



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

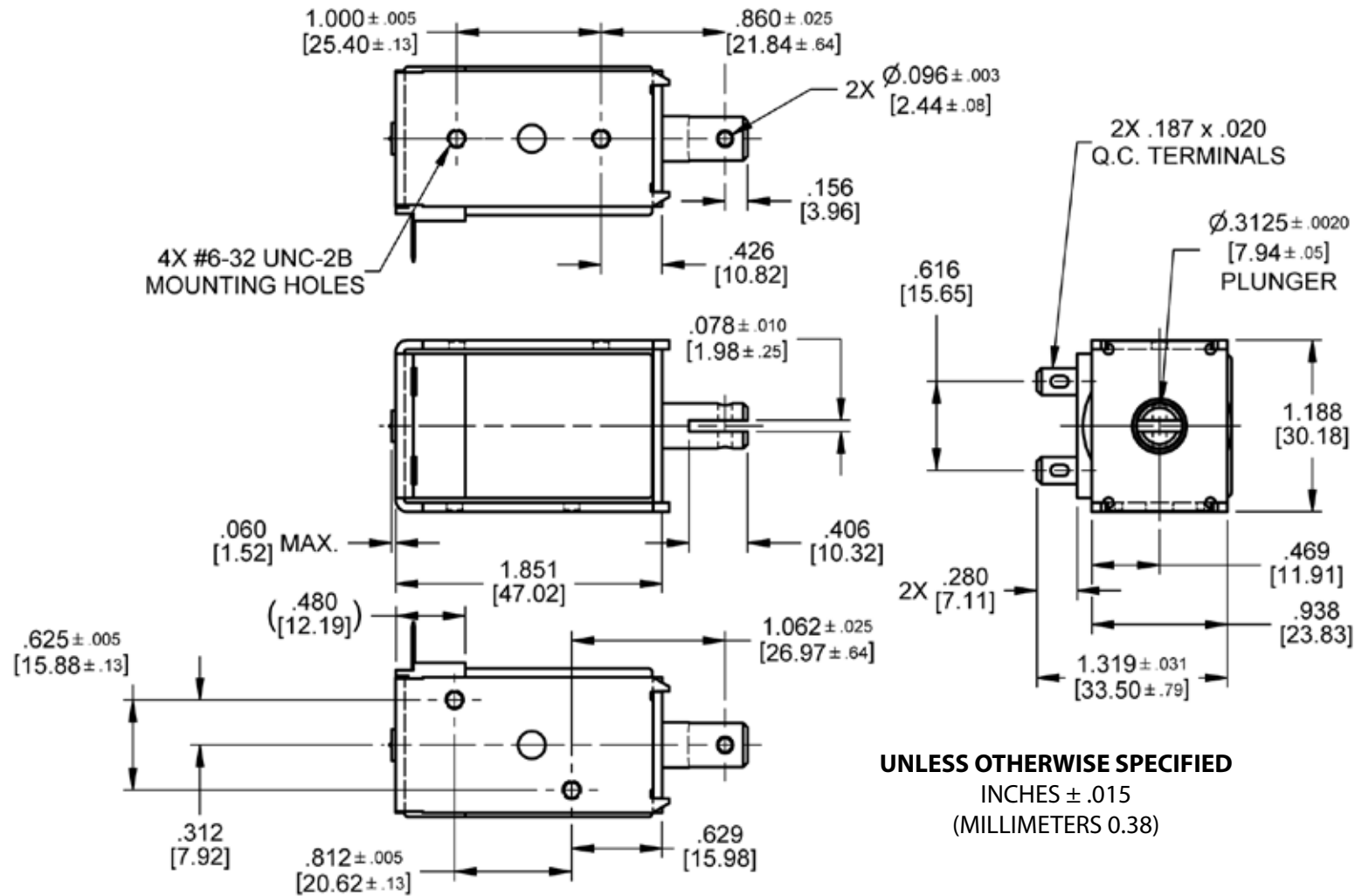


Electrical Specifications	
Coil Voltages	6, 12, 24, 120, 240 VAC 6, 12, 24, 110 VDC
Coil Power	12.5 VA Continuous, 39 VA Intermittent, 125 VA Pulse 8 Watts Continuous, 19 Watts Intermittent, 80 Watts Pulse
Coil Termination	0.187" [4.7] Quick Connect Terminals (standard) Wire leads optional with tape wrapped coil
Duty Cycle	Continuous, intermittent and pulse duty available (see standard parts 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	1.851" [47.0] (L) x 0.938" [23.8] (W) x 1.190" [30.2] (H) (See dimensional drawing on page 2)
Forces	See force curve tables on page 3
Plunger Diameter	Ø 0.3125" [7.9]
Plunger Guide Material	Plastic
Mounting	4X #6-32 UNC-2B Mounting Holes
Weight	Plunger - 0.7 oz [19.8 gms], Total - 5.0 oz [141.8 gms]
Life Expectancy	250,000 Cycles (Dependent on load conditions)
Agency Approvals	
UL File No. E57982 For Continuous Duty UL File No. E74443 For Insulation Systems S105, S130, S130D, S130D1, S155D	

Dimensions: inches [mm]

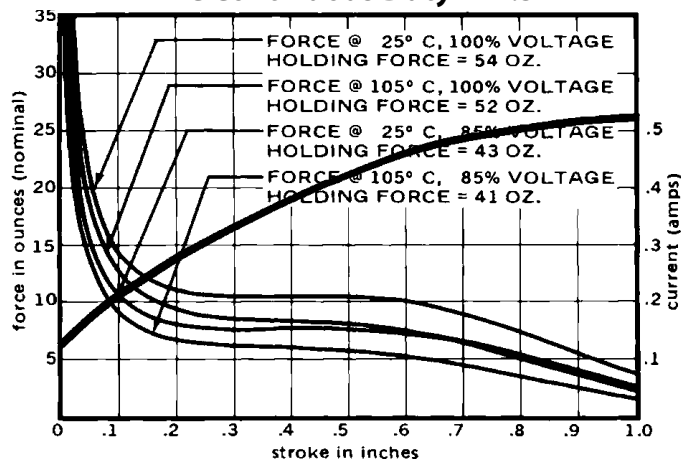
Dimensional View

Units: Inches [mm]

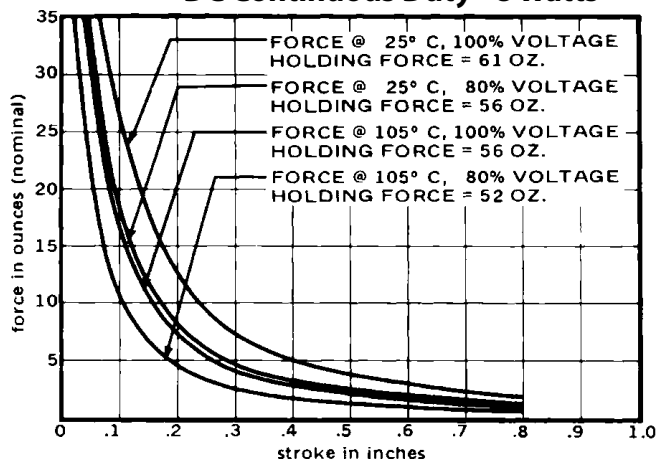


Force Curves

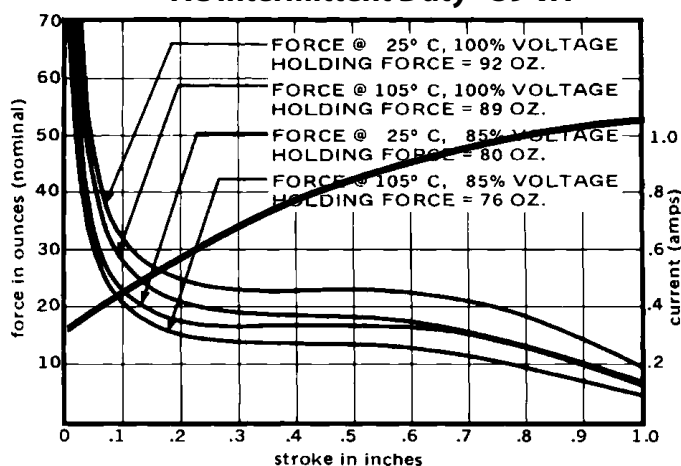
AC Continuous Duty - 12.5 VA



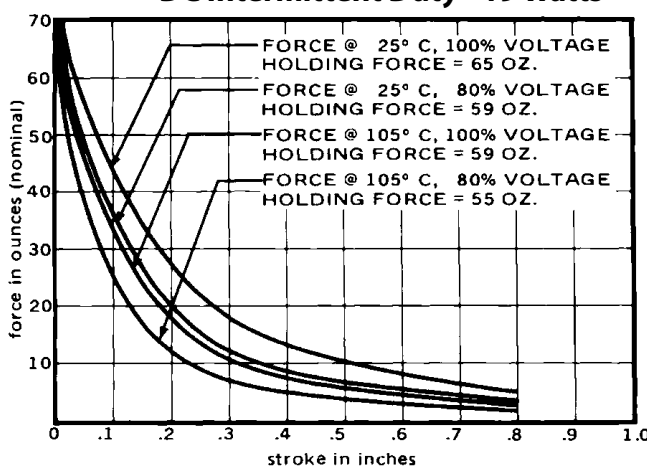
DC Continuous Duty - 8 Watts



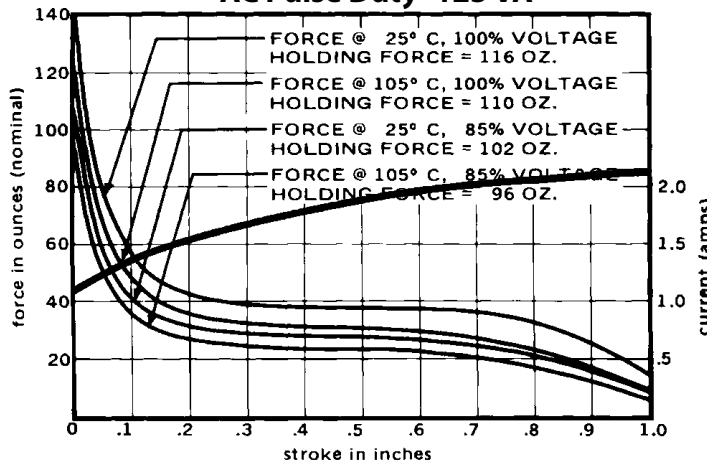
AC Intermittent Duty - 39 VA



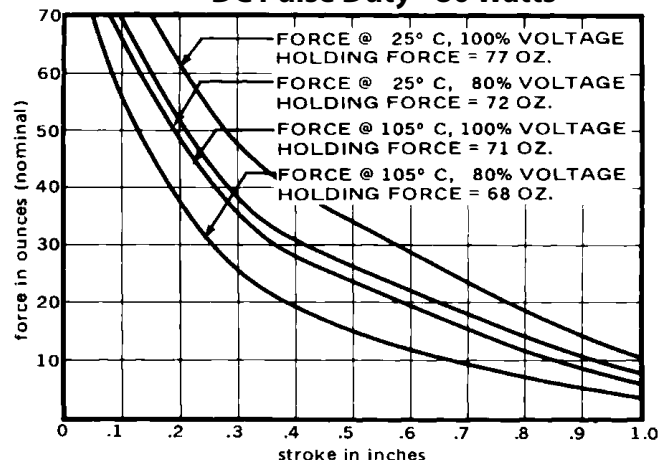
DC Intermittent Duty - 19 Watts



AC Pulse Duty - 125 VA



DC Pulse Duty - 80 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"
53738-80	6 VAC	Continuous	12.5 VA	0.47	Pull	54 [15.0]	13 [3.6]	11 [3.1]	10 [2.8]	8 [2.2]
53738-81	12 VAC			1.9						
53738-82	24 VAC			7.7						
53738-84*	120 VAC			200						
53738-85	240 VAC			813						
53738-86	6 VAC	Intermittent	39 VA	0.21	Pull	92 [25.6]	28 [7.8]	23 [6.4]	23 [6.4]	20 [5.6]
53738-87	12 VAC			0.86						
53738-88	24 VAC			3.5						
53738-90*	120 VAC			85						
53738-91	240 VAC			342						
53738-92	6 VAC	Pulse	125 VA	0.11	Pull	116 [32.2]	51 [14.2]	40 [11.1]	38 [10.6]	34 [9.5]
53738-93	12 VAC			0.43						
53738-94	24 VAC			1.73						
53738-96	120 VAC			45.5						
53738-97	240 VAC			182						
53736-80	6 VDC	Continuous	8 Watts	4.5	Pull	61 [17.0]	22.5 [6.3]	8 [2.2]	4 [1.1]	2 [0.6]
53736-81*	12 VDC			18.6						
53736-82*	24 VDC			73.9						
53736-84	110 VDC			1550						
53736-86	6 VDC	Intermittent	19 Watts	1.9	Pull	65 [18.1]	40 [11.1]	22 [6.1]	10 [2.8]	5 [1.4]
53736-87*	12 VDC			7.7						
53736-88*	24 VDC			31						
53736-90	110 VDC			634						
53736-92	6 VDC	Pulse	80 Watts	0.47	Pull	77 [21.4]	74 [20.6]	53 [14.7]	34 [9.5]	21 [5.8]
53736-93	12 VDC			1.9						
53736-94	24 VDC			7.7						
53736-96	110 VDC			151						

(*) Normally Stocked

Non stocked items require a minimum order