

CT 159.04

Pressure transducer and TDC sensor for CT 151



The illustration shows a similar pressure transducer: 1 pressure transducer, 2 adapter

Description

- **pressure measurement in the combustion chamber of an engine using a micro pressure transducer**
- **an inductive proximity switch serves as TDC sensor**

The pressure transducer is connected to the measuring amplifier in the CT 159.01 electronic indication system.

The inductive proximity switch supplied serves as a TDC sensor.

For experiments using cylinder pressure indication on the CT 151 test engine, the engine is fitted with a micro pressure transducer. The pressure transducer is directly exposed to the combustion chamber pressure. The core component of the pressure transducer is a heat resistant piezo-electric quartz crystal, which outputs a charge signal proportional to the pressure.

Learning objectives/experiments

- cylinder pressure measurements on internal combustion engines

Specification

- [1] quartz pressure transducer
- [2] inductive proximity switch as a TDC sensor
- [3] only to be used with CT 159.01 and CT 151

Technical data

Pressure transducer

- measuring range: 0...100bar
- max. operating temperature: 200°C
- max. allowable pressure: 250bar

Weight: approx. 1kg

Scope of delivery

- 1 pressure transducer
- 1 inductive proximity switch
- 1 adapter
- 1 manual

CT 159.04

Pressure transducer and TDC sensor for CT 151

Required accessories

| | |
|-----------|---|
| CT 159 | Modular test stand for single-cylinder engines, 3kW |
| CT 151 | Four-stroke diesel engine for CT 159 |
| CT 159.01 | Electronic engine indicating system for CT 159 |