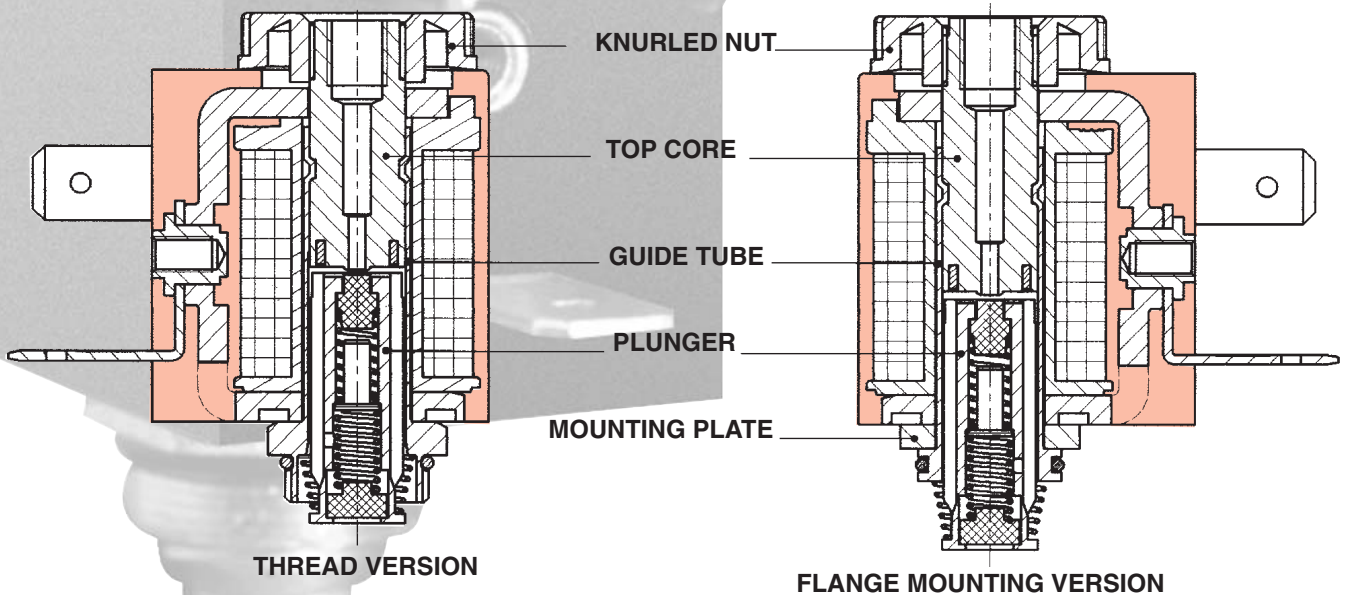


The EVI7 S9 system by AMISCO includes a wide range of solenoid operators designed for pneumatic valves. All solenoids of this system have the guide tube with a diameter of 9 mm and the plunger with a diameter of 8 mm. The system is designed for use with air.

*Please contact Amisco for use with other media.
All given informations are subjected to changes without notice.*



COIL

The coil is available in different sizes and with different electrical terminations. Types, power and other characteristics are described in the following pages.

All coils feature:

- heat resistant bobbin moulded with 30% glass filled thermoplastic polyester material
- class H wire 200°C according to IEC 317-8
- built-in magnetic yoke made by low carbon iron
- encapsulation with high quality specially designed glass filled nylon.

The use of other materials is possible upon special agreements. All coils are rated to class F and to IP 65 (with connector). The coil is designed and constructed in accordance to EN 60204.1 and VDE 0580 and it is suitable for industrial ambient conditions. For use in special ambients with high humidity, please, take contact with Amisco.

The coil is also in conformity with 94/9/EC ATEX for electrical apparatus of group II, category 3 (Ex nA II 3 GD T4 o T5).

ARMATURE ASSY

Plunger and core are made by a magnetic stainless steel specially designed for solenoid applications. The guide tube is made with brass (stainless steel is possible upon special agreement). The plunger is normally equipped with NBR rubber seals. Other materials like Viton are available upon request. The armature assembly is designed for more than 10⁶ cycles.

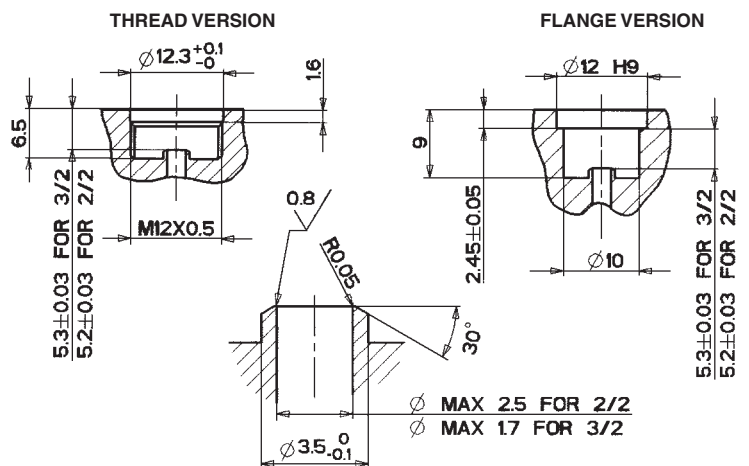
COMPLETE OPERATOR

The coil is fastened to the plungerguide tube by means of a knurled nut for ease of change over without interrupting the pneumatic circuit.

The armature assy is fixed to the valve body either by means of a M12x0.5 thread (thread version) or by a mounting plate with screws (flange mounting version). Amisco doesn't supply the plate.




The suggested interface dimensions of the valve body are shown below.

Any change to the prescribed dimensions can effect the performances of the solenoid operator.



SOLENOID SYSTEMS

for 2/2 and 3/2 way normally closed and normally open valves

	Electrical termination	Code	Characteristics							
			DC		AC 50 Hz		AC 60 Hz			
	Terminals AMP 6.3x0.8 width 11 mm	0709S...	Rated power DC	W	3	6.5				
	Terminals DIN 43650 B	0709D...	Inrush power AC	VA			7.5	12.5	6.5	10.5
	Flying leads	0709C...	Rated power AC	VA			5	8.5	4.2	7
			Coil temperature rise	°C	35	70	45	85	35	70
			Copper temperature rise	°C	40	80	55	95	45	80
	Terminal DIN 43650A (bottom ground)	3009D...	Rated power DC	W	2.5	4.5				
	Terminal DIN 43650A (top ground)	3009R...	Inrush power DC	VA			5.5	9	4.5	7.5
	Flying leads	3009C...	Rated power AC	VA			3	5	2.5	4.2
			Coil temperature rise	°C	20	35	20	35	15	30
			Copper temperature rise	°C	30	50	25	45	20	35
	3/2 way NC Flange	09L.....	Inlet orifice Ø	mm	1.2	1.5	1.2	1.5	1.2	1.5
	3/2 way NC Thread	09F.....	Exhaust orifice Ø	mm	1.4	1.4	1.4	1.4	1.4	1.4
			Working pressure	bar	0-10	0-10	0-10	0-10	0-10	0-10
	2/2 way NC Flange	09L.....	Inlet orifice Ø	mm	1.2	1.5	1.2	1.5	1.2	1.5
	2/2 way NC Thread	09F.....	Working pressure	bar	0-10	0-10	0-10	0-10	0-10	0-10
	3/2 way NO Flange	09L.....	Inlet orifice Ø	mm	1.4	1.4	1.4	1.4	1.4	1.4
	3/2 way NO Thread	09F.....	Working pressure	bar	0-7	0-10	0-7	0-10	0-7	0-10

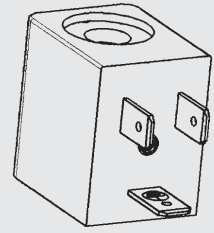
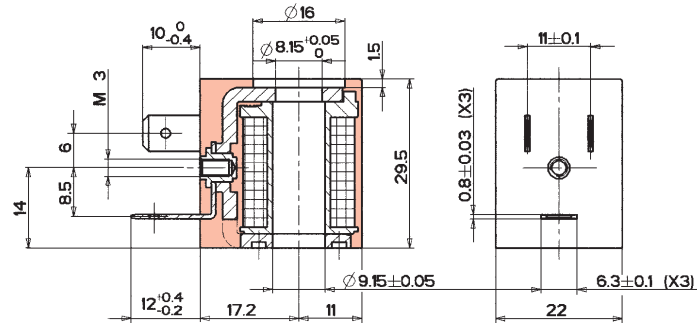
Notes:

Voltage tolerance: ± 10%
 Temperature range: -20°C ÷ +50°C
 Duty cycle: 100%

Standard voltages: 24 - 110 - 230 VAC
 12 - 24 VDC
 Other voltages on request

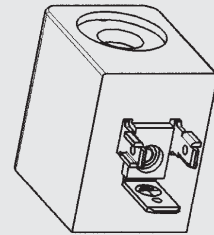
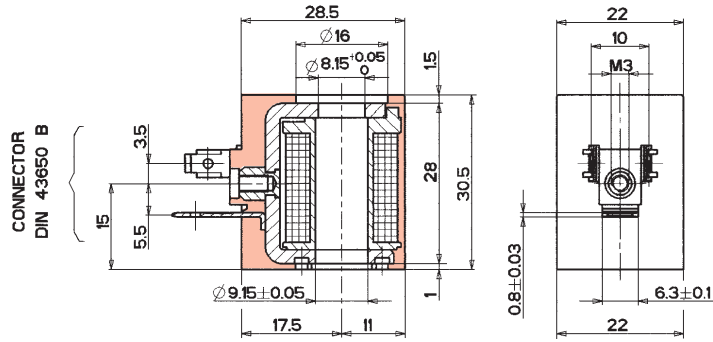
For different orifice sizes and pressures contact AMISCO

EVI 7/9



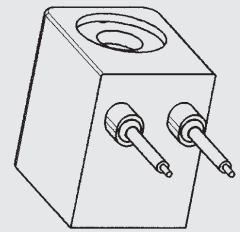
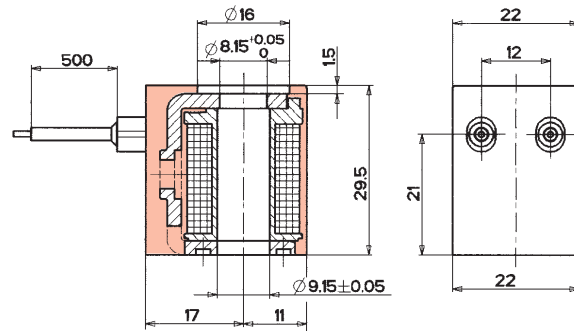
CODE 0709S.....

EVI 7/9 DIN



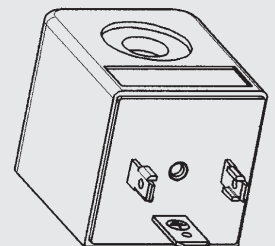
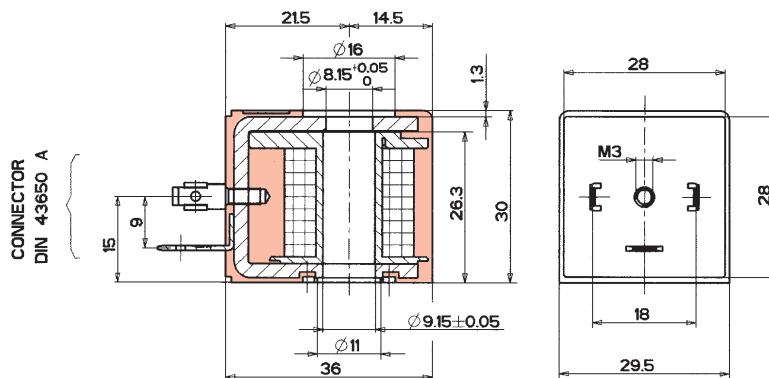
CODE 0709D.....

EVI 7/9 FLYING LEADS



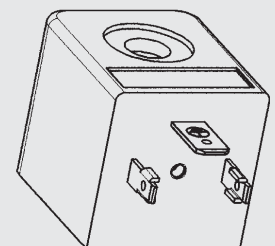
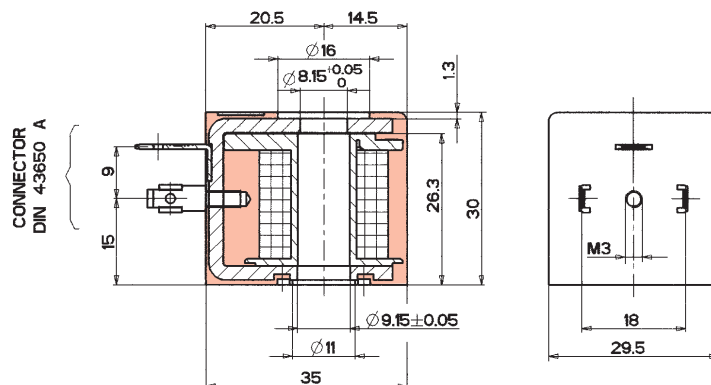
CODE 0709C.....

EVI 30/9



CODE 3009D.....

EVI 30/9 MR



CODE 3009R.....

COIL CODING SPECIFICATION



TYPE

07 = EVI 7
30 = EVI 30

COIL BORING

09 = 9 mm

ELECTRICAL CONNECTION

S = AMP 6,3x0,8
D = DIN 43650 A or DIN 43650 B
R = DIN 43650 A with ground on top
C = Flying leads

SUPPLY CURRENT

A = Alternating current (A.C.)
D = Direct current (D.C.)
R = Rectified alternating current

NOMINAL VOLTAGE

Example: 024 = 24V
220 = 220 V

WINDING CODE

To be communicated by AMISCO

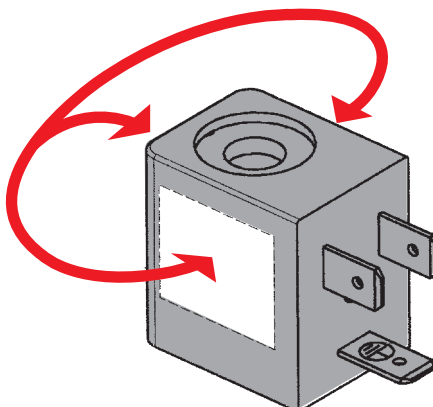
SPECIAL FEATURES

Z = Standard
M = Different moulding material
C = Different colour

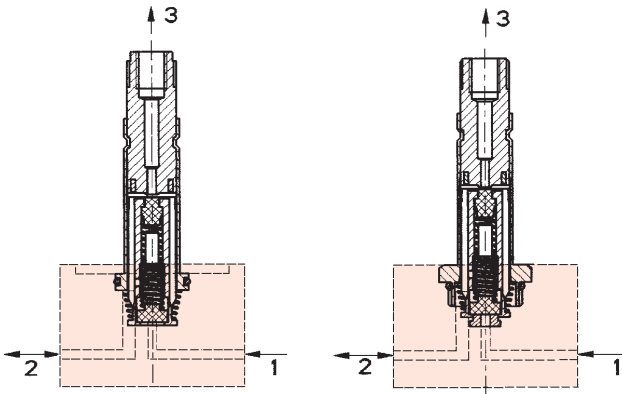
MARKING

N = Standard
T = Customer specifications
B = No Marking

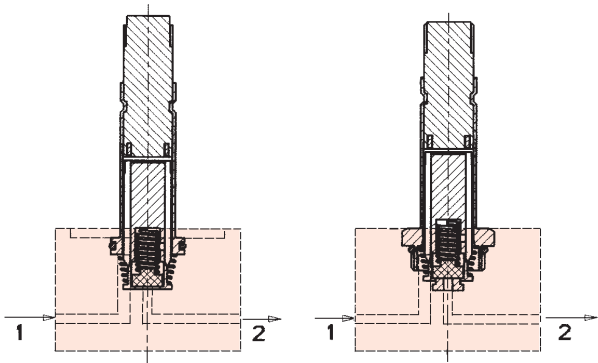
Alternative possibilities
for CUSTOMER LOGO



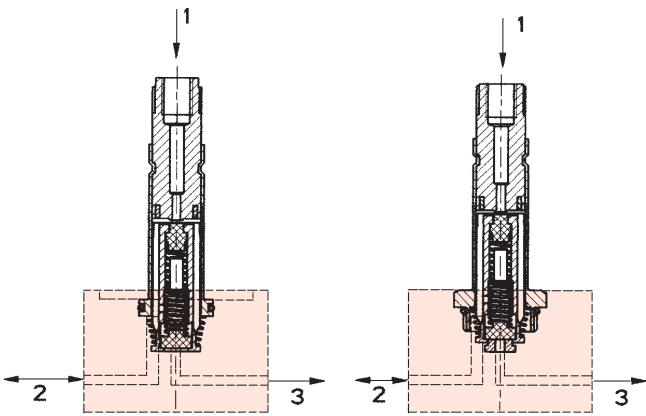
EXAMPLES OF MAIN APPLICATIONS



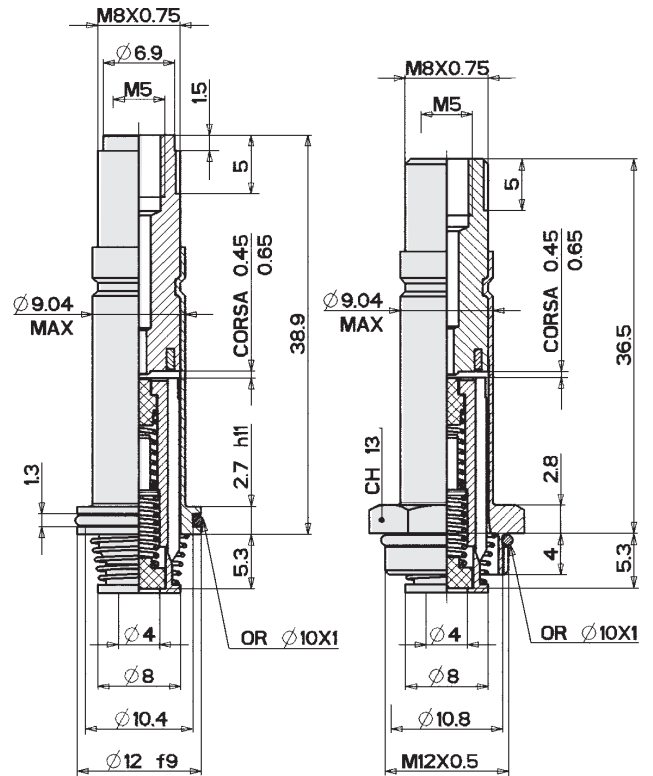
3/2 NC



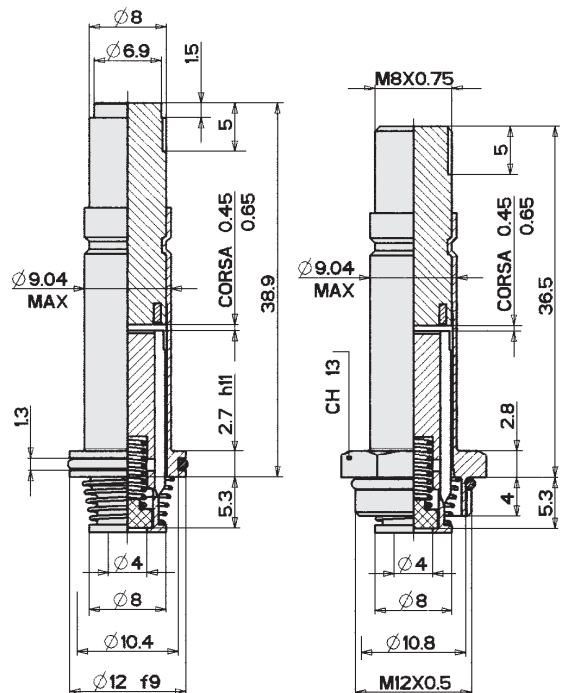
2/2 NC



3/2 NO



3/2 OPERATOR



2/2 OPERATOR

OPERATOR CODING SPECIFICATIONS



TYPE

09L= Flange
09F= Thread

DRAWING NUMBER

06080 = SP 608/0
03641 = SP 364/1

SUPPLY CURRENT

A = Alternating current
D = Direct current

FUNCTION

2 = 2/2 way
3 = 3/2 way

FUNCTION

C = Normally closed
O = Normally open

SEALS

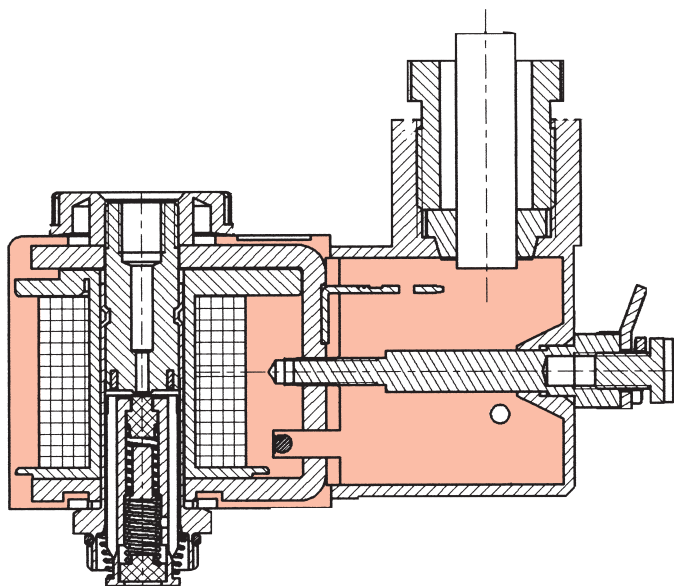
B = Low temperature NBR
E = EPDM - V = Viton
N = NBR - C = Neoprene

FASTENING SYSTEM

N= Without fastening system. Fastening nuts to be ordered separately as below:

FASTENING NUTS (Note: tightening torque max 0.6 Nm)

Plastic knurled nut	Cod. 540238	
Plastic knurled nut for protected exhaust	Cod. 540270	
Aluminium knurled nut Weavy washer Ø 8 DIN 137 type A	Cod. 540201 Cod. 535019	



AMISCO has completed the EVI7 S9 solenoid system with a special coil for pneumatic applications in potentially explosive ambients (class II), that fullfills the requirements of EN 50014 and EN 50028, for protection mode "m".

The **EVI30/9 EExm** coil is supplied with 1,2m cable connexion, other lenghts (from 1.5m to 10m) are available on request.

The coil is certified by CESI in thermal class T4 (with coil surface temperature max 135°C) or T5 (with coil surface temperature max 100°C).

Certificate of conformity n° EX-97.D.100.

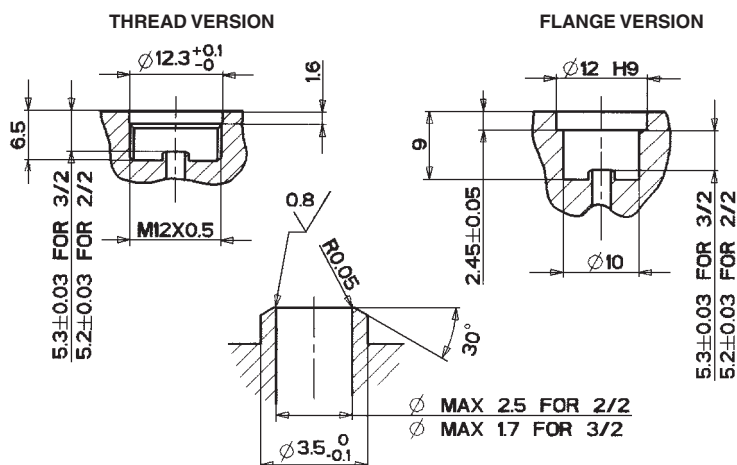
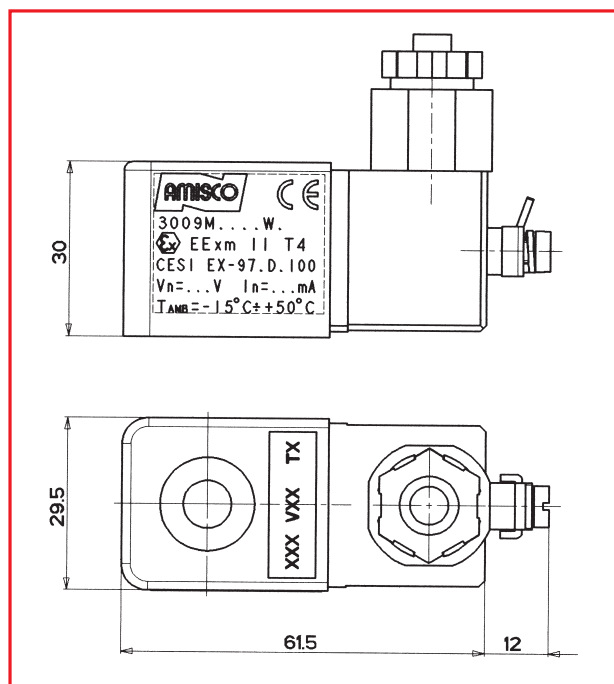
The protection is assured by a thermal fuse, that, in case of damage, disconnects the coil from power.

The product is developed to be used in ambients with temperature range from -15°C to +50°C, and it has a power consumption of 3.8W for type T4 and 3W for type T5.

The coil fits all Amisco standard operators 3/2 or 2/2 way NC or NO, threaded or flange types.

All main voltages are available.




For other technical specifications see below and backwards.



SOLENOID SYSTEMS "EExm"

for 2/2 and 3/2 way normally closed and normally open valves

Characteristics

Code			Characteristics				
			DC		AC 50 Hz	AC 60 Hz	
	3009M...W.	Rated power DC	W	3			
		Inrush power AC	VA			4.8	4
		Rated power AC	VA			3.2	2.7
		Coil temperature rise	°C	35		15	10
		Copper temperature rise	°C	40		30	25
	3009M...W.	Rated power DC	W		3.8		
		Inrush power AC	VA				
		Rated power AC	VA				
		Coil temperature rise	°C		50		
		Copper temperature rise	°C		55		
	09	Inlet orifice Ø	mm	1.3	1.5	1.5	
		Exhaust orifice Ø	mm	1.4	1.4	1.4	
	3/2 way NC	Working pressure	bar	0-10	0-10	0-10	
	09	Inlet orifice Ø	mm	1.3	1.5	1.5	
		2/2 way NC	Working pressure	bar	0-10	0-10	0-10
09	Inlet orifice Ø	mm	1.4	1.4	1.4		
	3/2 way NO	Working pressure	bar	0-7	0-10	0-10	

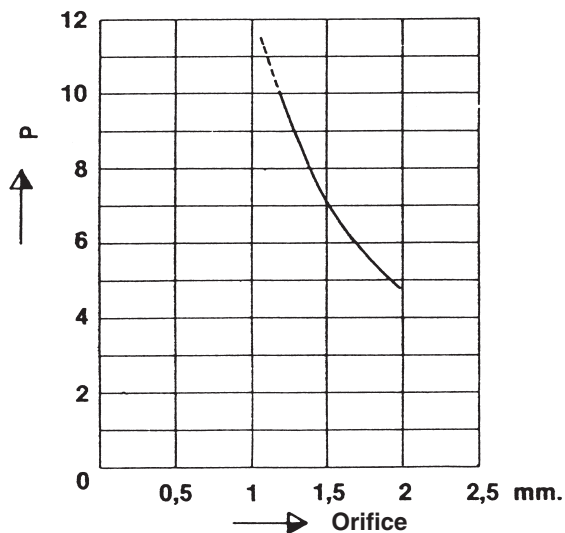
Notes:
 Temperature range: -15°C ÷ +50°C
 Duty cycle: 100%
 Voltage tolerance: ±10%

For different orifice sizes and pressures contact AMISCO

Standard voltages: 12 to 240 VAC - 50/60 Hz
 6 to 48 VDC
 Other voltages on request

PERFORMANCES

EExm II version T5 - DC
 bar



EExm II version T5 - AC
 EExm II version T4 - DC
 bar

