



**ONE SYSTEMS**<sup>®</sup>  
ACOUSTIC EXCELLENCE<sup>®</sup>

## EYE BOLT KITS

**January 2015**

One Systems offers a wide variety of enclosures that are compatible with M10 or M8 forged shoulder “eye” bolt suspension. One Systems offers complete kits that consists of 4 each 316 grade forged shoulder eye bolts and all necessary additional hardware. Each eye bolt is made of 316-grade stainless steel and is suitable for permanent installation in indoor applications.

The eye bolt kits are as follows:

### M10 Eyebolt Kit/316SS

The M10 Eyebolt Kit/316SS is used on the following One Systems products:

112/HTH  
212/HC  
312/HC  
CFA-2/HTH  
118/HSB

### M8 Eyebolt Kit/316SS

The M8 Eyebolt Kit/316SS is used on the following One Systems products:

108/HTC  
108/HTH  
208/HTC  
108/HSB

**NOTE:** One Systems strongly recommends against the use of eye bolts as a mounting method for outdoor applications, due to wind loading and variable wind direction.

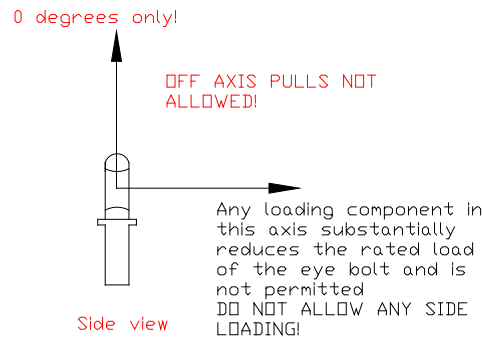
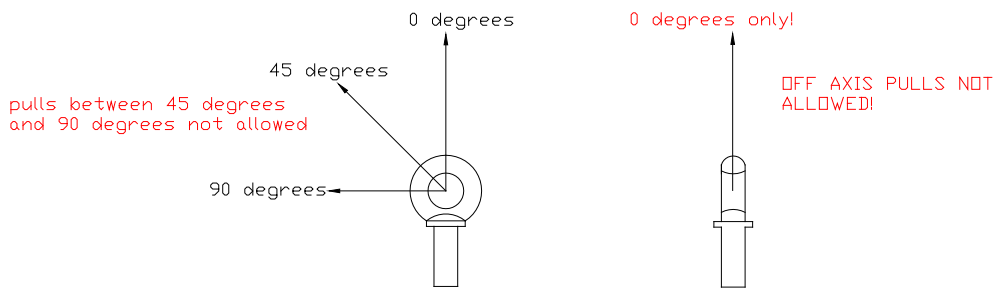
Suspending any product should only be attempted by individuals that are experienced and familiar with safe suspension practices. Installation of eye bolts requires a complete understanding of not only national and local codes for suspension of products, but also requires a complete understanding of the structural limitations and proper orientation of eye bolts. Information of eye bolt structural ratings can be found at [www.onesystems.com](http://www.onesystems.com) (“One Systems eye bolt kits”). This information is available under the “Documentation” tab of the One Systems web site home page and is listed under the “Technical Papers” sub heading, along with other technical papers by One Systems. This information should be read and understood prior to attempting to suspend any products.

It is also necessary to read and understand “Rigging and Suspension One Systems Products”. This information is also available at [www.onesystems.com](http://www.onesystems.com), and can be found from the “Documentation” tab of the home page, then will be listed with other papers under the “Technical Papers” sub heading.

**NOTE:** Eye bolt strength ratings vary with pull angle. It is extremely important to observe appropriate pull angles when suspending any object with eye bolts.

The figure below illustrates allowed pull angles. Suspending any object with eyebolts should always be done to insure the resultant forces are within the allowed pull angles as shown below. The maximum rating of the eye bolt is in a 0 degree pull. The rating decreases as the pull angle goes from 0 degrees to 45 degrees. **Any pull angles between 45 degrees and 90 degrees are not allowed!**

Off axis pulls are not allowed, as shown below!



**Warning: Do not substitute parts. Use only the One Systems M10 or M8 eye bolt kits!**

For One Systems 108/HTC, 108/HTH, 208/HTC and 108/HSB enclosures, two (2) “eye” bolts must be used for an “upside down” configuration, or a bottom mount configuration. This is shown below in figure 1. Two points **must** be used, and the center point (a third point) may be used for aiming.

For the One Systems 112/HTH and 212/HC, a total of three (3) M10 “eye” bolts must be used for either a top mount or bottom mount (if the enclosure is “upside down”) configuration, as shown in figure 2 below.

For the One Systems 312/HC a total of four (4) M10 “eye” bolts must be used, as shown in figure 3 below.

For eye bolt suspension of the CFA-2/HTH please see the CFA-2/HTH installation manual.

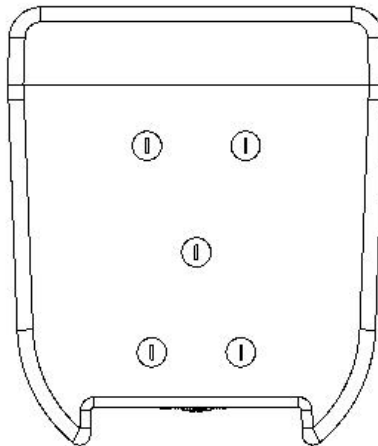


Figure 1  
108/HTC, 108/HTH, 208/HTC,  
108/HSB  
2 eye bolts must be used

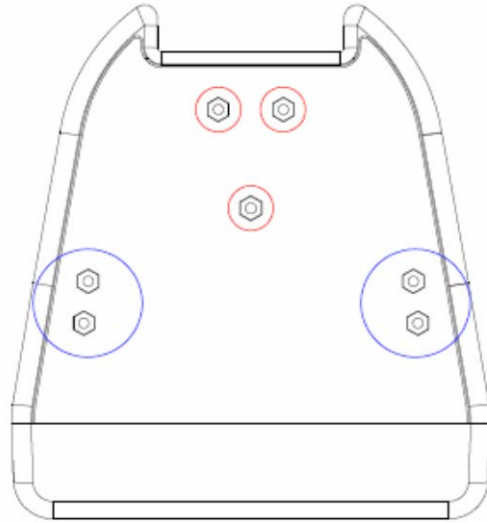


Figure 2  
112/HTH and 212/HTC  
2 of the points circled in blue and at least 1 of the points circled in red must be used

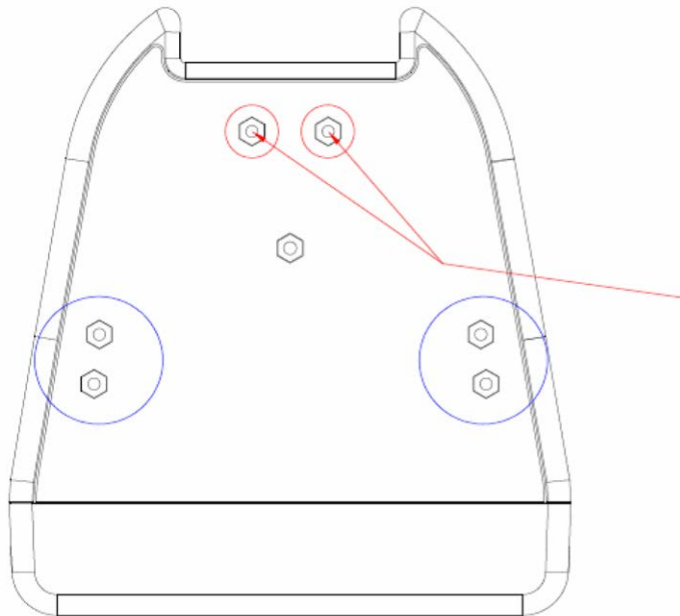


Figure 3  
312/HC  
A total of 4 eye bolts must be used  
The rear two points circled in red MUST be used.