



TUBULAR FRAME SOLENOID

Two position linear solenoid with tubular frame construction.



Features

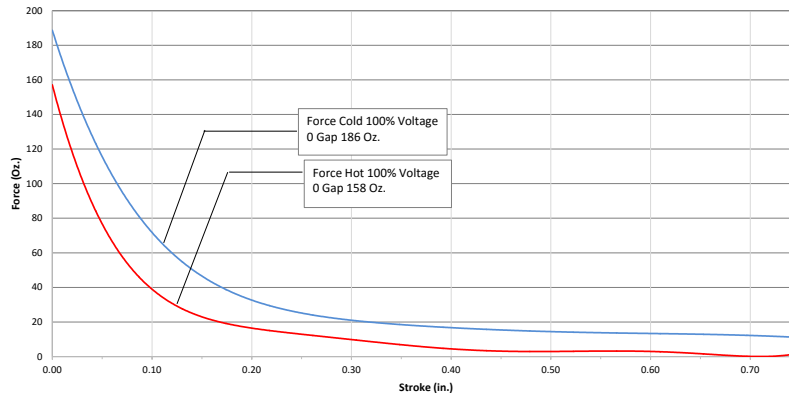
- High performance construction
- DC solenoids applications only
- Standard pull versions available
- UL approval available upon request

Electrical Specifications	
Coil Voltages	6, 12, 24, 115 VDC
Coil Power	12 Watts Continuous, 30 Watts Intermittent, 120 Watts Pulse
Coil Termination	Wire leads 24 AWG (standard)
Duty Cycle	Continuous, intermittent, pulse (see standard part numbers on page 3)
Coil Treatment	Tape Wrapped
Insulation Class	Class B Rating - 130°C (266°F) Max.
Dielectric Strength	30 Volts and Under: 500 VRMS Over 30 Volts: 1000 VRMS plus 2X rated voltage for 1 minute
Mechanical Specifications	
Size	2.000" [50.8] (L) x Ø 1.25" [31.8] (D)
Forces	See force curves on page 2
Plunger Diameter	Ø 0.438" [11.1]
Plunger Guide Material	Brass
Mounting	0.88" [22.4] x 0.16" [4.1] Hex Nut
Weight	Plunger - 1.91 oz [54.2 gms], Total - 8.96 oz [254 gms]
Life Expectancy	250,000 Cycles (Dependent on load conditions)
Agency Approvals	
	UL File No. E74443 For Insulation Systems S130

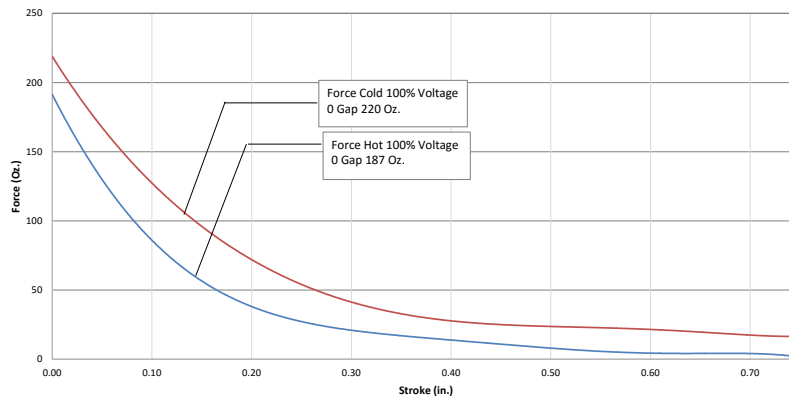
Dimensions: inches [mm]

Force Curves

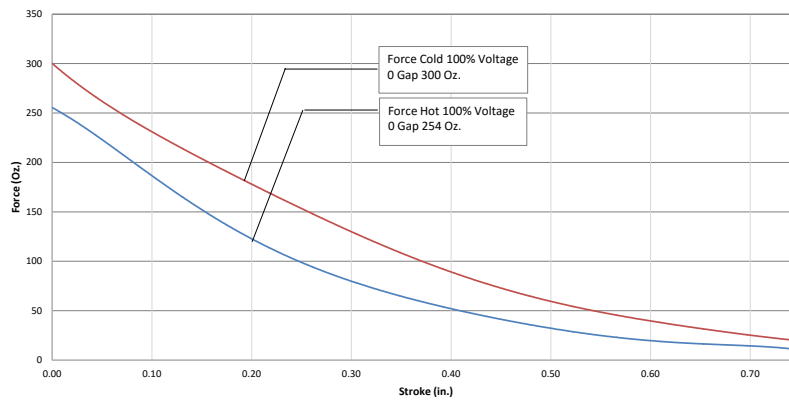
DC - Continuous Duty - 12 Watts



DC - Intermittent Duty - 30 Watts



DC - Pulse Duty - 120 Watts



Standard intermittent duty cycle at nominal voltage is one (1) minute "ON" and three (3) minutes "OFF". Standard pulse duty cycle is 100 milliseconds "ON" and 900 milliseconds "OFF".

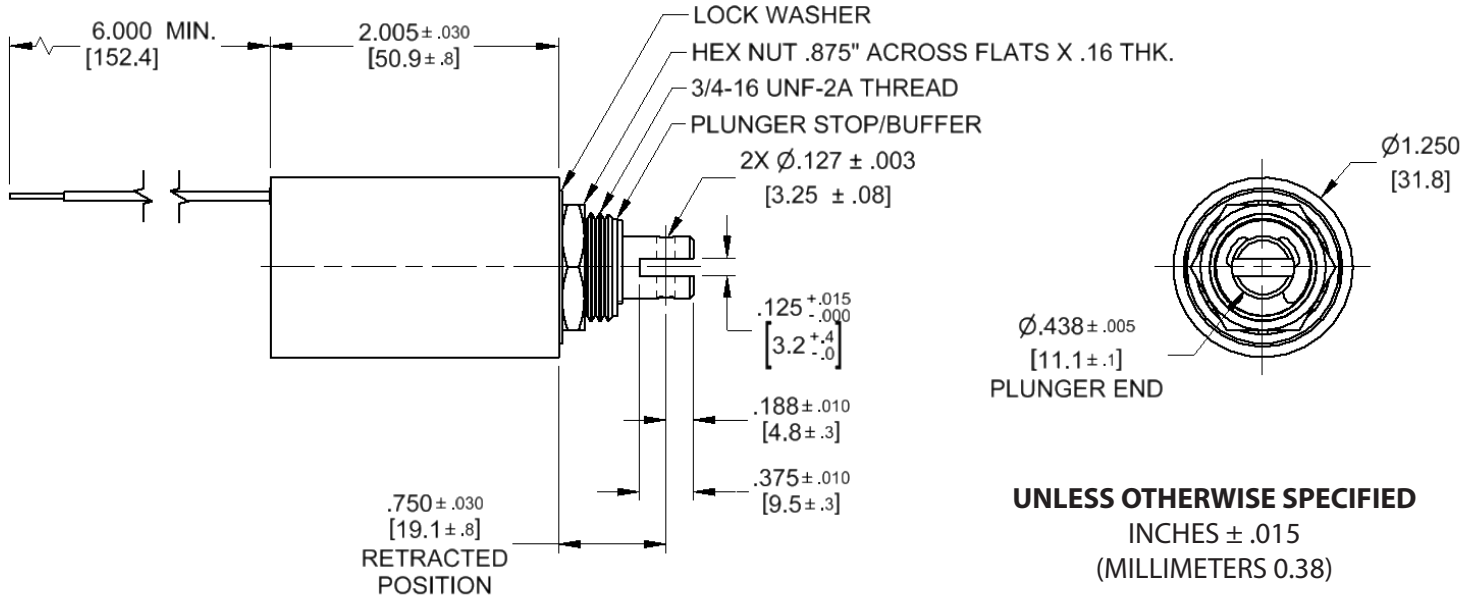
Note:

Cold Force @ 25°C (77°F) Coil Temperature
Hot Force @ 130°C (266°F) Coil Temperature
Approx. 36 sq. in. Heat Sink Required

MED 20x2.000

Dimensional View

Units: Inches [mm]



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"
53806-80	6 VDC	Continuous	12 Watts	3	Pull	186 [57.7]	56 [15.6]	26 [7.2]	15 [4.2]	11 [3.1]
53806-81	12 VDC			12						
53806-82	24 VDC			48						
53806-84	115 VDC			1102						
53806-86	6 VDC	Intermittent	30 Watts	1.2	Pull	220 [61.2]	110 [30.6]	54 [15.0]	24 [6.7]	16 [4.4]
53806-87	12 VDC			4.8						
53806-88	24 VDC			19.2						
53806-90	115 VDC			441						
53806-92	6 VDC	Pulse	120 Watts	0.3	Pull	300 [83.4]	219 [60.9]	154 [42.8]	59 [16.4]	20 [5.6]
53806-93	12 VDC			1.2						
53806-94	24 VDC			4.8						
53806-96	115 VDC			110						

(*) Normally Stocked

Non stocked items require a minimum order