

ENGINEERING
TOMORROW

Danfoss

DST P150

pressure transducer for hydrogen applications

Hydrogen H_2

A white hydrogen storage tank is the central focus, with the word 'Hydrogen' and the chemical formula 'H2' printed in blue on its side. The tank is situated on a grassy hill. In the background, several white wind turbines are visible against a clear blue sky. To the right, a portion of a solar panel array is visible, suggesting a clean energy environment. The overall scene is bright and clear, with a soft glow from the sun on the right side.

Danfoss and ESG

Preferred partner in helping our customers decarbonize



We pioneer solutions for customers to **enable decarbonization**



We innovate best-in-class **circular products**



We offer a leading employee experience that values and respects **diversity and inclusion**

DST P150 Hydrogen Applications Pressure Transmitter



Product family extension to meet hydrogen market demand

- DST P150 is new addition to the well established P1XX product family
- Product performance widely proven in applications such as Engines, HVAC, Water and more
- Wide selection of pressure ranges, electrical connectors and pressure ports available
- All wetted parts made of stainless steel 316L to avoid hydrogen embrittlement
- Hydrogen Compatibility Check conducted

Main applications focus for P150

- Fuel cells
- Hydrogen powered combustion engines
- Electrolysers



DST P150 Hydrogen Applications Pressure Transmitter



Technical Features

- All wetted parts in media contact made of stainless steel 316L to avoid hydrogen embrittlement
- Sealing: Fully-welded design
- Pressure range: up to 0-50 bar
- Operating temperature: -40 to 135°C (ratiometric output)
- High product accuracy (refer to P100)
- Durable design regarding overload (4x Full Scale) and burst pressure (5x FS)
- Self-diagnostics: available
- Conformity: **EC 79 (ongoing)**, CE, UL, others

*Wide selection of specs available. For further details contact Danfoss



Hydrogen (H₂) compatibility tests

- Danfoss internal hydrogen test with support of the Danish Technological Institute accomplished
 - **H**igh **T**emperature and **P**ressure **O**peration **L**ifetime test with temperatures of up to 135°C and overpressure of up to four times the nominal pressure range
 - Pulsation test (in oil) after H₂ HTPOL test at room temperature with more than 20M pressure cycles from 10 to 60barA
- External EC79/2009 hydrogen certification test ongoing





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