



COMPRESSION LIMITERS SPECIFICATIONS

STANDARD SPLIT SEAM

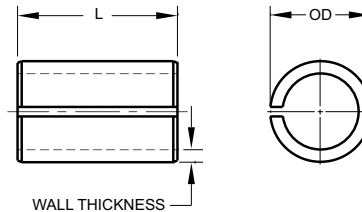


SERIES CL200

Not heat treated

SERIES CL250

Heat treated



MATERIAL

B Carbon Steel

HARDNESS

CL200 HV 120 to 245
CL250 HV 420 to 545

FINISH

K Plain, Oiled
T Zinc Plated
R Phosphate Coated

Features and Benefits:

- Flexible diameter accommodates wide hole tolerances.
- Lead-in facilitates insertion.
- Offered in heat treated and non-heat treated versions to suit various bolt grades.

DIMENSIONAL DATA

Unified							
Nominal Bolt Size	Installed I.D. Min.	Wall Thickness	OD	Recommended Hole Size	L*	Rated Proof Load (Lbs.)	
						CL200	CL250
#8	ø.193	.033	ø.265/.269	ø.259/.263	.312 to 2, +.000/-.006	810	1,770
#10	ø.221	.039	ø.305/.311	ø.299/.303	.312 to 2, +.000/-.006	1,100	2,400
1/4	ø.281	.044	ø.374/.381	ø.368/.372	.312 to 2, +.000/-.006	2,000	4,350
5/16	ø.344	.059	ø.468/.480	ø.462/.466	.312 to 2, +.000/-.008	3,200	6,950
3/8	ø.406	.073	ø.558/.574	ø.552/.556	.375 to 2, +.000/-.010	4,800	10,500

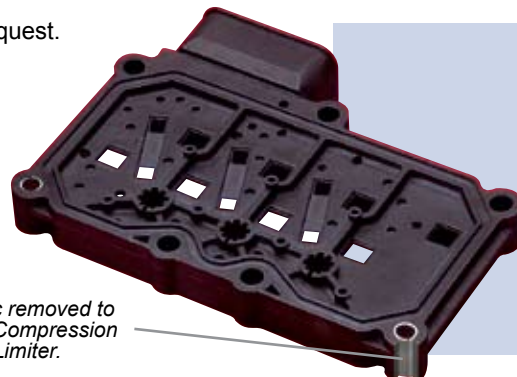
Metric							
Nominal Bolt Size	Installed I.D. Min.	Wall Thickness	OD	Recommended Hole Size	L*	Rated Proof Load (kN)	
						CL200	CL250
M4	ø4.8	0.85	ø6.65/6.75	ø6.50/6.60	8 to 50, +0.0/-0.15	3.69	9.66
M5	ø5.8	1.00	ø7.95/8.10	ø7.80/7.90	8 to 50, +0.0/-0.15	5.96	15.6
M6	ø6.8	1.10	ø9.15/9.33	ø9.00/9.10	8 to 50, +0.0/-0.15	8.44	22.1
M8	ø8.8	1.50	ø11.90/12.20	ø11.75/11.85	8 to 50, +0.0/-0.20	15.4	40.3
M10	ø10.8	1.85	ø14.65/15.07	ø14.50/14.60	10 to 50, +0.0/-0.25	24.4	63.8
M12	ø12.8	2.25	ø17.45/18.00	ø17.30/17.40	14 to 50, +0.0/-0.25	35.4	92.7

* Longer and shorter lengths on request.

Compression at Proof Load:

CL200 $c = Lc \times .0018$

CL250 $c = Lc \times .0047$



Plastic removed to show Compression Limiter.

SPIROL® Standard Split Seam Compression Limiters

can be installed with SPIROL Pin Inserters, Pin Driving Chucks, or simply pressed in.

To Order: BUSH, Nominal Bolt Diameter, Length, Material, Finish, Series
Example: BUSH 6 X 14 BK CL250

SPIROL®

Innovative fastening solutions.
Lower assembly costs.



Challenge Us!

SPIROL Application Engineers will review your application needs and work with your design team to recommend the best solution. One way to start the process is to visit our **Optimal Application Engineering** portal at www.SPIROL.com.

U.S.A. Spirol International Corporation
30 Rock Avenue
Danielson, Connecticut 06239
Tel. +1 (1) 860.774.8571
Fax. +1 (1) 860.774.2048

Spirol West Inc.
1950 Compton Avenue, Unit 111
Corona, California 92881-6471
Tel. +1 (1) 951.273.5900
Fax. +1 (1) 951.273.5907

**Spirol International Corporation
Shim Division**
321 Remington Road
Stow, Ohio 44224
Tel. +1 (1) 330.920.3655
Fax. +1 (1) 330.920.3659

Spirol Distribution
(For Distributor Customers)
30 Rock Avenue
Danielson, Connecticut 06239
Tel. +1 (1) 860.774.8571
Fax. +1 (1) 860.774.0487

Canada Spirol Industries, Ltd.
3103 St. Etienne Boulevard
Windsor, Ontario
Canada N8W 5B1
Tel. +1 (1) 519.974.3334
Fax. +1 (1) 519.974.6550

Mexico Spirol México, S.A. de C.V.
Carretera a Laredo KM 16.5 Interior E
Col. Moisés Saenz
Apodaca, N.L. 66613 México
ó Apdo. Postal 151 de Apodaca, N.L.
Tel. +52 (01) 81 8385 4390
Fax. +52 (01) 81 8385 4391

Europe Spirol Industries, Ltd.
Princewood Road
Corby, Northants
England NN17 4ET
Tel. +44 (0) 1536 444800
Fax. +44 (0) 1536 203415
(UK Distributors: Tel. 0800 3890034)

Spirol SAS
Rue Henri Rol Tanguy
Z.A. Les Naux
51450 Bétheny - Reims
France
Tel. +33 (0) 3 26 36 31 42
Fax. +33 (0) 3 26 09 19 76

Spirol GmbH
Briener Strasse 9
80333 Munich
Germany
Tel. +49 (0) 931 454 670 74
Fax. +49 (0) 931 454 670 75

**Asia Pacific Spirol International Engineered
Fastener Trading Co. Ltd.**
No. 11 Xi Ya Rd. North
Section A, 1F, Building 14
Wai Gao Qiao Free Trade Zone
Shanghai, China 200131
Tel. +86 (0) 21 5046-1451/1452
Fax. +86 (0) 21 5046-1540

e-mail: info@spirol.com

www.SPIROL.com