

# Superior performance of Danfoss overcenter valves



## Increase machine safety and reduce costs with Danfoss overcenter valves

When it comes to sourcing load-holding valves, one factor outweighs all others: safety. Given the valve's role of holding a load—or personnel—in the air, instability is unacceptable. Machines such as telehandlers and aerial work platforms equipped with a leading supplier's overcenter valves can succumb to instability in boom up-down situations. This puts operators and those working nearby at risk.

Danfoss' two-stage overcenter valves can eliminate oscillation, resulting in a safer, more stable machine. They also eliminate valve noise, which increases operator comfort, and reduce pressure drop to improve system efficiency.

**To compare the performance of Danfoss' and a leading competitor's overcenter valves, a series of field and laboratory tests was conducted. The results of this testing demonstrated that Danfoss valves outperform competitive valves in both static and dynamic scenarios. In summary:**

- Competitive valves were shown to be unstable in certain boom up-down operations, causing the whole machine to oscillate.

Danfoss valves eliminated this instability. **Eliminating oscillation results in a safer machine**

- Competitive valves squealed during boom retract operations (a spike of at least 20 dBA). Danfoss valves did not squeal; noise levels remained consistent. **Eliminating excess noise creates a more comfortable environment for the operator and those working nearby**
- Danfoss valves have a lower free-flow pressure drop of 30 psi (2 bar), on average. **Reducing pressure drop results in a more efficient**

Designers and owners of machines with long, unstable booms have considered oscillation and valve noise a fact of life, but the correct overcenter valve can eliminate these issues. OEMs can design safer, more efficient machines—and supply chain can reduce costs—by switching to Danfoss overcenter valves.

**To learn more about Danfoss overcenter valves, consult with an engineer or request a quote from your Danfoss sales manager.**

Danfoss Power Solutions, Nordborgvej 81, 6430 Nordborg, Denmark, Tel. +45 74 88 22 22, Fax +45 74 65 25 80  
www.danfoss.com, E-mail: info@danfoss.com

Any information, including, but not limited to information on selection of product, its application or use, product design, weight, dimensions, capacity or any other technical data in product manuals, catalogues descriptions, advertisements, etc. and whether made available in writing, orally, electronically, online or via download, shall be considered informative, and is only binding if and to the extent, explicit reference is made in a quotation or order confirmation. Danfoss cannot accept any responsibility for possible errors in catalogues, brochures, videos and other material. Danfoss reserves the right to alter its products without notice. This also applies to products ordered but not delivered provided that such alterations can be made without changes to form, fit or function of the product. All trademarks in this material are property of Danfoss A/S or Danfoss group companies. Danfoss and the Danfoss logo are trademarks of Danfoss A/S. All rights reserved.