

MAGNETIC LATCHING SOLENOID



D-frame, pull type solenoid with an internal permanent magnet for keeping the plunger in the retracted position without power.

Features

- Innovative design provides more pull and hold force than other solenoids of similar size.
- Low power consumption

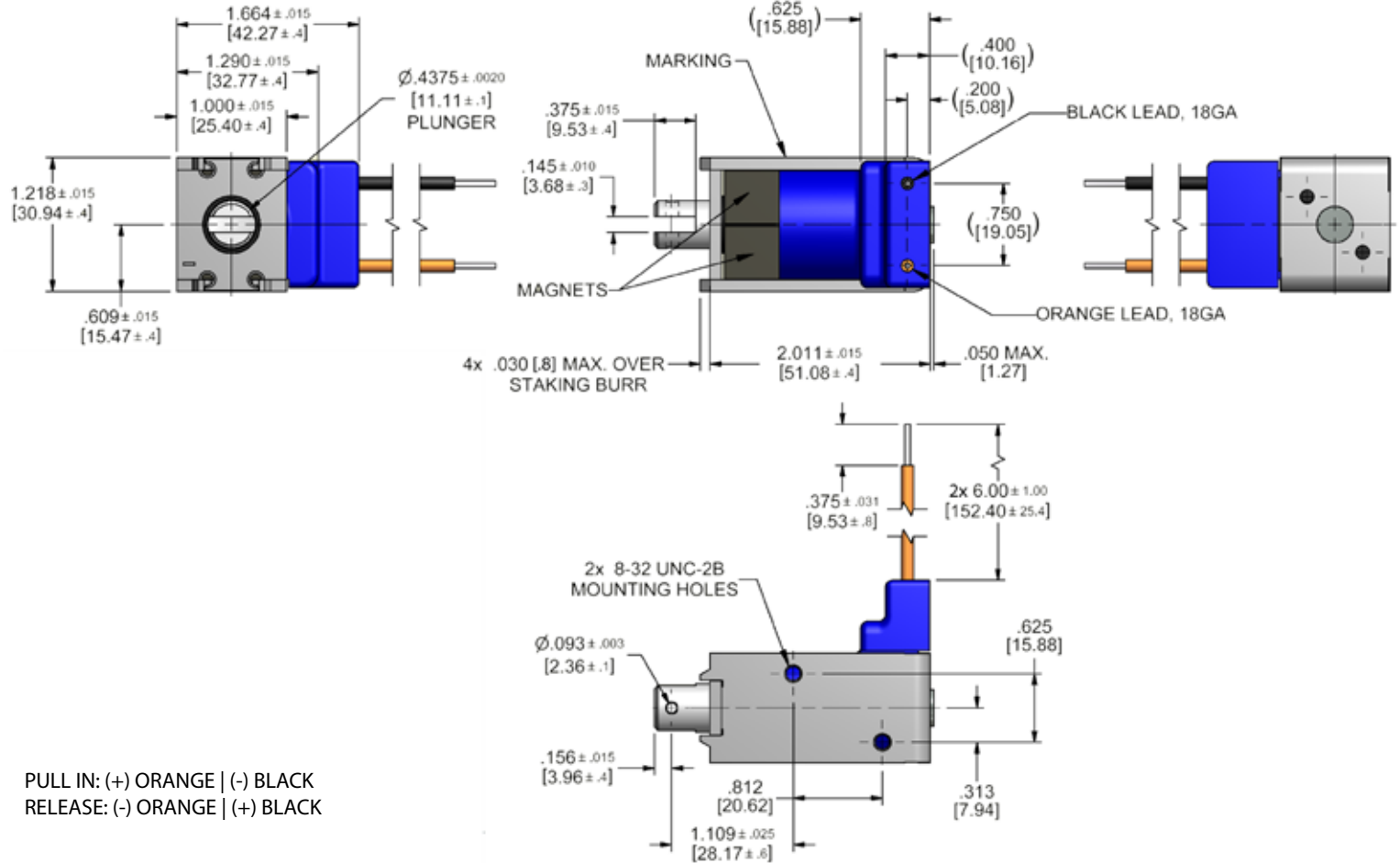


Electrical Specifications	
Coil Voltages	6, 12, 24 VDC Standard - Other voltages available on request
Coil Power	21 Watts Intermittent and 85 Watts Pulse- Other options available on request
Coil Termination	Wire leads 18 AWG (standard)
Duty Cycle	Intermittent and pulse duty available (see standard part numbers on page 3)
Coil Treatment	Encapsulated
Insulation Class	Class F Rating - (155° C)
Dielectric Strength	30 Volts and Under: 500 VRMS Over 30 Volts: 1000 VRMS plus 2X rated voltage for 1 minute
Mechanical Specifications	
Size	2.011" [51.1] (L) x 1.000" x [25.4] (W) x 1.218" [30.9] (H) See page 2 for dimensional drawing
Forces	See force curves on page 2
Plunger Diameter	Ø 0.4375" [11.1]
Plunger Guide Material	Plastic
Mounting	2X #8-32 UNC-2B Mounting Holes
Weight	Plunger - 1.2 oz [34 gms], Total - 6.3 oz [178.6 gms]
Life Expectancy	250,000 Cycles (Dependent on load conditions)
Agency Approvals	
UL File No. E74443 For Insulation Systems S105, S130, S130D, S130D1, S155D	

Dimensions: inches [mm]

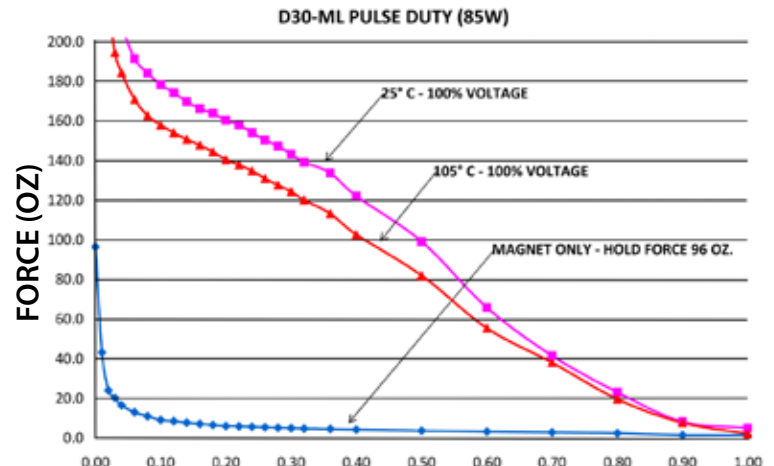
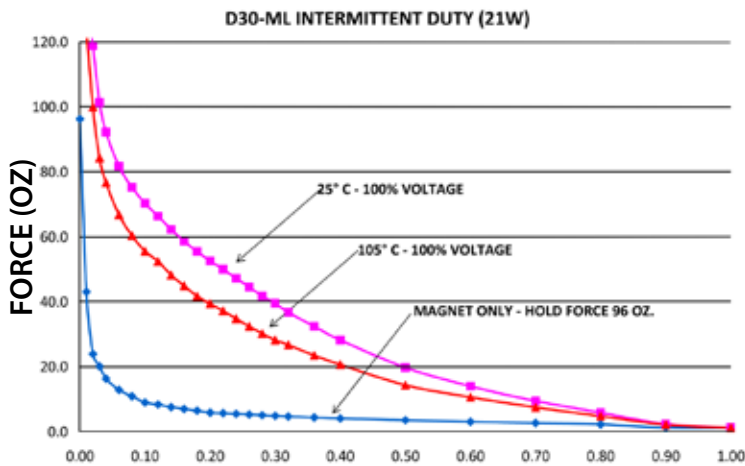
Dimensional View

Units: Inches [mm]



PULL IN: (+) ORANGE | (-) BLACK
RELEASE: (-) ORANGE | (+) BLACK

Force Curves



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"
53803-86*	6 VDC	Intermittent	21 Watts	1.7	Pull	96 [26.7]	65 [18.1]	46 [12.8]	19.7 [5.5]	7.7 [2.1]
53803-87*	12 VDC			6.8						
53803-88*	24 VDC			27.2						
53803-92	6 VDC	Pulse	85 Watts	0.42		96 [26.7]	172 [47.8]	152 [42.3]	99 [27.5]	31 [8.6]
53803-93	12 VDC			1.7						
53803-94	24 VDC			6.8						

(*) Normally Stocked

Non stocked items require a minimum order