

QUICK FACTS ON SPRINGS

Compression Springs

- Resists applied push forces
- Cylindrical and Conical shapes
- Wire Diameter Range: .006”- .250”
- Outside Diameter Range: .0047” – 2.82”
- Typical Applications include transportation and medical equipment

Extension Springs

- Resists applied pull forces
- Various end types
- Wire Diameter Range: .007” - .207”
- Outside Diameter Range: .0063” – 2.00”
- Typical applications include dental furniture, attic door hatches and playground equipment

Torsion Springs

- Resists applied torque
- Single Wound
- Closed Wound
- Ends (legs) are straight
- Wire Diameter Range: .012” - .135”
- Typical applications include truck doors, ATM machines and printers

Die Springs

- ISO- D Series
- JIS Series

Constant Force Springs

- Used as counterbalance
- Inside diameter mounted on drum – self-contained outer diameter
- Typical applications include window shades and display racks

Special Torsion Springs

- Resists applied torque
- Self-contained
- Coils do not contact each other
- Typical applications include motors and timing mechanisms

Garter Springs

- Garter springs are extension spring with ends connected
- Exerts Radial Forces
- Outside coil diameter: .039” to .250”
- Wire diameter: .006” to .034”
- Primary application is oil seals

Belleville Spring Washers

- High forces in small deflections
- Also known as conical or disc washers
- Outside Diameter of up to .187” – 5.25”
- Linear and non-linear force/deflection curves
- Assembled in parallel or series to modify force and deflection
- Typical applications include stamping dies

Curved Washers

- Exert light thrust loads
- Often used to absorb axial end play

Wave Washers

- Exert moderate thrust loads
- Often used for bearing preload

Materials:

- Carbon steels: Music wire, hard drawn, oil tempered
- Stainless Steels: 302, 316, 17-7
- Coatings and Custom Metals – Available upon Request