

# 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



- » Filtering between 25 µm or 5 µm
- » Available versions: with built-in gauge or with ports for gauge
- » Lockable knob with closure
- » Bowl locking system reducing the risk of accidents

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.

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.

## GENERAL DATA

<b>Construction</b>	modular, compact with filtering element in HDPE
<b>Materials</b>	see TABLE OF MATERIALS (pag. 3/1.30.02)
<b>Ports</b>	MX2: G3/8 - G1/2 - G3/4 MX3: G3/4 - G1
<b>Condensate capacity</b>	MX2: 55 cc MX3: 85 cc
<b>Mounting</b>	vertical in-line wall-mounting (by means of clamps) panel mounting
<b>Operating temperature</b>	-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)
<b>Porosity of filtering element</b>	25 µm (standard) 5 µm
<b>Draining of condensate</b>	MX2: manual-semi automatic (standard), automatic, depressurization protected, without drain with port G1/8 MX3: manual-semi automatic (standard), without drain with port G1/8
<b>Operating pressure</b>	0,3 ÷ 16 bar ((with automatic drain 1,5 ÷ 12)
<b>Nominal flow</b>	see FLOW DIAGRAMS (pag. 3/1.30.03)
<b>Fluid</b>	compressed air
<b>Pressure gauge</b>	version with built-in pressure gauge (standard) version with G1/4 ports for pressure gauge (MX3 only) version with G1/8 ports for pressure gauge (MX2 only)

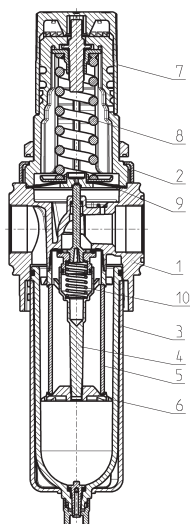
## CODING EXAMPLE

<b>MX</b>	<b>2</b>	<b>-</b>	<b>3/8</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>3/8</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)
<b>0</b>	DRAINING OF CONDENSATE: 0 = semiautomatic-manual drain (standard) 3 = automatic drain 5 = depressuring drain, protected 8 = without drain, with port G1/8
<b>0</b>	OPERATING PRESSURE: 0 = 0,5 ÷ 10 bar (standard) 4 = 0 ÷ 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 ÷ 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)
<b>LH</b>	FLOW DIRECTION: = from left to right (standard) LH = from right to left

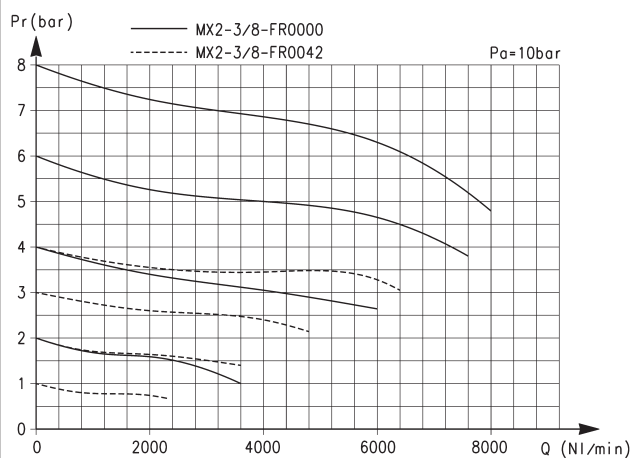
For the assembly of a single component with fixing flanges or wall-mounting, see the section "FRL Series MX Assembled" (pag. 3/1.50.01)

## Filter-regulators Series MX - materials



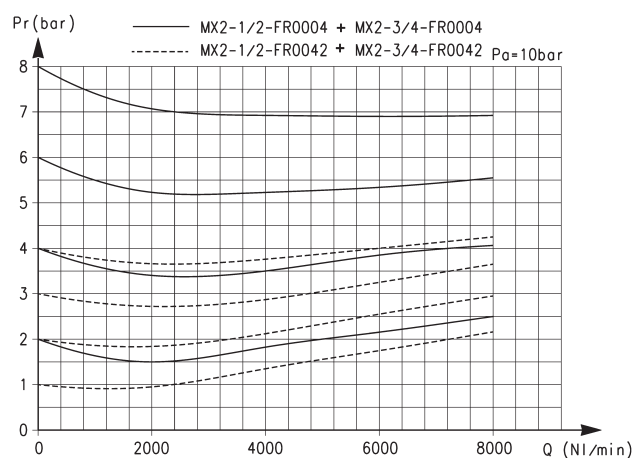
PARTS	MATERIALS
<b>1 = Body</b>	Aluminium
<b>2 = Covering</b>	Polyacetal
<b>3 = Bowl with technopolymer cover</b>	Polycarbonate/Polyamide
<b>4 = Valve guide</b>	Polyacetal
<b>5 = Filtering element</b>	Polyethylene
<b>6 = Separation deflector</b>	Polyacetal
<b>7 = Knob</b>	Polyamide
<b>8 = Upper spring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

## MX2 FLOW DIAGRAMS



$P_r$  = Regulated pressure  
 $Q$  = Flow

$P_a$  = Inlet pressure



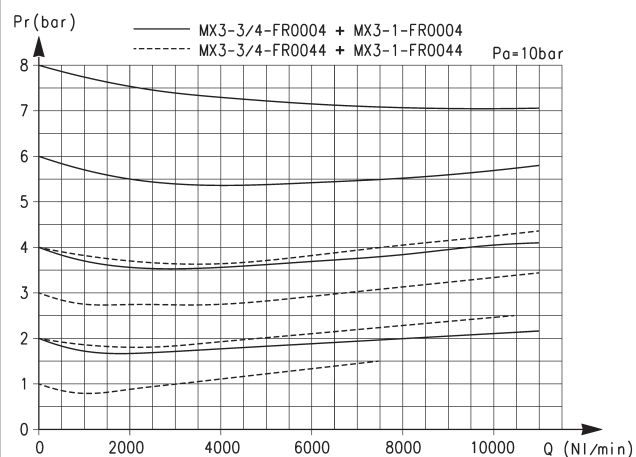
$P_r$  = Regulated pressure  
 $Q$  = Flow

$P_a$  = Inlet pressure

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TREATMENT

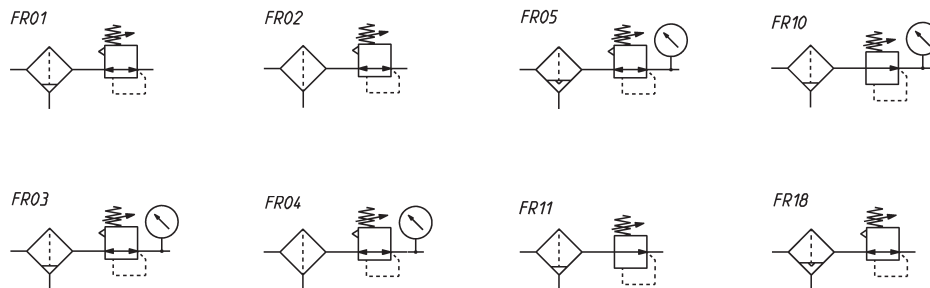
## MX3 FLOW DIAGRAM



$P_r$  = Regulated pressure  
 $Q$  = Flow

$P_a$  = Inlet pressure

## PNEUMATIC SYMBOLS

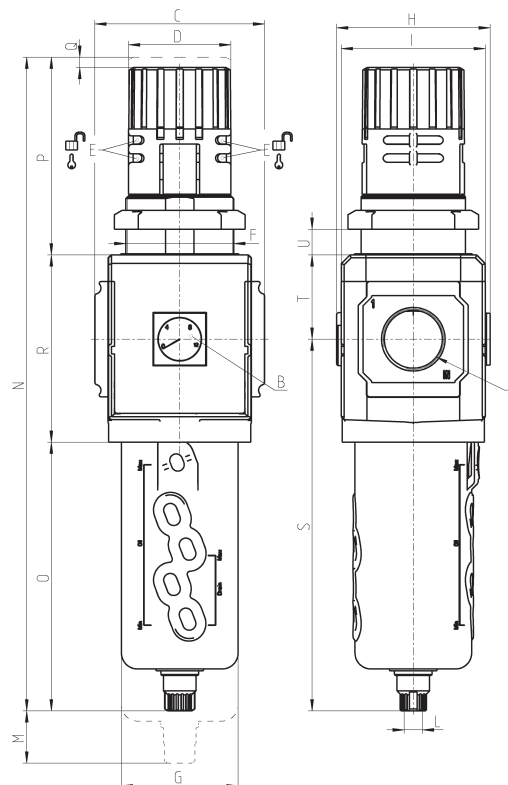


FR01 = filter-regulator with relieving and manual drain  
FR02 = filter-regulator with relieving and without drain  
FR03 = filter-regulator with relieving, manual drain and pressure gauge  
FR04 = filter-regulator with relieving, without drain and with pressure gauge

FR05 = filter-regulator with relieving, automatic drain and pressure gauge  
FR10 = filter-regulator with manual drain, without relieving and with pressure gauge  
FR11 = filter-regulator with manual drain and without relieving  
FR18 = filter-regulator with relieving and automatic drain



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)
<b>MX2-3/8-FR0004</b>	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
<b>MX2-1/2-FR0004</b>	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
<b>MX2-3/4-FR0004</b>	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
<b>MX3-3/4-FR0004</b>	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
<b>MX3-1-FR0004</b>	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