

| 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.

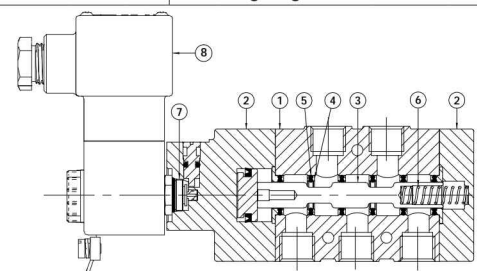
Solenoid operator with a special coil for pneumatic application in potentially explosive environment (group II). The protection is assured by a thermal fuse that, in case of damage, disconnects the coil from power.

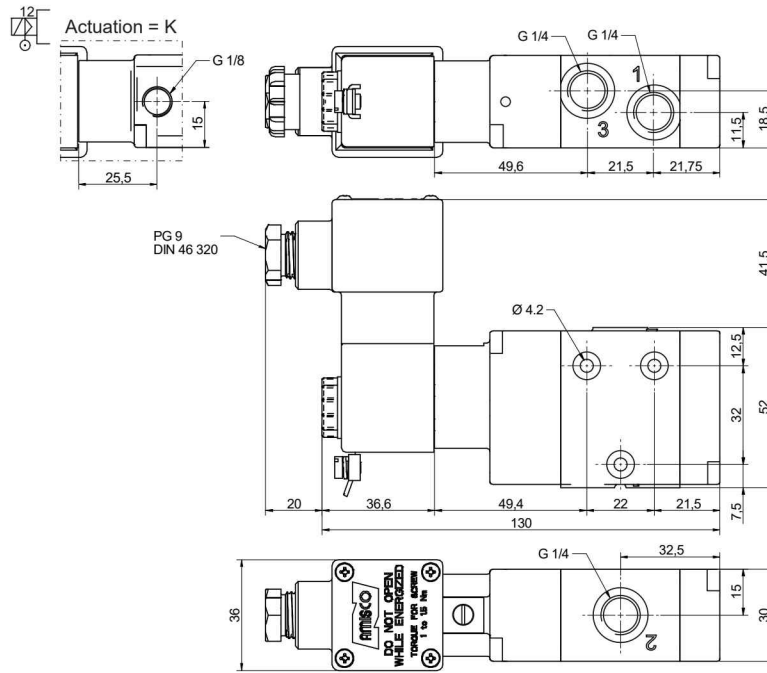
Solenoid system is conforming to 2014/34/EU Directive, certified:

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 |

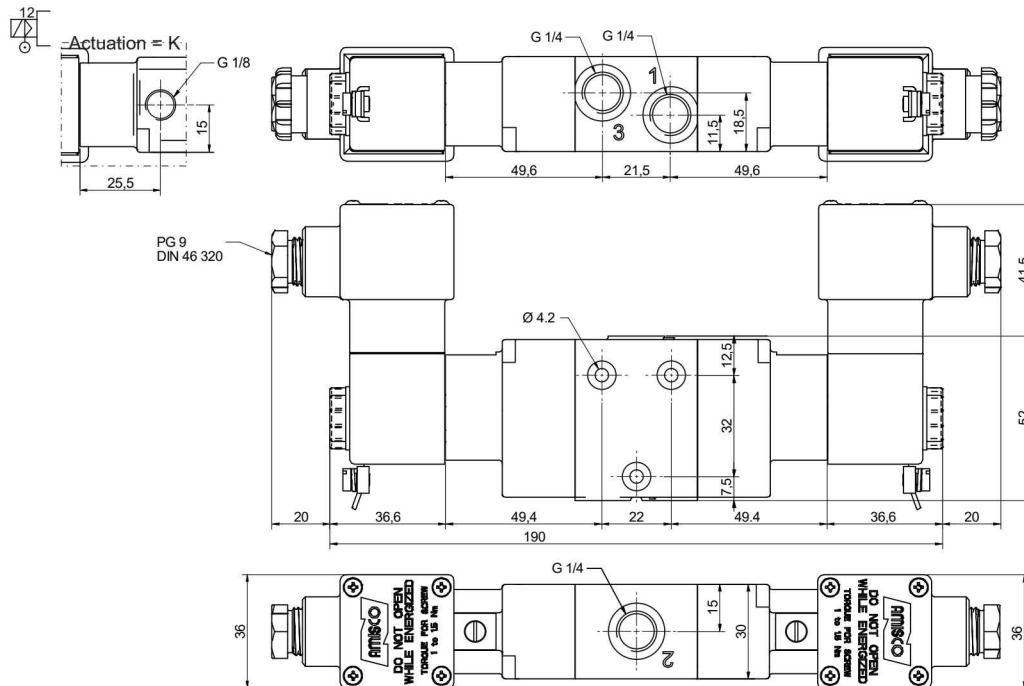
| Technical data | | | | | | | | | | | | | | | | |
|-------------------------------|---|--|--------|----------------------|---------------------|----------|----------|---------------------------|---------------------|----------|----------|----------|----------|----------|----------|-------|
| Fluid | 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 | 12VDC | 24VDC | 48VDC | 12VAC | 24VAC | 48VAC | 100VAC | 110VAC | 115VAC | 120VAC | 220VAC | 230VAC | 240VAC | |
| | 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 | 0.510A | 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 | 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 | | | | | | | | | | | | | | |





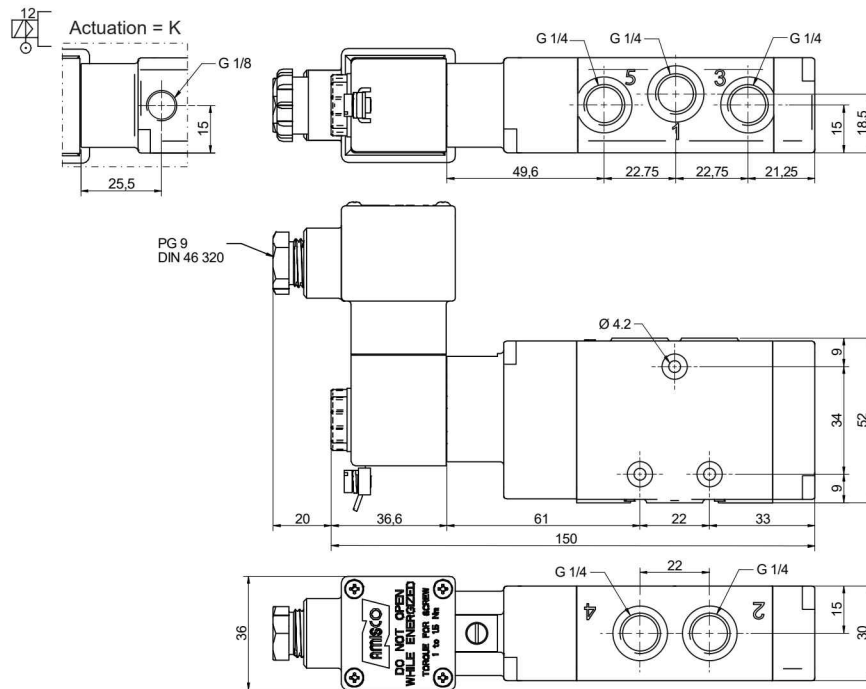
| Version | Symbol | Code | Item |
|---------------------------|--------|------|------------|
| 3/2 NC | | | AX1E230XB* |
| 3/2 NO | | | AX1E231XB* |
| 3/2 NC external air pilot | | | AX1K230XB* |

* For coil voltage: see code key at page 5.83.1



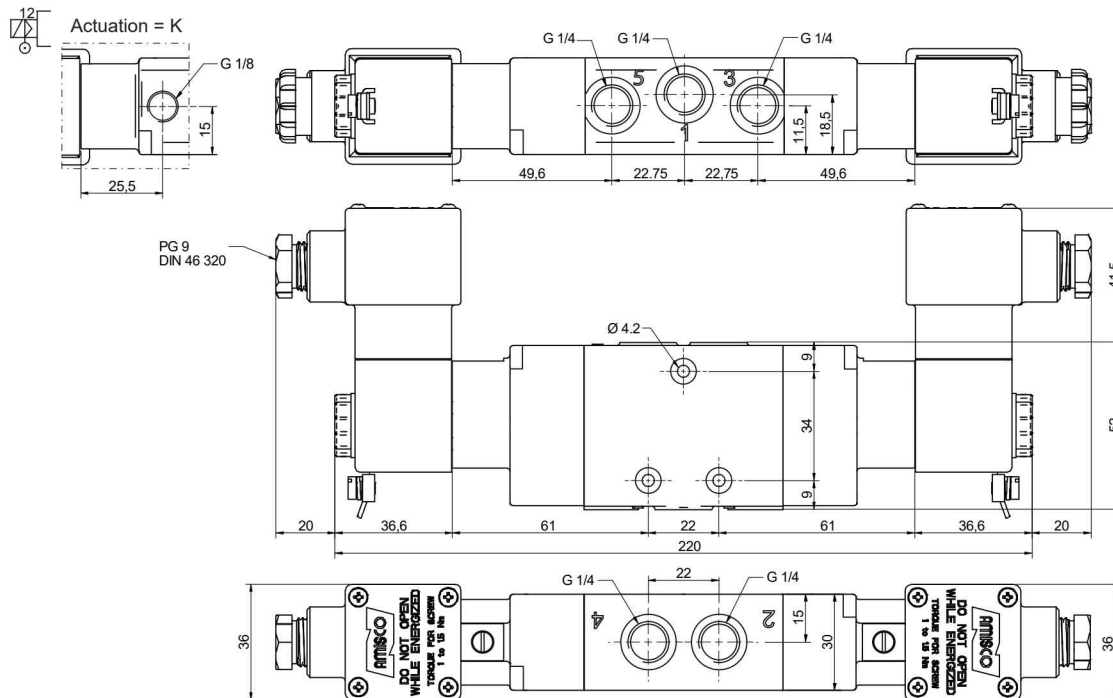
| Version | Symbol | Code | Item |
|--|--------|------|------------|
| 3/2 solenoid/solenoid | | | AX1E232XB* |
| 3/2 solenoid/solenoid external air pilot | | | AX1K232XB* |

* For coil voltage: see code key at page 5.83.1



| 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

