

# DC Frame Solenoid



## Model 22

### Features:

- Available return spring kit
- AC & DC Applications
- See Model 22 AC
- UL recognized

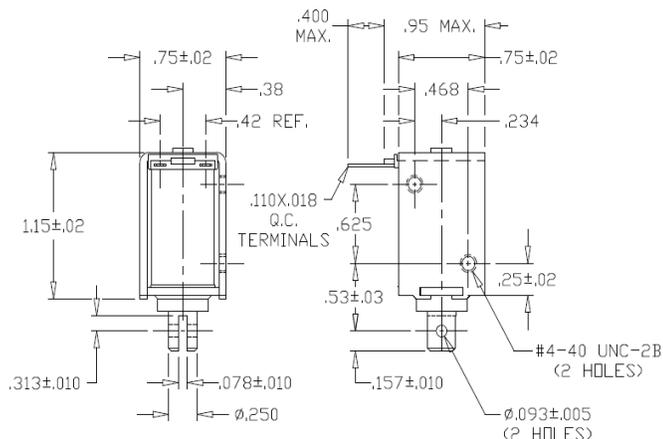
### Electrical:

- 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: 0.25"
- Plunger Guide Material: Plastic
- Mounting: 2 - #4-40 holes
- Weight: Plunger .2 oz, Total 1.6 oz
- Life Expectancy: 1 Million Cycles<sup>1</sup>

<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 <sup>2</sup> (Ω)	Power (W)	Current
22-C-12D	A420-065802-00	Cont.	12VDC	45.7	3.3	263 mA
22-I-12D	A420-065803-00	Inter. 25%	12VDC	22.6	6.7	531 mA
22-C-24D	A420-065804-00	Cont.	24VDC	182	3.3	132 mA
22-I-24D	A420-065805-00	Inter. 25%	24VDC	93.2	6.5	258 mA

<sup>2</sup> - 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

Stroke (in.)	Typical Push Force Ounces [N] @ 20°C (68°F) (Distance from fully seated position)					HOLDING FORCE Ounces [N]	Power (W)
	0.050	0.125	0.250	0.375	0.500		
Continuous 100%	11 [3.1]	3 [0.8]	2 [0.6]	1 [0.3]	N/A	39 [10.8]	3.3
Intermittent 25%	20 [5.6]	8 [2.2]	3 [0.8]	2 [0.6]	1 [0.3]	45 [12.5]	6.6
Intermittent 10% <sup>3</sup>	35 [9.7]	24 [6.7]	12 [3.3]	9 [2.5]	5 [1.4]	50 [13.9]	41.5
Pulse 1% <sup>3</sup>	51 [14.2]	42 [11.7]	28 [7.8]	22 [6.1]	14 [3.9]	N/A	102.3

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

Optional Return Spring Kit

A490-367461-07



**GUARDIAN-ELECTRIC.COM**

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