

D-FRAME SOLENOID



Two position linear solenoid with D-frame construction.

Features

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



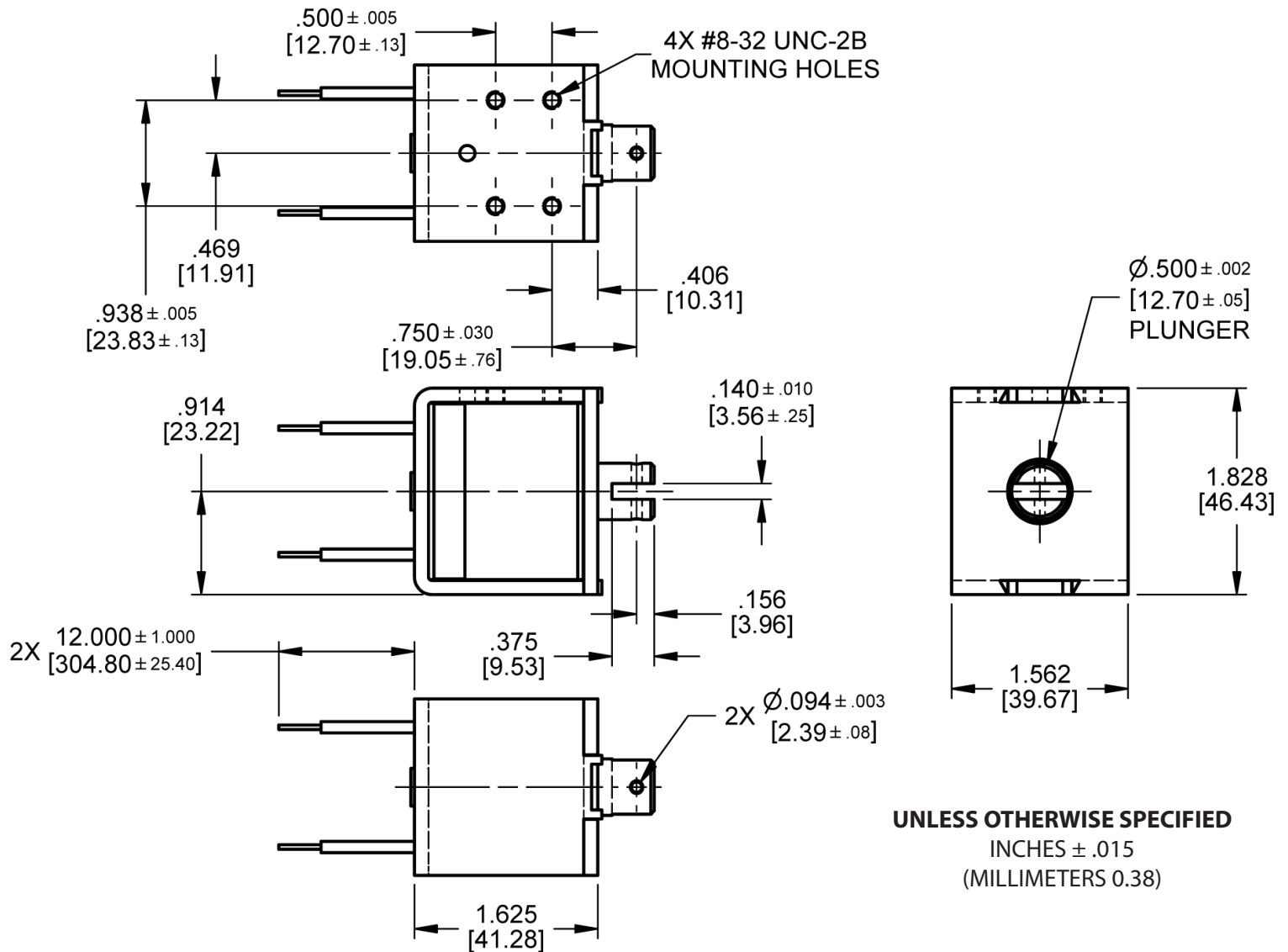
Electrical Specifications	
Coil Voltages	12, 24, 120, 240 VAC, 6, 12, 24, 110 VDC
Coil Power	14 VAC Continuous, 53 VA Intermittent, 140 VA Pulse 10 Watts Continuous, 25 Watts Intermittent, 100 Watts Pulse
Coil Termination	Wire leads (standard)
Duty Cycle	Continuous, intermittent and pulse duty available (see standard part numbers on page 4)
Coil Treatment	Tape Wrapped
Insulation Class	Class A Rating - 105°C (221°F) Max. (standard) Class B Rating - 130°C (266°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	1.625" (L) x 1.562" (W) x 1.828" (H) (See page 2 for dimensional drawing)
Forces	See force curves on page 3
Plunger Diameter	0.500"
Plunger Guide Material	Plastic
Mounting	4X #8-32 UNC-2B Mounting Holes
Weight	Plunger - 1.27 oz., Total - 12 oz.
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

All dimensions in Inches

D-50

Dimensional View

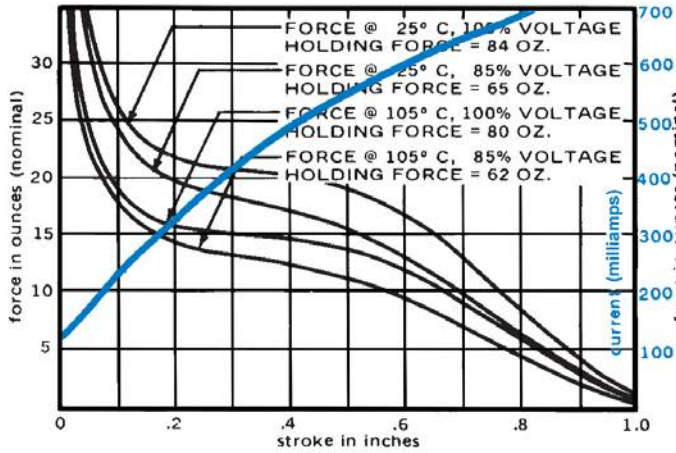
Units: Inches [mm]



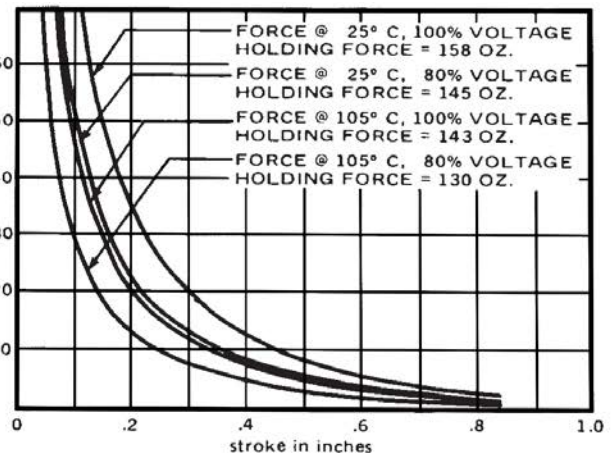
UNLESS OTHERWISE SPECIFIED
INCHES ± .015
(MILLIMETERS 0.38)

Force Curves

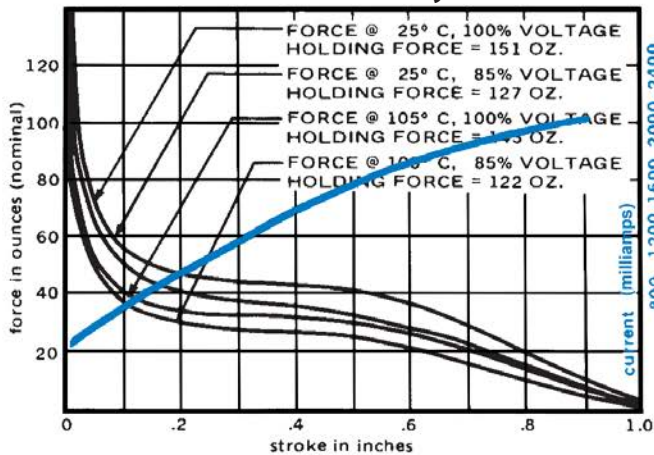
AC Continuous Duty - 14 VA



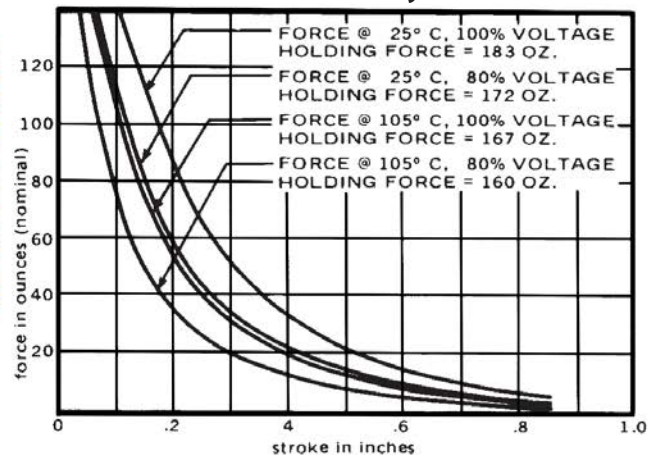
DC Continuous Duty - 10 Watts



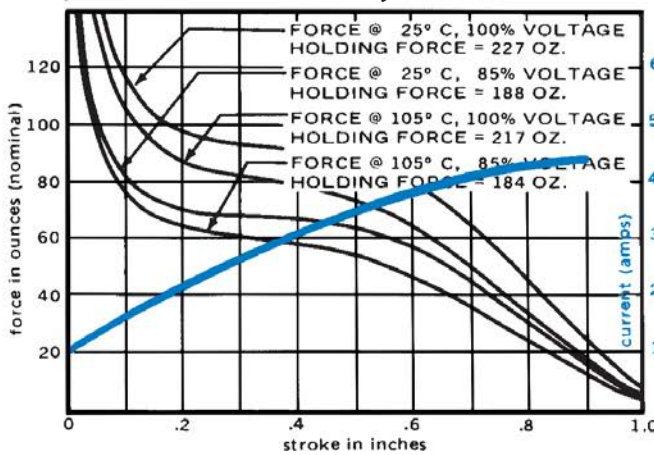
AC Intermittent Duty - 53 VA



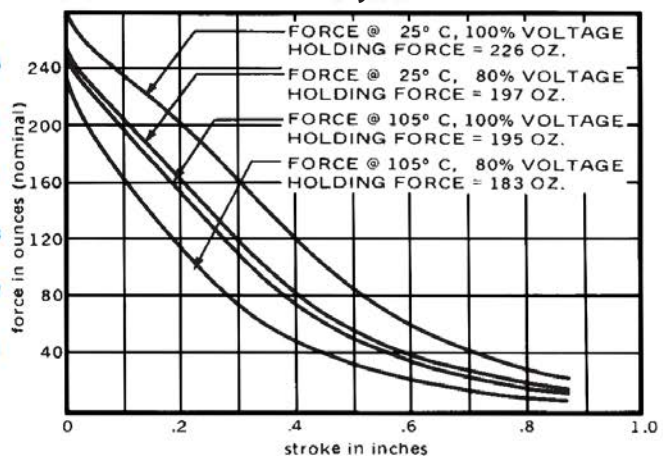
DC Intermittent Duty - 25 Watts



AC Pulse Duty - 140 VA



DC Pulse Duty - 100 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). 100% Voltage, 77°, Stroke @				
						0.000"	0.125"	0.250"	0.500"	0.750"
51053-81	12 VAC	Continuous	14 VA	.95	Pull	84	24	21	19	10
51053-83	24 VAC			3.8						
51053-94	120 VAC			97.4						
51053-97	240 VAC			392						
51014-83	24 VAC	Intermittent	53 VA	1.55	Pull	151	52	46	40	24
51014-94	120 VAC			40.7						
50014-97	240 VAC			162						
53699-83	24 VAC	Pulse	140 VA	0.70	Pull	227	10	994	90	54
53699-94	120 VAC			18.1						
53699-97	240 VAC			72.7						
51051-80	6 VDC	Continuous	10 Watts	3.77	Pull	158	60	25	8	4
51051-81	12 VDC			14.5						
51051-83	24 VDC			58.2						
51051-93	110 VDC			1210						
50029-80	6 VDC	Intermittent	25 Watts	1.42	Pull	183	128	65	21	9
50029-81	12 VDC			5.7						
50029-83	24 VDC			23						
50029-93	110 VDC			486						
53744-80	6 VDC	Pulse	100 Watts	0.35	Pull	226	225	180	82	35
53744-81	12 VDC			1.42						
53744-82	24 VDC			5.7						
53744-84	110 VDC			121						

(*) Normally Stocked

Non stocked items require a minimum order