

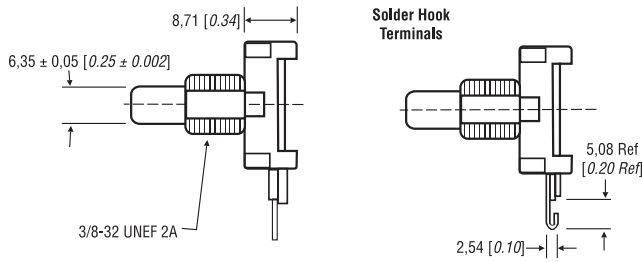
**Clarostat Rotary Potentiometers and Position Transducers (continued)**

**575 Series, Commercial potentiometer**



The 575 Series conductive plastic potentiometer offers a smooth feel and robust construction, with a thermoplastic housing, bushing, and shaft. Terminals are solder-hook style for panel mounting. No hardware is included.

<b>Power rating:</b>	0.5 W @ 70 °C (158 °F)
<b>Element type:</b>	Conductive plastic
<b>Terminal type:</b>	Solder hook-200 grid
<b>Bushing:</b>	9,52 mm (.375 in) D x 6,35 mm (0.25 in) L
<b>Shaft:</b>	6,35 mm (0.25 in) Ø x 19,05 mm (0.75 in) L
<b>Body:</b>	21,08 mm (0.830 in) square
<b>Electrical taper:</b>	Linear
<b>Operating temperature:</b>	-40 °C to 120 °C (-40 °F to 248 °F)
<b>Working voltage:</b>	350 Vac
<b>Linearity:</b>	± 5%
<b>Total resistance tolerance:</b>	± 20%
<b>Rotational cycles:</b>	50,000
<b>Mechanical rotation:</b>	300° ± 5°



**OPTIONS**

**Flatted Shaft**

RESISTANCE	TAPER	REFERENCE
1 kOhm	Linear	575SX1A48F102SS
10 kOhm	Linear	575SX1A48F103SS
50 kOhm	Linear	575SX1A48F503SS

**Slotted Shaft**

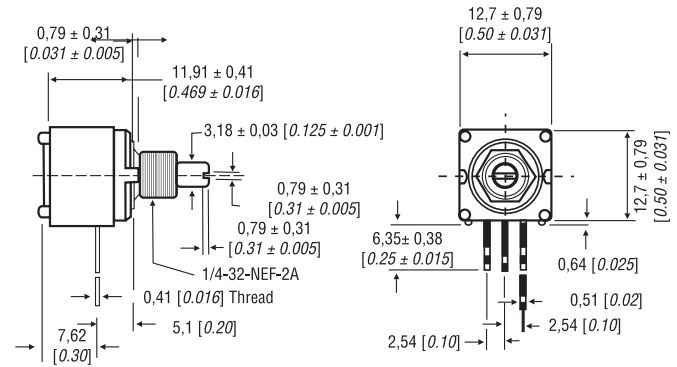
RESISTANCE	TAPER	REFERENCE
1 kOhm	Linear	575SX1A48S102SS
10 kOhm	Linear	574SX1A48S103SS
50 kOhm	Linear	574SX1A48S503SS

**590 Series, Commercial potentiometer**



The 590 Series conductive plastic modular potentiometer features low electrical noise, smooth feel, robust construction, and brass bushing and shaft. Terminals are PC style. Hardware included. Multiple sections (up to three) are available on special order.

<b>Power rating:</b>	0.5 W @ 70 °C (158 °F)
<b>Element type:</b>	Conductive plastic
<b>Terminal type:</b>	PC, 6,35 mm (0.25 in) long
<b>Bushing:</b>	6,35 mm (0.25 in) Ø x 6,35 mm (0.25 in) L
<b>Shaft:</b>	Slotted, 3,17 mm (0.125 in) Ø x 22,23 mm (0.875 in) L
<b>Body:</b>	12,7 mm (0.50 in) Ø
<b>Electrical taper:</b>	Linear
<b>Operating temperature:</b>	-40 °C to 120 °C (-40 °F to 248 °F)
<b>Linearity:</b>	± 5%
<b>Total resistance tolerance:</b>	± 10% (up to 500 kOhms) ± 20 % (1 MOhm and over)
<b>Rotational cycles:</b>	50,000
<b>Mechanical rotation:</b>	295° ± 5°



**OPTIONS**

**Slotted Shaft**

RESISTANCE	TAPER	REFERENCE
100 Ohm	Linear	590SX1N56S101SP
500 Ohm	Linear	590SX1N56S501SP
1 kOhm	Linear	590SX1N56S102SP
5 kOhm	Linear	590SX1N56S502SP
10 kOhm	Linear	590SX1N56S103SP
100 kOhm	Linear	590SX1N56S104SP
500 kOhm	Linear	590SX1N56S504SP
1 MOhm	Linear	590SX1N56S105SP

## 380 Series, Industrial potentiometer

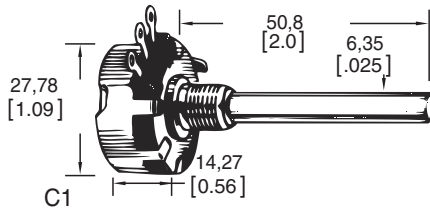


The 380 Series “Quiet One” is a 2-watt conductive plastic potentiometer offering superior dynamic noise and a long rotational life. It meets MIL-R-94 specifications where applicable.

<b>Approvals:</b>	MIL-R-94
<b>Power rating:</b>	2.0 W max.
<b>Element type:</b>	Conductive plastic
<b>Terminal type:</b>	Solder lug
<b>Shaft:</b>	Slotted
<b>Body:</b>	27,79 mm (1.094 in) Ø
<b>Electrical taper:</b>	Linear
<b>Operating temperature:</b>	-55 °C to 120 °C (-67 °F to 248 °F)
<b>Working voltage:</b>	500 Vdc
<b>Linearity:</b>	± 5%
<b>Total resistance tolerance:</b>	± 10% (up to 500 kOhms) ± 20 % (1 MOhm and over)
<b>Rotational cycles:</b>	100,000
<b>Mechanical rotation:</b>	312° ± 3°

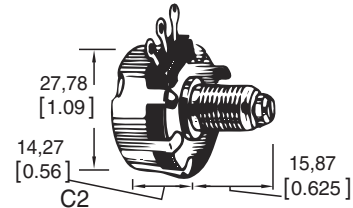
### OPTIONS

**C1: 2.0 in (50,8 mm) Round Shaft;  
0.375 in (9,5 mm) L bushing**



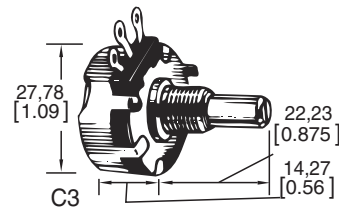
RESISTANCE	REFERENCE
100 Ohm	380C1100
250 Ohm	380C1250
500 Ohm	380C1500
1 kOhm	380C11000
1.5 kOhm	380C11500
2 kOhm	380C12000
2.5 kOhm	380C12500
5 kOhm	380C15000
10 kOhm	380C110K
15 kOhm	380C115K
20 kOhm	380C120K
25 kOhm	380C125K
50 kOhm	380C150K
100 kOhm	380C1100K
200 kOhm	380C1200K
250 kOhm	380C1250K
500 kOhm	380C1500K
1 MOhm	380C11MEG

**C2: 0.625 in (15,88 mm) screwdriver slotted shaft;  
0.5 in (12,7 mm) L locking bushing**



RESISTANCE	REFERENCE
250 Ohm	380C2250
1 kOhm	380C21000
5 kOhm	380C25000
10 kOhm	380C210K
25 kOhm	380C225K
50 kOhm	380C250K
100 kOhm	380C2100K
250 kOhm	380C2250K
1 MOhm	380C21MEG

**C3: 0.875 in (22,23 mm) shaft;  
0.375 in (9,5 mm) L bushing**



RESISTANCE	REFERENCE
100 Ohm	380C3100
250 Ohm	380C3250
500 Ohm	380C3500
1 kOhm	380C31000
2 kOhm	380C32000
2.5 kOhm	380C32500
5 kOhm	380C35000
10 kOhm	380C3310K
25 kOhm	380C325K
50 kOhm	380C350K
100 kOhm	380C3100K
150 kOhm	380C3150K
200 kOhm	380C3200K
250 kOhm	380C3250K
500 kOhm	380C3500K
1 MOhm	380C31MEG
5 MOhm	380C35MEG

## Clarostat Rotary Potentiometers and Position Transducers (continued)

### 485 Series, Industrial potentiometer

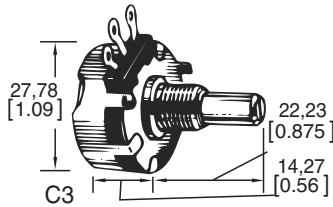


The 485 Series is the extended-life version of the 380 Series. It is a 2-watt conductive plastic potentiometer offering superior dynamic noise and extra long rotational life. It meets MIL-R-94 specifications where applicable.

<b>Approvals:</b>	MIL-R-94
<b>Power rating:</b>	2.0 W max.
<b>Element type:</b>	Conductive plastic
<b>Terminal type:</b>	Solder lug
<b>Shaft:</b>	Slotted
<b>Body:</b>	27,79 mm (1.094 in) Ø
<b>Electrical taper:</b>	Linear
<b>Operating temperature:</b>	-55 °C to 120 °C (-67 °F to 248 °F)
<b>Working voltage:</b>	500 Vdc
<b>Linearity:</b>	± 5%
<b>Total resistance tolerance:</b>	± 10% (up to 500 kOhms) ± 20 % (1 MOhm and over)
<b>Rotational cycles:</b>	1,000,000
<b>Mechanical rotation:</b>	312° ± 3°

#### OPTIONS

0.875 in (22,23 mm) shaft;  
0.375 in (9,5 mm) L bushing



RESISTANCE	REFERENCE
1 kOhm	C0416392
5 kOhm	C0416393
10 kOhm	C0416394

#### Special version with 45° element

Construction incorporates an internal shaft seal for moisture resistance.

RESISTANCE	REFERENCE
5 kOhm	C0416395

### RV4 MIL Series potentiometer

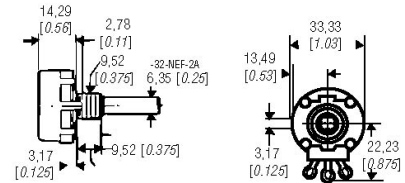


The RV4 is a dual-marked potentiometer with all the fine features of the 380 Series in a more economical package. It is built in strict accordance with MIL-R-94.

<b>Approvals:</b>	MIL-R-94
<b>Power rating:</b>	2.0 W max.
<b>Element type:</b>	Conductive plastic
<b>Terminal type:</b>	Solder lug
<b>Shaft:</b>	Slotted
<b>Body:</b>	27,79 mm (1.094 in) Ø
<b>Electrical taper:</b>	Linear
<b>Operating temperature:</b>	-55 °C to 120 °C (-67 °F to 248 °F)
<b>Working voltage:</b>	500 Vdc
<b>Linearity:</b>	± 5%
<b>Rotational cycles:</b>	25,000
<b>Mechanical rotation:</b>	312° ± 3°

#### OPTIONS

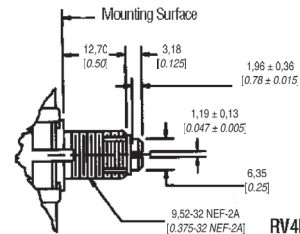
Standard Bushing,  
0.875 in (22,23 mm)  
shaft length



RV4N

RESISTANCE	TOLERANCE	REFERENCE
100 Ohm	± 10 %	RV4NAYS101A
250 Ohm	± 10 %	RV4NAYS251A
500 Ohm	± 10 %	RV4NAYS501A
1 kOhm	± 10 %	RV4NAYS102A
2.5 kOhm	± 10 %	RV4NAYS252A
5 kOhm	± 10 %	RV4NAYS502A
10 kOhm	± 10 %	RV4NAYS103A
25 kOhm	± 10 %	RV4NAYS253A
50 kOhm	± 10 %	RV4NAYS503A
100 kOhm	± 10 %	RV4NAYS104A
250 kOhm	± 10 %	RV4NAYS254A
500 kOhm	± 10 %	RV4NAYS504A
750 Kohm	± 10 %	RV4NAYS754A
1 MOhm	± 10 %	RV4NAYS105A
5 MOhm	± 20 %	RV4NAYS505B

#### Locking Bushing



RV4L

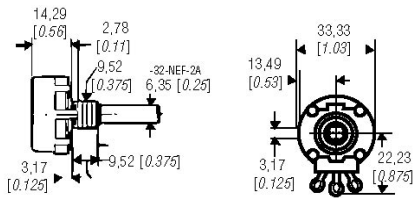
RESISTANCE	TOLERANCE	REFERENCE
100 Ohm	± 10 %	RV4LAYS101A
250 Ohm	± 10 %	RV4LAYS251A
500 Ohm	± 10 %	RV4LAYS501A
1 kOhm	± 10 %	RV4LAYS102A
2.5 kOhm	± 10 %	RV4LAYS252A
5 kOhm	± 10 %	RV4LAYS502A
10 kOhm	± 10 %	RV4LAYS103A
25 kOhm	± 10 %	RV4LAYS253A
50 kOhm	± 10 %	RV4LAYS503A
100 kOhm	± 10 %	RV4LAYS104A
250 kOhm	± 10 %	RV4LAYS254A
500 kOhm	± 10 %	RV4LAYS504A
750 kOhm	± 10 %	RV4LAYS754A
1 MOhm	± 10 %	RV4LAYS105A
5 MOhm	± 20 %	RV4LAYS505B

## 53 Series potentiometer



The 53 Series has all the fine features of the Series 380 in a more economical package. It is available with a 50,8 mm [2.0 in] long shaft.

<b>Power rating:</b>	2.0 W max.
<b>Element type:</b>	Conductive plastic
<b>Terminal type:</b>	Solder lug
<b>Shaft:</b>	Slotted, 50,8 mm (2.0 in) L
<b>Body:</b>	27,79 mm (1.094 in) Ø
<b>Electrical taper:</b>	Linear
<b>Operating temperature:</b>	-55 °C to 120 °C (-67 °F to 248 °F)
<b>Working voltage:</b>	500 Vdc
<b>Linearity:</b>	± 5%
<b>Rotational cycles:</b>	25,000
<b>Mechanical rotation:</b>	312° ± 3°



### OPTIONS

#### Standard Bushing, 2.0 in (50,8 mm) shaft length

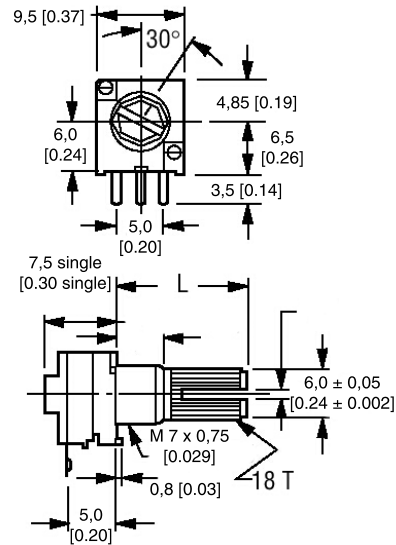
RESISTANCE	TOLERANCE	REFERENCE
100 Ohm	± 10 %	53C1100
250 Ohm	± 10 %	53C1250
500 Ohm	± 10 %	53C1500
1 kOhm	± 10 %	53C11K
2.5 kOhm	± 10 %	53C12500
5 kOhm	± 10 %	53C15K
10 kOhm	± 10 %	53C110K
25 kOhm	± 10 %	53C125K
50 kOhm	± 10 %	53C150K
100 kOhm	± 10 %	53C1100K
150 kOhm	± 10 %	53C1150K
250 kOhm	± 10 %	53C1250K
500 kOhm	± 10 %	53C1500K
750 kOhm	± 10 %	53C1750K
1 MOhm	± 20 %	53C11MEG
2.5 MOhm	± 20 %	53C12.5MEG
5 MOhm	± 20 %	53C15MEG

## 585 Series, Commercial potentiometer



Our Series 585 offers a robust construction in a low-cost commercial package, using carbon composition elements and a metal shaft and bushing.

<b>Power rating:</b>	0.05 W max. @ 40 °C
<b>Element type:</b>	Carbon composition
<b>Terminal type:</b>	3 in-line
<b>Bushing:</b>	M 7 x 0.75 thread, 7 mm L
<b>Shaft:</b>	6,0 mm (0.24 in) Ø by 25,0 mm (0.98 in) L
<b>Flatted shaft:</b>	12,0 mm (0.47 in) long by 4,5 mm (0.18 in) D standard; round end available
<b>Body:</b>	9,5 mm (0.37 in) square
<b>Operating temperature:</b>	-55 °C to 120 °C (-67 °F to 248 °F)
<b>Resistance tolerance:</b>	± 20%
<b>Rotational cycles:</b>	10,000
<b>Mechanical rotation:</b>	300°



### OPTIONS

#### Linear taper

RESISTANCE	SECTION	REFERENCE
1 kOhm	Single	585SX4Q25F102SP
5 kOhm	Single	585SX4Q25F502SP
10 kOhm	Single	585SX4Q25F103SP
1 kOhm	Double	585DX4Q25F102SP
5 kOhm	Double	585DX4Q25F502SP
10 kOhm	Double	585DX4Q25F103SP

#### Audio taper

RESISTANCE	SECTION	REFERENCE
1 kOhm	Single	585SX4Q25F102ZP
5 kOhm	Single	585SX4Q25F502ZP
10 kOhm	Single	585SX4Q25F103ZP

**Clarostat Rotary Potentiometers and Position Transducers (continued)**

**RV6/392M MIL Series potentiometer**



RV6/392M Series are economical potentiometers designed to meet wave soldering applications for mounting PC boards. They meet flow solderability and washability test requirements, and MIL-R-94 standard apply.

<b>Approvals:</b>	MIL-R-94
<b>Power rating:</b>	0.5 W max.
<b>Element type:</b>	Conductive plastic
<b>Terminal type:</b>	Solder hook
<b>Shaft:</b>	Slotted
<b>Body:</b>	12,7 mm (0.5 in) Ø
<b>Electrical taper:</b>	Linear
<b>Operating temperature:</b>	-40 °C to 120 °C (-40 °F to 248 °F)
<b>Working voltage:</b>	350 Vdc
<b>Linearity:</b>	± 5%
<b>Total resistance tolerance:</b>	± 10% (up to 500 kOhms) ± 20 % (1 MOhm and over)
<b>Rotational cycles:</b>	50,000
<b>Mechanical rotation:</b>	295° ± 5°

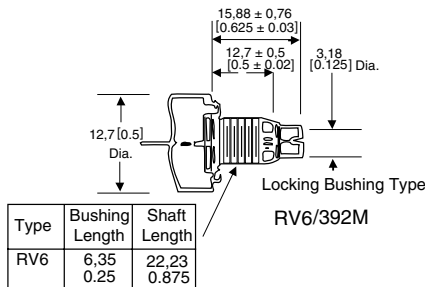
**OPTIONS**

**Standard Bushing, 6,35 mm (0.25 in) L;  
0.875 in (22,23 mm) shaft length**

RESISTANCE	REFERENCE
100 Ohm	RV6NAYSD101A
250 Ohm	RV6NAYSD251A
500 Ohm	RV6NAYSD501A
1 kOhm	RV6NAYSD102A
2.5 kOhm	RV6NAYSD252A
5 kOhm	RV6NAYSD502A
10 kOhm	RV6NAYSD103A
25 kOhm	RV6NAYSD253A
50 kOhm	RV6NAYSD503A
100 kOhm	RV6NAYSD104A
250 kOhm	RV6NAYSD254A
500 kOhm	RV6NAYSD504A
1 MOhm	RV6NAYSD105A

**Locking Bushing, 12,7 mm (0.50 in) L;  
0.625 in (15,88 mm) shaft length**

RESISTANCE	REFERENCE
100 Ohm	RV6LAYS101A
250 Ohm	RV6LAYS251A
500 Ohm	RV6LAYS501A
1 kOhm	RV6LAYS102A
2.5 kOhm	RV6LAYS252A
5 kOhm	RV6LAYS502A
10 kOhm	RV6LAYS103A
25 kOhm	RV6LAYS253A
50 kOhm	RV6LAYS503A
100 kOhm	RV6LAYS104A
250 kOhm	RV6LAYS254A
500 kOhm	RV6LAYS504A
1 MOhm	RV6LAYS105A



# Encoders

## 510 Series, Mechanical

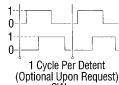
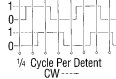


The 510 Series controls are manually operated, rotary, mechanical encoders that provide a two-bit gray code for relative reference applications and a four-bit gray code for absolute electrical reference applications. The "L" channel leads the "R" channel by 90° electrically in the CW position. It features continuous electrical travel and has a rotational life of more than 100,000 shaft revolutions with a positive detent feel.

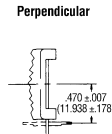
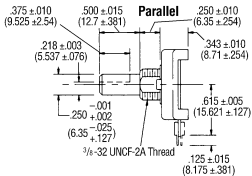
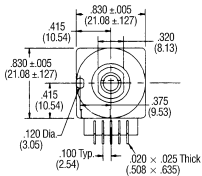
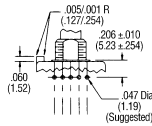
This series is small-sized, 21,08 mm<sup>2</sup> by 8,71 mm deep (0.83 in<sup>2</sup> x 0.343 in) long and commonly used in limited-space, panel-mounted applications where the need for costly, front-panel displays can be completely eliminated. Digital gray-code outputs eliminate the need for A/D converters.

- Bushing:** 9,52 mm (0.375 in) Ø x 6,35 mm (0.25 in) L
- Shaft:** Flatted, 6,35 mm (0.25 in) Ø x 19,05 mm (0.75 in) L
- Body:** 21,08 mm (0.830 in) square
- Operating temperature:** -40 °C to 105 °C (-40 °F to 221 °F)
- Rotational cycles:** 100,000

Output Table



Control Dimensions, Single Control



### OPTIONS

#### Vertical Mount, PC Terminals/bent back

**GREY CODE OPTIONS**

- 2 bit/4 cycles
- 2 bit/6 cycles
- 2 bit/9 cycles
- 4 bit/16 cycles

**REFERENCE**

- 510E1A48F204PC
- 510E1A48F206PC
- 510E1A48F209PC
- 510E1A48F416PC

#### Horizontal Mount, PC Terminals/straight

**GREY CODE OPTIONS**

- 2 bit/4 cycles
- 2 bit/6 cycles
- 2 bit/9 cycles
- 4 bit/16 cycles

**REFERENCE**

- 510E1A48F204PB
- 510E1A48F206PB
- 510E1A48F209PB
- 510E1A48F416PB

### Brackets

**MOUNTING DIRECTION**

- Vertical
- Horizontal

**REFERENCE**

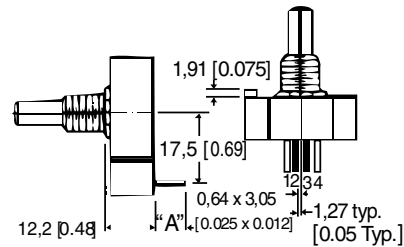
- 510VBKT
- 510HBKT

## 600 Series, Optical



The 600 Series controls are manually operated, rotary, optical encoders that output two square waves in quadrature at a rate of 128 pulse per channel per revolution as a standard with other resolutions down to 60 pulses available. The outputs are TTL compatible. PC terminals or cable leads are available.

- Pulses per revolution:** 128
- Supply voltage:** 5.0 V
- Body:** 34,93 mm (1.375 in) Ø
- Shaft:** 6,35 mm [0.25 in] dia by 22,23 mm [0.875] long
- Bushing:** 9,52 mm [0.375 in] dia by 9,52 mm [0.375 in] long
- Operating temperature:** -40 °C to 65 °C (-40 °F to 149 °F)
- Revolutions:** 10 million



### OPTIONS

#### Series 600

**TERMINATION**

- 177,8 mm (7.0 in) long cable
- PC terminals exiting side
- PC terminals exiting rear
- 177,8 mm (7.0 in) long cable with connector

**REFERENCE**

- 600EN-128-CBL
- 600EN-128-B66
- 600EN-128-C24
- 600EN-128-CN1