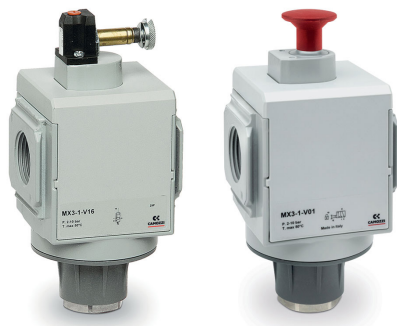


# LOCKABLE ISOLATION 3/2-WAY VALVES

## SERIES MX

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 lockout 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.

### General Data

<b>Construction</b>	Modular, compact, spool-type
<b>Ports</b>	MX2: G3/8 - G1/2 - G3/4 MX3: G3/4 - G1
<b>Mounting</b>	In-line Wall-mounting (by means of clamps)
<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>Operating pressure</b>	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)
<b>Nominal exhaust flow at 6 bar with Δp = 1 bar</b>	MX2: 6000 NL/min MX3: 9200 NL/min
<b>Fluid</b>	Compressed air

LOCKABLE ISOLATION 3/2-WAY VALVES  
SERIES MX - CODING EXAMPLES

Coding example

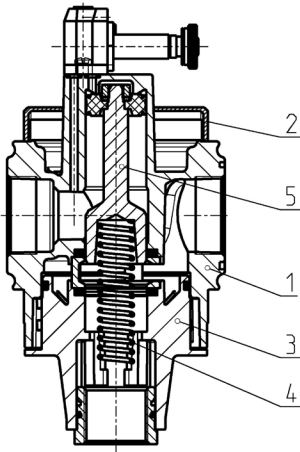
MX	2	-	3/8	-	V
MX	SERIES				
2	SIZE 2 = G3/8 - G1/2 - G3/4 3 = G3/4 - G1				
3/8	PORT 3/8 = G3/8 1/2 = G1/2 3/4 = G3/4 1 = G1				
V	3/2-WAY VALVE				
01	DESIGN TYPE 01 = lockable manual control 16 = electro-pneumatic control 17 = servo-pilot control 36 = pneumatic control				
LH	FLOW DIRECTION = from 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

AIR TREATMENT

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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

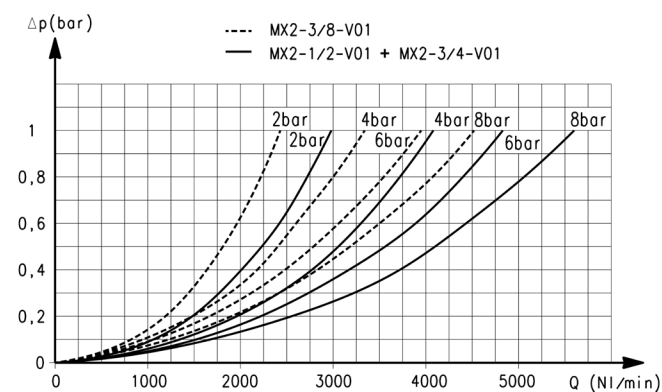


Diagram for lockable manual control valves MX2

$\Delta p$  = Pressure drop (bar)  
 $Q$  = Flow (NI/min)

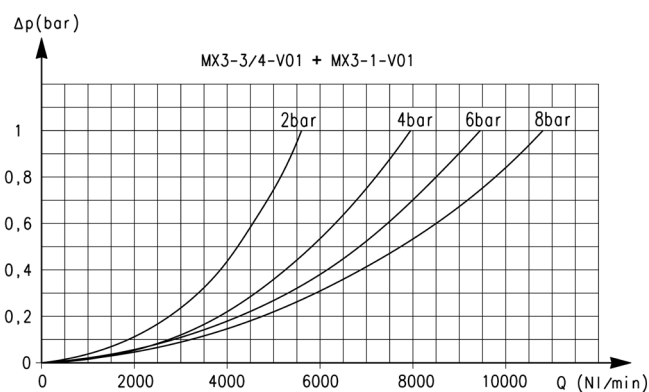


Diagram for lockable manual control valves MX3

$\Delta p$  = Pressure drop  
 $Q$  = Flow

## Lockable manual valves Series MX - dimensions

VN27 = Lockable bistable manual valve 3/2

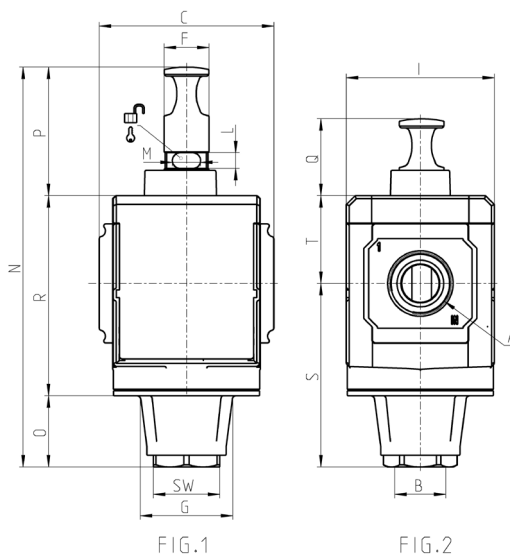
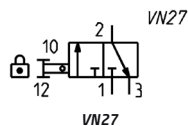


Fig. 1 = closed valve  
 Fig. 2 = open valve

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

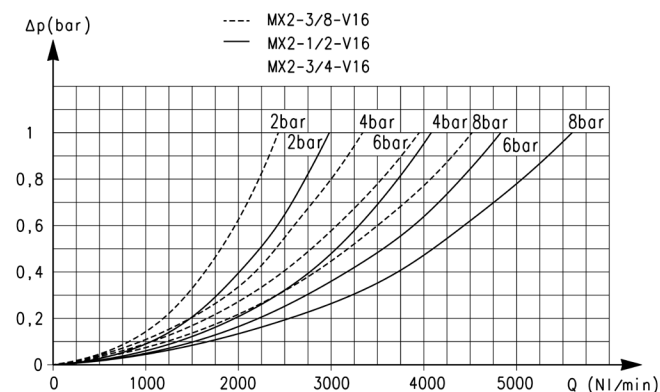


Diagram for electro-pneumatic control valves MX2

$\Delta p$  = Pressure drop (bar)  
 $Q$  = Flow (NI/min)

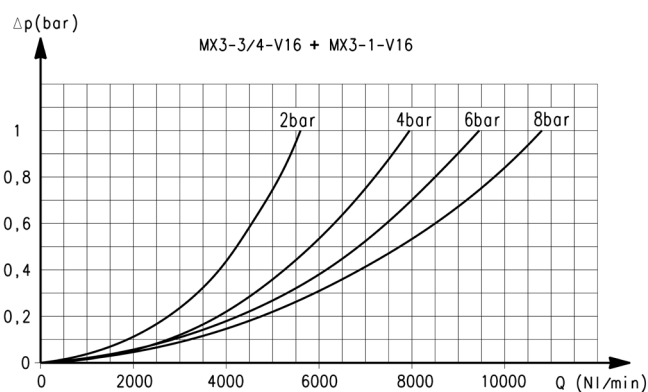


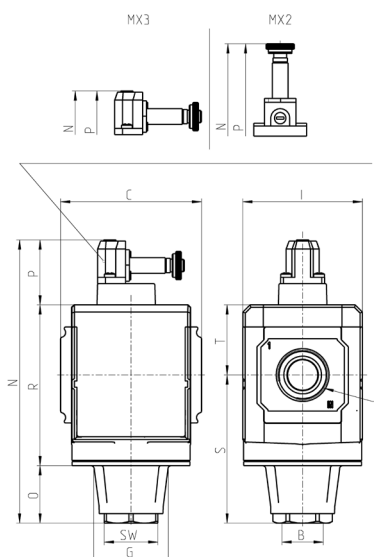
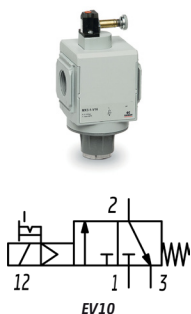
Diagram for electro-pneumatic control valves MX3

$\Delta p$  = Pressure drop (bar)  
 $Q$  = Flow (NI/min)

## Series MX electro-pneumatically operated valves - dimensions

AIR TREATMENT

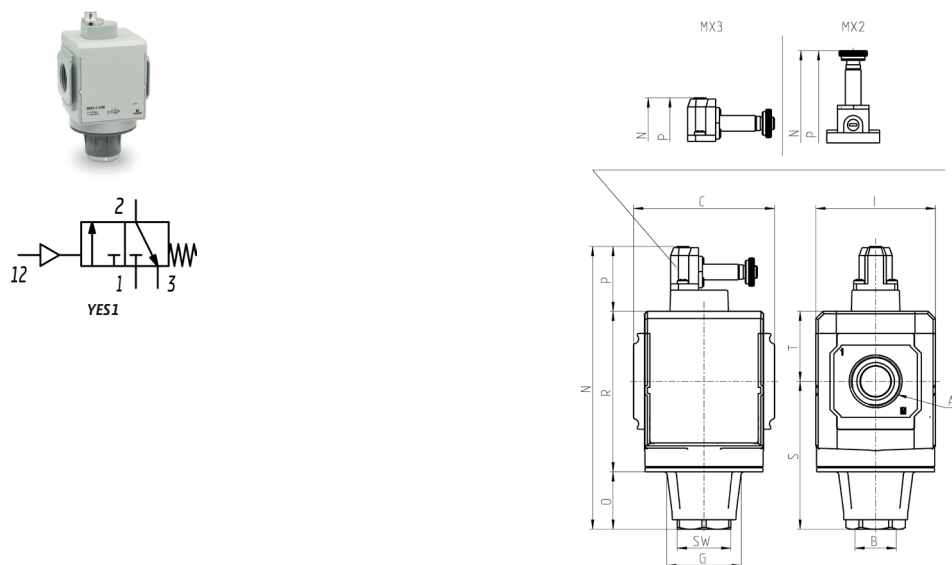
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EV10 = solenoid valve, 3/2 NC, monostable, with bistable manual override

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



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

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

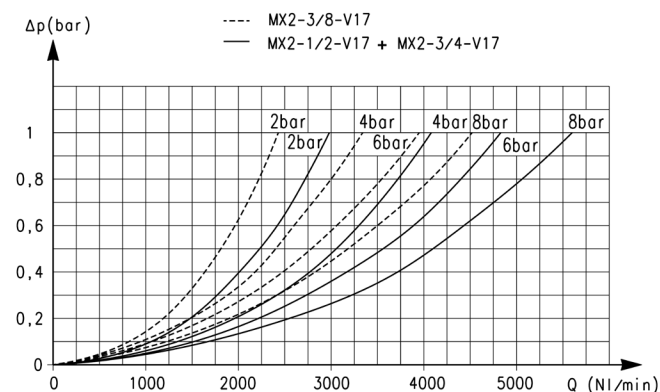


Diagram for servo-pilot control valves MX2

$\Delta p$  = Pressure drop (bar)  
 $Q$  = Flow (NI/min)

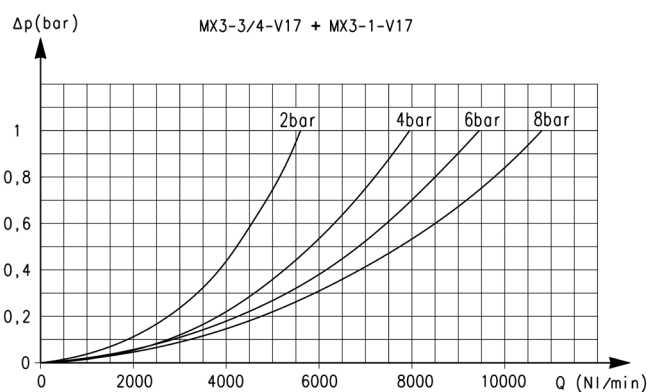


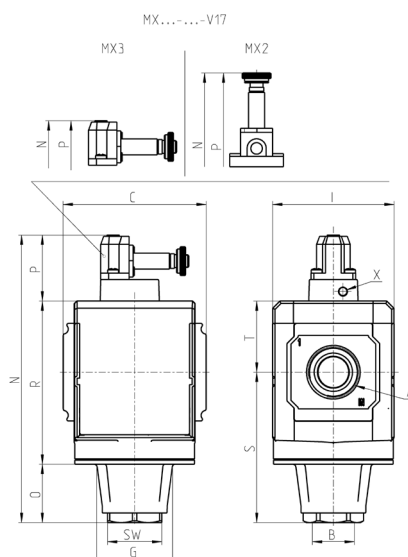
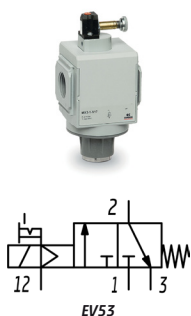
Diagram for servo-pilot control valves MX3

$\Delta p$  = Pressure drop (bar)  
 $Q$  = Flow (NI/min)

## Series MX servo-pilot valves - dimensions

AIR TREATMENT

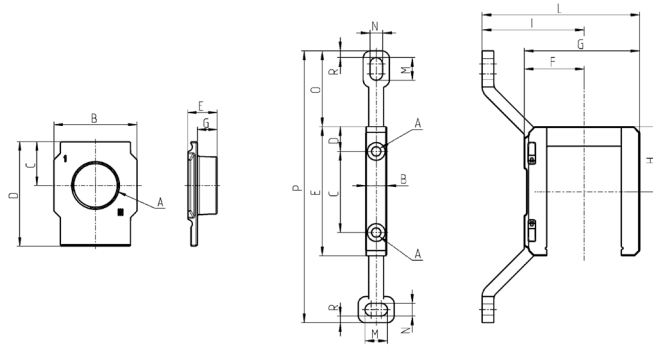
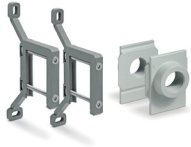
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EV53 = solenoid valve, 3/2, monostable, solenoid pilot with separate air supply and bistable manual override

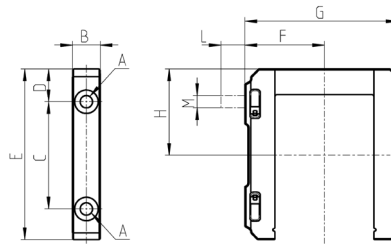
Mod.	A (1-2)	B (3)	C	G	I	N	O	P	R	S	SW	T	X (12)	Weight [kg]
MX2-3/8-V17	G3/8	G1/2	70	34,5	68	171	13	70	88	63,5	34	37,5	M5	0.5
MX2-1/2-V17	G1/2	G1/2	70	34,5	68	171	13	70	88	63,5	34	37,5	M5	0.5
MX2-3/4-V17	G3/4	G1/2	70	34,5	68	171	13	70	88	63,5	34	37,5	M5	0.5
MX3-3/4-V17	G3/4	G3/4	89,5	48	76	180,5	37	41,5	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

## Rapid clamps kit with wall fixing brackets + flanges



Mod.	A	B	C	The kit is supplied with:
MX2-3/8-KK	G 3/8	174	140	1x MX2-3/8-FL + 2x MX2-Y
MX2-1/2-KK	G 1/2	174	140	1x MX2-1/2-FL + 2x MX2-Y
MX2-3/4-KK	G 3/4	174	140	1x MX2-3/4-FL + 2x MX2-Y
MX3-3/4-KK	G 3/4	221	179	1x MX2-3/4-FL + 2x MX2-Y
MX3-1-KK	G 1	221	179	1x MX2-1-FL + 2x MX2-Y

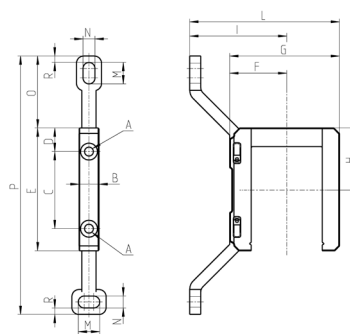
## Rapid clamp kit



See the positioning scheme in the section "Series MX assembled FRL".

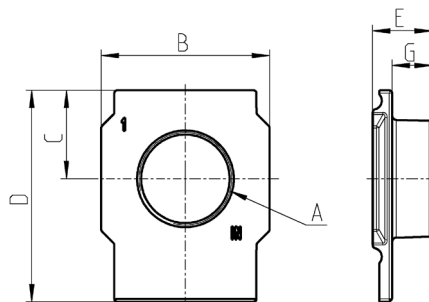
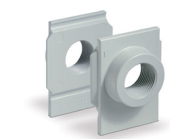
Mod.	A	B	C	D	E	F	G	H	L	M	Notes
MX2-X	5,2	12	46	14	73,5	37,5	70,5	37	-	-	
MX2-Z	5,2	12	46	14	73,5	37,5	70,5	37	14	M5	Kit with wall fixing screw
MX3-X	6,2	14	54	16,5	86	40	77	43,5	-	-	
MX3-Z	6,2	14	54	16,5	86	40	77	43,5	13	M6	Kit with wall fixing screw

## Rapid clamp kit with wall fixing brackets



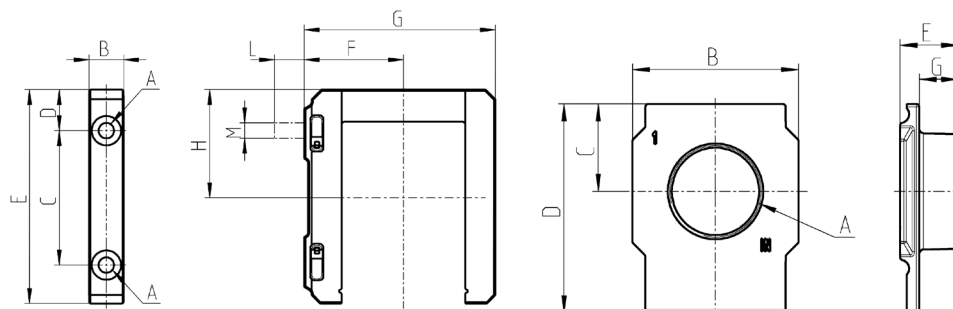
Mod.	A	B	C	D	E	F	G	H	I	L	M	N	O	P	R
MX2-Y	5,2	12	46	14	73,5	32,5	70,5	37	70,5	103	12	6,5	42	152	4
MX3-Y	6,2	14	54	16,5	86	40	77	43,5	68	105	15	8,4	50,5	181	4,5

## Terminal flanges (IN/OUT)



Mod.	A	B	C	D	E	G
MX2-3/8-FL	G3/8	50	26,5	63,5	17	11
MX2-1/2-FL	G1/2	50	26,5	63,5	17	11
MX2-3/4-FL	G3/4	50	26,5	63,5	17	11
MX3-3/4-FL	G3/4	58	30,5	73	20,5	13,5
MX3-1-FL	G1	58	30,5	73	20,5	13,5

## Rapid clamps kit + flanges



Mod.	A	B	C	The kit is supplied with:
MX2-3/8-HH	G 3/8	174	-	1x MX2-3/8-FL + 2x MX2-X
MX2-1/2-HH	G 3/8	174	-	1x MX2-1/2-FL + 2x MX2-X
MX2-3/4-HH	G 3/4	174	-	1x MX2-3/4-FL + 2x MX2-X
MX2-3/8-JJ	G 3/8	174	140	1x MX2-3/8-FL + 2x MX2-Z
MX2-1/2-JJ	G 1/2	174	140	1x MX2-1/2-FL + 2x MX2-Z
MX2-3/4-JJ	G 3/4	174	140	1x MX2-3/4-FL + 2x MX2-Z
MX3-3/4-HH	G 3/4	221	-	1x MX3-3/4-FL + 2x MX3-X
MX3-1-HH	G 1	221	-	1x MX3-1-FL + 2x MX3-X
MX3-3/4-JJ	G 3/4	221	179	1x MX3-3/4-FL + 2x MX3-Z
MX3-1-JJ	G 1	221	179	1x MX3-1-FL + 2x MX3-Z