

# 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

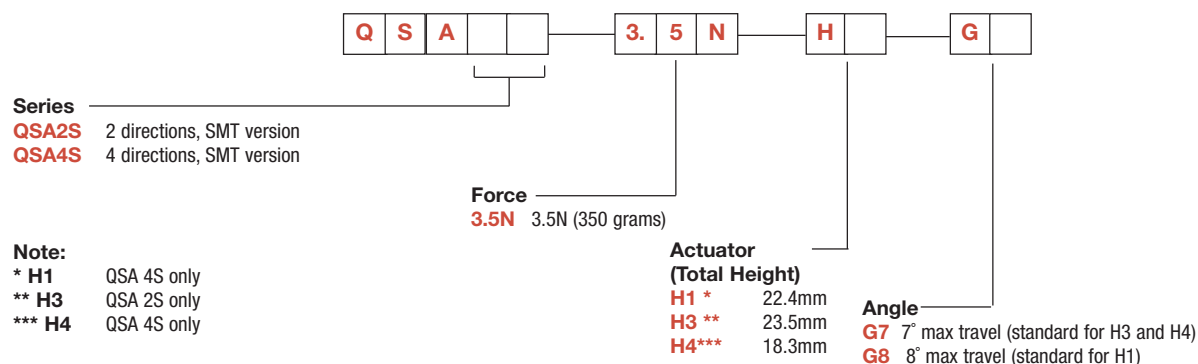
### Packaging

Trays 80 pieces.

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

### How To Order

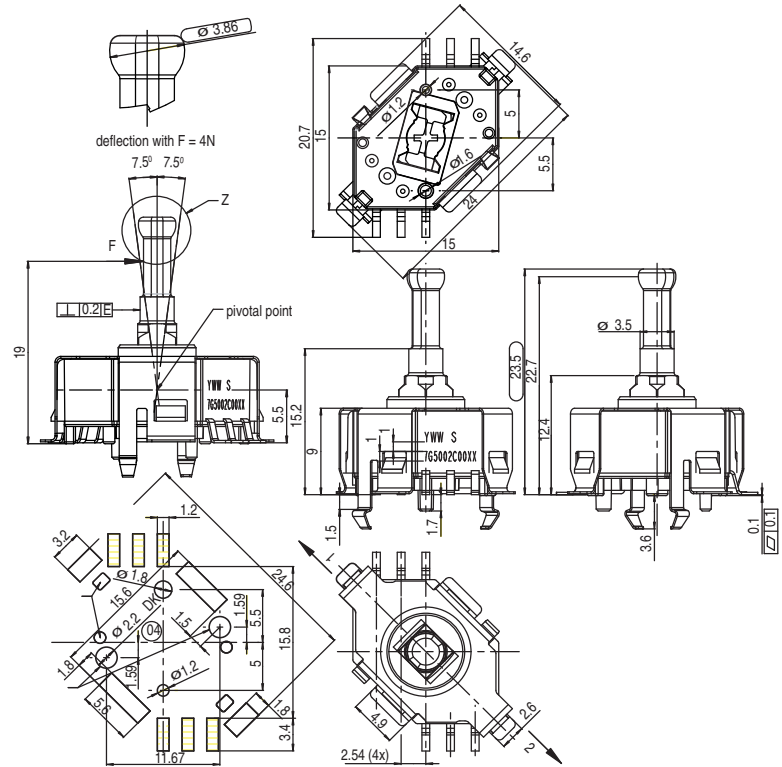
Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box.



Dimensions are shown: mm  
Specifications and dimensions subject to change

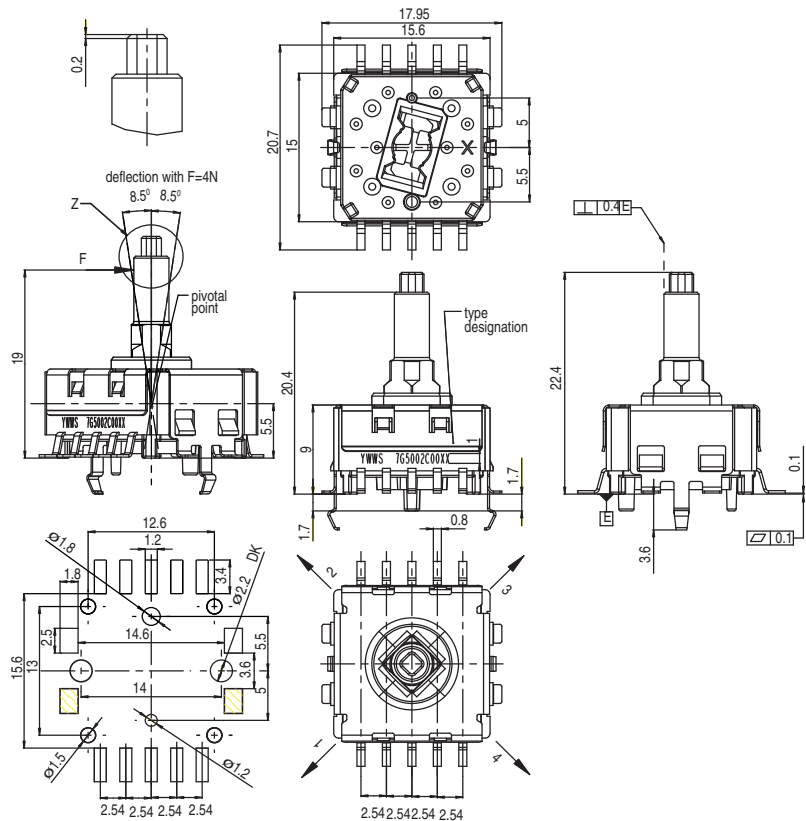
# QSA Series Silent Navigation Switch for SMT

## QSA2S H3



Navigation

## QSA4S H1

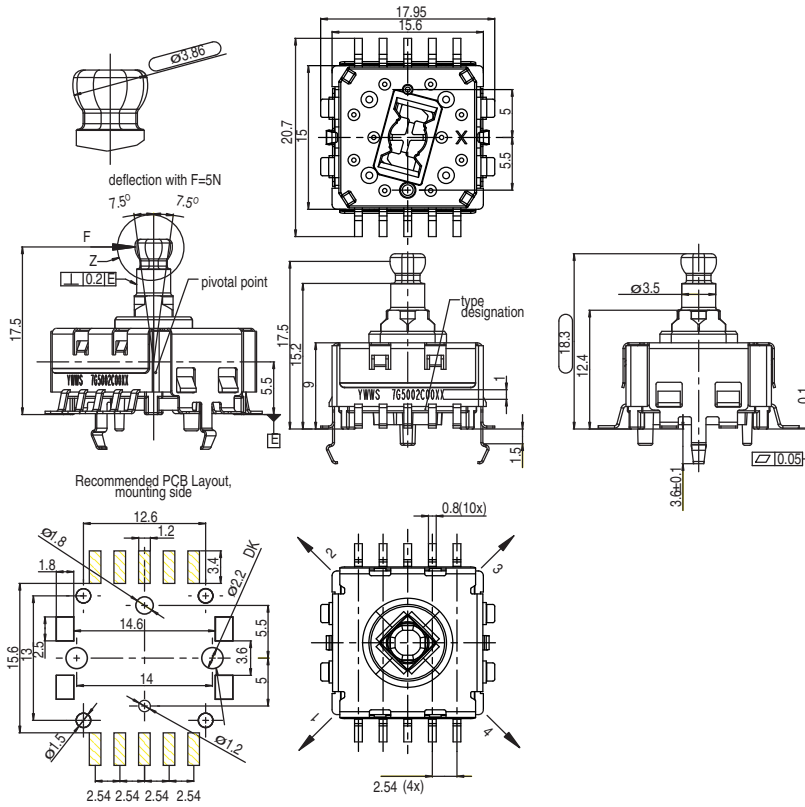
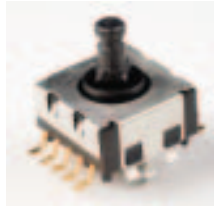


Dimensions are shown: mm  
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# QSA Series Silent Navigation Switch for SMT

## QSA4S H4



Navigation



Dimensions are shown: mm  
Specifications and dimensions subject to change

