

Valves series AX1 - Encapsulated coil Ex mb

1/4", 3/2 - 5/2 - 5/3, IN LINE and NAMUR interface, electrically operated Ex mb



Standard executions		
Version	Symbol	Code
3/2 NC		For code key see the table below
3/2 NO		
3/2 solenoid/solenoid		
5/2 solenoid/spring		
5/2 solenoid/solenoid		
5/2 solenoid/solenoid differential		
5/3 closed centres		
5/3 open centres		
5/3 pressurised centres		



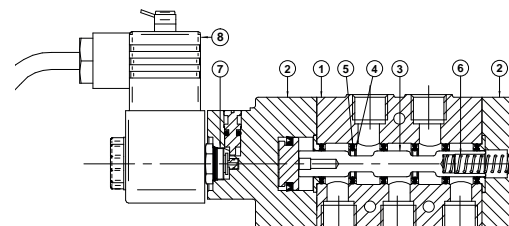
New series of "AX" valves with functions 3/2 - 5/2 - 5/3 connection in line on the body or NAMUR. Electric and electric servo pilot. They are manufactured in AISI 316L stainless steel, especially suitable in the food, chemical, pharmaceutical, Oil & Gas and mining industry. AX valves are manufactured according to 2014/34/EU Directive to be used in potentially explosive environment. Solenoid operator with a special coil for pneumatic application in potentially explosive environment (group II).

Solenoid system is conforming to 2014/34/EU Directive, certified:

II 2G Ex mb IIC T5 Gb
 II 2D Ex tb IIIC T95°C Db IP66

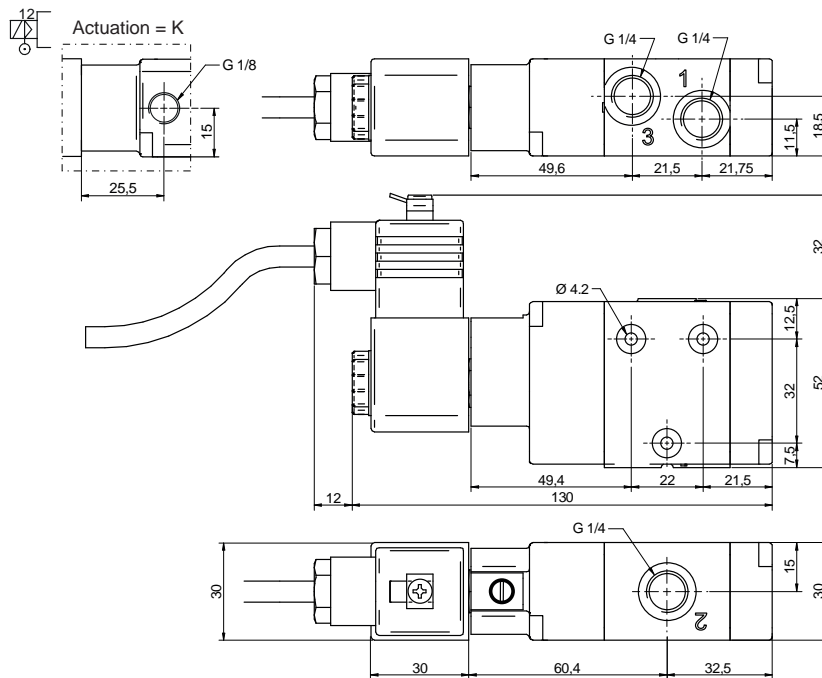
Code key					
Series	Actuation	Size	Function	Hazardous areas	Voltages
AX1 = Standard AXX1* = Completely in stainless steel AX1N = NAMUR AXX1N* = NAMUR Completely in stainless steel	E = electrical Ø9 K = electrical Ø9 external air pilot	2 = 1/4 Gas 2N = 1/4 NPT	30 = 3/2 NC 31 = 3/2 NO 32 = 3/2 solenoid/solenoid 50 = 5/2 solenoid/spring 51 = 5/2 solenoid/solenoid 52 = 5/2 solenoid/solenoid differential 70 = 5/3 CC 71 = 5/3 OC 72 = 5/3 PC	XD = II 2G Ex mb IIC T5 Gb II 2D Ex tb IIIC T95°C Db IP66	A = 6 VDC B = 12 VDC C = 24 VDC * D = 48 VDC E = 12 VAC F = 24 VAC * G = 48 VAC * H = 100 VAC I = 110 VAC * L = 115 VAC M = 120 VAC O = 220 VAC * P = 230 VAC Q = 240 VAC
* On request					* = Standard voltages

Technical data															
Fluid	Compressed filtered air with or without lubrication. Lubrication, if started, must be continued.														
Threaded connection	1/4 Gas - 1/4 NPT														
Pressure range	Spring return: 2,5 ÷ 10 bar			Bistable: 1 ÷ 10 bar				3 positions: 2,5 ÷ 10 bar							
Minimum external air pressure	1,5 bar														
Temperature range	-25°C ÷ +50°C														
Protection grade	IP66														
Ø Orifice	8 mm														
Flow	1.100 NI/min at 6 bar with ΔP 1 bar														
Mounting	In any position (vertical assembly is not recommended for bistable valves subjected to vibration)														
Cable lenght	3 mt.														
Manual override	Bistable														
Electrical characteristic	Nominal voltage	6VDC	12VDC	24VDC	48VDC	12VAC	24VAC	48VAC	100VAC	110VAC	115VAC	120VAC	220VAC	230VAC	240VAC
	Frequency	-	-	-	-	5060Hz	5060Hz	5060Hz	5060Hz	5060Hz	5060Hz	5060Hz	5060Hz	5060Hz	5060Hz
	Nominal current	0.510A	0.250A	0.125A	0.063A	0.270A	0.133A	0.067A	0.032A	0.029A	0.028A	0.027A	0.014A	0.014A	0.013A
	Nominal power	3W	3W	3W	3W	3.2VA	3.2VA	3.2VA	3.2VA	3.2VA	3.2VA	3.2VA	3.2VA	3.2VA	3.2VA
	Duty cycle	100% ED													
	Temp. class	T5													
Response time (at 6 bar)	Energising: - ms				Energising: - ms				Energising: - ms						
	De-energising: - ms				De-energising: - ms				De-energising: - ms						
Materials	(1) Body:	Stainless steel AISI 316L													
	(2) Cover:	Stainless steel AISI 316L													
	(3) Spool:	Hard aluminium anodized (AX series) Stainless steel AISI 316 (AXX series)													
	(4) Distancers:	Ixef 1022 (AX series) Stainless steel AISI 316 (AXX series)													
	(5) Seals:	Hydrogenate Nitrile Butadine Rubber (HNBR)													
	(6) Spring:	Stainless steel													
	(7) Operator:	Stainless steel													
	(8) Coil:	Thermoset resin													



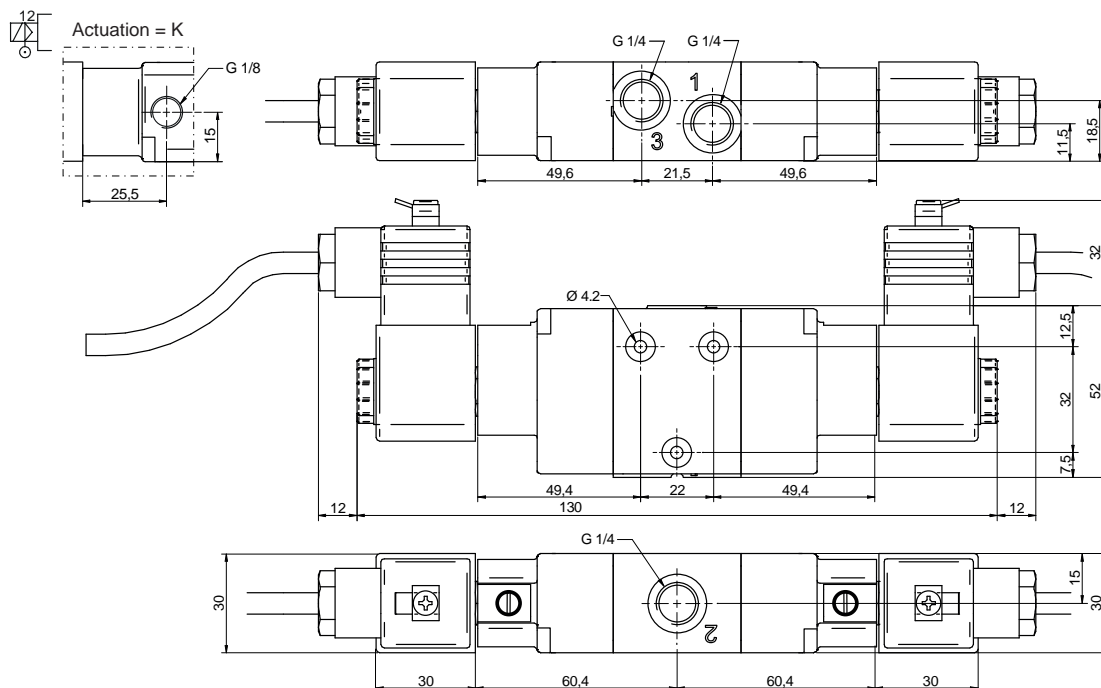
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Version	Symbol	Code	Item
3/2 NC			AX1E230XD*
3/2 NO			AX1E231XD*
3/2 NC external air pilot			AX1K230XD*

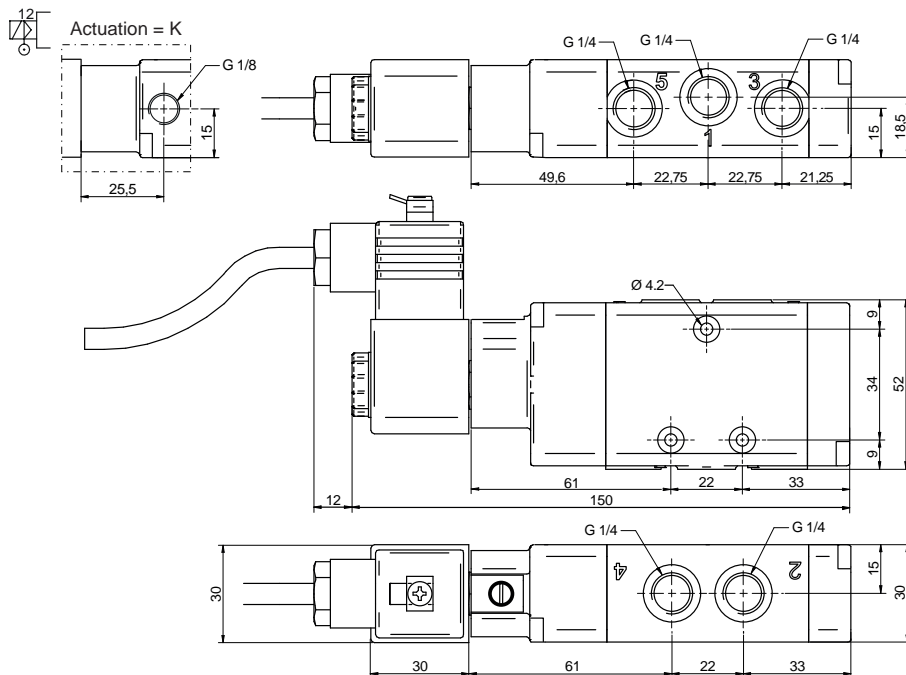
* For coil voltage: see code key at page 5.85.1



Version	Symbol	Code	Item
3/2 solenoid/solenoid			AX1E232XD*
3/2 solenoid/solenoid external air pilot			AX1K232XD*

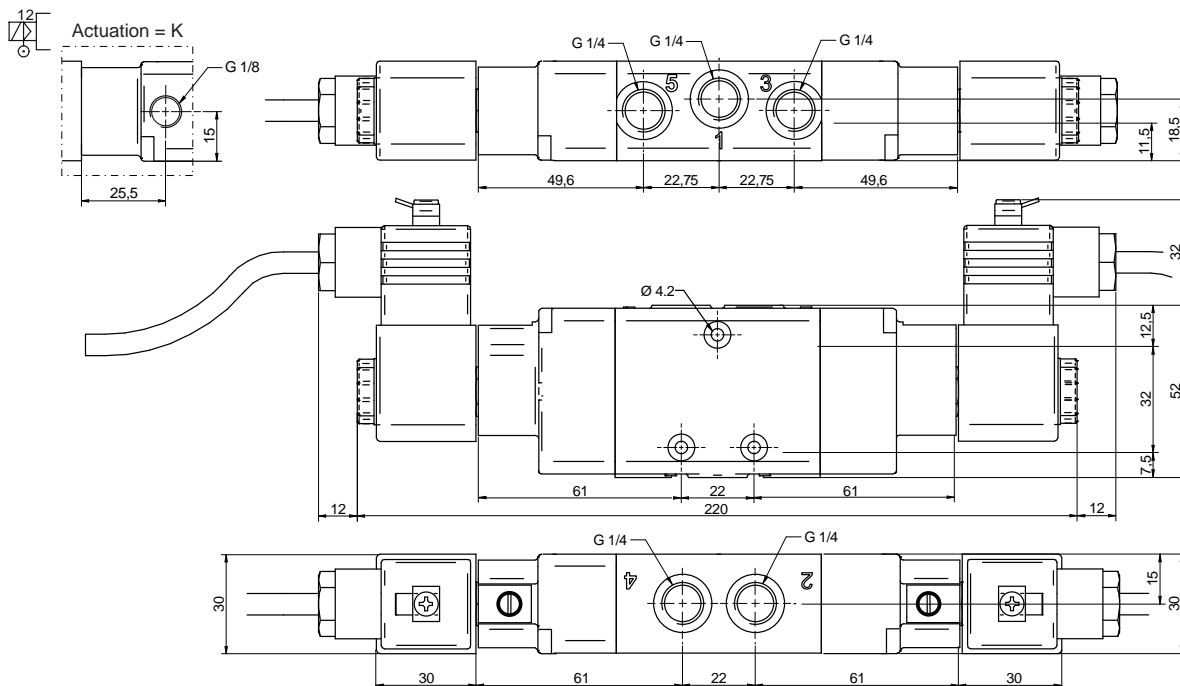
* For coil voltage: see code key at page 5.85.1

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Version	Symbol	Code	Item
5/2 solenoid/spring			AX1E250XD*

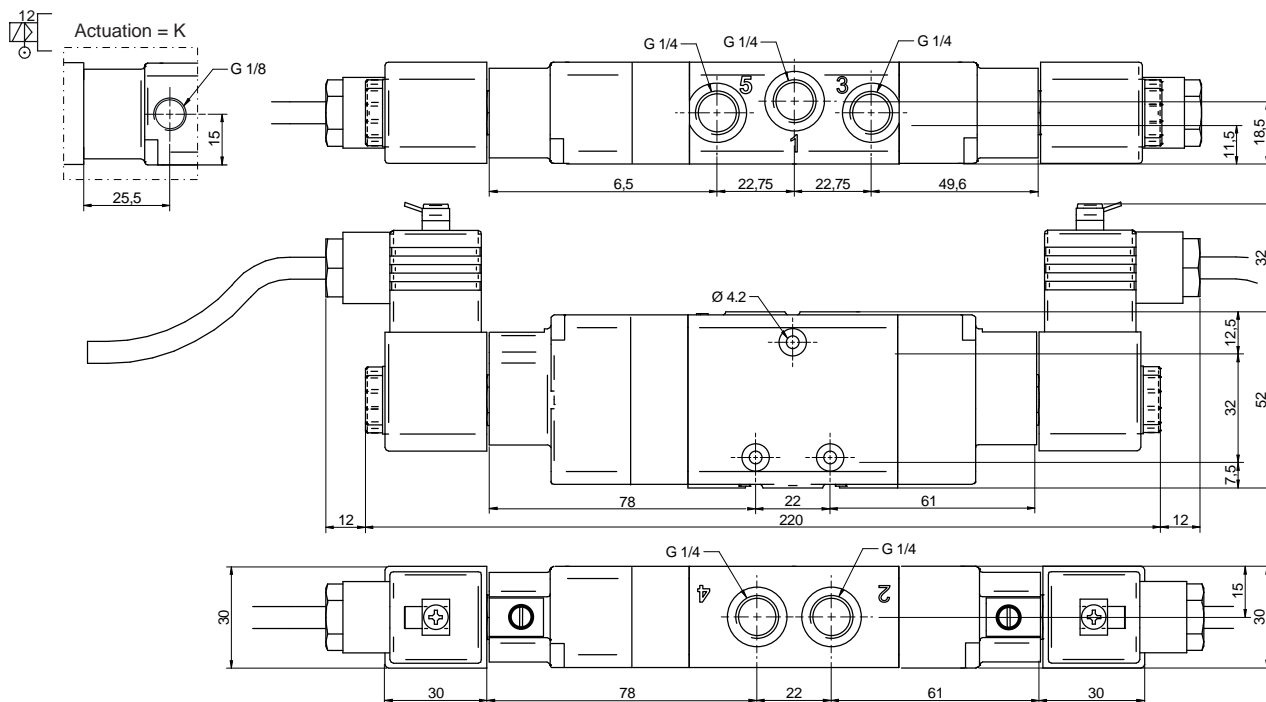
* For coil voltage: see code key at page 5.85.1



Version	Symbol	Code	Item
5/2 solenoid/solenoid			AX1E251XD*
5/2 solenoid/solenoid differential			AX1E252XD*

* For coil voltage: see code key at page 5.85.1

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Version	Symbol	Code	Item
5/3 closed centres			AX1E270XD*
5/3 open centres			AX1E271XD*
5/3 pressurised centres			AX1E272XD*

Version	Symbol	Code	Item
5/3 closed centres, external air pilot			AX1K270XD*
5/3 open centres, external air pilot			AX1K271XD*
5/3 pressurised centres external air pilot			AX1K272XD*

* For coil voltage: see code key at page 5.85.1

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