

Valves series AX1 - Encapsulated coil Ex dm

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



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.

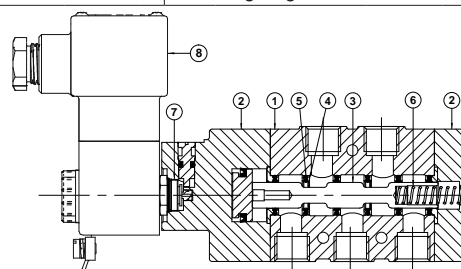
Solenoid operator with a special coil for pneumatic application in potentially explosive environment (group II). The protection is assured by a thermal fuse that, in case of damage, disconnects the coil from power.

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

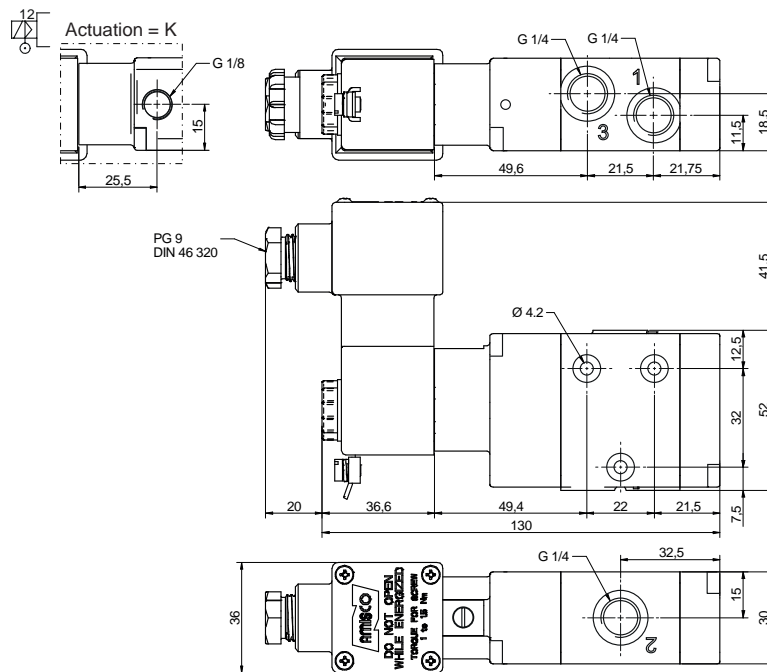
II 2G Ex db mb IIC T5 Gb
II 2D Ex tb IIIC T95°C Db IP66

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	XB = II 2G Ex db 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)	
Manual override	Bistable	
Electrical characteristic	Nominal voltage	6VDC 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 3.2 VA
	Duty cycle	100% ED
	Temp. class	T5
Response time (at 6 bar)	Energising: - ms	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

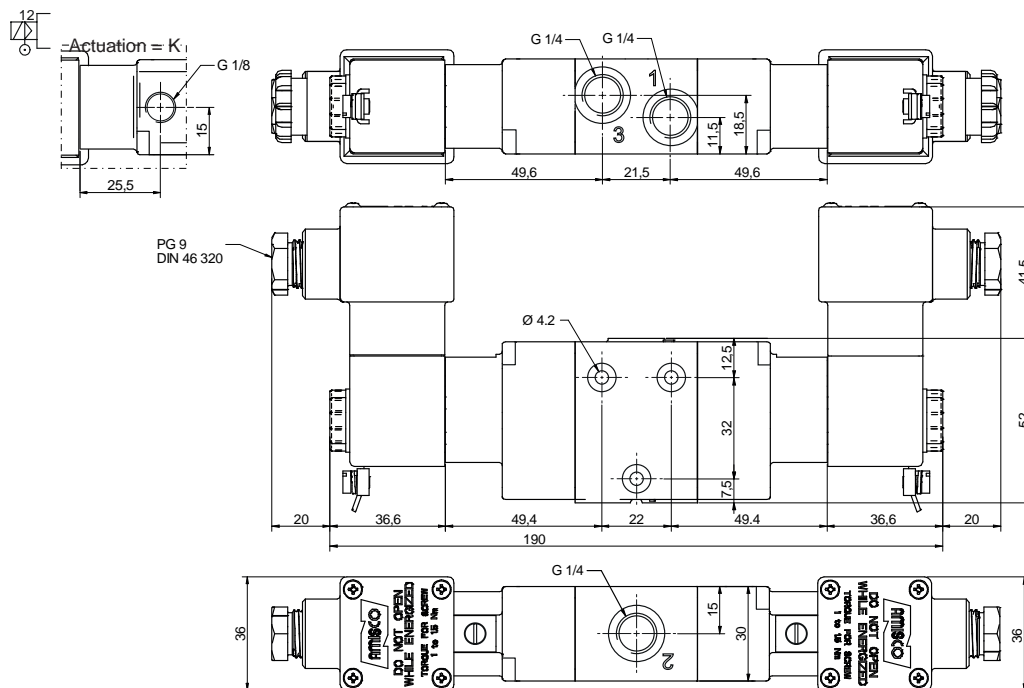


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Version	Symbol	Code	Item
3/2 NC			AX1E230XB*
3/2 NO			AX1E231XB*
3/2 NC external air pilot			AX1K230XB*

* For coil voltage: see code key at page 5.83.1

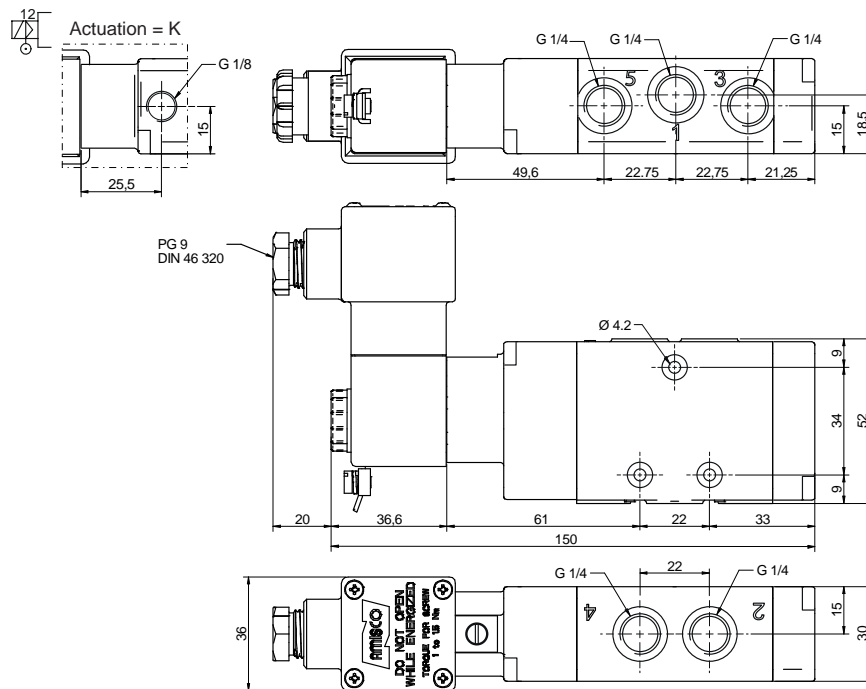


Version	Symbol	Code	Item
3/2 solenoid/solenoid			AX1E232XB*
3/2 solenoid/solenoid external air pilot			AX1K232XB*

* For coil voltage: see code key at page 5.83.1

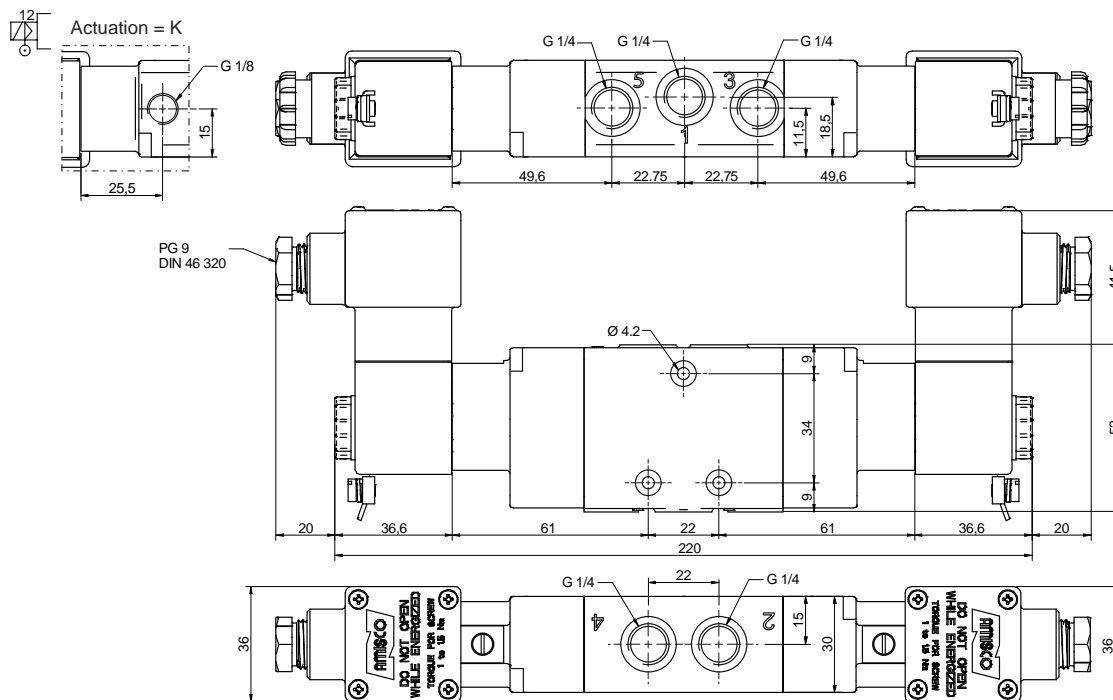
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Version	Symbol	Code	Item
5/2 solenoid/spring			AX1E250XB*

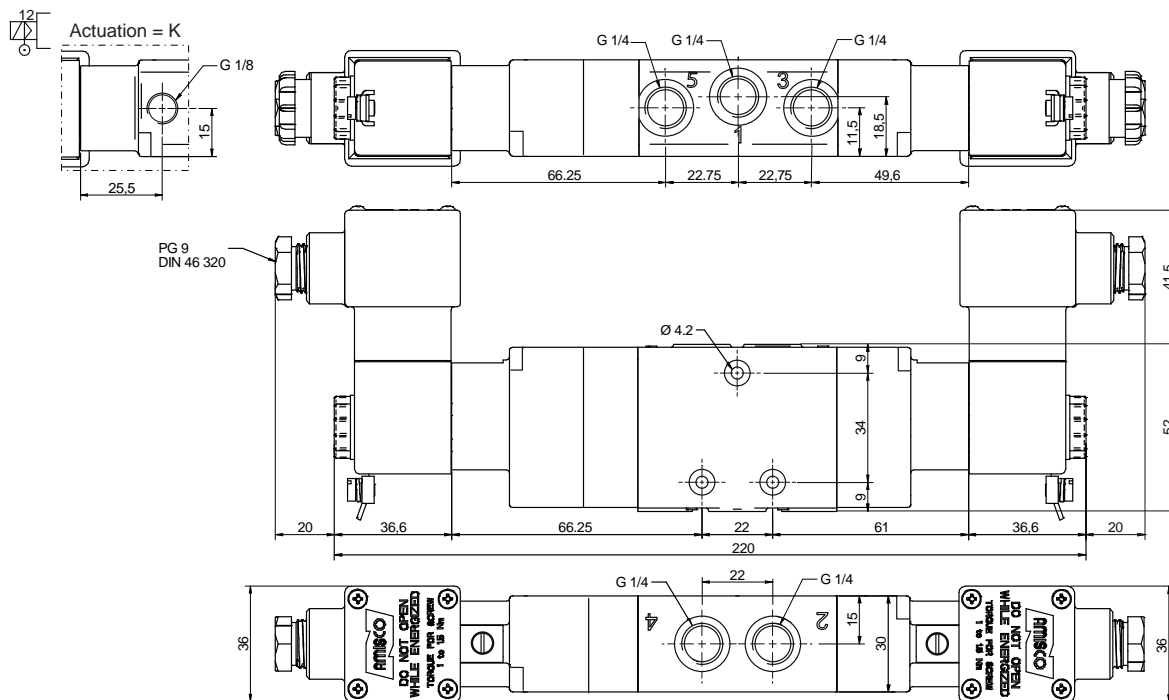
* For coil voltage: see code key at page 5.83.1



Version	Symbol	Code	Item
5/2 solenoid/solenoid			AX1E251XB*
5/2 solenoid/solenoid differential			AX1E252XB*

* For coil voltage: see code key at page 5.83.1

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Version	Symbol	Code	Item	Version	Symbol	Code	Item
5/3 closed centres			AX1E270XB*	5/3 closed centres, external air pilot			AX1K270XB*
5/3 open centres			AX1E271XB*	5/3 open centres, external air pilot			AX1K271XB*
5/3 pressurised centres			AX1E272XB*	5/3 pressurised centres external air pilot			AX1K272XB*

* For coil voltage: see code key at page 5.83.1

