**CTS**®

CTS 212 Rotary Switches

Features

- Hill and valley detent
- Balanced double bump detent spring
- Excellent feel
- 30˚ or 60˚ indexing
- Spring return styles available
- Adjustable stop available
- Solder lug and printed circuit terminals available
- Molded stator prevents solder from flowing into the circuit
- Custom switching patterns available
- Index or wafers are available separately
- RoHS compliant
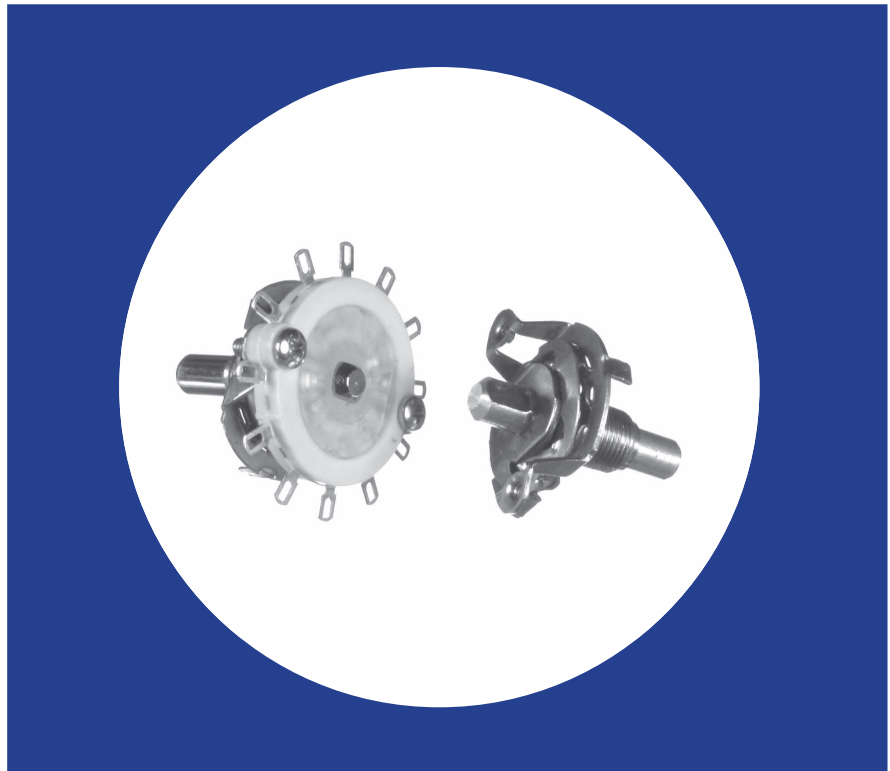
Electrical and Mechanical Specifications

Indexing

Double bump spring hill and valley detent with standand 30° indexing for 2 through 12 positions or with special 60° indexing from 2 to 6 positions.
Special 90° indexing consult CTS

Voltage and Current Rating

UL Rating: 3/4 amp at 125 VAC (shorting type only)
Special Rating: 1/4 amp at 28 VDC (shorting or non shorting)
1 amp at 28 VDC (shorting type only)

Contact Resistance

15 milliohms max. when measured from adjacent terminals

Stop Strength

15 in-lb (17.3Kgf-cm).

Torque

Up to 48 in-oz. (3.5Kgf-cm).

Detent Rotational Life

Standard:25,000 cycles through 12 positions and return at 10 cycles per minute.

Materials

Shaft:Aluminum or unplated brass at CTS option
Bushing:Standard — Brass
Detent Spring: Spring brass or nickel silver depending on torque requirements
Front Plate: Zinc plated or nickel plated plated steel at CTS option
Rotor Contacts, Stator Contacts and Terminals: Silver plated brass standard
Stator Insulator: Glass reinforced thermoset material

Bushing Lengths

Standard: 3/8"-32 UNEF-2A Thread,1/4" (6.35mm) or 3/8" (9.53mm) long.
Special Lengths: Available as required

Locating Lugs

Standard:Left side .531" (13.5mm) radius
Special:Right side .531" (13.5mm) radius or no lug

Shaft Trim

Standard:Plain round
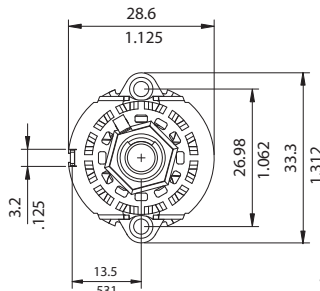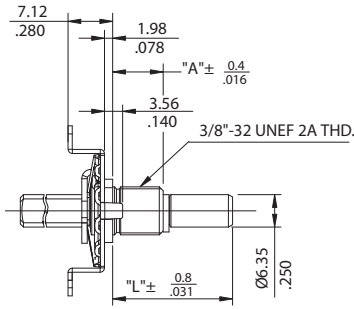Special:Flat, slot, knurl, or mixed (flat with slot)

Frames

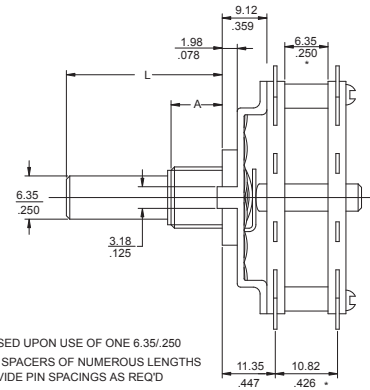Machine screw, bolt & nut, or rivet construction

Lubrication

Special lubrication is used sufficient for the life of the index assembly under normal hand operation.

6/30/05

Physical Dimensions

Detent Only

*NOTE :
10.82/.426 DIMENSION BASED UPON USE OF ONE 6.35/.250
SPACE NO SPACERS OR SPACERS OF NUMEROUS LENGTHS
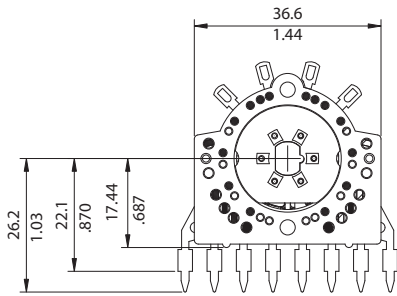ARE AVAILABLE TO PROVIDE PIN SPACINGS AS REQ'D

Typical Assembled Switch

Available Terminal Styles

Y-Style
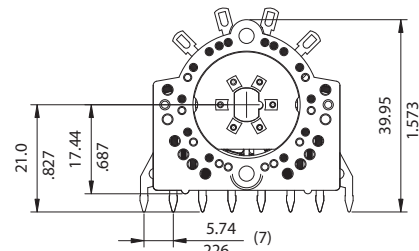
X-Style

T-Style

P.C. BOARD
MOUNTING HOLE

U-Style

P-Style

Ordering Information

212 T 01 02 N 2 20 R N 1

POLES
01 – 1 POLE
10 – 10 POLES ETC.

CONTACT TYPE
N – NON SHORTING (BREAK BEFORE MAKE)
S – SHORTING (BREAK BEFORE MAKE)

SHAFT FMS 1/32" INCREMENTS
20 – .625" (15.9mm)
24 – .750" (19.1mm)
28 – .875" (22.2mm)
32 – 1.000" (25.4mm)

SPECIALS
N – NONE
D – NO LOCATING LUG
E – LOCATING LUG RIGHT SIDE

INDEX OR ADJUSTABL STOP
BLANK – STANDARD
1 – 60° INDEX
2 – 90° INDEX
3 – 30° INDEX WITH ADJUSTABLE STOP
4 – 60° INDEX WITH ADJUSTABLE STOP
5 – 90° INDEX WITH ADJUSTABLE STOP

TERMINAL STYLE
T – SOLDER LUG
X – PC
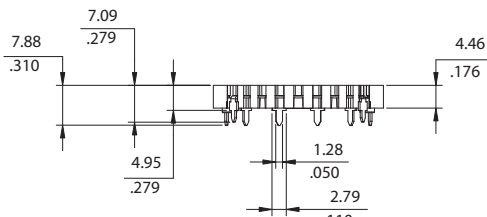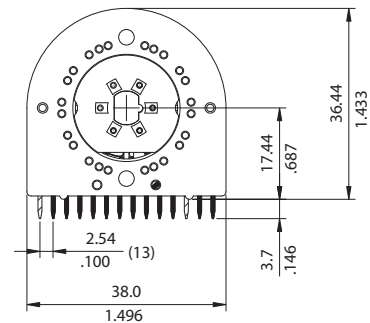**U** – PCFORMED TO REAR
P – PC WITH .100" (2.54mm) SPACING
Y – X STYLE WITH .870" (22.1mm) MEIGHT STAND OFF.

POSITIONS
02 – 2 POSITIONS
12 – 12 POSITIONS, ETC.

MOUNTING STYLE
BUSHING LENGTH: 1/8" INCREMENTS
EXAMPLES:
2 – .250" (6.35mm)
3 – .375" (9.5mm)
BUSHING MOUNT SUPPLIED WITH LOCATING LUG LEFT SIDE TERMINALS DOWN

SHAFT TRIM
R – ROUND
F – FLATTED .375" X .156" (9.53mm X 4.0mm)
K – KNURLED EIA S148(24 TEETH)
S – SD SLOT .047" WIDE X .063" DEEP (1.2mm X 1.6mm)
M – FLATTED .375" X .218" (9.53mm X 5.54mm) WITH SLOT