

# WEH® HVAC-R Connectors

for filling, evacuating and testing of refrigeration  
and air conditioning components



**50<sup>+</sup>**  
**YEARS**  
Quality & Safety



# WEH® HVAC-R Connectors

simplify workflows and reduce costs

WEH offers a complete product range of quick connectors that make connection to fluid lines easier, more reliable and with high integrity sealing. The cost savings during production and servicing resulting from easy, fast connection can be considerable.

WEH has a suitable quick connector for almost any application whether for refrigerant filling of air conditioning systems, ice machines, refrigerators, water coolers or other refrigeration and air conditioning components or for pressure and function tests of heat exchangers, pressure vessels, compressors, condensers, evaporation coils etc. with straight tube connections and bores.

## WEH® Service Connectors



## WEH® Test Connectors










## WEH® Filling Connectors



# Overview of WEH® Connectors

Many connection and application possibilities

## Connection possibilities

Type	Male threads	Straight tubes (outer Ø)	Straight tubes (inner Ø)	Bores	Swaged and flared	Beads	Collars
							
TW111	✓						
TW110 TW108						✓	
TW52 TW920	✓						
TW141		✓					
TW221			✓	✓	✓		✓
TW230			✓	✓			✓
TW241		✓					

## Filling and evacuating refrigerating and air conditioning systems

Type	TW111	TW110	TW108	TW52	TW920
Application	Filling and evacuating of industrial refrigerating and air conditioning systems	Filling and evacuating of automotive air conditioning systems during production	Filling and evacuating of automotive air conditioning systems during maintenance	Filling of gas cylinders with / without residual pressure valve	Filling of gas cylinders with residual pressure valve
Connects to	Schrader valve: 1/4" SAE (UNF 7/16"-20) 5/16" SAE (UNF 1/2"-20)	Tube Ø 11 mm Tube Ø 13 mm	Tube Ø 11 mm Tube Ø 13 mm	W21.8x1/14" G1/2" TR21x4.5	W21.8x1/14"
Medium	Refrigerants	Refrigerants	Refrigerants	Refrigerants, CO <sub>2</sub>	Refrigerants
Max. allowable operating pressure PS	42 bar	35 bar	35 bar	250 bar or 150 bar with TVCO <sub>2</sub> linear valve	40 bar

## Testing of tube connections

Type	TW141	TW221	TW230	TW241
Sealing range	6.0 - 22.2 mm tube OD	9.5 - 24.4 mm tube ID	9.5 - 22.2 mm tube ID	6.0 - 22.2 mm tube OD
Max. allowable operating pressure PS	Vacuum up to 100 bar	3 bar	Vacuum up to 70 bar	Vacuum up to 70 bar
Seals	O-ring sealing	Special sealing	O-ring sealing	Special sealing
Nominal bore DN*	3 to 5 mm	2 to 4 mm	2 to 5 mm	4 to 6 mm

\* The flow rate directly depends on the inner diameter of the tube.  
Other connection sizes on request.



## **The original WEH® Jaw locking mechanism**

For a perfect fit in seconds

A major part of the WEH® 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 female and male 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.

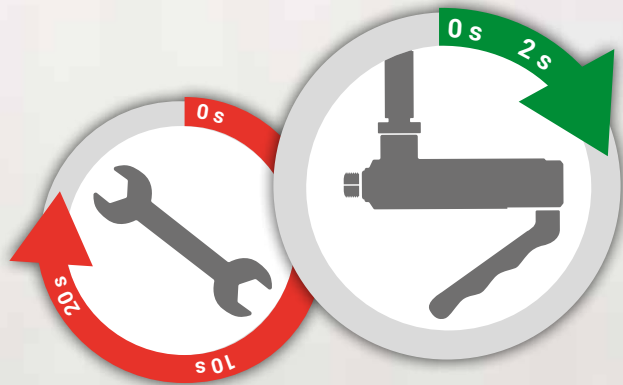
The wear on the connecting piece is also minimised and deformations reduced through the low contact pressure compared with ball-type and screw-on connections.





# Your advantages

- 1 Connection in seconds  
WITHOUT hand-tightening
- 2 No time-consuming hand-tightening
- 3 Reduced connection time
- 4 Time and cost savings



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





# WEH® Service Connectors

for filling and evacuating industrial refrigerating and air conditioning systems

## Indispensible tools for refrigerant filling

The typical practice when filling and maintaining refrigeration and air conditioning systems is to use screw connectors. When disconnecting these screw connectors, the residual refrigerant in filling hoses escapes into the atmosphere causing considerable environmental damage.

Escaping refrigerants also present a risk of injury to operators and can cause painful frost burns to the hands. Manual screwing and unscrewing is not only time and cost-consuming, but is also very laborious.

To minimise the impact on the environment and make disconnection and connection easier and more comfortable for service technicians, WEH has designed the TW111 filling connector. For many years, this tool has proven to be indispensable for the refrigeration and air conditioning industry.



Usability



Quality



Safety



Efficiency



Easy of  
maintenance



ECO  
friendliness

# Features & Benefits

- 1 Integrated shut-off valve**  
99 % less refrigerant loss  
→ **No frostbitten or burned hands**
- 2 WEH® Jaws**  
Connection in seconds without hand tightening  
→ **Reduces connection times**  
→ **Increases productivity**
- 3 Colour-coded sliding sleeve**  
Visual identification of circuits (high / low pressure)  
→ **Avoids mistaken use**  
→ **Increases safety at work**
- 4 (High) Operating comfort**  
Sparers the operators' joints  
→ **Cost reduction & enhanced efficiency**





# WEH® Service Connectors

for filling and evacuating industrial refrigerating and air conditioning systems



90° media inlet



Inline media inlet

## WEH® TW111

Filling and evacuating refrigerants during maintenance of industrial refrigerating and air conditioning systems with Schrader valve (1/4" resp. 5/16" SAE tube connection).

The TW111 is optionally available with a inline or 90° media inlet and with colour-coded sliding sleeves in red or blue for high pressure or low pressure connection ports on the customer's system.

Versions for 1/4" Schrader valves are characterized by its small outer diameter of 25 mm.

### Refrigerants:

R134A, R22 or R410A

### Operating pressure PS:

Max. 42 bar

### Connects to:



Pro Set 1



Pro Set 2

## WEH® TW111 Pro Set

With WEH® Pro Sets, you are perfectly equipped for filling refrigerants. Pro Sets are available in two designs:

**Pro Set 1** – consisting of service connector TW111 with in-line media inlet for the high pressure port (red) and for the low pressure port (blue), front seal set (5 units) and O-ring picker

**Pro Set 2** – consisting of service connector TW111 with 90° media inlet for the high pressure port (red) and for the low pressure port (blue), front seal set (5 units) and O-ring picker

### Refrigerants:

R134A, R22 or R410A

### Operating pressure PS:

Max. 42 bar

### Connects to:









# WEH® Service Connectors

for filling and evacuating of automotive air conditioning systems

## Perfect tool for the service technician

Automotive air conditioning equipment has to be filled and evacuated with refrigerants firstly during production and later on refilled repeatedly for maintenance purposes.

WEH® Connectors are an indispensable tool for these applications.  
The connectors establish a pressure-tight connection to tubes with beads in a matter of seconds.



Usability



Quality



Safety



Efficiency



Easy of  
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## WEH® TW110

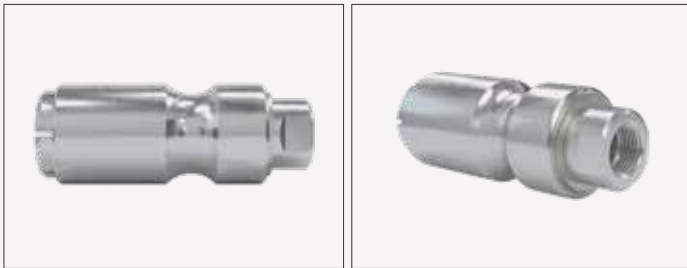
Filling and evacuating refrigerants in automotive air conditioning equipment **during production**. An integrated shut-off valve prevents the escape of refrigerants and so gives good environmental protection performance.

Due to its robust construction, the connector is ideally suited for continuous operation.

### Operating pressure PS:

Max. 35 bar

### Connects to:



## WEH® TW108

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

The connector is available with a red coloured grip sleeve for the vehicle's high pressure connection port and with a blue coloured grip sleeve for the vehicle's low pressure connection port.

### Operating pressure PS:

Max. 35 bar

### Connects to:







# WEH® Test Connectors

for leak testing of straight tubes and bores

## Easy testing of tube connections

Wherever straight tubes have to be pressure tested or function tested, the WEH® Connectors are the right tool, being ideal for applications in the refrigeration and air conditioning industry. Testing applications include heat exchangers, pressure vessels, valves, transducers, compressors, condensers, evaporation coils, air conditioners, heating systems and many more HVAC-R components.

In the automotive industry the quick connectors are used for radiator testing. Simplified workflows, shorter operating times and increased productivity can be achieved when using WEH® Connectors. A wide range of quick connectors for connection to bores, straight tubes and formed tube ends is available comprising a wide choice of sealing ranges.



Usability



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Safety



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Easy of  
maintenance



ECO  
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## Connect to a large variety of tube ends

Pressure-tight connections to copper, aluminium or steel tubes. The original WEH® Clamping jaws provide maximum grip and minimal distortion to the test piece.



# WEH® Test Connectors

for leak testing of straight tubes and bores



## WEH® TW141

For pressure and function tests up to 100 bars of external tube diameters, e.g. leak testing of heat exchangers and filling of closed cooling circuits with refrigerants.

**Sealing range:**

6.0 - 22.2 mm OD

**Operating pressure:**

Max. 100 bar

**Connects to:**



## WEH® TW221

For pressure and vacuum tests of internal tube diameters and bores in the low pressure range. The manually operated connector is secured to the component by its connection seal.

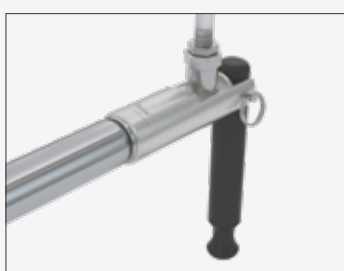
**Sealing range:**

9.5 - 24.4 mm ID

**Operating pressure PS:**

Max. 3 bar

**Connects to:**





## WEH® TW241

For filling and evacuating as well as for pressure and vacuum testing of straight tubes up to 22.2 mm external tube diameter.

The quick connector has a wide tolerance band and is also suitable for underwater, pressure decay and helium testing.

### Sealing range:

6.0 - 22.2 mm OD

### Operating pressure PS:

Max. 70 bar

### Connects to:



## WEH® TW230

For pressure and vacuum tests of internal tube diameters and bores. The quick connector has a wide tolerance band and is also suitable for underwater, pressure decay and helium testing.

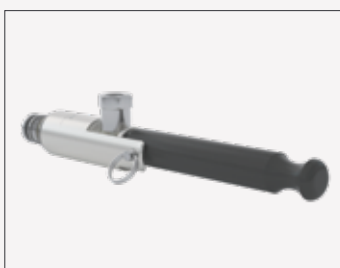
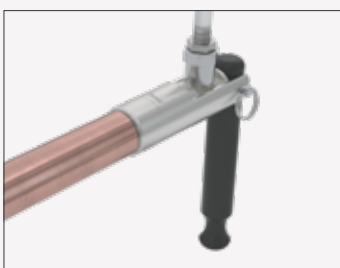
### Sealing range:

9.5 - 22.2 mm ID

### Operating pressure PS:

Max. 70 bar

### Connects to:





# **WEH® Filling Connectors**

for filling of gaseous media

## **Easier and more efficient filling of gas cylinders**

WEH® Quick Connectors meet with the stringent requirements for industrial gas handling applications and facilitate the connection and filling procedure. The connection to the cylinder valve is established in just seconds - without hand tightening.

The filling connectors are specifically designed for cylinder valves with male thread (with or without a residual pressure valve).



Usability



Quality



Safety



Efficiency



Easy of  
maintenance



ECO  
friendliness





## WEH® TW52

Suitable for filling of gas cylinders with male thread (with or without a residual pressure valve) with refrigerants or CO<sub>2</sub>. The TW52 is optionally available with the WEH® TVCO<sub>2</sub> linear valve.

### Media:

Refrigerants, CO<sub>2</sub>

### Operating pressure PS:

Max. 250 bar

Max. 150 bar (with TVCO<sub>2</sub> linear valve)

### Connects to:



## WEH® TW920

Refrigerant filling of cylinders with male thread and residual pressure valve. The pin inserts of special cylinder valves need not be removed for filling (normally the removal of the RPV pin is required before filling).

### Media:

Refrigerant R134A, R22 or R410A

### Operating pressure PS:

Max. 40 bar

### Connects to:





# 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

We replace parts to ensure quality 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 done 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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