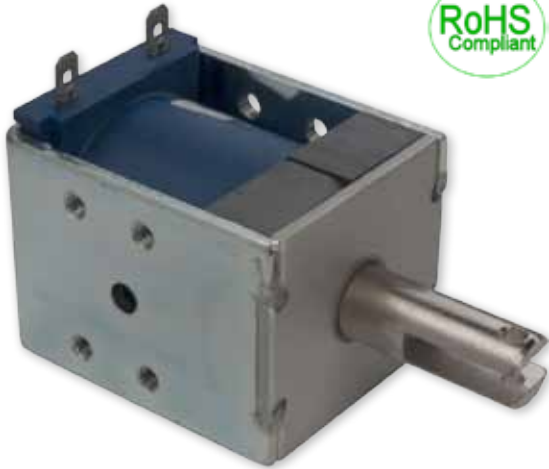


# D4-ML



## 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



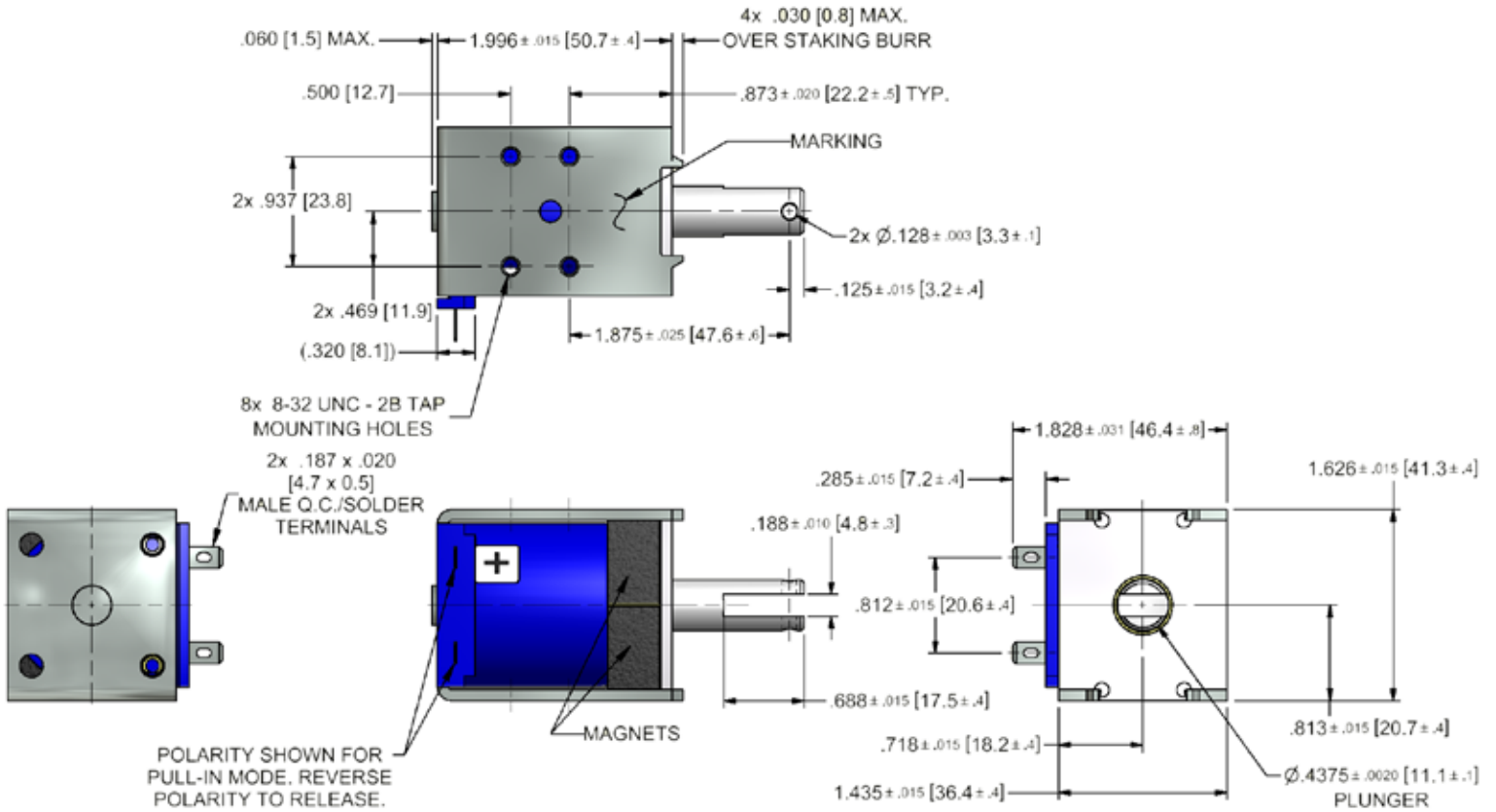
Electrical Specifications	
Coil Voltages	6, 12, 24 VDC - Other options available on request
Coil Power	29 Watts Intermittent, 115 Watts Pulse - Other options available on request
Coil Termination	0.187" [4.7] quick connect terminals (standard) 0.250" [6.4] quick connect terminals (optional)
Duty Cycle	Intermittent and pulse duty available (see standard part numbers on page 3)
Coil Treatment	Encapsulated (tape wrapped optional)
Insulation Class	Class B (130°C)
Dielectric Strength	30 Volts and Under: 500 VRMS Over 30 Volts: 1000 VRMS plus 2X rated voltage for 1 minute
Mechanical Specifications	
Size	1.996" [50.7] (L) x 1.437" [36.5] (W) x 1.626" [41.3] (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	8x 8-32 UNC - 2B TAP Mounting Holes
Weight	Plunger - 1.6 oz [45.4 gms], Total - 12.0 oz [340.2 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]

# D4-ML

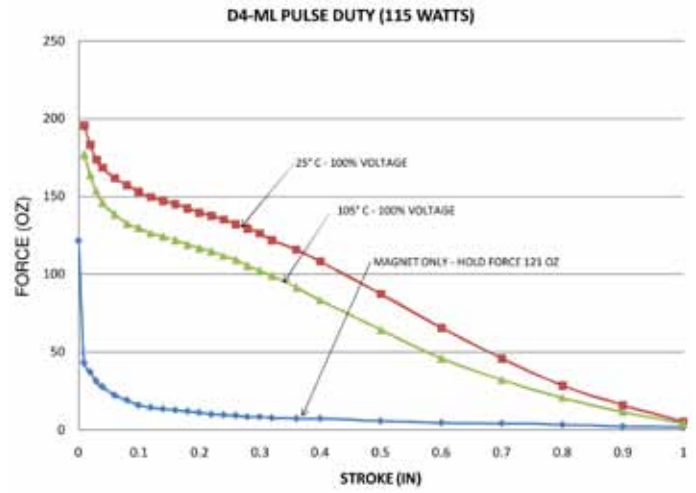
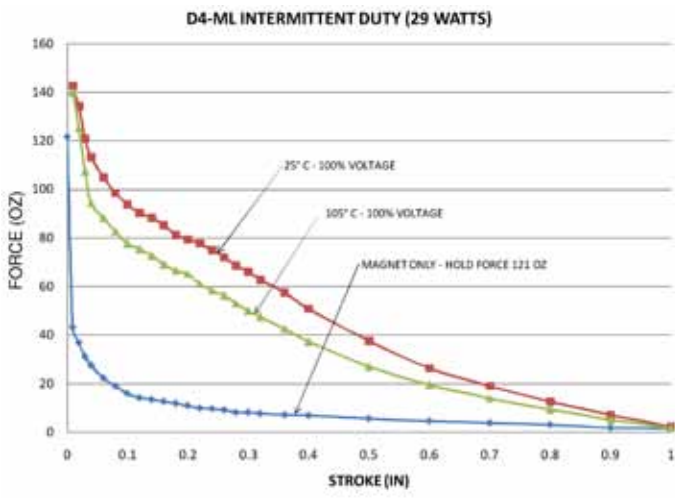
## Dimensional View

Units: Inches [mm]



1. POSITIVE POWER SUPPLY (+) TO (+) FOR PULL-IN.
2. NEGATIVE POWER SUPPLY (-) TO (+) FOR RELEASE.

## 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.

# D4-ML

## 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"
53802-86*	6 VDC	Intermittent	29 Watts	1.22	Pull	121 [33.6]	90 [25.0]	73 [20.3]	37 [10.3]	15 [4.2]
53802-87*	12 VDC			4.92						
53802-88*	24 VDC			20						
53802-92	6 VDC	Pulse	115 Watts	0.30		121 [33.6]	148 [41.1]	133 [37.0]	87 [24.2]	36 [10.0]
53802-93	12 VDC			1.22						
53802-94	24 VDC			4.92						

(\*) Normally Stocked

Non stocked items require a minimum order