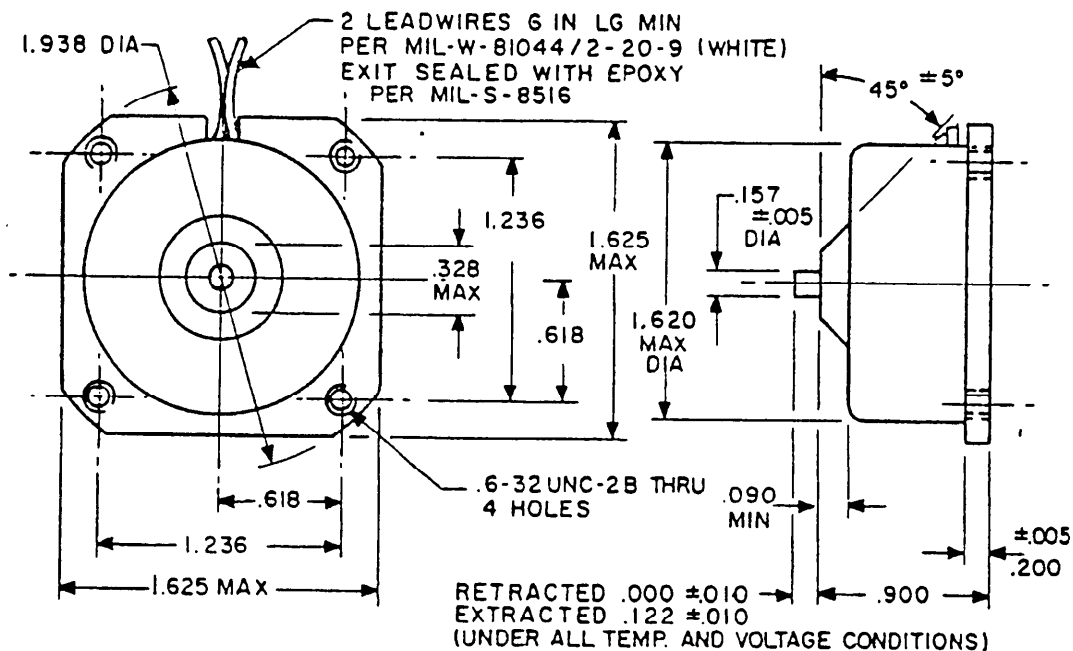


MIL-S-4040/4 (USAF)
5 November 1970

MILITARY SPECIFICATION SHEET

SOLENOID, ARMING ELECTRICAL 27 VOLT DC PUSH TYPE

The complete requirements for procuring the solenoid described herein shall consist of this document and the latest issue of Specification MIL-S-4040.



INCHES	MM
.005	.13
.010	.25
.090	2.29
.122	3.10
.157	3.99
.200	5.08
.328	8.33
.618	15.70
.900	22.86
1.236	31.39
1.620	41.15
1.625	41.28
1.938	49.23
6	152.4



NOTES:

1. Dimensions in inches. Unless otherwise specified tolerances ±.010
2. Metric equivalents (to the nearest .01 MM) are given for general information only and are based upon 1 inch = 25.4 MM

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REQUIREMENTS:

DIMENSIONS AND CONFIGURATION: See Page 1

COIL:

VOLTAGE: 18-30 VDC
 RESISTANCE: 49 OHMS MINIMUM AT 20⁰+2⁰C.
 CURRENT RATING APPROXIMATELY: 520 MA
 DIELECTRIC WITHSTANDING VOLTAGE
 BETWEEN LEAD WIRES AND CASE: 1000 VRMS

DESIGN AND CONSTRUCTION:

Required force: The energized solenoid shall withstand a steady static load of 750 pounds when applied twenty-five times. The deenergized solenoid shall retract prior to the load reaching 4 pounds. The static and release loads shall be applied downward at right angles to the plunger axis, with the solenoid mounted rigidly and the plunger horizontal. The loads shall be applied using a 3/32 inch thick steel plate with a 11/16 inch diameter through hole, chamfered 45 degrees by 3/64 deep, both sides. The extended and retracted positions of the plunger shall be within the tolerances shown on page 1 under all conditions of vibration, shock, temperature and voltage. No deformation shall be visually detectable. An AQL of 1.0 shall be met in accordance with MIL-STD-105.

DUTY CYCLE: The solenoid shall be capable of being continuously energized for 24 hours, at 30 VDC and 20⁰+2⁰C without damage or subsequent malfunction.

MATERIAL AND FINISH:

CASE: STEEL, CADMIUM PLATE PER QQ-P-416, TYPE 1 CLASS 2
 PLUNGER: STEEL (300 SERIES CRES), SPRING TEMPER

ENVIRONMENTAL REQUIREMENTS:

VIBRATION: MIL-STD-202 METHOD 204
 SHOCK: MIL-STD-202 METHOD 205
 MOISTURE RESISTANCE: MIL-STD-202 METHOD 106
 TEMPERATURE: -62⁰+2⁰C to + 93⁰+2⁰C
 SALT SPRAY: MIL-STD-202 METHOD 101
 SAND AND DUST: MIL-STD-202 METHOD 110

PART NUMBER: M4040/4-01

APPLICATION DATA:

This item is intended for use in, but not limited to, Aircraft Pylon Ejector Racks. (This part was formerly identified under North American Aviation Specification NA5-7772D.)

Preparing Activity:
 Air Force - 80
 (Project 5945-F207)