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

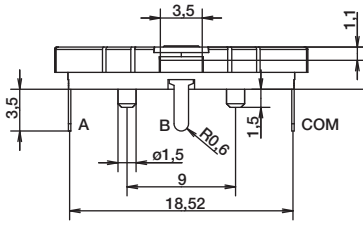
OPERATING TEMPERATURE: 0˚C / 40˚C
STORAGE TEMPERATURE: -40˚C / 70˚C
VIBRATION RESISTANCE: 10 ~ 55 Hz, displacement 0.75mm (p-p)
SHOCK RESISTANCE: Destruction 1,000 m/s² (approx. 100G) max.
WAVE SOLDERING: Max. 260˚C for 5 seconds
HAND SOLDERING: Max. 260˚C for 5 seconds

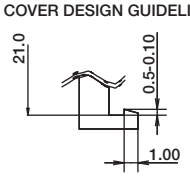
Designation	Number of Circuits	Rotation Actuation Force	Push Actuation Force	Cycle Life Rotation (per direction)	Cycle Life Push
TSWA	3	Max. 60g - cm	220g ± 50g	1,000K cycles	1,000K cycles
TSWB	5	Max. 50g - cm	Max 300g	1,000K cycles	1,000K cycles

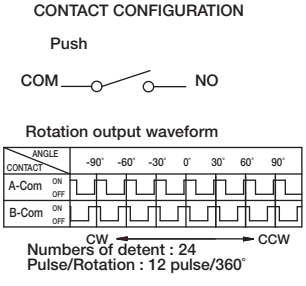
Part Number	Description	Tray	Box
TSWA-3N-C LFS	Base switch with jog and select, no decoration	80	160
TSWA-3N-CB11 LFS	Base switch with jog and select, white central button, white dial	65	130
TSWA-3N-CD23 LFS	Base switch with jog and select, black central button, grey dial	30	60
TSWB-3N-CB111 LFS	Central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

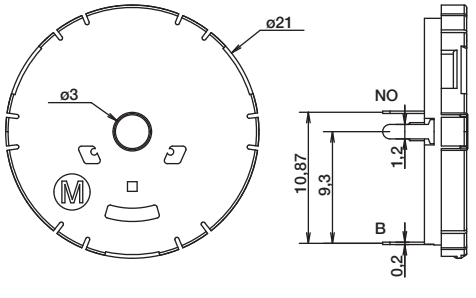
TSWA-3N-C LFS

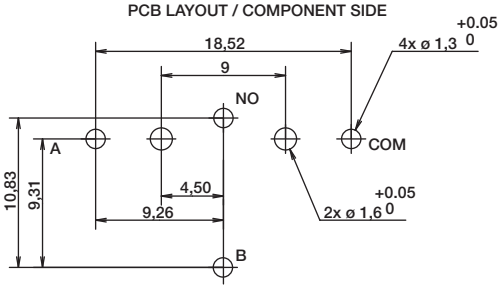
Base switch with jog and select, no decoration







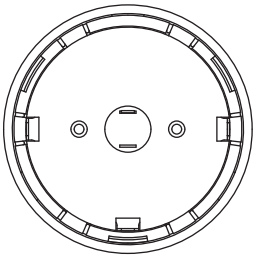


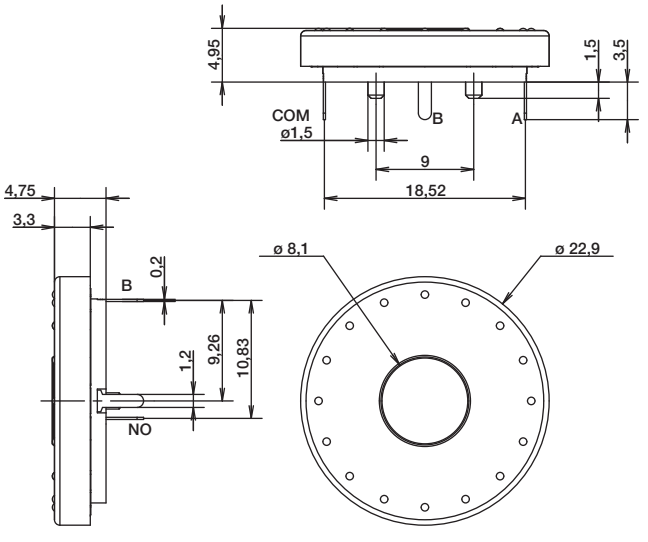


Dimensions are shown: mm
Specifications and dimensions subject to change

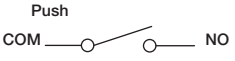
TSWA-3N-CB11 LFS

Base switch with jog and select, white central button, white dial

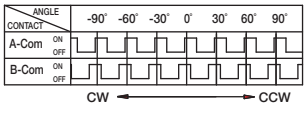




CONTACT CONFIGURATION



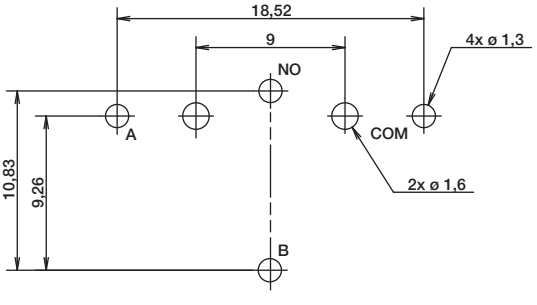
Rotation output waveform



Numbers of detent : 24

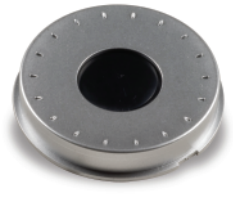
Pulse/Rotation : 12 pulse/360°

PCB LAYOUT / COMPONENT SIDE

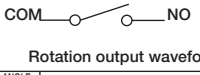


TSWA-3N-CD23 LFS

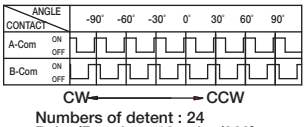
Base switch with jog and select, black central button, grey dial



CONTACT CONFIGURATION

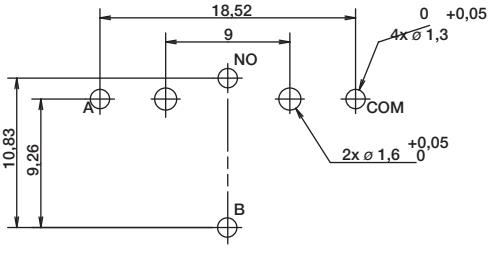


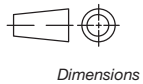
Rotation output waveform



Numbers of detent : 24
Pulse/Rotation : 12 pulse/360°

PCB LAYOUT / COMPONENT SIDE





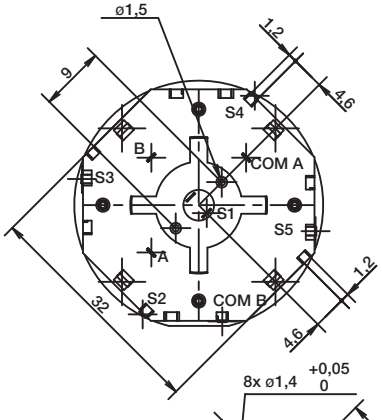
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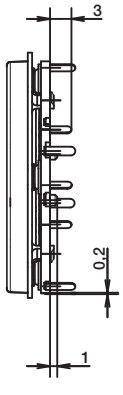
TSWB-3N-CB111 LFS Central select with jog and 4 directions, white central button, dial & direction ring

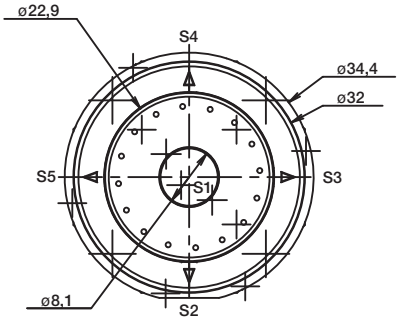
TSWB-3N-CB222 LFS Central select with jog and 4 directions, black central button, dial & direction ring

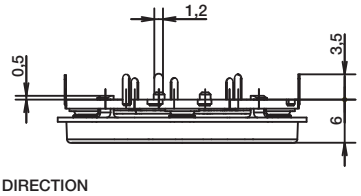


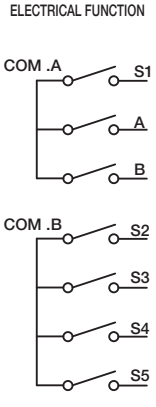


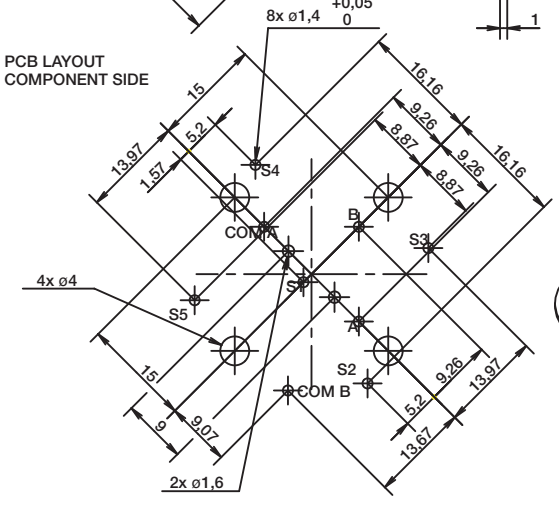


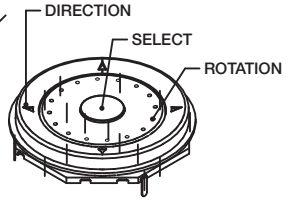


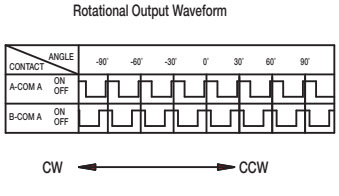












Numbers of detent : 24
Pulse/Rotation : 12 pulse/360°

First Angle Projection

Dimensions are shown: mm
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