

Industrial
16mm Size
Conductive Plastic
Precision Rotary Sensor

Features

- Robust Construction
- 2 Million Cycle Life
- 2% Precision Linearity
- Water Resistant (IP54, IP67)
- Wide Temperature Range
- Solder Lug, Faston, PC Terminal
- Continuous Rotation Available
- RoHS Compliant



Electrical and Mechanical Specifications

Resistance Range

1 K through 500 K ohms, linear
Consult CTS for audio taper

Resistance Tolerance

± 10%, ± 20%

Power Rating

0.25 watts @ 55°C

Dielectric Strength

750 VDC for 1 minute

Maximum Operating Voltage

500 VDC

Insulation Resistance

1000 Megohms minimum @ 500 VDC

Angle of Rotation

250°, 300°, 360°
(Refer to Resistance Tapers for detail)

Rotational Torque

3 – 50 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

2 M cycles

Linearity

± 2%

Temperature

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

Solder Heat Resistance

350°C for 5 seconds

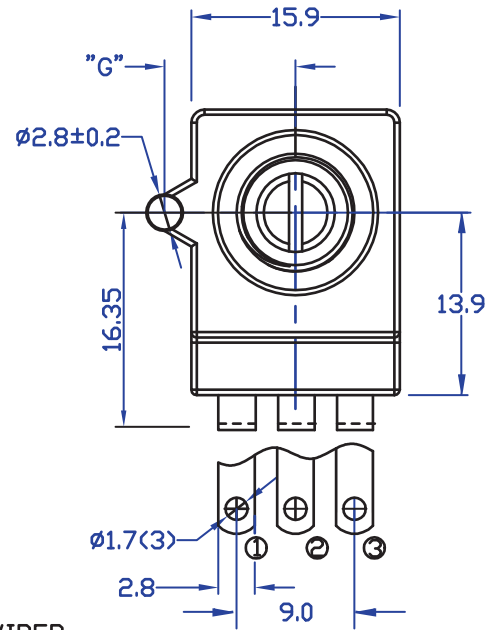
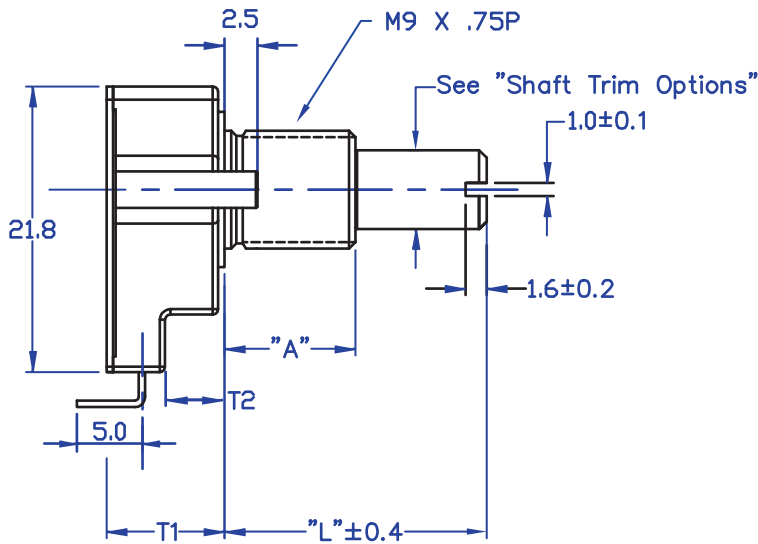
Ingress Protection Rating

IP54, IP67

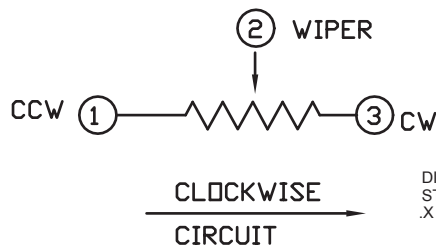
Vibration

15G, 10 to 2000 Hz

282S Metal Shaft, Bushing Mount, Solder Lug (Faston) Terminal Formed to Rear

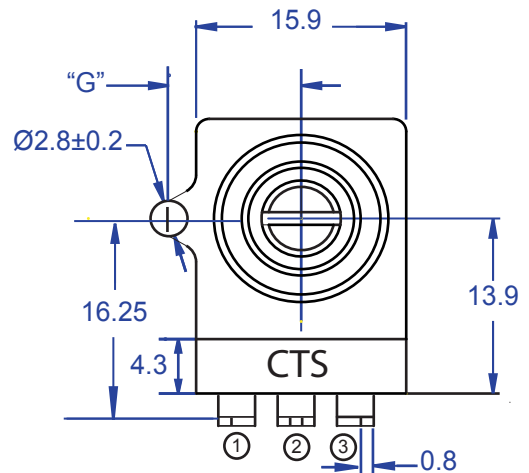
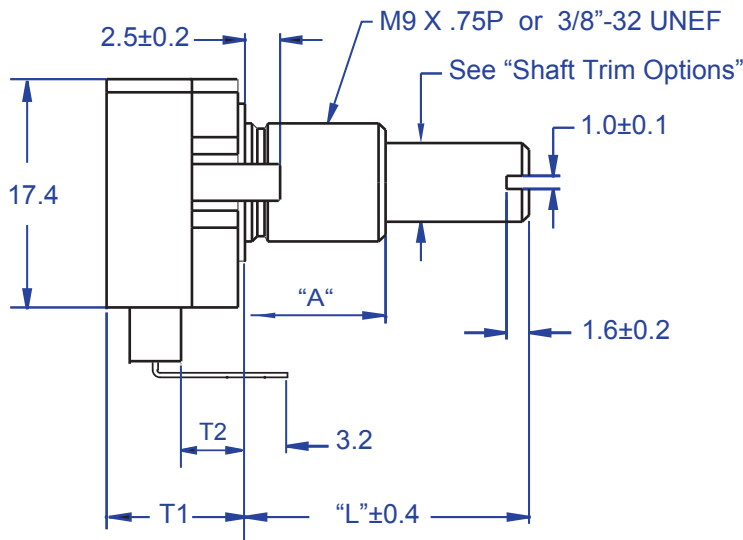


Locating Lug "G"	Thickness "T1"
10 mm Lug	9.0 mm
8 mm & No Lug	8.6 mm



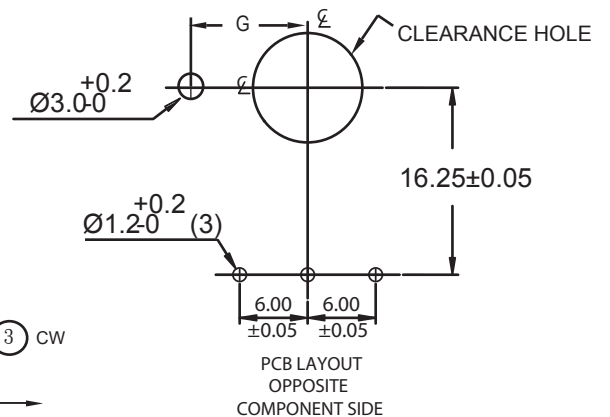
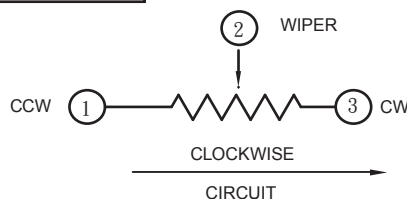
DIMENSION : mm
STANDARD TOLERANCE :
.X (1 PLACE) : ±0.3 .XX(2 PLACE) : ±0.13

282U Metal Shaft, Bushing Mount, PC Terminal Formed to Front

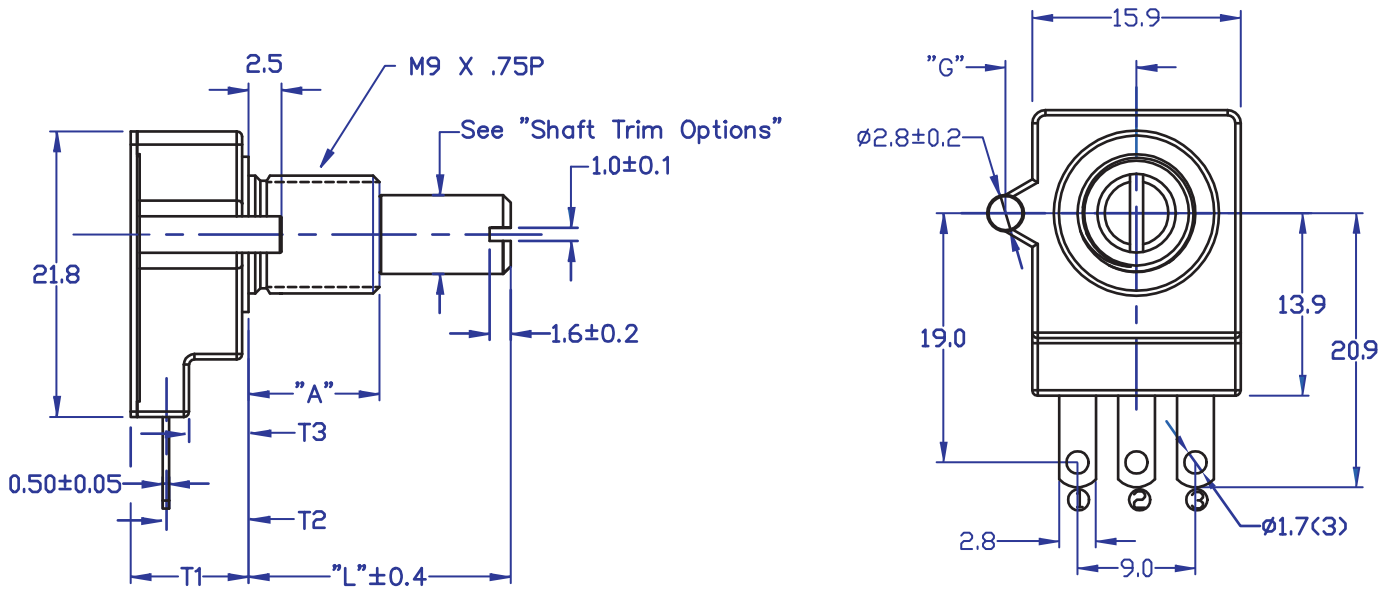


Locating Lug "G"	Thickness "T1"	Thickness "T2"
8 mm	9.4 mm	4.1 mm
10 mm	9.8 mm	4.5 mm

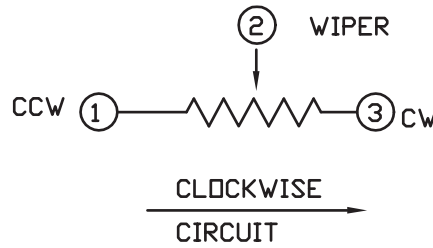
DIMENSION : mm
STANDARD TOLERANCE :
.X (1 PLACE) : ±0.3 .XX(2 PLACE) : ±0.13



282T Metal Shaft, Bushing Mount, Solder Lug (Faston) Terminal



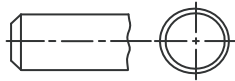
Locating Lug "G"	Thickness "T1"
10 mm Lug	9.0 mm
8 mm & No Lug	8.6 mm



DIMENSION : mm
STANDARD TOLERANCE :
.X (1 PLACE) : ±0.3 .XX(2 PLACE) : ±0.13

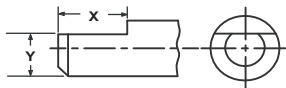
Shaft Trim Options

ROUND



Shaft Trim	Diameter
R	.236" (6.00 mm)
O	.250" (6.35 mm)

FLATTED



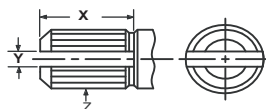
Shaft Trim	Diameter	X	Y
F	.236" (6.00 mm)	.375" (9.52 mm)	.156" (3.96 mm)
L	.250" (6.35 mm)	.440" (11.18 mm)	.217" (5.50 mm)

SD SLOT



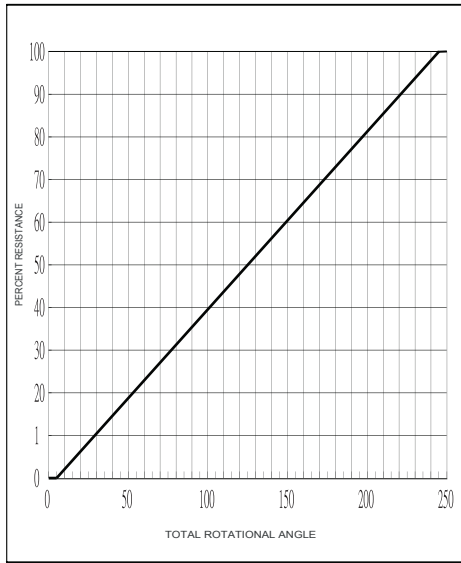
Shaft Trim	Diameter	X	Y
S	.236" (6.00 mm)	.063" (1.6mm)	.039" (1.0mm)
D	.250" (6.35 mm)	.063" (1.6mm)	.039" (1.0mm)

KNURLED & SLOTTED

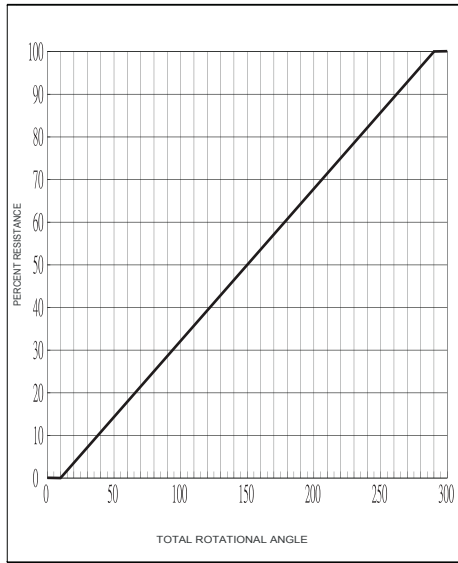


Shaft Trim	Diameter	X	Y	Z
K	.236" (6.00 mm)	.344" (8.74 mm)	.063" (1.60 mm)	24 Teeth

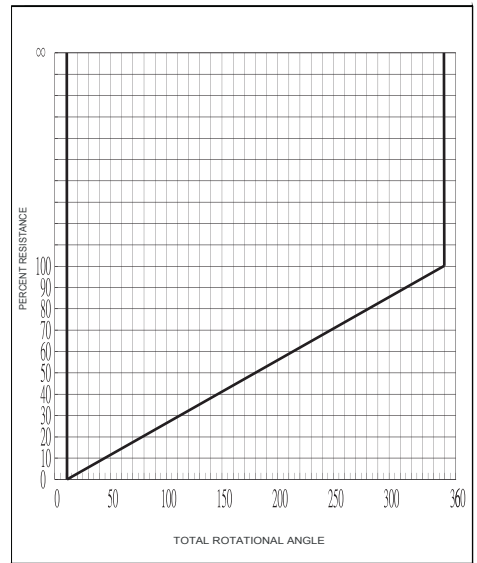
Resistance Tapers



TOTAL ROTATIONAL ANGLE: 250

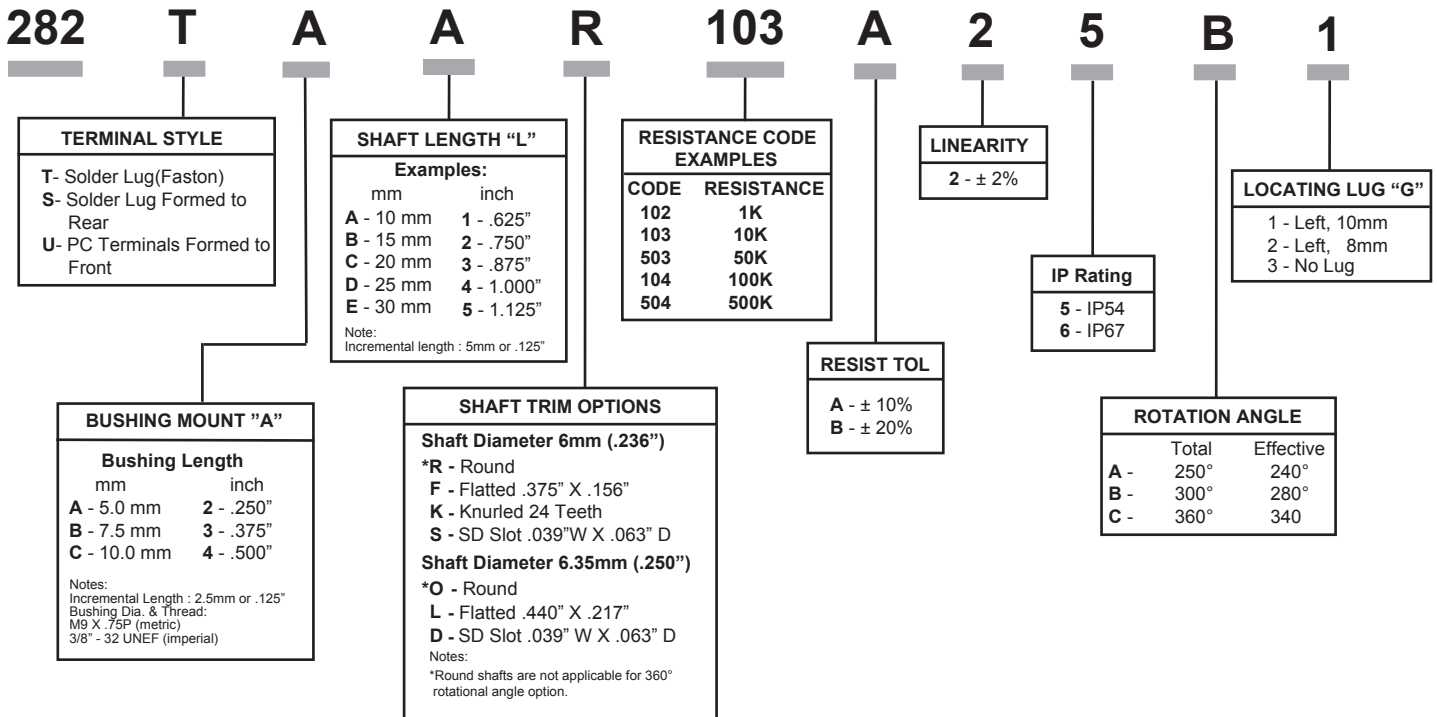


TOTAL ROTATIONAL ANGLE: 300°



TOTAL ROTATIONAL ANGLE: 360°

Ordering Information



Please consult factory for other mounting options or custom features not listed.

Standard Part - 282T33L502A25A2, 282T33L502A25C2, 282TCBS103A25B1
282T33L502A26A2, 282T33L502A26C2, 282TCBS103A26B1