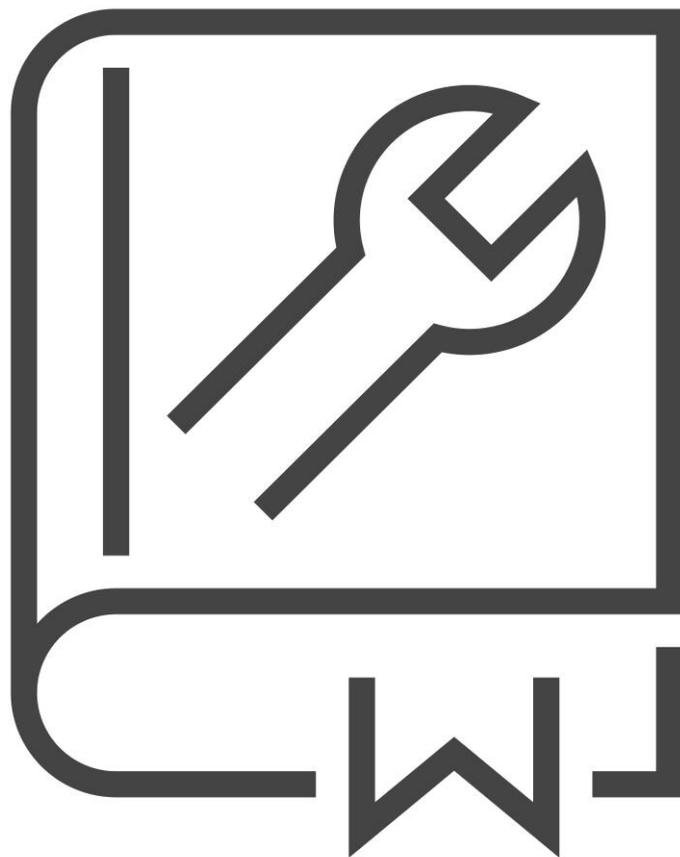




We are aluminium

Installation manual antivibration set base plates



Introduction

The purpose of this installation manual is to provide instructions so that installers and service operatives can competently and safely install the antivibration set on the base plates from Hydro. The antivibration set is an accessory for Hydro base plates.

Installers and service operatives must have the required competencies, knowledge and experience to safely work on equipment and operate mechanical tooling needed for the installation of the antivibration set.



ATTENTION:

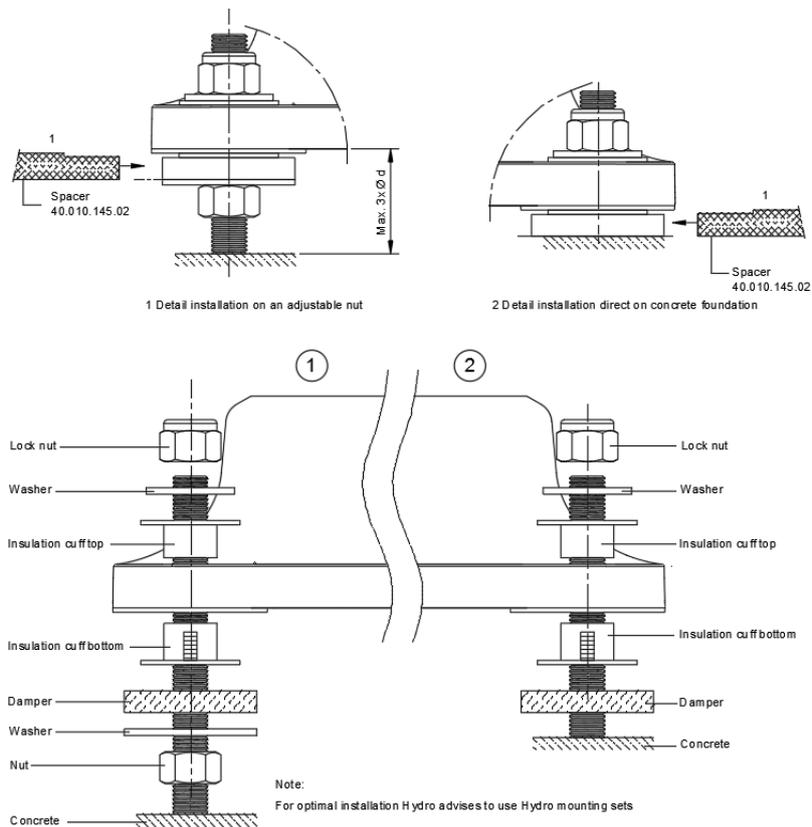
- Read this manual carefully before installing the antivibration set.
- Always follow the instructions.
- Always wear personal protection equipment; helmet, boots, gloves and safety glasses.
- The vibration damper set will have the best damping performance, if the set is installed carefully.
- The fasteners must be clean and free from burrs, strange metal parts and casting sand.
- One sided clamping of the base plate caused by damage of the bolt or the skew screw-on of the nut and bold must be avoided.
- Due care must be taken not to exceed the torque settings stated in table 1 to prevent catastrophic component damage.
- Air tools should not to be used because the fasteners can score due to the relatively high speed of the operation. This also counts when these tools are adjustable. The same goes for electrical tools, but when they can be adjusted at the right tightening moment, these tools can be used. We recommend "Never-Seez" lubricant for stainless fasteners.
- Hydro recommends carrying out a visual inspection every year and re-tightening the bolts/locknuts

Disclaimer

Despite the careful development and compilation of this installation manual, it is possible that incorrect or incomplete information is included. Hydro is not liable for any damage, directly or indirectly, related to the use of the information in this manual.

Installation instructions antivibration set 1-part base plate

Use table 1 (see page 4) as guidance to determine the minimal length of the anchors.



Installation on adjustable nut

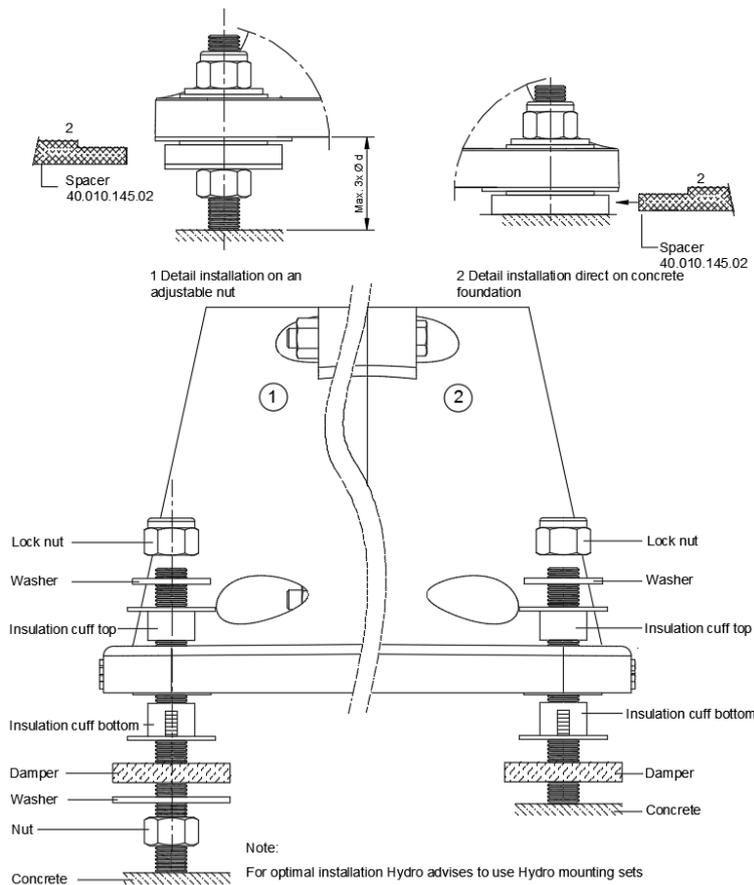
1. Screw a hexagonal nut on the anchor
2. Place the large washer (Hydro) on top of the nut
3. Place one damper (Hydro)
4. Repeat step 1-3 for each anchor
5. Place the Hydro base plate on the dampers
6. Put the washers on the anchors
7. Screw the lock nuts to just above the base plate
8. Put the spacer (Hydro) between the base plate and the large nut, for 1,5 mm compression of the damper
9. Tighten the lock nut, until the spacer clamps
10. Repeat steps 8 and 9 for all anchors

Installation direct on concrete foundation

1. Place one damper (Hydro)
2. Repeat step 1 for each anchor
3. Place the Hydro base plate on the dampers
4. Put the washers on the anchors
5. Screw the lock nuts to just above the base plate
6. Put the spacer (Hydro) between the base plate and the large nut, for 1,5 mm compression of the damper
7. Tighten the lock nut, until the spacer clamps
8. Repeat steps 6 and 7 for all anchors

Installation instructions antivibration set 2-part base plate

Use table 1 (see page 4) as guidance to determine the minimal length of the anchors.



Installation on adjustable nut

1. Screw a hexagonal nut on the anchor
2. Place the large washer (Hydro) on top of the nut
3. Place one damper (Hydro)
4. Repeat step 1-3 for each anchor
5. Place the Hydro base plate on the dampers
6. Put the washers on the anchors
7. Screw the lock nuts to just above the base plate
8. Put the spacer (Hydro) between the base plate and the large nut, for 1,5 mm compression of the damper
9. Tighten the lock nut, until the spacer clamps
10. Repeat steps 8 and 9 for all anchors

Installation direct on concrete foundation

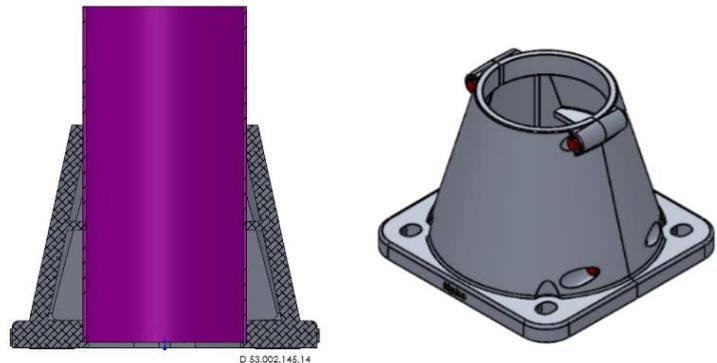
1. Place one damper (Hydro)
2. Repeat step 1 for each anchor
3. Place the Hydro base plate on the dampers
4. Put the washers on the anchors
5. Screw the lock nuts to just above the base plate
6. Put the spacer (Hydro) between the base plate and the large nut, for 1,5 mm compression of the damper
7. Tighten the lock nut, until the spacer clamps
8. Repeat steps 6 and 7 for all anchors

2-part base plate installation and column

- Install the base plate as indicated above
- Lower the column end into the base plate until the base of the column and baseplate are in line.
- Ensure both sides of bolts are tightened equally to ensure gap to avoid canting.
- Don't use air tools for tightening.
- Maximum torque setting as per table 1.

Maximum tightening moments for stainless fasteners	
Bold dimension (A2 class 70)	Tightening moment Nm
M10	35
M12	50
M16	100
M18	125

Table 1



Minimal length of thread/anchors (above ground):

Base plate	D114 - D145				D145		D165		D175		D200		D250
	200x200				300x300								
Pitch													
Thread size	M12	M14	M16	M18	M20	M24	M20	M24	M20	M24	M20	M24	M24
Min. length of thread [mm] (1.)	100	105	120	130	140	170	140	170	140	170	140	170	170
Min. length of thread [mm] (2.)	60	65	70	75	85	95	85	95	85	95	85	95	95

Table 1: minimal length of thread/anchors. (With the advised thread size for each size base plate)

Lifetime of the vibration damper set

Rubberdesign claims that the EPDM dampers have a lifetime of at least 5-10 years.

Rubberdesign advise inspection of the antivibration set each year:

- Visual inspection:
 - Cracks due to dry out of the material
 - Swelling of the rubber
- Tighten the locknuts
Tightening is needed because of the creep of EPDM, however this effect is very low.