

ELECTROMAGNETS

High Durability

- Bobbin and case designed for improved mechanical strength.



Economical

- Cost-efficient, simple structure with no moving parts.

FEATURES

1 High Holding Force

A unique circuit design with no magnetic diffusion allowing for high holding force with no air gap.

3 Custom Design Solutions

We also supply custom-made electromagnets to satisfy your unique requirements, such as original dimensions or higher power coil technology.

2 Low Residual Magnetism

Another feature of our unique circuit design is the reduced residual magnetism when power is turned off.

APPLICATIONS

- 1. Metal Fragment Removal**
useful for removing magnetic material.
- 2. Container Transport**
useful for attaching cargo trays to conveyor belts, etc.
- 3. Locking**
useful for electronic locking.

Regarding
Your Order

Bi-stable
Rotary
Solenoids

Driver Board for
Bi-stable Rotary
Solenoids

Step Rotary
Solenoids

Latching
Solenoids

Compact 2-Way/
3-Way Solenoid
Valves for
Chemical Liquids

Generic 2-Way/
3-Way
Solenoid Valves

Pinch Valves

Bi-stable Rotary
Optical
Shutters

Linear
Optical
Shutter

Electro-
magnets

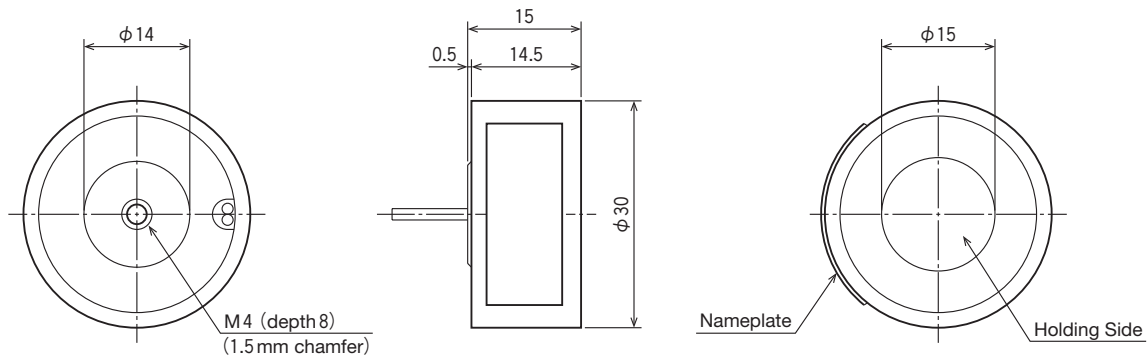
◆ Main Specifications

DC Resistance	56 (Ω)	
Working Voltage	12 (V DC)	24 (V DC)
Duty Cycle	100 (%)	25 (%)
Holding Force *1	90 (N)	170 (N)
Power Consumption	2.0 (W)	8.0 (W)
Coil Saturation Temperature Rise $\Delta\theta_s$ (at 20 °C)	$\Delta\theta_s \cong 22 \times W$ (°C) $K \cong 22$ (°C/watt)	
Heat-Resistant Class	Class E (120 °C)	
Insulation Resistance	500 V DC MEGA, Over 100 MΩ	
Dielectric Strength	1000 V AC, 50/60 Hz, 1 minute	
Mass	60 (g)	

* 1 : measurement conditions: measured by Takano Co. in a standard testing environment, with the holding side facing up, and with an air gap of 0.



◆ External Dimensions (mm)



Terminal Specifications

Lead Wire Length (mm) : 295
AWG Size : 28

Regarding Your Order

Bi-stable Rotary Solenoids

Driver Board for Bi-stable Rotary Solenoids

Step Rotary Solenoids

Latching Solenoids

Compact 2-Way/3-Way Solenoid Valves for Chemical Liquids

Generic 2-Way/3-Way Solenoid Valves

Pinch Valves

Bi-stable Rotary Optical Shutters

Linear Optical Shutter

Electro-magnets

TMH-3029A

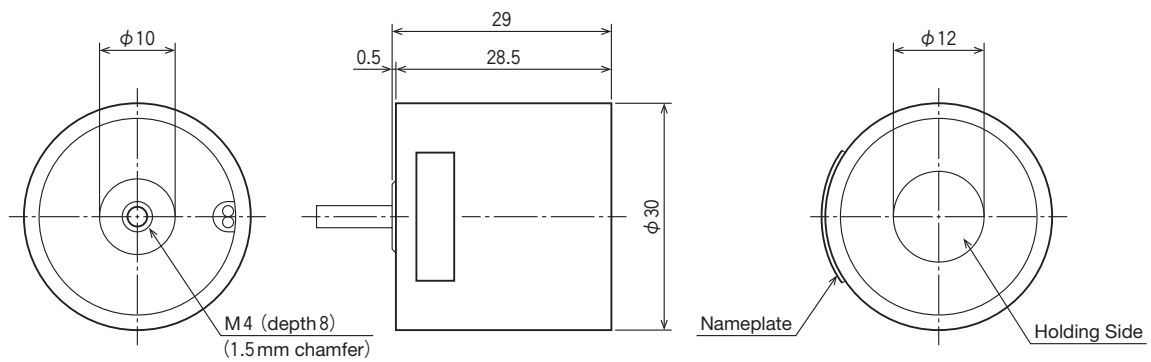
◆ Main Specifications

DC Resistance	56 (Ω)	
Working Voltage	12 (V DC)	24 (V DC)
Duty Cycle	100 (%)	25 (%)
Holding Force *1	50 (N)	60 (N)
Power Consumption	2.4 (W)	9.6 (W)
Coil Saturation Temperature Rise $\Delta\theta_s$ (at 20°C)	$\Delta\theta_s \doteq 19 \times W$ (°C) $K \doteq 19$ (°C/watt)	
Heat-Resistant Class	Class E (120°C)	
Insulation Resistance	500 V DC MEGA, Over 100 MΩ	
Dielectric Strength	1000 V AC, 50/60 Hz, 1 minute	
Mass	100 (g)	

* 1 : measurement conditions: measured by Takano Co. in a standard testing environment, with the holding side facing up, and with an air gap of 0.



◆ External Dimensions (mm)



Terminal Specifications

Lead Wire Length (mm) : 195
AWG Size : 24