Application Note



Angst+Pfister Sensors and Power is a company with a long track record in life science, serving medical device manufacturers across the globe for many decades.

Sterilizers/ Autoclaves accomplish the cleaning and sterilization of medical instruments and other items using different principles of operation.

"Thanks to Angst+Pfister Sensors and Power, we were able to massively improve our process stability and repeatability"



Example Sterilizer (source: Getinge)

What are the advantages of APSP pressure sensors for Sterilizers/ Autoclaves?

- Ceramic pressure cell for a wide temperature range
- Real-time monitoring of chamber pressure and leakage (door thoroughly closed?)
- Suitable for both gas, steam and aggressive liquids



- High accuracy miniature pressure sensor AG2/ AG4/ AL4
- Monitoring of inflatable door sealing
- HEPA-Filter monitoring (clogging detection)
- Backward gage sensor resistant towards temporary humidity exposure (e.g. condensation)
- Manifold-mountable
- Individual range calibration for optimization of usable span





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How can the APSP temperature sensors facilitate your design-in?

- Sensors according to DIN EN 60751: NTCs with any R25 and beta values, PT100 as well as PT1000 and Ni-120
- Freely select the housing as well as the cable outlet, connector and various materials (only pay for what you need)
- Almost any housing shape can be realized for easier integration
- Temperature range -40...380°C
- Design-in engineering support



Why could the high-performance humidity sensors MVH-series be benefitial for your application?

- Real-time monitoring of humidity inside the chamber, ensure proper drying
- 0...100% RH to maintain specified humidity in drying cabinets
- Additional temperature output



How can the versatile APSP drive solutions improve the long-term performance of door opener systems?

- Electrical drives with customized shafts/ gears/ encoders/ brakes
- Special connectors and wires (harness)
- Tailored winding (voltage/speed)
- Customized bearings (IP class as requested)
- Robust construction for vibration exposure
- Minimal axial tolerance



How can you benefit from APSP medical power supplies/ DC-DC converters while maximizing user safety?

- Compact form factor for reduced space demand
- High efficiency and low no-load energy consumption
- Extremely low leakage current
- High EMC- class
- BF (body floating) and even CF (cardiac floating) insulation
- Specific safety approval
- Design-in engineering and certification support
- Flexible customization even for smaller quantities



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What are the advantages of A+P elastomer components for Sterilizers/ Autoclaves?

- With our A+P specialists we realize the most suitable and efficient solutions for demanding Life Science applications in terms of sealing, fluid handling and antivibration
- Comprehensive know-how in high-performance elastomers from choice of raw materials to final testing and serial production
- Solutions designated for vacuum systems/ pumps
- Extremely high chemical resistance against most liquids and chemicals
- Great range of possible operating temperatures from -60°C up to +250°C
- High resistance to pressure, compression and deformation
- Low steam permeability and minimum water absorption combined with low cold flow compared to PTFE
- High durability and reliable service
- Non-adhesive smooth surface
- Fully customizable molded specials (e.g. inflatable door sealing AIRMATIC® for pressurized/vacumized chambers)
- Multiple approvals and conformities









Everything from a single source!

Very fast and flexible engineering prototypes for customized solutions.

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