

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



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.

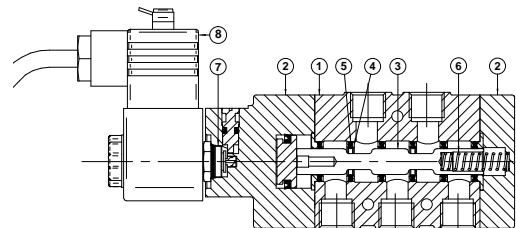
Solenoid operator with a special coil for pneumatic application in potentially explosive environment (group II).

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

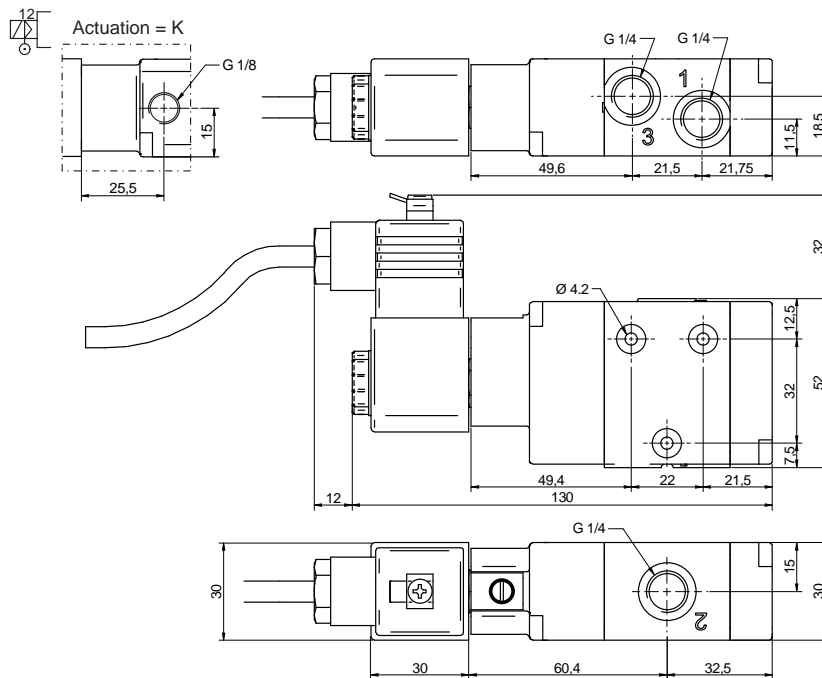
II 2G Ex mb IIC T5 Gb
II 2D Ex tb IIIC T95°C IP66 Db

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 IP66 Db	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 * = 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: 1.5 ÷ 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													
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)													
Manual override		Bistable													
Electrical characteristic	Nominal voltage	6 VDC	12 VDC	24 VDC	48 VDC	12 VAC	24VAC	48 VAC	100 VAC	110 VAC	115 VAC	120 VAC	220 VAC	230 VAC	240 VAC
	Frequency	-	-	-	-	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
	Nominal current	0.510 A	0.250 A	0.125 A	0.063 A	0.270 A	0.133 A	0.067 A	0.032 A	0.029 A	0.028 A	0.027 A	0.014 A	0.014 A	0.013 A
	Nominal power	3W	3W	3W	3W	3.2 VA	3.2 VA	3.2 VA	3.2 VA	3.2 VA	3.2 VA	3.2 VA	3.2 VA	3.2 VA	3.2 VA
	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) Fortron 1140L4 (AX series)													
	(4) Distancers:	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													

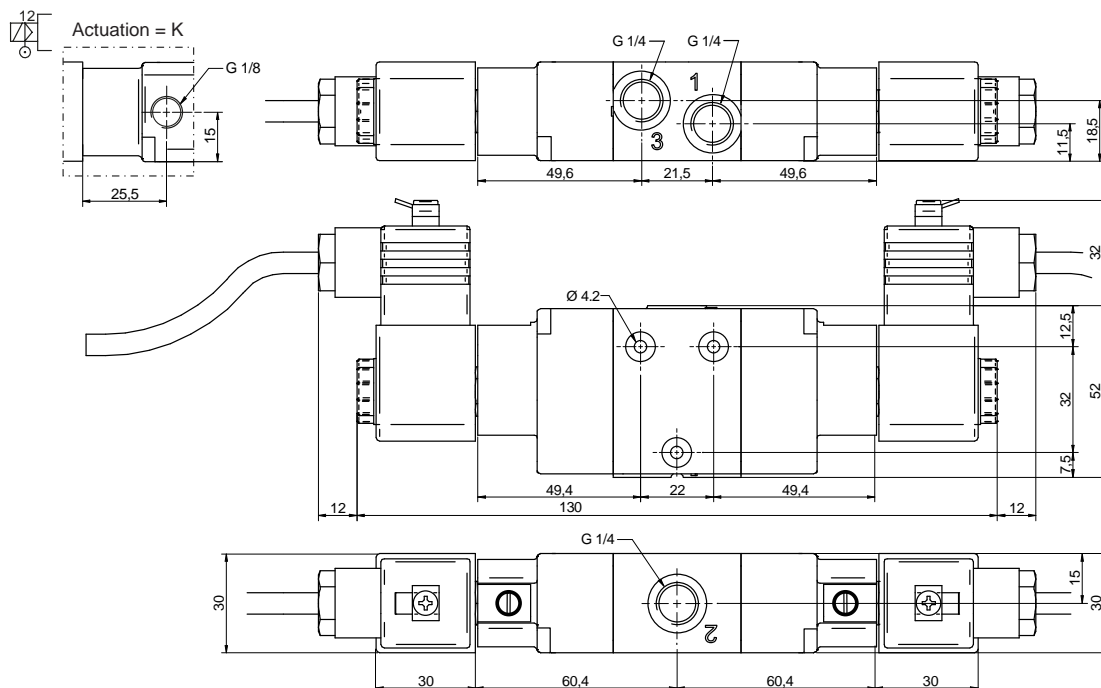


Valves series AX1 - Encapsulated coil Ex mb
 1/4", 3/2 - 5/2 - 5/3, IN LINE interface, electrically operated Ex mb



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

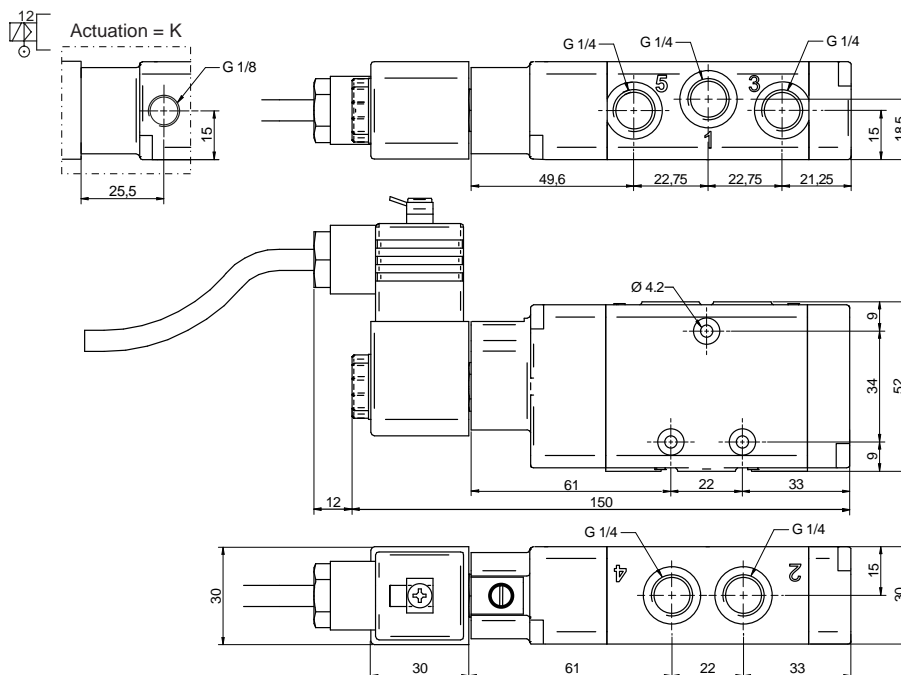


Version	Symbol	Code	Item
3/2 solenoid/solenoid			AX1E232XD*
3/2 solenoid/solenoid external air pilot			AX1K232XD*

* For coil voltage: see code key at page 5.85.1

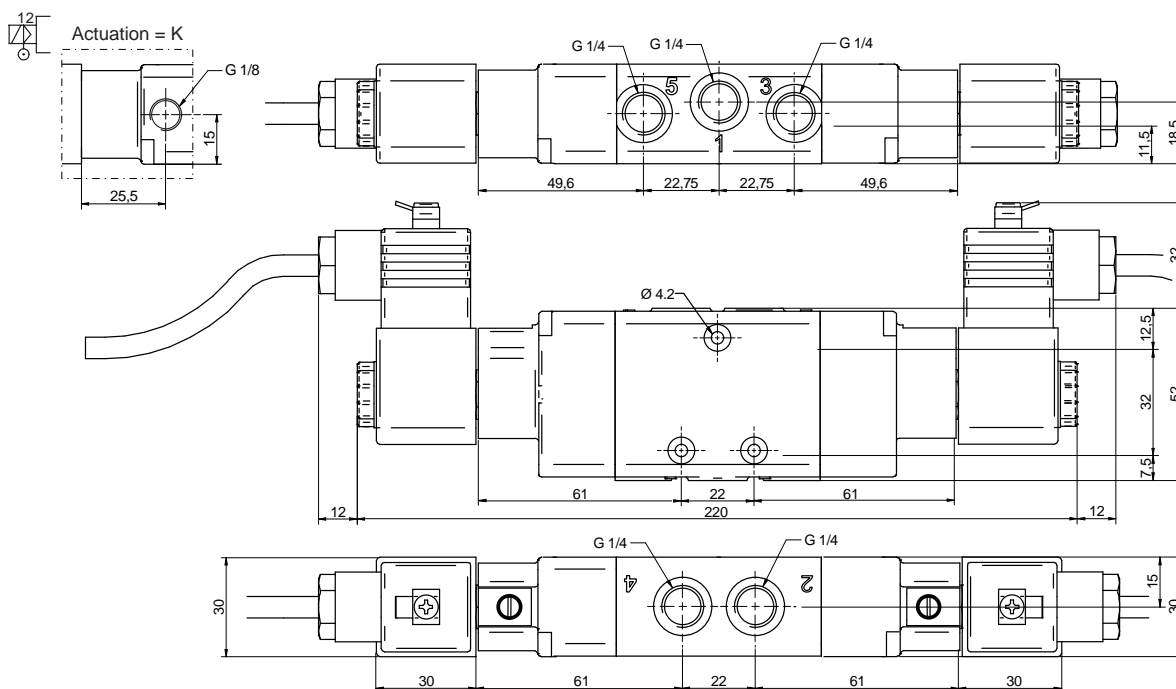
Valves series AX1 - Encapsulated coil Ex mb

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



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

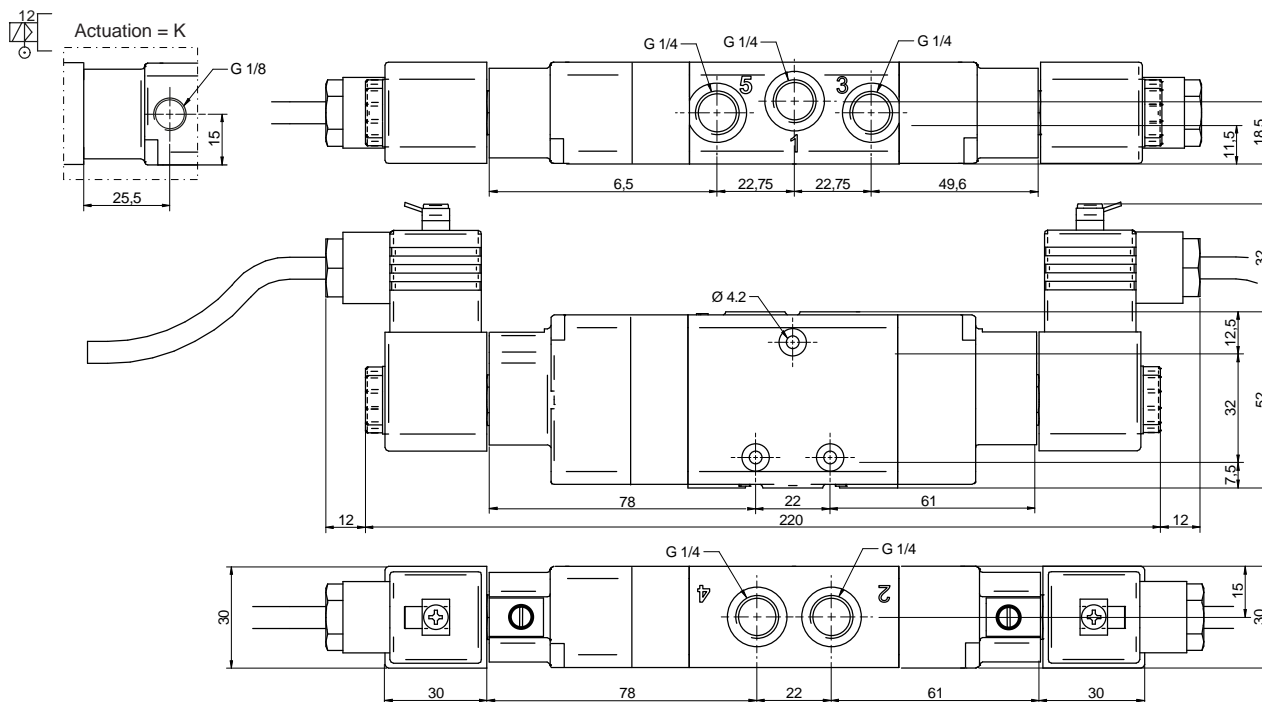
* For coil voltage: see code key at page 5.85.1



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

Valves series AX1 - Encapsulated coil Ex mb
 1/4", 3/2 - 5/2 - 5/3, IN LINE interface, electrically operated Ex mb



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

Valves series AX1 - Encapsulated coil Ex mb
1/4", 3/2 - 5/2, NAMUR interface, electrically operated Ex mb

