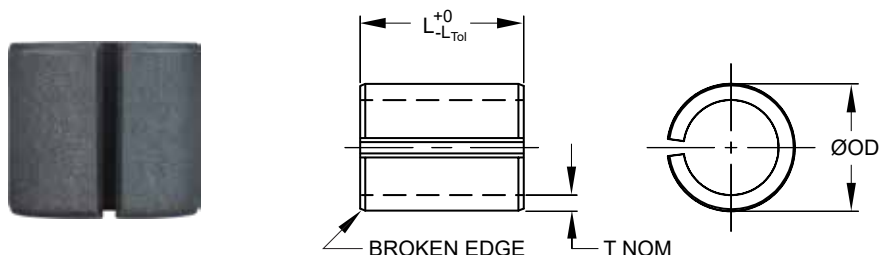


Series CL220



MATERIAL

B High Carbon Steel

FINISH

H ArmorGalv®

DIMENSIONAL DATA

NOMINAL BOLT SIZE ▶	M4	M5	M6	M8	M10	M12
Min. ØID Installed	5.0	6.0	7.0	9.0	11.0	13.0
Wall Thickness "T"	0.85	1.00	1.10	1.50	1.85	2.25
Length Tolerance "L _{Tol} "	0.15	0.15	0.15	0.20	0.25	0.25
Outer Diameter ØOD	7.17/7.34	8.47/8.64	9.67/9.89	12.52/12.79	15.27/15.59	18.07/18.44
Recommended Ø Hole Size	7.00/7.10	8.30/8.40	9.50/9.60	12.35/12.45	15.10/15.20	17.90/18.00
LENGTH	6					
	8					
	10					
	12					
	15					
	20					
	25					
	30					

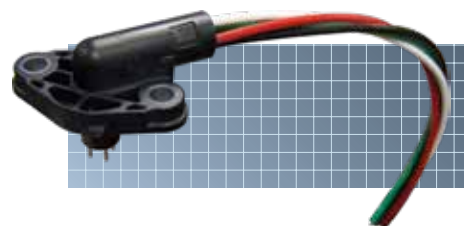
- CL220 rated for use up to ISO Class 8.8 bolts.
- Special lengths and sizes available upon request.

SPIROL® Split Seam Compression Limiters

can be installed with **SPIROL** installation equipment or simply pressed in.

To Order: CMPL, Nominal Bolt Diameter, Length, Material, Finish, Series

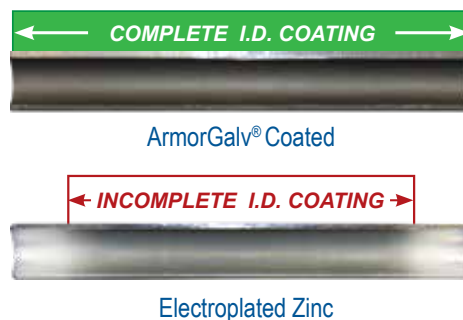
Example: CMPL 6 X 6 BH CL220



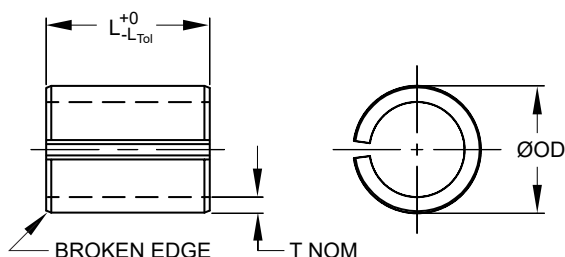
What is ArmorGalv®?

ArmorGalv® is a zinc alloy thermal diffusion coating covered by ASTM A1059M-08(2013). ArmorGalv® provides uniform deposition of coating on all surfaces of the part. There are no insignificant surfaces and the entire inner diameter receives full coating and protection. ArmorGalv® and two complimentary sealers offers a minimum of 1,000 hours corrosion resistance to red rust, and is an ideal coating for some of the most aggressive environments such as marine, automotive, mining, agriculture and industrial manufacturing.

SPIROL is a licensee of ArmorGalv®, a registered trademark of Distek N.A LLC



Series CL200



MATERIAL

B High Carbon Steel

FINISH

T Trivalent Zinc Plated

DIMENSIONAL DATA

NOMINAL BOLT SIZE ►		M4	M6	M8
Min. ØID Installed		4.5	6.5	8.5
Wall Thickness “T”		0.85	1.10	1.50
Length Tolerance “L _{Tol} ”		0.15	0.15	0.20
Outer Diameter ØOD		6.65/6.75	9.15/9.33	11.90/12.20
Recommended Ø Hole Size		6.50/6.60	9.00/9.10	11.75/11.85
LENGTH	8			
	10			
	12			
	15			
	20			
	25			

- All dimensions apply prior to plating. *Thicker finishes, such as ArmorGalv® and dip coatings, may require adjusted dimensions to ensure form, fit and function. Please consult SPIROL Engineering if considering these types of finishes for the CL200.*
- CL200 rated for use up to ISO Class 8.8 bolts.
- Heat treated versions available to order for use up to ISO Class 12.9/Grade 8 bolts.
- Special lengths and sizes available upon request.

SPIROL® Split Seam Compression Limiters

can be installed with **SPIROL** installation equipment or simply pressed in.

To Order: CMPL, Nominal Bolt Diameter, Length, Material, Finish, Series

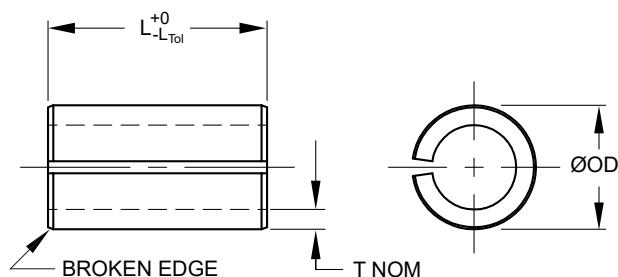
Example: CMPL 10 X 12 BT CL200





SPLIT SEAM – HEAVY WALL COMPRESSION LIMITERS

Series CL350



MATERIAL

B High Carbon Steel

FINISH

T Trivalent Zinc Plated

DIMENSIONAL DATA

NOMINAL BOLT SIZE ►		M6	M8
Min. ØID Installed		6.8	8.8
Wall Thickness “T”		1.50	2.00
Length Tolerance “L _{Tol} ”		0.15	0.20
Outer Diameter ØOD		10.08/10.28	13.25/13.52
Recommended Ø Hole Size		9.95/10.05	13.05/13.20
LENGTH	10		
	12		
	15		
	20		
	25		

- All dimensions apply prior to plating.
- CL350 rated for use up to ISO Class 10.9 bolts.
- Special lengths and inch sizes available upon request.

SPIROL® Split Seam Compression Limiters

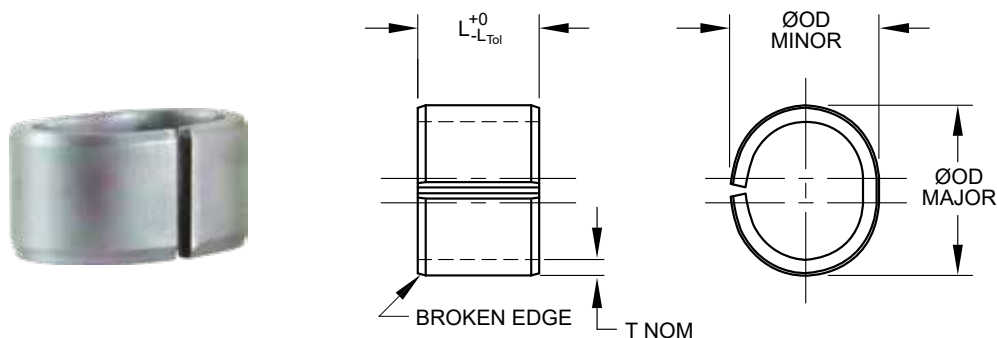
can be installed with **SPIROL** installation equipment or simply pressed in.



To Order: CMPL, Nominal Bolt Diameter, Length, Material, Finish, Series

Example: CMPL 6 X 15 BT CL350

Series CL400



MATERIAL

B High Carbon Steel

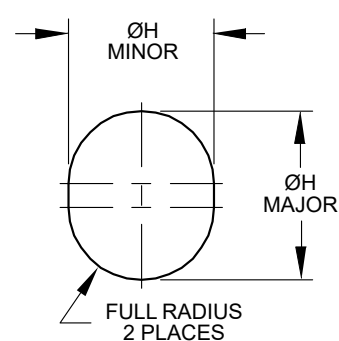
FINISH

T Trivalent Zinc Plated

DIMENSIONAL DATA

NOMINAL BOLT SIZE		M6	M8
Min. ØID		6.8	8.8
Wall Thickness "T"		1.10	1.50
Length Tolerance "L _{Tol} "		0.15	0.20
Outer Diameter ØOD Major		11.45/11.70	14.30/14.60
Outer Diameter ØOD Minor		9.40/9.60	12.25/12.50
Recommended Ø Hole Size	H Major	11.55/11.70	14.45/14.60
	H Minor	9.20/9.30	12.05/12.15
LENGTH	8		
	10		
	12		
	15		
	20		

HOLE SPECIFICATIONS



- All dimensions apply prior to plating.
- CL400 rated for use up to ISO Class 8.8 bolts.
- Special lengths and inch sizes available upon request.

SPIROL® Oval Split Seam Compression Limiters

can be installed with **SPIROL** installation equipment or simply pressed in.



To Order: CMPL, Nominal Bolt Diameter, Length, Material, Finish, Series

Example: CMPL 6 X 12 BT CL400

Technical Centres

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
Evropská 2588 / 33a
160 00 Prague 6-Dejvice
Czech Republic
Tel: +420 226 218 935

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

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. Etienne 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

Asia Pacific 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



Coiled Spring Pins



Slotted Spring Pins



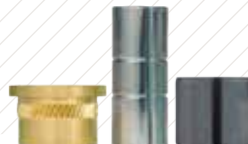
Solid Pins



Alignment Dowels / Bushings



Spacers & Rolled Tubular Components



Compression Limiters



Threaded Inserts for Plastics



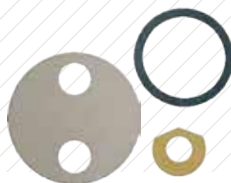
Railroad Nuts



Disc Springs



Precision Shims & Thin Metal Stampings



Precision Washers



Parts Feeding Technology



Pin Installation Technology



Insert Installation Technology



Compression Limiter Installation Technology

Please refer to www.SPIROL.co.uk for current specifications and standard product offerings.

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.co.uk.

e-mail: info-uk@spirol.com

SPIROL.co.uk