

KLINGER WORLDWIDE

Encompassing industry-specific knowledge

Today for Tomorrow

KLINGER Denmark was founded in 1848 and today we supply valves, instruments, gaskets and seals to a wide range of applications.

Within the pharmaceutical industry, process safety has a top priority, hence placing high demands for the devices used in the production of pharmaceutical products. KLINGER Denmark provides the industry with products, meeting all the requirements of the industry, such as aseptic design, certificates and documentation.

We provide our customers with know-how and experience from our technical experts - 24 hours a day - 365 days a year. Additionally we have a team with skills and experiences dedicated to support our customers within the pharmaceutical industry.

Trusted Worldwide

KLINGER is an established top leader for gaskets, seals, valves and instruments. The family business founded in 1886, today presents itself as a globally active group of companies. Our distribution network comprises 19 production sites, as well as sales and service offices in 60 countries.

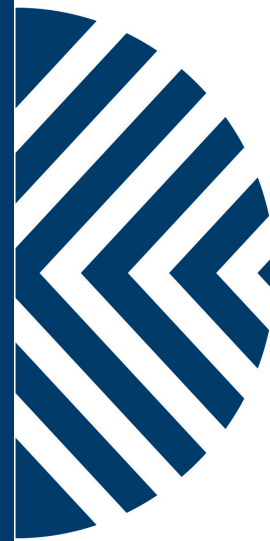
The KLINGER Group has 2.300 employees worldwide.

UTILITY APPLICATIONS

Standard Valves



For more details see www.klinger.dk



KLINGER DENMARK - SUPPLIER TO THE PHARMACEUTICAL INDUSTRY

Valves, Instruments, Gaskets, Seals and Service.

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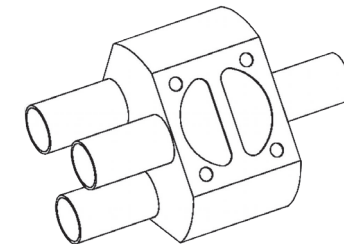
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ASEPTIC APPLICATIONS

Saunders Aseptic Diaphragm Valves	Saunders S360 Actuators	Saunders Diaphragms	Saunders I-VUE Sensor	Interactive Web-based Tools	Service	KLINGER Top-Chem-2000	KLINGER Quantum
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- Tailor made solutions to customer requirements:
 - Reduces design envelope and dead legs.
 - Optimizes the performance of your system and reduces risk of stagnant areas.
- Hash marks on forged bodies to indicate optimum drain angle saves time and money at installation.

- Full 360° rotation, enabling flexible installation and air port alignment. Reduces installation costs and gives a more compact valve arrangement.
- Easy compressor change permits easy conversion between rubber and PTFE diaphragms, minimizes the need to stock two sets of actuator and reduces stock value.

- Saunders has complete ownership of diaphragm development, design and production. Gives more flexibility in meeting customer demands.
- Full lot traceable back to raw material.

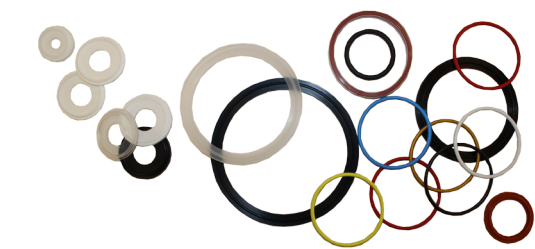
- Position reading with accuracy of <0,2mm gives better control of valves with small travel and reduces risk for incorrect feedback.
- Self-calibration in < 3 min. reduces installation time/cost.
- LED window for setting and programming the sensor and alarms. Programming by date or by operation cycle count. Avoiding unnecessary diaphragm replacements.

- Saunders Maintenance Center for downloading the newest 3D product training videos and installation manuals. Correct replacement of e.g. diaphragms results in lower maintenance costs and down time of machinery.
- Bio-Block process applications and P&ID helps you find the best solution for your application. By using multiple weir valves you can reduce overall costs and space.

- We offer service and repair of instruments, valves and actuators.
- Our service team perform calibration service of process instruments across the country - 24 hours a day.
- Our equipment meets all requirements of FDA's regulative CFR21 Part 11.
- A reduction of calibration time with up to 50%.

- Only PTFE-based gasket with Fire Safe Certificate.
- Up to 260°C.
- Less shrinkage compared to all other PTFE-based gaskets on the market. Normally between 16 - 27%.
- Eliminating the need for retightening, hence reducing installation costs.

- Quantum - unique and without comparison, due to:
 - HNBR peroxide oxidized bonding of the fibers.
 - Withstands higher temperatures than other fiber materials - tested up to 400°C.
 - Approximately 8 times more flexible than other fiber materials.
 - Longer lifespan and lower leakage rate.



Thermometers	Clamp-On Thermometers	Manometers	PASCAL Ci4 Transmitter	Temperature Transmitters, Pt100 Sensors & Resistance Thermometer for In-Process Calibration	Clamp Seals & O-Rings
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- We supply the complete range of thermometers and thermowells.
- Inserts can be supplied according to your requirements.
- Degree of protection IP 66.
- Fully traceable back to raw material.

- High accuracy, fast response.
- Measuring insert can be recalibrated and is replaceable, this means:
 - No welding and contact to medium.
 - Applicable for pipe diameter 4 - 300 mm.
 - Quick and cost efficient installation as production process is not interrupted.

- Manometers can be supplied with a wide range of hygienic fittings.
- In combination with electronic signal processing, process pressure can be read securely. Even at loss of voltage supply.
- Fully traceable back to raw material.

- Suitable for measurement of level, tank capacity (vol. & weight) and pressure, hence meeting all the requirements you may have.
- Accuracy 0.1%.
- Turndown up to 100:1.
- ATC-Technology which gives a reduction of temperature error by 80% or more.

- We supply a large range of temperature transmitters and sensors.
- Pt100 sensors: transmitters can be integrated.
- Classification per SIL2.
- Pt100 and resistance thermometers can be offered with measuring insert for in-process calibration, which gives no interruption of production process.

- Wide range of solutions on stock to meet your requirements - FAST!
- Material: NBR, EPDM, SIL, FPM, FFKM, FEP & PTFE.
- Approvals: FDA, 3A, USP Class VI, EU1935/2004.
- Clean room production for food contact material available.
- Fully traceable back to raw material.
- E.g. we control the entire supply chain.