

The Torque Limiting SOLIDWEDGE™ limits torque as the SOLIDWEDGE™ is expanded, creating consistent clamping forces for maintainers without the need for torque drivers or specialized tools. The slip clutch ratchet mechanism prevents over-tightening and provides audible feedback when the specified torque is reached. Torque is not limited in reverse, ensuring retraction of the SOLIDWEDGE™.

### OPTIMIZED FOR 2 LEVEL MAINTENANCE

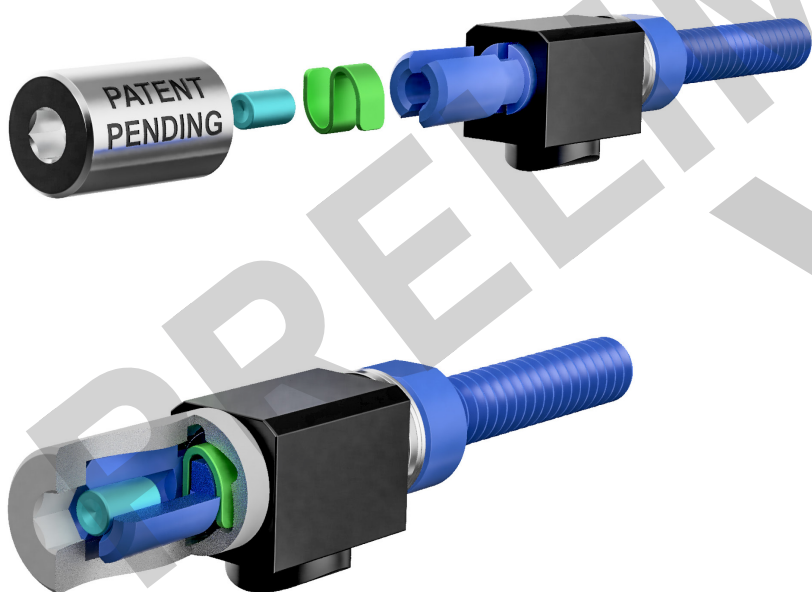


Expansion Torque



Contraction Torque

### TORQUE LIMITING SLIP CLUTCH



### TORQUE TOLERANCE

8 ±1 in-lb

### FEATURES

- Torque Limited Expansion
- Full Torque Contraction
- Ideal for 2 Level Maintenance (2LM)
- Audible + Tactile Ratchet Feedback
- RoHS + REACH + ITAR Compliant
- Low Profile Design

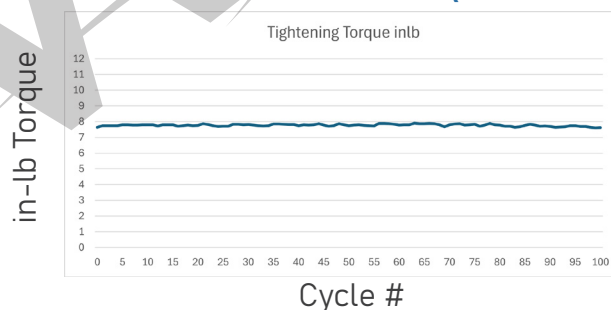
### MECHANISM MATERIALS

Screws, Nuts, Clip, Washers:  
300 Series Stainless Steel  
(passivated per AMS - 2700)

Drive Head: Nitronic 60

Lubrication: MIL-PRF-27617, Vacuum

### TIGHTENING TORQUE



US PATENT PENDING

The SOLIDWEDGE™ is a breakthrough technology that allows conduction cooled modules to operate at higher thermal loads in higher temperature environments.

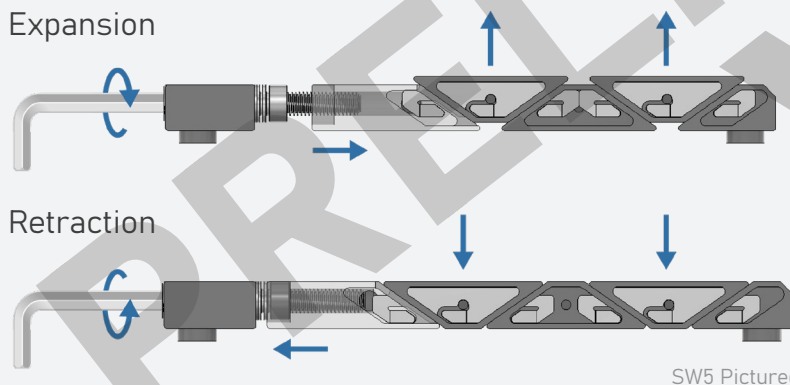
### OPTIMIZED FOR VITA 48 AND CPCI



**US PATENT  
8,456,846**

### POSITIVE RETRACTION

Adjacent wedge segments are connected to prevent a stuck wedge lock. Turning the drive screw counterclockwise retracts the threaded drive wedge, pulling each of the connected segments down to their relaxed position.



### THERMAL RESISTANCE

0.12 °C/W Resistance per Card Edge

### FEATURES

Torque Limiting Slip Clutch Ratchet  
800 lb Clamping Force  
Mass: 20 g  
6-32 Drive Screw  
Zero Insertion Force  
Low Profile Design  
Self-Retracting Segments  
Superior Plating Endurance  
Optimized for VITA Specifications  
Models Available for Download

### WEDGELOCK MATERIALS

Active Wedge Segments: 6061-T6511

Front Mounting Block: 6061-T6511

Screws, Nuts, Washers:  
300 Series Stainless Steel  
(passivated per AMS - 2700)

Helicoil Wire Insert; Nitronic 60

### 3D MODEL:

<https://a360.co/3T2bCE0>

The SOLIDWEDGE™ design provides three times the thermal contact area of conventional wedge locks. The design also features a larger screw size, which creates higher contact forces between the heat frame and cold wall surfaces, significantly improving thermal performance.

The interconnected links of the SOLIDWEDGE™ feature positive retraction of all segments without the use of springs or other mechanisms.

### PART NUMBER BUILDER

Required

Additional Specifications

**SWT5 - 455 - 275 - 300 - XXX - XX - 30D - B075**

<b>Wedge:</b>	<b>Spacing:</b>	<b>Height:</b> 0.275"	<b>Width:</b> 0.300"	<b>Hex:</b>	<b>Finish:</b>
4.55" MOUNTING HOLE SPACING					
SW - SOLIDWEDGE T - TORQUE LIMITING 5 - ACTIVE SEGMENTS		3/32" HEX KEY - [332] M2.5 HEX KEY - [M25] 7/64" HEX KEY - [764]			

<b>1</b>	<b>2</b>
30° WEDGE SEGMENTS	
BOSS LENGTH 0.075"	

	BLACK ANODIZE PER MIL-A-8625, TYPE II, CLASS 2	[BA]
	HARD BLACK ANODIZE PER MIL-A-8625, TYPE III, CLASS 2	[BH]
	CHEMICAL FILM CLEAR	[CC]
	CHEMICAL FILM GOLD	[CG]
	ELECTROLESS NICKEL	[EN]

See last page for more plating info

**RECOMMENDED PART NUMBER: SWT5-455-275-300-332-BA-30D-B075**

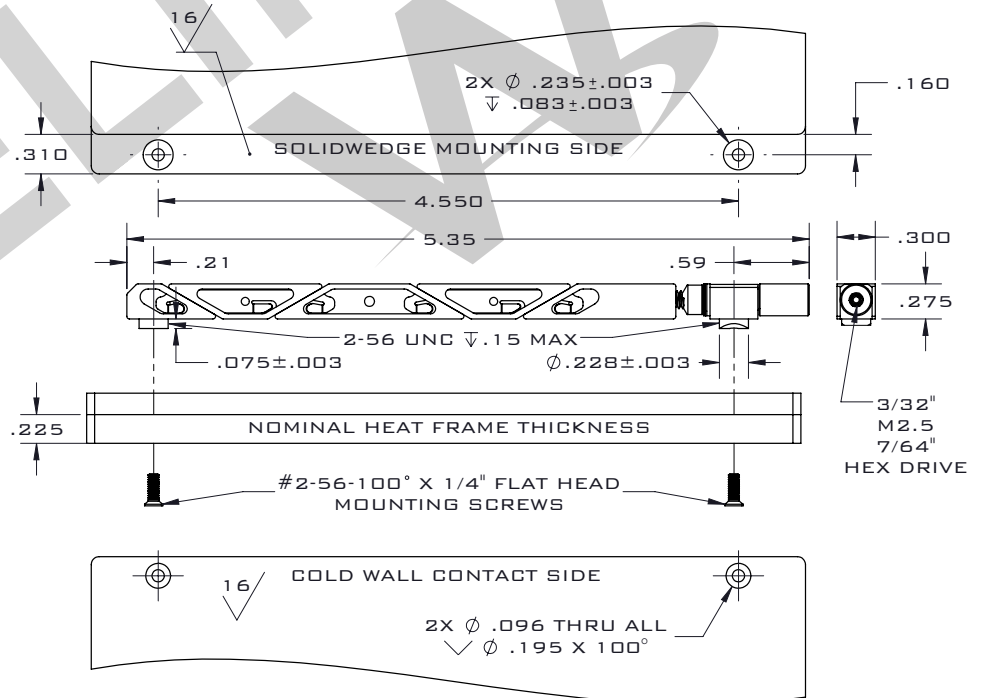
### MOUNTING DETAILS

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES.  
TOLERANCES:  
TWO PLACE DECIMAL: ±.01  
THREE PLACE DECIMAL: ±.005

**EXPANSION DETAILS**

NOMINAL EXPANSION: .025"

MAXIMUM EXPANSION: .060"



Standard material specs for WaveTherm's SOLIDWEDGE™, injector/ejectors, and OpenCOTS products.

### ASSEMBLY HARDWARE



#### 300 SERIES STAINLESS STEEL

Compliance	Specification	Use Case
✓ DFARS	Passivated per	Standard material for screws, nuts, washers, and SOLIDWEDGE™ straps in WaveTherm product assemblies.
✓ RoHS	AMS-2700	
✓ REACH		

### ALUMINUM PLATING



#### BLACK ANODIZED - BA

Compliance	Specification	Properties and Use Case
✓ RoHS	MIL-A-8625	Provides reliable corrosion resistance and durability. Ideal for use in demanding applications requiring high insertion/extraction counts.
✓ REACH	Type II Class 2	



#### BLACK ANODIZED HARDENED - BH

Compliance	Specification	Properties and Use Case
✓ RoHS	MIL-A-8625	Provides superior corrosion resistance and high durability. Ideal for use in harsh and rugged environments with high insertion/extraction counts.
✓ REACH	Type III Class 2	



#### CHEMICAL FILM CLEAR - CC

Compliance	Specification	Properties and Use Case
✓ RoHS	MIL-DTL-5541	Provides good corrosion resistance and electrical conductivity with lower durability. Not ideal for high insertion/extraction counts.
✓ REACH	Type II Class 1A Clear	



#### CHEMICAL FILM GOLD - CG

Compliance	Specification	Properties and Use Case
✗ RoHS	MIL-DTL-5541	Provides good electrical conductivity with lower durability. Not suited for high insertion/extraction counts.
✗ REACH	Type I Class 1A Gold	
	or* Class 1A Gold	



#### ELECTROLESS NICKEL - EN

Compliance	Specification	Properties and Use Case
✓ RoHS	MIL-C-26074	Provides excellent thermal performance and excellent electrical conductivity. Ideal for high-performance thermal management.
✓ REACH	Class 4 Grade B	
	or* AMS-C-26074 Class 4 Grade B	

Images for demonstration only

\*varies based on plating vendor's certificates of conformance