

## COILS FOR M&M INTERNATIONAL SOLENOID VALVES

Coils manufactured by M&M International are designed for continuous duty in conformity to the EN60730 safety standards. They are encapsulated in a self-extinguishing synthetic material and offer high mechanical protection and excellent thermal dissipation. They are fully interchangeable on all M&M International solenoid valves, thereby reducing warehouse inventories.

### TECHNICAL DATA

Series <b>2000</b> : connection to DIN 46244		
Electrical connection: fast on connection 6.3x0.8		
Series <b>7000/8000</b> : connection to DIN EN 175301-803 form A (ex DIN 43650-A)		
Protection class: IP 65 (CEI EN60529) - NEMA 4 (UL 50) with connector and gasket		
Insulation class (compliant with EN60730): "F" and "H"		
Operation: continuous		
Voltage tolerance:	AC	DC
SERIES <b>2000/7000/8000</b>	+10% ÷ -15%	+10% ÷ -5%
Coil power:	AC	DC
SERIES <b>2000</b>	10VA (holding) 16VA (inrush)	7W
SERIES <b>7000</b>	18VA (holding) 36VA (inrush)	14W
SERIES <b>8000</b>	12VA (holding) 24VA (inrush)	10W

### OPTIONS

Class "H" insulation coils series 2000/7000: e.g. coil 7251  
 UL Approved coils series 2000/7000: e.g. coil 240R  
 Impregnated coils for use with applications in specially damp /humid environments: e.g. coil B400 for series 2000, D700 for series 7000 and E250 for series 8000. To be used absolutely with connector and gasket (see page 45 for more information)

### SERIES: 2000 - 7000 - 8000

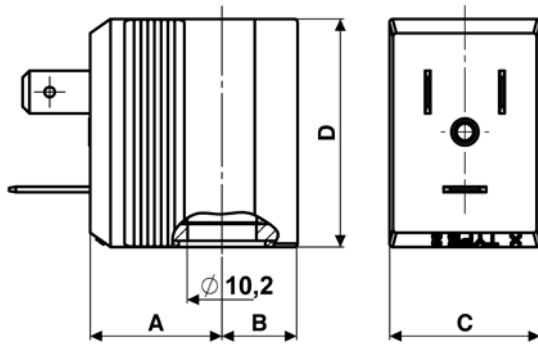


### SELECTION TABLE

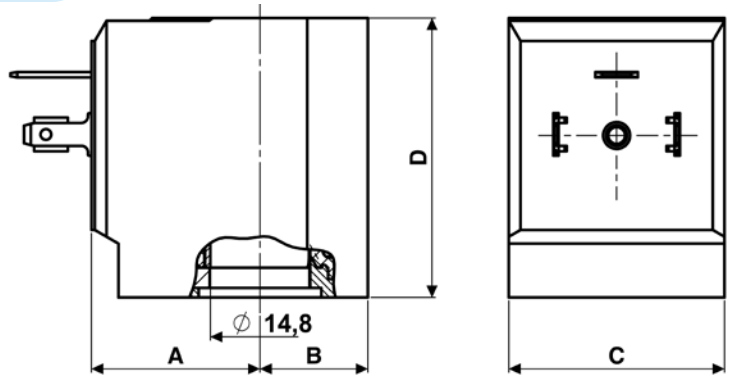
CODE	voltage	power		class	ambient temp.		media temp.		ED
		holding	inrush		min	max	min	max	
2250	24V DC	7W	—	"F" 155°C	-10°C	+50°C	-10°C	+130°C	100%
2200	24V 50/60Hz	10VA	16VA						
2400	110V 50Hz - 120V 60Hz	10VA	16VA						
2600	200V 50Hz - 220V 60Hz	10VA	16VA						
2700	230V 50Hz - 240V 60Hz	10VA	16VA						
7250	24V DC	14W	—						
7200	24V 50/60Hz	18VA	36VA						
7400	110V 50Hz - 120V 60Hz	18VA	36VA						
7600	200V 50Hz - 220V 60Hz	18VA	36VA						
7700	230V 50Hz - 240V 60Hz	18VA	36VA						
8250	24V DC	10W	—						
8200	24V 50/60Hz	12VA	24VA						
8400	110V 50Hz - 120V 60Hz	12VA	24VA						
8600	200V 50Hz - 220V 60Hz	12VA	24VA						
8700	230V 50Hz - 240V 60Hz	12VA	24VA						

Custom voltages and low power consumption available: please contact M&M Sales Department.

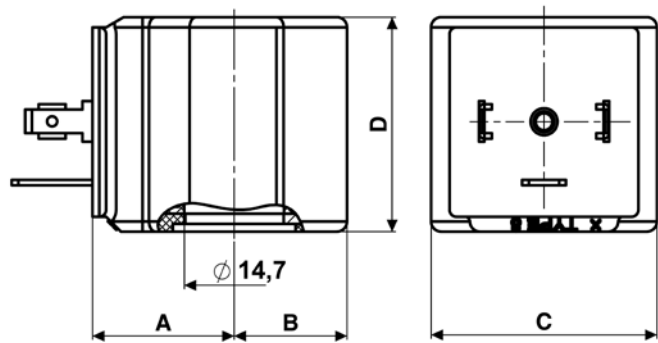
## COILS - DIMENSIONS & WEIGHTS



Coil series 2000



Coil series 7000



Coil series 8000

DIMENSIONS & WEIGHTS

Series	A	B	C	D	weight
[code]	[mm]	[mm]	[mm]	[mm]	[kg]
2000	19.5	11.2	22.3	33.7	0.060
7000	25	16	32	41.4	0.146
8000	21	16.75	33.5	31.7	0.09

## DIN CONNECTORS FOR SOLENOID VALVES

Coil connectors provide the safest flexible system for connecting M&M International solenoid valves and give a protection class of IP65. They are designed and made of synthetic material offering a high level of electrical insulation. Compliance with UL 1977 and VDE Regulations.

### TECHNICAL DATA

Rated voltage (Max.):	250V AC / 300V DC
Nominal current:	10 A (Rated) / 16A (Max.)
Wire cross-section:	1.5 mm <sup>2</sup> (Max.)
Cable entry:	PG9 (6 – 8 mm)
Protection class:	IP 65 (only with gasket)
Insulation class:	group C - VDE 0110
Housing colour:	black

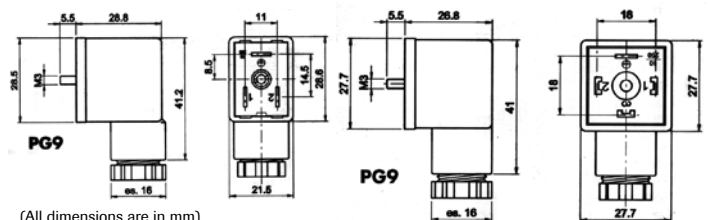
### OPTIONS

- Connectors with protection circuits
- Connectors with LED
- Connectors with flying leads

### NOTES

Connectors are supplied with thermoplastic rubber bordered gasket, fixing screw and preinstalled position with ground H 12 (the connector can be spinned when connected)

SERIES: 600 001 00- / 600 011 00-



(All dimensions are in mm)

For coil series 2000, connector code 600 001 00-, weight: 0.019 Kg



For coil series 7000, connector code 600 011 00-, weight: 0.020 Kg

Other versions available upon request and depending on quantity: please contact M&M Sales Department.

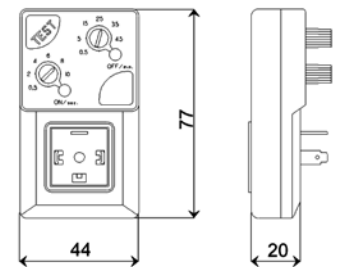
## ANALOG AND DIGITAL ELECTRONIC TIMERS

Ideal for: Automatic Drain Valves - Sampling Valves - Lubrication Systems - Air Dryers.

### ANALOG TIMER TECHNICAL SPECIFICATIONS



Supply voltage	120 ÷ 240V AC/DC - 50/60Hz for  US and CE  approved timer (Code AT2000C02I *)
Absorption:	4 mA Max
Operating temperature:	- 10° C ÷ + 50° C
Class protection:	IP 65 - EN 60529 (with connector and gasket)
Switch holding voltage:	400V Max
Switch capacity:	1A
Inrush current:	10A for 10 ms
Duty cycle:	100% ED
Switch life:	3•08"
Repeat accuracy:	± 1%
Timing temperature coefficient:	± 0.005% - C°
Time ON:	■ from 0.5 to 10 s.
Time OFF:	■ from 30 s. to 45 min.
Set/Reset/Test:	Membrane key
Circuit:	UL 94 V0
Indicators:	GREEN LED for "power ON" RED LED for "valve open"
Manual override:	Test
Colour:	Black

### SERIES: AT2000

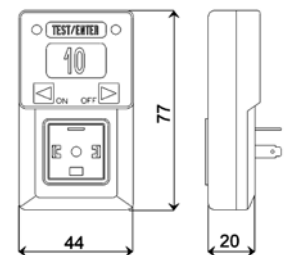


All dimensions in mm

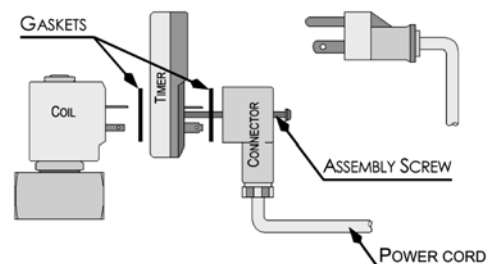
### DIGITAL TIMER TECHNICAL SPECIFICATIONS


Supply voltage	120 ÷ 240V AC/DC - 50/60Hz for  US and CE  approved timer (Code DT3000C12I *)
Absorption:	4 mA Max
Operating temperature:	- 10° C ÷ + 50° C
Class protection:	IP 65 - EN 60529 (with connector and gasket)
Switch holding voltage:	400V Max
Switch capacity:	1A
Inrush current:	10A for 10 ms
Duty cycle:	100% ED
Switch life:	3•08"
Repeat accuracy:	± 0.01%
Timing temperature coefficient:	± 0.0001% - C°
Time ON:	■ from 0 to 9.5 s., step 0.5 s. from 10 to 99 s., step 1.0 s.
Time OFF:	■ from 0 to 9.5 min., step 0.5 min. from 10 to 99 min., step 1 min.
Indicators:	GREEN LED for "power ON" RED LED for "valve open"
Manual override:	Test
Colour:	Black


### SERIES: DT3000



All dimensions in mm



 US approval number E200580

 For supply voltage 24V AC/DC please contact Sales Department.

Note: Timers are supplied in single boxes with two squared gaskets and M3x50 fixing screw (see assembling scheme).