## **AC Laminated Solenoid**

# **GUARDIAN**

### Model 18

#### **Features:**

High stroke force High holding force Brass plunger guide See model 18P for Push Model RoHS Compliant UL Recognized

#### **Electrical:**

Coil Voltages: 120, 240 VAC standard Coil Termination: 1/4" Quick Connects

Duty Cycle: 100% Continuous, 10% Intermittent Coil treatment: Encapsulated, Tape Wrapped Insulation Class: Class A Rating - 105° C (221° F)

Dielectric Strength: 1500V 60 Hz

#### **Mechanical:**

Size: 2.5"(L) x 1.8"(W) x 2.1"(H)

Plunger Width: 0.7"

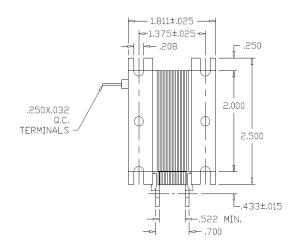
Plunger Guide Material: Steal Mounting: 6 0.208" holes Weight: Plunger 4.5 oz, Total 17 oz Life Expectancy: 250,000 Cycles¹

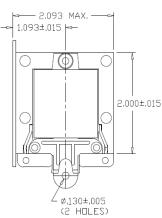
<sup>1</sup> - Dependent on load conditions











Solenoid shown energized with plunger fully seated

#### Standard Part Numbers

| Model No. | Part No.       | Duty Cycle | Voltage | Resistance $^2$ ( $\Omega$ ) | Power<br>(VA) | Current |
|-----------|----------------|------------|---------|------------------------------|---------------|---------|
| 18-C-120A | A421-062510-08 | Cont.      | 120VAC  | 20.3                         | 49            | 408 mA  |
| 18-I-120A | A421-062510-07 | Inter. 10% | 120VAC  | 8                            | 228           | 1.9 A   |
| 18-C-240A | A421-062510-10 | Cont.      | 240VAC  | 80.7                         | 49            | 204 mA  |
| 18-I-240A | A421-062510-09 | Inter. 10% | 240VAC  | 46.9                         | 228           | 950 mA- |

2 - Coil resistance tolerance +/- 5%

Contact us for custom voltages or duty cycles

#### **Available Customization:**

- Plunger Connection
- Coil Treatment
- Terminations
- Insulation systems up to class H 180° C (356° F) \* Minimum quantities apply

| Typical Pull Force Ounces [N] @ 20°C (68°F) (Distance from fully seated position) |            |            |            |            |            |            |           |             |
|---|------------|------------|------------|------------|------------|------------|-----------|-------------|
| Stroke (in.)  | 0.125      | 0.250      | 0.375      | 0.500      | 0.625      | 0.750      | 1.000     | Ounces [N]  |
| Continuous 100%   | 155 [43]   | 115 [32]   | 105 [29.2] | 105 [29.2] | 105 [29.2] | 100 [27.8] | 60 [16.7] | 245 [68.1]  |
| Intermittent 10%  | 336 [93.4] | 240 [66.7] | 200 [55.6] | 195 [54.2] | 200 [55.6] | 195 [54.2] | 144 [40]  | 430 [119.6] |

Continuous Duty 100% = 100% On Time

Intermittent Duty 10% = 10% On Time (3 Minutes On Max Followed By 27 Minutes Off)



