

WEH[®] Connectors Automotive

for quick and efficient testing of components and for filling and evacuating of automotive air conditioning equipment



WEH[®] Quick Connectors

For improved quality in production

As a long-established partner of the international automotive and hydraulics industry as well as the entire production industry, the experts at WEH develop the forward-thinking solutions of the future.

Our versatile product portfolio includes quick connectors for pressure tests and function tests in the serial production of automobiles.

WEH® Connectors have been used successfully in the automotive industry for many years, for instance in testing engines, fuel systems, oil systems or cooling systems.



In the automotive industry, many components must often undergo rapid and efficient pressure and function testing during production (as well as vacuum testing and leak testing) without disrupting the production sequence. The test connectors from WEH have proven themselves particularly for the automation of these testing processes.

In a matter of seconds, WEH[®] Connectors attach to components with a male thread, female thread, bead, collar, swaged and flared, stub, straight tube, bore or hose without the need for laborious tightening and loosening. The quick connectors are distinguished by their ease of operation and ease of maintenance, improving productivity by simplifying work processes and shortening connection times.

WEH[®] Quick Connectors at a glance Numerous options for connection and use

		Male threads	Female threads	Straight tubes	Holes and bores	Swaged and flared	Beads	Collars	Barbs
Туре	Max. allowable operating pressure bar				\bigcirc				
- TW17	350		~						
- TW18	350	~				~	~	~	~
- TW800	50	~				~	~	~	~
- TW850	630	~				~	~	~	~
- TW221	3			~	~	~	~	~	~
[–] TW230	70			~	~			~	~
- TW01	9		~	~	~	~	~	~	~
- TW02	35	On request		~		~	~	~	~
- TW03	345		~						
- TW04	50	~							
- TW710	10						~	~	✓
[–] TW711	10	On request					~	~	~
- TW712	10	On request					~	~	~
- TW713	10	On request					~	~	~
- TW714	10						~		
⁻ TW723	10	~				~	~	~	~
- TW110	35						~		
- TW108	35						~		
- TW130	350	<	<			~	~	~	<
- TW130	50	<	<						

* The test piece profile must allow a firm grip! Automation is possible for many types. Please contact us!



The original WEH® Jaw locking mechanism

For a perfect connection in seconds

A major part of the connectors have the unique WEH[®] Jaw locking mechanism developed by WEH. Hard wearing jaws clamp securely and safely onto a large variety of different connections, including internal and external threads, straight tubes, tube ends and bores among others. You do not need to attach a matching counterpiece to the component being checked. The connectors fit directly onto the test piece.

Laborious screwing and unscrewing of hoses is eliminated and the operators' joints are spared. The latest sealing technology provides a pressure-tight connection for your application. This means that additional Teflon strips or filler are not necessary.

The wear on the connecting piece is also minimised and deformations reduced through the low contact pressure compared with ball-type and screw-on connections.



Your <mark>ad</mark>vantage<mark>s</mark>

- Connection in seconds
 No time-consuming hand-tightening
 Reduced connection time
- 4 Time and cost savings



- 5 Increased productivity6 Spares the operators' joints
- 7 Easy and comfortable operation



For all automotive components

The right test connectors and filling connectors

WEH® Quick connectors have been a standard tool in the international automotive industry for many years now.

Typical applications include leak tests, helium and vacuum testing as well as hot and cold tests of fuel lines, engines, steering systems, tanks, gears, compressors, injection pumps and filling of automotive air conditioning equipment and cooling systems. Particularly for these applications, all kinds of ports with a wide range of connection configurations are tested for leak tightness, for example components with female thread, male thread, bead, swaged and flared, collar etc.



- ▶ Fuel lines
- Engines
- Automotive air conditioning equipment
- Steering systems
- Hose connections
- Tanks
- ► Gears
 - Cooling systems
 - Compressors
- ▶ Engine blocks
- Exhaust systems
- Injection pumps
- Capacitors
- And much more...



Test connectors for leak testing in electromobility

As the future market of electromobility develops, new requirements are being placed on leak tests for batteries.

WEH® Test connector meet this challenge and have already proven themselves as an ideal tool for efficient and cost-effective leak tests.

Although electric drives consist of fewer components than combustion engines, the scope of testing required is considerable.

For example, battery housings, electric drives, aluminum boxes with lithium ion batteries and cooling sleeves for electric engines all must be checked for leak tightness.

But the test connectors by WEH are also used in leak testing of solar batteries for private households and commercial applications.

Marrie de

TW17

For leak tests of cooling circuits and oil modules in electric engines, battery housings and solar batteries

TW01

For leak tests of inverters, cooling circuits of electric engines and hybrid engines as well as aluminum boxes with lithium-ion batteries



For leak tests of straight tubes and components with male thread, collar or bead in electromobility

Advantages at a glance

- Simplified testing processes
- Reduction of connection time
- Increased productivity

WEH[®] Connectors | Connection technology



More information in our catalog:

TW221

For leak tests of cooling circuits in electric engines, water connections of electric motors and battery systems of electric vehicles



TW800

For leak tests of electric axles, cooling water lines of electric machines and electric motors





Connectors for engine testing Perfect connections for pressure and leak testing

Secure connection to a broad variety of ports

Particularly for engine testing, all kinds of ports with a wide range of connection specifications must be tested, for example components with bead, swaged and flared, collar, flange, stub or male thread.

In a matter of seconds, WEH® Test connectors fit directly onto the engine connection being tested without disrupting the production sequence. Complicated testing devices are not required. This also makes them optimal for automated testing of large quantities of parts.

Typical applications include hot and cold tests for conventional combustion engines as well as leak testing for electric engines.



Pressure-tight connection in a matter of seconds Direct connection - without disrupting the

- production sequence
- Complicated testing devices are not required
 Simplifies work processes

Broad variety of ports

6

- Matching connector for each connecting type
 Safe connection to all kinds of ports

Automated testing processes are possible

- Test large quantities of parts
- Increases productivity and reduces costs

WEH[®] Quick Connectors for engine testing



WEH® TW17

Quick connector for pneumatic and hydraulic pressure and function testing of components with female thread, e.g. engines, cylinders, pressure vessels, hoses, valves, etc.

Operating pressure PS:

Vacuum up to max. 350 bar

Actuations:

- H = Manual actuation via hand lever
- V = Pneumatic actuation via valve button
- P = Pneumatic actuation, for external manual, semi-automatic or fully automatic control systems

Connection types:







WEH[®] TW18

Quick connector for pneumatic and hydraulic pressure and function testing of components with male thread, e.g. engines, cylinders, pressure vessels, hoses, valves, etc.

Operating pressure PS:

Vacuum up to max. 350 bar

Actuations:

- H = Manual actuation via hand lever
- V = Pneumatic actuation via valve button
- P = Pneumatic actuation, for external manual, semi-automatic or fully automatic control systems





WEH® TW800

Quick connector for pressure and function testing of components with bead, swaged and flared, collar, flange, stub or male thread, e.g. testing of pressure vessels, compressors, heat exchangers, measuring equipment, hoses, tubes, tanks, etc.

Operating pressure PS:

Vacuum up to max. 50 bar

Actuation:

Manual actuation via sliding sleeve





WEH® TW850

Quick connector for pressure and function testing of components with bead, swaged and flared, collar, flange, stub or male thread, e.g. testing of pressure vessels, compressors, heat exchangers, measuring equipment, hoses, tubes, tanks, etc.

Operating pressure PS:

Vacuum up to max. 630 bar

Actuation:

Manual actuation via sliding sleeve







WEH[®] Quick Connectors for engine testing



WEH® TW221

Quick connector for pressure and vacuum testing in straight tubes and bores (sealing of the internal tube diameter), e.g. in pressure vessels, valves, transducers, compressors, condensers, tubing systems etc.

Operating pressure PS: Max. 3 bar

Actuation: Manual actuation via clamping lever







WEH® TW230

Quick connector for pressure and vacuum testing in straight tubes and bores (sealing of the internal tube diameter), e.g. in heat exchangers, pressure vessels, valves, transducers, compressors, condensers, evaporation coils, single units, tubing systems, automotive air conditioning equipment, heating systems etc.

Operating pressure PS:

Vacuum up to max. 70 bar

Actuation: Manual actuation via clamping lever







WEH[®] TW01

Quick connector for pressure and vacuum testing in straight tubes, in bores and on components with female threads. Leak tests: Pressure loss, underwater/helium tests.

Other applications: Filling, pressure and function tests, flushing etc. of components: Containers, valves, plastic containers, pumps, med. components, filters, pressure vessels, tube connections etc.

Operating pressure PS: Vacuum up to max. 9 bar

Pilot pressure: 4 - 12 bar compressed air

Actuation:

Pneumatic actuation

Connection types:







WEH® TW02

Quick connector for pressure and vacuum testing in straight tubes, in hoses and on components with collar or bead. Special designs such as twin connectors are available on request.

Operating pressure PS:

Vacuum up to max. 35 bar

Pilot pressure: 4 - 12 bar compressed air

Actuation: Pneumatic actuation





Connectors for gears and steering systems

Pressure and leak testing in a matter of seconds

DIRECT connection without tightening

The process for testing gears and steering systems must be easy, cost-effective and time-saving. In a matter of seconds, WEH® Test connectors fit directly onto the test piece without disrupting the production sequence. Complicated testing devices are not required.

WEH® Connectors are available with manual or pneumatic actuation. The test connectors with pneumatic actuation are perfectly suited for automated leak testing of high quantities of parts.



Pressure-tight connection in a matter of seconds Without disrupting the production sequence Simplifies work processes

DIRECT connection

- Complicated testing devices are not required
- Saves time and money

Automated testing processes are possible

- Test large quantities of parts
- Increases productivity and reduces costs

WEH[®] Quick Connectors

for gears and steering systems



WEH[®] TW17

Quick connector for pneumatic and hydraulic pressure and function testing of components with female thread, e.g. engines, cylinders, pressure vessels, hoses, valves, etc.

Operating pressure PS:

Vacuum up to max. 350 bar

Actuations:

- H = Manual actuation via hand lever
- V = Pneumatic actuation via valve button
- P = Pneumatic actuation, for external manual, semi-automatic or fully automatic control systems

Connection types:







WEH[®] TW18

Quick connector for pneumatic and hydraulic pressure and function testing of components with male thread, e.g. engines, cylinders, pressure vessels, hoses, valves, etc.

Operating pressure PS:

Vacuum up to max. 350 bar

Actuations:

- H = Manual actuation via hand lever
- V = Pneumatic actuation via valve button
- P = Pneumatic actuation, for external manual, semi-automatic or fully automatic control systems





WEH[®] TW03

Quick connector for pressure and vacuum testing in straight tubes, in bores and on components with female threads, e.g. fittings, valves, tubes, boilers, containers, radiators, etc.

Operating pressure PS: Vacuum up to max. 345 bar **Actuation:** Manual tightening

Connection types:









WEH[®] TW04

Quick connector for pressure and vacuum testing in straight tubes, in bores and on components with male thread, e.g. fittings, valves, tubes, boilers, containers, radiators, etc.

Operating pressure PS:

Vacuum up to max. 50 bar **Actuation:**

Manual tightening





Connectors for fuel lines

No loss of fuel – with WEH® Fuel connectors

Simplified work processes - without disrupting the production sequence

The fuel lines of engines must be tested for leak tightness easily, reliably and quickly during production.

With WEH® Fuel adapters, a pressure-tight connection is established in a matter of seconds. The connector is attached directly to the fuel line, complicated testing devices are not required. Thanks to their compact design, limited space at engine test stands is not a problem.

An integrated shut-off valve prevents fuel from escaping when the connector is not attached. Not only does this help to protect the environment, it also ensures a clean and safe work environment.



Integrated shut-off valve prevents fuel from escaping after disconnection

- Clean & safe workplace
- Protects the environment

Pressure-tight connection in a matter of seconds

- Without disrupting the production sequence
- Simplifies work processes

- Direct connection without tighteningComplicated testing devices are not required
- Saves time and money

WEH[®] Quick Connectors for fuel lines



WEH[®] TW710

Quick connector for pressure and function testing of fuel lines on pipes with collar or bead.

Operating pressure PS: 10 bar

Actuations: Manual actuation via grip sleeve

Connection types:









WEH[®] TW711

Quick connector for pressure and function testing of fuel lines on pipes with collar or bead.

Male thread on request.

Operating pressure PS: 10 bar

Actuation: Manual actuation via grip sleeve





WEH[®] TW712

Quick connector for pressure and function testing of fuel lines on pipes with collar or bead.

Male thread on request.

Operating pressure PS: 10 bar

Actuation: Manual actuation via grip sleeve





WEH® TW713

Quick connector for pressure and function testing of fuel lines on pipes with collar or bead.

Male thread on request.

Operating pressure PS: 10 bar

Actuation: Pneumatic, automation possible







WEH[®] Quick Connectors for fuel lines



WEH[®] TW714

Quick connector for pressure and function testing at "John-Guest" connections.

Operating pressure PS: 10 bar

Actuation: Manual actuation via grip sleeve

Connection types:







WEH[®] TW723

Quick connector for pressure and function testing of fuel lines on pipes with collar, bead or male thread. Also available in a special version for connection to rubber fuel lines.

Operating pressure PS:

10 bar

Actuation: Manual actuation via grip sleeve





WEH[®] TW800

Quick connector for pressure and function testing of components with bead, swaged and flared, collar, flange, stub or male thread, e.g. testing of pressure vessels, compressors, heat exchangers, measuring equipment, hoses, tubes, tanks, etc.

Operating pressure PS:

Vacuum up to max. 50 bar

Actuation:

Manual actuation via sliding sleeve





WEH® TW850

Quick connector for pressure and function testing of components with bead, swaged and flared, collar, flange, stub or male thread, e.g. testing of pressure vessels, compressors, heat exchangers, measuring equipment, hoses, tubes, tanks, etc.

Operating pressure PS:

Vacuum up to max. 630 bar

Actuation:

Manual actuation via sliding sleeve





Connectors for automotive air conditioning equipment Truly environmentally friendly

Ideal tools for service technicians

In the automotive industry, automotive air conditioning equipment has to be filled and evacuated with refrigerants during production and later refilled repeatedly for maintenance purposes.

In this context, WEH[®] Connectors are an indispensable tool. In a matter of seconds, the connectors attach reliably to tube connections with beads – without the need for tightening. This spares the operator's joints, reduce costs and increases productivity.

In addition, an integrated shut-off valve reduces the refrigerant loss to a minimum, thereby protecting the environment. The operator's hands are protected against frostbite.



Integrated shut-off valve reduces refrigerant loss Protects the operator's hands against frostbite

- Protects the environment

Pressure-tight connection in a matter of seconds
Filling and evacuating of refrigerants during production

Direct connection without tightening

- Spares the operators' joints
 Increases productivity and reduces costs

WEH® Quick Connectors for automotive air conditioning equipment



WEH[®] TW110

Filling and evacuating of refrigerants in automotive air conditioning equipment **during production**. An integrated shut-off valve prevents refrigerants from being released into the atmosphere.

Thanks to its robust design, the connector is **optimally** suited for long-term use.

Operating pressure PS: Max. 35 bar **Connection types:**









WEH® TW108

Economical alternative to the WEH® TW110. The TW108 is suitable for filling and evacuating refrigerants **during maintenance** of automotive air conditioning equipment.

It is available with a red sliding sleeve for the vehicle's high pressure side and with a blue sliding sleeve for the vehicle's low pressure side.

Operating pressure PS: Max. 35 bar **Connection types:**









Connectors for brake systems

Reliable and safe pressure and leak testing

Increase productivity and reduce costs

Leak testing is increasingly being automated, especially in serial production, since very high quantities often have to be reliably and rapidly tested for leak tightness during production without any leakage.

The test connectors with pneumatic actuation by WEH are perfectly suited for automated leak tests. The pressure-tight connection is established in a matter of seconds – without tightening. The connector attaches directly to the component being tested, no complicated testing devices are required.



Automated testing processes are possible

- Test large quantities of parts
- Increases productivity and reduces costs

Pressure-tight connection in a matter of seconds

- Without disrupting the production sequence
- Simplifies work processes

Direct connection without tightening

- Complicated testing devices are not required
- Saves time and money

WEH[®] Quick Connectors for brake systems



WEH® TW17

Quick connector for pneumatic and hydraulic pressure and function testing of components with female thread, e.g. engines, cylinders, pressure vessels, hoses, valves, etc.

Operating pressure PS:

Vacuum up to max. 350 bar

Actuations:

- H = Manual actuation via hand lever
- V = Pneumatic actuation via valve button
- P = Pneumatic actuation, for external manual, semi-automatic or fully automatic control systems

Connection types:







WEH[®] TW18

Quick connector for pneumatic and hydraulic pressure and function testing of components with male thread, e.g. engines, cylinders, pressure vessels, hoses, valves, etc.

Operating pressure PS:

Vacuum up to max. 350 bar

Actuations:

- H = Manual actuation via hand lever
- V = Pneumatic actuation via valve button
- P = Pneumatic actuation, for external manual, semi-automatic or fully automatic control systems





WEH[®] Quick Connectors for brake systems



WEH® TW800

Quick connector for pressure and function testing of components with bead, swaged and flared, collar, flange, stub or male thread, e.g. testing of pressure vessels, compressors, heat exchangers, measuring equipment, hoses, tubes, tanks, etc.

Operating pressure PS:

Vacuum up to max. 50 bar

Actuation:

Manual actuation via sliding sleeve







WEH® TW850

Quick connector for pressure and function testing of components with bead, swaged and flared, collar, flange, stub or male thread, e.g. testing of pressure vessels, compressors, heat exchangers, measuring equipment, hoses, tubes, tanks, etc.

Operating pressure PS:

Vacuum up to max. 630 bar

Actuation:

Manual actuation via sliding sleeve







WEH® TW130

Quick connector for pressure and function testing of components with Banjo tube connections and pipe / hose connections with union nuts, e.g. heat exchangers, high pressure hoses etc.

Operating pressure PS: Max. 350 bar

Pilot pressure: 6 - 8 bar

Actuation: Pneumatic actuation via valve button

Connection types:





WEH[®] TW131

Quick connector for pressure and function testing of components with banjo tube connection, hose and tube connection, e.g. for heat exchangers, etc.

Operating pressure PS:

Max. 50 bar Actuation: Manual actuation via grip sleeve Connection types:



Markets in which WEH has raised the bar

The development of the unique WEH[®] Jaw locking mechanism started the success of WEH[®] Connectors. When WEH introduced their very first invention, nobody knew that this incredibly simple, yet highly effective technology would write an entirely new chapter for the leak testing of components and would mean a giant leap forward in efficiency.

The very first WEH® TW05 connector was developed in 1980 and was filed for patent in 1983 – but it was only the first in a long line of quick connectors. The innovative quick connectors for

pressure, function and leak testing, as well as for the filling and evacuation of gaseous media created a pressure and function-tight connection in seconds.

Driven by a passion for precision and optimal economic viability, WEH developed an extensive product portfolio over the years.

Today, WEH[®] Product solutions are used in all key industry sectors:

- General industrial applications
- Automation technology
- **3** Automotive industry
- 4 Refrigeration and air conditioning industry
 - Gas industry
- 6 Breathing air

















Quality & Service at WEH

- Made in Germany -

Opt for safety: The manufacturer service from WEH

You have chosen a WEH[®] Product and thereby choosing quality and safety. Your satisfaction is our focus - especially after purchasing our products. Our service team is your reliable and competent point of contact when it comes to the lifespan of our products.

That's what we call excellent service!

The quality of our products is the major benefit for our customers. Because WEH® Products are not simply replaced they are sent for service.

Your benefits:

- Our experts reliably, quickly & safely inspect, repair, and maintain your devices.
- We meet national and international requirements.
- We only use original spare parts.
- We carry out outgoing goods inspections and prepare a test report.
- We guarantee maximum availability and performance of our products.
- With our service, you minimize security risks.
- Our experts recognize impending damages at an early stage.
- Our service personnel can rule out unnecessary repairs and subsequent damages.
- The costs for service and maintenance are transparent.

What we can do for you



ANALYSIS

During maintenance, we decide which individual parts can be reused.



REPLACEMENT

e replace parts to ensure ality and safety criteria.



GUARANTEE & WARRANTY

Anyone who does excellent work is happy to offer a guarantee. You can be assured that every product has been tested.



LABORATORY

We invest continuously. For very specific analyses, we collaborate with our partner laboratories.



CLEANING

Please wash first! This is lone by a state-of-the-art cleaning machine.



Quality from experience

Market-proven technology for more than 50 years

Many will describe WEH as obsessed. Obsessed with the highest quality. In fact, this is one of the most important criteria that our products must fulfill. Quality is paramount alongside safety. We only use high-quality materials and have been relying on the "Made in Germany" seal for decades.

Sustainable satisfaction, but above all the safety of our customers is paramount to us. From the product idea to the service performance, the demand for excellent quality is firmly anchored in our company's processes. For us, it goes without saying that every product undergoes maximum quality and safety checks.

Our customers can rely on our team to carefully inspect incoming and outgoing goods. Our quality experts have state-of-the-art measuring and testing methods at their disposal.

By the way, we apply the high standard of top quality not only to our ready-to-ship products, but also to goods we receive from suppliers. We place great value on reliable partners who also embody and implement our standards in their companies.

Only if the quality of the purchased materials is assured can you rely on the final product being safe and high-quality.

The result of our philosophy?

Product solutions that impress with top quality and optimum safety and offer our customers numerous benefits, such as:

- Low downtime
- Cost reduction and increased productivity
- Reliability and unique user-friendliness

CERTIFIED QUALITY MANAGEMENT

Our quality standards are certified according to recognized standards:

- ▶ ISO 9001:2015
- ISO 14001:2015
- Pressure Equipment Directive 2014/68/EU Annex III, Module H







Contact More questions? - Great! Don't hesitate to contact our experts.

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