ENGINEERING
TOMORROW

Danfoss

Enhancing safety to **improve performance**

Introducing the SIL 2 compliant DST P92S pressure sensor certified by TÜV

SIL 2 compliant to
improve
your time to market.

Certified by TÜV

Ready for a SIL 2 **environment**

Maintaining the highest level of compliance with industry-wide safety standards is an essential part of maintaining a strong brand and reputation among your customers. At Danfoss, we understand the role safety standard compliance plays in your business, which is why we are continually developing solutions to enhance your products and make certifying your machines more streamlined.

Danfoss now offers a pressure sensor suitable for use in a Safety Integrity Level 2 (SIL 2) environment to serve the mobile hydraulic market. Ideal for industries such as material handling, construction, agriculture and forestry, the DST P92S pressure sensor is specifically designed to enhance safety, improve performance and reduce maintenance costs. The sensor supports the functional safety and contributes to meeting the safety targets of the entire machine. In other words, when you use the DST P92S pressure sensor, you're one step ahead in the safety approval process because this component is already approved for use in a SIL 2 environment or system.

PRODUCT HIGHLIGHTS

The DST P92S pressure sensor:

- Performs moisture and harness checks to detect moisture in the connector, harness fails and electrical interference on the signal line with a 4-20 mA/20-4 mA dual output
- Makes a start-up diagnosis after powering the transmitter. If a fault is detected, the safe state is entered
- Makes a cyclic diagnosis every 30…40ms to test the temperature sensor element, the pressure sensor concerning drift, the open circuit and short circuit and the sensor signal range. If the cyclic diagnosis detects a fault, the safe state is entered as long as the fault is pending
- Has a sealed transmitter and connector to prevent moisture ingress, even in harsh environments
- One of the smallest in the market (22 Hex)

Safety Features

Although properly sized mechanical and hydraulic components are typically considered safe, they have been known to fail without any obvious warning signs. Incorporating complete self-diagnostics and/or redundancy within electronic control equipment is necessary to identify systematic and random errors and activate the pre-defined safe condition when errors are detected. While this process can be quite extensive, requiring a substantial commitment of both time and financial resources, it is essential to ensure safety.

DST P92S pressure sensors detect possible failures — including offset drift and overload — and will switch to safe mode if a failure is detected.

Streamline
the certification process.

Applications in focus:

Stabilizing + Shut down + Lifting + Suspension + Steering + Brake

DST P92S pressure sensor in combination with the controller ensures that the machine is compliant with the requirement as per ISO13849-1 for a performance level up to PLd.

For more information, visit **hydraulicsensors.danfoss.com**

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Simplify functional safety compliance

Danfoss is committed to providing you with the reliable, certified components you need to achieve your functional safety goals. Whatever your needs, Danfoss has the solutions and application know-how to help you achieve functional safety compliance more easily, reduce total installed costs and accelerate time to market.

A PARTNER YOU CAN RELY ON

System Design

Danfoss certified components save design time and effort.

System Validation

Danfoss documentation minimizes time and cost investments.

Component Selection

Danfoss can help you determine the proper components for your needs.

Commitment

Industry experts committed to your success.

For more information, visit **hydraulicsensors.danfoss.com**

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