

# SPECIFICATIONS

## ELECTRICAL

RESISTANCE: SEE TABLE

ELECTRICAL STROKE: 1.00 INCH, APPROX. CENTERED WITHIN THE MECHANICAL STROKE.

ELECTRICAL OVERTRAVEL: (0.035) EACH END

ELECTRICAL CONTINUITY: THROUGHOUT MECHANICAL STROKE

STROKE VELOCITY: 50 IN / SEC

LINEARITY: ±1% INDEPENDENT

OUTPUT SMOOTHNESS: 0.1% MAX

RESISTANCE TEMPERATURE COEFFICIENT: 400 PPM/°C MAX

POWER RATING: 1.0 WATT MAX @ 70°C,

DERATED TO 0.0 WATT @ 125°C

WIPER CONTACT CURRENT: 10 MILLIAMPS MAX

DIELECTRIC STRENGTH: 500 VRMS @ 60 Hz

INSULATION RESISTANCE: 100 MEG OHMS @ 500 VDC

## MECHANICAL

MECHANICAL STROKE: 1.070 ±.020

ACTIVATION FORCE: 20 GRAMS MAX

## ENVIRONMENTAL

OPERATING TEMPERATURE: -65°C TO +125°C

CYCLE LIFE: 50 MILLION CYCLES MIN

SHOCK: SAWTOOTH 100G PEAK PER MIL-STD-202

METHOD 213, TEST CONDITION I

VIBRATION: HIGH FREQ; SWEPT 10 - 2000HZ, 15G PEAK  
PER MIL-STD-202 TEST CONDITION B

## MATERIALS

HOUSING: STAINLESS STEEL

SHAFT: PASSIVATED CENTERLESS GROUND SST

BEARINGS: VECTRA E130i

CONTACTS: MULTI-FINGER PRECIOUS METAL

ELEMENT: CO-MOLDED CONDUCTIVE PLASTIC

LEAD WIRES: 30 AWG TEFLON INSULATION, TYPE ET

## NOTES: UNLESS OTHERWISE SPECIFIED

1. ALL ELECTRICAL, MECHANICAL, AND ENVIRONMENTAL SPECIFICATIONS ARE IAW MIL-PRF-39023

## MODEL NO. RESISTANCE (OHMS) ±10%

5903-0110-030 1,000Ω

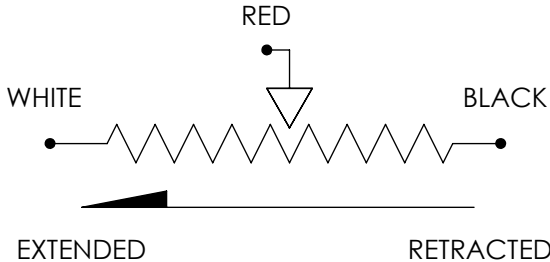
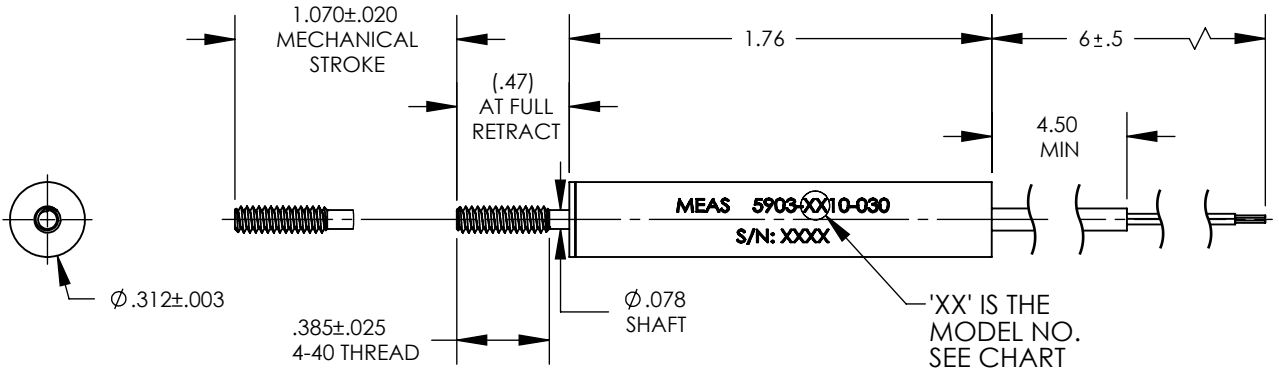
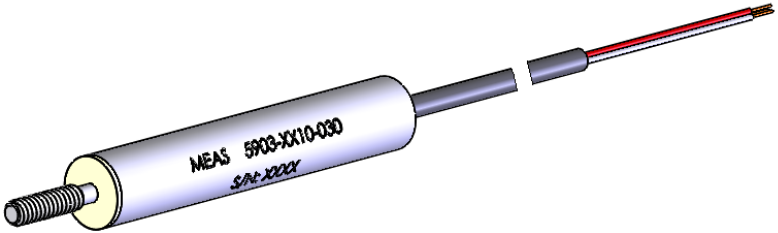
5903-0210-030 2,000Ω

5903-0510-030 5,000Ω

5903-1010-030 10,000Ω

## CHANGE HISTORY

REV	DESCRIPTION	DATE	DRAWN	APPROVED
A	RELEASE	5/8/03	-	-
B0	ECN 2818-SSC	5/21/10	-	-
B1	ECN 2900-SSC	6/29/10	-	-
B2	ECN 4388-SSC	2/13/10	-	-
B3	ECN 5093	9/25/14	JDD	KJS
C0	ECN 5288	9/8/15	EML	BSJ



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DIMENSIONS ARE IN INCHES  
TOLERANCES:  
ANGULAR ±2°  
TWO PLACE DECIMAL ±.01  
THREE PLACE DECIMAL ±.005  
FOUR PLACE DECIMAL ±.0005

## EAR CONTROL

TECHNICAL INFORMATION SUBJECT TO EXPORT ADMINISTRATION REGULATIONS (EAR). THIS TECHNICAL INFORMATION IS PROHIBITED FROM TRANSFER OR DISCLOSURE IN ANY MANNER TO NON-U.S. PERSONS IN THE UNITED STATES OR ABROAD WITHOUT PRIOR APPROVAL BY THE U.S. COMMERCE DEPARTMENT OR APPLICABLE EAR EXEMPTION.

MATERIAL

FINISH

DO NOT SCALE DRAWING

NAME	DATE
D. Allmendinger	4/16/03
CHECKED	
ENG APPR.	R. Privitt 5/8/03
MFG APPR.	
Q.A.	

COMMENTS:

measurement  
SPECIALTIES™

POTENTIOMETER  
1" LINEAR MOTION - TABULATED

CAGE CODE  
5W885

DWG. NO.

5903-XX10-030

SHEET 1 OF 1