

# DC Frame Solenoid

## Model 28



1425 Lake Avenue, Woodstock, IL 60098

### Features:

Available return spring kit  
AC & DC Applications (See Model 28 AC)  
RoHS Compliant  
UL Recognized  
Coil Termination: 3/16" QC terminals

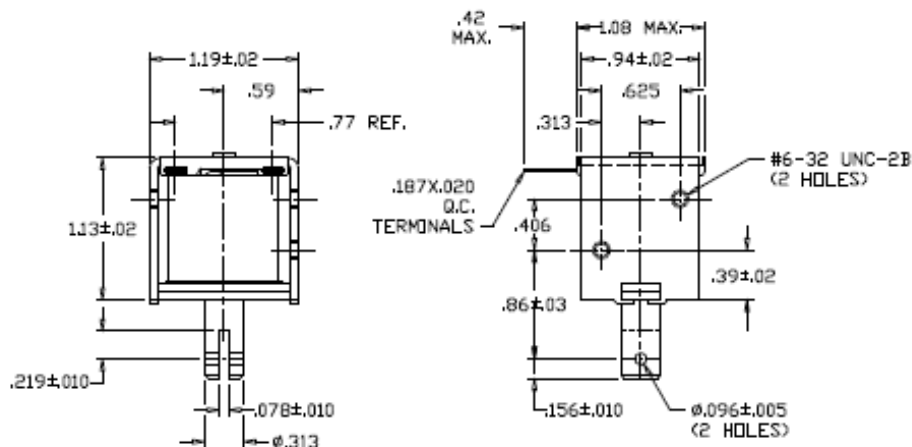
### Electrical:

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: 2 - #6-32 holes  
Weight: Plunger .5 oz, Total 3.5 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
28-C-12D	A420-065452-00	Cont.	12VDC	29.8	5.1	403 mA
28-I-12D	A420-065453-00	Inter. 25%	12VDC	11.9	12.7	1.01 A
28-C-24D	A420-065454-00	Cont.	24VDC	116	5.2	207 mA
28-I-24D	A420-065455-00	Inter. 25%	24VDC	47.4	12.8	506 mA

<sup>2</sup> - Coil resistance tolerance +/- 5%

Contact us for custom voltages or duty cycles

### Available Customization:

- Plunger
  - DC Voltage / Duty Cycle
  - Coil Termination
  - 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)							HOLDING FORCE Ounces [N]	Power (W)
Stroke (in.)	0.050	0.125	0.250	0.375	0.500	0.625		
Continuous 100%	25 [7]	10 [2.8]	4 [1.1]	2 [0.6]	1 [0.3]	N/A	130 [36.1]	5.1
Intermittent 25%	40 [11.1]	12 [3.3]	7 [1.9]	4 [1.1]	2 [0.6]	N/A	159 [44.2]	12.7
Intermittent 10% <sup>3</sup>	70 [19.5]	50 [13.9]	35 [9.7]	28 [7.8]	14 [3.9]	1 [0.3]	95 [26.4]	38.9
Pulse 1% <sup>3</sup>	92 [25.6]	85 [23.6]	65 [18.1]	58 [16.1]	28 [7.8]	3 [0.8]	N/A	95.8

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

### Optional Return Spring Kit

A490-367461-08



www.Kelcoind.com

Information contained in this specification sheet subject to change without notice. Guardian Electric ©

