

# TSW Series 3 or 7 Function Tact and Scroll Wheel

## Features/Benefits

- Compact and slim
- Multiple function in one component (rotary, select)
- Easy installation
- Through hole termination
- Integrated decoration (B type)

## Typical Applications

- Remote controls
- Desk phones
- Keyboards
- Printers
- Entertainment systems
- White goods



## Operation Characteristics

OPERATING FORCE: See chart below  
24 detent - 12 pulses/360°

## Specifications

INITIAL CONTACT RESISTANCE: Max. 300mΩ  
INSULATION RESISTANCE: Min. 100 MΩ (100 VDC)  
RATING: 1mA 10 VDC  
LIFE CYCLE: See chart below  
OPERATING FREQUENCY:  
Rotation - Max. 30 operations per minute  
Push - Max. 120 operations per minute  
Depression - Max. 300 gf

## Environmental

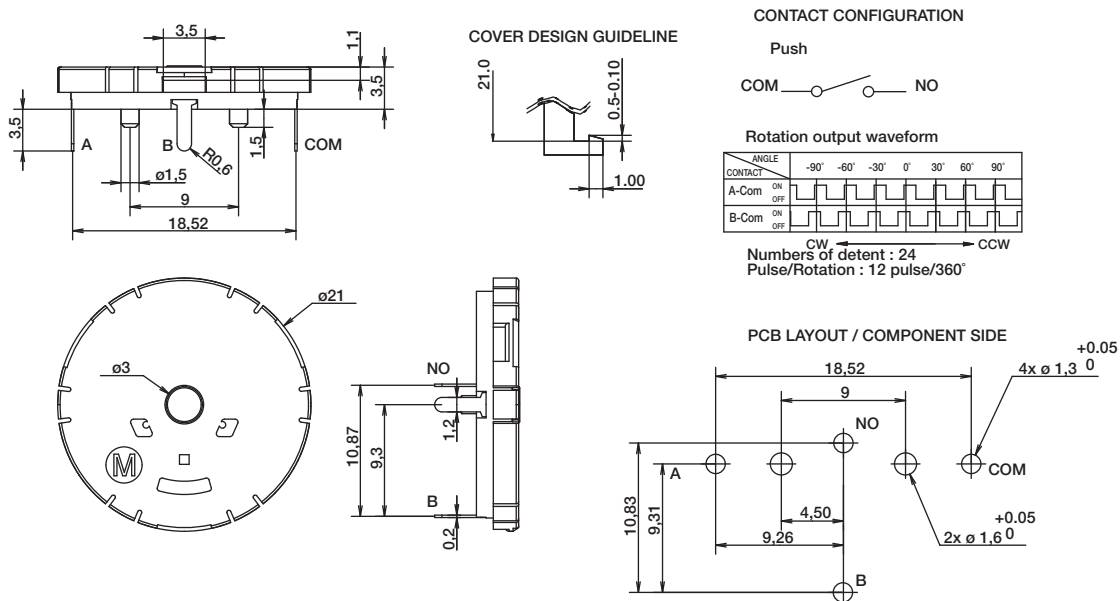
OPERATING TEMPERATURE: 0°C / 40°C  
STORAGE TEMPERATURE: -40°C / 70°C  
VIBRATION RESISTANCE: 10 ~ 55 Hz, displacement 0.75mm (p-p)  
SHOCK RESISTANCE: Destruction 1,000 m/s<sup>2</sup> (approx. 100G) max.  
WAVE SOLDERING: Max. 260°C for 5 seconds  
HAND SOLDERING: Max. 260°C for 5 seconds

Designation	Number of Circuits	Rotation Actuation Force	Push Actuation Force	Cycle Life Rotation (per direction)	Cycle Life Push
TSWA	3	Max. 60g - cm	220g ± 50g	1,000K cycles	1,000K cycles
TSWB	5	Max. 50g - cm	Max 300g	1,000K cycles	1,000K cycles

Part Number	Description	Tray	Box
TSWA-3N-C LFS	Base switch with jog and select, no decoration	80	160
TSWA-3N-CB11 LFS	Base switch with jog and select, white central button, white dial	65	130
TSWA-3N-CD23 LFS	Base switch with jog and select, black central button, grey dial	30	60
TSWB-3N-CB111 LFS	Central select with jog and 4 directions, white central button, dial & direction ring	30	60
TSWB-3N-CB222 LFS	Central select with jog and 4 directions, black central button, dial & direction ring	30	60

## TSWA-3N-C LFS

Base switch with jog and select, no decoration



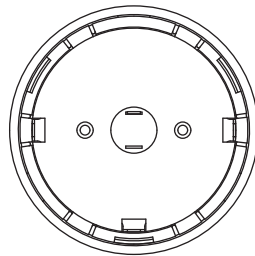
Dimensions are shown: mm  
Specifications and dimensions subject to change



# TSW Series

## 3 or 7 Function Tact and Scroll Wheel

**TSWA-3N-CB11 LFS** Base switch with jog and select, white central button, white dial

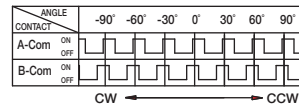


CONTACT CONFIGURATION

Push



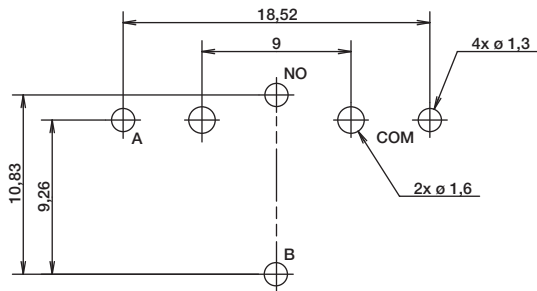
Rotation output waveform



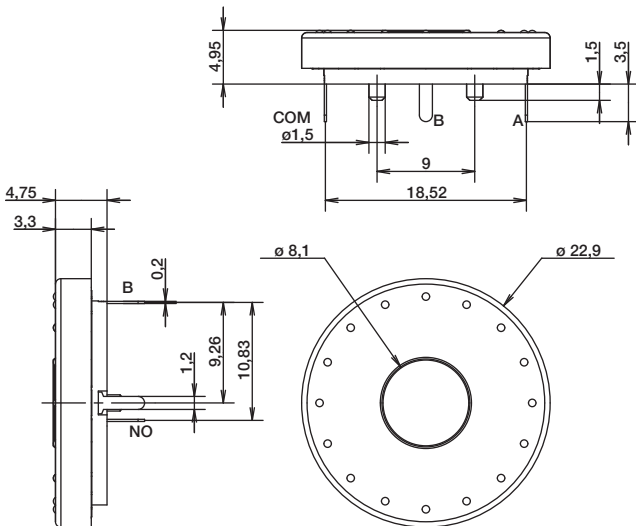
Numbers of detent : 24

Pulse/Rotation : 12 pulse/360°

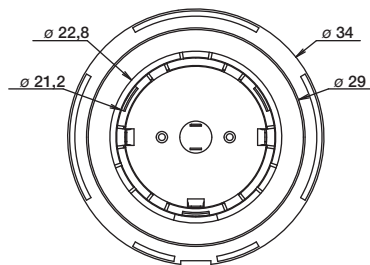
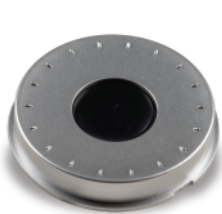
PCB LAYOUT / COMPONENT SIDE



Navigation



**TSWA-3N-CD23 LFS** Base switch with jog and select, black central button, grey dial

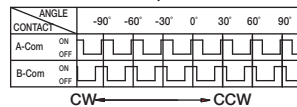


CONTACT CONFIGURATION

Push



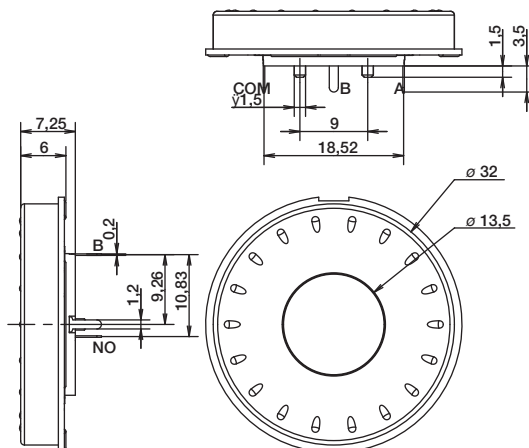
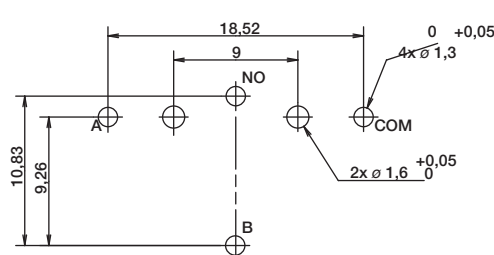
Rotation output waveform



Numbers of detent : 24

Pulse/Rotation : 12 pulse/360°

PCB LAYOUT / COMPONENT SIDE



First Angle Projection

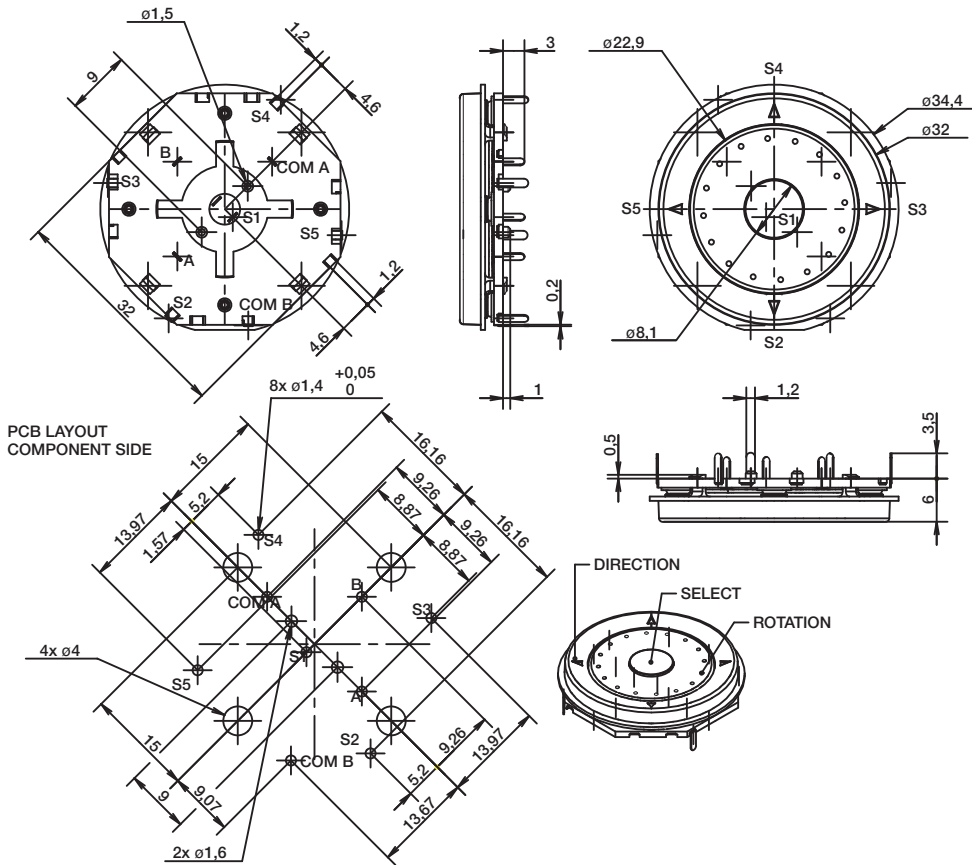
Dimensions are shown: mm  
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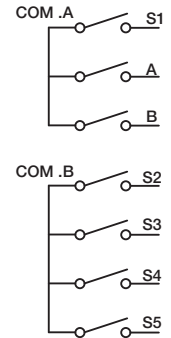
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**TSWB-3N-CB111 LFS**  
**TSWB-3N-CB222 LFS**

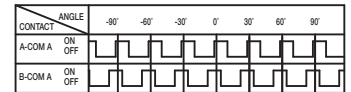
Central select with jog and 4 directions, white central button, dial & direction ring  
Central select with jog and 4 directions, black central button, dial & direction ring



ELECTRICAL FUNCTION



Rotational Output Waveform



CW ← → CCW

Numbers of detent : 24

Pulse/Rotation : 12 pulse/360°



C

Navigation

# Mouser Electronics

Authorized Distributor

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## C&K Switches:

[TSWB3NCB111LFS](#) [Tsw A-3n-Cd23 Lfs](#)