

Adjustable Temperature Switches

TSW Series
Starts at
\$160



TSW-11, \$165, shown smaller than actual size.

- ✓ Compact and Economical
- ✓ Ideal for Economical Temperature Switching Applications
- ✓ External Temperature Scale for Easy Setpoint Adjustments
- ✓ 1 A Gold Contacts for TTI and Dry Contact Closures
- ✓ 5 A Silver Contacts for Larger Electrical Loads
- ✓ Vibration Resistant

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 see Section B.

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

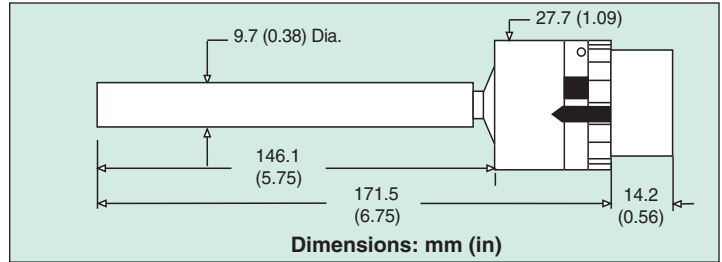
Caps and Accessories: Black valox and brass terminals

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)



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

Model No.	Price	Temp. Range °C/°F	Rating (A)	Contact Repeatability °C/°F
TSW-11	\$165	-45 to -5 (-49 to 23)	1	±0.7 (1.3)
TSW-15	160	-45 to -5 (-49 to 23)	5	±0.7 (1.3)
TSW-21	165	-25 to 20 (-13 to 63)	1	±0.9 (1.6)
TSW-25	160	-25 to 20 (-13 to 63)	5	±0.9 (1.6)
TSW-31	165	-5 to 35 (23 to 95)	1	±0.8 (1.4)
TSW-35	160	-5 to 35 (23 to 95)	5	±0.8 (1.4)
TSW-41	165	25 to 70 (77 to 158)	1	±0.9 (1.6)
TSW-45	160	25 to 70 (77 to 158)	5	±0.9 (1.6)
TSW-51	165	55 to 105 (131 to 221)	1	±1.0 (1.8)
TSW-55	160	55 to 105 (131 to 221)	5	±1.0 (1.8)
TSW-61	165	80 to 125 (176 to 257)	1	±.9 (1.6)
TSW-65	160	80 to 125 (176 to 257)	5	±.9 (1.6)
TSW-71	165	115 to 175 (239 to 347)	1	±1.2 (2.2)
TSW-75	160	115 to 175 (239 to 347)	5	±1.3 (2.3)
TSW-81	165	175 to 230 (347 to 456)	1	±1.2 (2.1)
TSW-85	160	175 to 230 (347 to 456)	5	±1.2 (2.1)
TSW-91	165	200 to 265 (392 to 509)	1	±1.3 (2.4)
TSW-95	160	200 to 265 (392 to 509)	5	±1.3 (2.4)

Accessories

Model Number	Price	Description
3/4-385S-U21/2-304SS	\$29.00	Stainless steel thermowell
3/4-385S-U21/2-BRASS	23.50	Brass thermowell
SSLK-38-12	28.00	Stainless steel compression fitting
BRLK-38-12	12.00	Brass compression fitting

Comes complete with operator's manual.
Other thermowells available; see Section B.

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, \$165 + 29 = \$194.



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