

TYPE RM1

Magnetically Latching Solenoid

Bistable linear solenoids ideally suited for all battery operated DC applications, featuring the possibility to keep its plunger closed due to the action of a permanent magnet. Solenoid will maintain its state as long as required, without consuming current or producing heat any longer.

This particular feature makes it ideally suited to be used as a hold solenoid. Designed to work in any position, it can also turn an electrical impulse into an axial traction force. Coil winding being insulated in Class F.



SPECIFICATION

Magnet			
Hold Force :	≥ 1200 grams @ 20°C		
Temperature coefficient :	0.2% / °C		
Coil			
Rated voltage :	6V DC	12V DC	24V DC
Rated current (± 10%) :	800 mA	380 mA	190 mA
Resistance @ 20°C (± 10%) :	7,5 Ω	31 Ω	125 Ω
Release voltage :	3,8 V ±0.5	7 V ±0.6	13,8 V ±1
Connections :	red (+) / black (-) leads		
Duty cycle :	Pulse		
Insulation class of winding :	F (155°C)		
General Data			
Temperature range :	-20 +60°C		
Proof voltage :	1KV AC		
Dimensions :	15.5 x 16.5 x 30 mm		

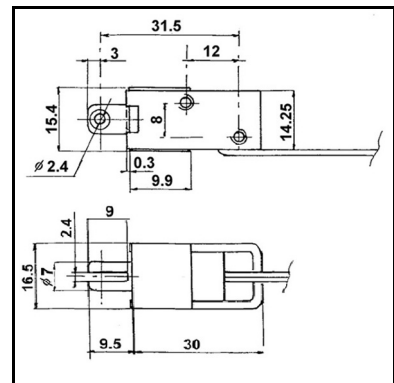
TYPICAL USE

A) Hold solenoid.

Type RM1 being a magnetically latching solenoid designed for DC coil supply. To close the plunger, the coil must be pulse energised at nominal voltage (Vn) for a minimum time of 50 milliseconds. The solenoid will maintain its plunger closed as long as required, even interrupting the supply voltage, due to the action of a permanent magnet. Hold force is 1200 grams. To release plunger, the coil must be fed by an inverted polarity current pulse at a given release voltage.

B) Low current linear pull solenoid.

This solenoid develops a pull action force of 200 grams at 3 mm, when suitably energised by a 2.5 Vn pulse not exceeding 100 milliseconds. The solenoid will maintain its plunger closed as long as required, even interrupting the supply voltage, due to the action of a permanent magnet (virtually reducing down to zero both current consumed and heat generated). To release plunger, coil must be fed by an inverted polarity current pulse at the release voltage.



ORDERING INFORMATION

RM1 - 12DC

1

2

1 – Type: RM1
2 – Coil supply voltage: DC only