

Care of Cylinder Pressure Sensors

Valid for all Cylinder Pressure Sensors

Sensors are precision instruments requiring careful maintenance, which is essential for reliable measuring results.

Quartz cylinder pressure sensors must be cleaned regularly depending on the type of use, the length of time they are used and the fuel involved. Dirt and contamination can be removed as follows.

For cleaning, it is essential for the cable to be left connected to the sensor. If a cable is not connected to the sensor, the sensor connector must be sealed with the Protective Cap Type 1895.

1. Primary cleaning

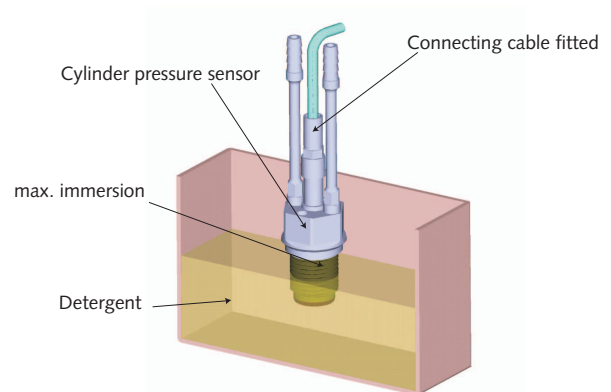
Clean off the layer of dirt deposited on the diaphragm with a slightly abrasive substance. This dirt consists of fuel residues, soot and lubricating oil. The following substance is recommended and can be ordered for Kistler under article number **6.970.010: Abrasive cleaning pad (grain 240)**

Warning!

The sensor front must never be cleaned with metallic substances such as wire brushes, sand blasting, grinding, scraping etc., since this could destroy the diaphragm and thus the sensor.

2. Secondary cleaning

For secondary cleaning, it is recommended that you immerse the sensor in a detergent on a mineral oil base (e.g. petroleum ether, petrol), clean it with a paint brush and then blow it out with compressed air. The **Kistler Cleaning Spray Type 1003** is also recommended for secondary cleaning.



3. Secondary cleaning in an ultrasonic bath

If necessary, secondary cleaning of the sensors can be carried out in an ultrasonic bath, in which it is essential to comply with several conditions:

- The connecting cable must be screwed on
- Immerse the sensor in detergent **only up to the sealing ring**
- The ultrasonic bath should meet the following specifications:

Operating frequency	30 ... 50 kHz
Ultrasonic output power	50 ... 150 W
Ultrasonic power in the bath	max. 50 W/liter
- Suitable detergent:
 - Aqueous alkaline detergent (pH 7 ... 9)
 - Mineral oil based detergent e.g. petrol
(Caution! Flammable!)
 - Bath temperature max. 60 °C
- Cleaning time: according to contamination, max. 2 min.

Warning:

1. **Excessively long cleaning times and ultrasonic baths with too high output power can cause destruction of the sensor.**
2. **On absolutely no account must the sensor be immersed in the detergent or ultrasonic bath liquid with the cable connector unsealed.**

000-066e-07.02 (IN03.6052e)