# Series MX filter-regulators

New versions

MX2 ports: G3/8, G1/2, G3/4 - MX3 ports: G3/4, G1

Modular

Bowl with technopolymer cover and bayonet-type mounting



- » Quality of delivered air according to ISO 8573-1:2010, Classes 7.8.4 and 6.8.4
- » With built-in pressure gauge or with ports for pressure gauge
- » Lockable knob
- » Polymer bowl locking system reducing the risk of accidents
- » Metal bowl also available

Series MX filter-regulators integrate filter and pressure reducer in one unit. They are, therefore, compact and suitable for prefiltering functions.

Available with or without draining (relieving), they are equipped with a valve diaphragm for a direct pressure regulation and with an integrated condensate drainer, manual or automatic. Moreover, they are equipped with a built-in pressure gauge.

The Series MX has been realized to offer a multi-sector solution that guarantees saving in terms of installation time, space and costs.

A special configurator, available on Camozzi website at http://catalogue.camozzi.com (sec. Configurators), allows the customer to choose the most suitable solution for his application, selecting single components or by configuring assembled FRLs.

### **GENERAL DATA**

Construction	modular, compact with filtering element in HDPE
Materials	see TABLE OF MATERIALS on the following page
Ports	MX2: G3/8 - G1/2 - G3/4 - MX3: G3/4 - G1
Condensate capacity	MX2: 55 cc - MX3: 85 cc
Mounting	vertical in-line, wall-mounting (by means of clamps), 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) -5°C $\div$ 60°C up to 10 bar (with the dew point of the fluid lower than 2°C at the min. working temperature)
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
Draining of condensate	MX2: manual-semi automatic (standard), automatic, depressurization protected, direct G1/8 exhaust MX3: manual-semi automatic (standard), automatic, direct G1/8 exhaust
Inlet pressure	$0.3 \div 16$ bar (with automatic drain $1.5 \div 12$ )
Nominal flow	see FLOW DIAGRAMS on the following pages
Fluid	compressed air
Pressure gauge	built-in pressure gauge (standard)

with G1/4 port (MX3 only) or G1/8 port (MX2 only)

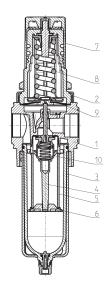


#### **CODING EXAMPLE**

МХ	2 - 1/2 - FR 0 0 0 4 M - LH												
MX	SERIES												
2	SIZE: 2 = G3/8 - G1/2 - G3/4 3 = G3/4 - G1												
1/2	PORT: 3/8 = G3/8 1/2 = G1/2 3/4 = G3/4 1 = G1												
FR	FILTER-REGULATOR												
0	FILTERING ELEMENT WITH DESIGN TYPE:  0 = 25 µm with relieving (standard)  1 = 5 µm with relieving  2 = 25 µm with relieving (with semiautomatic-manual drain only)  3 = 5 µm without relieving (with semiautomatic-manual drain only)  4 = 25 µm with relieving and by-pass valve  5 = 5 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												
0	DRAINING OF CONDENSATE (further details in the dedicated section): 0 = semiautomatic-manual drain (standard - only for polymer bowl) 3 = automatic drain 5 = depressuring drain, protected (only for polymer bowl) 8 = without drain, with port G1/8												
0	OPERATING PRESSURE: 0 = 0.5 ÷ 10 bar (standard) 4 = 0 ÷ 4 bar 7 = 0.5 ÷ 7 bar (MX2 only)												
4	PRESSURE GAUGE:  0 = without pressure gauge (with threaded port)  2 = with built-in pressure gauge 0-6 and working pressure 0 ÷ 4 bar  3 = with built-in pressure gauge 0-10 and working pressure 0 ÷ 7 bar (MX2 only)  4 = with built-in pressure gauge 0-12 and working pressure 0.5 ÷ 10 bar (standard)												
М	TYPE OF BOWL: = polymer (standard) M = metal (only for MX2-1/2 and MX3-1)												
LH	FLOW DIRECTION: = from left to right (standard) LH = from right to left												

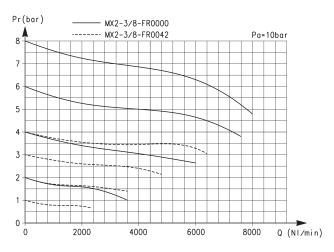
 $For the assembly of a single component with fixing flanges or wall-mounting, see the section {\tt "FRL Series MX}\ Assembled" and {\tt Series MX}\ Assembled {\tt Series MX}\ A$ 

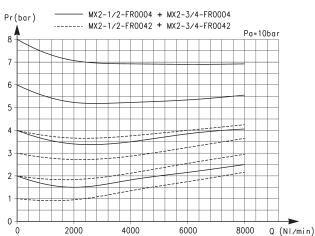
## Filter-regulators Series MX - materials



PARTS	MATERIALS
1 = Body	Aluminium
2 = Covering	Polyacetal
3 = Bowl / bowl cover	Polycarbonate/Polyamide/Aluminium
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

#### **MX2 FILTER REGULATORS FLOW DIAGRAMS**





Pr = Regulated pressure

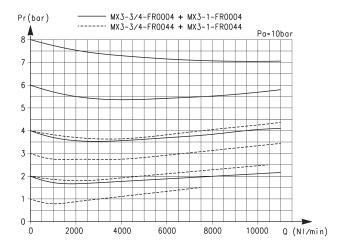
Q = Flow

Pa = Inlet pressure

Pr = Regulated pressure Q = Flow

Pa = Inlet pressure

#### **MX3 FILTER-REGULATORS FLOW DIAGRAM**



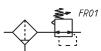
Pr = Regulated pressure

Q = Flow

Pa = Inlet pressure

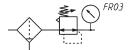
# CAMOZZI Automation

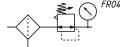
#### **PNEUMATIC SYMBOLS**

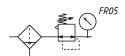


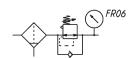


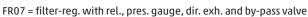












FR18 = filter-reg. with relieving and automatic drain

FR25

FR22 = filter-reg. without relieving, with pressure gauge,

automatic-depressurisation drain and by-pass valve

FR24 = filter-reg. with rel. and man/semiaut drain and bypass valve

FR25 = filter-reg. with relieving, direct exhaust and by-pass valve

FR26 = filter-reg. without relieving, automatic-depressurisation

drain and by-pass valve



FR02 = filter-reg. with relieving and direct exhaust

FR03 = filter-reg. with relieving, pressure gauge and manual/ semiautomatic drain

FR04 = filter-reg. with relieving, pressure gauge and direct exhaust

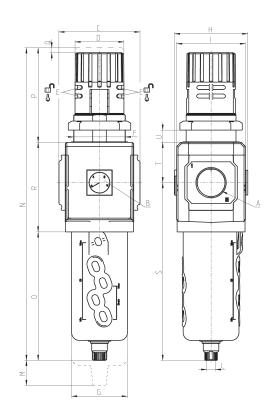
FR05 = filter-reg. with relieving, pressure gauge and automatic drain

FR06 = filter-reg. with relieving, pressure gauge, manual/

semiautomatic drain and by-pass valve

#### Filter-regulators Series MX - dimensions





Mod.	Α	B (bar)	C	D	Ε	F	G	Н	- 1	L	М	N	0	Р	Q	R	S	T	U	Weight (Kg)
MX2-3/8-FR0004	G3/8	0 ÷ 12	70	45	Ø 4.7	M47x1.5	55.5	74.5	68	G1/8	66	290	127	78	5	85	174.5	37.5	0 ÷ 16	0.8
MX2-1/2-FR0004	G1/2	0 ÷ 12	70	45	Ø 4.7	M47x1.5	55.5	74.5	68	G1/8	66	290	127	78	5	85	174.5	37.5	0 ÷ 16	0.8
MX2-3/4-FR0004	G3/4	0 ÷ 12	70	45	Ø 4.7	M47x1.5	55.5	74.5	68	G1/8	66	290	127	78	5	85	174.5	37.5	0 ÷ 16	0.8
MX3-3/4-FR0004	G3/4	0 ÷ 12	89.5	54	Ø 4	M57x1.5	61.5	81	76	G1/8	75	345	142	104	5	99	196.5	44.5	0 ÷ 20	1.3
MX3-1-FR0004	G1	0 ÷ 12	89.5	54	Ø 4	M57x1.5	61.5	81	76	G1/8	75	345	142	104	5	99	196.5	44.5	0 ÷ 20	1.3
MX2-1/2-FR0304M	G1/2	0 ÷ 12	70	45	Ø 4.7	M47x1.5	60	74.5	68	G1/8	66	283	120	78	5	85	167.5	37.5	0 ÷ 16	0.9
MX3-1-FR0304M	G1	0 ÷ 12	89.5	54	Ø 4	M57x1.5	67	81	76	G1/8	75	337	134	104	5	99	188.5	44.5	0 ÷ 20	1.3