DC Frame Solenoid

GUARDIAN

Model 4

Features:

Available return spring kit AC & DC Applications See Model 4 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

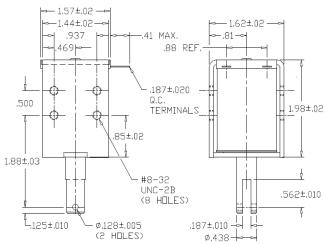
Mechanical:

Size: 1.54" (L) x 1.62"(W) x 1.57"(H) Plunger Diameter: 0.50" Plunger Guide Material: Plastic Mounting: 8 - #8-32 holes Weight: Plunger 1.6 oz, Total 12.6 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 (Ω) | Power (W) | Current |
|-----------|----------------|------------|---------|------------------------------------|--------------|---------|
| 4-C-12D | A420-065942-00 | Cont. | 12VDC | 15.8 | 9.6 | 759 mA |
| 4-I-12D | A420-065943-00 | Inter. 25% | 12VDC | 3.96 | 38.2 | 3.03 A |
| 4-C-24D | A420-065944-00 | Cont. | 24VDC | 61.3 | 9.9 | 392 mA |
| 4-I-24D | A420-065945-00 | Inter. 25% | 24VDC | 15.8 | 38.3 | 1.52 A |

2 - Coil resistance tolerance +/- 5%

Contact us for custom voltages or duty cycles

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° C (68° F) (Distance from fully seated position) | | | | | | | | | HOLDING FORCE | Power (W) |
|--|------------|------------|------------|------------|------------|------------|------------|-----------|------------------|--------------|
| Stroke (in.) | 0.050 | 0.125 | 0.250 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 | Ounces [N] | |
| Continuous 100% | 100 [27.8] | 60 [16.7] | 20 [5.6] | 18 [5] | 13 [3.6] | 5 [1.4] | 3 [0.8] | 1 [0.3] | 155 [43.1] | 9.8 |
| Intermittent 25% | 140 [38.9] | 112 [31.1] | 97 [27] | 60 [16.7] | 40 [11.1] | 27 [7.5] | 22 [6.1] | 20 [5.6] | 181 [50.3] | 38.3 |
| Intermittent 10% ³ | 180 [50] | 155 [43.1] | 130 [36.1] | 90 [25] | 78 [21.7] | 65 [18.1] | 60 [16.7] | 42 [11.7] | 205 [57] | 72.2 |
| Pulse 1%³ | 218 [60.6] | 195 [54.2] | 165 [45.9] | 135 [37.5] | 120 [33.4] | 110 [30.6] | 100 [27.8] | 70 [19.5] | N/A | 146.8 |

Optional Return Spring Kit A490-367461-03

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)

3 - Calculated force values to be verified in application









