



**HT HYDROTECHNIK**

WE ARE MINIMESS®

# MINIMESS® – THE GOLD STANDARD IN TEST POINT COUPLING



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The Original Minimesse®

## **Using innovative solutions to set industry trends**

Hydrotechnik has long been on the cutting edge when it comes to hydraulic testing technology. In 1964, Hydrotechnik launched the Minimesse® - plug-in test point coupling with a ball sealing mechanism. The inventor of this revolutionary technology was our company founder himself, Ulrich Baumgarten. In the past, pressure was measured using a fixed mounted pressure gauge, and the only way to measure

the pressure was to shut down the entire system, a time-consuming process. Thanks to this revolutionary technology, production would no longer need to be interrupted.

## **Revolutionary soft-seal technology**

In 1982, staying true to its motto, "in progress we trust", Hydrotechnik patented a leak-free test point soft-sealing technology. Its precision and ease of use makes it the product of choice for performance and safety, especially when it comes to using hydraulic systems in environmentally sensitive areas or in the gas industry.

## **p/T test points: Using today's technology to prevent tomorrow's problems**

Technological developments in the fields of automation and robotics have made it possible to measure temperature and pressure at the same testing point. Hydrotechnik's engineers put their heads together and developed the p/T (pressure/temperature) test point. They designed the spring-loaded valve body so that it was longer and could act as a thermowell that extended into the fluid being tested: When the temperature sensor is screwed into the test point, the valve opens and floods the thermowell. This technology ensures that the fluid temperature is accurately transferred to the temperature sensor.

## **Dependability and quality**

Modern automation technology combined with an integrated leakage detection system, ensures that Hydrotechnik delivers high-quality products, a high level of process reliability and zero leakage. There is currently a wide selection of technologically-advanced test point couplings available to the mobile hydraulic industry; however, because of their commitment to environmental safety standards and their goal to improve their customers' economic efficiency, Minimesse® test points have become the industry leader when it comes to modern test point technology.

# QUALITY, SAFETY AND PRACTICALITY – MINIMESS®



**Working under pressure,**  
is what running a hydraulic system is about. With Minimesse® test points, all the tasks associated with maintaining and servicing a hydraulic system (connecting sensors and pressure gauges, filling or emptying the system, drawing samples, removing sensors, venting) can be done without shutting down the system. Minimesse® test points also ensures that your operation meets current environmental standards.

## **Minimesse® test point coupling**

- 100% leak free
- Can be used in low temperature systems
- Tested to more than 2,000,000 impulse cycles > 600 bar
- Available in a large range of models, for different applications
- Easy to install
- Conforms to ISO standard 15171-2

## **Minimesse® pays for itself**

- Save time: faster diagnosis means faster maintenance
- Save money: faster diagnosis and faster maintenance means longer equipment life
- Invest for the future: no more installing expensive service sensors
- Improve quality: comprehensive diagnostics keep your system productive
- Built to last: corrosion protection conforms to DIN EN ISO 9227 NSS.  
More than 1,000 hours of salt spray testing!

## **Minimesse® for the production line**

- Forward-thinking: use test point couplings where you know you'll need it
- Efficient: use test point coupling on your test benches
- Customized: create a system that meets your needs

## **Minimesse® to upgrade your system**

- Easy to install
- Wide range of connections and adapters enables easy system integration

## **Tested and certified**

- BAM-certified for fire-extinguishing systems
- DVGW-approved (applies to Minimesse® 1620 and 1215 series)
- Approved for use with pressure tank gas fill valves
- Conforms to military specification MIL-V-24695 for usage with hydraulic oil
- Development and production meet ISO 9001 standards
- Environmental management meets ISO 14001 standards

## **Upgrade or install any mobile or stationary system**

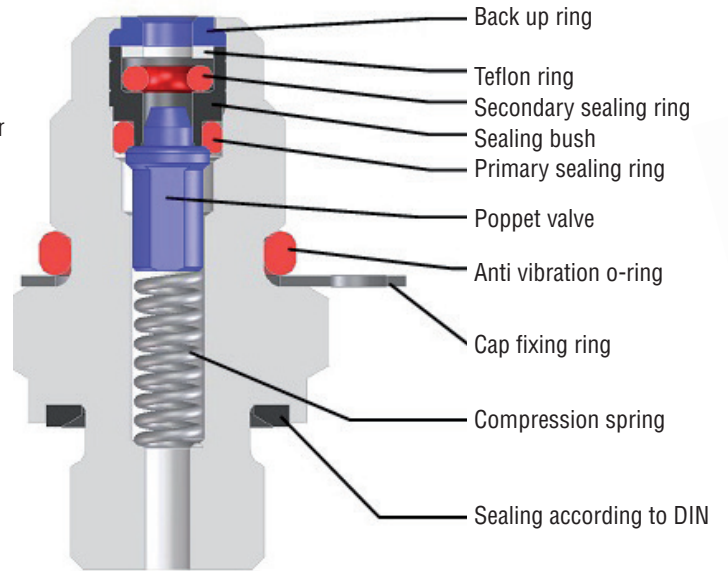
- Construction equipment
- Agricultural equipment
- Industrial hydraulic systems
- Mechanical engineering
- Aeronautics
- Shipbuilding
- Automotive technology
- Medical and laboratory technology
- Railway vehicles
- Energy and environmental technology



# ORIGINAL MINIMESS® TEST POINT COUPLING

Whether you have to monitor system pressure, vent, fill or flush your system, or draw samples, MinimeSS® test point coupling lets you do so without shutting down the system. It is designed to let you quickly connect any device, whether it's for measuring, testing or switching.

- Compatible with any hydraulic medium:  
Hydraulic and other mineral-based oils and gases
- Its unique seal makes it 100% leak-free
- Seal material: NBR, FKM and EPDM
- Available in free-cutting and stainless steel
- Customizable to meet the requirements of your system



| Test point         | Screw cap thread size | Nominal bore | Max pressure | Material  | Seal material                 |
|--------------------|-----------------------|--------------|--------------|---|-------------------------------|
| MinimeSS® 1620     | M 16 x 2              | DN2          | 630 bar      | Free cutting steel 1.0718<br>Stainless steel 1.4571 | NBR (Perbunan)<br>FKM (Viton) |
| MinimeSS® p/T 1620 | M 16 x 2              | DN2          | 630 bar      | Free cutting steel 1.0718<br>Stainless steel 1.4571 | NBR (Perbunan)<br>FKM (Viton) |
| MinimeSS® 1215     | Buttress thread 12    | DN2          | 630 bar      | Free cutting steel 1.0718<br>Stainless steel 1.4571 | NBR (Perbunan)<br>FKM (Viton) |
| MinimeSS® 1615     | M 16 x 1,5            | DN2          | 630 bar      | Free cutting steel 1.0718<br>Stainless steel 1.4571 | NBR (Perbunan)<br>FKM (Viton) |
| MinimeSS® 1604     | Buttress thread 16    | DN4          | 400 bar      | Free cutting steel 1.0718                           | NBR (Perbunan)<br>FKM (Viton) |



## ORIGINAL MINIMESS® 1620



The Original Minimesse® 1620 test point coupling is our best seller, as it can be used in most standard applications. It comes in a broad range of thread sizes, in accordance with metric and international thread standards, making it suitable for any configuration.

## ORIGINAL MINIMESS® 1615



The Original Minimesse® 1615 test point coupling was primarily designed for military applications. It comes in a broad range of thread sizes, in accordance with metric and international thread standards, making it suitable for any configuration.

## ORIGINAL MINIMESS® 1215

The Original Minimesse® 1215 test point coupling is designed for hard-to-access areas. It features a small thread size and a compact design. It comes in a broad range of thread sizes, in accordance with metric and international thread standards, making it suitable for any configuration.



## ORIGINAL MINIMESS® 1604

Because of its larger DN4 inside diameter, the Original Minimesse® 1604 test point coupling is perfect for quick system filling and flushing. It can also be used to monitor pressure, inspect fluid and draw samples while the system is operating.



## FLAT FACE



The appeal of the "Flat Face" system lies in its compact design and the fact that it is not threaded, which makes it quick and easy to clean. It can be used at a pressure of up to 400 bar. Flat Face is designed to diagnose hydraulic oil-based systems. The connection conforms to ISO 15171-1. It has a high corrosion resistance and has undergone 1,000 hours of salt spray testing.



# MINIMESS® SPECIAL SERIES

## LOW TEMPERATURE SERIES

Original MinimeSS® Special Low Temperature Series test point coupling is designed for sub-zero temperatures. It is made with high-grade stainless steel and is available in a wide range of thread sizes. Combined with the Original MinimeSS® test point coupling and high-grade elastomers, it is suitable for testing in the oil and gas industry in temperatures as low as -60°C.

## OFFSHORE SERIES

The Special Offshore Series coupling was designed for deep sea and salt water use. Whether it is used in the oil or gas industry, our coupling, designed to be used in external high pressure environments, particularly in maritime applications, will not let your system down, even in the most extreme conditions.

## GAS SERIES

The Special Gas Series consists of a large selection of MinimeSS® test point coupling with different thread sizing and housing materials and are designed for a wide range of temperatures. Specially selected MinimeSS® gas fill valves have been certified by the German Federal Institute for Materials Research and Testing. We can also provide you with documentation on individual test results. The gas fill valves are guaranteed to work in temperatures as low as -60°C.



## DEFENSE LINE SERIES

Many years of collaboration with armed forces around the world has made Hydrotechnik a dependable partner in the field of military technology. Products in the Special Defense Line Series have been designed to suit the needs of defense technology. Our defense technology consultants have extensive knowledge in this field and will provide you with the support you need to implement your project.

## MINIMESS® p/T 1620

This unique Hydrotechnik product allows you to measure both the pressure and the temperature of your hydraulic fluid – with one simple test point coupling. Shutting down your system to change a sensor is now a thing of the past. Moreover, p/T test point coupling offers all the benefits of the classic MinimeSS® test point coupling, with the choice of adding pressure or temperature sensors or even a combined p/T sensor.





# HOSES AND ADAPTERS

## MINIMESS® HOSES

Minimess® hoses are microbore hoses that come in the standard lengths of DN2 and DN4. Our large selection of hose materials and fittings will fit almost any configuration. We can manufacture any combination of hose lengths and fitting configurations to suit your needs. Microbore hoses offer excellent flexibility with high working pressure ratings, i.e. 315 bar, 400 bar or 630 bar.



## ADAPTERS

Hydrotechnik has a wide selection of adapters, making it easy to upgrade to MINIMESS® test point coupling. We have T adapters, combo adapters, and DKO adapters. Our adapters:

- Comes in standard sizes
- Available in several different thread sizes
- Are compatible with different hydraulic fluids due to our large selection of sealing materials
- Fitted with the Original Minimess® test point couplings
- Easy to fit, whether this is an upgrade or original install



## MINIMESS® GAS FILLING VALVES

Hydrotechnik offer safe, easy to use & robust gas filling valves so you can fill, vent and test the pressure of hydraulic accumulators. Gas tight, high quality valves are essential to maintaining the safety standards of your operation.



Benefits:

- Excellent gas-tightness
- Gas fill valve opens automatically when hose is connected
- Connection can be done by hand, making it faster and safer. No special tools required!
- Adapters are available to fit different tank manufacturers



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