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Stay Online White Paper  
 2007-12-11 (revised 2013-05-31)  
 Topic: **Cage Nuts**

Data Cabinet Cage Nuts have become somewhat convoluted. This is due to - 1) Number of thread options and the 2) Choice between types of cage nuts.

1) Both Metric and English standards for the threads of a cage nut are now encountered. The most common threads used for data applications are English (10-32, 12-24) and Metric (M5, M6).

HP® and Dell® among others have used different OEM (original equipment manufacturers) over the years resulting in different standards. Metric cage nuts become the standard when a European manufacturer (like Rittal®) is used; whereas if a typical USA manufacturer is the supplier then the English standard is used.

Are the Metric and English screws interoperable? The following table illustrates:

		Cage Nut			
		10-32	12-24	M5	M6
Screw	10-32	Perfect	Loose	Loose	No grip
	12-24	Won't Fit	Perfect	Won't Fit	Very Loose
	M5	Strips Thread	Won't Fit	Perfect	No Grip
	M6	Won't Fit	Won't Fit	Won't Fit	Perfect

Table Key:

- Perfect                      Matching thread on screw and nut.
- Won't Fit                    The screw cannot be forced into the nut.
- Strips Thread              The screw can be forced into the nut but the thread is stripped.
- Loose                        The screw enters the nut but can be wiggled.
- Very Loose                The screw enters the nut but has very limited grip.
- No Grip                     The screw enters the nut but has no grip at all.

2) There are two types of cage nuts used in data cabinet environments - Slide-On and Snap-In. Slide-On is used primarily when the provided vertical rails are drilled but not tapped. Slide-On cage nuts are beneficial for square punched rails because of the ease of moving the mounting hardware. However, with this approach there is extra play as the Slide-On cage nut is not locked and in a dense installation it will become problematic.

Snap-In cage nuts are used exclusively for rails that are punched with mounting squares. All conventional data cabinet rails are punched with the same size square so you can snap in any size thread.

Choice of thread is theatrically related to the weight of equipment - 10-32 being the thinnest and M6 the thickest. However, screws are rarely shorn due to the weight of the mounted equipment. It is wise to stay with one thread for the cabinet or you will be fumbling with a host of screws in the future.

Due to the very limited interoperability of screws and cage nuts we sell them with price breaks at 50, 100, 500, and sometimes 3000.

Description
<a href="#">10-32 Zinc Snap-In Cage Nut</a>
<a href="#">12-24 Zinc Snap-In Cage Nut</a>
<a href="#">M6 Zinc Snap-In Cage Nut</a>
<a href="#">M5 Zinc Snap-In Cage Nut</a>
<a href="#">10-32 Black Snap-In Cage Nut</a>
<a href="#">12-24 Black Snap-In Cage Nut</a>
<a href="#">M6 Black Snap-In Cage Nut</a>
<a href="#">M5 Black Snap-In Cage Nut</a>
<a href="#">10-32 Zinc Slide-On Cage Nut</a>
<a href="#">12-24 Zinc Slide-On Cage Nut</a>
<a href="#">M6 Zinc Slide-On Cage Nut</a>
<a href="#">M5 Zinc Slide-On Cage Nut</a>
<a href="#">10-32 Black Slide-On Cage Nut</a>
<a href="#">12-24 Black Slide-On Cage Nut</a>

We also provide various length screws in different finishes to make your equipment both secure and aesthetic.

<a href="#">½ Inch 10-32 Zinc Screw</a>
<a href="#">½ Inch 10-32 Black Screw</a>
<a href="#">½ Inch 10-32 Black Screw - RoHS</a>
<a href="#">¾ Inch 10-32 Zinc Screw</a>
<a href="#">¾ Inch 10-32 Black Screw</a>
<a href="#">¾ Inch 10-32 Black Screw - RoHS</a>
<a href="#">1 Inch 10-32 Zinc Screw</a>

<a href="#">1 Inch 10-32 Black Screw</a>
<a href="#">1 Inch 10-32 Black Screw - RoHS</a>
<a href="#">¾ Inch 12-24 Zinc Screw</a>
<a href="#">¾ Inch 12-24 Black Screw</a>
<a href="#">¾ Inch 12-24 Black Screw - RoHS</a>
<a href="#">½ Inch M6 Zinc Screw</a>
<a href="#">½ Inch M6 Black Screw</a>
<a href="#">½ Inch M6 Black Screw - RoHS</a>
<a href="#">¾ Inch M6 Zinc Screw</a>
<a href="#">¾ Inch M6 Black Screw</a>
<a href="#">¾ Inch M6 Black Screw - RoHS</a>
<a href="#">¾ Inch M5 Zinc Screw</a>
<a href="#">¾ Inch M5 Black Screw</a>
<a href="#">¾ Inch M5 Black Screw - RoHS</a>

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