





Hydraulic Testers



Oil Analysis Equipment



Product Overview **STAUFF Diagtronics**





With measuring, testing, display and analysis devices and equipment from the STAUFF Diagtronics product range, system operators, maintenance personnel and repair technicians can determine and monitor the essential parameters in mobile and industrial hydraulics: operating pressure, maximum pressure, differential pressure, system temperature, volume flow, contamination and much more.

The range includes analogue and digital pressure gauges, that are either supplied individually or as part of practical pressure test kits including the required connection adaptors and accessories, as well as high-performance hand-held hydraulic testers of the PPC series, that have been developed to meet the growing demands of the industry.

The PT-RF series of pressure transmitters and readers are an alternative solution for universal pressure measurements for fluid technology applications.

Fluid analysis is a crucial element of any oil management program. Early detection of system contamination can prevent costly repairs and downtime.

Portable and permanently installed STAUFF particle counters and monitors enable the precise determination of cleanliness levels of hydraulic media according to international standards.







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Oil Condition Sensor





Pressure Gauges

Description

Measuring pressure on equipment is indispensable for monitoring and ensuring the smooth functioning and operating safety of these systems.

STAUFF offers a variety of simple pressure measuring devices for liquid and gaseous media. These pressure gauges can be used as both stationary or portable devices.

STAUFF addresses the very extensive width of possible system pressures and the strict requirements for precision with a variety of pressure gauge types with different measuring ranges.

The glycerine filled gauge range is available with various connection ports to fit many different installation needs. The pressure gauges can be purchased alone or in a test kit. The kits can be supplied with gauges with different pressure ranges and adaptors to satisfy any requirement. The analog pressure gauges are primarily designed for permanent installations.

STAUFF also offers a digital line for analytical troubleshooting. These digital pressure gauges are also available as a pressure test kit and also make it possible to perform the many different measurement tasks with the help of adaptors and the measuring hose. An important advantage is the possibility to measure pressure peaks with the device, to save them short term and to display them in the display as MIN and MAX values.

In addtion to the individual products, the STAUFF measuring devices are also available as kit.



Pressure Gauge (analogue) - Type SPG

- · Mechanical pressure measurement
- Suitable for hydraulic oil and gaseous media
- Thread form: BSP (G1/4 and G1/2),

NPT (1/4 NPT and 1/2 NPT), SAE (7/16-20 UNF)

- Standard dual scales with pressure indication in bar and PSI
- U-bolt or flange mounting kit on request
- Options: Protective rubber cap,

Additional scale readings including personilisation



Pressure Test Kit (analogue) - Type SMB

 The SMB Pressure Test Kits are assembled in various versions, in accordance with customer wishes.
 All pressure test kits are supplied in a handy case with custom-designed foam inserts and contain:

> Pressure gauge, Test hose, Gauge adaptor, Direct gauge adaptor, Test coupling and Thread adaptor



Pressure Gauge (digital) - Type SPG-DIGI

- Digital measure and display pressures
- Suitable for oils, lubricants and water
- Thread form: BSP (G1/4),
 - SAE (7/16–20 UNF)
- Bar graph display (drag indicator)
- Background lighting
- Zero correction
- Battery charge display



Pressure Test Kit (digital) • Type SMB-DIGI

 The SMB-DIGI Pressure Test Kits are assembled in various versions, in accordance with customer wishes.
 All pressure test kits are supplied in a handy case with custom-designed foam inserts and contain:

> Digital Pressure Gauge, Test Hose, Adaptor, Hose Connector, Test Coupling, Thread Adaptor and Operating manual





Hydraulic Testers

Description

The STAUFF measuring and test equipment of the PPC series are perfectly suited for measuring all relevant parameters in fluid power systems, including pressure, differential pressure, temperature, flow and rotational speed.

Depending on the type, they allow evaluation, storage and further processing in PCs or notebooks. They have been especially developed for the growing needs of system monitoring, troubleshooting and determining measured values in hydraulic and pneumatic systems.

Options and Accessories

Sensors

Pressure Sensors, Temperature Sensors and Pressure / Temperature Sensors available in analogue or CAN version

Flow Turbine

Also available in CAN version

Rotational Speed Sensor

· Allows non-contact speed measurement of rotating components

Converter

Sensorconverter: Measure and evaluate different signals from other or third-party sensors

• CAN Frequency Converter: Can be used to connect frequency signals to the CAN **Hydraulic Testers**

Connection and Extension Cables

• For analogue and CAN Sensors



Hydraulic Testers • Type PPC-04-plus / ...CAN

- Portable Hydraulic Tester
- Display Lightning
- · Available with two inputs for connecting up to two analogue sensors or with an CAN interface for connecting up to three
- Internal Memory
- Integrated USB interface
- Internal Power Supply with Lithium Ion pack
- Calibration certificate for analogue Version available



Hydraulic Testers • Type PPC-06-plus / ...-08-plus

- Portable Hydraulic Tester
- Display Lightning
- Up to four inputs for analogue sensors with automatic sensor detection
- Internal Memory
- Integrated USB interface
- Internal Power Supply with Lithium Ion pack
- With and without Calibration certificate available



Hydraulic Tester ■ Type PPC-Pad

- · Portable multi-function hand-held measuring instrument
- FT-LCD colour graphic display
- Available with six inputs for connecting analogue sensors or with two CAN interfaces for connecting up to eight digital sensors with automatic sensor detection
- Internal Memory
- CAN-, LAN- and USB interface
- Internal Power Supply with Lithium Ion pack
- With and without Calibration certificate available



Flow Indicator • Types SDM / SDMKR

- Analogue flow indicators for measuring the flow rate of fluids
- Designed with a loading valve for the strain test of the hydraulic system to facilitate precise control of the operating pressure
- Suitable for Mineral Oil (Aluminium), HFC Fluids and Water
- SDMKR can also be subjected to a reverse flow direction
- SDM can not be subjected to a reverse flow direction, with thread to connect a pressure gauge







Complete Systems

Complete systems for analogue Hydraulic Testers are assembled in different versions according to customer wishes. The complete systems are supplied in a handy case with individually designed pockets/sections and contain beside the Hydraulic Tester also Sensors, Adaptors, Connection Cables and more.

• With and without Calibration certificate available

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Hydraulic Tester and Pressure Transmitter with Accumulator Adaptor

Description

The PT-RF series of pressure transmitters and Hydraulic Testers are an alternative solution for universal pressure measurements for fluid technology applications. The advantages resulting from the use of the new technology:

Measurements can be carried very easily, without extensive training and within a few seconds at the press of a button and then documented in a reliable process – practically a temporary opening of the system – is not required. Potential hazards for people, machines and the environment, as well as ingress of dirt into the system can be effectively excluded.

Options and Accessories

Process Connection Adaptors for Pressure Transmitter PT-RF

 Various adaptors are available in addition to the pressure transmitters from the PT-RF series, allowing connection to the known STAUFF Test 20 system as well as installation in pines



Pressure Transmitter • Type PT-RF

The pressure transmitters from the PT-RF series are integrated into fluid technology plants and systems permanently or temporarily using the appropriate process connection adapters. The energy required for a measurement is transferred to the pressure transmitter via the antenna of the reading device using wireless RFID technology. This means that the pressure transmitters require neither internal nor external power supply and are completely maintenance-free.



Accumulator Adaptor - Type SBAA / SDAA

The Accumulator Adaptor together with the PT-RF pressure sensors allow maintenance personal to quickly and easily check the accumulator pressure without pressure loss. For this, the Accumulator Adaptor is screwed onto the nitrogene connection of the accumulator and a PT-RF pressure sensor is attached at the side. The original Valve from the Accumulator can either still be used on top of the Adaptor in case it is equipped with an thread, or be replaced by a Valve with an thread. Charging devices already in use can still be used.



Reader • Type Reader-PT-RF

The hand-held readers transfer the energy required for a measurement to the pressure transmitter using RFID technology.

When the pressure transmitter is activated by the press of a button, a current measured value is determined within only 0.5 seconds and then immediately transmitted back to the reading device together with other relevant information and then output on the illuminated display and stored.



Complete system • Type PT-RF-SET

The PT-RF-SET complete system is compiled in different versions according to customer requirements. All complete systems are supplied in a handy carrying case containing individually shaped foam inserts for a maximum of 10 pressure transmitters and 10 process connection adaptors.





Laser Particle Counter

Description

Fluid analysis is a crucial component of any oil management program. Early detection of potential problems can prevent costly repairs and downtime. The STAUFF Laser Particle Counters makes it possible to detect the ISO Cleanness levels of the hydraulic media.

The LasPaC-II devices feature a twin laser system or with the LPM-II Series an LED laser and eight channels for different particle sizes in order to gurantee high accuracy and repeatability. These compact units are easy to handle for mobile and inline applications.

Options and Accessories

- Moisture / Temperature Sensor:
 RH in % (relative humidity) and Temperature in °C
- Phosphate Ester (e.g. Skydrol®) or specific Water Glycol fluids units on request



Laser Particle Counter • Type LasPaC-II-P (Portable)

The LasPaC-II-P is a fully equipped portable laser particle counter with a complete QWERTY keyboard, an integrated thermal printer, an internal rechargeable battery and a large LCD display.

- Portable, campact and robust design
- Low pressure measurements starting with 2 bar / 29 PSI and high pressure tests up to 400 bar / 5801 PSI
- Independent Use Rechargeable Battery Mode
- Option: Bottle Sampling Unit



The LPM-II-plus is an automatic, optical particle counter with high-performance LEDs that work on the light obscuration principle.

- Robust design for inline applications
- Easy handling thanks to Display and Buttons
- Internal data storage
- Options and Accessories: Interface Module with USB or Ethernet Interface Remote Display Unit Flow Control Valve
- ATEX version available



Laser Particle Counter • Type LasPaC-II-M (Mobile)

The LasPaC-II-M is a highly accurate laser particle counter. With a competitive price it is the best compromise between lower cost and briliant accuracy/reliability.

- Lightweight, mobile and compact design
- Low pressure measurements starting with 2 bar / 29 PSI and high pressure tests up to 400 bar / 5801 PSI
- Easy handling thanks to Display and Buttons
- Independent Use Rechargeable Battery Mode
- Option: Bottle Sampling Unit



Oil Sampling Kit • Type SFSK-1 / -2

STAUFF SFSK oil analysis kits provide the tools to take a sample from a STAUFF test coupling or directly from a reservoir or sump.

For this the supplied hose is directly connected to the test coupling with an adaptor and the fluid is filled into the supplied vials.

But there is also the possibility to draw up the sample directly from a tank with the hand pump and fill it into the vial.

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Oil Condition Sensor

Description

The STAUFF OCS Oil Condition Sensor continuously monitors the condition of hydraulic and lubricating oils and displays this in real time on the OCD Oil Condition Display, optionally available as an accessory.

The OCD displays the values recorded by the OCS sensor on a multi-segment display, which enables the oil condition and temperature to be recorded at a glance without the need to connect to a PC.

The data can, of course, also be transmitted directly into the machine control or to a PC, if required. More important, a multi-coloured LED provides the ACTUAL condition in relation to the TARGET condition, which enables demand-led maintenance and oil change intervals to be planned.

Options and Accessories

- USB Interface allows to download the measured data and to carry out programming using the supplied software
- Starter Kit with all required components available



Oil Condition Sensor • Type OCS-I-M-B08-M16

The Oil Condition Sensor OCS is designed for continuous monitoring of hydraulic systems. Permanently installed in the system the OCS sensor monitors the condition of hydraulic fluids and lubricating oils in real time, whereby water ingress and oxidation can be detected in time.

The OCS sensor is 60 times more sensitive than dielectric sensors on increasing contamination and protects the system from cost-intensive downtimes and reduces machine downtimes.



Oil Condition Display • Typ Display-OCS-I

The optional Oil Condition Display OCS unit shows the values measured by the sensor using a multi-segment LED indicator, which makes the oil condition apparent at a glance and without any connection to a PC.

The display unit also has integrated measurement value memory, from which the data can be subsequently transferred for assessment via USB.



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