

1. Assembly

When assembling, the installation instructions for the pipe system must be observed. The viscoelastic dampers VD, VM, VI which are supplied with installation dimensions (cold load), are taken to the assembly location in an upright position and the upper and lower connection plates each force-fit connected to the piping system and steelwork. The bolt-tightening torque moments can be found in the table.

2. Delivery condition

The viscoelastic dampers are supplied preset on the cold position; this means the transport restraints position the upper against the lower part of the damper set against each other (offset position). If not ordered otherwise the offset position ($x=0$; $y=0$; $z=0$) is supplied. The adjustment values can be read off the type plate.

For a load greater than 20 kg an M16 inner thread of limited engagement depth is located in the upper connection plate for a lifting device to be attached. The viscoelastic damper must be in the upright position at all times, as otherwise the absorption medium could run out.

3. Deblocking

The transport restraints are loosened and removed.

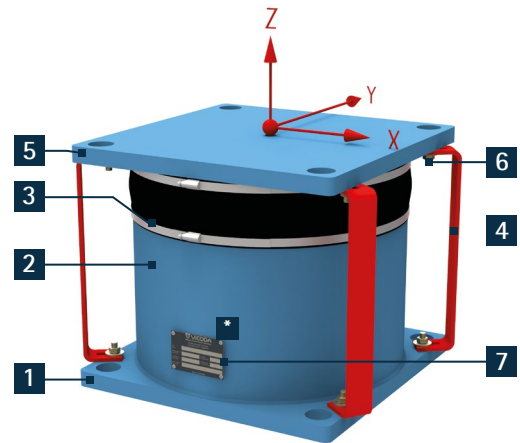
4. Commissioning

For all viscoelastic dampers it is recommended to start operation slowly so that the damper can adapt to operating temperature, otherwise severe reaction forces could develop that far exceed the specified nominal loads. If necessary, the dampers should be brought to operating temperature with the aid of supplementary heating. During commissioning the relative position of the upper and lower connection plates changes to the hot load position, as calculated beforehand.

In hot position the damper should have approximately reached the middle position, otherwise the dynamic characteristics change. If the middle position in the tolerance range is not reached the calculations should be checked at once.

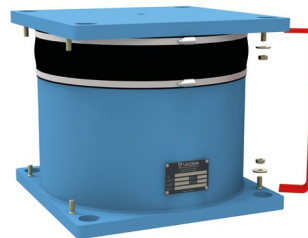
5. Inspection and maintenance

The viscoelastic dampers are maintenance-free. Annual visual inspection of the coating and the protective sleeve shall be executed. For inspection purposes the transport restraints can be used again.



- 1** Lower connection plate
- 2** Body
- 3** Protective sleeve
- 4** Transport restraint
- 5** Upper connection plate
- 6** M16 transport thread for hoist
- 7** Type plate

- * Stamped on the type plate are:
Type, production number, order number, nominal load, operating temperature, marking number



Removal of the transport restraint

Bolt size	Screw torque values* [Nm]	
	4.6	5.6
M 12	29	39
M 16	71	95
M 20	138	184
M 24	235	315
M 30	475	635
M 36	1080	1440

* Values acc. To VDI2230 Appendix A, friction coefficient $\mu=0,14$

