

SPIROL®

PRECISION BRASS COMPRESSION LIMITERS

SPIROL® Series CL8000 and CL8100 **Compression Limiters for bolted joint integrity.**

A Compression Limiter is used to preserve a threaded joint's integrity. As a bolt is tightened to achieve the required friction between threads, the plastic is compressed.

Without a Compression Limiter, plastic will either crack or creep, resulting in the loosening and eventual failure of the joint.

The Compression Limiter absorbs the load when the bolt is tightened to its recommended value. The plastic is isolated from excessive compressive loads and plastic integrity is maintained – ensuring that the joint remains intact throughout the life of the product.

Series CL8000 Precision Machined - Brass: The Series CL8000 is machined from 360 brass. Similar to the aluminum CL6000, the CL8000 can be molded in or pressed into an assembly. The applications for SPIROL's brass and aluminum Compression Limiters are very similar, however to accommodate the same class/grade bolt, the brass Limiters have a larger wall thickness due to the material's lower yield strength. While this increases the size and weight of the Limiter as compared to the CL6000, the thicker wall does provide more bearing surface for the mating component. The most common reason a designer may choose the CL8000 is for those applications that require a shift away from aluminum on the galvanic series chart to make the Limiter more noble. The CL8000 is rated for use up to ISO Class 10.9/ Grade 8 bolts.

Series CL8100 Precision Machined - Headed Brass: The CL8100 headed brass Compression Limiters are the same as the CL8000 with the addition of a head. Similar to the CL6100, the head provides extra bearing surface on the mating component when a flanged bolt or a washer is not used.

SPIROL® Knurled CL8000 and CL8100 Compression Limiters are perfect for press-in and molded-in applications - including highly automated assembly processes.

*The CL8000 supersedes the CL800 and the CL8100
supersedes the CL801 Compression Limiters*



Knurled CL8000



Headed CL8100

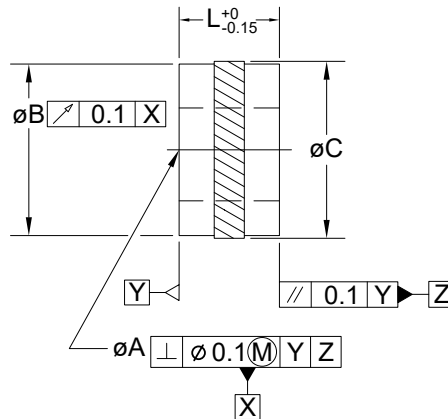


SERIES CL8000 & CL8100 FEATURES & BENEFITS

- Symmetrical CL8000 – no orientation required for installation.
- Headed CL8100 – provides extra bearing surface; eliminates washer.
- Square ends – to ensure 100% contact with mating surface.
- Knurl provides excellent retention.
- Pilot – stands freely in the hole prior to complete installation.

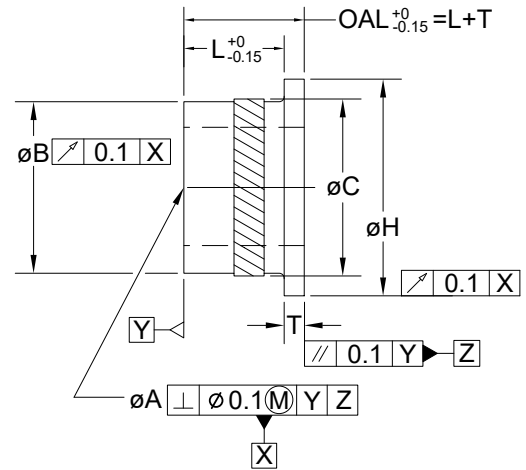
Series CL8000

Knurled



Series CL8100

Headed



MATERIAL

E Brass

FINISH

K Plain

DIMENSIONAL DATA

NOMINAL BOLT SIZE ►	M3	M4	M5	M6	M8	M10
Inner Diameter ØA	4.05/4.15	5.05/5.15	6.05/6.15	7.05/7.15	9.05/9.15	11.05/11.15
Body Diameter ØB	6.03/6.19	7.56/7.72	9.09/9.25	10.92/11.08	14.58/14.74	17.95/18.11
Knurl Diameter ØC Nom.	6.45	7.97	9.50	11.34	15.01	18.36
Head Diameter ØH	7.75/8.00	9.35/9.60	10.95/11.20	13.35/13.60	17.35/17.60	20.45/20.70
Head Thickness "T" Ref.	1.00	1.00	1.00	1.25	1.25	1.25
Recommended Ø Hole Size	6.22/6.30	7.73/7.81	9.26/9.34	11.10/11.18	14.77/14.85	18.12/18.20
LENGTH	3					
	4					
	5					
	6					
	8					

- CL8000 / CL8100 rated for use up to ISO Class 10.9 bolts.
- The knurl will always be larger than the maximum hole.
- Additional diameters and special lengths available upon request.
- Available in inch sizes - made to order.

To Order: CMPL, Nominal Bolt Size x Length, Material, Finish, Series

Example: CMPL 5 X 6 EK CL8000

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