

Series 282

Industrial 16mm Conductive Plastic

Precision Potentiometer

- 2 million life cycles
- 2% precision linearity
- Ingress Protection (IP54, IP67)
- Wide Temperature Range
- Solder Lug, PC Terminal
- Continuous Rotation Available



Description

The 282 Series robust construction provides the user with a long life, highly reliable precision product in a sealed housing which meets up to IP67 standards. Options include various terminal configurations, shaft and bushing lengths, shaft styles, resistance values and tolerances, and various rotation angles to meet your design requirements.

Ordering Information

Series	Terminal Styles	Bushing Length "A"	Shaft Length "L"	Shaft Trim	Resistance Code Examples	Resistance Tolerance	Linearity ±2%	IP Rating	Rotational Angle	Locating Lug "G"
282	T	A	A	R	103	A	2	5	B	1

Code	Terminal Style
T	Solder lug
S	Solder lug formed to rear
U	PC terminals formed to front

Code	Bushing Length 2.5mm or .125" Increments
2	.250" (3/8" - 32UNEF)
3	.375" (3/8" - 32UNEF)
4	.500" (3/8" - 32UNEF)
A	5.0mm (M9 x.75P)
B	7.5mm (M9 x.75P)
C	10.0mm (M9 x.75P)

Code	Shaft Length "L" 5mm or .125" Increments Examples
1	.625"
2	.750"
3	.875"
4	1.000"
5	1.125"
A	10 mm
B	15 mm
C	20 mm
D	25 mm
E	30 mm

Code	Resistance
102	1K
501	500
102	1K
252	2.5K
502	5K

Code	Spec.
A	±10%
B	±20%

Code	Spec.
R	Round (Dia. 6mm, not available for 360° rotation)
F	Flatted .375" x .156" (Dia. 6mm)
K	Knurled 24 Teeth (Dia. 6mm)
S	SD slot .063" deep X .047" wide (Dia. 6mm)
O	Round (Dia. 6.35mm)
L	Flatted .440" x .217" (Dia. 6.35mm)
D	SD slot .063" deep X .047" wide (Dia. 6.35mm)

Code	Spec.
1	Left, 10mm
2	Left, 8mm
3	No lug

Code	Total	Electrical
A	250°	240°
B	300°	280°
C	360°	340°

Electrical Specifications

Parameter	Conditions & Remarks	Min	Max	Unit
Resistance Range	Linear	1K	500K	Ohms
Resistance Tolerance	±20%, ±10%			
Dielectric Strength	1 minute		750	VDC
Power Rating (Standard)	55°C		0.25	Watts
Power Rating (Special)	75°C		0.50	Watts
Operating Voltage			500	VDC
Insulation Resistance	500 VDC	1000		Megohms
Linearity			±2	%

Mechanical and Environmental

Rotational Torque	20 to 180 gf-cm
Rotational Life	2 Million cycles
Mechanical Angle	250°, 300°, 360°
Stop Strength	9 kgf-cm
Push-Pull Strength of Shaft	13.6 kg for 10 seconds
Mounting Information	Bushing mount
Ingress Protection Rating	IP54, IP67
Manual Soldering	Maximum temperature of 350°C for 3 seconds
Vibration	15G, 10 to 2000 Hz
RoHS	Lead-Free. Fully compliant to RoHS Directive
Packaging :	Standard tray packaging
Operating Temperature:	-40°C to +125°C
Storage Temperature:	-55°C to +150°C

Mechanical Specifications

Figure 1 – 282S – Metal Shaft, Bushing Mount, Solder Lug Terminal Formed to Rear

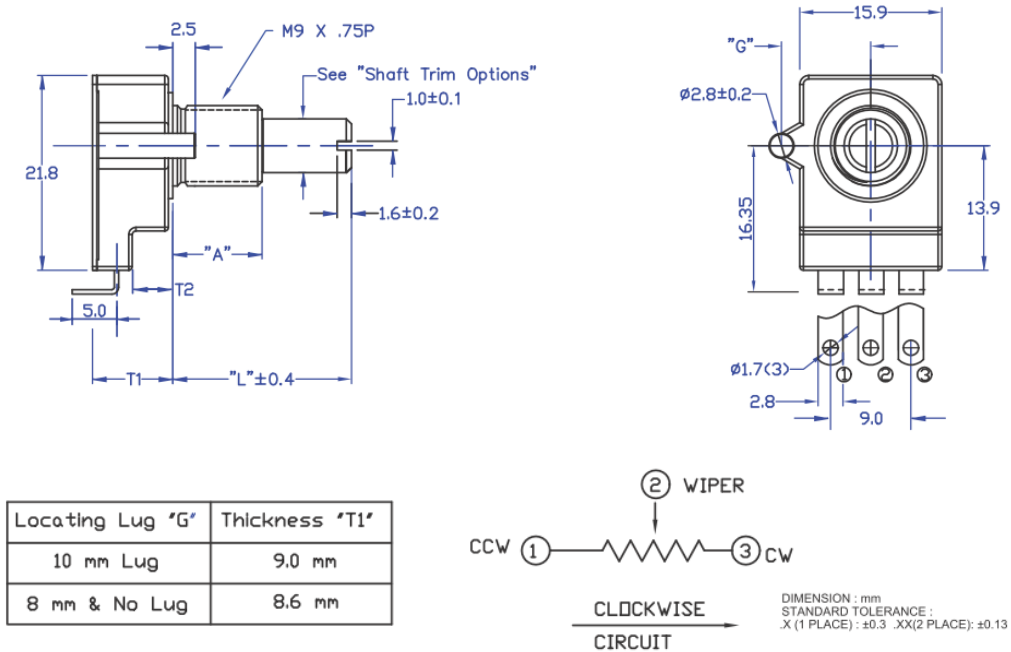


Figure 2 – 282U – Metal Shaft, Bushing Mount, PC Terminal Formed to Front

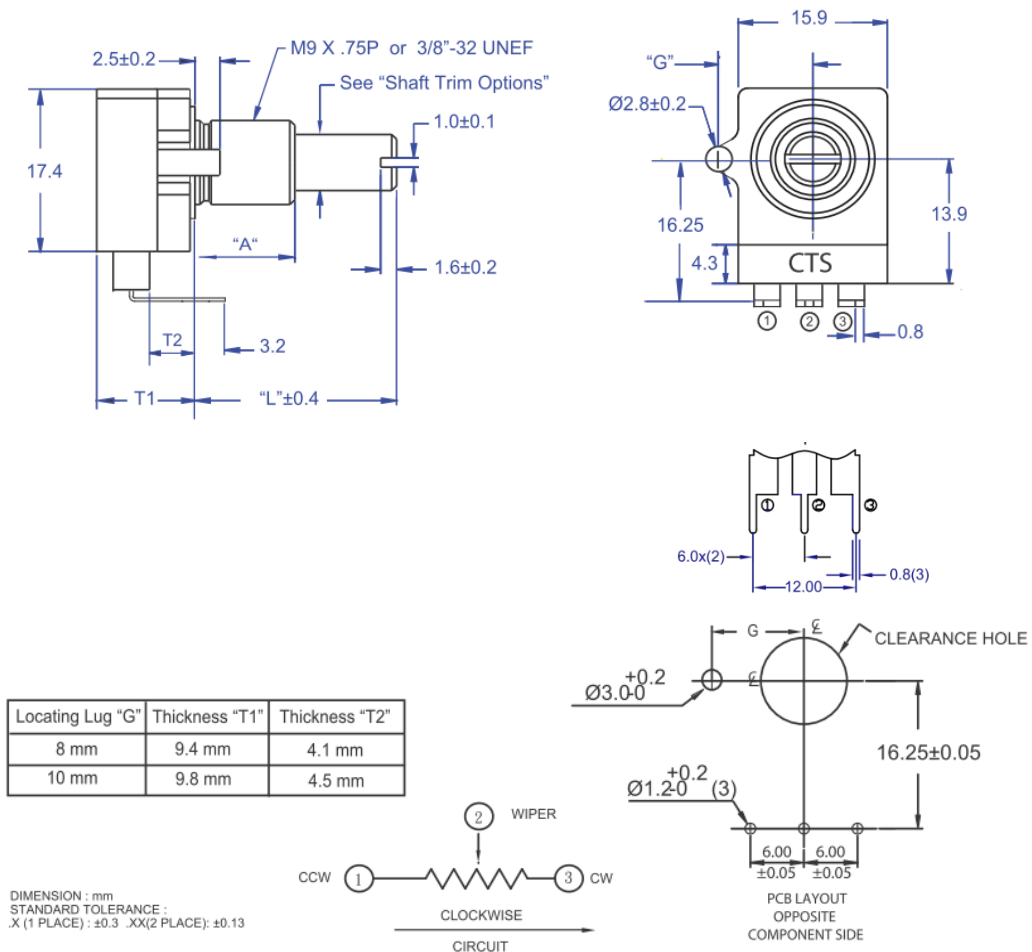
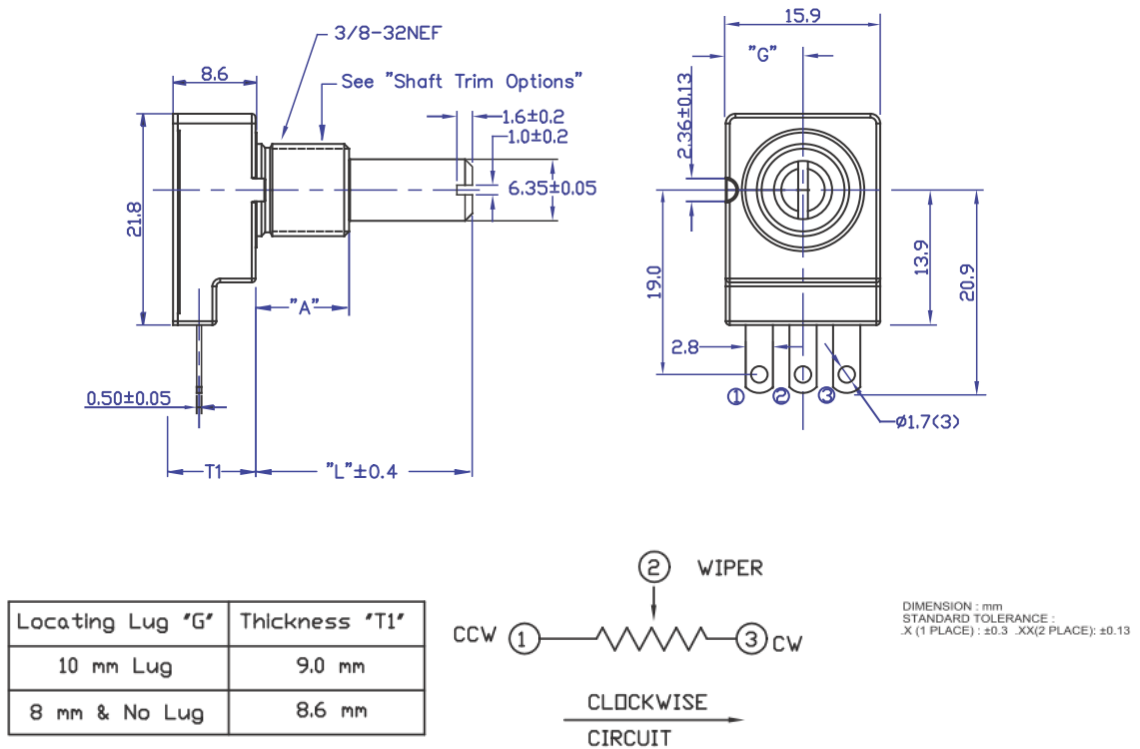
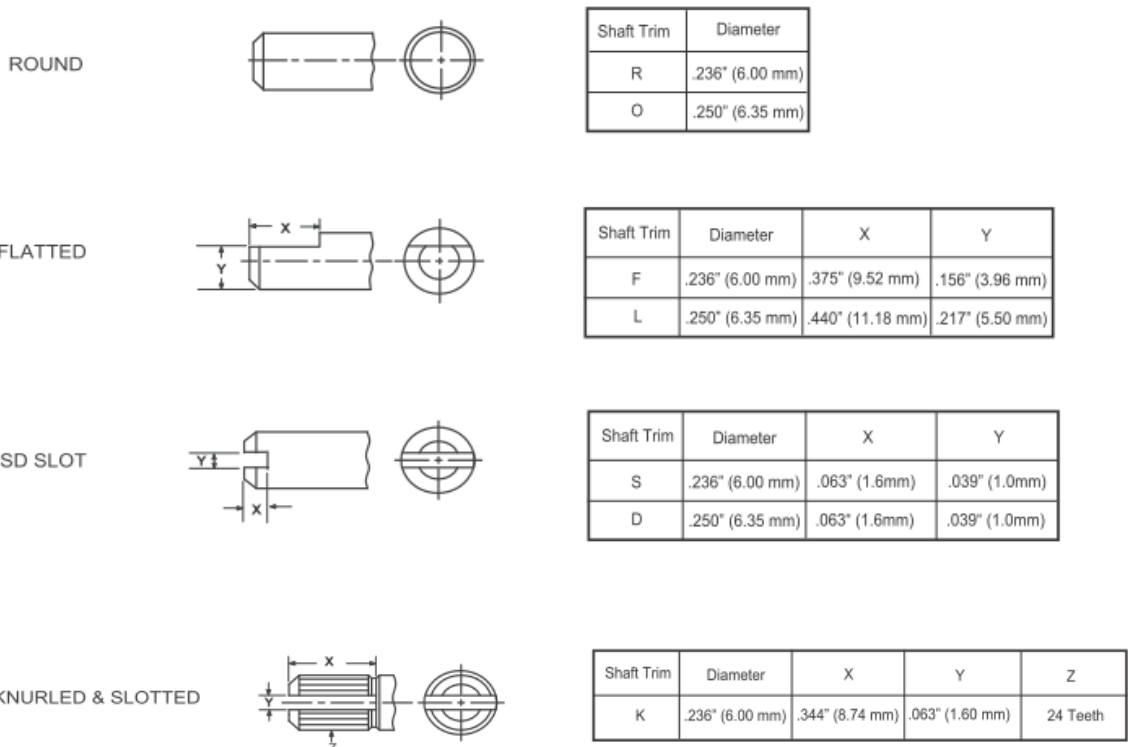


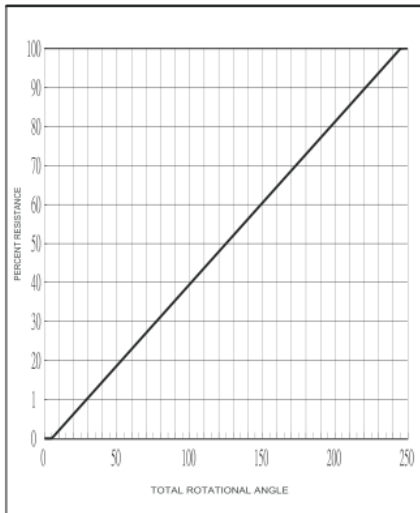
Figure 3 – 282T– Metal Shaft, Bushing Mount, Solder Lug Terminals, with 8 mm Locating Lug



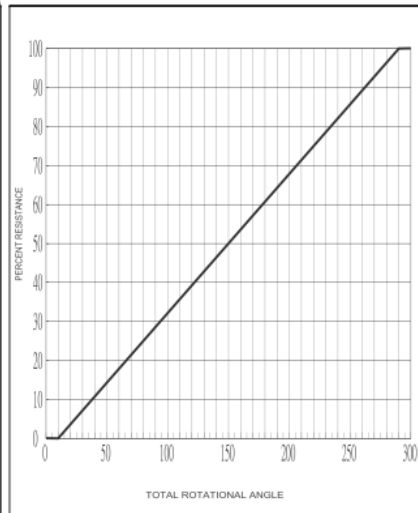
Shaft Trim Options



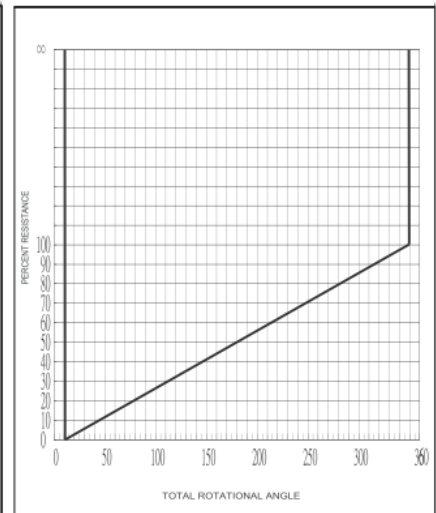
Resistance Tapers



TOTAL ROTATIONAL ANGLE: 250



TOTAL ROTATIONAL ANGLE: 300°



TOTAL ROTATIONAL ANGLE: 360°