



### **TUBULAR FRAME SOLENOID**



Two position linear solenoid with tubular construction.

#### **Features**

- High performance construction
- DC solenoids applications only
- Standard push and pull versions available
- UL approval on many models



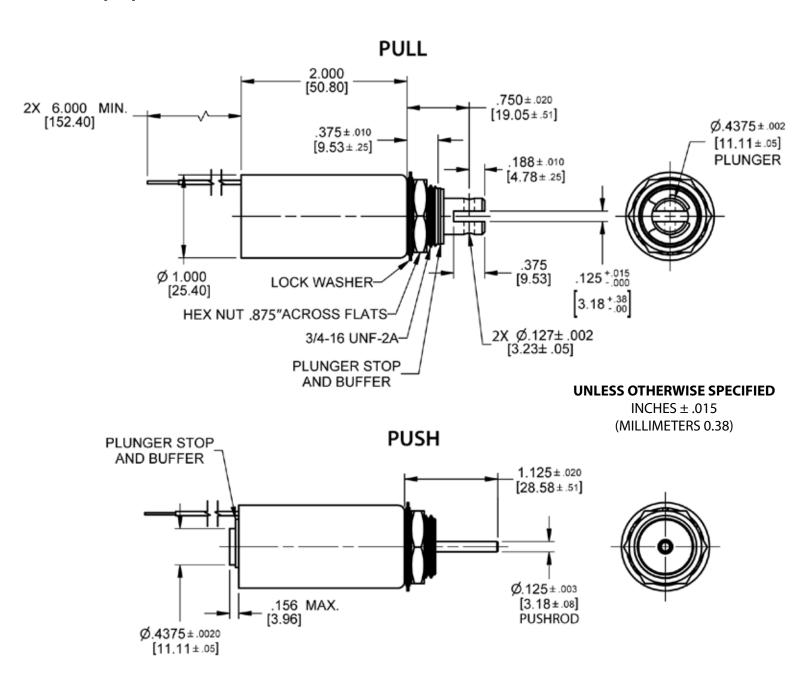
Electrical Specifications					
Coil Voltages	6, 12, 24, 115 VDC				
Coil Power	10 Watts Continuous, 24 Watts Intermittent, 96 Watts Pulse				
Coil Termination	Wire leads 24 AWG (standard)				
Duty Cycle	Continuous, intermittent and pulse (see standard part numbers on page 4)				
Coil Treatment	Tape wrapped				
Insulation Class	Class A Rating - 105°C (221°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 1.000" [25.4] (D)				
Forces	See force curves on page 3				
Plunger Diameter	Ø 0.4375"[11.1]				
Plunger Guide Material	Plastic				
Mounting	0.875" [22.2] Hex Nut				
Weight	Plunger - 1.5 oz [42.5 gms], Total - 6.5 oz [184.3 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				

Dimensions: inches [mm]



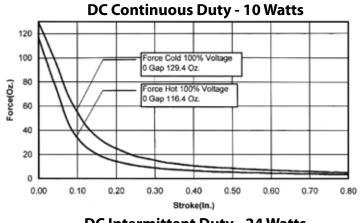
### **Dimensional View**

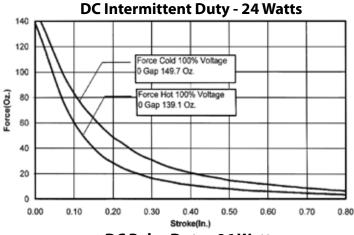
Units: Inches [mm]

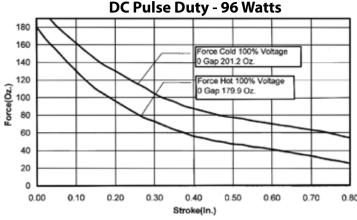




#### **Force Curves**







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



### **Standard Part Numbers**

Parts No.	Voltage	Duty Cycle	DOWAR	Resistance	Operation	Typical Force oz [N] 100% Voltage, 77°F [25°C], Stroke @				
				(Ohms)		0.000"	0.125"	0.250"	0.500"	0.750"
53753-80	6 VDC	Continuous	10 Watts	3.8	Pull	129 [35.9]	42 [11.7]	18 [5.0]	8 [2.2]	5 [1.4]
53757-80	6 VDC			3.8	Push					
53753-81*	12 VDC			15	Pull					
53757-81*	12 VDC			15	Push					
53753-82*	24 VDC			60	Pull					
53757-82*	24 VDC			60	Push					
53753-84	115 VDC			1500	Pull					
53757-84	115 VDC			1500	Push					
53753-86	6 VDC	Intermittent	24 Watts	1.5	Pull	149 [41.4]	72 [20.0]	36 [10.0]	15 [4.2]	8 [2.2]
53757-86	6 VDC			1.5	Push					
53753-87*	12 VDC			6	Pull					
53757-87*	12 VDC			6	Push					
53753-88*	24 VDC			24	Pull					
53757-88*	24 VDC			24	Push					
53753-90	115 VDC			600	Pull					
53757-90	115 VDC			600	Push					
53753-92	6 VDC	Pulse	96 Watts	0.37	Pull	201 [55.9]	150 [41.7]	115 [32.0]	77 [21.4]	60 [16.7]
53757-92	6 VDC			0.37	Push					
53753-93	12 VDC			1.5	Pull					
53757-93	12 VDC			1.5	Push					
53753-94	24 VDC			6	Pull					
53757-94	24 VDC			6	Push					
53753-96	115 VDC			150	Pull					
53757-96	115 VDC			150	Push					

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