



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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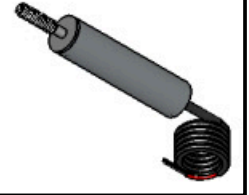
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



5903 Series

5/16 In. Dia. LINEAR MOTION
PRECISION POTENTIOMETERS
1 In. ACTIVE STROKE



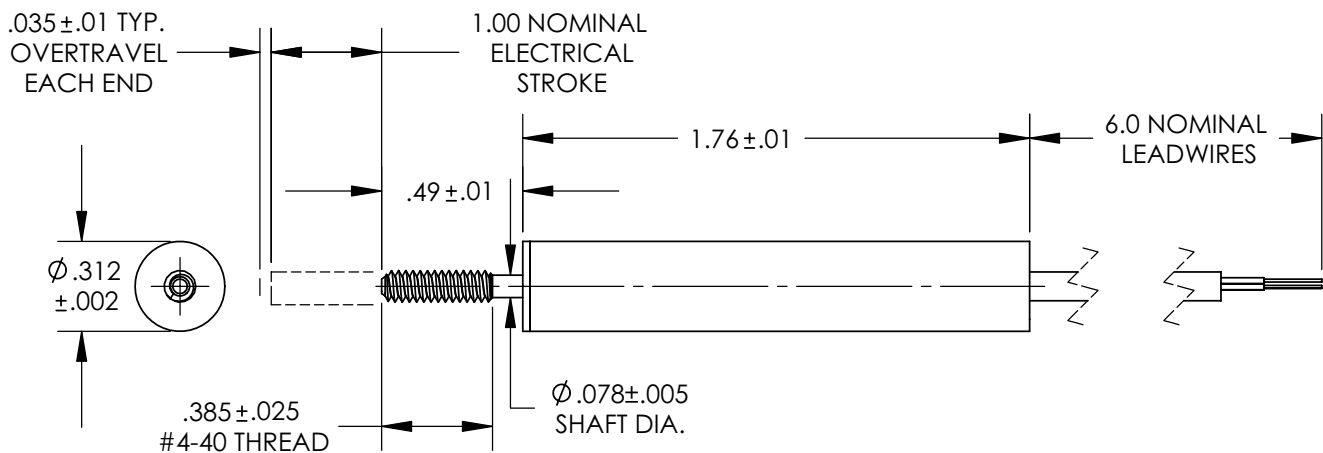
STANDARD PRODUCT OFFERING

SS&C PART NUMBER

RESISTANCE

5903-0110-030	1K Ω \pm 10%
5903-0510-030	5K Ω \pm 10%
5903-1010-030	10K Ω \pm 10%

STANDARD PRODUCTS ALSO AVAILABLE
WITH .5 In., .75 In., 1.5 In. AND 2.0 In.
STROKE LENGTHS



STANDARD MODEL ELECTRICAL CHARACTERISTICS

RESISTANCE:	1k Ω TO 10k Ω \pm 10%
ACTIVE ELECTRICAL STROKE:	1.00 In. NOMINAL OTHER STROKE LENGTHS AVAILABLE AS NOTED
ELECTRICAL CONTINUITY STROKE:	OVER MECH. STROKE
INDEPENDENT LINEARITY:	\pm 1.0%
END VOLTAGE:	0.5% MAX.
VOLTAGE RESOLUTION:	VIRTUALLY INFINITE
OUTPUT SMOOTHNESS:	0.1% MAX.
RESISTANCE TEMP. COEFFICIENT:	500PPM/ $^{\circ}$ C MAX.
POWER RATING @ 70 $^{\circ}$ C:	1.0 WATT MAX.
WIPER CONTACT CURRENT:	10 MilliAmps MAX.
DIELECTRIC STRENGTH:	1000 VRMS
INSULATION RESISTANCE:	100 Meg Ω MIN.

STANDARD MODEL MECHANICAL CHARACTERISTICS

MECHANICAL STROKE:	1.070 \pm .020
ACTUATING FORCE:	0.75 Oz. MAX.
SHAFT ROTATION:	CONTINUOUS (NO EFFECT)
TOTAL WEIGHT (1-GANG):	0.75 Oz. MAX.
ALLOWABLE SHAFT PLAY:	.005 MAX. MISALIGNMENT

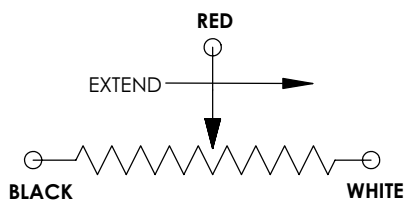
STANDARD ENVIRONMENTAL CHARACTERISTICS

OPERATING TEMP. RANGE:	-65 $^{\circ}$ C To +125 $^{\circ}$ C
OPERATING LIFE:	100 x 10 ⁶ STROKES MIN.

STANDARD MATERIALS OF CONSTRUCTION

HOUSING:	STAINLESS STEEL (TUBING)
SHAFT AND GUIDE RODS:	STAINLESS STEEL
RESISTANCE ELEMENT:	CO-MOLDED CONDUCTIVE PLASTIC
ELECTRICAL CONTACTS:	MULTI-FINGER PRECIOUS METAL
BEARINGS:	VECTRA E130i PLASTIC
LEADWIRES / JACKET:	#30 AWG TYPE ET (TEFLON) SHRINK TUBING JACKET

SCHEMATIC DIAGRAM

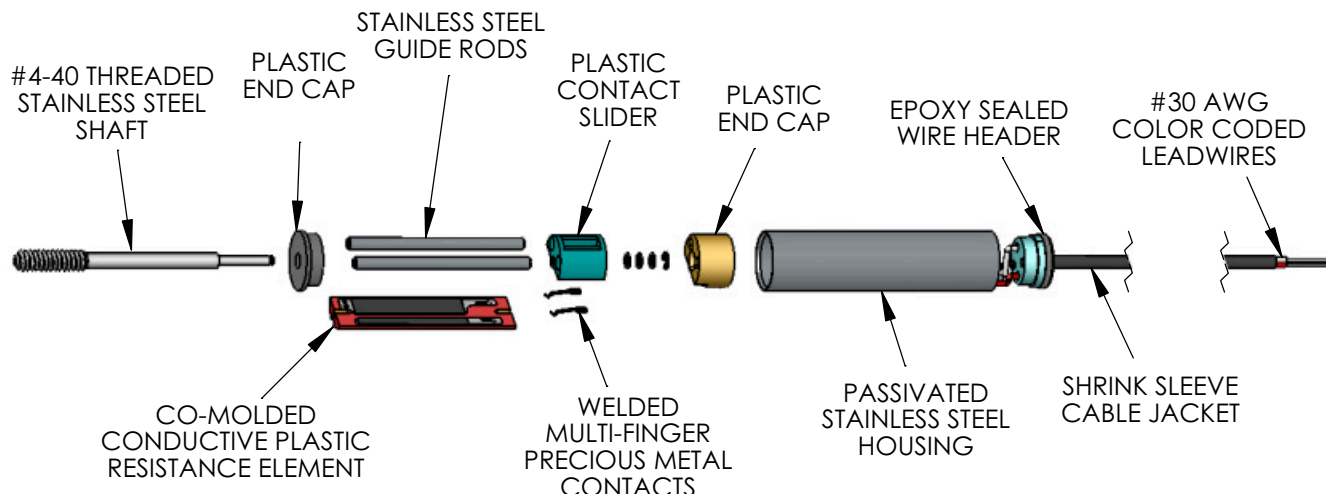


CONTACT:

SPECTRUM SENSORS & CONTROLS, INC.
424 CROWN POINT CIRCLE, GRASS VALLEY, CA 95945
(800) 880-7730 (530) 273-4608 FAX: (530) 273-0769
E-MAIL: sales@specsensors.com

5903 Series

5/16 In. Dia. LINEAR MOTION
PRECISION POTENTIOMETERS



STANDARD ELECTRICAL CHARACTERISTICS

RESISTANCES ($\pm 10\%$):	1K Ω , 2K Ω , and 5k Ω
ACTIVE ELECTRICAL STROKE:	0.5, 0.75, 1.0, 1.5, and 2.0 Inches
ELECTRICAL CONTINUITY:	THROUGHOUT MECH. STROKE
INDEPENDENT LINEARITY:	$\pm 1.0\%$
END VOLTAGE:	0.5% MAX.
VOLTAGE RESOLUTION:	VIRTUALLY INFINITE
OUTPUT SMOOTHNESS:	0.1% MAX.
RESISTANCE TEMP. COEFFICIENT:	500PPM/ $^{\circ}$ C MAX.
POWER RATING @ 70 $^{\circ}$ C:	1.0 WATT MAX. PER STROKE INCH
WIPER CONTACT CURRENT:	10 MilliAmps MAX.
DIELECTRIC STRENGTH:	1000 VRMS
INSULATION RESISTANCE:	100 Meg Ω MIN.

STANDARD MECHANICAL CHARACTERISTICS

MECHANICAL STROKE:	ACTIVE STROKE + 0.07 IN.
SHAFT ACTIVATION FORCE:	0.75 Oz. MAX.
MAX. SHAFT MISALIGNMENT:	0.005 In. PERMISSIBLE

STANDARD ENVIRONMENTAL CHARACTERISTICS

OPERATING TEMP. RANGE:	-65 $^{\circ}$ C To +125 $^{\circ}$ C
ROTATIONAL OPERATING LIFE:	100 x 10 ⁶ STROKES MIN.

STANDARD MATERIALS OF CONSTRUCTION

HOUSING:	STAINLESS STEEL
SHAFT AND GUIDE RODS:	STAINLESS STEEL
RESISTANCE ELEMENT:	CO-MOLDED CONDUCTIVE PLASTIC
ELECTRICAL CONTACTS:	MULTI-FINGER PRECIOUS METAL
LEADWIRES / CABLE:	#30 AWG TYPE ET (TEFLON)

AVAILABLE OPTIONS

CUSTOM RESISTANCE VALUES (500 Ω TO 30k Ω)
AND TOLERANCES AS LOW AS $\pm 5\%$

SPECIAL LINEARITIES AS LOW AS 0.2%, ABSOLUTE
(INDEXED) OR INDEPENDENT OVER SPECIFIED
REGIONS.

SPECIAL ELECTRICAL STROKES (3.5 Inch MAX.)

SPECIAL CABLE OR CONNECTORS

SPECIAL SHAFT LENGTHS AND FEATURES SUCH
AS FLATS, SLOTS, STEPS, YOKES, CLAMPS, AND
ROD ENDS.

SPECIAL ENVIRONMENTAL CAPABILITIES SUCH AS
MOISTURE SEALS, HIGH SHOCK AND VIBRATION
CAPABILITIES.

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