## **DC Frame Solenoid**

# **GUARDIAN**

### Model 11

#### **Features:**

Available return spring kit AC & DC Applications See Model 11 AC UL recognized

#### **Electrical:**

Coil Voltages: 6, 12, 24, 48, 110 VDC standard Coil Termination: 3/16" QC terminals Duty Cycle: 100% Continuous, 25% Intermittent,

10% Intermittent, 1% Pulse Coil treatment: Plastic cover

Insulation Class: Class A Rating - 105° C (221° F)

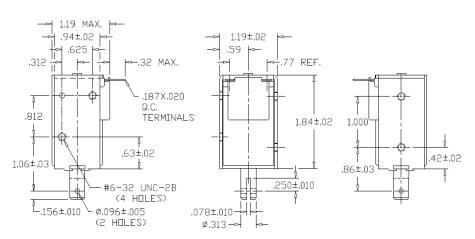
Dielectric Strength: 1500V 60 Hz

#### Mechanical:

Size: 1.54" (L) x 1.62"(W) x 1.57"(H) Plunger Diameter: 0.313" Plunger Guide Material: Plastic Mounting: 4 - #6-32 holes Weight: Plunger 0.6 oz, Total 5.2 oz Life Expectancy: 1 Million Cycles 1

 $^{\mathrm{1}}$  - 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>(W) | Current |
|-----------|----------------|------------|---------|------------------------------|--------------|---------|
| 11-C-12D  | A420-065572-00 | Cont.      | 12VDC   | 18.4                         | 8.2          | 652 mA  |
| 11-l-12D  | A420-065573-00 | Inter. 25% | 12VDC   | 7.5                          | 20.2         | 1.6 A   |
| 11-C-24D  | A420-065574-00 | Cont.      | 24VDC   | 93.1                         | 6.5          | 258 mA  |
| 11-l-24D  | A420-065575-00 | Inter. 25% | 24VDC   | 29.1                         | 20.8         | 825 mA  |

2 - Coil resistance tolerance +/- 5%

Contact us for custom voltages or duty cycles

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#### **Available Customization:**

- Plunger
- DC Voltage
- **Duty Cycle**
- Insulation systems up to class H 180° C (356° F)
- Minimum quantities apply

| Typical Push Force Ounces [N] @ $20^{\circ}$ C ( $68^{\circ}$ F) (Distance from fully seated position) |           |           |           |           |           |           |           | HOLDING<br>FORCE | Power<br>(W) |       |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------------|--------------|-------|
| Stroke (in.)   | 0.050     | 0.125     | 0.250     | 0.375     | 0.500     | 0.625     | 0.750     | 1.000            | Ounces [N]   |       |
| Continuous 100%  | 35 [9.7]  | 21 [5.8]  | 10 [2.8]  | 6 [1.7]   | 4 [1.1]   | 2 [0.6]   | 1 [0.3]   | N/A              | 82 [22.8]    | 7.8   |
| Intermittent 25%   | 58 [16.1] | 46 [12.8] | 27 [7.5]  | 18 [5]    | 10 [2.8]  | 8 [2.2]   | 6 [1.7]   | 5 [1.4]          | 93 [25.9]    | 20.4  |
| Intermittent 10% <sup>3</sup>  | 80 [22.2] | 70 [19.5] | 50 [13.9] | 35 [9.7]  | 30 [8.3]  | 25 [7]    | 20 [5.6]  | 10 [2.8]         | 100 [27.8]   | 72.2  |
| Pulse 1%³  | 108 [30]  | 95 [26.4] | 75 [20.9] | 62 [17.2] | 55 [15.3] | 50 [13.9] | 45 [12.5] | 20 [5.6]         | N/A          | 146.8 |

**Optional Return** Spring Kit A490-367461-05

Continuous Duty 100% = 100% On Time

Intermittent Duty 25% = 25% On Time (100 Seconds On Max Followed By 300 Seconds Off)
Intermittent Duty 10% = 90% On Time (10 Seconds On Max Followed By 90 Seconds Off)

Pulse Duty 1% = 99% On Time (1 Second On Max Followed By 99 Seconds Off)

<sup>3</sup> - Calculated force values to be verified in application









