SPIROL®

COILED SPRING PINS FOR COSMETIC CASE HINGES

SPIROL® Series 550 **©** Cosmetic Coiled Pins

The unique flexibility of the Series 550 Cosmetic Coiled Pin makes it the ideal hinge pin for compact cases.



The Series 550 Cosmetic Coiled Pin's seam is prepared with a beveled edge to ensure that there are no high spots at the seam.

The use of a Cosmetic Coiled Pin will simplify your design and manufacturing process. Assembly is easier and less expensive, and the hinge performance will exceed swing torque requirements.

Uniform radial spring force results in controlled hinge movement and a hinge quality that remains consistent over time.

Controlled hinge movement is achieved with wider tolerances and lower molding costs than with a solid pin or cut wire.

Low insertion force and compression of the pin during installation minimize hinge stress and scrap.



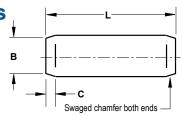
Constant radial force

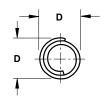
Contact **SPIROL** for design assistance: www.SPIROL.com/Cosmetic-Design



SERIES 550 COSMETIC COILED PINS

Specifications





| Nominal Diameter | Dim. "D" Pin Diameter | | Dim. "B" Chamfer Diameter | Dim. "C" Chamfer Length | Recomi Hole Di | mended iameter | Dim. "L" Standard Lengths (Tolerance = ± 0.25) | | | | | |
|---------------------|--------------------------|------|---------------------------------|-------------------------------|-------------------|-------------------|---|---|----|----|----|----|
| | Min. | Max. | Max. | (Ref.) | Min. | Max. | 6 | 8 | 10 | 12 | 14 | 16 |
| 1.2 | 1.27 | 1.35 | 1.15 | 0.40 | 1.19 | 1.22 | | | | | | |
| 1.5 | 1.60 | 1.68 | 1.40 | 0.50 | 1.49 | 1.53 | | | | | | |

Standard Material Nickel Stainless Steel SAE 302/304, 1.4310 (18-8)

Standard Finish Plain - Oil Free

Design Guidelines

The use of a Series 550 Cosmetic Coiled Pin will simplify design as misalignment of the inner and outer holes to provide friction is no longer necessary. Intentional misalignment is difficult to control in production and induces stress in the hinge area causing cracking and pin fallout.

- Misalignment should not exceed 0.05mm.
- 60% or more pin length retained by the inner hole.
- Minimum bearing surface in either hole should exceed three times the diameter of the pin.
- The inner hole depth should be at least 0.35mm deeper than the retained pin length to prevent breaks at assembly.
- The holes in the cover and the base should be precision matched to achieve maximum friction swing torque.

Pin Installation Technology

The Model HC, Horizontal, Dual Pin Inserter was developed specifically for installing Series 550 Cosmetic Coiled Pins into plastic hinges.

This machine dramatically increases production efficiency with minimal operator training and effort.



SPIROL offers complimentary Application Engineering support! We will assist on new designs as well as help resolve issues, and recommend cost savings on existing designs. Let us help by visiting Application Engineering Services on SPIROL.com.

Technical Centers

Americas SPIROL International Corporation

30 Rock Avenue

Danielson, Connecticut 06239 U.S.A.

Tel. +1 860 774 8571 Fax. +1 860 774 2048

SPIROL Shim Division

321 Remington Road Stow, Ohio 44224 U.S.A. Tel. +1 330 920 3655

Fax. +1 330 920 3659

SPIROL Canada

3103 St. Ftienne Boulevard Windsor, Ontario N8W 5B1 Canada

Tel. +1 519 974 3334 Fax. +1 519 974 6550

SPIROL Mexico

Avenida Avante #250 Parque Industrial Avante Apodaca Apodaca, N.L. 66607 Mexico Tel. +52 81 8385 4390

Fax. +52 81 8385 4391

SPIROL Brazil

Rua Mafalda Barnabé Soliane, 134 Comercial Vitória Martini, Distrito Industrial

CEP 13347-610, Indaiatuba, SP, Brazil

Tel. +55 19 3936 2701 Fax. +55 19 3936 7121

Europe SPIROL United Kingdom

17 Princewood Road Corby, Northants NN17 4ET United Kingdom Tel: +44 (0) 1536 444800 Fax: +44 (0) 1536 203415

SPIROL France

Cité de l'Automobile ZAC Croix Blandin 18 Rue Léna Bernstein 51100 Reims, France Tel: +33 (0) 3 26 36 31 42

Fax: +33 (0) 3 26 09 19 76

SPIROL Germany

Ottostr. 4

80333 Munich, Germany Tel: +49 (0) 89 4 111 905 71 Fax: +49 (0) 89 4 111 905 72

SPIROL Spain

Plantes 3 i 4

Gran Via de Carles III, 84 08028, Barcelona, Spain Tel/Fax: +34 932 71 64 28

SPIROL Czech Republic

Pražská 1847 274 01 Slaný Czech Republic

Tel/Fax: +420 313 562 283

SPIROL Poland

ul. Solec 38 lok. 10 00-394, Warszaw, Poland Tel. +48 510 039 345

Asia SPIROL Asia Headquarters

1st Floor, Building 22, Plot D9, District D No. 122 HeDan Road Wai Gao Qiao Free Trade Zone

Shanghai, China 200131 Tel: +86 (0) 21 5046-1451 Fax: +86 (0) 21 5046-1540

SPIROL Korea

16th Floor, 396 Seocho-daero, Seocho-gu, Seoul, 06619, South Korea Tel: +82 (0) 10 9429 1451

e-mail: info@spirol.com

SPIROL.com