

QSA Series Silent Navigation Switch for SMT

Features/Benefits

- Excellent tactile feel
- Plunger can be custom designed
- SMT switch adapted for low current
- Only actuate 1 direction at a time
- Provides logic level control
- RoHS compliant

Typical Applications

- Seat adjustments
- Industrial controls
- Mirror adjustment
- Home entertainment
- Multi-function steering wheel



Construction

| | |
|-----------------|--|
| FUNCTION: | QSA2: 2 way switch QSA4: 4 way switch |
| TYPE OF SWITCH: | QSA2: 2x make contacts QSA4: 4x make contacts |
| FOOTPRINT: | 23 mm x 18 mm, operating direction diagonal |
| HEIGHT: | Housing: 9 mm, total height: 22,4 mm (H1 version) |
| PINS: | Solder pins, SMD |
| ATTACHMENT: | Snap-in pegs provided to help secure and locate switches |
| ACTUATOR: | ø3,5 mm with button fastener |

Mechanical

| | |
|-------------------------|--|
| OPERATION DIRECTION: | In X-Y direction along the diagonal axis of the switch. Rotation point is 5,5 mm over the PCB surface. |
| TRAVEL: (H1 G8 version) | Travel of the actuator measured on an axis parallel to and 19 mm above PCB. switch point/stop (4,0 N force) 1,2 ± 0,4 mm / 1,9±0,5 mm |
| ACTUATION ANGLE: | G8 version To switch point / stop (4,0 N force) 6.5° / 8.5° |
| ACTUATION FORCE: | 3,3 ± 1 N |
| TACTILE EFFECT: | 15% |
| LIFE: | 30,000 cycles in each direction (≤ 20 N force) |

For further information and test reports concerning life, please consult factory.

Mechanical (continued)

| | |
|---------------------|---|
| RETURN FORCE: | 0,8 ± 0,3N |
| ACTUATION STRENGTH: | >50 N, parallel to PCB >100 N, vertical (push) to PCB >50 N traction (pull) force |

Electrical

| | |
|------------------------------|-------------------|
| SWITCHING POWER MAX: | 0,20 VA |
| MIN / MAX SWITCHING VOLTAGE: | (VDC) 20mV / 30 V |
| MIN / MAX SWITCHING CURRENT: | 1mA / 50mA |
| BOUNCE: | < 1 ms |

Environmental

| | |
|------------------------|---------------|
| OPERATING TEMPERATURE: | -40°C to 85°C |
| STORAGE TEMPERATURE: | -40°C to 95°C |

Process

AUTOMATIC SOLDERING: Reflow compatible per CECC00802

Other Data

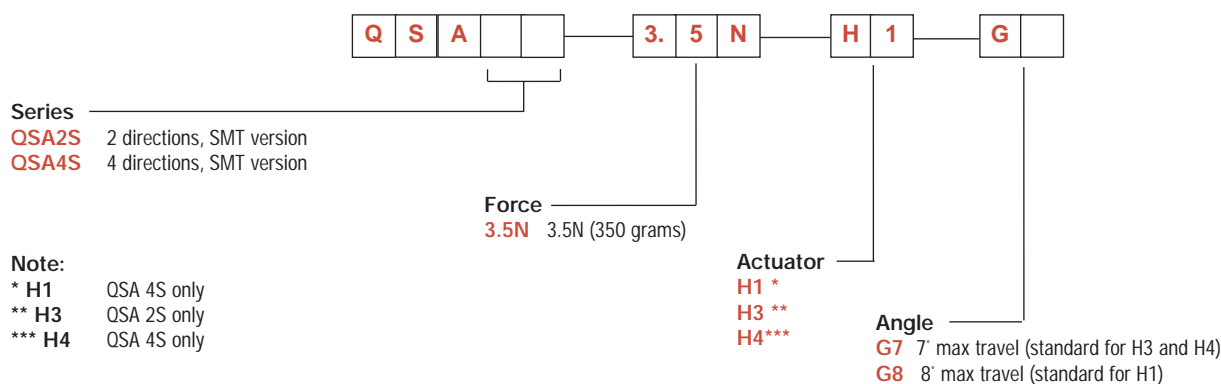
CONTACT MATERIAL: Au on Ni layer
SOLDERING PINS: Au flash
HOUSING MATERIAL: Thermoplastic

QSA is RoHS compliant.

Note: Specifications listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

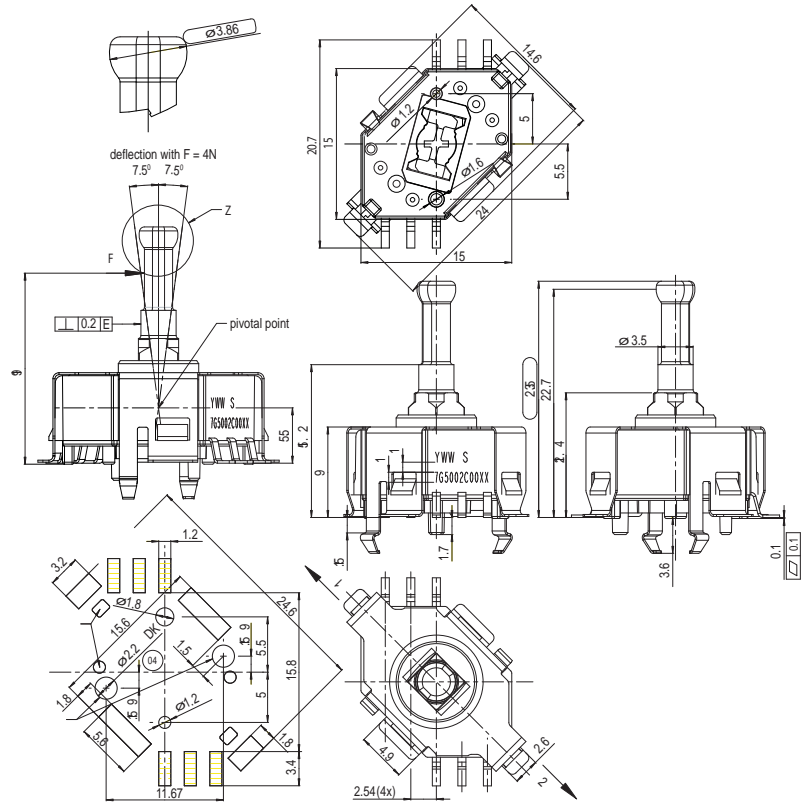
How To Order

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box.



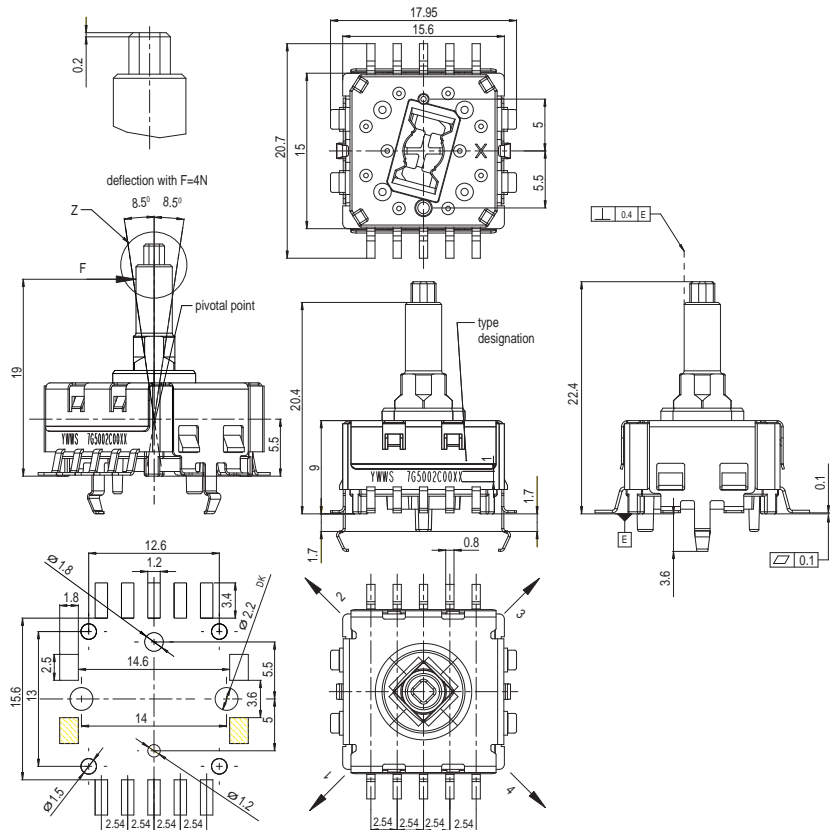
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QSA2S H3



- yellow surface:** terminals and top plate fixations to be soldered with Infrared process
- green surface:** bearing point -to keep free from PCB lines snap-in pegs and positioning pins to get through the PCB but not to be soldered
- red hole:** terminals and top plate fixations to be soldered with Infrared process

QSA4S H1



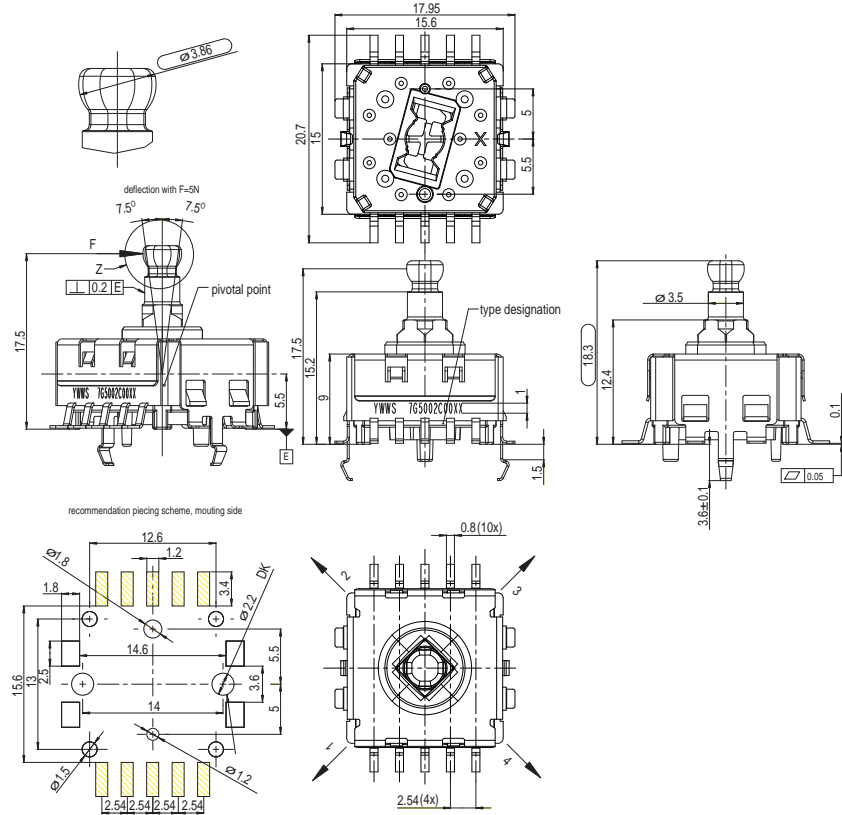
- yellow surface:** terminals and top plate fixations to be soldered with Infrared process
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- red hole:** terminals and top plate fixations to be soldered with Infrared process



Dimensions are shown: mm (inch)
Specifications and dimensions subject to change

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OSA4S H4



Navigation