

Safety Information for Danfoss

Quick Disconnect Couplings including Hansen™, Gromelle™, and former Aeroquip brands

1.0 General Instructions.

- **1.1 Scope.** The scope of this safety information notice is to warn against improper selection, use, installation, etc. of Danfoss coupling products.
- **1.2 Distribution.** A copy of this safety information notice should be distributed to all individuals responsible for using and/or selecting Danfoss coupling products.
- **1.3 Fail-Safe.** Design all systems and equipment for fail-safe operation such that failure of any component does not result in personal injury and/or property damage.
- 1.4 User Responsibility. It is the sole responsibility of the user to select and determine that the Danfoss product is compatible with the end use application. The user is responsible for reading and following this safety information notice as well as any instructions or literature on the Danfoss product being used. The user must provide necessary product warnings for Danfoss couplings products, used with systems or equipment, to the operators of the systems or equipment.
- **1.5 Usage with other Manufacturers' Products.** When using Danfoss coupling products with other manufacturers' adapters, hoses, etc., do not exceed the lowest pressure rating of any of the components being used or rupture may result.

2.0 Selection of Danfoss Couplings.

- **2.1 Pressure.** Ensure that the maximum operating pressure of the system or equipment does not exceed the rated operating pressure of the Danfoss coupling product or rupture/failure may result.
- **2.2 Fluid Compatibility.** Verify that all components (seals, metals, etc.) are compatible with the fluid being conveyed. Failure to do so may result in high speed fluid discharge and/or leakage of fluids which may be flammable, toxic, at extreme temperatures, or otherwise harmful.
- **2.3 Temperature.** Ensure that the maximum operating temperature of the system or equipment does not exceed the rated operating temperature of the Danfoss coupling product (including seals) or rupture/failure may result.
- **2.4 Coupling Size.** Use properly sized couplings such that there is not a large pressure drop across them thus avoiding system damage due to excessive heat generation or failure of internal components.
- 2.5 Sleeve Lock. Use sleeve locks or threaded couplings where there is the possibility of accidental disconnection. Failure to utilize sleeve locks or threaded couplings in these applications may result in hose whip, expelled components, high speed fluid discharge, system damage, or leakage of fluids which may be flammable, toxic, at extreme temperatures, or otherwise harmful. Sleeve locks, where available reduce the risk of accidental disconnection.

2.6 Connect or Disconnect Under Pressure.

If connection and/or disconnection of couplings under pressure is a requirement, only use couplings designed for connection/disconnection under pressure. Failure to utilize this type of coupling in that application may result in hose whip, expelled components, high speed fluid discharge, and/or system damage. Be certain not to confuse the rated operating pressure with the rated connect/disconnect under pressure.

- **2.7 Environment.** Ensure that Danfoss couplings are compatible with the surrounding environment. The surrounding environment may be heat, salt water, moisture, chemicals, and the like. Failure to protect against an adverse environment may cause system damage, premature failure, and/or leakage of fluids which may be flammable, toxic, at extreme temperatures, or otherwise harmful.
- 2.8 External Loads. Avoid any external loads such as side loads, tensile loads, vibration, etc. Failure to do so may result in accidental disconnection, premature failure, system damage, and/or leakage of fluids which may be flammable, toxic, at extreme temperatures, or otherwise harmful.
- 2.9 Welding & Brazing. Extreme heating of plated products above +450°F (+232°C) such as welding, brazing, baking, etc., where the plating is burned off, may result in the release of deadly gases. Damage may occur to elastomeric/plastic seals in the coupling leading to leakage/failure.

3.0 Installation of Danfoss Couplings.

- 3.1 Inspection of Product. Prior to installation, ensure that the Danfoss product meets all of the requirements of the system and/or equipment it is to be used on. Ensure you have the correct part number, function test the coupling by connecting it with a mating half. The function test should result in smooth, non-binding operation or premature failure may result.
- **3.2 Cleanliness.** Use end caps and plugs to reduce the risk of system contamination or damage to critical sealing surfaces. Failure to do so may result in leakage of fluids which may be flammable, toxic, at extreme temperatures, or otherwise harmful. Caps and plugs are not a secondary seal unless explicitly noted.
- **3.3 Location.** Place Danfoss couplings in a safe location such as not to expose the user to personal injury (slippage, tripping, falling, strains etc.) during installation, connection, disconnection and maintenance.
- 4.0 Product Maintenance. A maintenance schedule should be put in place to ensure that Danfoss couplings are functioning properly. Danfoss is not responsible for product failures resulting from modification or improper maintenance.
- **4.1 Inspection.** A regular visual inspection schedule should be in place to ensure that there is no leakage, cracked/damaged/missing components, corrosion build-up, contamination build-up, wear etc. If any abnormality is encountered, the coupling should be replaced immediately.



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