## DC Frame Solenoid

Model 28HD

## Features:

Available return spring kit
AC \& DC Applications (See Model 28HD 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 - $105^{\circ} \mathrm{C}\left(221^{\circ} \mathrm{F}\right)$
Dielectric Strength: 1500 V 60 Hz

## Mechanical:

Size: $1.54^{\prime \prime}(\mathrm{L}) \times 1.62^{\prime \prime}(\mathrm{W}) \times 1.57^{\prime \prime}(\mathrm{H})$
Plunger Diameter: 0.438"
Plunger Guide Material: Plastic Mounting: 2 - \#6-32 holes
Weight: Plunger .9 oz , Total 4.7 oz
Life Expectancy: 1 Million Cycles ${ }^{1}$
${ }^{1}$ - Dependent on load conditions


Solenoid shown energized with plunger fully seated

## Standard Part Numbers

| Model No. | Part No. | Duty Cycle | Voltage | Resistance <br> $(\Omega)$ | Power <br> $(W)$ | Current |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28HD-C-12D | A420-065962-00 | Cont. | 12VDC | 30.1 | 5 | 399 mA |
| 28HD-I-12D | A420-065963-00 | Inter. 25\% | 12 VDC | 12.2 | 12.4 | 984 mA |
| 28HD-C-24D | A420-065964-00 | Cont. | 24 VDC | 119 | 5.1 | 202 mA |
| 28HD-I-24D | A420-065965-00 | Inter. $25 \%$ | 24VDC | 49 | 12.3 | 490 mA |

2-Coil resistance tolerance $+/-5 \%$
Contact us for custom voltages or duty cycles

| Typical Pull Force Ounces [ N ] @ $20^{\circ} \mathrm{C}\left(68^{\circ} \mathrm{F}\right)$ <br> (Distance from fully seated position) |  |  |  |  |  |  | HOLDING FORCE <br> Ounces [N] | Power <br> (W) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stroke (in.) | 0.050 | 0.125 | 0.250 | 0.375 | 0.500 | 0.625 |  |  |
| Continuous 100\% | 30 [8.3] | 12 [3.3] | 6 [1.7] | 4 [1.1] | 1 [0.3] | N/A | 76 [21.1] | 5.1 |
| Intermittent 25\% | 65 [18.1] | 30 [8.3] | 12 [3.3] | 8 [2.2] | 5 [1.4] | N/A | 92 [25.6] | 12.4 |
| Intermittent 10\% ${ }^{3}$ | 135 [37.5] | 90 [25] | 48 [13.3] | 25 [7] | 15 [4.2] | 4 [1.1] | 95 [26.4] | 47.3 |
| Pulse $1 \%^{3}$ | 175 [48.7] | 145 [40.3] | 90 [25] | 50 [13.9] | 25 [7] | 10 [2.8] | N/A | 92.7 |


| Optional Return <br> Spring Kit |
| :---: |
| A490-367461-09 |

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
$\oplus$ www.Kelcoind.com
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