OMEGA’s TSW Series adjustable temperature switch is perfect for applications that require an economical solution to temperature control. The stainless steel stem of the TSW Series switch is sealed and filled with a gas that expands as process temperature rises. A membrane within the switch body mechanically causes closure of a 5 A Form "C" relay. The 9.7 mm (0.38") diameter of the probe is designed to mate with OMEGA’s standard 385 Series thermowells for your most rugged applications. Please visit omega.com.

Specifications
Temperature Range: -43 to 266°C (-45 to 510°F)
Temperature Sensor: Limit filled, saturated vapor sensor
Ambient Temperature Limits for Switch Body: -55 to 105°C (-67 to 221°F)
Max System Temperature Capillary: 425°C (797°F)
Max System Pressure: 68.9 bar @ 425°C (1000 psi @ 798°F)
Electrical: 1 A Rated Contacts: 115 Vac/28 Vdc
5 A Rated Contacts: 250 Vac/28 Vdc
Max Switch Cycle Rate: Not to exceed 20 cycles per minute
Wiring Code: Black = common, white = normally open, red = normally closed

Construction Materials
Wetted Parts:
Temperature Sensor: 316 SS

Non-Wetted Parts:
Body: 303 SS
Lock Ring: Zinc alloy, chromate finish
Switch Housing: Zinc alloy, chromate finish
Caps and Accessories: Black valox and brass terminals
Indicator: 303 SS
Indicator Ring: Black nylon
Wire Interface: 3-wire pigtail, furnished 300 mm (12") long, 20 AWG insulated with PVC, 300V rating
Weight: 113 g (0.25 lb)

To Order
Model Temperature Rating Repeatability
No. Range °C/°F (A) °C/°F
TSW-11 -45 to -5 (-49 to 23) 1 ±0.7 (1.3)
TSW-15 -45 to -5 (-49 to 23) 5 ±0.7 (1.3)
TSW-21 -25 to 20 (-13 to 63) 1 ±0.9 (1.6)
TSW-25 -25 to 20 (-13 to 63) 5 ±0.9 (1.6)
TSW-31 -5 to 35 (23 to 95) 1 ±0.8 (1.4)
TSW-35 -5 to 35 (23 to 95) 5 ±0.8 (1.4)
TSW-41 25 to 70 (77 to 158) 1 ±0.9 (1.6)
TSW-45 25 to 70 (77 to 158) 5 ±0.9 (1.6)
TSW-51 55 to 105 (131 to 221) 1 ±1.0 (1.8)
TSW-55 55 to 105 (131 to 221) 5 ±1.0 (1.8)
TSW-61 80 to 125 (176 to 257) 1 ±0.9 (1.6)
TSW-65 80 to 125 (176 to 257) 5 ±0.9 (1.6)
TSW-71 115 to 175 (239 to 347) 1 ±1.2 (2.2)
TSW-75 115 to 175 (239 to 347) 5 ±1.3 (2.3)
TSW-81 175 to 230 (347 to 456) 1 ±1.2 (2.1)
TSW-85 175 to 230 (347 to 456) 5 ±1.2 (2.1)
TSW-91 200 to 265 (392 to 509) 1 ±1.3 (2.4)
TSW-95 200 to 265 (392 to 509) 5 ±1.3 (2.4)

Accessories
Model No. Description
3/4-385S-U21/2-304SS Stainless steel thermowell
3/4-385S-U21/2-BRASS Brass thermowell
SSLK-38-12 Stainless steel compression fitting
BRLK-38-12 Brass compression fitting

Comes complete with operator’s manual. Other thermowells available:
Ordering Example: TSW-41, adjustable temperature switch with a 25 to 70°C (77 to 158°F) range, 1 A contact rating and 3/4-385S-U21/2-304SS, stainless steel thermowell.