

# Series MX filter-regulators

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

Series MX filter-regulators integrate filter and pressure reducer in one unit. They are, therefore, compact and suitable for pre-filtering 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 ÷ 50°C up to 16 bar (with the dew point of the fluid lower than 2°C at the min. working temperature) -5°C ÷ 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 ÷ 16 bar (with automatic drain 1.5 ÷ 12)
exit pressure	0.5 ÷ 10 bar (standard), 0.5 ÷ 4 bar and 0.5 ÷ 7 bar
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)

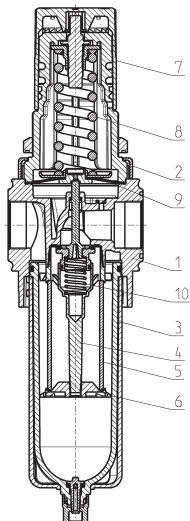
## CODING EXAMPLE

<b>MX</b>	<b>2</b>	<b>-</b>	<b>1/2</b>	<b>-</b>	<b>FR</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>-</b>	<b>LH</b>
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<b>MX</b>	SERIES
<b>2</b>	SIZE: 2 = G3/8 - G1/2 - G3/4 3 = G3/4 - G1
<b>1/2</b>	PORT: 3/8 = G3/8 1/2 = G1/2 3/4 = G3/4 1 = G1
<b>FR</b>	FILTER-REGULATOR
<b>0</b>	FILTERING ELEMENT WITH DESIGN TYPE: 0 = 25 µm with relieving (standard) 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 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
<b>0</b>	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
<b>0</b>	OPERATING PRESSURE: 0 = 0.5 ÷ 10 bar (standard) 4 = 0.5 ÷ 4 bar 7 = 0.5 ÷ 7 bar (MX2 only)
<b>4</b>	PRESSURE GAUGE: 0 = without pressure gauge (with threaded port) 2 = with built-in pressure gauge 0-6 and working pressure 0.5 ÷ 4 bar 3 = with built-in pressure gauge 0-10 and working pressure 0.5 ÷ 7 bar (MX2 only) 4 = with built-in pressure gauge 0-12 and working pressure 0.5 ÷ 10 bar (standard)
<b>LH</b>	FLOW DIRECTION: = from left to right (standard) LH = from right to left

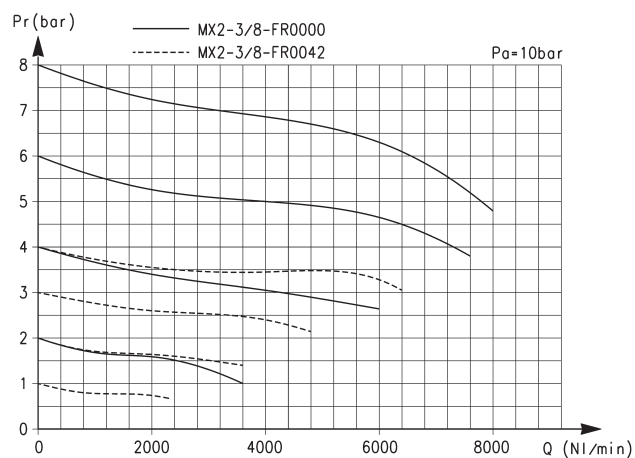
For the assembly of a single component with fixing flanges or wall-mounting, see the section "FRL Series MX Assembled"

## Filter-regulators Series MX - materials



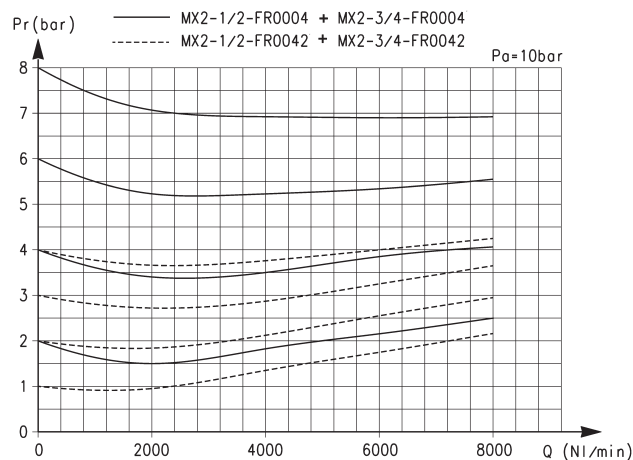
PARTS	MATERIALS
1 = Body	Aluminium
2 = Covering	Polyacetal
3 = Bowl / bowl cover	Polycarbonate/Polyamide
4 = Valve guide	Polyacetal
5 = Filtering element	Polyethylene
6 = Separation deflector	Polyacetal
7 = Knob	Polyamide
8 = Upper spring	Zinc-plated steel
9 = Diaphragm	NBR
10 = Lower spring	Stainless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

## MX2 FILTER REGULATORS FLOW DIAGRAMS



Pr = Regulated pressure  
Q = Flow

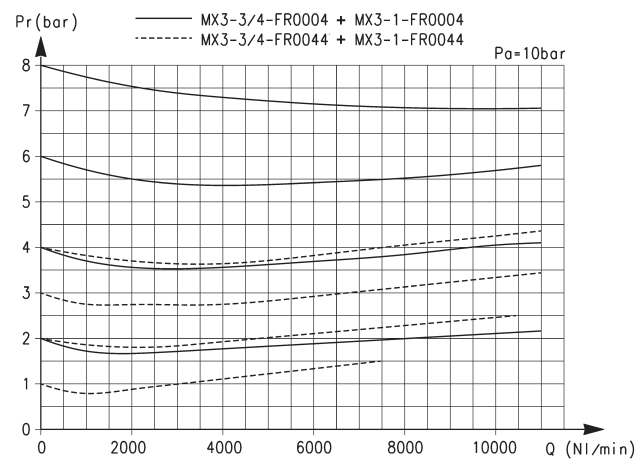
Pa = Inlet pressure



Pr = Regulated pressure  
Q = Flow

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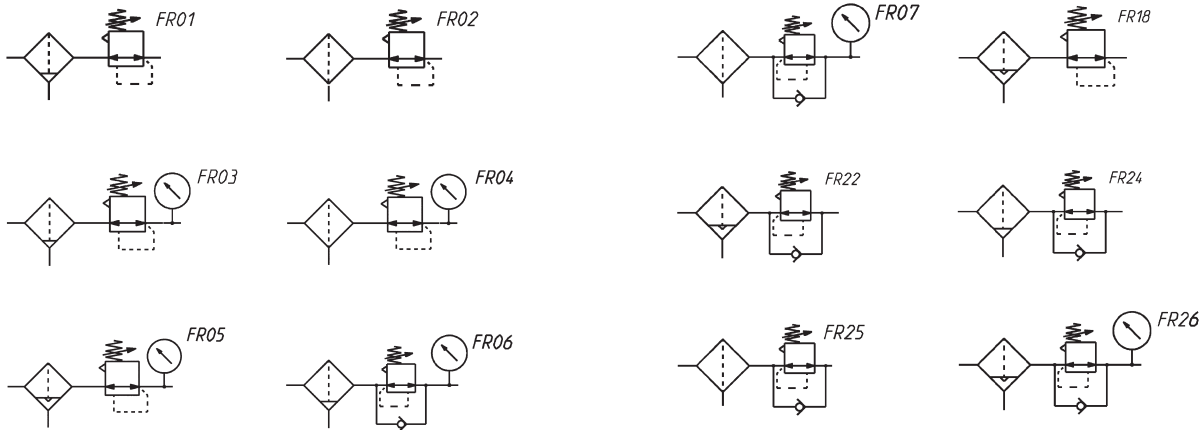
## MX3 FILTER-REGULATORS FLOW DIAGRAM



Pr = Regulated pressure  
Q = Flow

Pa = Inlet pressure

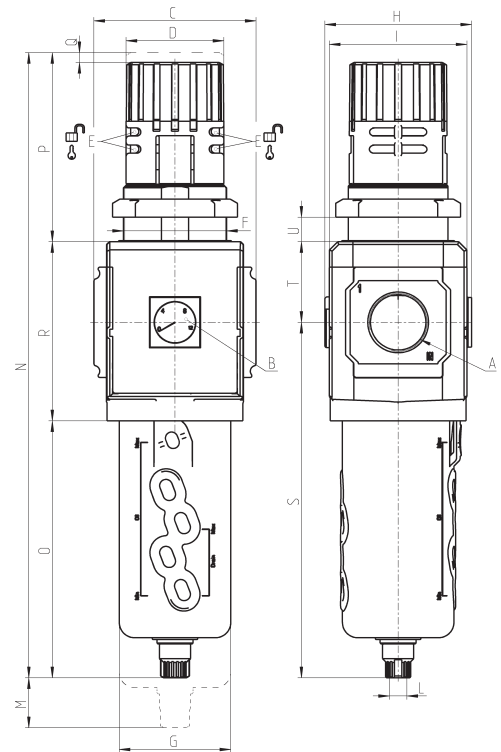
## PNEUMATIC SYMBOLS



FR01 = filter-reg. with relieving and manual/semiautomatic drain  
 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

FR07 = filter-reg. with rel., pres. gauge, dir. exh. and by-pass valve  
 FR18 = filter-reg. with relieving and automatic drain  
 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

## Filter-regulators Series MX - dimensions



Mod.	A	B (bar)	C	D	E	F	G	H	I	L	M	N	O	P	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