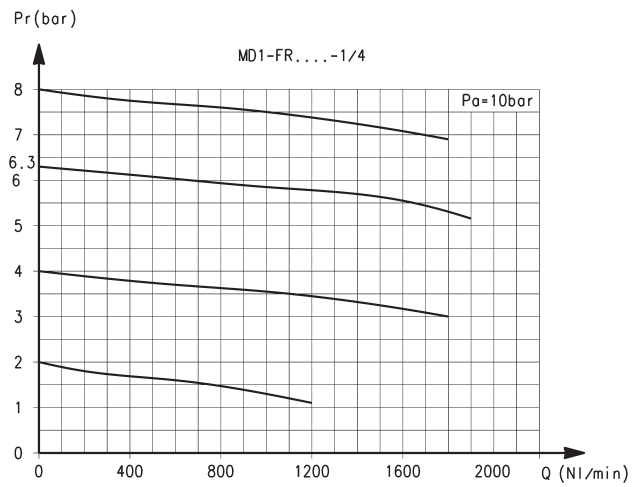


Ports with interchangeable G1/8 threaded cartridges

Pr = Regulated pressure

Q = Flow

Pa = Inlet pressure



Ports with interchangeable G1/4 threaded cartridges

Pr = Regulated pressure

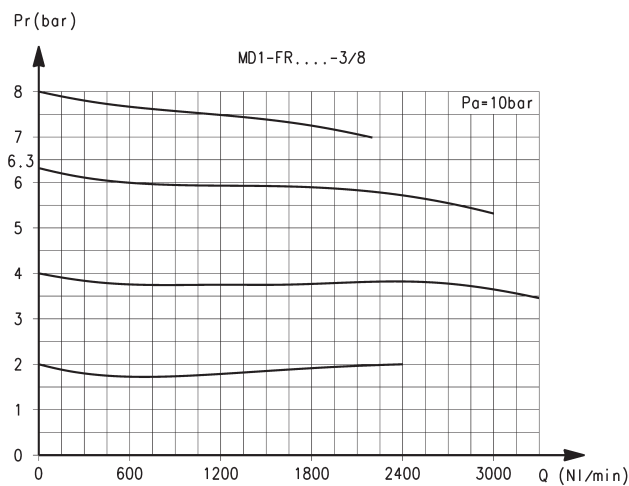
Q = Flow

Pa = Inlet pressure

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TREATMENT

FLOW DIAGRAMS



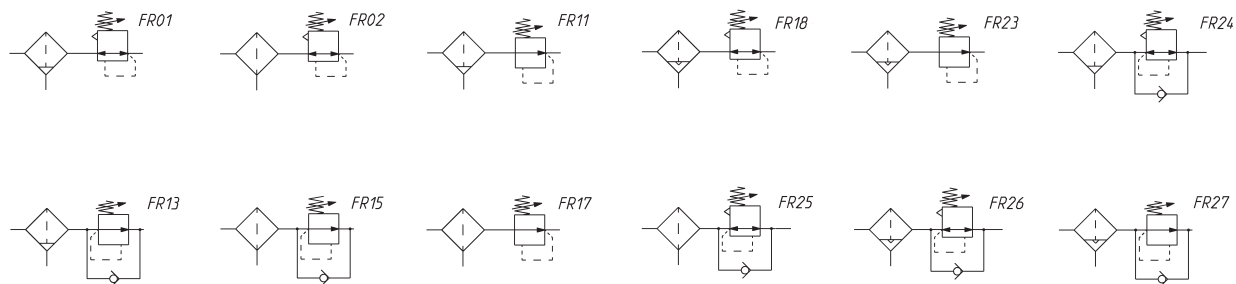
Ports with interchangeable G3/8 threaded cartridges

Pr = Regulated pressure

Q = Flow

Pa = Inlet pressure

PNEUMATIC SYMBOLS



FR01 = filter-regulator with relieving and manual drain

FR02 = filter-regulator with relieving, without drain

FR11 = filter-regulator no relieving, with manual drain

FR13 = filter-regulator no relieving and by-pass valve, with manual drain

FR15 = filter-regulator without relieving, by-pass valve and manual drain

FR17 = filter-regulator without relieving and drain

FR18 = filter-reg. with relieving and automatic drain

FR23 = filter-reg. no relieving, with automatic drain

FR24 = filter-reg. with relieving, by-pass valve and manual drain

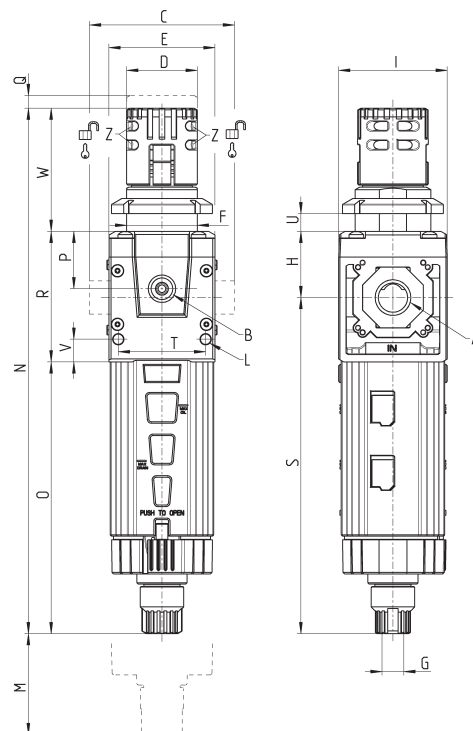
FR25 = filter-reg. with relieving and by-pass valve, no drain

FR26 = filter-reg. with relieving, by-pass valve, automatic drain

FR27 = filter-reg. without relieving and by-pass valve, with automatic drain



Series MD filter-regulators - dimensions



Mod.	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T	U	V	W	Z	Weight (Kg)
MD1-FR000	-	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-FR000-1/8	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-FR000-1/4	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-FR000-3/8	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-FR000-6	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-FR000-8	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-FR000-10	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