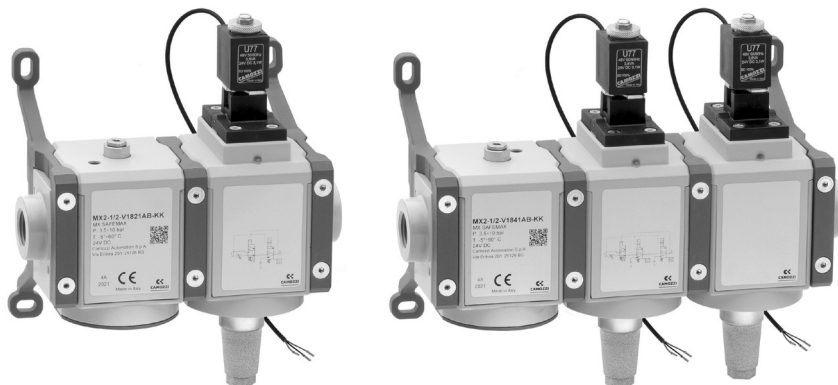




Series MX SAFEMAX 3/2-way quick exhaust safety valves with soft start valve

Ports: G1/2



- » According to Machinery Directive 2006/42 / CE
- » Easy integration with Series MX FRLunits
- » Different solutions up to Performance Level E
- » Integrated soft start valve
- » No interface plate for connections

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.

In this configuration, in addition to the characteristics of the versions with solenoid valves only, the soft start function has been integrated, which allows a gradual introduction of pressure into the system.

Its positioning upstream of the solenoid valves allows, even in the event of an anomaly, to always have the maximum discharge flow rate. Thanks to the internal construction solutions it was possible to maintain the design and dimensions of the standard product, no further interface plates are necessary.

Please note: the safety valve alone is not sufficient to guarantee the safety function. Its activation requires the use of a supervisor device.

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 = 4100 NL/min (ΔP 1) 2→3 = 5000 NL/min (free flow) double version: 1→2 = 3300 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, segnale ON con Ev, in posizione NC
Voltage	10-28V DC
Operation	Magneto-resistive
Type of contact	N.O. PNP, ON signal with sol. valve in NC position
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	2.000.000 cycles

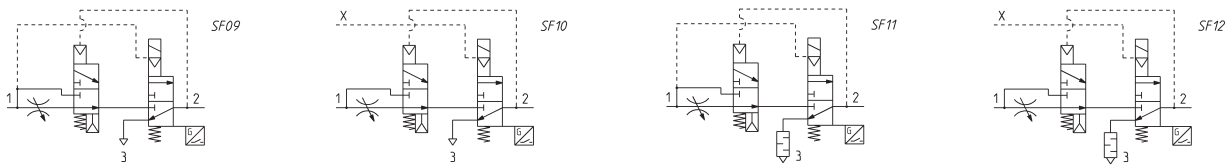
CODING EXAMPLE SINGLE VALVE

MX	2	-	1/2	-	V	18	2	0	A	B	-	KK	-	LH
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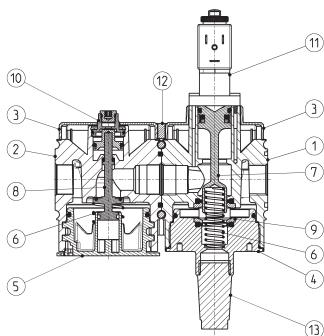
MX	SERIES	
2	SIZE	
1/2	PORT 1/2 = G1/2	
V	COMPONENT V = 3/2-way valve	
18	CONSTRUCTION 18 = internal servo-pilot with soft start valve 19 = external servo-pilot with soft start valve	
2	CHANNEL 2 = single	
0	ACCESSORIES 0 = without silencer 1 = with silencer	
A	SENSOR A = UL sensor, 2 mt cable B = UL 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	sensor and version must comply with the same Standard / directive AB, BB - CA, DA - EC
KK	MOUNTING = without mounting accessories Z = central wall clamps Y = central wall brackets	HH = side quick clamps and flanges JJ = side wall clamps and flanges KK = side wall brackets and flanges
LH	FLOW DIRECTION = from left to right (standard) LH = from right to left	

SERIES MX SAFEMAX 3/2-WAY QUICK EXHAUST SAFETY VALVES + AVP

Symbols for single version with soft start valve



Series MX SAFEMAX single valve with soft start valve - materials



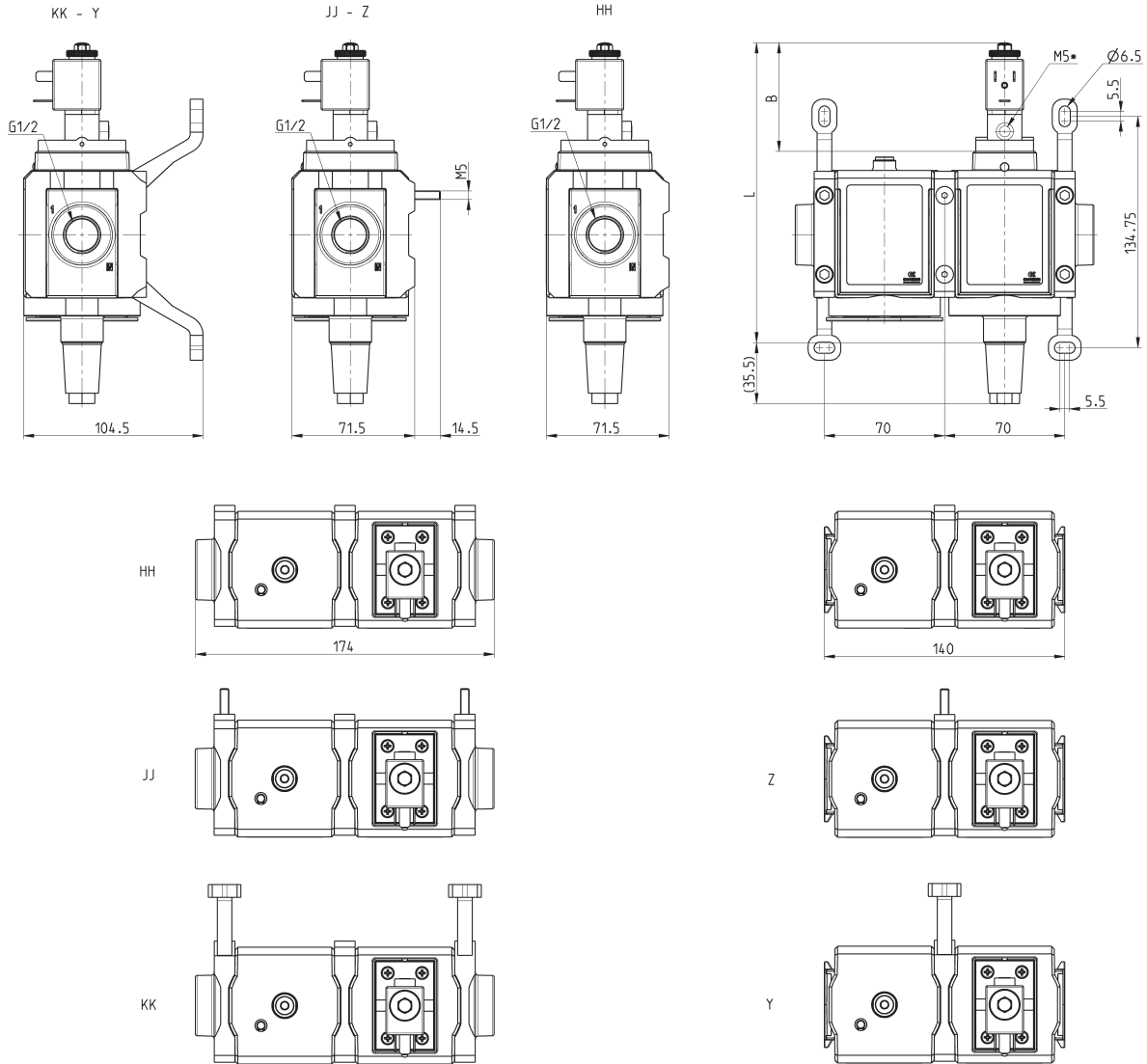
PARTS	MATERIALS
1 = Body of solenoid valve	Aluminium
2 = Body of starter	Aluminium
3 = Covering	Pom
4 = Valve cap	Aluminium
5 = Soft start valve cover	Pom
6 = Springs	Stainless steel
7 = Valve spool	Stainless steel, Fkm, Ptfе, plastoferrite
8 = Soft start valve spool	Brass
9 = Cage elements	Brass
10 = Upper cap of starter	Brass
11 = Solenoid	Copper, Brass, Stainless steel, PET
12 = Quick clamp	PA66
13 = Silencer and plugs	Stainless steel, Bronze
O-Ring and seals	Nbr, Fkm
Sensor	Sensor PA body, epoxy resin and PU cable

Series MX SAFEMAX single valve with soft start valve - dimensions

The solenoid valve is supplied complete with sensor and coil



*connection available only with external pilot version



Mod.	L (mm)	B (mm)	Symbols
MX2-1/2-V182...	175	63	SF09 - SF11
MX2-1/2-V192...	180.5	69	SF10 - SF12

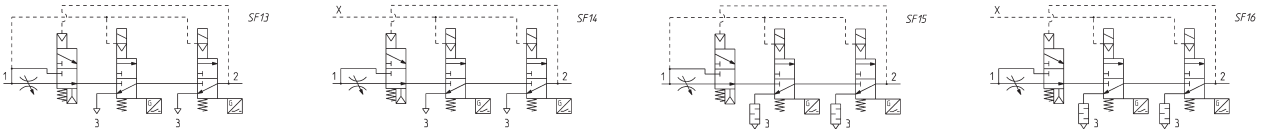
CODING EXAMPLE DOUBLE VALVE

MX	2	-	1/2	-	V	18	4	0	A	B	-	KK	-	LH
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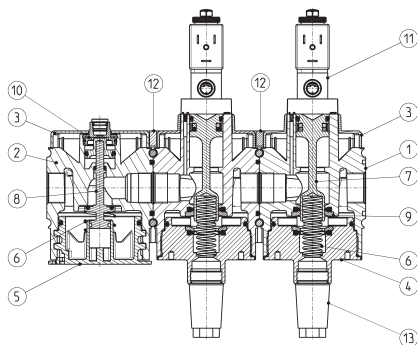
MX	SERIES	
2	SIZE	
1/2	PORT 1/2 = G1/2	
V	COMPONENT V = 3/2-way valve	
18	CONSTRUCTION 18 = internal servo-pilot with soft start valve 19 = external servo-pilot with soft start valve	
4	CHANNEL 4 = double	
0	ACCESSORIES 0 = without silencer 1 = with silencer	
A	SENSOR A = UL sensor, 2 mt cable B = UL 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	sensor and version must comply with the same Standard / directive AB, BB - CA, DA - EC
KK	MOUNTING = without mounting accessories Z = central wall clamps Y = central wall brackets	HH = side quick clamps and flanges JJ = side wall clamps and flanges KK = side wall brackets and flanges
LH	FLOW DIRECTION = from left to right (standard) LH = from right to left	

SERIES MX SAFEMAX 3/2-WAY QUICK EXHAUST SAFETY VALVES + AVP

Symbols for double version with soft start valve



Series MX SAFEMAX double valve with soft start valve - materials



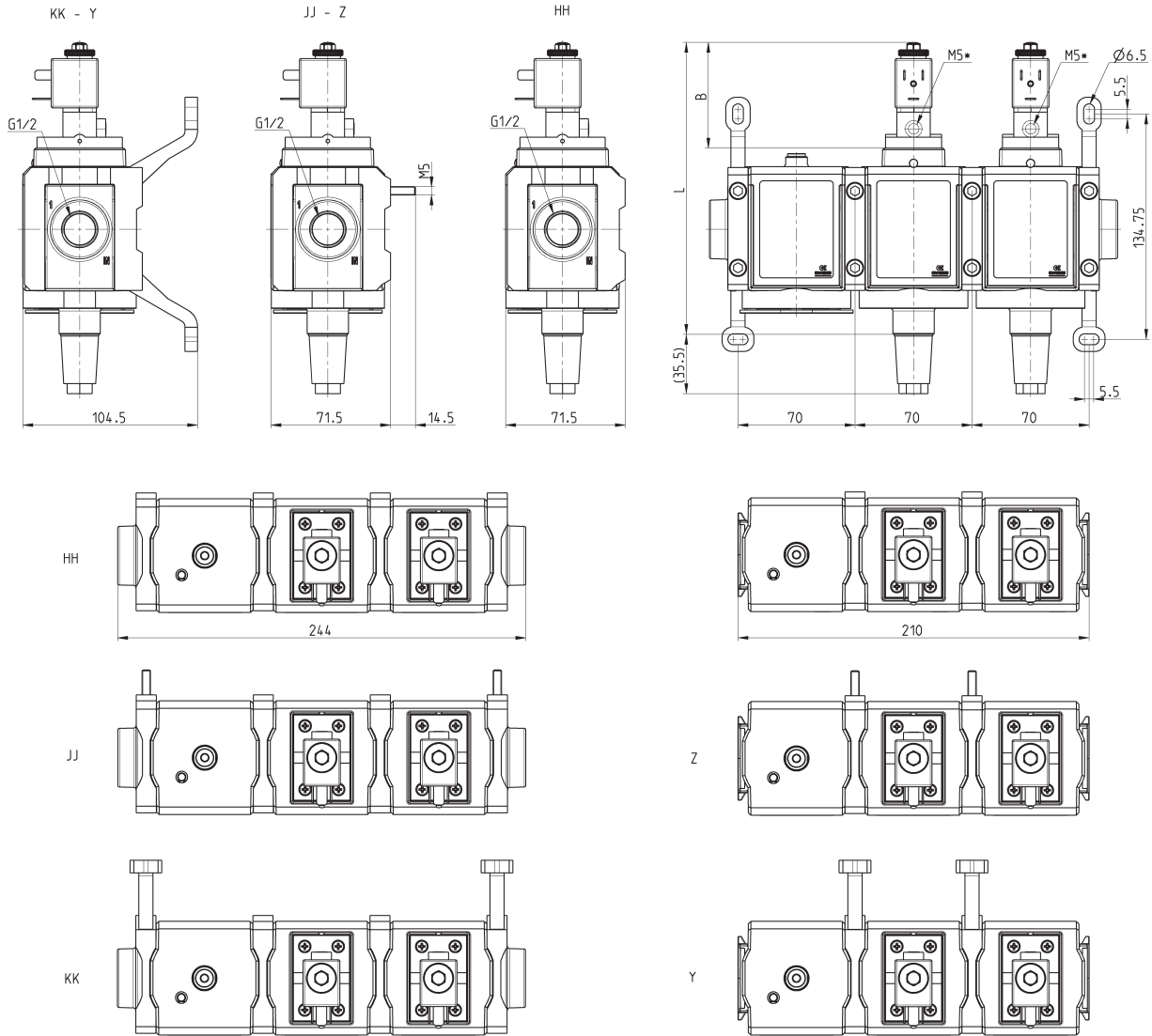
PARTS	MATERIALS
1 = Body of solenoid valve	Aluminium
2 = Body of starter	Aluminium
3 = Covering	Pom
4 = Valve cap	Aluminium
5 = Soft start valve cover	Pom
6 = Springs	Stainless steel
7 = Valve spool	Stainless steel, Fkm, Ptfе, plastoferrite
8 = Soft start valve spool	Brass
9 = Cage elements	Brass
10 = Upper cap of starter	Brass
11 = Solenoid	Copper, Brass, Stainless steel, PET
12 = Quick clamp	PA66
13 = silencer and plugs	Stainless steel, Bronze
O-Ring and seals	Nbr, Fkm
Sensor	Sensor PA body, epoxy resin and PU cable

Series MX SAFEMAX double valve with soft start valve - dimensions

The solenoid valve is supplied complete with sensors and coils



*connection available only with external pilot version



Mod.	L (mm)	B (mm)	Symbols
MX2-1/2-V184...	175	63	SF13 - SF15
MX2-1/2-V194...	180.5	69	SF14 - SF16