

# Technical Support Sheet - Installation and Maintenance Manual

# **Rubber expansion joint**

## Part 1 - Prepare and install

1. After receiving the equipment, first check whether the list of equipment is in conformity with the object.

2. Check the equipment one by one to see if there is any collision and damage in the transportation process. If there is any damage, it should be solved in time.

3. Installation should be done according to installation sketch and installation location before installation of equipment.

4. Before installation, debris such as clay adhering to equipment during transportation should be removed.

When installing the equipment in the pipeline, we should try our best to keep it in a natural state, avoid forced connection, artificially deform the equipment, lead to early damage of the equipment, and weaken the service effect and life.

5. When the equipment is connected with flange, first compared holes with holes. Due to revers flange of the ball is deformable, the revers flange hole of spherical can be corrected by prying if there are errors.

When buried, geographic protective cover should be installed, to remove the hard soil around the equipment and put it on the sand for protection.

#### Part 2 - Installation cautions (Rubber joints shall not be installed until the installation precautions are clearly recognized.)

1. Use strictly within the allowable range of temperature, pressure, medium and displacement. (Refer to catalogue or contact us for confirmation.)

2. Rubber joints should be installed in natural state or within 5 mm of compression. The allowable displacement should not be regarded as the allowable error value of installation, so as to avoid early damage when the product is installed.

3. There must be fixed anchor or pipes guides in the pipeline, and the fixed support force must be bigger than the axial displacement force, If the fixed support force of the pipeline is less than the actual axial displacement force

of the rubber joint, the limit anti-pull-off device should be installed and adjusted to the allowable safe displacement.

4. Loosen all the bolts during installation, install according to the product drawing, align with the relative flange first, install all the bolts, add the spring pad, and tighten the cross diagonal one by one. When assembling bolts, the thread tip must be pointed to the outside of the ball to avoid damaging the ball when it expands.

5. Rubber joints should avoid contact with sharp objects, coatings brushed with organic solvents and thermal insulation materials ,and avoid welding spark burns.

6. When rubber joints are used in high temperature, high pressure or chemical dangerous substance medium, additional protective measures should be taken to protect the personnel on site from being harmed in the case of leakage or splash.

### **Part 3 - Operation and Maintenance**

1. The final inspection of the product has been done before the equipment leaves the factory.

2. The test pressure of the equipment is 1.1 times of the design pressure.

3. As long as the installation instructions are strictly followed, it can be put into operation.

4. Within 48 hours of operation, a special person will be set up to check whether the connecting bolt is loosened or not.

5. The loosening of connecting bolts should be checked regularly for equipment installed in vibration environment.

6. Check the geographical changes of the equipment installed in the field frequently. If the axial displacement of the equipment exceeds the prescribed value due to the subsidence of the piers at both ends of the equipment, remedial measures should be taken immediately.



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