

25 Series

Product Catalogue



Stock and Custom Springs



ISO 9001
Registered



Call: +44 (0)118 978 1800

Visit: www.lespring.com or www.lespring.co.uk

Email: sales@lespring.co.uk | Fax: +44 (0)118 977 4832

Why Choose Lee Spring?

Selection

Lee Spring offers 25,000+ products in stock, plus custom capabilities to meet your specifications. From the Bantam™ Mini Series up to the Die Series, Lee Spring stocks a spring that fits most applications.

Not finding what you need in the stock line, Lee Spring can custom manufacture springs to meet your exact specifications.

In Stock

Lee Spring stocks millions of springs all ready to ship today. An extensive inventory of Compression, Extension, Torsion, Belleville and speciality springs are on hand.

Global Flexibility

Lee Spring partners with your business to find solutions that meet your geographic requirements wherever your business takes you in the world. Lee Spring has locations located around the world ready to assist. Develop prototypes with a Lee Spring Engineer in one part of the world and reduce long-run shipping costs by producing parts close to where you need them in another part of the world. This level of global flexibility and selection is just another reason to work with Lee Spring on your next project.



Custom Made to Your Specifications

Lee Spring offers extensive custom capabilities and engineering support from design through production. Lee Spring also offers an extensive selection of custom material and finish options.

Experience and Support

Since 1918, Lee Spring has been manufacturing, engineering, and designing springs, formed metal parts and related products for a wide variety of industries. Lee Spring's extensive experience in spring design and mechanical engineering will complement your design team.

More Value

- Free Standard Delivery available within the UK.
- Free Plating on all Music Wire Stock Springs.
- Free Grinding on all Standard Stock Compression Springs.
- Free Passivation on 302, 316 & 17-7 Stainless Steel Stock Springs.
- Certificate of Compliance on all Stock Springs and Custom Springs.
- Guaranteed RoHS Compliance on all Stock Springs.

CAD Downloads Available Online

Visit leespring.com to download CAD files of stock products. 3D CAD solid part files in the most common file types and 2D prints with specifications are available for download. Drop spring CAD files directly to your CAD software.



NEW!

2,000+ New Products Added

- Includes 500+ new Compression Springs in metric DIN-Plus dimensions according to DIN2098, Parts 1+2.
- New Extension Springs added in SS316 material.
- New Torsion Springs added in SS316 material.
- Expanded High Pressure Compression Spring selection, including new 600 PSI designs.

Lee Spring offers a huge selection – In Stock and Ready to Ship.



The Only Non-Metallic, Non-Corroding, Non-Contaminating Spring

At last! Compression springs that combine the strength of metal with the special attributes of high-performance thermoplastics. LeeP™ Plastic Composite Springs feature patented designs molded in Ultem* resins. This groundbreaking line meets the needs of applications such as medical, food-processing, marine, and electronics where non-corroding, high temperature resistant, non-conductive, inert in a variety of standard sizes, each in an easy-to-identify rainbow strength.



LeeP™ Plastic Composite Springs page 9

FROM 10 TO 10 MILLION. STOCK SPRINGS OR CUSTOM SPRINGS

If you need it,
Lee Spring
can do it.

If you think it,
Lee Spring
can make it.



STOCK SPRINGS

Lee Spring is one of the largest stockists of catalogue spring products, meeting the needs of customers in a vast range of industries across the region.

The catalogue lists thousands of spring types including the Innovative LeeP™ high performance plastic composite springs, Bantam™ Mini compression springs, Lite Pressure™ and High Pressure compression springs. Our complete portfolio includes Compression, Die, Extension and Wave springs in addition to Belleville Washers and numerous Speciality springs.

All stock products are available for despatch within 24 hours.

SPRING KITS

Formulated with research and development engineers, technicians and maintenance engineers in mind, our spring kits comprise a selection of different sizes and are available for standard compression, extension, torsion and instrument springs.

CUSTOM DESIGN AND MANUFACTURING

Our design and manufacturing capabilities are limited only by the imagination of engineers.

Custom designs are normally considered when either the performance required or physical size and configuration exceed the scope available from our comprehensive stock range.

Our specialist design engineers have a wealth of spring experience and can provide expert consultancy for any specific project, from start to finish.

On page 253 you will find a glossary to help specify a spring to match your application. Starting on page 241 there are specification forms for compression, extension, torsion, conical, swivel hook, drawbar, constant force and wave springs.

Our dedicated customer service and technical teams are always on hand to help you find the right solution for your specific application.

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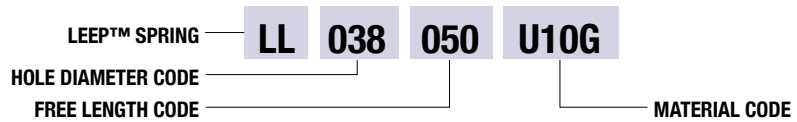
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GUIDE TO LEE SPRING PART NUMBERS

LEETM PLASTIC COMPOSITE SPRINGS

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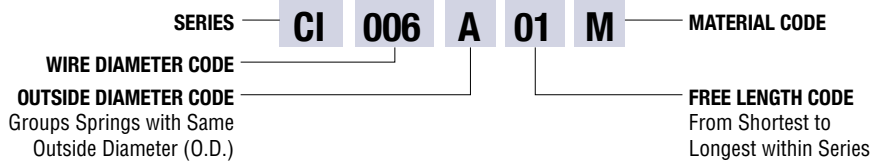


COMPRESSION SPRINGS

pg.13

- Series*
- BANTAM MINI SERIES (Inch)
 - BANTAM MINI SERIES (Metric)
 - INSTRUMENT SERIES (Inch)
 - INSTRUMENT SERIES (Metric)
 - LITE PRESSURE™ SERIES (Inch)
 - STANDARD SERIES (Inch)
 - STANDARD SERIES (Metric)
 - HEAVY DUTY SERIES (Inch)
 - DIN2098 PART 2
 - DIN2098 PART 1
 - HIGH PRESSURE SERIES (Inch)

- CB
- CBM
- CI
- CIM
- LP
- LC
- LCM
- LHC
- CID
- LCD
- LHP

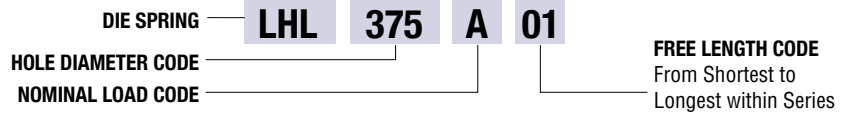


DIE SPRINGS

pg.131

- MEDIUM LOAD SERIES
- MEDIUM LOAD PLUS SERIES
- MEDIUM HEAVY SERIES
- HEAVY LOAD SERIES
- EXTRA HEAVY LOAD SERIES

- Load*
- A
 - AB
 - B
 - C
 - D

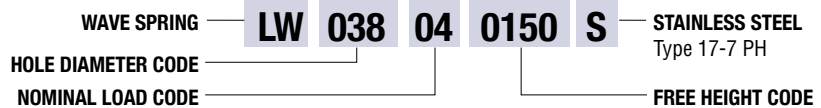


REDUX™ WAVE SPRINGS

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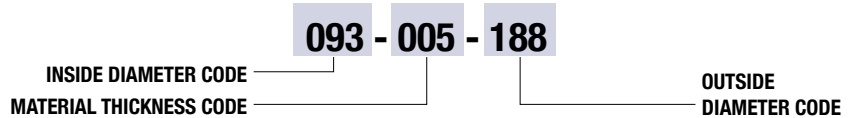
- Series*
- REDUX SERIES (Inch)
 - REDUX SERIES (Metric)

- LW
- LWM



BELLEVILLE WASHERS

pg.159

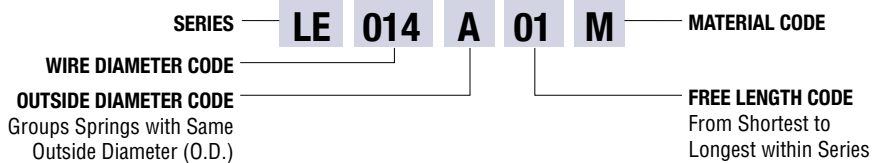


EXTENSION SPRINGS

pg.165

- Series*
- INSTRUMENT SERIES (Inch)
 - INSTRUMENT SERIES (Metric)
 - STANDARD SERIES (Inch)
 - STANDARD SERIES (Metric)

- EI
- EIM
- LE
- LEM

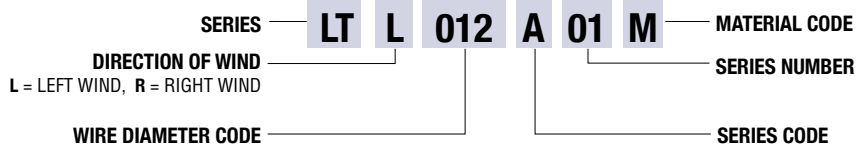


TORSION SPRINGS

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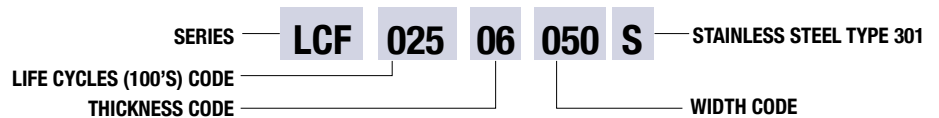
- Wind*
- TORSION SERIES (Inch, Left Wind)
 - TORSION SERIES (Inch, Right Wind)
 - TORSION SERIES (Metric, Left Wind)
 - TORSION SERIES (Metric, Right Wind)

- LTL
- LTR
- LTML
- LTMR



CONSTANT FORCE SPRINGS

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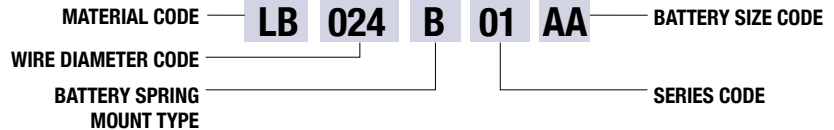


BATTERY SPRINGS

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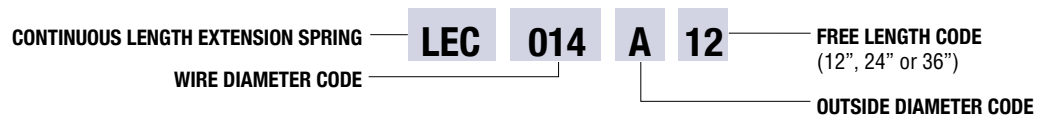
- INTERIOR MOUNT SERIES
- EXTERIOR MOUNT SERIES
- ADAPTABLE MOUNT SERIES
- DOUBLE MOUNT SERIES

- Mount Type*
- A
 - B
 - C
 - D



CONTINUOUS LENGTH EXTENSION SPRINGS

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Material Code: M = Music Wire S = Type 302* Stainless S316 = Type 316 Stainless E = Elgiloy® LB = Nickel Coated Music Wire LBC = Silver Coated Beryllium Copper *Type 302 may be substituted with Type 304 at Lee Spring's discretion.

QUALITY MANAGEMENT



Our quality system meets the requirements of
BS EN ISO 9001-2008
– Certificate No. 5692.



Lee Spring is also ROHS COMPLIANT and REACH compliant

Material Traceability is a standard procedure on all orders, regardless of quantity. Batch codes are fixed to all packages prior to despatch. A Certificate of Conformity is charged at £10.00 (€13.00) per copy, per spring type.

CUSTOMER SERVICE

Whatever your requirements; springs for repair or maintenance, development work or batch production, our trained telephone sales staff will help you select springs from this catalogue.

We can accept credit card transactions and open accounts for new customers immediately.

Whether you are ordering ten springs or millions, we welcome every enquiry and each order receives the same professional service.

SPRING MATERIALS

Lee Spring **Stock Springs** are manufactured using materials to military, aerospace and/or equivalent British or DIN standards.

- **Music Wire Standard & Oil Tempered** – zinc plated and fully de-embrittled
- **Stainless Steel Type 302** – passivated to optimise corrosion resistance
- **Stainless Steel Type 316** – Excellent corrosion resistance in chloride environments, purity levels are higher and colour more consistent. Ultrasonically cleaned and passivated to enhance cleanliness.
- **LeeP™ Plastic Composite Springs** – Manufactured in Ultem* PEI resin making them inert and non-magnetic. High strength to weight ratios, optimising performance and reducing mass. Excellent stability of physical and mechanical properties at elevated temperatures, corrosion resistant, low flammability, toxicity and recyclable.
- **Bantam™ Mini Springs** – feature a wire diameter size of 0.10mm – just slightly thicker than a human hair. Manufactured in Elgiloy, a cobalt-chromium nickel alloy known for its high strength.

Custom Spring designs can employ a range of Nickel and Cobalt alloys including -

Inconel 600, 718 and X-750, Nimonic 90, Hastelloy C-276, Monel 400, Monel K-500. Other available alloys are Stainless Steel 17-7 and 316, Phosphor Bronze, Beryllium Copper.

* Ultem resin is produced by SABIC Innovative Plastics, a leader in engineering thermoplastic material solutions.



ORDER ONLINE

Order springs online at www.lespring.com or www.lespring.co.uk.

Via our website you can also access a vast engineering database that will help you calculate spring characteristics and select types to meet specific performance and application criteria.

When you have selected a spring full technical details, including dimensions and loads can be accessed along with price information.

Users can view and manipulate stock spring images and download 3D or 2D CAD models in all major platforms or view and save images as .jpg or .tiff files.



Benefit from the **Lee Spring Difference**

Lee Spring offers around **25,000 stock springs** packed with all these extras at no additional charge.

Plating

On all music wire stock springs

Grinding

On all standard stock compression springs

Passivation

On 302, 316 & 17-7 stainless steel stock springs

Expert engineering assistance

On stock and custom springs

Certificate of compliance

On all stock springs

Guaranteed RoHS compliance

Live customer service support

Enhanced CAD downloads

On stock spring designs

Comprehensive website with on-line ordering

FREE Standard Delivery available within the UK

On stock spring designs

