D-11

Deltrol CONTROLS

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	6, 12, 24, 120, 240 VAC | 6, 12, 24, 110 VDC
Coil Power	12.5 VA Continuous, 39 VA Intermittent, 125 VA Pulse 8 Watts Continuous, 19 Watts Intermittent, 80 Watts Pulse
Coil Termination	0.187" [4.7] Quick Connect Terminals (standard) Wire leads optional with tape wrapped coil
Duty Cycle	Continuous, intermittent and pulse duty available (see standard parts on page 4
Coil Treatment	Encapsulated (tape wrap optional)
Insulation Class	Class A Rating - 105ºC (221ºF) Max. (standard) Class F Rating - 155ºC (311ºF) Max. (optional)
Dielectric Strength	30 Volts and Under: 500 VRMS Over 30 Volts: 1000 VRMS plus 2X rated voltage for 1 minute
Mechanical Specifications	
Size	1.851" [47.0] (L) x 0.938" [23.8] (W) x 1.190" [30.2] (H) (See dimensional drawing on page 2)
Forces	See force curve tables on page 3
Plunger Diameter	Ø 0.3125" [7.9]
Plunger Guide Material	Plastic
Mounting	4X #6-32 UNC-2B Mounting Holes
Weight	Plunger - 0.7 oz [19.8 gms], Total - 5.0 oz [141.8 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, S130, S130D, S130D1, S155D

Dimensions: inches [mm]

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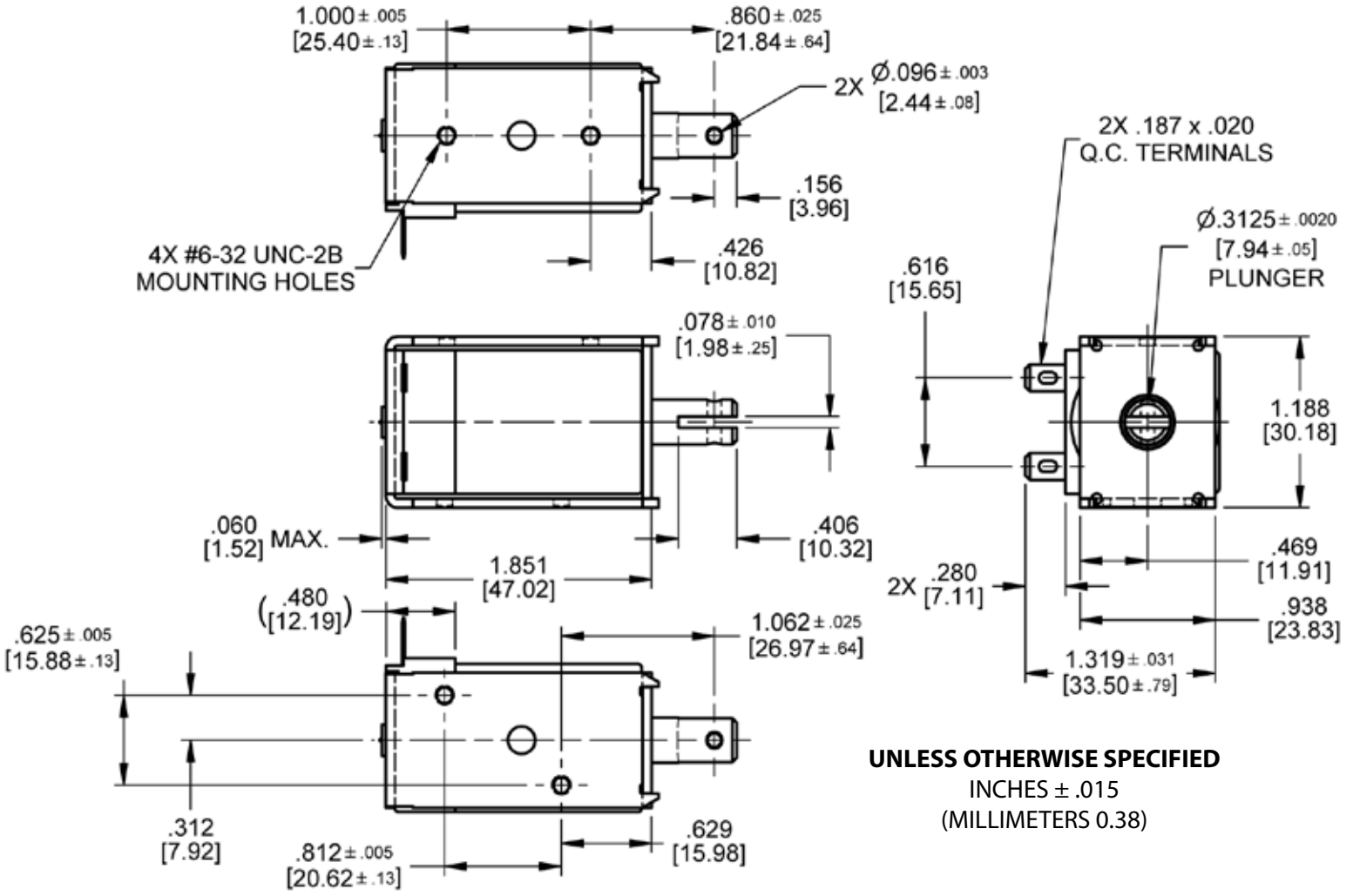
Dimensional View

Units: Inches [mm]



UNLESS OTHERWISE SPECIFIED
INCHES ± .015
(MILLIMETERS 0.38)

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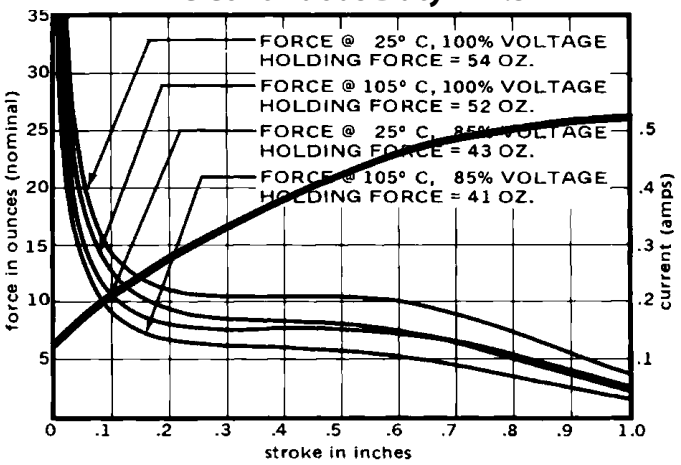
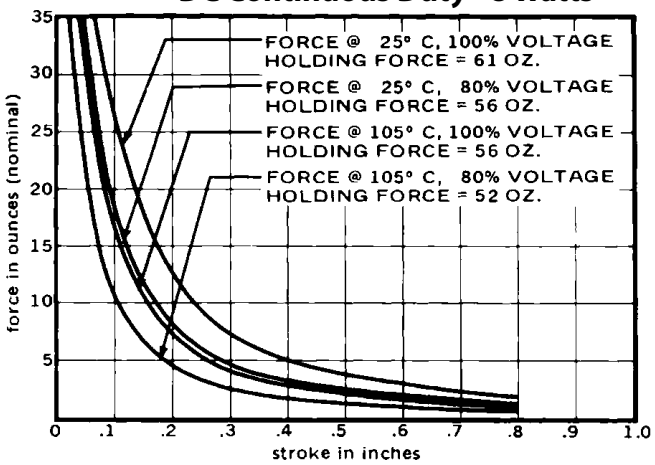
Force Curves

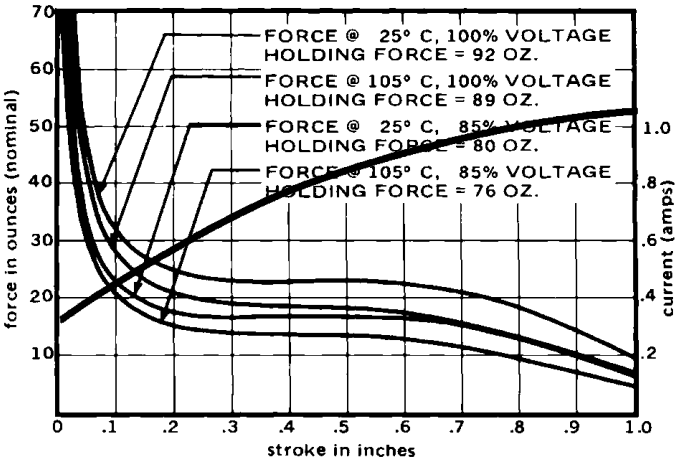
AC Continuous Duty - 12.5 VA



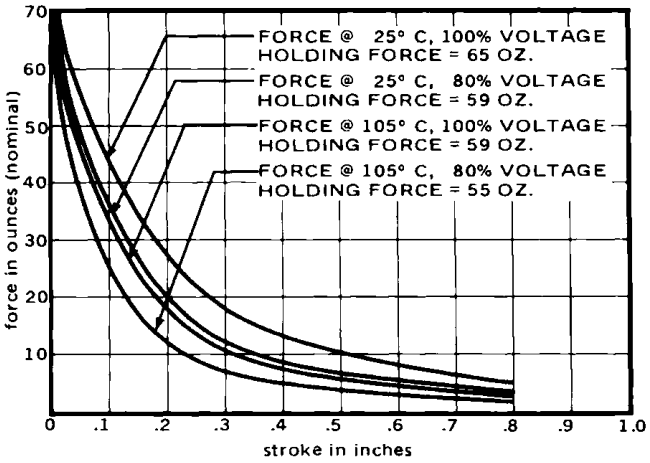
DC Continuous Duty - 8 Watts



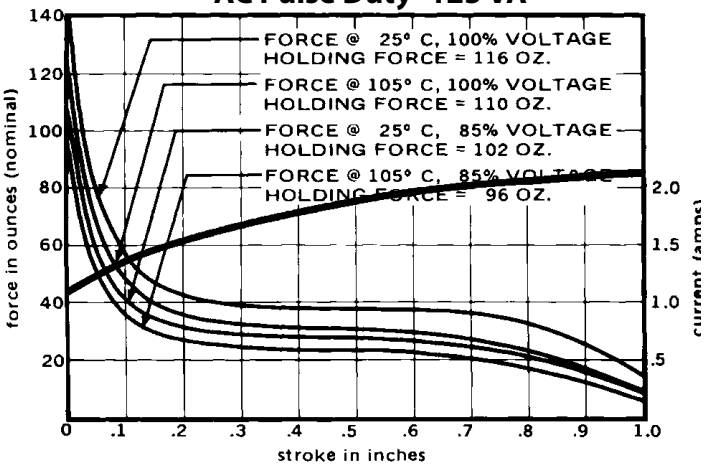
AC Intermittent Duty - 39 VA



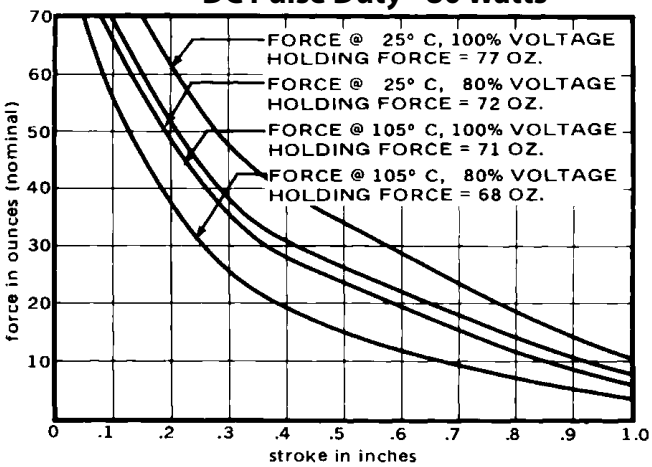
DC Intermittent Duty - 19 Watts



AC Pulse Duty- 125 VA



DC Pulse Duty - 80 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

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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"
53738-80	6 VAC	Continuous	12.5 VA	0.47	Pull	54 [15.0]	13 [3.6]	11 [3.1]	10 [2.8]	8 [2.2]
53738-81	12 VAC			1.9						
53738-82	24 VAC			7.7						
53738-84*	120 VAC			200						
53738-85	240 VAC			813						
53738-86	6 VAC	Intermittent	39 VA	0.21	Pull	92 [25.6]	28 [7.8]	23 [6.4]	23 [6.4]	20 [5.6]
53738-87	12 VAC			0.86						
53738-88	24 VAC			3.5						
53738-90*	120 VAC			85						
53738-91	240 VAC			342						
53738-92	6 VAC	Pulse	125 VA	0.11	Pull	116 [32.2]	51 [14.2]	40 [11.1]	38 [10.6]	34 [9.5]
53738-93	12 VAC			0.43						
53738-94	24 VAC			1.73						
53738-96	120 VAC			45.5						
53738-97	240 VAC			182						
53736-80	6 VDC	Continuous	8 Watts	4.5	Pull	61 [17.0]	22.5 [6.3]	8 [2.2]	4 [1.1]	2 [0.6]
53736-81*	12 VDC			18.6						
53736-82*	24 VDC			73.9						
53736-84	110 VDC			1550						
53736-86	6 VDC	Intermittent	19 Watts	1.9	Pull	65 [18.1]	40 [11.1]	22 [6.1]	10 [2.8]	5 [1.4]
53736-87*	12 VDC			7.7						
53736-88*	24 VDC			31						
53736-90	110 VDC			634						
53736-92	6 VDC	Pulse	80 Watts	0.47	Pull	77 [21.4]	74 [20.6]	53 [14.7]	34 [9.5]	21 [5.8]
53736-93	12 VDC			1.9						
53736-94	24 VDC			7.7						
53736-96	110 VDC			151						

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

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