WEH® HVAC-R Connectors

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

ORIGINAL WEH® QUALITY since 1973

50+ YEARS Quality & Safety

WEH® - We Engineer Hightech

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» Introduction

WEH® HVAC-R Connectors
simplify workflows and reduce costs

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

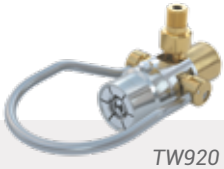
WEH has a suitable filling or testing connector for almost any application whether for refrigerant filling of refrigerators, ice machines, air conditioning systems, water coolers or other refrigeration and air conditioning components or for pressure and function tests of heat exchangers, pressure vessels,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


TW111


TW110


TW108


TW52


TW920


TW141


TW221


TW230


TW241

The original WEH® Jaw locking mechanism
For a perfect connection in seconds

A major part of the WEH® Connectors has the unique 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.

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.

» Introduction

WEH® Quick connectors
for filling and evacuating refrigerants

Indispensable tools for refrigerant filling

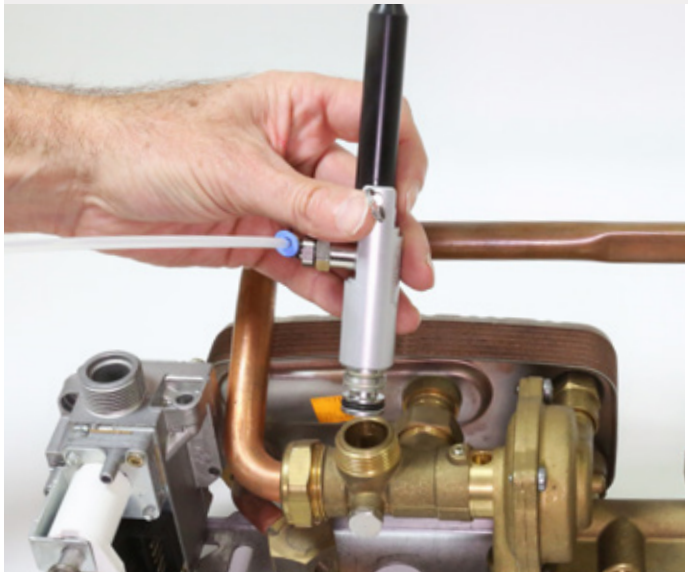
The typical practice when filling and maintaining refrigeration and air conditioning systems is to use screw connectors. When disconnecting these screw connectors, the residual refrigerant in filling hoses escapes into the atmosphere causing considerable environmental damage.

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.

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

To minimise the impact on the environment and make connection and disconnection easier and more comfortable for service technicians, WEH has designed quick connectors, that have proven to be indispensable for the refrigeration and air conditioning industry for many years.

WEH® Test connectors
for leak testing of straight tubes and bores



Testing tube connections - a child‘s play

Wherever straight tubes and bores have to be pressure tested or vacuum tested, the WEH® Connectors are the right tool. Testing applications include heat exchangers, pressure vessels, valves, transducers, compressors, condensors, evaporation coils, air conditioners, heating systems and many more HVAC-R components.

In the automotive industry the quick connectors are mainly 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.

» Overview

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 OF REFRIGERANTS

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_2	Refrigerants
Max. allowable operating pressure PS	42 bar	35 bar	35 bar	250 bar resp. 150 bar with TVCO$_2$ shut-off valve	40 bar

» Overview

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

EXAMPLES OF USE

TW111 | For filling and evacuating of industrial refrigerating and air conditioning systems

TW110 | For filling and evacuating of automotive air conditioning systems during production

TW141 | For testing of cooling circuits

ORDERING

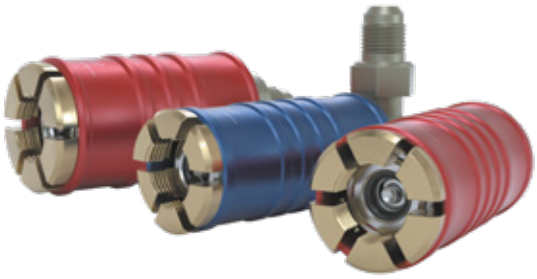
Normally we need the following information when ordering:

1. **Part no.**
2. **Pressure range**
3. **Medium / leak rate**
4. **Description of application**
5. **Temperature range**
6. **Space requirement (interference contours, clearance, etc.)**
7. **CAD drawing of customer test piece with tolerances**
8. **Test piece**

For reasons of precaution, we'd like to point out that
a) regarding the delivery of each article acc. to the respective order confirmation - in particular concerning ECE / EC79 articles - WEH does not confirm the fulfilment of additional requirements of the concerned end customer,
b) WEH is not subject to any external reporting obligation with regard to external change management (see page 44) and
c) WEH does not confirm the replacement of the product in the form of a regular series delivery.
Exclusions acc. to a) - c) can be agreed with the conclusion of a customer-specific project with corresponding special conditions.

» WEH® Connector **TW111**

DESCRIPTION



Features
- For connection to Schrader valves
- No frostbitten or burned hands
- 99 % less refrigerant loss
- Connection in seconds
- No hand tightening required
- WEH® Jaw locking mechanism
- Reduces connection times and costs
- Different versions available
- High-grade materials

The WEH® TW111 Quick connector is the ideal tool for filling and evacuating refrigerants when servicing refrigerating and air conditioning systems with Schrader valve (1/4“ resp. 5/16“ SAE tube connection).
An integrated and flow-optimized shut-off valve minimizes the escape of refrigerant into the atmosphere, thus reducing refrigerant loss by up to 99 % compared to conventional screw connectors. This not only cuts costs but also protects the environment.

As with all WEH® Connectors, damage to tendons and joints caused by the continuous screwing and unscrewing of threaded connections is also eliminated with the TW111. Simply push the connector onto the Schrader valve and push the sliding sleeve forwards. A safe and pressure-tight connection is thus established in seconds. Not only does this make work significantly easier, connection times are also reduced, thus cutting costs.

The quick connector is rated for a max. operating pressure of 42 bar and suitable for filling a large variety of different refrigerants, for example R134A, R22 or R410A.
The TW111 is optionally available with an 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.

The WEH® TW111 is equipped with a chloroprene front seal as standard. For filling of refrigerant R410A an EPDM front seal is used. Other sealing materials on request. It is the customer‘s responsibility to clarify the media compatibility.

Application
Quick connector for filling and evacuating refrigerants of industrial refrigerating and air conditioning systems with Schrader valve acc. to SAE J513.

TECHNICAL DATA

Characteristic	Basic version
Max. allowable operating pressure PS*	42 bar
Temperature range	-10 °C up to +80 °C
Leak rate	1 x 10^{-3} mbar x l/s
Actuation	Manual actuation via sliding sleeve
Material	Brass and anodized aluminium
Sealing material	Front seal of chloroprene resp. EPDM (R410A)
Design	With integrated shut-off valve

* Please note that the pressure may be higher for some refrigerants, as i.e. R407A, R407B, R410A, R507 in case of high ambient temperatures!

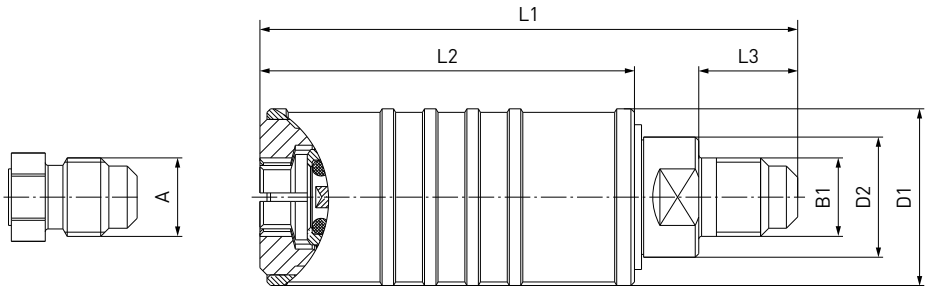
Other designs on request

Example of use:

» WEH® Connector **TW111**

ORDERING | WEH® TW111 Quick connector with inline media inlet

approx. dimensions (mm)

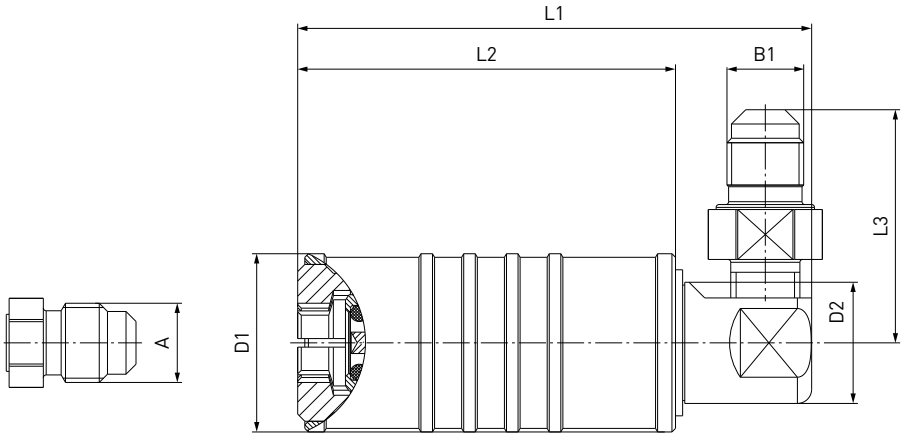


Part No.	Description	A (male thread)	B1 (male thread)	D1	D2	L1	L2	L3
C1-102991	TW111 - high pressure (red)	UNF 7/16"-20*	UNF 7/16"-20*	25	17	76	53	14
C1-102993	TW111 - low pressure (blue)	UNF 7/16"-20*	UNF 7/16"-20*	25	17	76	53	14

* acc. to SAE J513 (45°)

ORDERING | WEH® TW111 Quick connector with 90° media inlet

approx. dimensions (mm)



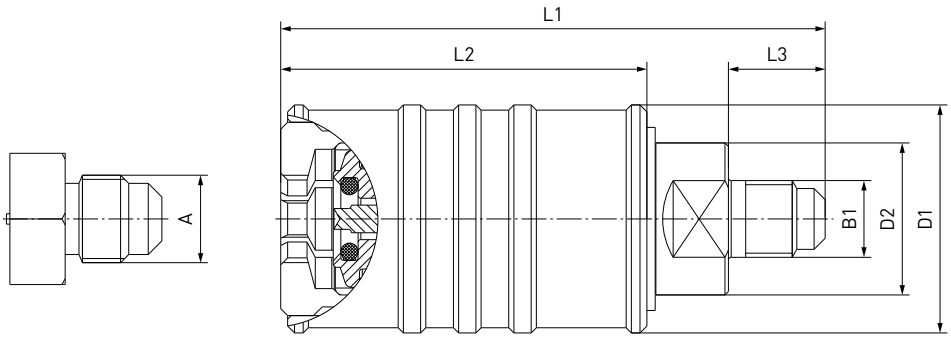
Part No.	Description	A (male thread)	B1 (male thread)	D1	D2	L1	L2	L3
C1-102992	TW111 - high pressure (red)	UNF 7/16"-20*	UNF 7/16"-20*	25	17	72	53	33
C1-102994	TW111 - low pressure (blue)	UNF 7/16"-20*	UNF 7/16"-20*	25	17	72	53	33

* acc. to SAE J513 (45°)

» WEH® Connector **TW111**

ORDERING | WEH® TW111 Quick connector with inline media inlet, for R410A refrigerant

approx. dimensions (mm)



Part No.	Description	A (male thread)	B1 (male thread)	D1	D2	L1	L2	L3
C1-30291	TW111 - high pressure (red)	UNF 1/2"-20*	UNF 1/2"-20*	33	22	79	53	14
C1-30290	TW111 - low pressure (blue)	UNF 1/2"-20*	UNF 1/2"-20*	33	22	79	53	14
C1-34797	TW111 - high pressure (red)	UNF 1/2"-20*	UNF 7/16"-20*	33	22	79	53	14
C1-34796	TW111 - low pressure (blue)	UNF 1/2"-20*	UNF 7/16"-20*	33	22	79	53	14

* acc. to SAE J513 (45°)

Other connector sizes and versions on request.

Required information for ordering see page 7.

SPARE PARTS

Various parts are available as spares for the WEH® TW111 Quick connector.

Part No.	Description
On request	Front seal

When ordering the front seal, please indicate the part no. engraved on the connector.

» WEH® Connector **TW111 Pro Set**

CONTENT

	WEH® TW111 - Set 1 Part no.: C1-161409		WEH® TW111 - Set 2 Part no.: C1-161410
A1	Quick connector TW111 with inline media inlet - high pressure (red) - low pressure (blue)	A2	Quick connector TW111 with 90° media inlet - high pressure (red) - low pressure (blue)
B1	Front seal set (includes 5 front seals)	B2	Front seal set (includes 5 front seals)
C1	O-ring picker	C2	O-ring picker

» WEH® Connector **TW110**

DESCRIPTION

Features
- Connection in seconds
- No hand tightening required
- WEH® Jaw locking mechanism
- Reduces connection times and costs
- High-grade materials

The WEH® TW110 Quick connector is specifically designed for filling and evacuating refrigerants, as for example R134A, of automotive air conditioning equipment acc. to SAE J639. The quick connector is rated for a max. operating pressure of 35 bar and is completely made of stainless steel. Therefore, the connector is ideally suited for continuous operation.

The TW110 quick connector is equipped with an integrated and flow-optimized shut-off valve reducing the leakage of environmentally harmful refrigerants to a low residual volume. Thanks to the high operating convenience offered by the sliding sleeve, tedious hand tightening causing RSI is a thing ofthe past. Thus workflows are significantly simplified and considerable time and cost savings are achieved.

The WEH® TW110 is equipped with a HNBR front seal. Other sealing materials on request. It is the customer‘s responsibility to clarify the media compatibility.

Application
Quick connector for filling and evacuating refrigerants of automotive air conditioning equipment acc. to SAE J639 during production.

TECHNICAL DATA

Characteristic	Basic version
Max. allowable operating pressure PS*	35 bar
Temperature range	-10 °C up to +80 °C
Leak rate	1 x 10^{-3} mbar x l/s
Actuation	Manual actuation via sliding sleeve
Material	Corrosion-resistant stainless steel
Sealing material	Front seal of HNBR
Design	With integrated shut-off valve

* Please note that the pressure may be higher for some refrigerants, as i.e. R407A, R407B, R410A, R507 in case of high ambient temperatures!

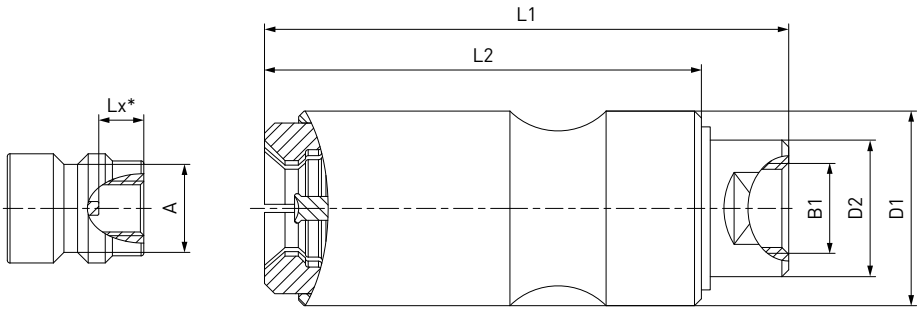
Other designs on request

Example of use:

» WEH® Connector **TW110**

ORDERING | WEH® TW110 Quick connector

approx. dimensions (mm)



Part No.	Description	A**	B1 (female thread)	D1	D2	L1	L2
C1-1748	TW110	Ø 11	G1/4"	28.5	20	77	64
C1-1749	TW110	Ø 13	G1/4"	28.5	20	77	64

* Lx: the connection depth of each customer's receptacle valve may vary.
Therefore a sample or dimensioned drawing is needed for each order.
** acc. to SAE J639

Other connector sizes and versions on request.

Required information for ordering see page 7.

SPARE PARTS

Various parts are available as spares for the WEH® TW110 Quick connector.

Part No.	Description
On request	Front seal

When ordering the front seal, please indicate the part no. engraved on the connector.

» WEH® Connector **TW108**

DESCRIPTION

Features
- Connection in seconds
- No hand tightening required
- WEH® Jaw locking mechanism
- Reduces connection times and costs
- Versions for high or low pressure connection ports available
- High-grade materials

The WEH® TW108 Quick connector is a good reasonably priced alternative to the WEH® TW110 for filling and evacuating refrigerants, as for example R134A, especially during maintenance of automotive air conditioning equipment acc. to SAE J639. The connector is the ideal choice for leak-tight connections during maintenance work, continuous operation not requiring.

The TW108 quick connector is equipped with an integrated and flow-optimized shut-off valve reducing the leakage of environmentally harmful refrigerants to a low residual volume. Thanks to the high operating convenience offered by the sliding sleeve, tedious hand tightening causing RSI is a thing of the past. Thus workflows are significantly simplified and considerable time and cost savings are achieved.

The quick connector is rated for a max. operating pressure of 35 bar and available with colour-coded sliding sleeves in red or blue for high pressure or low pressure connection ports on the customer's system.

The WEH® TW108 is equipped with a HNBR front seal. Other sealing materials on request. It is the customer‘s responsibility to clarify the media compatibility.

Application
Quick connector for filling and evacuating refrigerants during maintenance of automotive air conditioning equipment acc. to SAE J639.

TECHNICAL DATA

Characteristic	Basic version
Max. allowable operating pressure PS*	35 bar
Temperature range	-10 °C up to +80 °C
Leak rate	1 x 10^{-3} mbar x l/s
Actuation	Manual actuation via sliding sleeve
Material	Brass and anodized aluminium
Sealing material	Front seal of HNBR
Design	With integrated shut-off valve

* Please note that the pressure may be higher for some refrigerants, as i.e. R407A, R407B, R410A, R507 in case of high ambient temperatures!

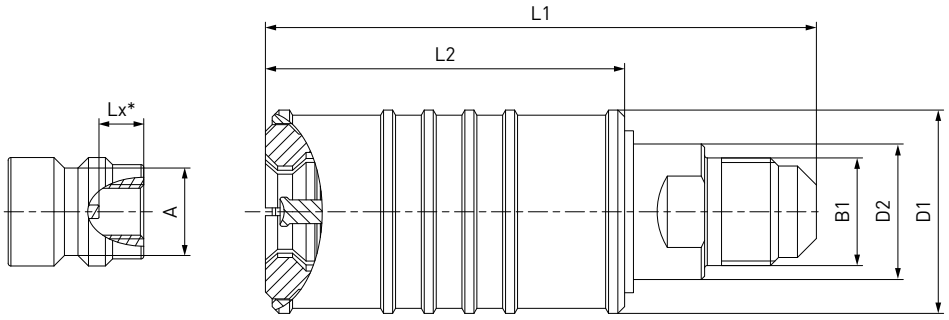
Other designs on request

Example of use:

» WEH® Connector **TW108**

ORDERING | WEH® TW108 Quick connector

approx. dimensions (mm)



Part No.	Description	A**	B1 (male thread)	D1	D2	L1	L2	L3
C1-14455	TW108 - high pressure (red)	Ø 13	UNF 7/16"-20***	30	20	79	53	14.0
C1-14458	TW108 - low pressure (blue)	Ø 11	UNF 7/16"-20***	30	20	79	53	14.0
C1-14455/1	TW108 - high pressure (red)	Ø 13	UNF 5/8"-18***	30	20	81	53	16.5
C1-14458/1	TW108 - low pressure (blue)	Ø 11	UNF 5/8"-18***	30	20	81	53	16.5

* Lx: the connection depth of each customer's receptacle valve may vary.
Therefore a sample or dimensioned drawing is needed for each order.
** acc. to SAE J639
*** acc. to SAE J513 (45°)

Other connector sizes and versions on request.

Required information for ordering see page 7.

SPARE PARTS

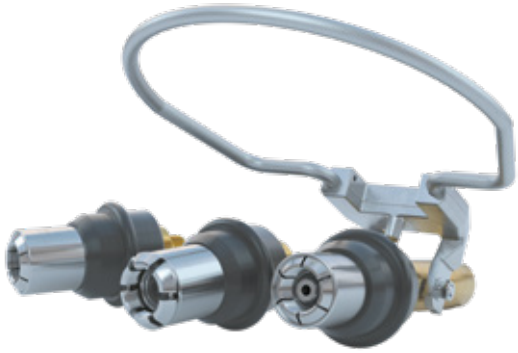
Various parts are available as spares for the WEH® TW108 Quick connector.

Part No.	Description
On request	Front seal

When ordering the front seal, please indicate the part no. engraved on the connector.

» WEH® Connector **TW52**

DESCRIPTION



Features
- Suitable for filling of CO_2 or refrigerants
- Version for **residual pressure valves or non-residual pressure valves** available
- Connection in seconds
- No hand tightening required
- High safety due to pressure-assisted piston
- Environmentally friendly - a vent pipe recirculates the vented gas (in conjunction with $TVCO_2$)
- WEH® Jaw locking mechanism
- High-grade materials

The WEH® TW52 Quick connector has been developed especially for filling gas cylinders with refrigerants or gaseous and liquid CO_2. Connection to the cylinder is made within seconds without tedious screwing and unscrewing, thus preventing RSI resulting in the inflammation of tendons and abrasion of joints.

The TW52 is also suitable for filling one litre cylinders, e.g. for soda drinks.

The WEH® TW52 is equipped with a front seal of EPDM resp. polyurethane.
Other sealing materials on request.
It is the customer's responsibility to clarify the media compatibility.

The TW52 is optionally available with the WEH® $TVCO_2$ shut-off valve (see accessories).

This quick connector is available for gas cylinder valves acc. to DIN, BS, NF, CGA etc.

TW52 with $TVCO_2$ shut-off valve

Application
Quick connector for filling and evacuating (except version with $TVCO_2$ shut-off valve) of gas cylinders with male thread (with or without a residual pressure valve) with CO_2 or refrigerants.

TECHNICAL DATA

Characteristic	Basic version
Nominal bore (DN)	5 mm
Max. allowable operating pressure PS	250 bar 150 bar (TW52 with $TVCO_2$ shut-off valve)
Temperature range	-40 °C up to +40 °C (CO_2)
Leak rate	1 x 10^{-3} mbar x l/s
Connection A	Male thread connection acc. to the corresponding national standard e.g. DIN, CGA, BS, NF etc.
Actuation	Manual actuation via grip sleeve
Material	Corrosion resistant stainless steel and brass
Sealing material	Front seal of EPDM resp. polyurethane (C1-16560, C1-17069)
Design	With or without RPV pin

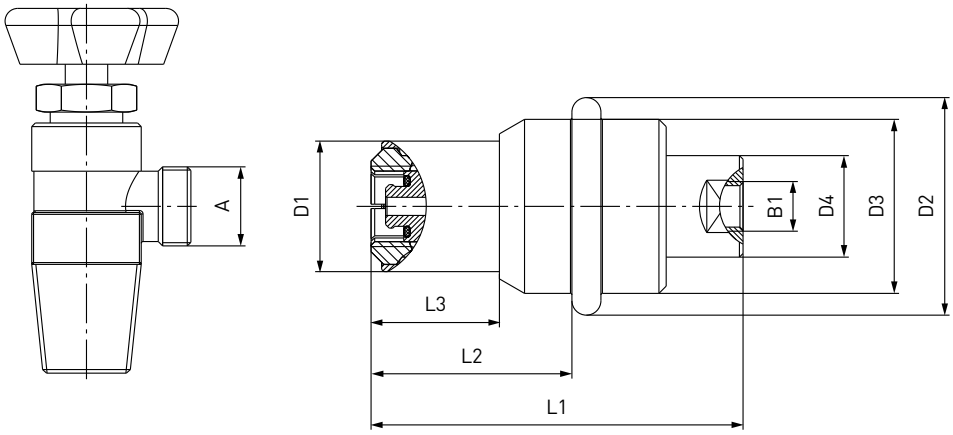
Other designs on request

Example of use:

» WEH® Connector **TW52**

ORDERING | WEH® TW52 Quick connector for non-residual pressure valves

approx. dimensions (mm)

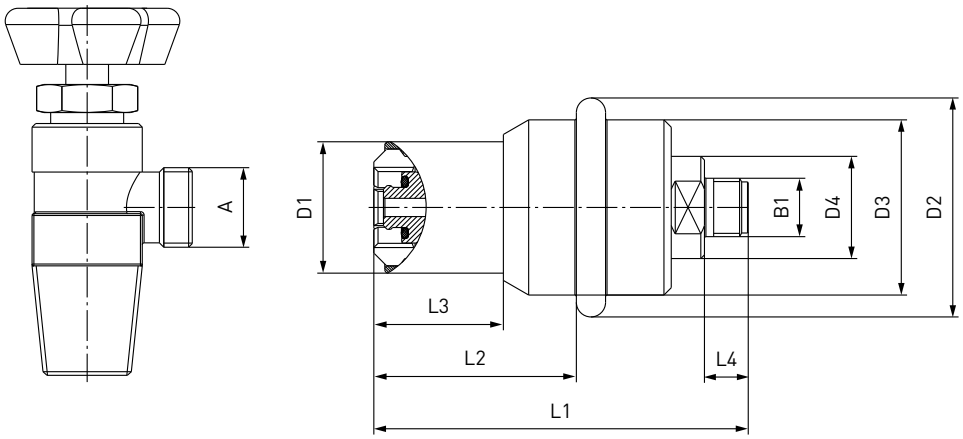


Part No.	Description	A (male thread)	B1 (female thread)	D1	D2	D3	D4	L1	L2	L3
C1-16560-X01	TW52	G1/2“	G1/4“	38	60	48	28	103	55.5	35.5
C1-16564-X01	TW52	W21.8x1/14“*	G1/4“	36	60	48	28	103	55.5	35.5

* acc. to DIN 477

ORDERING | WEH® TW52 Quick connector for non-residual pressure valves (suitable for $TVCO_2$ shut-off valve)

approx. dimensions (mm)



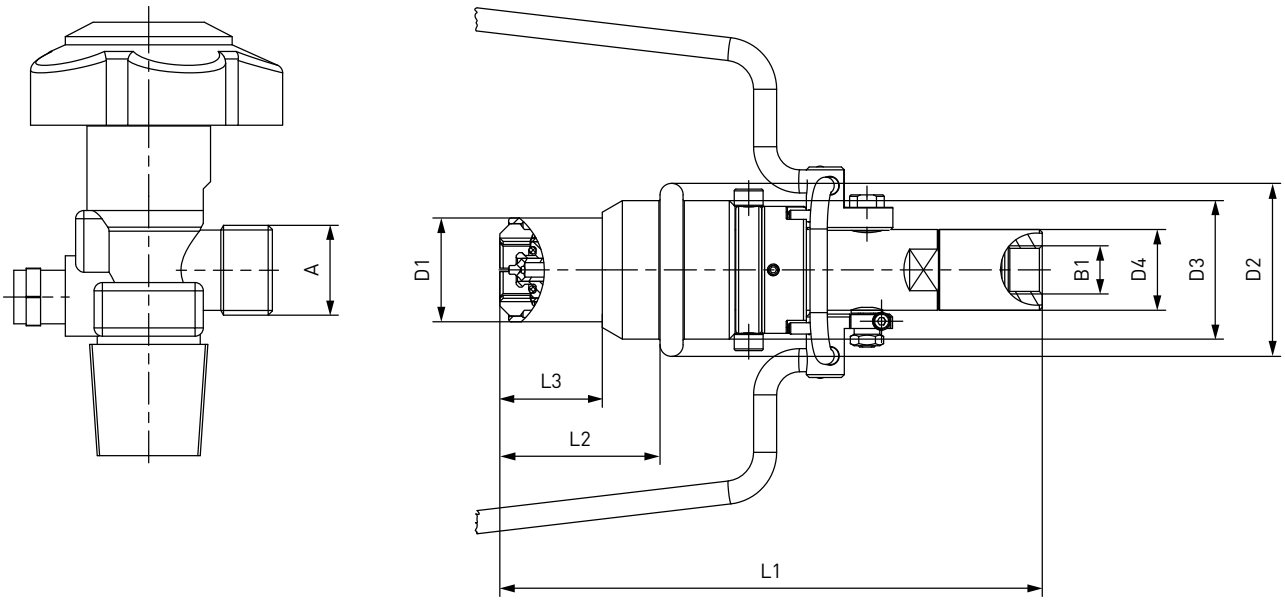
Part No.	Description	A (male thread)	B1 (male thread)	D1	D2	D3	D4	L1	L2	L3	L4
C1-16563	TW52	W21.8x1/14“*	M16x1.5	36	60	48	28	103	55.5	35.5	12

* acc. to DIN 477

» WEH® Connector **TW52**

ORDERING | WEH® TW52 Quick connector for residual pressure valves (incl. shut-off valve)

approx. dimensions (mm)



Part No.	Description	A (male thread)	B1 (female thread)	D1	D2	D3	D4	L1	L2	L3
C1-68486	TW52	W21.8x1/14"*	G3/8"	36	60	48	28	188	55.5	35.5

* acc. to DIN 477

Other connector sizes and versions on request.

Required information for ordering see page 7.

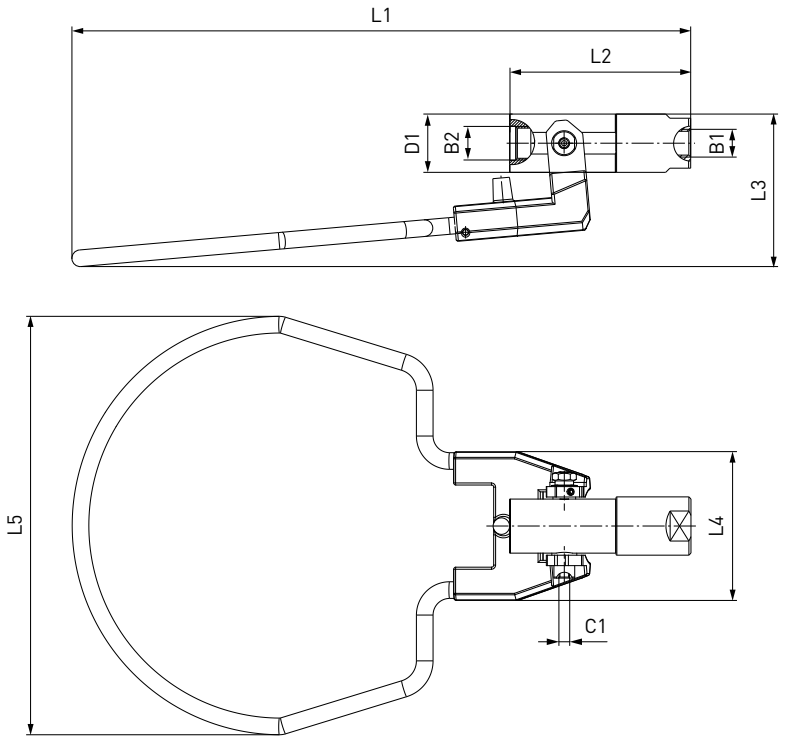
» WEH® Connector **TW52**

ACCESSORIES

The following accessories are available for the WEH® TW52 Quick connector:

WEH® $TVCO_2$ Shut-off valve

The WEH® $TVCO_2$ Shut-off valve enables to start or finish filling. Simply connect the $TVCO_2$ to the inlet 'B1' of the TW52 quick connector. The residual gas can be vented completely to the system via a recirculation hose. This prevents CO_2 from escaping into the atmosphere.



Part No.	Description	B1 (female thread)	B2 (female thread)	C1	D1	L1	L2	L3	L4	L5
C1-34605	$TVCO_2$	G1/4"	M16x1.5	M5	28	297	87	73	71.5	201

Other connector sizes and versions on request.

SPARE PARTS

Various parts are available as spares for the WEH® TW52 Quick connector.

Part No.	Description
On request	Front seal

When ordering the front seal, please indicate the part no. engraved on the connector.

» WEH® Connector **TW920**

DESCRIPTION

Features
- For cylinder valves with male thread and residual pressure valve
- Connection in seconds
- No hand tightening required
- Simplifies the connecting and filling procedure
- Suitable for right or left handed operation
- Pin within the valve is actuated automatically
- RPV is not removed from the valve so it can be used again
- WEH® Jaw locking mechanism

The WEH® TW920 Quick connector for filling refrigerants overcomes the need to remove the cylinder valve cartridge when filling thus facilitating cylinder connection and filling.
When applying pressure, the piston of the WEH® Connector moves forward and pulls out the pin of the residual pressure valve. Then filling procedure can start.

The WEH® TW920 is equipped with a HNBR front seal. Other sealing materials on request. It is the customer's responsibility to clarify the media compatibility.

Application
Quick connector for filling refrigerants of cylinders with male thread and residual pressure valve.

TECHNICAL DATA

Characteristic	Basic version
Max. allowable operating pressure PS	40 bar
Pilot pressure	6 - 8 bar (for opening residual pressure valve)
Temperature range	-10 °C up to +80 °C
Leak rate	1 x 10^{-3} mbar x l/s
Connection A	W21.8x1/14" for special cylinder valve with pin to pull out
Actuation	Manual actuation via operating loop (loop depending on type of cylinder valve)
Material	Brass and corrosion-resistant stainless steel
Sealing material	Front seal of HNBR

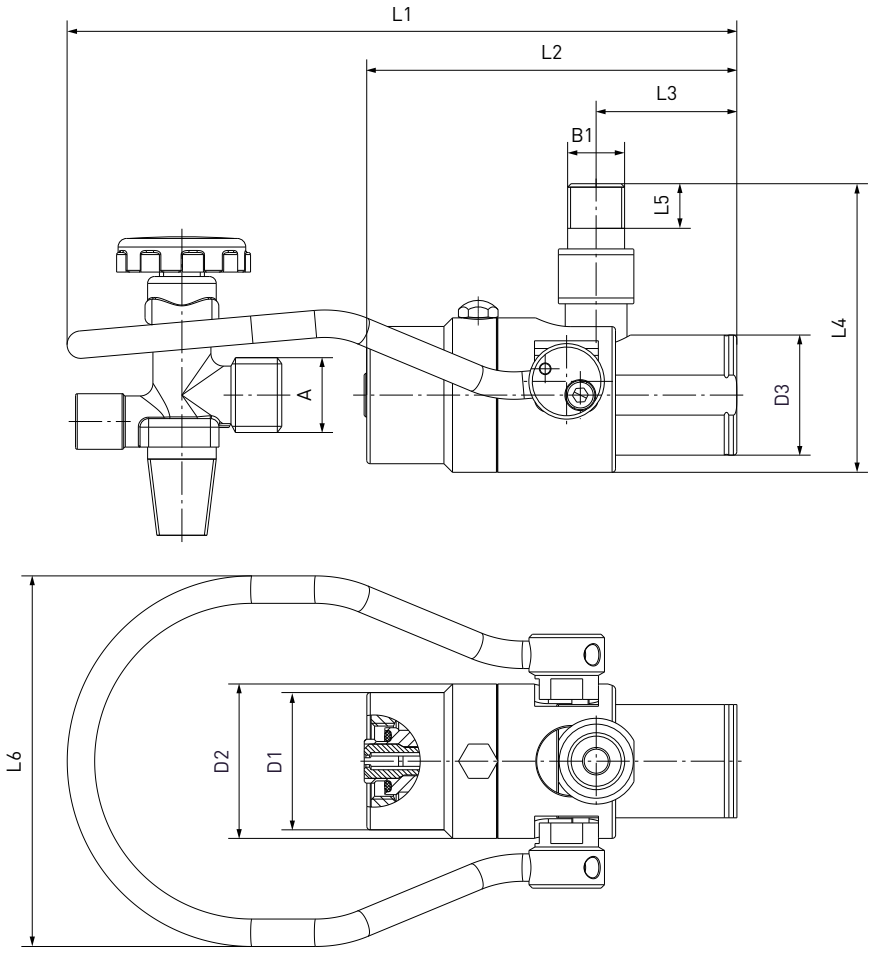
Other designs on request

Example of use:

» WEH® Connector **TW920**

ORDERING | WEH® TW920 Quick connector

approx. dimensions (mm)



Part No.	Description	A (male thread)	B1 (male thread)	D1	D2	D3	L1	L2	L3	L4	L5	L6
C1-77826	TW920	W21.8x1/14"	NPT 3/8"	40	45	35	195	108	41	84	13	108

Other connector sizes and versions on request.

Required information for ordering see page 7.

» WEH® Connector **TW920**

ACCESSORIES

The following accessories are available for the WEH® TW920 Quick connector:

WEH® TD1 Swivel joint

The WEH® TD1 prevents twisting of the filling hose and and simplifies radial alignment of the connector.

Part No.	Description	B1	B2
On request	TD1	On request	On request

Actuations

For the WEH® TW920 various actuations, e.g. loops, wire ropes etc. are available in different sizes and forms.
Please contact us!

Adaptors

Adaptors for connecting the quick connector to the filling hose are available on request.

SPARE PARTS

Various parts are available as spares for the WEH® TW920 Quick connector.

Part No.	Description
On request	Front seal

When ordering the front seal, please indicate the part no. engraved on the connector.

» WEH® Connector **TW920**

» WEH® Connector **TW141**

DESCRIPTION

Features
- Connection in seconds
- No hand tightening required
- For connection onto straight tubes, sealing on the external diameter
- No transverse forces generated on connection
- WEH® Jaw locking mechanism
- Ergonomic design
- High-grade materials

The WEH® TW141 Quick connector provides pressure-tight connections on straight tubes of copper, brass or aluminium and has earned a reputation for ease of operation.
The TW141 is a lever-actuated connector, which creates no transverse forces that can distort the test piece or filling port when connecting and disconnecting. WEH® TW141 is fitted with an internal safety feature which prevents the connector from being removed until a pressure lower than 5 bar is attained.

The WEH® TW141 is equipped with a NBR front seal. Other sealing materials on request. It is the customer's responsibility to clarify the media compatibility.

Application
Quick connector for pressure and function testing of straight tubes (sealing on external tube diameter), as for example leak testing of heat exchangers, air conditioning components and tube assemblies.
Filling of closed cooling circuits with refrigerants.

TECHNICAL DATA

Characteristics	Basic version
Nominal bore (DN)	3 to 5 mm, acc. to design
Max. allowable operating pressure PS	Vacuum up to 100 bar
Temperature range	-10 °C up to +80 °C
Leak rate	1 x 10^{-3} mbar x l/s
Actuation	Manual actuation via hand lever
Max. allowable surface finish of test piece	Rz8 µm
Material	Clamping jaws: corrosion resistant stainless steel Housing: anodized aluminium
Sealing material	Front seal of NBR

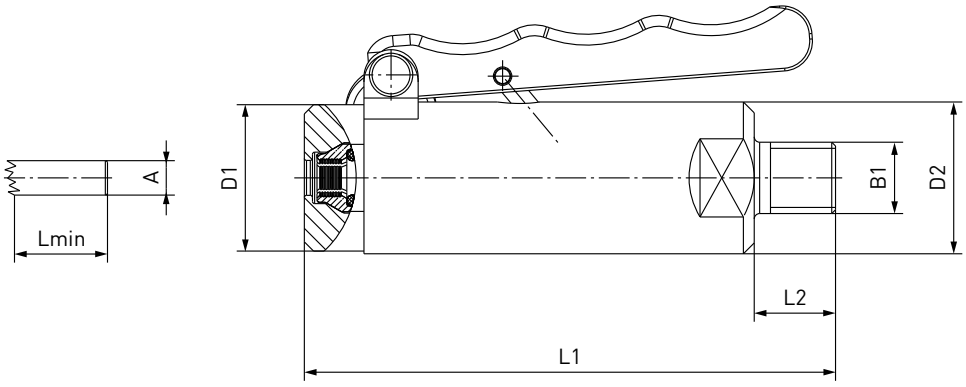
Other designs on request

Example of use:

» WEH® Connector **TW141**

ORDERING | WEH® TW141 Quick connector – body size 1

approx. dimensions (mm)



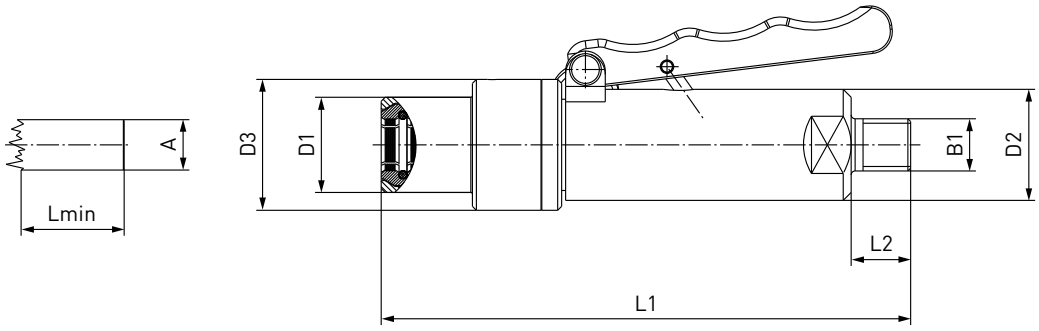
Part no.	Body size	Sealing range external tube Ø A	Tolerance	B1 (male thread)	D1	D2	L1	L2	Lmin*
C1-14967	1	6.0	± 0.2	NPT 1/4“	27	28	100	15	19
C1-17606	1	6.35 (1/4")	± 0.2	NPT 1/4“	27	28	100	15	19
C1-17750	1	7.9 (5/16")	± 0.2	NPT 1/4“	27	28	100	15	19
C1-14968	1	8.0	± 0.2	NPT 1/4“	27	28	100	15	19

* Lmin: minimum insertion length of test piece
Other connection sizes on request

» WEH® Connector **TW141**

ORDERING | WEH® TW141 Quick connector – body size 2 + 3

approx. dimensions (mm)



Part no.	Body size	Sealing range external tube Ø A	Tolerance	B1 (male thread)	D1	D2	D3	L1	L2	Lmin*
C1-17536	2	9.5 (3/8")	± 0.1	NPT 1/4"	21	28	33	134	15	19
C1-16773	2	10.0	± 0.1	NPT 1/4"	19	28	33	134	15	15
C1-16774	2	12.0	± 0.1	NPT 1/4"	21	28	33	134	15	15
C1-17751	2	12.7 (1/2")	± 0.1	NPT 1/4"	24	28	33	134	15	15
C1-16775	2	15.0	± 0.1	NPT 1/4"	24	28	33	134	15	15
C1-17959	3	15.9 (5/8")	± 0.1	NPT 1/4"	32	28	49	134	15	15
C1-16776	3	16.0	± 0.1	NPT 1/4"	32	28	49	134	15	15
C1-16777	3	18.0	± 0.1	NPT 1/4"	34	28	49	134	15	15
C1-18006	3	19.05 (3/4")	± 0.1	NPT 1/4"	34	28	49	134	15	15
C1-16778	3	22.0	± 0.1	NPT 1/4"	38	28	49	134	15	15
C1-17939	3	22.2 (7/8")	± 0.1	NPT 1/4"	38	28	49	134	15	15

* Lmin: minimum insertion length of test piece
Other connection sizes on request

Other connection types on request.

Required information for ordering see page 7.

» WEH® Connector **TW141**

ACCESSORIES

The following accessories are available for the WEH® TW141 Quick connector:

Adaptor / Plug

For the TW141 different adaptors for other media inlets are available.
If the WEH® Connector is to be used as a plug, the media inlet 'B1' can be sealed with a plug.

Adaptor

Plug

Part no.	Description	Connection
E29-30810	Adaptor	NPT 1/4" female thread - G1/4" female thread
E201-30366	Adaptor	NPT 1/4" female thread - G1/4" male thread
E29-934P	Adaptor	NPT 1/4" female thread - UNF 7/16" male thread
E29-900P	Plug	NPT 1/4" female thread

Anchor plate

WEH offers an anchor plate to create a safe, secure attachment for the TW141 and which can be used for all sealing ranges.

Part no.	Description
E29-45285	Anchor plate for TW141

SPARE PARTS

Various parts are available as spares for the WEH® TW141 Quick connector.

Part no.	Description
On request	Front seal

When ordering the front seal, please indicate the part no. engraved on the connector.

» WEH® Connector **TW221**

DESCRIPTION

Features
- Connection in seconds
- No hand tightening required
- For connection into straight tubes and bores
- No seal adjustment required
- Wide range of tube tolerances
- High-grade materials

The WEH® TW221 Quick connector provides a pressure-tight connection to bores and straight tubes of copper, steel or aluminium within seconds. The connector is suitable for pressure and vacuum testing with oil free air or gaseous media. The manually operated connector is secured to the component by its connection seal. In this case it is important that during testing, the test piece and seals have to remain absolutely dry to ensure proper functioning and sealing.

The WEH® TW221 is equipped with a SBR front seal. It is the customer's responsibility to clarify the media compatibility.

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

TECHNICAL DATA

Characteristics	Basic version
Nominal bore (DN)	2 to 4 mm, acc. to design
Max. allowable operating pressure PS	3 bar
Temperature range	+5 °C up to +80 °C
Leak rate	1 x 10^{-3} mbar x l/s
Material	Anodized aluminium
Sealing material	Front seal of SBR

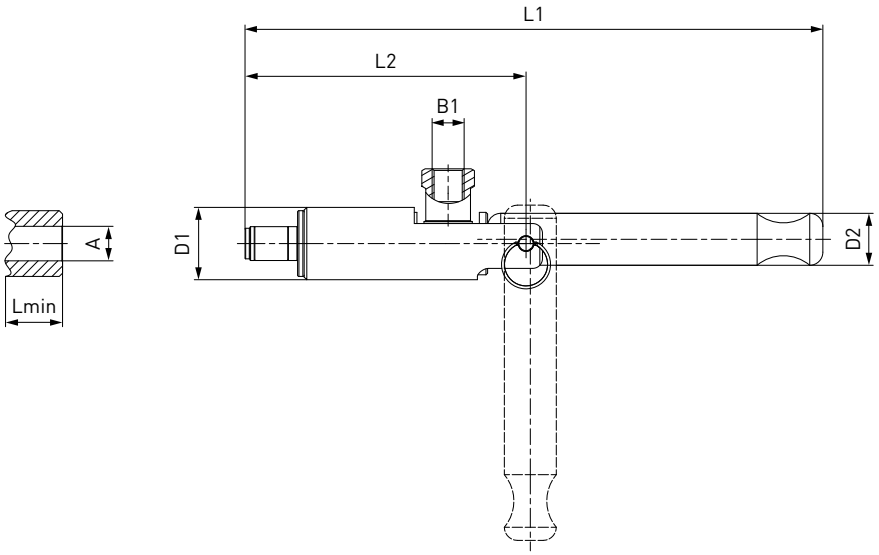
Other designs on request

Example of use:

» WEH® Connector **TW221**

ORDERING | WEH® TW221 Quick connector – body size 1 + 2

approx. dimensions (mm)



Part no.	Body size	Sealing range internal tube Ø A	B1 (female thread)	D1	D2	L1	L2	Lmin*	Replacement seal set** (consisting of 5 front seals + 5 o-rings)
C1-82309	1	9.5 - 10.4	G1/8“	22	16	176	86	16	B200B-89775
C1-82814	1	10.5 - 11.4	G1/8“	22	16	176	86	16	B200B-97248
C1-82305	1	11.5 - 12.4	G1/8“	22	16	176	86	16	B200B-90418
C1-82304	1	12.5 - 13.4	G1/8“	22	16	176	86	16	B200B-89774
C1-84246	2	13.5 - 14.4	G1/8“	22	16	186	96	29	B200B-91391
C1-84247	2	14.5 - 15.4	G1/8“	22	16	186	96	29	B200B-132009
C1-84248	2	15.5 - 16.4	G1/8“	22	16	186	96	29	B200B-90420
C1-84249	2	16.5 - 17.4	G1/8“	22	16	186	96	29	B200B-98586
C1-84251	2	17.5 - 18.4	G1/8“	22	16	186	96	29	B200B-95777
C1-82300	2	18.5 - 19.4	G1/8“	22	16	186	96	29	B200B-90416
C1-84252	2	19.5 - 20.4	G1/8“	22	16	186	96	29	B200B-90442
C1-82307	2	20.5 - 21.4	G1/8“	22	16	186	96	29	B200B-135789
C1-82308	2	21.5 - 22.4	G1/8“	22	16	186	96	29	B200B-95700
C1-84253	2	22.5 - 23.4	G1/8“	22	16	186	96	29	B200B-95894
C1-83865	2	23.5 - 24.4	G1/8“	22	16	186	96	29	B200B-84806

* Lmin: minimum insertion length of test piece
** Replacement seal sets for body size 2 with a sealing range > 13.5 mm always include 10 front seals
Note: required roundness of internal tube diameter max. 0.25 mm
Other connection sizes on request

Other connection types on request.

Required information for ordering see page 7.

» WEH® Connector **TW221**

ACCESSORIES

The following accessories are available for the WEH® TW221 Quick connector:

Screw plug for plug version

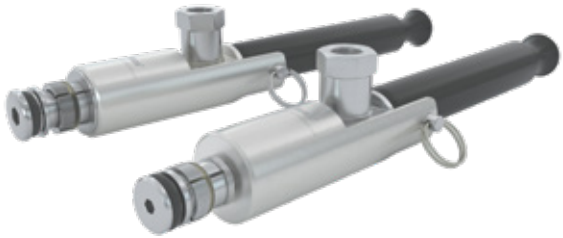
If the WEH® Connector is to be used as a plug, the media inlet 'B1' can be sealed with a screw plug of brass with a PVC sealing ring for low pressure range. It is recommended that the media compatibility of the seal be tested by the customer!

Part no.	Description	Connection (male thread)	Pressure range
E69-9200	Screw plug (low pressure)	G1/8"	0 - 50 bar

» WEH® Connector **TW221**

» WEH® Connector **TW230**

DESCRIPTION



Features
- Connection in seconds
- No hand tightening required
- For connection into straight tubes and bores
- WEH® Jaw locking mechanism
- No seal adjustment required
- Wide range of tube tolerances up to ± 0.25 mm
- High-grade materials

With the WEH® TW230 Quick connector straight tubes of copper, steel or aluminium can be easily tested for leak tightness in just seconds. The radial sealing system reliably seals inside tube and bore diameters from 9.5 mm to 22.2 mm and brigdes tube tolerances of up to ± 0.25 mm.
Connection to the straight tube is established by manual actuation of the clamping lever. Thanks to the WEH® Jaw locking mechanism the connector is securely located in the straight tube and the wear of the test piece is minimized as surface pressure is very low.
The TW230 is also suited for underwater, pressure decay and helium tests.

The WEH® TW230 is equipped with a NBR front seal. Other sealing materials on request. It is the customer‘s responsibility to clarify the media compatibility.

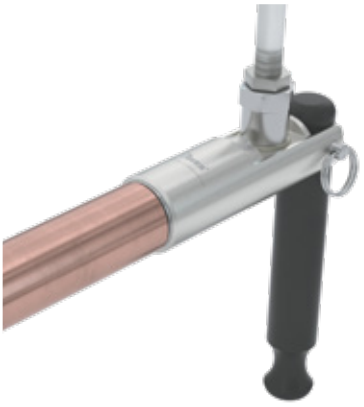
Application
Quick connector for pressure and vacuum testing of straight tubes and bores (sealing the internal tube diameter), as for example heat exchangers, pressure vessels, valves, transducers, compressors, condensers, evaporation coils, component and tubing systems, air conditioners, heating systems etc.

TECHNICAL DATA

Characteristics	Basic version
Nominal bore (DN)	2 to 5 mm, acc. to design
Max. allowable operating pressure PS	Vacuum up to 70 bar
Temperature range	+5 °C up to +80 °C
Leak rate	1 x 10^{-3} mbar x l/s
Max. allowable surface finish of test piece	Rz8 µm
Max. allowable material hardness of test piece	28 HRC
Material	Clamping jaws: corrosion-resistant stainless steel, hardened Housing: anodized aluminium
Sealing material	Front seal of NBR

Other designs on request

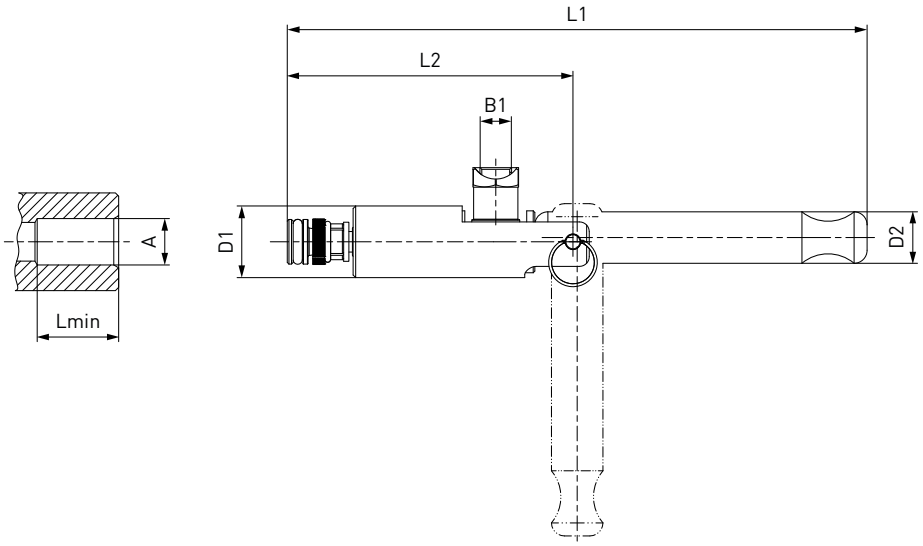
Example of use:



» WEH® Connector **TW230**

ORDERING | WEH® TW230 Quick connector – body size 1

approx. dimensions (mm)



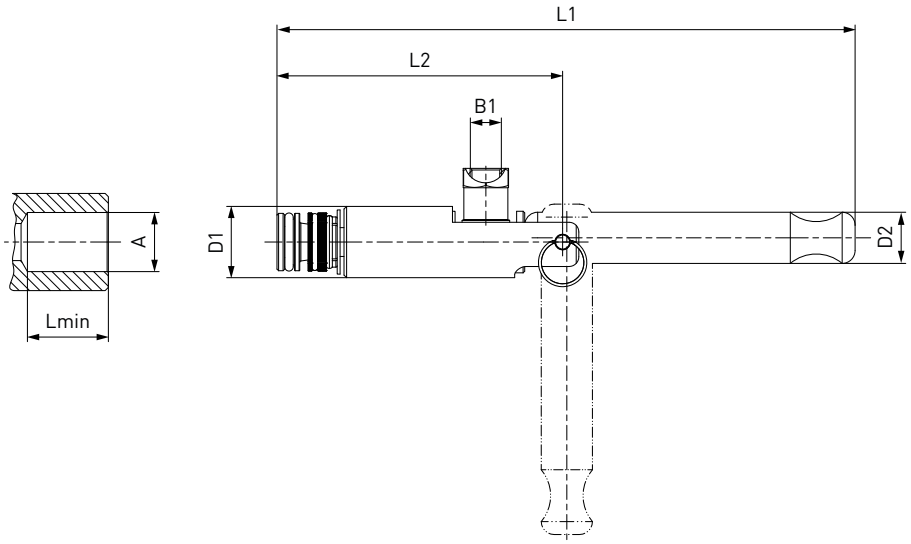
Part no.	Body size	Sealing range internal tube Ø A ± 0.25	B1 (female thread)	D1	D2	L1	L2	Lmin*	Replacement seal set (consisting of 5 front seals + 1 retaining ring for the clamping jaws)
C1-128668	1	9.5 (3/8")	G1/8"	22	16	178	87.5	13.5	B200B-129358
C1-128734	1	10.0	G1/8"	22	16	178	87.5	13.5	B200B-129364
C1-128742	1	11.0 (7/16")	G1/8"	22	16	178	87.5	13.5	B200B-129373
C1-128750	1	12.0	G1/8"	22	16	178	87.5	13.5	B200B-129381
C1-128756	1	12.7 (1/2")	G1/8"	22	16	178	87.5	13.5	B200B-129387
C1-128758	1	13.0	G1/8"	22	16	178	87.5	13.5	B200B-129389
C1-128767	1	14.0	G1/8"	22	16	178	87.5	13.5	B200B-129398

* Lmin: minimum insertion length of test piece
When ordering, please state if testing reinforced fibre glass or plastic test pieces.
Other connection sizes on request

» WEH® Connector **TW230**

ORDERING | WEH® TW230 Quick connector – body size 2

approx. dimensions (mm)



Part no.	Body size	Sealing range internal tube Ø A ± 0.25	B1 (female thread)	D1	D2	L1	L2	Lmin*	Replacement seal set** (consisting of 5 front seals + 2 retaining rings for the clamping jaws)
C1-128774	2	15.0	G1/8“	22	16	178.5	88	16.0	B200B-129405
C1-128778	2	15.5	G1/8“	22	16	178.5	88	16.0	B200B-129409
C1-128782	2	15.9 (5/8“)	G1/8“	22	16	178.5	88	16.0	B200B-129414
C1-128783	2	16.0	G1/8“	22	16	178.5	88	16.0	B200B-129415
C1-128789	2	16.5	G1/8“	22	16	178.5	88	16.0	B200B-129421
C1-128792	2	17.0	G1/8“	22	16	178.5	88	16.0	B200B-129424
C1-128798	2	18.0	G1/8“	22	16	178.5	88	16.0	B200B-129436
C1-128805	2	19.05 (3/4“)	G1/8“	22	16	178.5	88	16.0	B200B-129445
C1-128810	2	20.0	G1/8“	22	16	178.5	88	16.0	B200B-129450
C1-128820	2	22.0	G1/8“	22	16	178.5	88	16.0	B200B-129460
C1-128821	2	22.2 (7/8“)	G1/8“	22	16	178.5	88	16.0	B200B-129461

* Lmin: minimum insertion length of test piece
** Replacement seal sets for body size 2 with a sealing range < 15.9 mm only contain 1 retaining ring for the clamping jaws
When ordering, please state if testing reinforced fibre glass or plastic test pieces.
Other connection sizes on request

Other connection types on request.

Required information for ordering see page 7.

ACCESSORIES

The following accessories are available for the WEH® TW230 Quick connector:

Screw plug for plug version

If the WEH® Connector is to be used as a plug, the media inlet 'B1' can be sealed with a screw plug of stainless steel with an o-ring of NBR 70° Shore for high pressure range. It is recommended that the media compatibility of the seal be tested by the customer!

Part no.	Description	Connection (male thread)	Pressure range
W9329	Screw plug (high pressure)	G1/8"	0 - 350 bar

» WEH® Connector **TW241**

DESCRIPTION

Merkmale
- For connection onto straight tubes, sealing on the external diameter
- Self-retaining up to max. 70 bar
- Connection in seconds
- No hand tightening required
- WEH® Jaw locking mechanism
- No seal adjustment required
- Wide range of tube tolerances up to ± 0.25 mm
- High-grade materials

The WEH® TW241 Quick connector enables quick and easy leak testing of straight tubes of copper, steel or aluminium with an outer diameter of 6.0 to 22.2 mm. The connector is also suitable for underwater, pressure decay and helium testing.

The WEH® TW241 seals external diameters of straight tubes within seconds and bridges large tube tolerances of up to ± 0.25 mm with no operational adjustment of seals.

The WEH® Jaw locking mechanism provides maximum grip with minimum distortion of the test piece. There is no need for additional fixing. Operation is amazingly easy. Plug the WEH® Connector onto the tube, actuate the clamping lever and the pressure tight connection is made. An internal pressure support provides additional safety for the operator ensuring that disconnection is not possible until pressure has decreased to a safe value below 5 bar.

The WEH® TW241 is equipped with a chloroprene front seal. Other sealing materials on request. It is the customer's responsibility to clarify the media compatibility.

Application
Quick connector for pressure and vacuum testing of straight tubes (sealing on external tube diameter) as for example heat exchangers, pressure vessels, valves, transducers, compressors, condensers, evaporation coils, tubing systems, air conditioners, heating systems etc.

TECHNICAL DATA

Characteristics	Basic version
Nominal bore (DN)	4 to 6 mm, acc. to design
Max. allowable operating pressure PS	Vacuum up to 70 bar
Temperature range	+5 °C up to +80 °C
Leak rate	1 x 10^{-3} mbar x l/s
Max. allowable surface finish of test piece	Rz8 µm
Max. allowable material hardness of test piece	28 HRC
Material	Clamping jaws: corrosion-resistant stainless steel, hardened Housing: anodized aluminium
Sealing material	Front seal of chloroprene

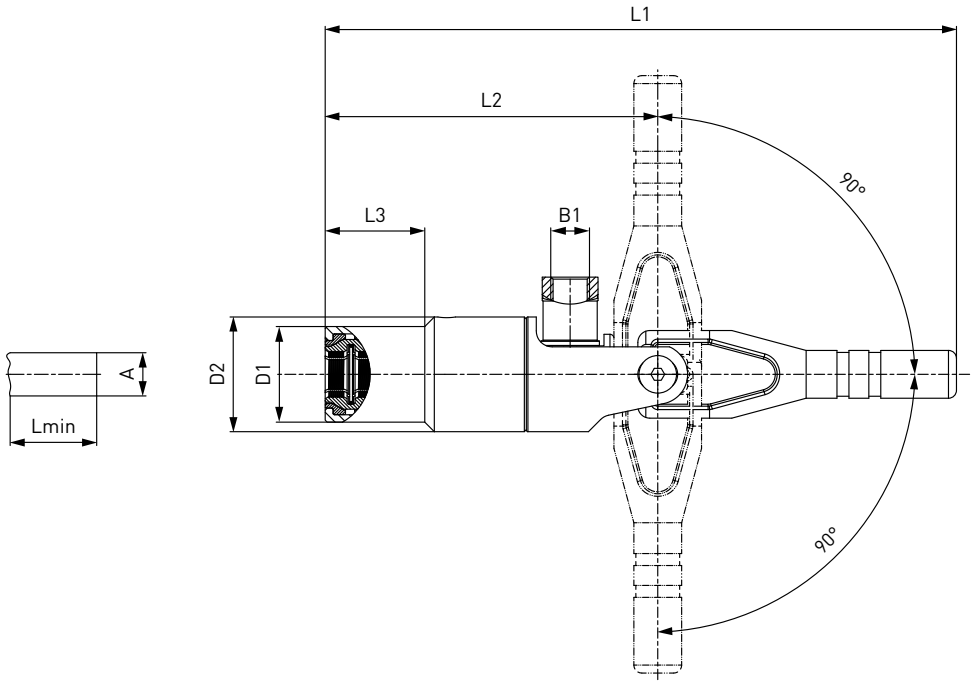
Other designs on request

Example of use:

» WEH® Connector **TW241**

ORDERING | WEH® TW241 Quick connector – body size 1

approx. dimensions (mm)



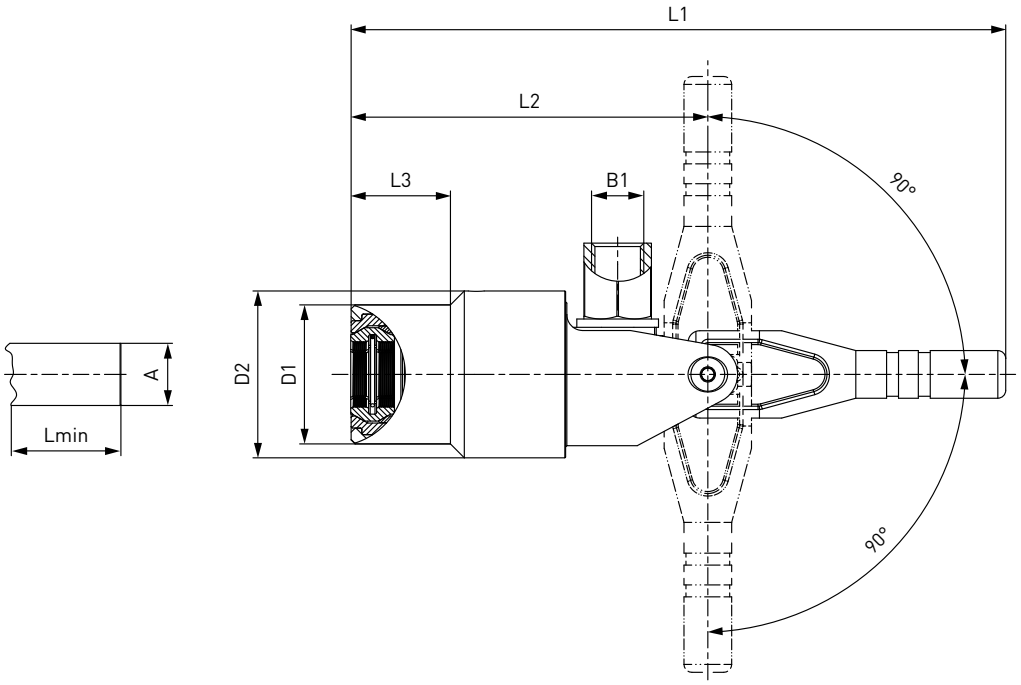
Part no.	Body size	Sealing range external tube Ø A ± 0.25	B1 (female thread)	D1	D2	L1	L2	L3	Lmin*	Replacement seal set (consisting of 5 front seals)
C1-130646	1	6.0	G1/8“	24	28.8	158.5	83.5	25	26.5	B202B-130704
C1-130647	1	6.35 (1/4“)	G1/8“	24	28.8	158.5	83.5	25	26.5	B202B-130705
C1-130654	1	7.9 (5/16“)	G1/8“	24	28.8	158.5	83.5	25	26.5	B202B-130713
C1-130655	1	8.0	G1/8“	24	28.8	158.5	83.5	25	26.5	B202B-130714
C1-130661	1	9.5 (3/8“)	G1/8“	24	28.8	158.5	83.5	25	26.5	B202B-130720
C1-130663	1	10.0	G1/8“	24	28.8	158.5	83.5	25	26.5	B202B-130722

* Lmin: minimum insertion length of test piece
When ordering, please state if testing reinforced fibre glass or plastic test pieces.
Other connection sizes on request

» WEH® Connector **TW241**

ORDERING | WEH® TW241 Quick connector – body size 2

approx. dimensions (mm)



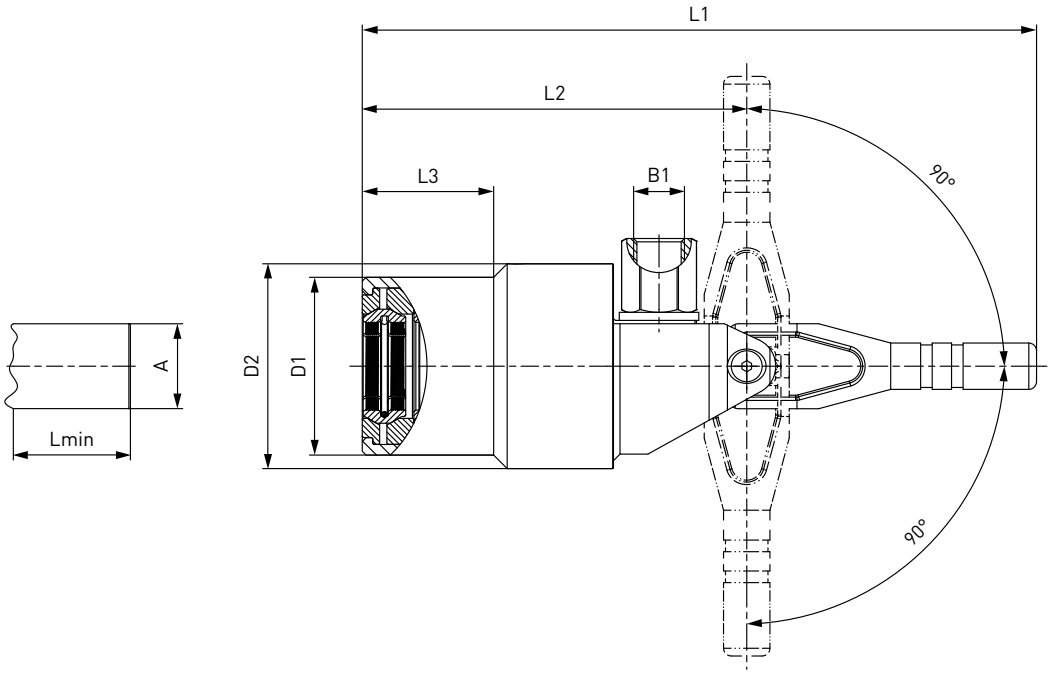
Part no.	Body size	Sealing range external tube Ø A ± 0.25	B1 (female thread)	D1	D2	L1	L2	L3	Lmin*	Replacement seal set (consisting of 5 front seals)
C1-130672	2	12.0	G1/4“	35	42	165	90	25	26.5	B202B-130732
C1-130674	2	12.7 (1/2“)	G1/4“	35	42	165	90	25	26.5	B202B-130734
C1-130685	2	15.9 (5/8“)	G1/4“	35	42	165	90	25	26.5	B202B-130745
C1-130686	2	16.0	G1/4“	35	42	165	90	25	26.5	B202B-130746

* Lmin: minimum insertion length of test piece
When ordering, please state if testing reinforced fibre glass or plastic test pieces.
Other connection sizes on request

» WEH® Connector **TW241**

ORDERING | WEH® TW241 Quick connector – body size 3

approx. dimensions (mm)



Part no.	Body size	Sealing range external tube Ø A ± 0.25	B1 (female thread)	D1	D2	L1	L2	L3	Lmin*	Replacement seal set (consisting of 5 front seals)
C1-130691	3	19.05 (3/4")	G1/4"	46	53	174.5	99.5	34	26.5	B202B-130752
C1-130694	3	22.0	G1/4"	46	53	174.5	99.5	34	26.5	B202B-130755
C1-130695	3	22.2 (7/8")	G1/4"	46	53	174.5	99.5	34	26.5	B202B-130756

* Lmin: minimum insertion length of test piece
When ordering, please state if testing reinforced fibre glass or plastic test pieces.
Other connection sizes on request

Other connection types on request.

Required information for ordering see page 7.

» WEH® Connector **TW241**

ACCESSORIES

The following accessories are available for the WEH® TW241 Quick connector:

Screw plug for plug version

If the WEH® Connector is to be used as a plug, the media inlet 'B1' can be sealed with a screw plug of stainless steel with an o-ring of NBR 70° Shore for high pressure range. It is recommended that the media compatibility of the seal be tested by the customer!

Part no.	Description	Connection (male thread)	Pressure range
W9329	Screw plug (high pressure)	G1/8"	0 - 350 bar
W9330	Screw plug (high pressure)	G1/4"	0 - 350 bar

Lever extension

As standard the TW241 quick connector has a short lever for easy connection to components at difficult-to-access ports. A lever extension for applications with no restricted space is optionally available enhancing comfort in operation.

Part no.	Description
E67-137059	Lever extension for TW241

» WEH® Connector **TW241**

» Technical appendix

Definitions

Abbreviation	Definition	
Pressure specifications	*(all pressure specifications are to be understood as overpressure, unless otherwise stated)*	
PN	Nominal pressure	Nominal pressure after temperature compensation at 15 °C (59 °F)
PS	Max. allowable operating pressure	Maximum allowable operating pressure acc. to Pressure Equipment Directive 2014/68/EU, Article 2 paragraph 8
PT	Hydrostatic test pressure	Hydrostatic test pressure acc. to Pressure Equipment Directive 2014/68/EU, Annex I no. 7.4
PP	Pilot pessure	Actuation pressure for hydraulic and pneumatic components
PC	Cracking pressure	Pressure at which the check valve opens and the first indication of flow occurs
WP	Working pressure	'Working pressure' means the maximum pressure to which a component is designed to be subjected to and which is the basis for determining the strength of the component under consideration
MAWP	Max. allowable working pressure	Max. allowable operating pressure at which the weakest point of the system or the vessel (e.g. cylinder valve) can operate at a certain temperature during normal operation
Dimensions		
L1, L2, L3 ...	Length specification	
D1, D2, D3 ...	Diameter specification	
A/F(1), A/F(2) ...	Wrench size specification	
Ports		
A / X	Customer-specific port (test piece, sample, cylinder valve, handwheel respiratory protective equipment)	
B1, B2, B3 ...	Media ports	
C1, C2, C3 ...	Gas recirculation ports	
P1, P2, P3 ...	Pilot pressure ports	
MA1, MA2 ...	Measuring ports	
Q	Drain port filter	
G	Mounting bores	
Others		
DN	Nominal size (DN) acc. to Pressure Equipment Directive 2014/68/EU, whereby the largest, pressurized diameter of the media or pilot pressure connections of the WEH® Device (A, B1, B2, B3 or C1, C2, C3 and P1, P2, P3) which faces the customer's pipe system, is relevant.	
µm	Max. diameter of the filtered particle	
Kv	Is the discharge of water in m^3/h at a pressure drop of 1 bar (14.5 psi), acc. to DIN/EN 60534-2	
Cv	Is the discharge of water in gallons per minute at a pressure drop of 1 psi, acc. to DIN/EN 60534-2	
IR	Infrared data interface	
ENR	Exchangeable data interface (exchangeable nozzle receiver)	

» Technical appendix

Definitions

Abbreviation	Definition
TS	Maximum allowable temperature acc. to Pressure Equipment Directive 2014/68/EU, Article 2 paragraph 9
Breakaway force	Is the force range, in which the breakaway releases
NC	Normally closed (initial position of shut-off valve)
NO	Normally open (initial position of shut-off valve)

Technical explanations

Term	Definition
Temperature range	Is the temperature range in which the WEH® Product can be used. If no explicit information on medium and ambient temperature is given, this temperature range applies to both medium and environment.
Media temperature range	Is the temperature range of the medium used, which can flow through the WEH® Product (may change depending on the time of measurement).
Ambient temperature range	Is the temperature range of the environment in which the WEH® Product can be used.
Leak rate	Is the maximum external leak rate, which the WEH® Product exhibits in delivery condition.
Internal leak rate	The internal leak rate depends, among other things, on type of application, medium and pressure difference on the WEH® Product. On request it can be specified more precisely.
Max. side load	Is the max. allowable sum of all external forces that may act on the device under intended use. **Note:** External forces can affect the life time of WEH® Products and can cause damage. Tensile and transverse loads as well as vibrations and pressure impacts need to be considered, e.g. by user side measures such as on site mountings and similar. Therefore, lateral forces such as whipping hoses or other equipment must be avoided. WEH® Products should be installed in such a way, that lateral forces which could lead to leakage or damage can not occur. Special applications require a special consultation before selecting the product.
Products with pneumatic actuation	The customer has to ensure there is adequate axial movement when pneumatically actuated WEH® Products are used in automated systems, see maximum side load. Ideally the products should be mounted with a floating joint or introduced individually to prevent the possibly existing clamping jaws getting blocked or jammed in the thread of the test piece.
Sealing material	On request the WEH® Product can be adapted to customer specific applications regarding to the sealing materials used. The clarification of the media compatibility and suitability of the adapted WEH® Product for the final application is always the responsibility of the end user.
Corrosion resistant	WEH® Products are designed for use in temperate climate zones - with low levels of humidity and salinity in the air. An accelerated formation of rust or corrosion may occur at or near the sea. Therefore, reduce the inspection interval recommended for normal use and send in the WEH® Product for maintenance immediately if you notice increased soot, rust or corrosion.
Storage / life time of components	There are certain requirements for every WEH® Product. WEH® Products are generally products which may be subject to wear and fatigue during operation and depending on your individual application/use. For details - in particular regarding the corresponding minimum inspection and maintenance intervals – please refer to the respective operating instructions for the WEH® Product.

» Technical appendix

Further explanations

Subject	Definition
Technical data	Unless otherwise stated, the technical data in catalogs, data sheets and operating instructions are based on tests with nitrogen that are in the development phase or at the end of development. Leakage data are based on measurements with helium.
Intended use	For the intended use of WEH® Products, please refer to the respective operating instructions. The following applications are generally excluded for WEH® H_2 and CNG products, unless these are expressly permitted in the operating instructions: • aerospace applications, e.g. in aircrafts • shipping applications • applications offshore and in littoral areas • applications within defense and weapons technology
Safe product selection	Our WEH® Products are designed to be operated by qualified professional users (insofar as WEH® Products are also designed to be operated by other users in individual cases, this is explicitly stated in the corresponding operating instructions). Please note that WEH does not know your system and therefore - also due to the large number of different potential applications of WEH® Products - cannot perform tests on all potential types of application. You alone are responsible for the selection, configuration and suitability of WEH® Products, especially according to the requirements of your system. Before purchasing WEH® Products, please particularly ensure that our products are compatible with your intended use, your performance data, your material and fluids, your system concept and your system limits according to our product specifications. Please also consider your technical and legal requirements for operation, handling and maintenance. The quality and safety of WEH® Products is our highest priority. For this reason, WEH® Products may not be used outside the specifications in the relevant data sheets and product descriptions. If you are not sure whether the WEH® Product is suitable for your system and intended use, please contact us in advance. We also strongly recommend that you refrain from using third-party spare parts or a combination of WEH® Products with unsuitable third-party products. You alone are responsible for reviewing the suitability of third-party products. WEH® Products and WEH® Spare parts comply with our quality and safety standards.
Explanation on the Pressure Equipment Directive	In general, WEH® Products with a maximum allowable operating pressure of more than 0.5 bar (PS) fall within the scope of application of the Pressure Equipment Directive 2014/68/EU, are generally classified as pressure accessories in accordance with Article 2 (5) of the same and are considered to be similar to piping. These WEH® Products may not be used as safety accessories. Furthermore, it is pointed out, that these WEH® Products are designed and placed on the market in accordance with the requirements of Article 4 (3) of the Pressure Equipment Directive 2014/68/EU. For some products a different classification and/or categorisation is required or can be conducted on request. In these cases, if legally required, a conformity assessment procedure in accordance with Annex III of the Pressure Equipment Directive 2014/68/EU can and will also be conducted and the conformity can be declared by means of an EU Declaration of Conformity in accordance with Annex IV of the Pressure Equipment Directive 2014/68/EU. In these cases, the EU Declaration of Conformity is enclosed with the product.
External change management	WEH reserves the right to update, optimise and adjust its products continuously. This may result in corresponding changes of the product. Customers will be informed proactively or unsolicited by WEH only in individual cases about product updates, product optimisations and/or product adaptations that have been carried out. You are free to contact WEH at any time to request information about any product updates, product optimisations and/or product adjustments.

» Brochure data

This catalog was created diligently and on the basis of decades of experience.

All information/recommendations in this catalog are non-binding and are particularly subject to possible deviations or changes. For any binding information/recommendations, please refer to the verified information/recommendations in our individual orders. Particularly, due to the wide range of possible applications of WEH® Products and the unknown parameters and operating conditions linked to them, the accuracy and/or completeness of the information/recommendations in this catalog cannot be guaranteed with respect to certain individual cases. In doing so, we would like to refer once again to the information/recommendations provided in individual orders.

The application limits indicated in this catalog (e.g. for pressure, temperature, etc.) are generally theoretical values determined in a test environment. As the concrete operating conditions could differ, we cannot ensure that these values apply to a specific customer application. During the practical use, you should particularly consider that the mutual influence of operational parameters could result in changes of the maximum values. Especially, in case of any unusual operating conditions, please contact WEH before using any WEH® Products. We therefore strongly recommend that you also require any necessary binding information/recommendations to be included by us in the individual orders.

Furthermore, we point out that we cannot assume any warranty or accept any responsibility for printing errors, incomplete information or misinterpretations. Illustrations and/or images are particularly provided for illustrative purposes only and may differ in some details from the actual product. Moreover, dimensions and other technical details in this catalog are non-binding information and are provided for illustrative purposes only. The product's exact form and design result exclusively from the specific individual order. In particular, certain information/recommendations in the catalog only become integral part of the contract if they have been expressly contractually agreed.

Only the latest version of our catalog and other product related documents is valid and applicable. Please ensure that you always use the latest catalog's and documents' versions. Please feel free to contact WEH at any time and request the latest versions.

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MD-10004-L01-R2.4.0-03