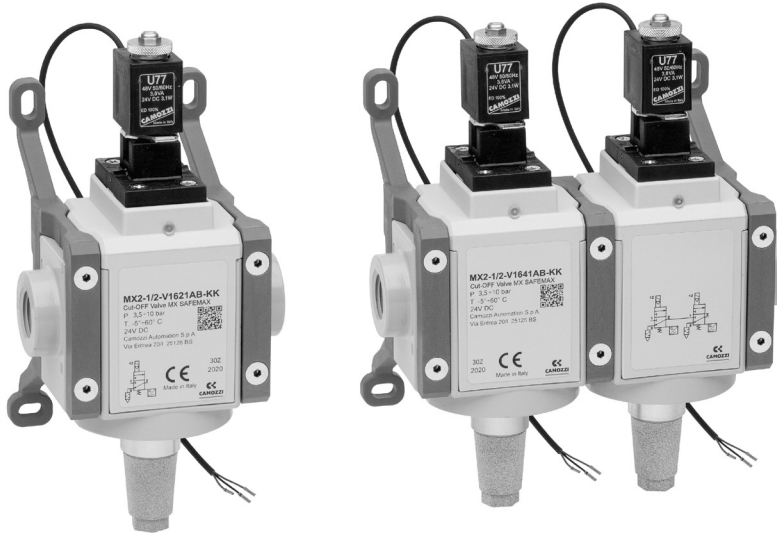CAMOZZI
Automation

Series MX SAFEMAX
3/2-way quick exhaust safety valves

New

Ports: G1/2

» According to Machinery Directive 2006/42 / CE

» Easy integration with Series MX FRLunits

» Solutions to reach Performance Level E

Series MX SAFEMAX solenoid valves are equipped with an integrated sensor that detects the position of the spool and enables to quickly exhaust the system in case of emergency. The single channel valve is classified in category 2 and can reach Performance level D. The double channel valve is classified in category 4 and can reach Performance level E. Please note: the safety valve is not sufficient, alone, to guarantee the safety function. Its setup requires the use of a monitoring device.

The Machinery Directive (MD) 2006/42 / EC establishes the safety requirements that a machine must respect in order to protect the health of people during its use. Series MX SAFEMAX solenoid valves comply with ISO 13849-1, regarding the safe design of control systems that perform safety functions.

GENERAL DATA

Construction	modular, compact, spool-type
Materials	see TABLE OF MATERIALS on the following page
Ports	G1/2
Mounting	in-line, wall-mounting (by means of clamps)
Operating temperature	-5 ÷ +60 °C
Operating pressure	with internal servo-pilot: 3,5 bar ÷ 10 bar with external servo-pilot: 0,5 bar ÷ 10 bar (pilot 3,5 bar ÷ 10 bar, greater or equal to operating P)
Flow rate (6 bar)	single version: 1→2 = 5600 Nl/min (ΔP 1) 2→3 = 5000 Nl/min (free flow) double version: 1→2 = 4100 Nl/min (ΔP 1) 2→3 = 5000 Nl/min (free flow)
Medium	Filtered air in class 7.4.4 according to ISO 8573-1. In case lubricated air is used, we recommend ISOVG32 oil and to never interrupt lubrication.

COIL SPECIFICATIONS

Connection	DIN EN 175 301-803-B
Voltage	24V DC (±10%) 3,1W (ED 100%)

SENSOR SPECIFICATIONS

Connection	with wires, M8
Voltage	10-28V DC
Operation	Magnetoresistive
Type of contact	N.O. PNP
Max. current	EX version: 200 mA 0,65 W UL version: 100 mA 3 W CE version: 200 mA 5,5W

COMPLIANCE WITH EN ISO 13849-1 STANDARD

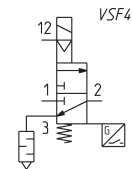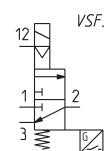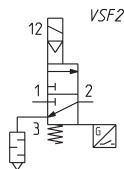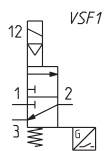|	
Performance level reachable (PL)	single version: category 2, PLd double version: category 4, PLe
B10d	1.000.000 cycles

CODING EXAMPLE SINGLE VALVE

| MX | 2 | - | 1/2 | - | V | 16 | 2 | 0 | A | B | - | KK | - | LH |

MX	SERIES
2	SIZE
1/2	PORT 1/2 = G1/2
V	COMPONENT V = 3/2-way valve
16	CONSTRUCTION 16 = internal servo-pilot 17 = external servo-pilot
2	CHANNEL 2 = single
0	ACCESSORIES 0 = without silencer 1 = with silencer
A	SENSOR A = UL sensor, 2 mt cable B = UL sensor, 5 mt cable C = ATEX sensor, 2 mt cable D = ATEX sensor, 5 mt cable E = CE sensor M8 connector, 300 mm cable
B	VERSION A = Atex B = UL C = CE
KK	MOUNTING = without mounting accessories JJ= side wall clamps and flanges HH = side quick clamps and flanges KK = side wall brackets and flanges
LH	FLOW DIRECTION = from left to right (standard) LH = from right to left

Symbols for single version

VSF1   VSF2   VSF3   VSF4

Series MX SAFEMAX single valve - materials

PARTS	MATERIALS
1 = Body	Aluminium
2 = Covering	POM Polyacetal
3 = Cover	Polyacetal
4 = Lower spring	Steel
5 = Spool	Stainless steel
6 = Cage element	Brass
7 = Solenoid	Steel, brass, PBT, POM
8 = Silencer	Bronze, steel
Seals	NBR, FKM
Sensor	PA body, epoxy resin and PU cable

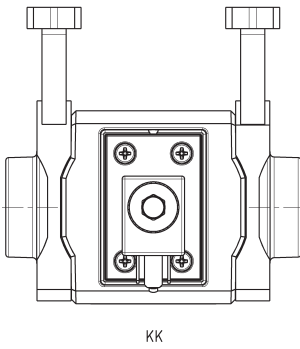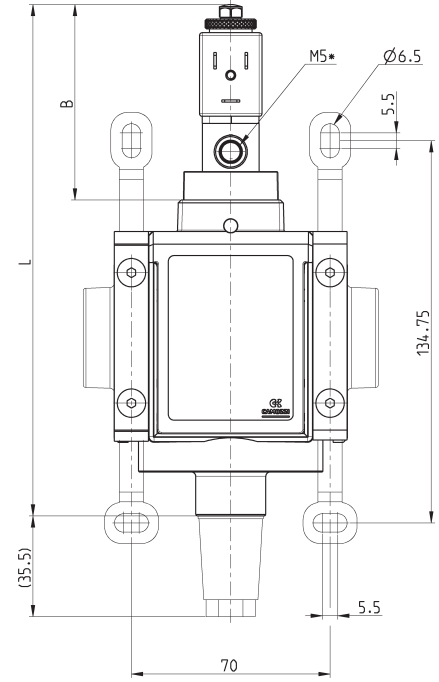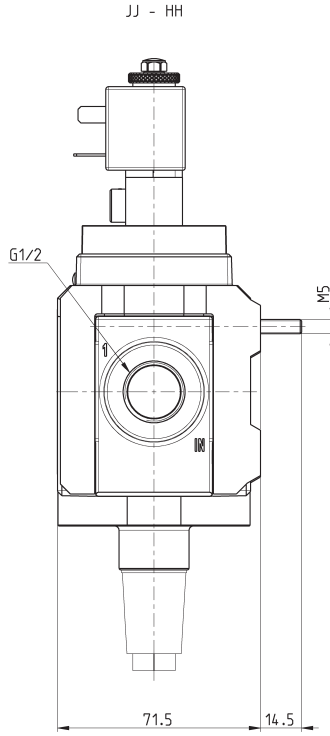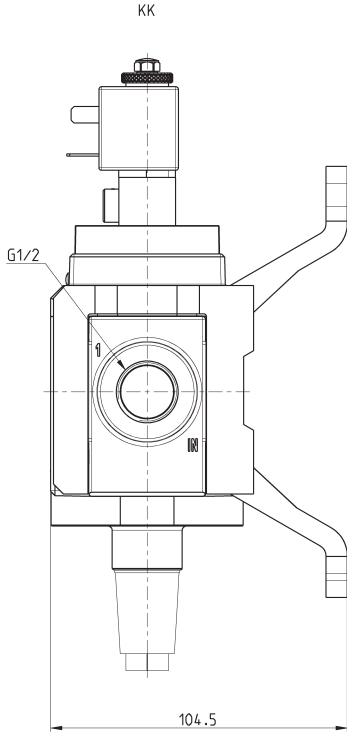## Series MX SAFEMAX single valve - dimensions

The solenoid valve is supplied complete with sensor and coil

*connection available only with external pilot version
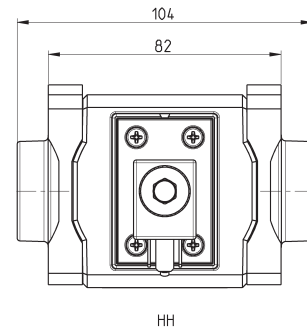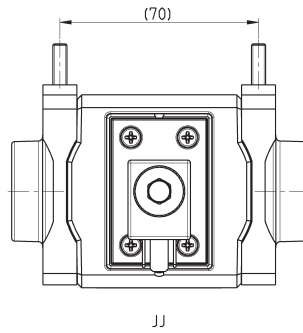
Mod.	L (mm)	B (mm)
MX2-1/2-V162*	175	63
MX2-1/2-V172*	180.5	69

CODING EXAMPLE DOUBLE VALVE

| MX | 2 | - | 1/2 | - | V | 16 | 4 | 0 | A | B | - | KK | - | LH |

MX	SERIES
2	SIZE
1/2	PORT 1/2 = G1/2
V	COMPONENT V = 3/2-way valve
16	CONSTRUCTION 16 = internal servo-pilot 17 = external servo-pilot
4	CHANNEL 4 = double
0	ACCESSORIES 0 = without silencer 1 = with silencer
A	SENSOR A = UL sensor, 2 mt cable D = ATEX sensor, 5 mt cable B = UL sensor, 5 mt cable E = CE sensor M8 connector, 300 mm cable C = ATEX sensor, 2 mt cable
B	VERSION A = Atex B = UL C = CE
KK	MOUNTING = without mounting accessories HH = side quick clamps and flanges Z = central wall clamp JJ= side wall clamps and flanges Y= central wall bracket KK = side wall brackets and flanges
LH	FLOW DIRECTION = from left to right (standard) LH = from right to left

Symbols for double version

VSF5   VSF6   VSF7   VSF8

Series MX SAFEMAX double valve - materials

PARTS	MATERIALS
1 = Body	Aluminium
2 = Covering	POM Polyacetal
3 = Cover	Polyacetal
4 = Lower spring	Steel
5 = Spool	Stainless steel
6 = Cage element	Brass
7 = Solenoid	Steel, brass, PBT, POM
8 = Intermediate flange	PA66
9 = Silencer	Bronze, steel
Seals	NBR, FKM
Sensor	PA body, epoxy resin and PU cable

Products designed for industrial applications.
General terms and conditions for sale are available on www.camozzi.com.
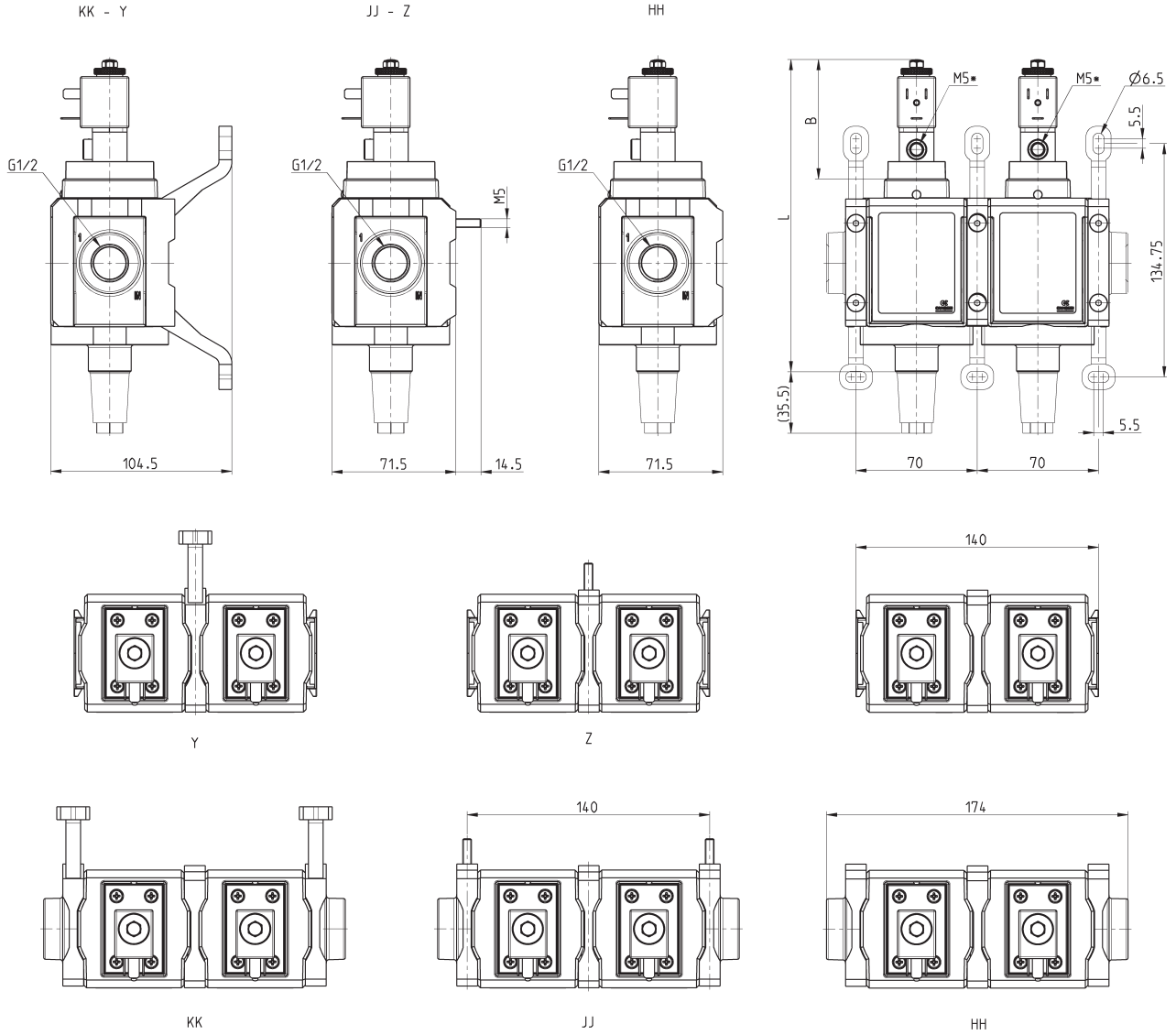
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Automation

Series MX SAFEMAX double valve - dimensions

The solenoid valve is supplied complete with sensors
and coils

*connection available only with external pilot version

KK - Y

JJ - Z

HH

Mod.	L (mm)	B (mm)
MX2-1/2-V164*	175	63
MX2-1/2-V174	180.5	69