

# **Data Center Cooling**

Data center cooling systems are crucial for maintaining optimal operating temperatures for equipment, ensuring reliability and performance. They remove excess heat generated by servers and other IT equipment, preventing malfunctions and downtime.

When searching the internet for Data Center Cooling sealing solutions, quality is important. Rubber Fab carries the highest quality gaskets, hoses and hose accessories, with innovative and PATENTED products being at the center of our portfolio.

## **EPDM AND FKM GASKETS AND O-RINGS**

Rubber Fab offers a wide variety of sanitary gaskets and o-rings. Rubber Fab's commitment to product innovation ensures broad use in a wide array of sanitary markets including Data Center Cooling. We proudly offer first to market and patented solutions to solve the most demanding applications. Our line of gaskets and o-rings are formulated from zinc-free peroxide cured elastomers, and thermoplastics, solving fit, form and function demands for virtually every application. Rubber Fab's EPDM and FKM gaskets and o-rings offer the best chemical resistance against common coolants including water, deionized water, glycol/water solutions, and dielectric fluids like fluorocarbons and mineral oils, which are used in various cooling methods.



## **SCREEN GASKETS**

The complete elimination of particulates is critical to ensure maximum cooling and flow rates in the data center market. Consider the full range of Rubber Fab's Fluid Filtration technology. Our fluid filtration gaskets provide the most comprehensive range of stainless steel mesh and filter cloth providing a comprehensive elimination of particulate in the flow path protecting equipment that is in the fluid flow path.

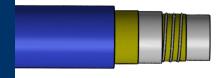


### **SOCK SCREENS**

The extended sock shaped mesh gasket offers up to 5 times more open area for 5 times more soil collection capability than conventional screens. They provide greater flow for situations where it is imperative that particulate is removed to ensure maximum cooling capabilities and flow. Due to the large capacity and open screen area, sock screens require less service therefore reducing down time and costly change outs, a major consideration with in-line data cooling processes. While protecting expensive processing equipment from foreign matter, sock screens are especially effective in decreasing pump wear and burnout while increasing energy conservation. Regularly used in the transfer of cooling liquids sanitary sock screens are specifically designed for high volume applications with low pressure drop.

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### RFDKRFLX WITH FIRE SLEEVE



Rubber Fab's Data Center Cooling hoses specifically designed for sanitary suction and discharge applications to transport a wide variety of fluids without imparting contamination. This Data

Center hose utilizes pharmaceutical grade tubes made from FKM that offers the best chemical resistance against common coolants including water, deionized water, glycol/water solutions, and dielectric fluids like fluorocarbons and mineral oils, which are used in various cooling methods. For flexibility our data center hoses are provided with V0 rated Flame Resistant sleeves that are lightweight, resistant to high heat, and essentially immune to chemicals and solvents. Rubber Fab's sleeves exceed many engineering standards for Chemical resistance, high temperature stability, zero moisture absorption, dimensional stability, and ultra-low wear - making them ideal for data center applications.

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### DATA CENTER COOLANT CHEMICAL RESISTANCE GUIDE:

Rubber Fab's continued commitment to material innovation offers best in class chemical resistance against a wide range of medias. Our elastomers and thermoplastics provide the best compatibility to many common coolants utilized in the Data Center Cooling market. Coolants utilized in various cooling methods for the Data Cooling market, most common listed below, are covered by Rubber Fab's material technologies.

Water and Deionized Water: Water, especially deionized, is a common and efficient coolant for recirculating cooling systems where liquid-to-air heat exchangers are used to transfer heat from the coolant to the surrounding air.

**Glycol/Water Solutions:** Ethylene glycol and propylene glycol are often mixed with water to enhance heat transfer capabilities to prevent freezing are commonly used for recirculating cooling systems where liquid-to-air heat exchangers are used to transfer heat from the coolant to the surrounding air.

**Dielectric Fluids:** Fluorocarbons: Known for low boiling points, these are most commonly used in two-phase immersion cooling systems where servers and other components are submerged in a dielectric fluid, to effectively remove heat.

**Mineral Oils and Synthetic Oils:** These offer good thermal conductivity and compatibility and are most commonly used in single-phase immersion cooling where servers and other components are submerged in a dielectric fluid, to effectively remove heat.

