

Standard Hex Head Cap Screws, SXS Series

Product Announcement from Strainert



Strainert fasteners utilize an exclusive internal gaging method (U.S. Patent #2,873,341) to indicate bolt tension due to preload with strain gage accuracy. Fasteners provide a means for accurate, independent inspection of an assembled bolt for preload, thereby enhancing the structural integrity and reliability of both the bolt and the assembly.

APPLICATIONS

These Force Sensing Bolts are available from ¼" diameter up to 1 ½" diameter, and are available in many different lengths. They are typically grade 9, (180 KSI) high strength alloy steel and they are intended for use in applications where hex head bolts are used.

FEATURES

The gaging process consists of the installation of foil type bonded strain gages in a small hole drilled along the longitudinal neutral axis of the bolt. This method compares favorably in accuracy and stability with the best external gage installations, but is vastly superior to external gage installations in mechanical and environmental ruggedness and miniaturization since the internal strain gage installation is self-protecting.

In most bolts, neither the gage or the drilled hole reduce the allowable bolt load in a Strainert fastener. The hole depth is confined to the shank of the bolt, and the hole diameter is controlled so that the bolt cross-section through the threads is smaller than the section through the shank with the gage hole. Therefore, the gage installation will withstand and accurately indicate high strength loads.

Some Features Include:

- To measure accurate preload, service load and overload of bolted assemblies
- For maximum uniformity, efficiency and reliability in bolted assemblies
- For effective research, testing and manufacturing of bolted assemblies