

Bolt & Sleeve Assembly

The bolt and sleeve assembly maximizes performance in joints that must accommodate expansion and contraction due to creep and in-service load relaxation.



Design Guidelines

Fastener Sizes: M4 – M12; lengths and washer sizes as required by application

Head Styles: as required

Thread Styles: as required

Drive System: TORX PLUS® Drive, external hex; others available upon request

Point Options: dog point, header point, Acupoint™ feature; others as required

Materials: low carbon steel; others available upon request

Features

- Cold formed bolt with roll-formed threads
- Captivated sliding sleeve with resilient grommet
- Fastener/sleeve meet strength levels up to P.C.10.9
- Custom-engineered to desired compression load and distance requirements
- Manufacturing method minimizes damage to grommet

Benefits

- Accommodates vertical movement of joint components caused by in-service conditions, including load relaxation and thermal expansion
- Can be used with nonparallel joint surfaces
- Minimizes damage to the top surface of the joint
- Accommodates tolerance variations in components
- Engineering changes in sleeve length easily and quickly accommodated
- No added costs for tooling changes for varying sleeve lengths
- No special tooling required for installation

Thermal expansion, creep and material relaxation cause application materials to expand or contract. These dimensional changes can result in the loss of clamp in the joint members. A fastener that can accommodate these changes while maintaining the integrity of the application is needed.

The design of the bolt and sleeve assembly **maximizes fastening performance** in these applications **while minimizing in-place costs.**

The sliding sleeve features a grommet that can expand or contract as needed to accommodate changes in the application material. The sleeve is not crimped into place but instead is held in place by the washer. This **maximizes fastener strength.**

The foot increases contact area to **minimize potential embedment** at the surface of the tapped hole, while the resilient grommet protects the top surface of the joint.

The sliding action of the sleeve allows **faster and easier alignment** into the tapped hole.

