

# Cylmate®

## Combustion Pressure Transducer PFPL203



Pressure under control with 5 year warranty.

### Measurement made easy

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Cylmate® Combustion  
Pressure Transducer  
PFPL203

#### Recognized, verified and proven

Combustion pressure measurement is very challenging in the aggressive application of 2 stroke engines. The unique and reliable Cylmate pressure transducer has proven its maintenance- and calibration-free performance during years of continuous operation.

#### Over 500,000,000 strokes

Transducers installed for over a decade, and still in operation. User experience from several thousands of installed pressure transducers.

#### Accuracy over time

The measuring accuracy is not influenced by any clogging or heat flash from the combustion gases, which potentially could be a problem with other pressure transducers.

Cylmate pressure transducers does not have any aging phenomena and is not affected by pressure cycling, temperature cycling, combustion gases or combustion residues. Therefore the Cylmate pressure transducers do not need any recalibration. The transducer critical parts are made of Inconel.

#### Save money by tuning and controlling the combustion pressure stroke-by-stroke

Cylmate pressure transducers used on electronically controlled diesel engines enabling improved energy efficiency and lower the risk for off-hire costs.

#### Our customers are within

- Engine builders
- Engine designers
- Shipping companies
- Power plants



### Installation requirement

The installation requirements for the pressure transducer can be summarized with:

- As good heat transfer as possible from the transducer to the cylinder cover
- As good metallic contact as possible
- As short engine adapter as possible
- The pressure transducers shall not be covered in order to get as much cooling as possible from the air around the transducers.

### Technical data

Calibrated measuring range	0–250 bar
Combined errors (Sensitivity drift, linearity deviation and hysteresis)	<±0,5 %
Max. overload	600 bar
Max. ambient temperature at transducer	260 °C
Max. ambient temperature at electronic unit	70 °C
Cable length	4 m
Degree of protection	IP65
Warranty	5 years
Life time	>10 years



## DET NORSKE VERITAS

### TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. **A-13650**

This is to certify that the  
**Pressure Transmitter**  
with type designation(s)  
**PFPL203, PFPC203**  
Issued to  
**ABB AB**  
**VÄSTERÅS, Sweden**

is found to comply with  
**Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards**

Application  
Location classes:

Temperature	B
Humidity	B
Vibration	B
EMC	A
Enclosure	B (IP 65)

This Certificate is valid until **2016-06-30**.

Issued at **Havik** on **2014-03-11**

DNV local station: **Stockholm**

Approval Engineer: **Andreas Torp Karlsen**



for **Det Norske Veritas AS**  
Digitally Signed By: **Even, Ståle**  
Location: **DNV Havik, Norway**  
Signing Date: **2014-03-12**, on behalf of  
**Odd Magne Nesvåg**  
**Head of Section**

This Certificate is subject to terms and conditions overlaid. Any significant change in design or construction may render this Certificate invalid.  
The validity date relates to the Type Approval Certificate and not to the approval of equipment systems installed.  
If any person suffers loss or damage which is proved to have been caused by any negligence and/or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for the proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In the provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.

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