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
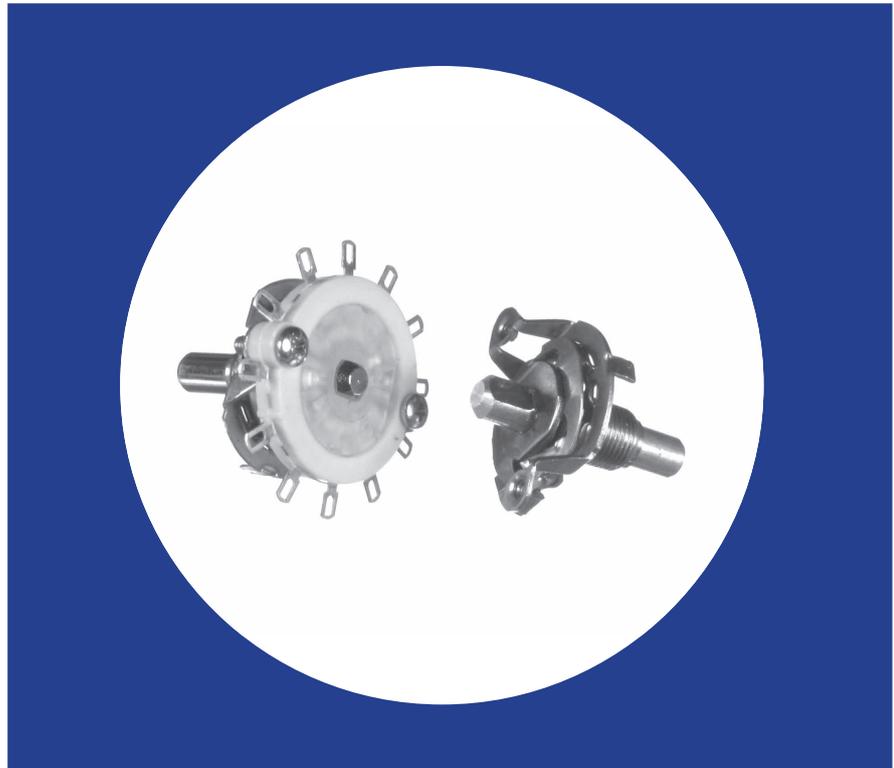
Electrical and Mechanical Specifications

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.

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www.ctscorp.com

Physical Dimensions

7.12 / .280

1.98 / .078

"A"± .4 / .016

3.56 / .140

3/8"-32 UNEF 2A THD.

Ø6.35 / .250

"L"± .8 / .031

28.6 / 1.125

26.98 / 1.062

33.3 / 1.312

3.2 / .125

13.5 / .531

9.12 / .359

6.35 / .250 *

1.98 / .078

L

A

6.35 / .250

3.18 / .125

11.35 / .447
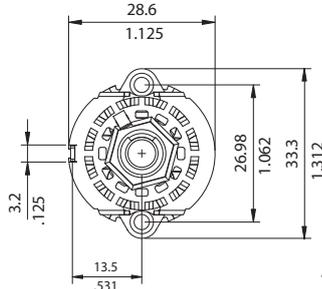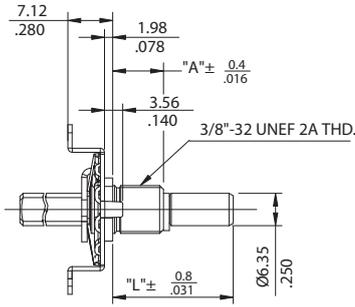
10.82 / .426 *

* 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
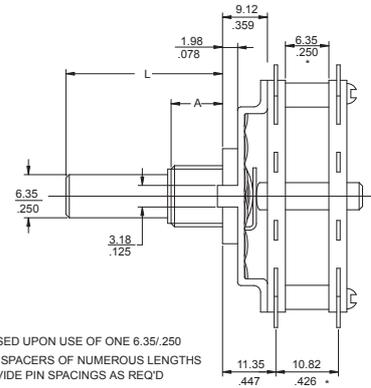
DIMENSION: mm / INCH

Detent Only

Typical Assembled Switch

Available Terminal Styles

36.6 / 1.44

26.2 / 1.03

22.1 / .870

17.44 / .687

Y-Style

21.0 / .827

17.44 / .687

39.95 / 1.573

5.74 / .226 (7)

X-Style

13.49 / .531

26.98 / 1.062

15°

Ø1.98 / .076 HOLE @ 15° AS REQUIRED

R15.09 / .594

2-CLEARANCE HOLES FOR #4-40 PANHEAD SCREWS

P.C. BOARD MOUNTING HOLE

Ø38.76 / 1.526 TO OUTSIDE OF TERMINALS

33.32 / 1.312

26.98 / 1.062

Ø2.94±0.05 (2)THR. HOLE .116±.002

T-Style

7.88 / .310

7.09 / .279

4.46 / .176

4.95 / .279

1.28 / .050

2.79 / .110

U-Style

36.44 / 1.433

17.44 / .687

2.54 / .100 (13)

3.7 / .146

38.0 / 1.496
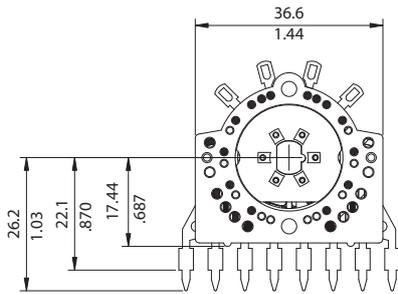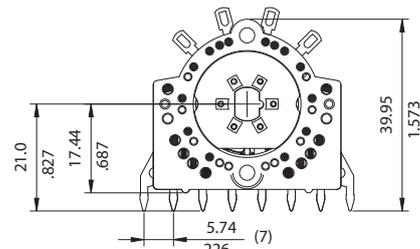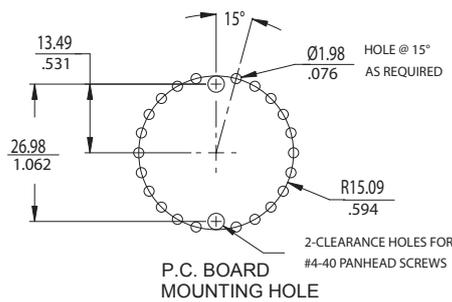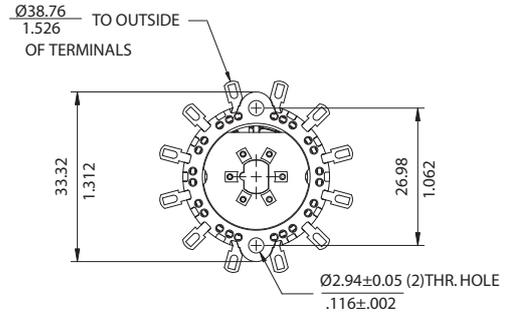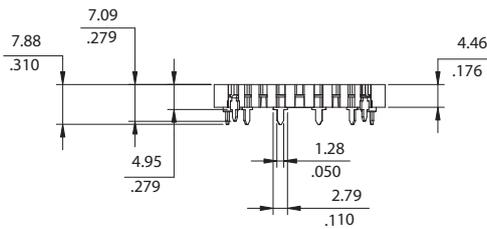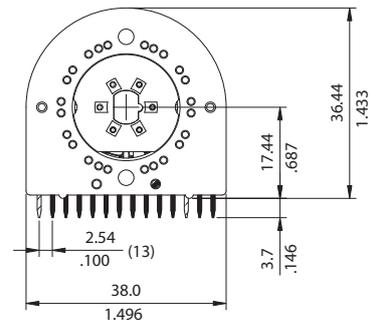
P-Style

DIMENSION: mm / INCH

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 – 30° INDEX
WITH
ADJUSTABLE
STOP
3 – 60° INDEX
WITH
ADJUSTABLE
STOP

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

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.

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