

**ROTORCLIP.COM** 

TAPERED SECTION RETAINING RINGS / CIRCLIPS | CONSTANT SECTION RETAINING RINGS SPIRAL RETAINING RINGS | WAVE SPRINGS | SELF-COMPENSATING HOSE CLAMPS















## APPLICATION DRIVEN SOLUTIONS™



Rotor Clip products deliver quality and strength, backed by traceability, expertise and customer trust.

#### **OUR PRODUCT OFFERINGS**

- Tapered Section Rings
- · Constant Section Rings
- · Spiral Rings
- Wave Springs
- Hose Clamps
- · Installation Tools



Linear worm actuator with internal retaining ring

## YOUR APPLICATION, YOUR SOLUTION, WE MAKE THEM ALL

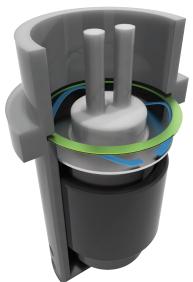
Rotor Clip is the global leader in the manufacture of Retaining Rings, Wave Springs and Hose Clamps. With over 20,000 standard parts, we specialize in engineering the right part for the right application, every time, whether it is a standard or custom.

## 20,000 STANDARDS, ENDLESS CUSTOM CAPABILITIES

If our stock items are not the right fit, we are able to support your application requirements with a custom solution. We have designed and manufactured thousands of custom solutions across nearly every industry.

Our team of design, metallurgical and manufacturing engineers are available to consult with customers to solve difficult problems and ensure they receive the highest-quality, highest-performing products.

Throughout the years, Rotor Clip has received numerous quality awards from major OEMs, automotive manufacturers and distributors.



Exhaust sensor with flat end wave spring and spiral ring



Spinner reel with multi-turn wave spring

#### **OUR CERTIFICATIONS**

AS IATF ISO ISO ISO 13485 TISA
--------------------------------

Learn about our extensive capabilities. Watch now.



## TAPERED SECTION RETAINING RINGS

- Axially Assembled Internal/External
- · Radially Assembled External
- Self-Locking External
- Inch DIN ANSI Metric JIS
- Standards: .040" to 15" / 1mm to 1000mm
- · Can accommodate higher thrust loadings
- · Installation tools available
- · Various materials and finishes available



## **CONSTANT SECTION / SNAP RINGS**

- · Axially Installed Internal/External
- Inch DIN Metric
- Uniform material width 3 point contact with groove when installed
- · Offers more clearance than a tapered section ring
- Standards: .157" to 10" / 4mm to 450mm
- · Highly customizable
- · Various materials and finishes available



## SPIRAL RINGS

- Axially Installed Internal/External
- Inch DIN Metric
- 360 degree contact with groove
- More clearance than tapered section rings
- Low thrust load applications
- Standards: .250" to 10" / 6mm to 400mm
- Highly customizable
- Various materials and finishes available including special alloys



## **WAVE SPRINGS**

- Up to 50% space savings compared to coil springs
- Inch Metric
- Single-Turn and Multi-Turn designs
- Improve bearing and application life
- Available in plain ends, shim ends, and patented flat ends
- Various materials and finishes available including special alloys
- Custom configurations, sizes and materials



## **HOSE CLAMPS**

- · Single Wire Double Wire
- Constant Tension Band
- · Self-compensating No screws required
- Cannot be over/under tightened
- Expand and contract with temperature shifts
- Uniform hose pressure
- Installation ease





REQUEST SAMPLES

## **PRODUCT INDEX**







#### Axially Assembled, Inch Tapered Section Retaining Rings

Internal

External





Inverted







Beveled



Standard



Inverted



**SHM** Reinforced Tamper-







**VSH** Reveled

## Radially Assembled, Inch Tapered Section Retaining Rings

External





Shaped







Bowed



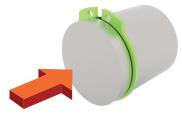












**Axially Assembled** 

Self-Locking, Inch Tapered Section Retaining Rings

Crescent

External

SHF















ΤI Flat Rim

Internal

Axially Assembled, Metric Tapered Section Retaining Rings

Internal



DHO **DIN 472** Standard



DHI Inverted



**DHT DIN 984** Teeth



**DHR DIN 472** Heavy Reinforced



External

**DSH DIN 471** Standard







**DIN 983** Teeth



**DSR DIN 471** Heavy Reinforced



Radially Assembled

Radially Assembled, Metric Tapered Section Retaining Rings

External



DIN 6799 Shaped



DC

Self-Locking, Metric Tapered Section Retaining Rings

External



**DSF** Friction





DTI

JIS "E" Retaining Rings External



"E" Shaped

Axially Assembled, ANSI Metric Radially Assembled, ANSI Metric Tapered Section Retaining Rings Tapered Section Retaining Rings

Internal External







Standard



**MSR** 



External



**MRE** 

# **PRODUCT INDEX**









## Inch Constant Section Retaining Rings

Internal

External



HN

Needle









USC Standard



Notched



**SNL** Needle

## Metric Constant Section Retaining Rings

Internal

External









**CFH** Flat Wire



SR Ball/Roller **Bearings** 



SB SAE Standard



**CFS** Flat Wire



**DIN 5417 Bearings** 



**Shims** 

Internal/External

Spiral Wave Rings

Internal External



**KMS** Shim

## Inch Spiral Retaining Rings

Internal

KL

Light Duty











Heavy

Dutv



Dutv





External



Duty



External

Medium -Heavy Duty





Dutv





Metric Spiral Retaining Rings

Internal







Duty





Heavy Duty





Duty





Medium-

Heavy

Duty



Heavy

Duty

Metric













Duty





MCM Medium Duty



Medium-

Heavy

Duty



Duty



**Wave Springs** 

Single-Turn



**SST** 

Overlap





Narrow









Wire

Multi-Turn





## Self-Compensating Hose Clamps

Wire Clamps

**Band Clamps** 













Constant

Tension Band

**CTB** 



**CTL** Constant Tension Band Light



Double

Wire



# Coiled or Stamped, Engineered for You

- ® Every ring, every style, one manufacturer
  - ® Standard & custom capabilities
    - ® Diameters as small as .040"
      - ® Stainless steel & exotic alloys readily available

# Your Application, Your Solution, We Make Them All

- ® Reduce operating heights by 50%
- ® Standard & custom capabilities
- ® Diameters as small as .118"
- ® Stainless steel & exotic alloys readily available







Rotor Clip Multi-Turn Wave Spring

