



# SWAT Washers - Titanium

WEB Selection Tool

WEB CAD Download

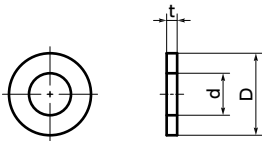
Cleanroom wash & packaging

Chemical-proof

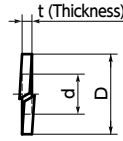
Non-Magnetic

Lightweight

## SWAT-F



## SWAT-S



### Physical property

	TP340C (Grade 2 Titanium)
Specific Gravity	4.51
Melting Point (°C)	1668
Longitudinal Elastic Modulus (GPa)	106
Thermal Conductivity (W/(m·K))	17.16
Linear Expansion Coefficient (K <sup>-1</sup> )	8.4 × 10 <sup>-6</sup>
Electric Resistance (μΩ·m)	0.55
Amplitude Permeability (μ)	1.0001 (Nonmagnetic)

• Values in chart are for reference only. They are not guaranteed values.

- Specific gravity is approximately 60% of stainless steel.
- Nonmagnetic.
- Excellent chemical and seawater resistance.
- Chemical polishing and brightening processing improve the screw surface. Furthermore, the screws are cleanroom washed, cleanroom packed, and comply with clean specifications that require no oil or foreign matter deposits.

### Application

Lightweight applications in automobiles, aircrafts, spacecrafts, and robots FPD production equipment, semiconductor devices, electrical and electronic equipment, aquatic applications, and electrochemical plating

### Material/Finish

RoHS Compliant

	SWAT
Main Body	TP340C (Grade 2 Titanium)

### SWAT-F Washers

Unit : mm

Part Number	Nominal	d	D	t	Mass (g)	Qty per pack
SWAT-3-F	3	3.2	7	0.5	0.068	1
SWAT-4-F	4	4.3	9	0.8	0.18	1
SWAT-5-F	5	5.3	10	1	0.25	1
SWAT-6-F	6	6.4	12.5	1.6	0.65	1
SWAT-8-F	8	8.4	17	1.6	1.2	1
SWAT-10-F	10	10.5	21	2	2.3	1

### SWAT-S Spring Washers

Unit : mm

Part Number	Nominal	d	D	t	Mass (g)	Qty per pack
SWAT-3-S	3	3.1	5.9	0.7	0.062	1
SWAT-4-S	4	4.1	7.6	1	0.15	1
SWAT-5-S	5	5.1	9.2	1.3	0.27	1
SWAT-6-S	6	6.1	12.2	1.5	0.59	1
SWAT-8-S	8	8.2	15.4	2	1.2	1
SWAT-10-S	10	10.2	18.4	2.5	2.1	1

### Related Products

**SWAT-VF** Titanium Washer with Ventilation Grooves is available.

→ P.575



### Part number specification

## SWAT-6-F

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Individual Sales → P.794	Cleanroom Wash & Packaging → P.792	Screw Length Adjustment → P.796	Vibration Resistant → P.795	Modification process for captive use → P.791
1 pc. in 1 bag	Cleanroom washed and packed	Not Available	Not Available	Not Available