

Specifications

ELECTRICAL CHARACTERISTICS

Resistance Values (See chart on front)	500 to 125K ohms
Resistance Tolerance*	±3% Standard
Absolute Minimum Resistance*	0 to 0.1% or 0 to 1.00, whichever is greater
Noise during Adjustment*	100% ENR Maximum
Insulation Resistance, 500 VDC*	1000 Megohms Minimum
Resolution (See chart)	0.01% to 0.03%
Electrical Rotation*	360° (+10°/-0°)
Function Conformity (Independent Linearity)	±0.20% Standard

ENVIRONMENTAL CHARACTERISTICS

Power Rating:	2.0 watt
70°C (158°F) Ambient	0 watt
125°C (257°F) Ambient	
Operating Temperature Range	-65° to +125°C (-65° to +257°F)
Temperature Coefficient of Resistance Wire	20 PPM/°C Max.
Moisture Resistance (1) Standard	MIL-STD-202, Method 103A (Steady State)
Vibration	MIL-R-12934C, 20G
Contact Bounce	0.1 Millisecond maximum
Wiper Shift, Maximum	0.1%
Shock	MIL-R-12934C, 100G
Contact Bounce and Wiper Shift	Same as Vibration
Sand and Dust	MIL-E-5272C
Fungus	Material meets MIL-E-5272C
Salt Spray	Meets MIL-STD-202B, Method 101A

Lead Life	1000 hours per MIL-R-12934C
Resistance Shift, Maximum	2.0%
Mechanical Life	100,000 cycles (2,000,000 shaft revolutions)
Dielectric Strength	MIL-R-12934C
Room Conditions	150° VAC

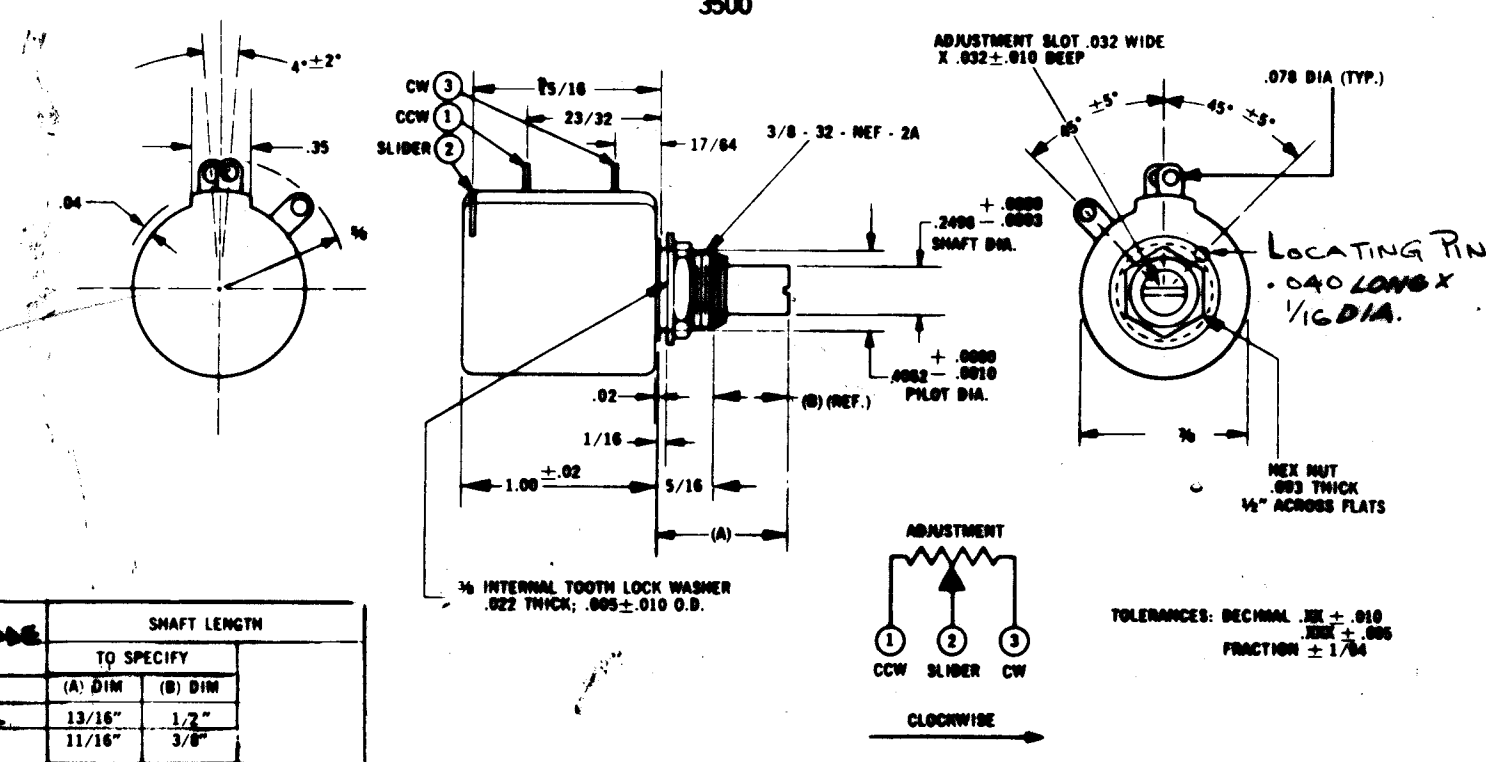
PHYSICAL CHARACTERISTICS

Shaft Torque*	0.6 oz.-in. Maximum (starting) 0.6 oz.-in. Maximum (running)
Markings*	Manufacturer's name, wiring diagram, date code, resistance, manufacturer's part number, function conformity and resistance tolerance (customer's part number optional). Legible marking, no physical defects
Backlash	1.0 degree maximum
Mechanical stop strength	48 in.-oz.
Mechanical Rotation	360° (+10°/-0°)
Terminals	Silver plated solder lugs
Mounting	Bushing Mount (sleeve bearings)

RV117

REVISIONS

SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD	APPD
Ø	ORIGINAL RELEASE FOR PRODUCTION	1/29/60	WA	CP		
A	REVISED COMPLETELY FOR CLARIFICATION	2/20/64	19526	RV	DF	WJ



QTY	SHAFT LENGTH	
	(A) DIM	(B) DIM
2	13/16"	1/2"
1	11/16"	3/8"

Standard Resistances

Resistance (ohms)	Part Number *		Max. Resolution (Percent)
	3500S Solder Lugs 11/16" Shaft Lgth.	3500S Solder Lugs 13/16" Shaft Lgth.	
500	3500S-1-501	3500S-2-501	0.03
1,000	3500S-1-102	3500S-2-102	0.03
2,000	3500S-1-202	3500S-2-202	0.03
5,000	3500S-1-502	3500S-2-502	0.02
10,000	3500S-1-103	3500S-2-103	0.02

Resistance (ohms)	Part Number *		Max. Resolution (Percent)
	3500S Solder Lugs 11/16" Shaft Lgth.	3500S Solder Lugs 13/16" Shaft Lgth.	
20,000	3500S-1-203	3500S-2-203	0.02
50,000	3500S-1-503	3500S-2-503	0.01
100,000	3500S-1-104	3500S-2-104	0.01
125,000	3500S-1-125	3500S-2-125	0.009
150,000	3500S-1-150	3500S-2-150	0.009
200,000	3500S-1-200	3500S-2-200	0.009
250,000	3500S-1-250	3500S-2-250	0.009
300,000	3500S-1-300	3500S-2-300	0.009

TMC PART NO. SHALL BE IN FOLLOWING FORM
RV117 - 1 102

BASIC DWG. NO. SHAFT LENGTH

RESISTANCE
1st TWO DIGITS SIG. FIG.
LAST DIGIT SIGNIFIES NO. OF ZEROS

NOTES

QTY/UNIT	MODEL USED ON	ASSY. NO.
SCALE	CODE	5401-395

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REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
BUDETTI LIST OF MATERIAL				
MATERIAL			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
FINISH			TITLE RESISTOR, VARIABLE, PRECISION	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES			DRAWN 5/5/60	DATE
DECIMALS .I ± .05 .II ± .01 .XXX ± .005			CHECKED 5/26/60	DATE
FRACTIONS ± 1/64 ANGLES ± 6° 30'			ELECT. DES. MECH. DES.	FINAL APPROVAL 2 B DATE RV117 SHEET
			DATE	REV. LVL. A