
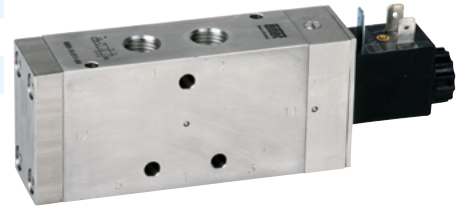


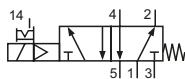
## Technical details

<b>Connection</b>	G1/4
<b>Nominal Size</b>	9 mm
<b>Temperature range</b>	-30°C ... +80°C*
<b>Medium</b>	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Differing the pressure dew point must be at least 10°C below lowest occurring ambient temperature.
<b>Materials</b>	Body: stainless steel 1.4571, seals: FKM and PU, inner parts: stainless steel 1.4305
<b>Protection</b>	IP 65 according to EN 60529
	Valves in accordance with 2014/34/EU (ATEX) available. *ATEX versions have a different temperature range. (page 06)

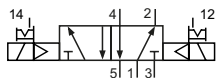


Electrically operated spill valve. The manual override is detent and is operated by screwdriver.

## 5/2-way-Valves

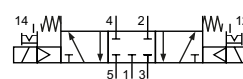


KMX-10-511-HN-xxx  
5/2-way, single solenoid, mechanical spring return



KMX-10-520-HN-xxx  
5/2-way, double solenoid

## 5/3-way-Ventil



KMX-10-530-HN-xxx  
5/3-way, center position closed

Please complete: xxx = electrical option

## Electrical options

Nominal voltage	Power consumption	Specifics	Connection*1	-xxx Manual override on same side of ports	
				2 and 4	1, 3 and 5
12 V DC	4.2 W		Form B industrial norm	-F41	-F11
24 V DC	4.2 W		Form B industrial norm	-F42	-F12

\*1 Plug socket not included, suitable plug sockets page 04

## Technical data

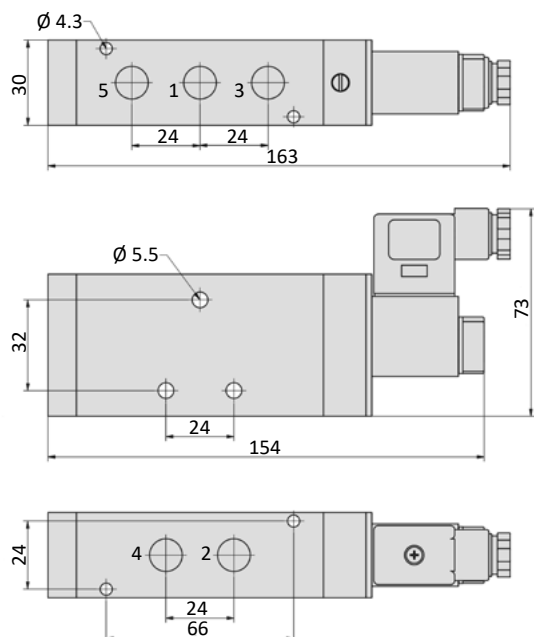
Model-no.:	KMX-10-511	KMX-10-520	KMX-10-530
<b>Operating pressure (bar)</b>	3 ... 8	3 ... 8	3 ... 8
<b>Pilot pressure (bar)</b>	3 ... 8	3 ... 8	3 ... 8
<b>Flow rate (NI/min)</b>	1800	2100	1500
<b>Resonse time (ms) at 6 bar</b>	on: 16 off: 27	on: 18 off: 18	on: 16 off: 22
<b>Weight (kg)</b>	0.470	0.630	0.630

## Series KMX-10

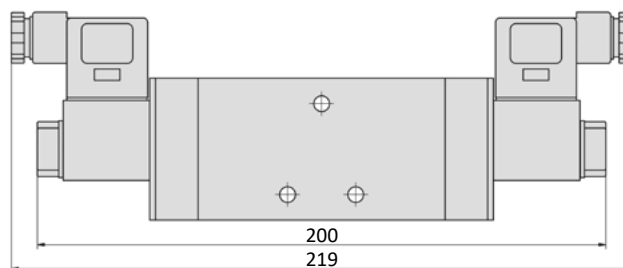


### Dimensions

#### KMX-10-511-HN



#### KMX-10-520-HN, KMX-10-530-HN



- 1 = pressure inlet
- 2,4 = outlets
- 3,5 = exhausts

Plug socket (not included in scope of delivery) can be repositioned by 180°.  
Solenoid coil can be repositioned.

### Accessories



Plug sockets: page 04

- HN * - * * *				
Manual override	Coil and plug options		Coil type	Voltage type Position of the manual override Position of the connector lugs
- without	0	ATEX 2GD, encapsulated with casting compoand width 30 mm	23-SP-037	0 without indication
HN detent	9	ATEX 2GD, intrinsically safe, with enclosed plug socket, width 30 mm	23-SP-038	1 Manual override at 1/3/5
	A	ATEX 3GD, coil with enclosed plug socket, width 30 mm	23-SP-043	DC
	B	ATEX 3GD, valve with mounted coil and enclosed plug socket, width 30 mm	23-SP-043	1 Manual override at 1/3/5
	C	ATEX 3GD, without plug, width 22 mm	23-SP-041	Connector lugs at 2/4
	F	with coil, with enhanced humidity resistance, without plug, low temperature version	23-SP-011-1-711 23-SP-011-1-712	AC
	U	ATEX 2GD, without coil (for coil 23-SP-036)	no	2 Manual override at 1/3/5
	V	ATEX 2GD, Flame proof enclosuresand encapsulated with casting compoand	23-SP-045	Connector lugs at 2/4
	W	ATEX 2GD / 3GD, without coil (for coil 23-SP-041 and 23-SP-045)	no	DC, low power
	X	ATEX 3GD, without coil (for coil 23-SP-043 at 230V AC and 115V AC)	no	3 Manual override at 1/3/5
	Y	ATEX 2GD, without coil (for coil 23-SP-038)	no	Connector lugs at 2/4
	Z	ATEX 2GD / 3GD, without coil (for coil 23-SP-043 at 24V DC and 23-SP-037)	no	DC
				4 Manual override at 2/4
				Connector lugs at 2/4
				AC
				5 Manual override at 2/4
				Connector lugs at 2/4
				DC, low power
				6 Manual override at 2/4
				Connector lugs at 2/4
				7 without indication
				Manual override at 2/4
				0 without
				1 12 V
				2 24 V
				3 42 V
				4 48 V
				5 110 V
				6 115 V
				7 230 V
				8 240 V
				9 20 V
				A 4 V
				B 6 V
				C 8 V
				D 61 V
				E 36 V
				F 9 V

Not all options are suitable for all valve series

# Plug sockets

## Form B industrial norm

Overall width	22 mm
Contact distance	11 mm
Contacts	2P + E
Protection	IP 65 according to EN 60529 requires a flat gasket
For use with series	M-04, M-05, M-07, M-22, KM-09, KMX-10, MS-18, KN-05, MN-06, MI-01, MI-02, MI-03

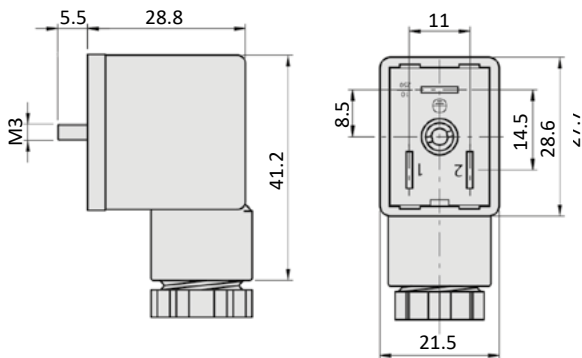


Model-no.:	28-ST-01	28-ST-04-112	28-ST-04-127	28-ST-06-112	28-ST-06-127	28-ST-06-K3-112*	28-ST-06-K3-127*
Voltage (AC/DC)	0 - 250 V	10 - 50 V	70 - 250 V	24 V	230 V	24 V	230 V
Status indicator	no	yes	yes	yes	yes	yes	yes
Protective circuit	no	no	no	yes (varistor)	yes (varistor)	yes (varistor)	yes (varistor)
Connecting cable	without	without	without	without	without	3 m	3 m
Wire cross section	max. 1.5 mm <sup>2</sup>	max. 1.5 mm <sup>2</sup>	max. 1.5 mm <sup>2</sup>	max. 1.5 mm <sup>2</sup>	max. 1.5 mm <sup>2</sup>	3 x 0.75 mm <sup>2</sup>	3 x 0.75 mm <sup>2</sup>
Ø Connecting cable	6 - 8 mm	6 - 8 mm	6 - 8 mm	6 - 8 mm	6 - 8 mm		

\* These plug sockets are fitted with integrated flat gaskets.

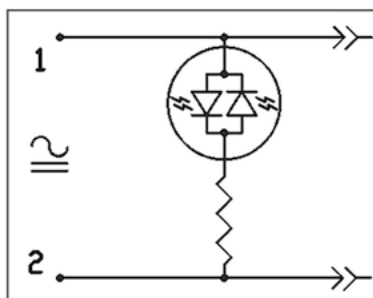
## Dimensions

### Form B industrial norm

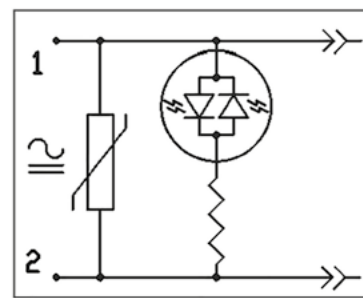


## Electrically circuits

### Status indicator (LED)



### Status indicator (LED) and protective circuit (varistor)



## Solenoid coils

### Form B industrial norm

Overall width	22 mm
Contact distance	11 mm
Contacts	2P + E
Protection	IP 65 according to EN 60529 with connected plug socket
Duty cycle	100 %
Voltage tolerance	± 10 %



Model-no.:	23-SP-011-1-711	23-SP-011-1-712
Voltage	12 V DC	24 V DC
Power consumption DC	4.2 W	4.2 W
Power consumption AC	-	-
Temperature range*	-40°C...+80°C	-40°C...+80°C
Specifics	enhanced humidity resistance	

\* The max. applicable operating temperature depends on the temperature specification of the used valve.



## Series KMX-10

### Device marking

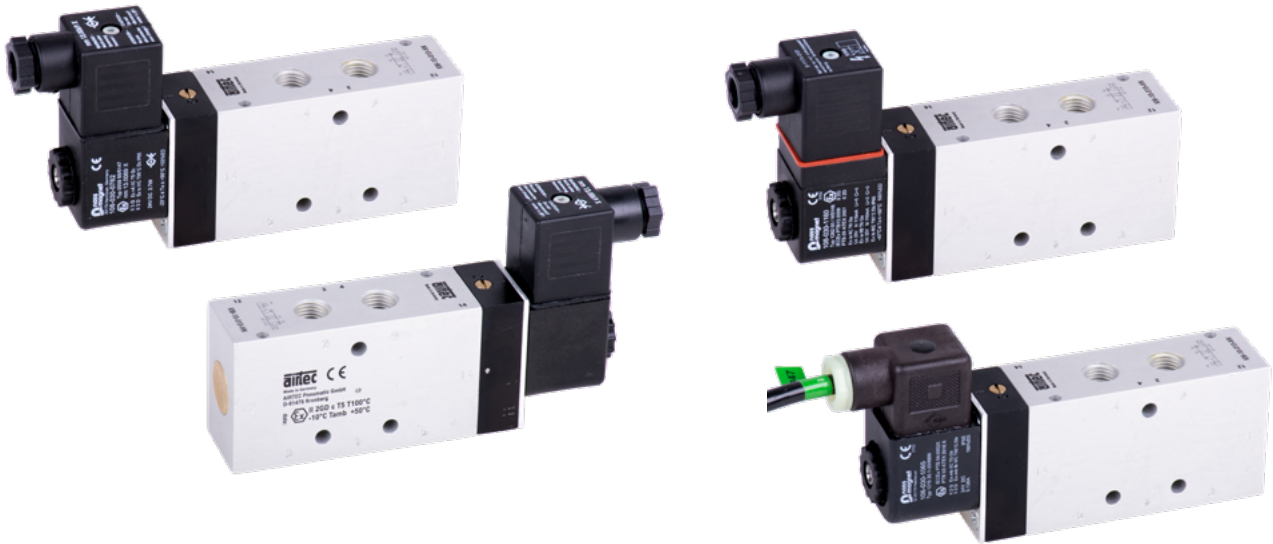
Electrically operated valves are marked as follows:



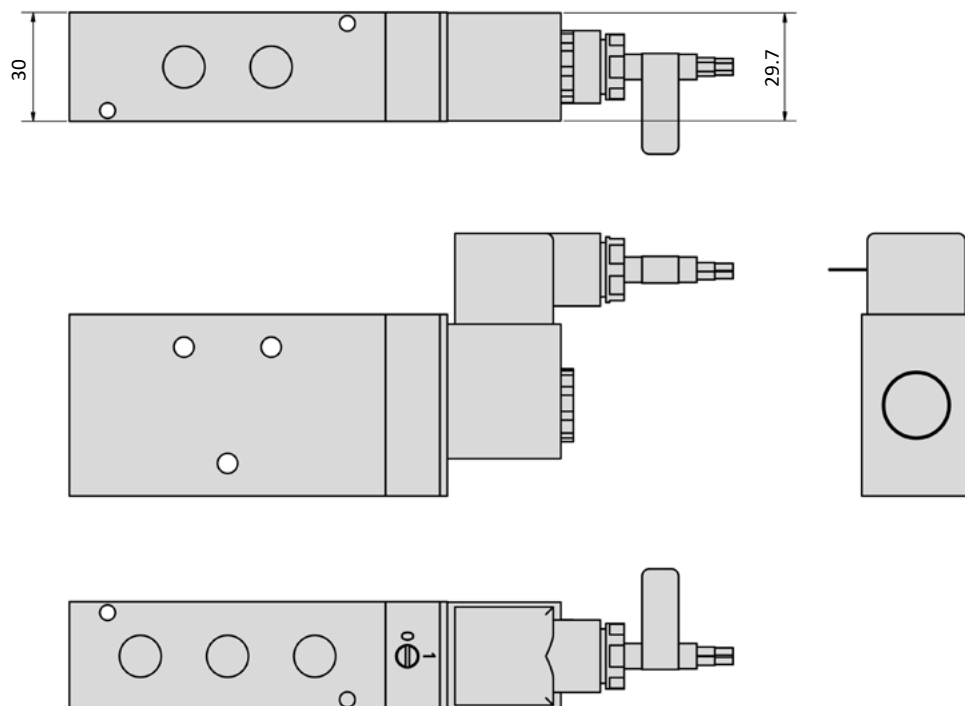
II 2G Ex h IIC T5 Gb  
II 2D Ex h IIIC T100°C Db  
-10°C T<sub>amb</sub> +50°C



Marking according to DIN EN ISO 80079-36/ -37.

### Series KMX-10



Electrically operated valves conform to equipment category 2 can be used in Zone 1 respectively in Zone 21. For the use in hazardous areas the category group of the used coil has to be taken into account. The specification of the whole equipment corresponds always to the lowest category of the single components.

**Divergent dimensions**
**Series KMX-10**


-  The valves are equipped with special electrical equipment. As a result, the dimensions of these components may change. In addition to the valve dimensions, please note the dimensions of the solenoid coils on the following pages.
-  Please observe the respective operating instructions and declarations of conformity. These are enclosed with the products and are available at [www.airtec.de](http://www.airtec.de).



## Electrical options

ATEX-category	Voltage	Power consumption	Ignition protection	Solenoid coil #	-xxx Manual override on same side of ports	
					2 or 2 and 4	1. 3 or 1. 3 and 5
3GD	24 V DC	2.7 W	Non-sparking device	23-SP-043-A12	-B42	-B12
3GD	230 V AC	4 VA	Non-sparking device	23-SP-043-A27	-B57	-B27
2GD	24 V DC	3 W	encapsulated with casting compound and flameproof enclosure	23-SP-045-V12	-V42	-V12
2GD	230 V AC	3.8 VA	encapsulated with casting compound and flameproof enclosure	23-SP-045-V27	-V57	-V27
2GD	12 V DC	3.3 W	Encapsulated with casting compound	23-SP-037-011-xx*	-041-xx*	-011-xx*
2GD	24 V DC	3.3 W	Encapsulated with casting compound	23-SP-037-012-xx*	-042-xx*	-012-xx*
2GD	110...120 V AC	3 VA	Encapsulated with casting compound	23-SP-037-025-xx*	-055-xx*	-025-xx*
2GD	230 V AC	3.1 VA	Encapsulated with casting compound	23-SP-037-027-xx*	-057-xx*	-027-xx*
2GD	U ≤ 28 V DC / U ≤ 32 V DC	I ≤ 115 mA / I ≤ 195 mA	Intrinsically safe	23-SP-038-01-912	-942	-912

# For details on the ATEX solenoid coils, see chapter 12.

\* xx = length of connecting cable: 03 = 3 m. 05 = 5 m. 10 = 10 m (available length see chapter 12)



## Solenoid coils

### 23-SP-037

Ignition protection class	Encapsulated with casting compound mb (gases) mb tb (dust)
Classification	II 2G Ex mb IIC T5 II 2D Ex mb tb IIIC T95°C IP65
Overall width	30 mm
Temperature range*	-20°C...+50°C (battery fitted -20°C...+40°C)
Temperature range medium	-10°C...+50°C (battery fitted -10°C...+40°C)

\* The max. applicable operating temperature depends on the temperature specification of the used valve.



Model-no.:	23-SP-037-012-xx	23-SP-037-025-xx	23-SP-037-027-xx
Voltage	24 V DC	110...120 V AC	230 V AC
Power consumption	3.3 W	3 VA	3.1 VA
Rated current	136 mA	27 mA	14 mA
Connecting cable (xx)	03 = 3 m, 05 = 5 m, 10 = 10 m	03 = 3 m	03 = 3 m, 05 = 5 m

## Solenoid coils

### 23-SP-038

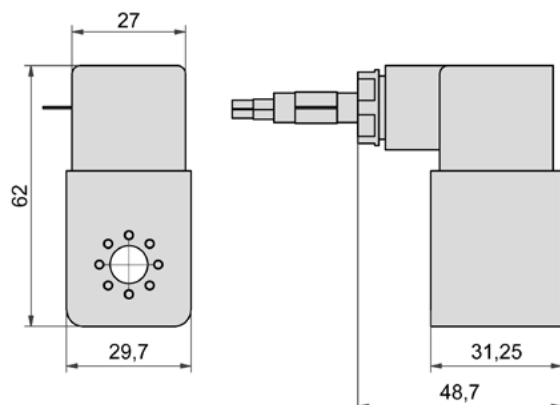
Ignition protection class	Intrinsically safe ia (gases) t (dust)
Classification	II 2G Ex ia IIC T6 Ga ( $\leq 28$ V DC) II 2G Ex ia IIB T6 Ga ( $\leq 32$ V DC) II 2D Ex t IIIC T80°C Db IP65
Overall width	30 mm
Temperature range*	-40°C...+50°C
Temperature range medium	-10°C...+50°C (battery fitted -10°C...+40°C)

\* The max. applicable operating temperature depends on the temperature specification of the used valve.

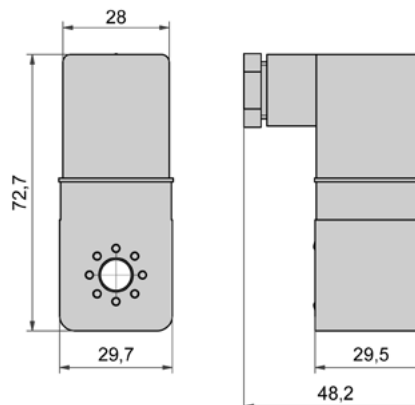
Model-no.:	23-SP-038-01-912
Voltage	$U \leq 28$ V DC / $U \leq 32$ V DC
Rated current	$I \leq 115$ mA / $I \leq 195$ mA
Connection	plug (part of delivery)

## Dimensions

### 23-SP-037



### 23-SP-038





## Valves

### Electrically operated

#### Solenoid coils

#### 23-SP-043

Ignition protection class	enhanced safety na (gases) tc (dust)
Classification	II 3 G Ex ec IIC T5 Gc II 3 D Ex tc IIIC T95°C Dc IP65
Overall width	30 mm
Temperature range*	-20°C...+50°C
Temperature range medium	-10°C...+50°C

\* The max. applicable operating temperature depends on the temperature specification of the used valve.

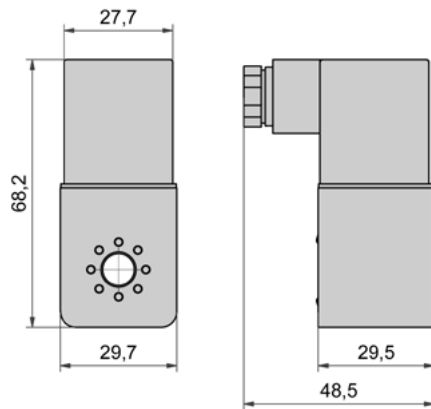


Model-no.:	23-SP-043-A12	23-SP-043-A27
Voltage	24 V DC	230 V AC
Power consumption	2.7 W	4 VA
Rated current	112 mA	17,5 mA
Connection	plug (part of delivery)*	plug (part of delivery)*

\* The socket is supplied unassembled.

#### Dimensions

#### 23-SP-043



## Solenoid coils

### 23-SP-045

<b>Ignition protection class</b>	encapsulated with casting compound and flameproof enclosure d mb (gases) tb (dust)
<b>Classification</b>	II 2G Ex d mb IIC T5 Gb II 2D tb IIIC T95°C Db IP66
<b>Overall width</b>	30 mm
<b>Temperature range*</b>	-20°C...+50°C
<b>Temperature range medium</b>	-10°C...+50°C

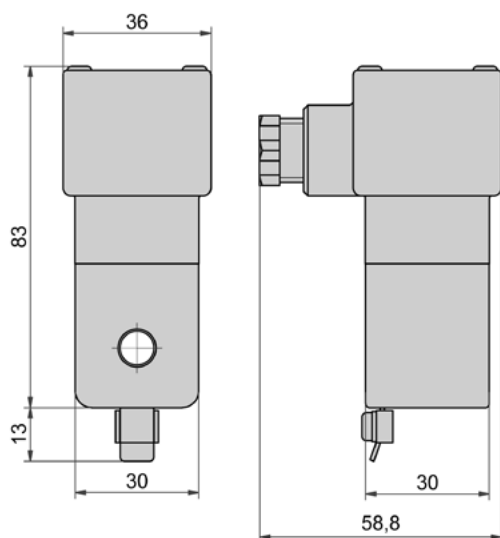
\* The max. applicable operating temperature depends on the temperature specification of the used valve.



Model-no.:	23-SP-045-V12	23-SP-045-V27
<b>Voltage</b>	24 V DC	230 V AC
<b>Power consumption</b>	3 W	3,8 VA
<b>Rated current</b>	125 mA	14 mA
<b>Connection</b>	terminal box	terminal box

## Dimensions

### 23-SP-045



Delivery is only made in a fully assembled state with valve, as the approval relates to both the electrical and mechanical components. The delivery of individual parts is only permitted for replacement purposes.



The operating instructions for the valve and the electrical equipment must be taken into account before putting into operation. These are included with each valve and are available at [www.airtec.de](http://www.airtec.de).