



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



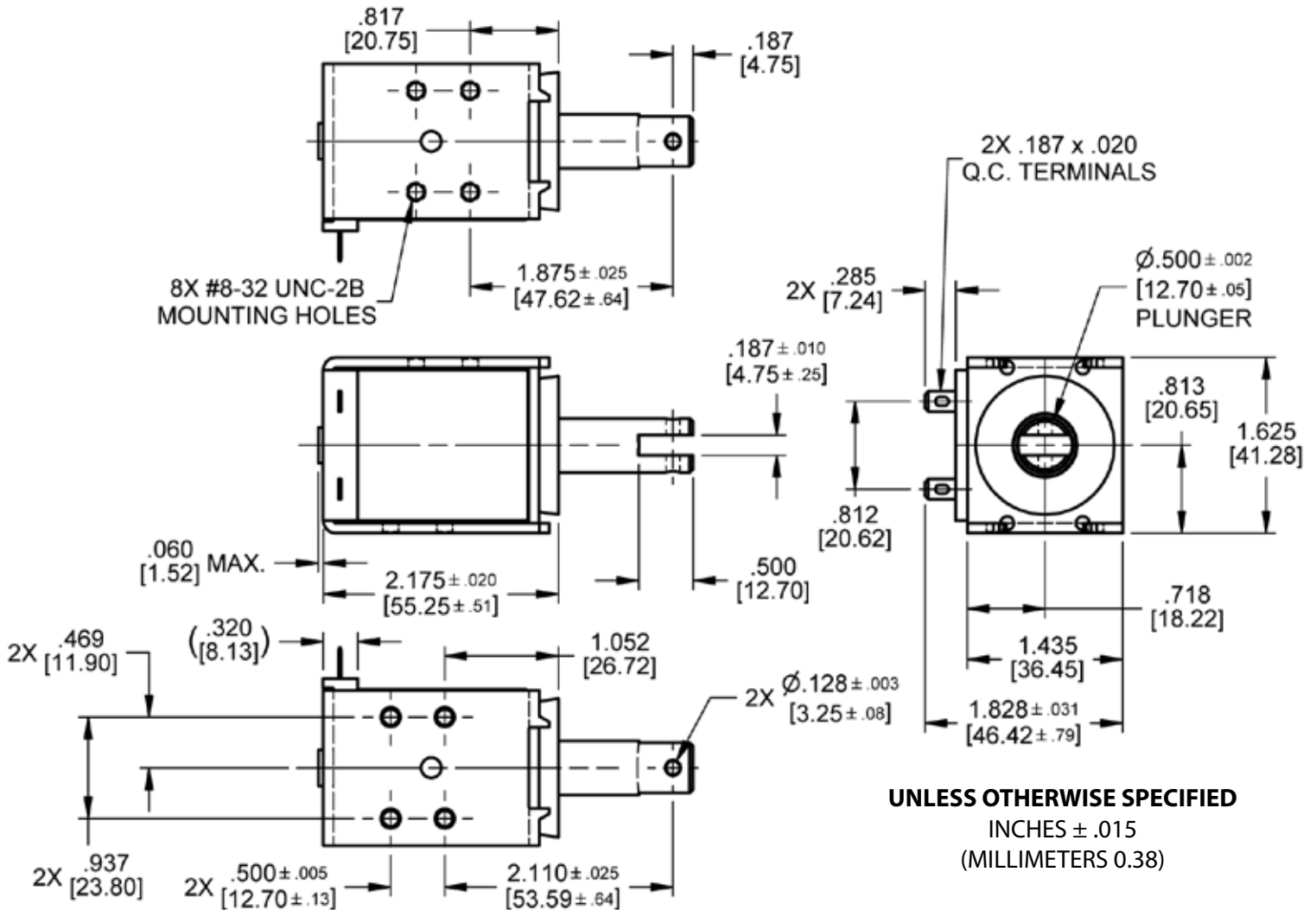
Electrical Specifications	
Coil Voltages	12, 24, 120, 240 VAC 6, 12, 24, 110 VDC
Coil Power	31 VA Continuous, 145 VA Intermittent, 310 VA Pulse 11.5 Watts Continuous, 38 Watts Intermittent, 115 Watts Pulse
Coil Termination	0.187" [4.7] Quick Connect Terminals (standard) 0.250" [6.4] Quick Connect Terminals (optional) Wire Leads (optional with tape wrapped coil)
Duty Cycle	Continuous, intermittent and pulse (see standard part numbers on page 4)
Coil Treatment	Encapsulated (tape wrapped optional)
Insulation Class	Class A Rating - 105° C Max. (221°F) (standard) Class F Rating - 155° C Max. (311°F) (optional)
Dielectric Strength	30 Volts and Under: 500 VRMS Over 30 Volts: 1000 VRMS plus 2X rated voltage for 1 minute
Mechanical Specifications	
Size	2.175" [55.2] (L) x 1.437" [36.5] (W) x 1.625" [41.3] (H) (See dimensional drawing on page 2)
Forces	See force curves on page 3
Plunger Diameter	Ø 0.500" [12.7]
Plunger Guide Material	Plastic
Mounting	8X #8-32 UNC-2B Mounting Holes
Weight	Plunger - 2.5 oz [70.9 gms], Total - 13.3 oz [377.1 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-4HD

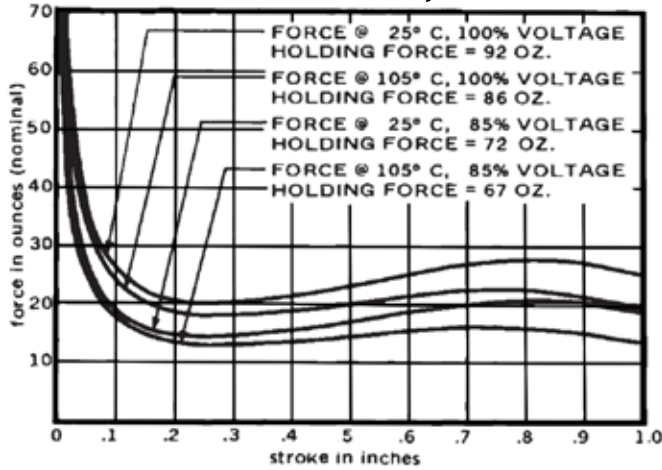
Dimensional View

Units: Inches [mm]

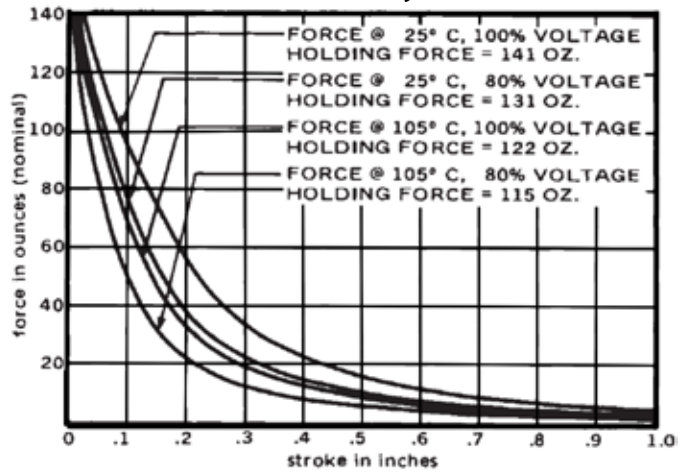


Force Curves

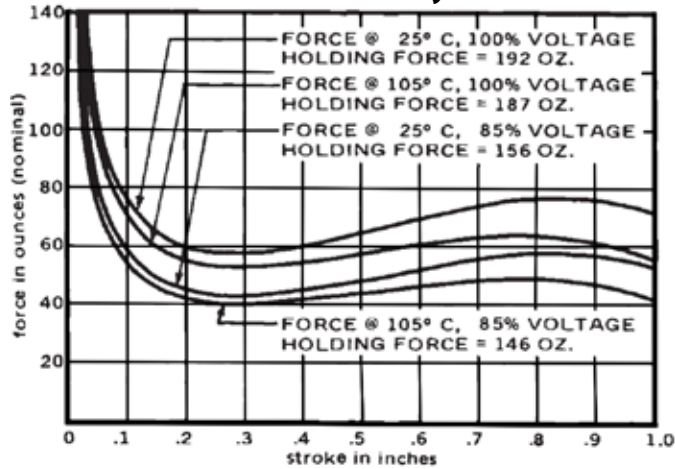
AC Continuous Duty - 31 VA



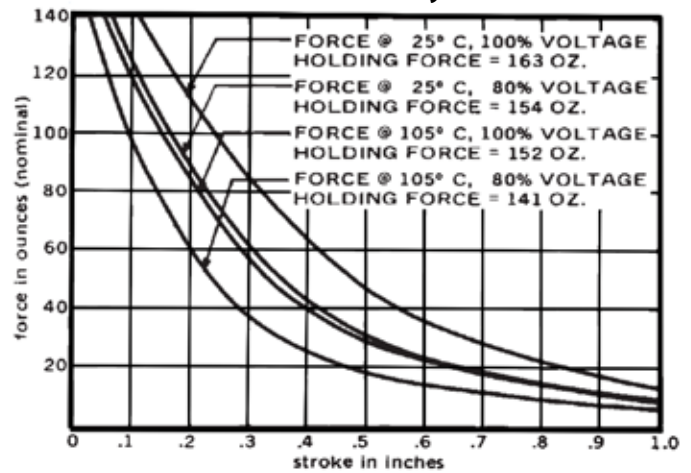
DC Continuous Duty - 11.5 Watts



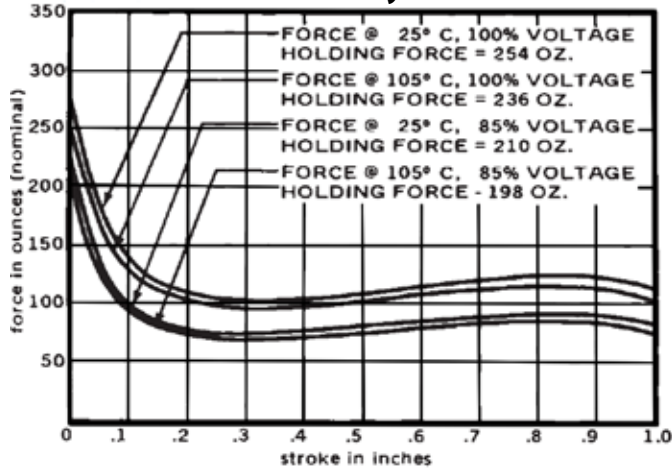
AC Intermittent Duty - 145 VA



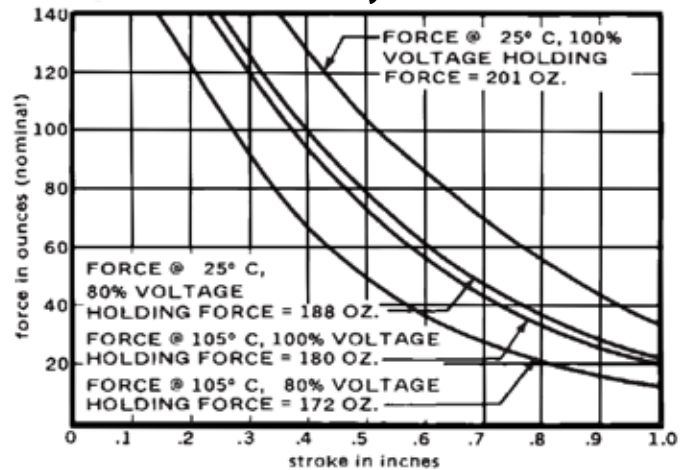
DC Intermittent Duty - 38 Watts



AC Pulse Duty - 310 VA



DC Pulse Duty - 115 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"
53720-81	12 VAC	Continuous	31 VA	0.588	Pull	92 [25.6]	23 [6.4]	20 [5.6]	23 [6.4]	27 [7.5]
53720-82	24 VAC			2.38						
53720-84*	120 VAC			61.1						
53720-85	240 VAC			247						
53720-88	24 VAC	Intermittent	145 VA	0.689	Pull	192 [53.4]	70 [19.5]	58 [16.1]	65 [18.1]	75 [20.9]
53720-90*	120 VAC			17.7						
53720-91	240 VAC			71.8						
53720-94	12 VAC	Pulse	310 VA	0.453	Pull	254 [70.6]	125 [34.8]	105 [29.2]	108 [30.0]	125 [34.8]
53720-96	120 VAC			11.7						
53720-97	240 VAC			48.2						
53719-80	6 VDC	Continuous	11.5 Watts	2.88	Pull	141 [39.2]	85 [23.6]	41 [11.4]	15 [4.2]	9 [2.5]
53719-81*	12 VDC			11.7						
53719-82*	24 VDC			48.2						
53719-84	110 VDC			1033						
53719-86	6 VDC	Intermittent	38 Watts	0.924	Pull	163 [45.3]	135 [37.5]	95 [26.4]	48 [13.3]	25 [7.0]
53719-87*	12 VDC			3.75						
53719-88*	24 VDC			15.2						
53719-90	110 VDC			328						
53719-92	6 VDC	Pulse	115 Watts	0.316	Pull	201 [55.9]	210 [58.4]	175 [48.7]	105 [29.2]	62 [17.2]
53719-93	12 VDC			1.25						
53719-94	24 VDC			5.10						
53719-96	110 VDC			105						

(*) Normally Stocked

Non stocked items require a minimum order