

## Sensor Check-box

*Interface device for sensor data evaluation*

- Sensor offset- and span check by pressure pump
- Data interface from sensor to check box
- Read out of stored max. pressure, max temperature and engine operating hours
- Actual Pmax- and Tmax reading during engine operation



### Application

- All types of IMES sensors

### Technical Data

Calibration check	Offset- and span evaluation
Read out from sensor electronic	- sensor operating hours
	- sensor operating hours while engine running
	- pressure- and temperature maximum
	- sensor offset @ 0 bar
A/D resolution	21 Bit
Interface to PC	USB
Interface sensor	Serial interface
Dimension	90 x 60 x 30 mm
Weight	130 g

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## Sensor Check Report



Company, ship name or power plant: IMES, Cogeneration plant  
 Engine: MAN  
 Engine number: 123456789  
 Operator: Stefan Neumann  
 Date: 08.11.2018

Sensor Type: CPS-01CA  
 Serial Number: 5952-17-1273-0

Evaluation (Temperature: 23°C)

Offset	Current:	4.1508mA
	Pressure:	2.8bar
	Deviation:	3.77% (referenced to 4.0000mA)
	Result:	within specification

Span	Current (measured):	8.0091mA
	Pressure (entered):	150.0bar
	Current (norm. to 300.0bar):	16.0182mA
	Pressure (normalized):	300.3bar
	Deviation:	0.11% (referenced to 16.0000mA)
	Result:	within specification

Total result: **approved**

### Read out Sensor Operation Data

Operation time (powered):	1h
Operation time (engine running):	1h
Maximum pressure:	183.4bar
Maximum temperature:	82.6°C

### Pressure Pump

Model:	SIKA Ref-E2
Serial number:	1225TG0
Calibration date:	16.10.2018

### Checkbox

H/W Serial number:	366935883436
Calibration date:	17.09.2018

Signature:

IMES Sensor Check Version 1.0.1.0



In conjunction with the hydraulic pressure pump including manometer the check-box is suitable for sensor offset and –span evaluation at ambient temperature.

For reading out the stored sensor operation data the check-box is connected to the sensor SCU by serial interface and via USB to a PC.

The check-box visualisation software is reading out running hours on engine, maximum pressure and maximum temperature data. All data will be displayed in a sensor evaluation report and the measured data of sensor offset and –span will be compared with sensor specification.

The sensor data visualisation software only reads out the stored operation data of SCU and pressure @ 0 bar. It can be additionally used for sensor checking of Pmax and Tmax during engine operation.

## Scope of supply

Check-box incl. 1m USB cable

Sensor connecting cable (0.5 m) M12 connector

Sensor connecting cable (0,5 m) ITT Canon connector

Visualisation software sensor check

Visualisation software sensor data

## Part no.

IW-4140

IW-4141

IW-4142

IW-4143

IW-4144

## Option

Pressure pump incl. manometer and connecting cable

IW-1570

Pressure adaptor for sensor thread M10x1

IW-1568

Pressure adapter for sensor thread M14x1,25

IW-1569