

# Solenoids

## U7\* - U7\*EX - G7\* - A8\* - G93 - H8\*

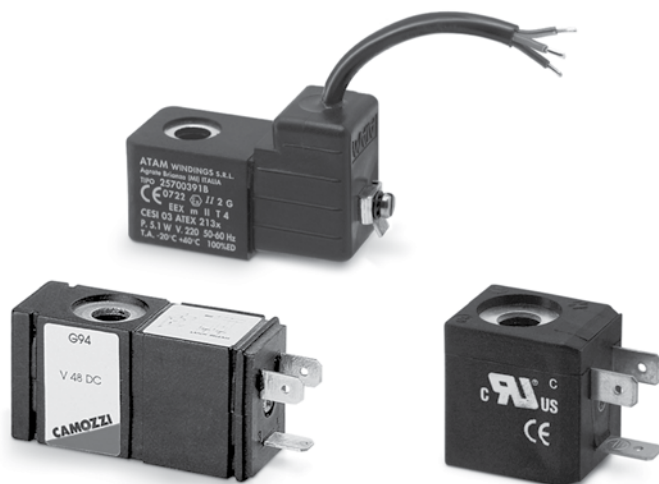
Version A and B

Connection according to DIN 43650 and DIN 40050 standards



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CONTROL



The mechanical part of the tube in the solenoid valves Series A, 3, 4, 9 and NA allows the mounting of various types of solenoids.

Mod. G9... is a special type of solenoid with incorporated memory for pulsed operation.

Mod. H8... is explosion-proof and suitable for potentially explosive ambients (ATEX).

Mod. U7... is also available certificated ATEX. To order this version it is necessary to add EX at the end of the code. For example: U79 becomes U79EX.

### GENERAL DATA

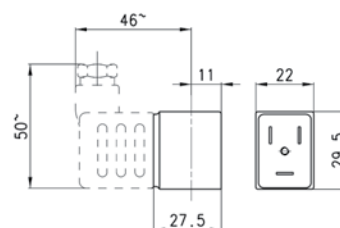
<b>Wire insulation</b>	U7... / G7... / G93 = class F (155° C) A8... = class H (180° C) H8... = class H (200° C)
<b>Protection class</b>	U7... / G7... / G93 = IP54 - DIN 40050 IP65 (with connector Mod. 122-800 and Mod. 122-800EX) A8... = IP54 - DIN 40050 IP65 (with connector Mod. 124-800) H8... = IP64
<b>Operation</b>	ED 100%
<b>Tolerance V AC</b>	+10 -15 %
<b>Tolerance V DC</b>	+/- 10 %

## Solenoids Mod. U7... / U7\*EX e Mod. G7...



Connections: Bipolar plus earth DIN 43650 (version B)  
Mod. U7\*EX marked II 3 GD Eex nA T4

Solenoid material:  
U7\* = PET  
G7\* = PA

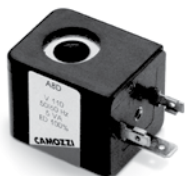


Mod.	Sol. volt.	Pow. abs.	Sol. volt.	Pow. abs.	Sol. volt.	Pow. abs.
<b>U7H - G7H</b>	12V - DC	3,1W	24V - 50/60Hz	3,5VA		
<b>U7K/U7K1, G7K/G7K1</b>	110V - 50/60Hz	3,8VA	125V - 50/60Hz	5,5VA	72V-DC	4,8W
<b>U7J - G7J</b>	230V - 50/60Hz	3,5VA	240V - 50/60Hz	4VA		
<b>U79 - G79</b>	48V - DC	3,1W				
<b>U710 - G710</b>	110V - DC	3,2W				
<b>U77/U771, G77/G771</b>	24V - DC	3,1W	48V - 50/60Hz	3,5VA		
<b>U7F - G7F</b>	380V - 50/60Hz	7VA				
<b>U72 - G72</b>	12V - DC	5W				
<b>U73 - G73</b>	24V - DC	5W				

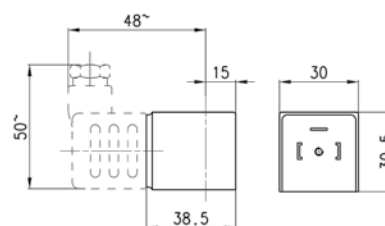
Notes to the table:  
Sol. volt. = Solenoid voltage  
Pow. abs. = Power absorption

Mod. U7K1, G7K1, U771 and G771 are to be used only with sol. valves series A, NO in line.

## Solenoids Mod. A8..



Connections: Bipolar plus earth DIN 43650 (version A)

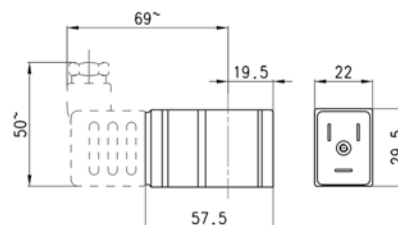


Mod.	Solenoid voltage	Power absorption
<b>A8B</b>	24 V - 50/60 Hz	5 VA
<b>A8D</b>	110 V - 50/60 Hz	5 VA
<b>A8E</b>	220 V - 50/60 Hz	5 VA
<b>A83</b>	24 V - DC	4 W

## Solenoids Mod. G93 (with memory)



Voltage tolerance: DC and AC  $\pm 10\%$   
Pulsed operation: see explanation

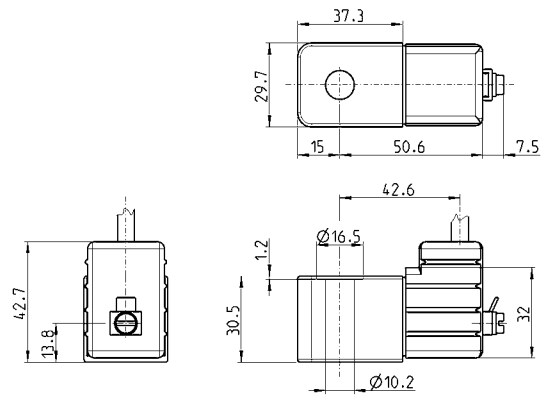


Mod.	Voltage V	Minimum impulse latch/release	Consumption mA latch/release
<b>G93</b>	24 DC	18 - 10	168 - 80



### Solenoid Mod. H8.. for potentially explosive ambients (ATEX)

Class F according to the standard VDE0580  
 Operating temperature: -20°C + 40°C  
 Connections: tripolar cable 3 mt (standard)  
 Conformity certificate to the standard CEI 31-8 (EN 50014) and CEI 31-13 (EN50028) marked EEx m IIT4.  
 Incapsulating: self-extinguishing PA.



For Series NA use plate mod. NA54-PC.

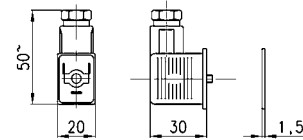
Mod.	Solenoid voltage	Power absorption
<b>H83</b>	24 V - DC	5,4 W
<b>H8B</b>	24 V - 50/60 Hz	5,3 VA
<b>H8C</b>	48 V - 50/60 Hz	5,3 VA
<b>H8D</b>	110 V - 50/60 Hz	5,3 VA
<b>H8E</b>	230 V - 50/60 Hz	5,3 VA



### Connectors for solenoids Mod. U7.. and G7..

According to the standard DIN 43650 (PG)

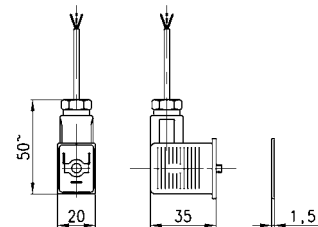
Mod. 122-800EX:  
 for solenoids mod. U7\*EX certificated to the standard ATEX, with anti-screwing off screw mod. TORX.



Mod.	Torque (Nm)
<b>122-800</b>	0,5
<b>122-800EX</b>	0,5



### Connectors for solenoids Mod. G9

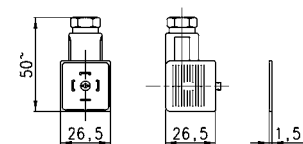


Mod.	Connection	Torque (Nm)
<b>122-892C</b>	P common positive	0,5
<b>122-893C</b>	N common negative	0,5



### Connectors for solenoids Mod. A8

According to the standard DIN 43650 (PG)



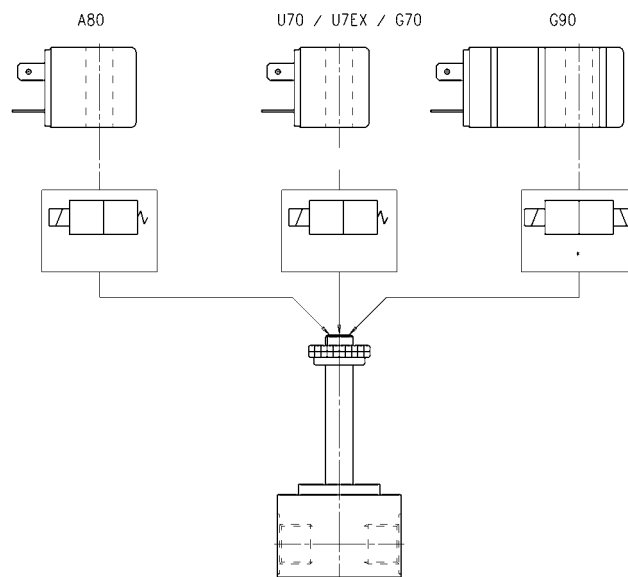
Mod.	Torque (Nm)
<b>124-800</b>	0,5

## Solenoids for solenoid valves Series A, 3, 4, 9 and NA

All solenoids presented can be mounted on the following solenoid valves: Series A - 3 - 4 - 9 - NA

NB:

For the tightening of the solenoids' nut we recommend to do it manually, avoiding the use of any equipment.



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CONTROL

## Solenoids Mod. G90

Solenoids Mod. G90 can be replaced on all other Series A solenoid valves or pilots allowing to change the valve functioning from:

- unstable functioning system (spring return)
- stable functioning system (memory)

The stable functioning has the following advantages:

- with an impulse of about 20 ms after which the valve always remains in the controlled position.
- the valve remains in the controlled position (opened or closed) even if there is no power.
- when normally opened valves should be used, it is not necessary to use valves with special mechanical parts as a NC valve becomes a NO valve just by changing the control impulse sequence.
- The impulse control system facilitates the utilization with electronic circuits. The minimum required impulse for the function is 20 ms; if, for circuit reasons, the impulse last for a longer period, there is no danger of heating.
- magnet attraction command = Actuation SW1
- magnet release command = Actuation SW2

If the solenoids are mounted in batteries, a magnetic scheme type G90/L should be used.

To facilitate the cabling a special connector is available, which contains a circuit which realises the inversion of the power supply to the solenoid, indispensable for the PLC command, 122-892 P with common positive or 122-893 N with common negative.

