# **DC Frame Solenoid**

## Model 3HD



• 1425 Lake Avenue, Woodstock, IL 60098

#### **Features:**

Available return spring kit AC & DC Applications (See Model 3HD AC) RoHS Compliant UL recognized Coil Termination: 3/16"QC terminals

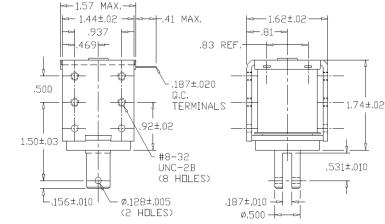
#### **Electrical:**

Coil Voltages: 6, 12, 24, 48, 110 VDC standard 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 1.5 oz, Total 10.7 oz Life Expectancy: 1 Million Cycles<sup>1</sup>





RoHS

Solenoid shown energized with plunger fully seated

**Available Customization:** 

Insulation systems up to class H 180° C (356° F)

Plunger

.

DC Voltage / Duty Cycle

**Coil Termination** 

Minimum quantities apply

**1**†**1** 

Optional Return Spring Kit

A490-367461-02

### **Standard Part Numbers**

Model No.	Part No.	Duty Cycle	Voltage	Resistance <sup>2</sup> (Ω)	Power (W)	Current
3HD-C-12D	A420-065922-00	Cont.	12VDC	16.7	9.1	719 mA
3HD-I-12D	A420-065923-00	Inter. 25%	12VDC	5.45	27.7	2.2 A
3HD-C-24D	A420-065924-00	Cont.	24VDC	65.8	9.2	365 mA
3HD-I-24D	A420-065925-00	Inter. 25%	24VDC	22.1	27.4	1.09 A

2 - Coil resistance tolerance +/- 5%

Contact us for custom voltages or duty cycles

Typical Pull 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%	115 [32]	55 [15.3]	20 [5.6]	10 [2.8]	8 [2.2]	4 [1.1]	2 [0.6]	1 [0.3]	145 [40.3]	9.2
Intermittent 25%	165 [45.9]	107 [29.7]	60 [16.7]	40 [11.1]	30 [8.3]	15 [4.2]	12 [3.3]	5 [1.4]	181 [50.3]	27.7
Intermittent 10% <sup>3</sup>	230 [63.9]	205 [57]	145 [40.3]	110 [30.6]	80 [22.2]	50 [13.9]	35 [9.7]	10 [2.8]	265 [73.7]	72.2
Pulse 1% <sup>3</sup>	280 [77.8]	260 [72.3]	225 [62.6]	180 [50.]	140 [38.9]	90 [25.]	55 [15.3]	17 [4.7]	290 [80.6]	146.8

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

