

ENGINEERING  
TOMORROW



**DST P150**

pressure transducer for hydrogen applications





# 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 (H<sub>2</sub>) 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 H<sub>2</sub> HTPOL test at room temperature with more than 20M pressure cycles from 10 to 60barA
- External EC79/2009 hydrogen certification test ongoing





ENGINEERING  
**TOMORROW**