

C-FRAME SOLENOID

Two position linear solenoid with C-frame construction.

Features

- Economical construction
- AC solenoids and DC solenoids available
- Encapsulated coils on most models
- UL approval on many models

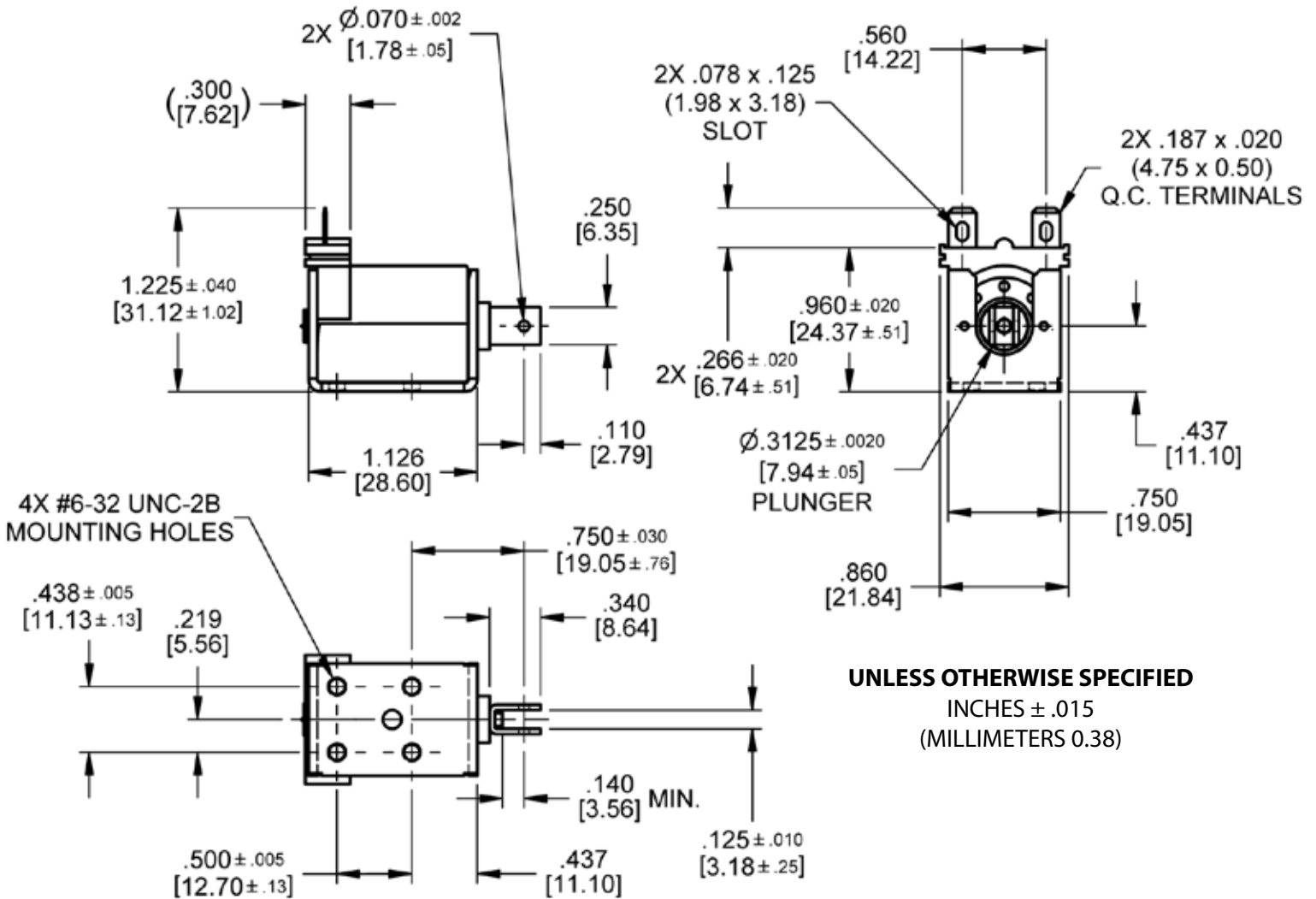


Electrical Specifications	
Coil Voltages	6, 12, 24, 120, 240 VAC 6, 12, 24, 110, 220 VDC
Coil Power	6.8 VA Continuous, 19.6 VA Intermittent, 68 VA Pulse 4.7 Watts Continuous, 12 Watts Intermittent, 45 Watts Pulse
Coil Termination	0.187" [4.7] Quick Connect/Solder Lug (standard) 0.250" [6.4] Quick Connect/Solder Lug (optional) Wire Leads (optional with tape wrapped coil)
Duty Cycle	Continuous, intermittent, pulse (see standard part numbers on page 4)
Coil Treatment	Encapsulated
Insulation Class	Class A Rating - 221°F [105°C] Max. (standard) Class F Rating - 266°F [155°C] 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	1.126" [28.6] (L) 0.860" [21.8] (W) 0.839" [21.3] (H) (See dimensional drawing on page 2)
Forces	See force curves on page 3
Plunger Diameter	Ø 0.3125 [7.9]
Plunger Guide Material	Plastic
Mounting	4X #6-32 UNC-2B Mounting Holes
Weight	Plunger - 0.3 oz. [9.0 gms], Total - 1.5 oz. [42.5 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]

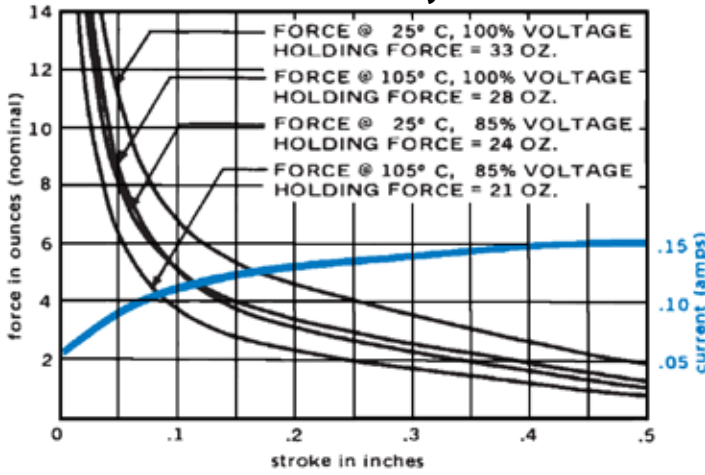
Dimensional View

Units: Inches [mm]

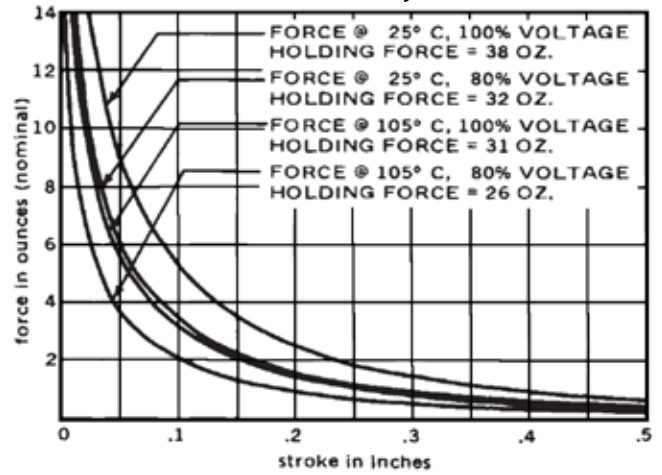


Force Curves

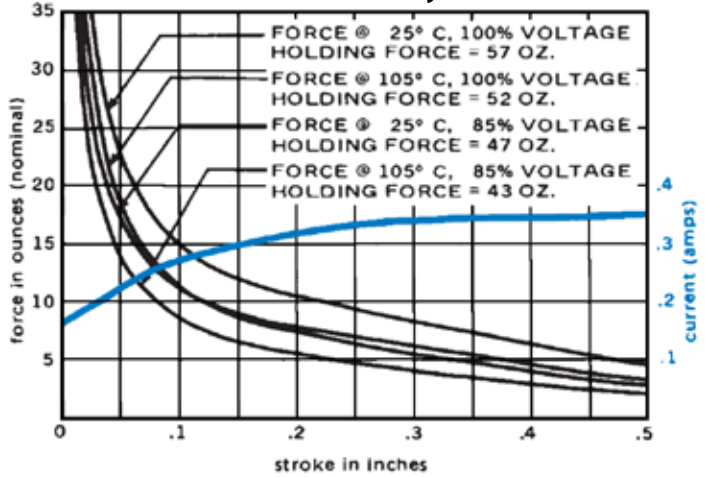
AC Continuous Duty - 6.8 VA



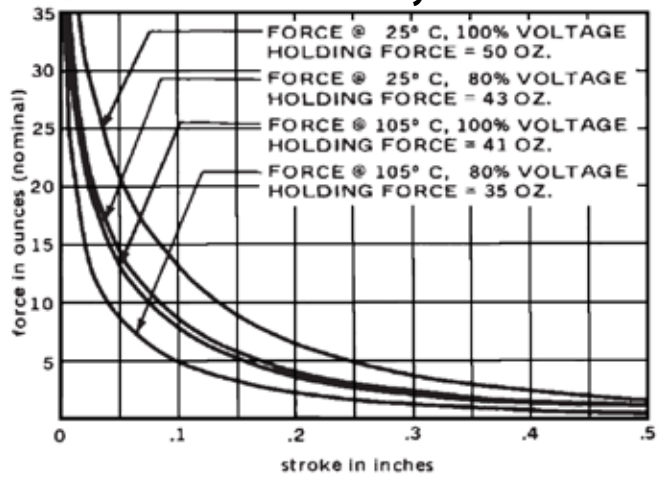
DC Continuous Duty - 4.7 Watts



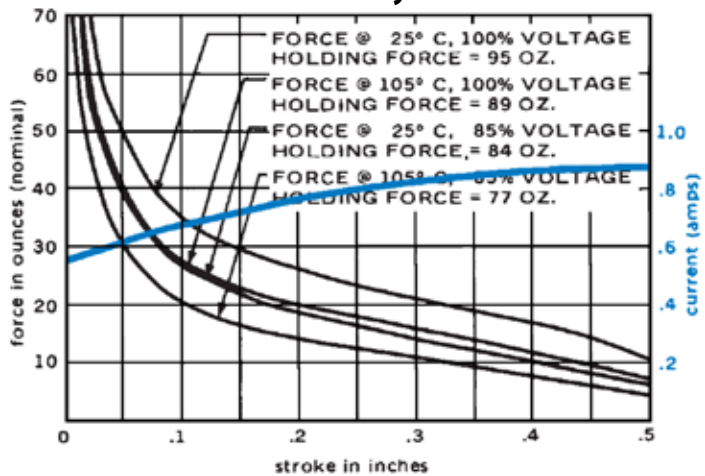
AC Intermittent Duty - 19.6 VA



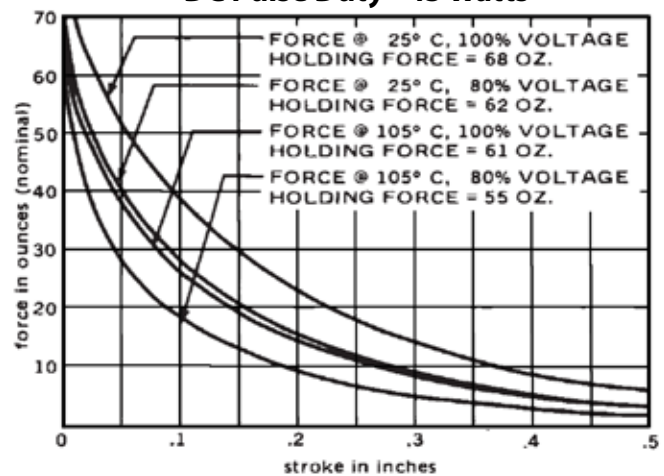
DC Intermittent Duty - 12 Watts



AC Pulse Duty - 68 VA



DC Pulse Duty - 45 Watts



Standard intermittent duty cycle at nominal voltage is 25%, with one (1) minute maximum "ON" and three (3) 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"
53687-80	6 VAC	Continuous	6.8 VA	1.92	Pull	33 [9.2]	5.9 [1.6]	4 [1.1]	2 [0.6]	0 [0.0]
53687-81	12 VAC			7.6						
53687-83	24 VAC			30.6						
53687-94*	120 VAC			776						
53687-97	240 VAC			3070						
53688-80	6 VAC	Intermittent	19.6 VA	0.78	Pull	57 [15.8]	13 [3.6]	9 [2.5]	4.5 [1.3]	0 [0.0]
53688-81	12 VAC			3.2						
53688-83	24 VAC			13						
53688-94*	120 VAC			327						
53688-97	240 VAC			1370						
53743-80	6 VAC	Pulse	68 VA	0.3	Pull	95 [26.4]	32 [8.9]	24 [6.7]	10 [2.8]	0 [0.0]
53743-81	12 VAC			1.18						
53743-82	24 VAC			5						
53743-83	120 VAC			124						
53743-84	240 VAC			493						
53685-80	6 VDC	Continuous	4.7 Watts	7.6	Pull	38 [10.6]	4 [1.1]	1.9 [0.5]	0.5 [0.1]	0 [0.0]
53685-81	12 VDC			30.6						
53685-83*	24 VDC			124						
53685-93	110 VDC			2670						
53685-97	220 VDC			11200						
53686-80	6 VDC	Intermittent	12 Watts	3.2	Pull	50 [13.9]	11 [3.1]	5 [1.4]	2 [0.6]	0 [0.0]
53586-81	12 VDC			13						
53686-83*	24 VDC			50.8						
53686-93	110 VDC			1011						
53686-97	220 VDC			4050						
53745-80	6 VDC	Pulse	45 Watts	0.78	Pull	68 [18.9]	34 [9.5]	17 [4.7]	6 [1.7]	0 [0.0]
53745-81	12 VDC			3.2						
53745-82	24 VDC			13						
53745-84	110 VDC			271						
53745-85	220 VDC			1140						

(*) Normally Stocked
Non stocked items require a minimum order