



D-FRAME SOLENOID

Two position linear solenoid with D-frame construction.

Features

- Balance of cost and performance
- AC solenoids and DC solenoids available
- Encapsulated coils on most models
- UL approval on many models



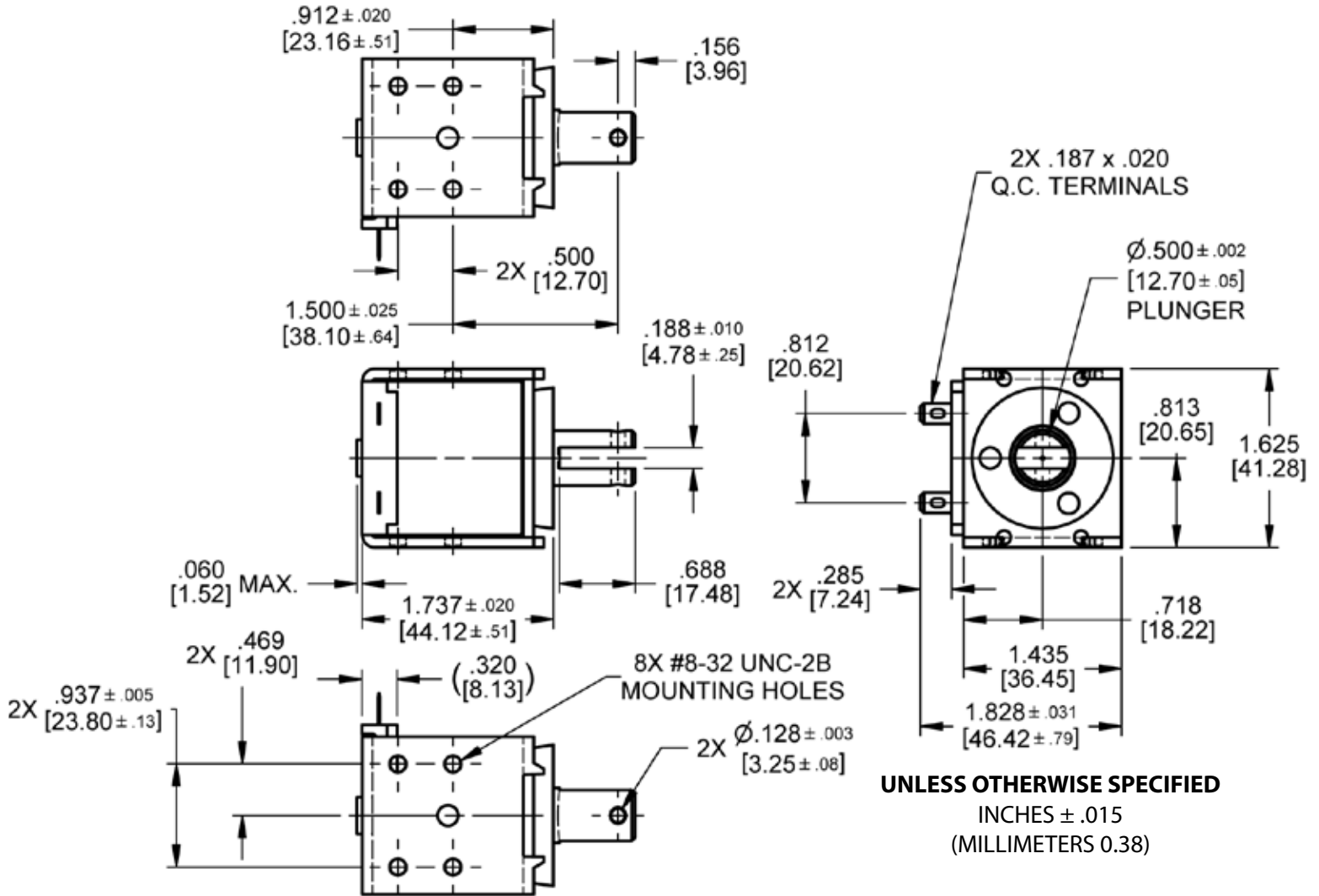
| Electrical Specifications | |
|---------------------------|--|
| Coil Voltages | 6, 12, 24, 120, 240 VAC 6, 12, 24, 110 VDC |
| Coil Power | 21 VA Continuous, 120 VA Intermittent, 210 VA Pulse, 11 Watts Continuous, 27 Watts Intermittent, 110 Watts Pulse |
| Coil Termination | 0.187" [4.7] Quick Connect Terminals (standard) 0.250" [6.4] Quick Connect Terminals (optional) Wire leads optional with tape wrapped coil |
| Duty Cycle | Continuous, intermittent and pulse duty available (see standard part numbers on page 4) |
| Coil Treatment | Encapsulated (tape wrap optional) |
| Insulation Class | Class A Rating - 105°C (221°F) Max. (standard) Class F Rating - 155°C (311°F) Max. (optional) |
| Dielectric Strength | 30 Volts and Under: 500 VRMS Over 30 Volts: 1000 VRMS plus 2X rated voltage for 1 minute |
| Mechanical Specifications | |
| Size | 1.737" [44.1] (L) x 1.437" [36.5] (W) x 1.626" [41.3] (H) (See dimensional drawing on page 2) |
| Forces | See page 3 for force curves |
| Plunger Diameter | Ø 0.500" [12.7] |
| Plunger Guide Material | Plastic |
| Mounting | 8X #8-32 UNC-2B Mounting Holes |
| Weight | Plunger - 1.8 oz [51.0 gms], Total - 11.0 oz [311.9 gms] |
| Life Expectancy | 250,000 Cycles (Dependent on load conditions) |
| Agency Approval | |
| | UL File No. E57982 For Continuous Duty UL File No. E74443 For Insulation Systems S105, S130, S130D, S130D1, S155D |

Dimensions: inches [mm]

D-3HD

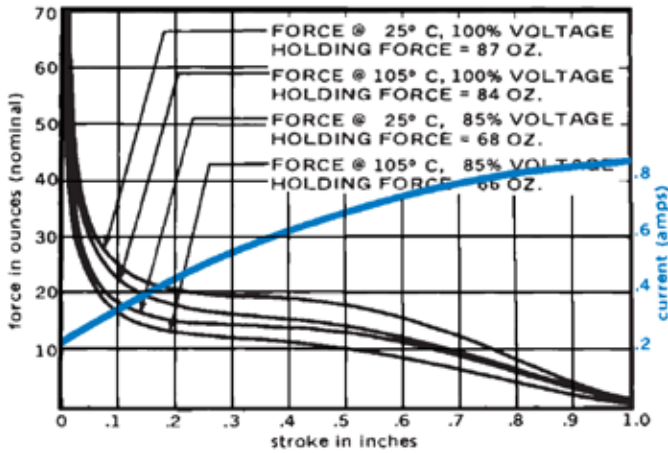
Dimensional View

Units: Inches [mm]

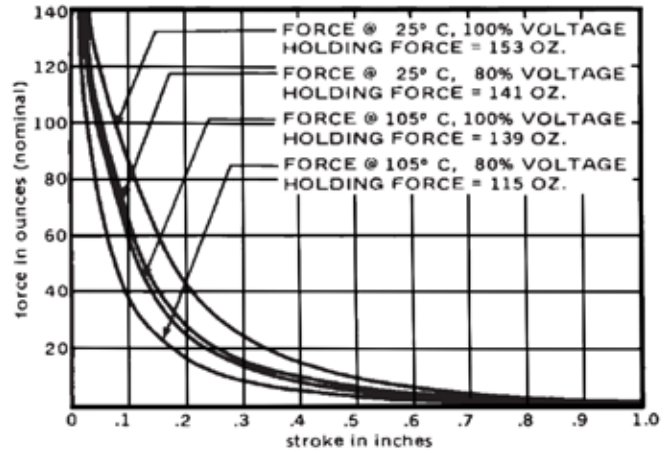


Force Curves

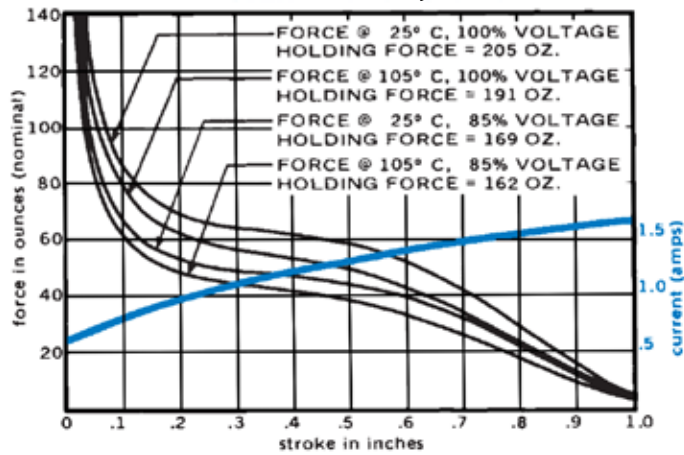
AC Continuous Duty - 21 VA



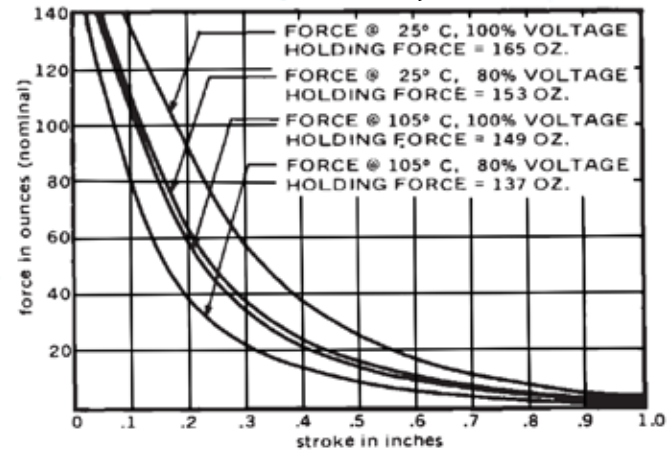
DC Continuous Duty - 11 Watts



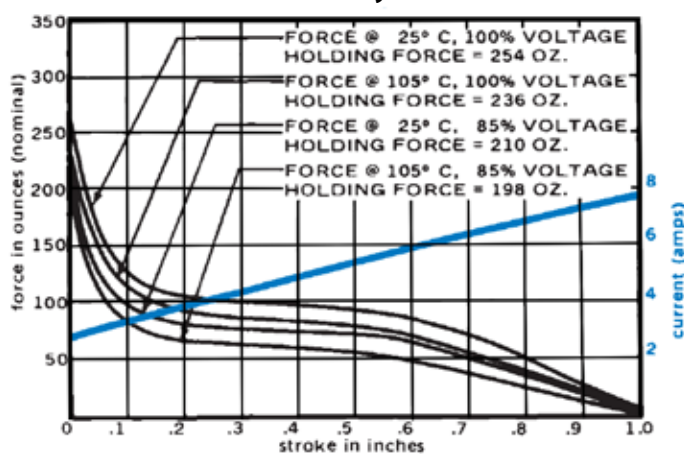
AC Intermittent Duty - 120 VA



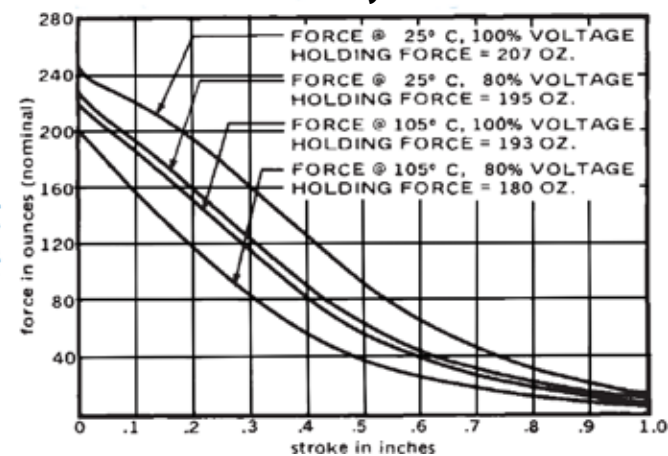
DC Intermittent Duty - 27 Watts



AC Pulse Duty - 210 VA



DC Pulse Duty - 110 Watts



Standard intermittent duty cycle at nominal voltage is 25%, with three (3) minutes maximum "ON" and nine (9) minutes minimum "OFF" in a repetitive cycle. Standard Pulse duty cycle is 10% with 100 milliseconds "ON" and 900 milliseconds "OFF".
NOTE: Approx 36 sq. in. Heat Sink Required

Standard Part Numbers

| Parts No. | Voltage | Duty Cycle | Power | Resistance (Ohms) | Operation | Typical Force oz [N] 100% Voltage, 77°F [25°C], Stroke @ | | | | |
|-----------|---------|--------------|-----------|-------------------|-----------|--|---------------|---------------|--------------|--------------|
| | | | | | | 0.000" | 0.125" | 0.250" | 0.500" | 0.750" |
| 53733-80 | 6 VAC | Continuous | 21 VA | 0.26 | Pull | 87 [24.2] | 23 [6.4] | 20 [5.6] | 18 [5.0] | 10 [2.8] |
| 53733-81 | 12 VAC | | | 1.05 | | | | | | |
| 53733-82 | 24 VAC | | | 4.21 | | | | | | |
| 53733-84* | 120 VAC | | | 109 | | | | | | |
| 53733-85 | 240 VAC | | | 446 | | | | | | |
| 53733-87 | 12 VAC | Intermittent | 120 VA | 0.26 | Pull | 205 [57.0] | 79 [22.0] | 65 [18.1] | 58 [16.1] | 34 [9.5] |
| 53733-88 | 24 VAC | | | 1.05 | | | | | | |
| 53733-90* | 120 VAC | | | 27.6 | | | | | | |
| 53733-91 | 240 VAC | | | 109 | | | | | | |
| 53733-94 | 24 VAC | Pulse | 210 VA | 0.70 | Pull | 254 [70.6] | 115 [32.0] | 100 [27.8] | 90 [25.0] | 63 [17.5] |
| 53733-96 | 120 VAC | | | 18.0 | | | | | | |
| 53733-97 | 240 VAC | | | 73.8 | | | | | | |
| 53732-80 | 6 VDC | Continuous | 11 Watts | 3.13 | Pull | 153 [42.5] | 74 [20.6] | 30 [8.3] | 10 [2.8] | 4 [1.1] |
| 53732-81* | 12 VDC | | | 12.8 | | | | | | |
| 53732-82* | 24 VDC | | | 51.5 | | | | | | |
| 53732-84 | 110 VDC | | | 1100 | | | | | | |
| 53732-86 | 6 VDC | Intermittent | 27 Watts | 1.31 | Pull | 165 [45.9] | 134 [37.3] | 70 [19.5] | 26 [7.2] | 10 [2.8] |
| 53732-87* | 12 VDC | | | 5.27 | | | | | | |
| 53732-88* | 24 VDC | | | 21.4 | | | | | | |
| 53732-90 | 110 VDC | | | 463 | | | | | | |
| 53732-92 | 6 VDC | Pulse | 110 Watts | .323 | Pull | 207 [57.5] | 215 [59.8] | 180 [50.0] | 90 [25.0] | 40 [11.1] |
| 53732-93 | 12 VDC | | | 1.31 | | | | | | |
| 53732-94 | 24 VDC | | | 5.27 | | | | | | |
| 53732-96 | 110 VDC | | | 109 | | | | | | |

(* Normally Stocked

Non stocked items require a minimum order