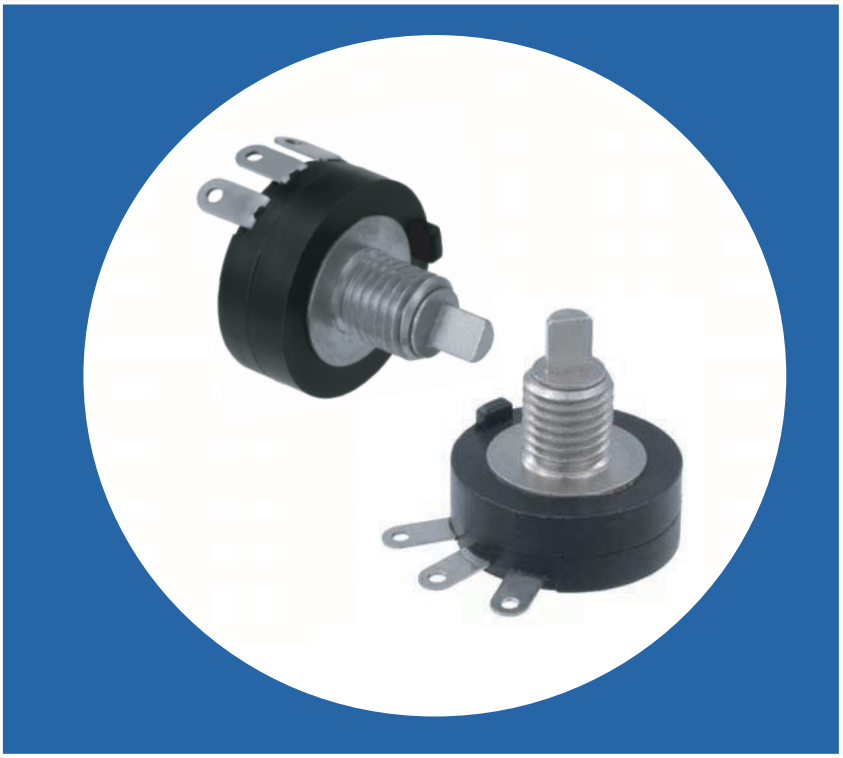
CTS Electrocomponents

Series 284 Data Sheet
Precision Potentiometer

Industrial
16mm Size Slim
Conductive Plastic
Precision Rotary Sensor



Features

- Compact Size
- Up to 3 Million Life Cycles
- 2% Precision Linearity
- Water Resistant
- Wide Temperature Range
- Solder Lug Terminal
- RoHS Compliant

Electrical and Mechanical Specifications

Resistance Range
1 K through 500 K ohms, linear

Resistance Tolerance
± 10%, ± 20%

Power Rating
0.25 watts @ 55°C

Dielectric Strength
500 VDC for 1 minute

Maximum Operating Voltage
350 VDC

Insulation Resistance
100 Megohms minimum @ 100 VDC

Rotation Angle
Total Rotational Angle : 250°
Effective Electrical Angle : 60°, 220°

Rotational Torque
IP40 : 3~30 gf-cm
IP54 & IP67 : 20~120 gf-cm

Stop Strength
9 kgf-cm minimum

Push-Pull Strength of Shaft
13.6 kg for 10 seconds

Mounting Information
Bushing Mount

Rotational life
3M Cycles (60° Effective Electrical Angle)
2M Cycles (220° Effective Electrical Angle)

Linearity
± 2%

Temperature
Operating : -40°C - 125°C
Storage : -55°C - 150°C

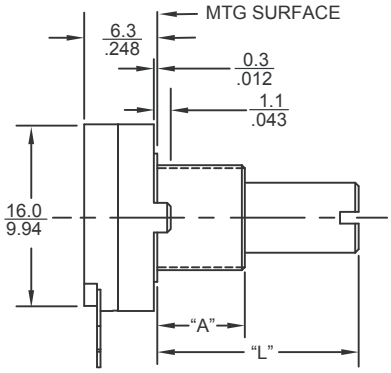
Solder Heat Resistance
350°C for 5 seconds

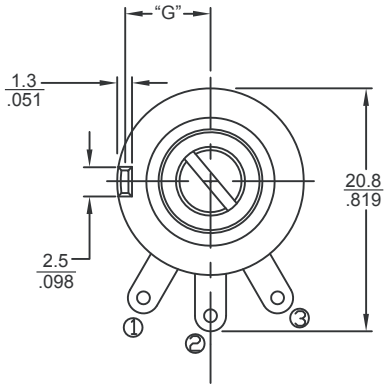
Ingress Protection Rating
IP40, IP54, IP67

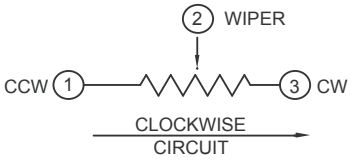
Vibration
15G, 10 to 2000 Hz

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284T Metal Shaft, Bushing Mount, Solder Lug Terminal

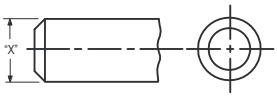






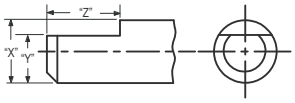
DIMENSION: mm / inch

Shaft Trim



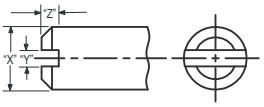
R - ROUND

	X
Imperial Shaft	.125"
Metric Shaft	6.00



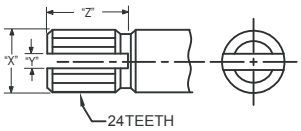
F - FLATTED

	X	Y	Z
Imperial Shaft	.125"	.076"	.156"
Metric Shaft	6.00	4.00	5.00



S - SLOTTED

	X	Y	Z
Imperial Shaft	.125"	.039"	.047"
Metric Shaft	6.00	1.57	1.00



K - SLOT & KNURLED

	X	Y	Z
Imperial Shaft	.236"	.062"	.157"
Metric Shaft	6.00	1.57	4.00

Note: Contact CTS for shaft sizes not listed

Ordering Information

284 T A A R 103 A 2 2 B 1

TERMINAL STYLE
T- Solder Lug

BUSHING MOUNT "A"
Length Examples:

mm	inch
A - 5.0 mm	**2** - .250"
B - 7.5 mm	**3** - .375"
C - 10.0 mm	**4** - .500"

Notes:
Bushing Dia. & Thread:
Metric Unit: M7 X .75P
Imperial Unit: 1/4-32 UNEF
Incremental Length :
Metric Unit: 2.5mm, Imperial Unit: .125"

SHAFT LENGTH "L"
Examples:

mm	inch
A - 10 mm	**1** - .625"
B - 15 mm	**2** - .750"
C - 20 mm	**3** - .875"
D - 25 mm	**4** - 1.000"
E - 30 mm	**5** - 1.125"

Notes:
Shaft Diameter:
Metric Unit: 6mm, Imperial Unit: .125"
Incremental Length :
Metric Unit: 5mm, Imperial Unit: .125"

Note:
Contact CTS for shaft sizes not listed

METAL SHAFT TRIM
R - Round
F - Flatted
S - Slotted
K - Slot & Knurled

RESISTANCE CODE EXAMPLES

CODE	RESISTANCE
102	1K
103	10K
503	50K
104	100K
504	500K

RESIST TOL
A - ± 10%
B - ± 20%

LINEARITY
2 - ± 2%

IP Rating
4 - IP40
5 - IP54
6 - IP67

ROTATION ANGLE

	Angle	Life
A -	220°	2M Cycles
B -	60°	3M Cycles

Note:
Angle means Effective Electric Angle

LOCATING LUG "G"
1 - Left, 7.3 mm

Please consult factory for custom or not listed features.

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