Series MX
lockable isolation 3/2-way valves

MX2 ports: G3/8, G1/2, G3/4 - MX3 ports: G3/4, G1
Modular
Manual, electro-pneumatic, servo-pilot and pneumatic control

- Standard tamperproof lock-out (manual valve)
- One/more locks for the lock-out feature (manual valve)
- Actuation at 24 V, 110 V or 230 V
- Exhaust in atmosphere

Manual isolation valves are ideal to allow an easy access to the FRL group. The system is depressurized with the de-activation of the valve.
Electropneumatic isolation valves: ideal where manual access is difficult, they allow a maximum positioning flexibility and are designed to pressurize or depressurize pneumatic systems. The built-in manual override guarantees security in case of an emergency.

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, spool-type
Materials	see TABLE OF MATERIALS on the following page
Ports	MX2: G3/8 - G1/2 - G3/4 MX3: G3/4 - G1
Mounting	in-line wall-mounting (by means of clamps)
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)
Operating pressure	Manual valve: -0,8 bar ÷ 10 bar Electro-pneumatic valve: 2 bar ÷ 10 bar Servopilot or pneumatic valve: -0,8 bar ÷ 10 bar (with pilot 3.5 ÷ 10 bar)
Nominal flow	see FLOW DIAGRAMS on the following pages
Nominal exhaust flow at 6 bar with Δp = 1 bar	MX2: 6000 Nl/min MX3: 9200 Nl/min
Fluid	compressed air

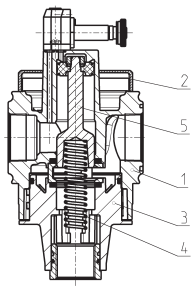
CODING EXAMPLE

MX	2	-	3/8	-	V	01	-	LH

MX	SERIES
2	SIZE: 2 = G3/8 - G1/2 - G3/4 3 = G3/4 - G1
3/8	PORT: 3/8 = G3/8 1/2 = G1/2 3/4 = G3/4 1 = G1
V	3/2-WAY VALVE
01	DESIGN TYPE: 01 = lockable manual control 16 = electro-pneumatic control 17 = servo-pilot control 36 = pneumatic control
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 "FRL Series MX Assembled"

Lockable isolation 3/2-way valves Series MX - materials



PARTS	MATERIALS
1 = Body	Aluminium
2 = Covering	Polyacetal
3 = Valve holder plug	Polyacetal
4 = Lower spring	Zinc-plated steel
5 = Spool	Stainless steel (MX...V16 - V17 - V36) Aluminium (MX...V01)
Seals	NBR

NOMINAL FLOW DIAGRAM FOR VALVES Mod. MX...V01

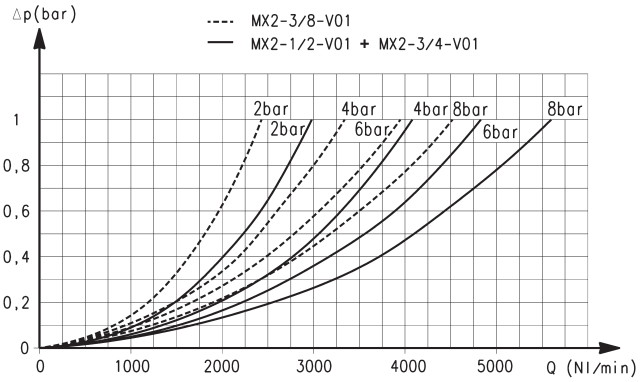


Diagram for lockable manual control valves MX2

Δp = Pressure drop (bar)
Q = Flow (Nl/min)

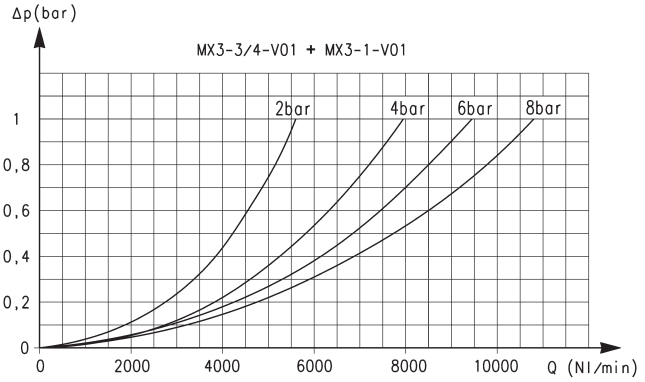


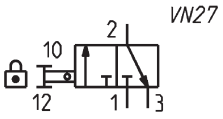
Diagram for lockable manual control valves MX3

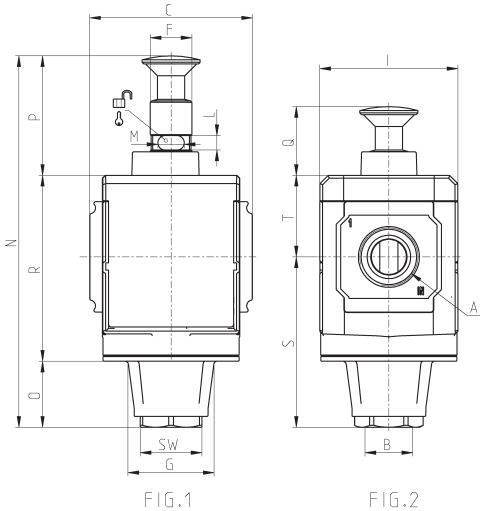
Δp = Pressure drop
Q = Flow

Lockable manual valves Series MX - dimensions

Fig. 1 = closed valve
Fig. 2 = open valve

VN27 = Lockable bistable manual valve 3/2





Mod.	A	B	C	F	G	I	L	M	N	O	P	Q	R	S	SW	T	Weight (Kg)
MX2-3/8-V01	G3/8	G 1/2	70	26	34,5	68	9	8	152	13	51	31	88	63,5	27	37,5	0.5
MX2-1/2-V01	G 1/2	G 1/2	70	26	34,5	68	9	8	152	13	51	31	88	63,5	27	37,5	0.5
MX2-3/4-V01	G3/4	G 1/2	70	26	34,5	68	9	8	152	13	51	31	88	63,5	27	37,5	0.5
MX3-3/4-V01	G3/4	G3/4	89,5	32	48	76	8	14,5	205,5	37	66,5	40	102	94,5	34	44,5	0.9
MX3-1-V01	G1	G3/4	89,5	32	48	76	8	14,5	205,5	37	66,5	40	102	94,5	34	44,5	0.9

NOMINAL FLOW DIAGRAMS FOR VALVES Mod. MX...V16

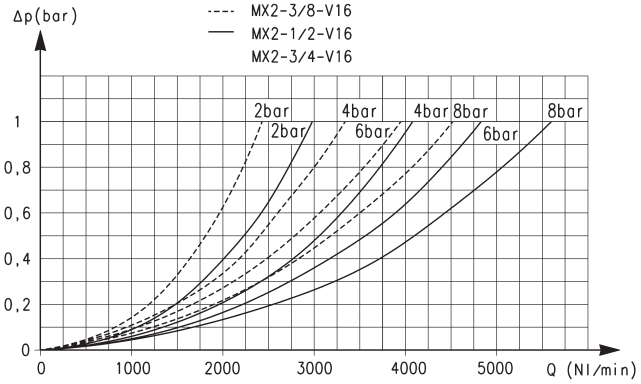


Diagram for electro-pneumatic control valves MX2

Δp = Pressure drop (bar)
Q = Flow (Nl/min)

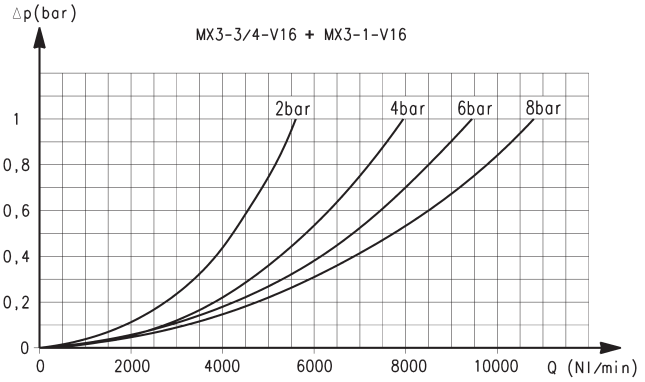
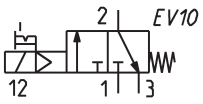


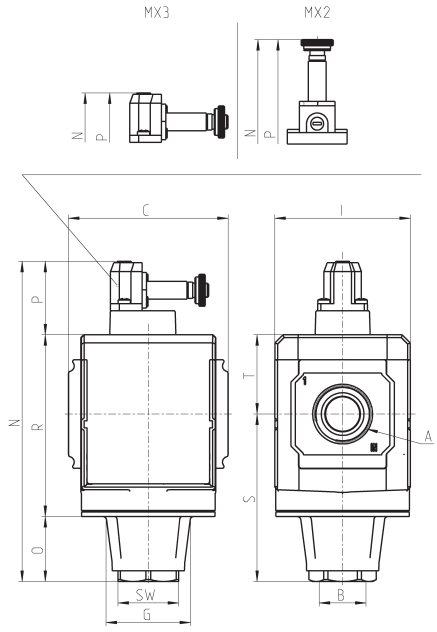
Diagram for electro-pneumatic control valves MX3

Δp = Pressure drop (bar)
Q = Flow (Nl/min)

Series MX electro-pneumatically operated valves - dimensions

EV10 = solenoid valve, 3/2 NC, monostable, with bistable manual override

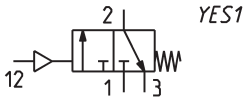


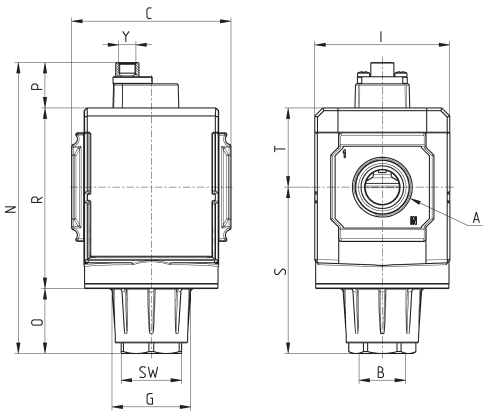


Mod.	A	B	C	G	I	N	O	P	R	S	SW	T	Weight (Kg)
MX2-3/8-V16	G3/8	G1/2	70	34.5	68	171	13	70	88	63.5	34	37.5	0.5
MX2-1/2-V16	G1/2	G1/2	70	34.5	68	171	13	70	88	63.5	34	37.5	0.5
MX2-3/4-V16	G3/4	G1/2	70	34.5	68	171	13	70	88	63.5	34	37.5	0.5
MX3-3/4-V16	G3/4	G3/4	89.5	48	76	180.5	37	41.5	102	94.5	34	44.5	0.9
MX3-1-V16	G1	G3/4	89.5	48	76	180.5	37	41.5	102	94.5	34	44.5	0.9

Series MX pneumatically operated valves - dimensions

YES1 = pneumatically operated valve, 3/2, monostable, mechanical spring





Mod.	A	B	C	G	I	N	O	P	R	S	SW	T	Y (pilot supply)	Weight (Kg)
MX2-3/8-V36	G3/8	G1/2	70	34.5	68	122	13	21	88	63.5	34	37.5	G1/8	0.5
MX2-1/2-V36	G1/2	G1/2	70	34.5	68	122	13	21	88	63.5	34	37.5	G1/8	0.5
MX2-3/4-V36	G3/4	G1/2	70	34.5	68	122	13	21	88	63.5	34	37.5	G1/8	0.5
MX3-3/4-V36	G3/4	G3/4	89.5	48	76	164	37	25.5	102	94.5	34	44.5	G1/8	0.9
MX3-1-V36	G1	G3/4	89.5	48	76	164	37	25.5	102	94.5	34	44.5	G1/8	0.9

FLOW DIAGRAM for valves Mod. MX...V17

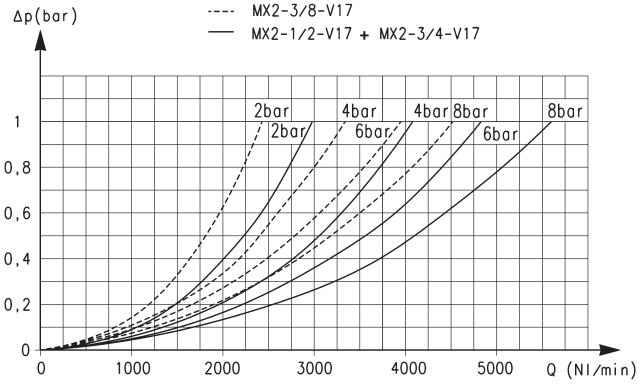


Diagram for servo-pilot control valves MX2

Δp = Pressure drop (bar)
Q = Flow (Nl/min)

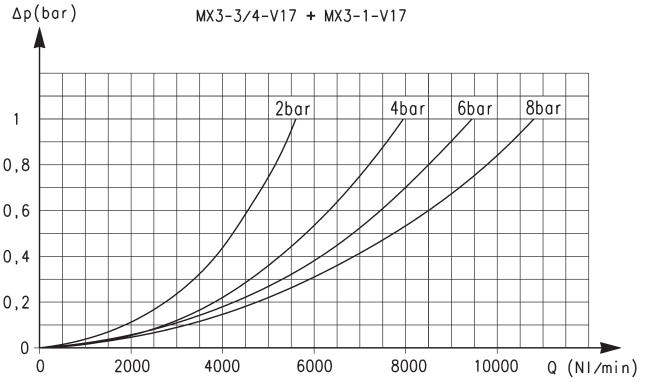
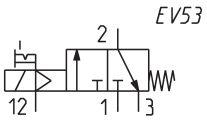


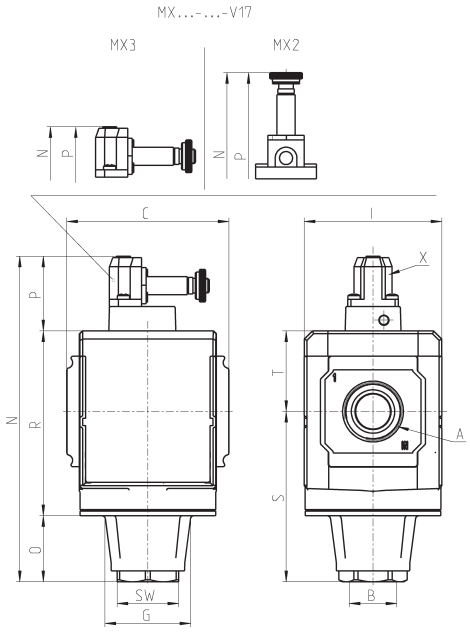
Diagram for servo-pilot control valves MX3

Δp = Pressure drop (bar)
Q = Flow (Nl/min)

Series MX servo-pilot valves - dimensions

EV53 = solenoid valve, 3/2, monostable, solenoid pilot with separate air supply and bistable manual override





Mod.	A	B	C	G	I	N	O	P	R	S	SW	T	X	Weight (Kg)
MX2-3/8-V17	G3/8	G1/2	70	34,5	68	171	13	70	88	63,5	34	37,5	M5	0.5
MX2-1/2-V17	G1/2	G1/2	70	34,5	68	171	13	70	88	63,5	34	37,5	M5	0.5
MX2-3/4-V17	G3/4	G1/2	70	34,5	68	171	13	70	88	63,5	34	37,5	M5	0.5
MX3-3/4-V17	G3/4	G3/4	89,5	48	76	180,5	37	41,5	102	94,5	34	44,5	M5	0.9
MX3-1-V17	G1	G3/4	89,5	48	76	180,5	37	41,5	102	94,5	34	44,5	M5	0.9