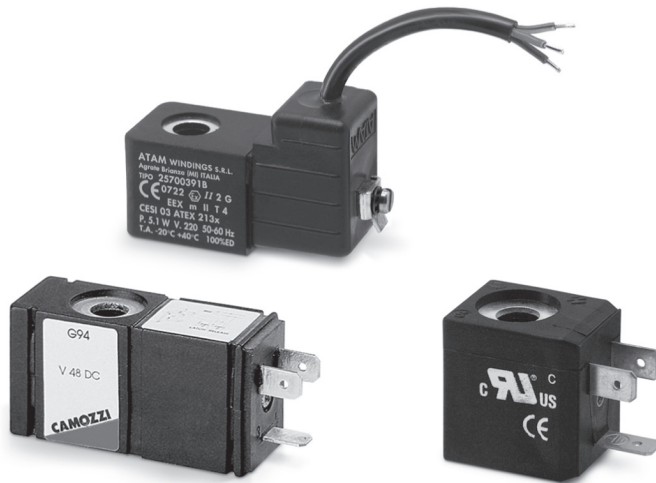


Solenoids U7* - U7*EX - G7* - A8* G93 - B* - H8* and GP*

Version A and B

Connection according to DIN 43650 and DIN 40050 standards



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...: special solenoids with incorporated memory for pulsed operation.

Mod. H8...: explosion-proof solenoids suitable for potentially explosive ambients (ATEX).

Mod. U7...: solenoids available also with ATEX certification.

Mod. B...: to be used only with solenoid valves Series CFB (2/1.30).

Mod. GP...: in compliance with DIN EN 175301-803-C standards, they can be mounted only on Series AP proportional valves, size 16 mm.

GENERAL DATA

Wire insulation	U7... / G7... / G93 = class F (155° C) A8... = class H (180° C) B... / H8... = class H (200° C)
Protection class	U7... / G7... / G93 = IP54 - DIN 40050 IP65 (with connector Mod. 122-800 and Mod. 122-800EX) A8... / B... = IP54 - DIN 40050 IP65 (with connector Mod. 124-800) H8... = IP64
Operation	ED 100%
Tolerance V AC	Mod. A and U: -15% / +10% Mod. B: ±10%
Tolerance V DC	Mod. A and U: ±10% Mod. B: ±5%

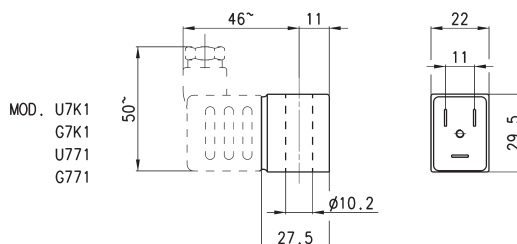
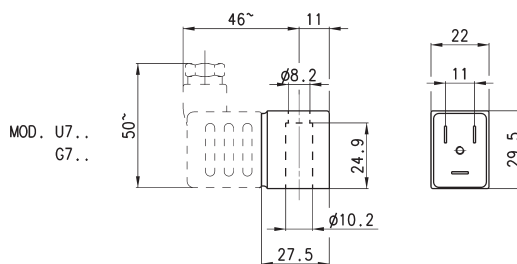
Solenoids Mod. U7... / U7*EX and Mod. G7...

Connections: Bipolar plus earth DIN 43650 (vers. B)
Solenoid material: U7* = PET: G7* = PA



To order the ATEX version of Mod. U7 (not available for Mod. U7F and U7K1 with voltage 125V 50/60Hz) it is necessary to add EX at the end of the code.

Mod. U7*EX marked:
II 3G Ex nA IIC T4 Gc X IP65
II 3D Ex tc IIIC 130°C Dc X



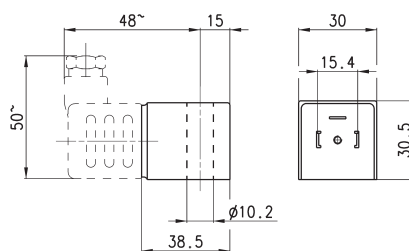
Mod.	Sol. volt. (1)	Pow. abs. (1)	Sol. volt. (2)	Pow. abs. (2)	Sol. volt. (3)	Pow. abs. (3)
U7H	12 V DC	3.1 W	24V - 50/60 Hz	3.5 VA		
G7H	12 V DC	3.1 W	24V - 50/60Hz	3.5 VA		
U7K	110V - 50/60Hz	3.8 VA	125V - 50/60Hz	5.5 VA	72 V DC	4.8 W
U7K1	110V - 50/60Hz	5.8 VA	125V - 50/60Hz	8.3 VA	72 V DC	5.6 W
G7K	110V - 50/60Hz	3.8 VA	125V - 50/60Hz	5.5 VA	72 V DC	4.8 W
G7K1	110V - 50/60Hz	5.8 VA	125V - 50/60Hz	8.3 VA	72 V DC	5.6 W
U7J	230V - 50/60Hz	3.5 VA	240V - 50/60Hz	4 VA		
G7J	230V - 50/60Hz	3.5 VA	240V - 50/60Hz	4 VA		
U79	48 V DC	3.1 W				
G79	48 V DC	3.1 W				
U710	110 V DC	3.2 W				
G710	110 V DC	3.2 W				
U77	24 V DC	3.1 W	48V - 50/60Hz	3.5 VA		
U771	24 V DC	3.1 W	48V - 50/60Hz	3.5 VA		
G77	24 V DC	3.1 W	48V - 50/60Hz	3.5 VA		
G771	24 V DC	3.1 W	48V - 50/60Hz	3.5 VA		
U7F	380V - 50/60Hz	7 VA				
U72	12 V DC	5 W				
G72	12 V DC	5 W				
U73	24 V DC	5 W				
G73	24 V DC	5 W				

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...

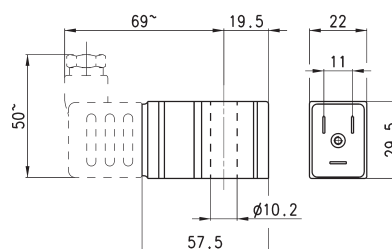

Connections: Bipolar plus earth DIN 43650 (version A)



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

Solenoids Mod. G93 (with memory)


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

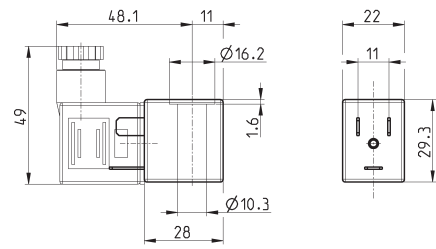


Mod.	Voltage	Minimum impulse latch/release	Consumption latch/release
G93	24 V DC	18 ms - 10 ms	168 mA - 80 mA

Solenoids Mod. B7...

Connections: Bipolar plus earth DIN 43650 (vers. B)

Solenoid material: PA-MXD6

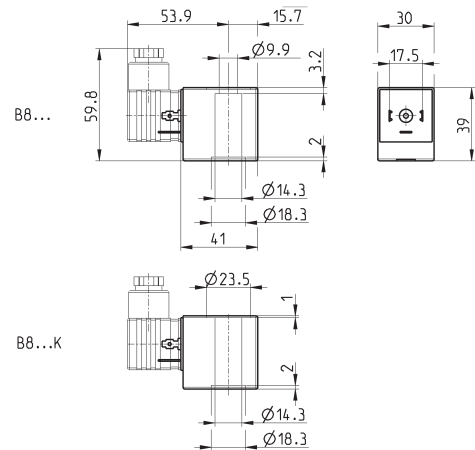
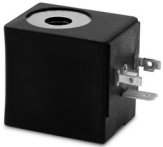


Mod.	Solenoid voltage	Power absorption
B7B	24 V - 50/60 Hz	9 VA
B7D	110 V - 50/60 Hz	9 VA
B7E	230 V - 50/60 Hz	9 VA
B72	12 V - DC	10 W
B73	24 V - DC	10 W

Solenoids Mod. B8...

Connections: Bipolar plus earth DIN 43650 (vers. A)
Solenoid material: PA-MXD6

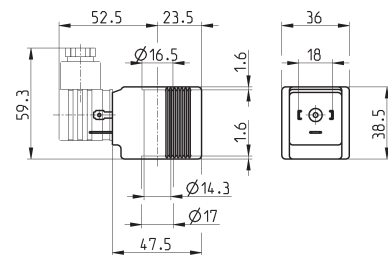
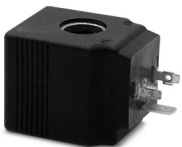
The B8*K models can be used only with some solenoid valves Series CFB (Mod. CFB-D1..., 2/2 NO).
For further information see the table on page 2/1.30.03.



Mod.	Solenoid voltage	Power absorption
B8B	24 V - 50 Hz	15 VA
B8BK	24 V - 50 Hz	15 VA
B8D	110 V - 50/60 Hz	15 VA
B8DK	110 V - 50/60 Hz	15 VA
B8E	230 V - 50/60 Hz	15 VA
B8EK	230 V - 50/60 Hz	15 VA
B82	12 V - DC	19 W
B82K	12 V - DC	19 W
B83	24 V - DC	19 W
B83K	24 V - DC	19 W

Solenoids Mod. B9...

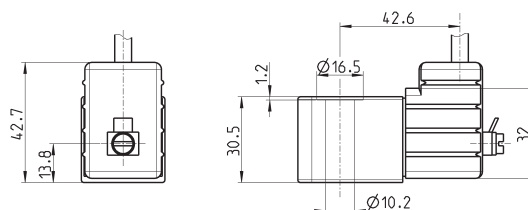
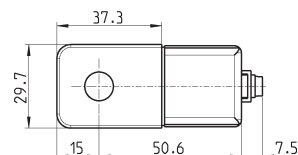
Connections: Bipolar plus earth DIN 43650 (vers. A)
Solenoid material: PA-MXD6



Mod.	Solenoid voltage	Power absorption
B9B	24 V - 50 Hz	29 VA
B9D	110 V - 50/60 Hz	29 VA
B9E	230 V - 50 Hz	29 VA
B93	24 V - DC	30 W


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.

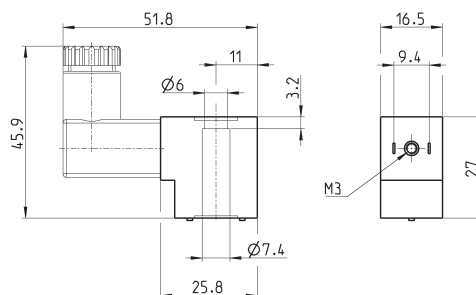


Mod.	Solenoid voltage	Power absorption
H83	24 V - DC	5,4 W
H8B	24 V - 50/60 Hz	5,3 VA
H8C	48 V - 50/60 Hz	5,3 VA
H8D	110 V - 50/60 Hz	5,3 VA
H8E	230 V - 50/60 Hz	5,3 VA

For Series NA use plate mod. NA54-PC.


Solenoids Mod. GP - size 16 mm

Electrical connection: Bipolar
 (DIN EN 175301-803-C)
 Solenoid material: PA



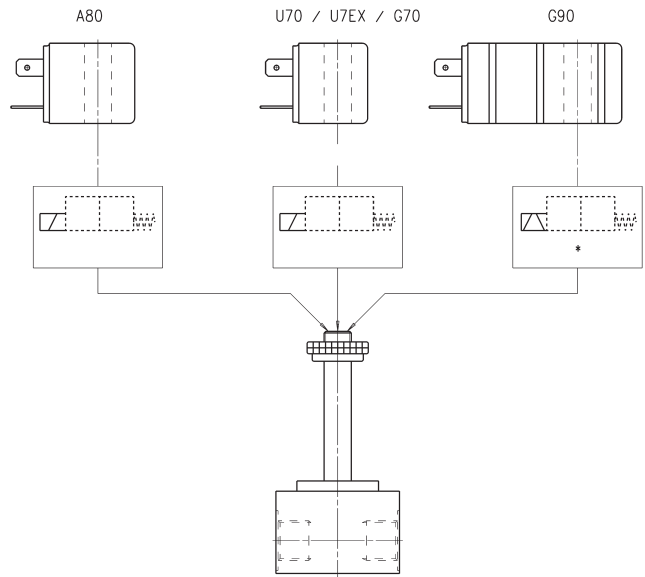
Mod.	Solenoid voltage	Power absorption
GP7	12 V DC	3 W
GP7	24 V DC	3 W

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.



Solenoids Mod. G9...

Solenoids Mod. G9... can be replaced on all other Series A solenoid valves or pilots allowing to change the valve functioning from:

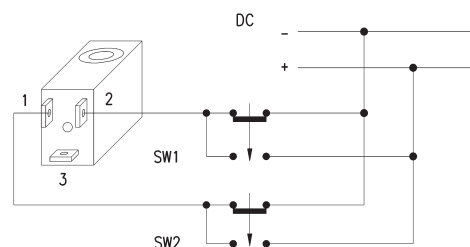
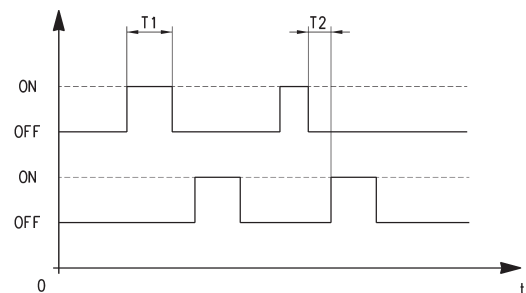
- unstable functioning system (spring return)
- stable functioning system (memory)

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

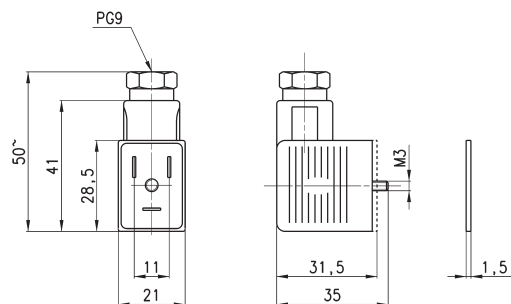
If the solenoids are mounted in batteries, a magnetic scheme type G90/L should be used.

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.




Connectors Mod. 122-... DIN 43650

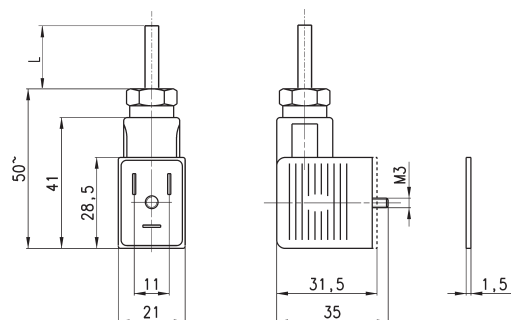
For solenoids Mod. U7/U7*EX, G7 and B7

 Mod. 122-800EX:
for ATEX certified solenoids mod. U7*EX, with anti-screwing off screw mod. TORX.


Mod.	description	colour	working voltage	cable holding	tightening torque
122-601	connector, diode + Led	transparent	10/50 V DC	PG9	0.5 Nm
122-701	connector, varistor + Led	transparent	24 V AC/DC	PG9	0.5 Nm
122-702	connector, varistor + Led	transparent	110 V AC/DC	PG9	0.5 Nm
122-703	connector, varistor + Led	transparent	230 V AC/DC	PG9	0.5 Nm
122-800	connector, without electronics	black	-	PG9	0.5 Nm
122-800EX	connector, without electronics	black	-	PG9	0.5 Nm


Connectors Mod. 122-5... DIN 43650 with cable

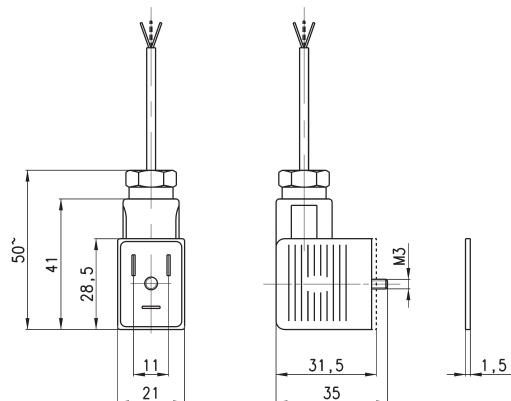
For solenoids Mod. U7/U7*EX, G7 and B7



Mod.	description	colour	working voltage	cable length [L]	cable holding	tightening torque
122-550-1	moulded cable, without electronics	black	-	1000 mm	-	0.5 Nm
122-550-5	moulded cable, without electronics	black	-	5000 mm	-	0.5 Nm
122-571-3	moulded cable, varistor + Led	black	-	3000 mm	-	0.5 Nm


Connectors Mod. 122-89°C

For solenoids Mod. G9

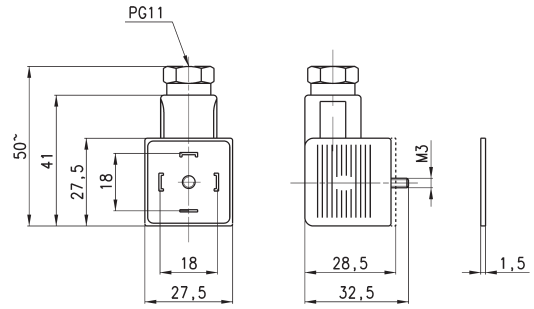


Mod.	description	colour	working voltage	cable length [L]	cable holding	tightening torque
122-892C	pre-wired connector, positive common	transparent	12/24V DC	2000 mm	PG9	0.5 Nm
122-893C	pre-wired connector, negative common	transparent	12/24V DC	2000 mm	PG9	0.5 Nm

Connector Mod. 124-... DIN 43650

For solenoids Mod. A8 and Mod. B8/B9

Protection class IP65



Mod.	description	colour	working voltage	cable holding	tightening torque
124-800	connector, without electronics	black	-	PG9/PG11	0.5 Nm
124-702	connector, varistor + Led	black	110 V AC/DC	PG9/PG11	0.5 Nm
124-701	connector, varistor + Led	black	24 V AC/DC	PG9/PG11	0.5 Nm
124-703	connector, varistor + Led	black	230 V AC/DC	PG9/PG11	0.5 Nm