

2019

## **WEH<sup>®</sup> Connectors**

**Pressure-tight connections in seconds  
to threads, tubes, beads, etc.**

**Connection solutions for industrial applications**

Catalogue 35 | V1.1



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## » Introduction

### WEH® Quick connectors for pressure and function testing, filling and plugging

WEH is one of the leading manufacturers of quick connectors for pressure and function testing. For over 40 years, the unique jaw locking mechanism developed by WEH has represented a leap in the efficiency of leak testing.

#### Extensive connection possibilities

Internal or external threads, straight tubes, beads, collars, swages/flares or bores: WEH offers a solution for almost every application where a connection is needed. A suitable testing connector is available for each type of connection. We offer customer-tailored solutions for special applications even from small quantities.



In addition to the benefits the WEH® Jaw locking mechanism offers, you will no longer need pre-mounted coupling systems when using a WEH® Connector. It is not necessary to attach a counterpart to the component to be tested - with the WEH® Connectors you simply connect to the existing ports.

#### Connections in seconds

Pressure testing of components for leak tightness and function, whether manual, pneumatic or fully automatic, must be simple and time-saving. WEH® Connectors are simply placed onto / over or into the inlet of the test piece and the pressure-tight connection is immediate. Laborious thread connections and tightening of pressure test hoses is no longer needed and intricate testing devices are a thing of the past. The WEH® Connectors are designed for pressures up to several 1000 bar depending on connection type and test piece. In comparison to threaded connections there are significant time and cost reductions due to the efficient design of WEH® Connectors.

As a long standing partner to the international automotive, hydraulic and other manufacturing industries, WEH offers advanced solutions to make production processes faster, cost effective and more efficient.

### 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 internal and external 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

### Applications

WEH® Quick connectors have become standard in the general industry worldwide. Where all supply lines had to be screwed on engine test benches, now the innovative WEH® Connectors enable pressure-tight connections in seconds.

Increase your productivity using WEH® Connectors and benefit from the significant advantages:

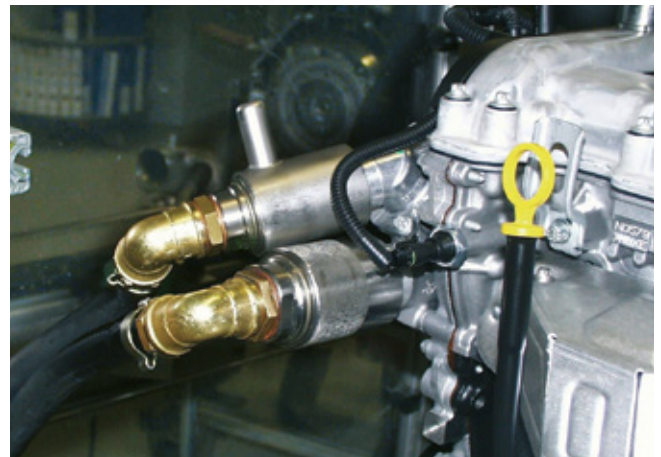
- Safe and pressure-tight connections
- Reduction of connecting times → cost saving
- Ease of operation
- Operators' joints are protected from RSI

Connection solutions for hydraulic, pneumatic and fluid applications include testing of pressure vessels, fluid lines, hydraulic aggregates / hydraulic pumps / hydraulic blocks, pneumatic components, air engines, engines, injector pumps, steering racks, cylinder and automotive components.

### Examples of use



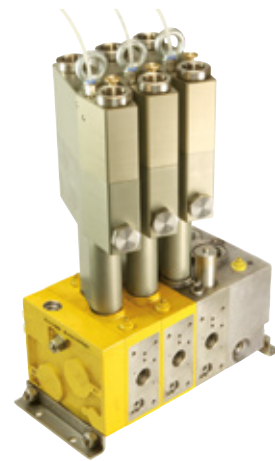
TW723 | Testing of engines



TW800 | Testing of engines



TW17H | Testing of injection pumps



TW17V | 3 x twin connector for testing of hydraulic pumps

## » Product overview

### WEH® Connectors for internal threads



### WEH® Connectors for external threads











### WEH® Universal connectors for threads, tubes, beads, etc.



### Special connectors



## » Connection possibilities

| Type  | Max. allowable operating pressure<br>bar | External threads  | Internal threads  | Straight tubes  | Holes and bores   | Swaged and flared  | Beads   | Collars   | Barbs   |
|-------|--|---|---|---|---|--|---|---|---|
|       |  |  |  |  |  |  |  |  |  |
| TW17  | 350                                      |   | ✓   |   |   |  |   |   |   |
| TW19  | 350                                      |   | ✓   |   |   |  |   |   |   |
| TW05  | 5 - 12                                   |   | ✓   |   |   |  |   |   |   |
| TW03  | 345                                      |   | ✓   |   |   |  |   |   |   |
| TW18  | 350                                      | ✓   |   |   |   | ✓  | ✓   | ✓   | ✓   |
| TW04  | 50                                       | ✓   |   |   |   |  |   |   |   |
| TW800 | 50                                       | ✓   |   |   |   | ✓  | ✓   | ✓   | ✓   |
| TW850 | 630                                      | ✓   |   |   |   | ✓  | ✓   | ✓   | ✓   |
| TW130 | 350                                      | ✓*  | ✓*  |   |   | ✓  | ✓   | ✓   | ✓*  |
| TW141 | 100                                      |   |   | ✓   |   |  |   |   |   |
| TW221 | 3  |   |   | ✓   | ✓   | ✓  | ✓   | ✓   | ✓   |
| TW230 | 70                                       |   |   | ✓   | ✓   |  |   | ✓   | ✓   |
| TW241 | 70                                       |   |   | ✓   |   |  |   |   |   |
| TW01  | 9  |   | ✓   | ✓   | ✓   | ✓  | ✓   | ✓   | ✓   |
| TW02  | 35                                       | (✓)   |   | ✓   |   | ✓  | ✓   | ✓   | ✓   |

\* The test piece profile must allow a firm grip!

Automation is possible for many types. Please contact us!  
Please note the relevant information on page 69, further notes.

## 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



## » WEH® Connector TW17

### DESCRIPTION



#### Features

- Connection in seconds
- No hand tightening required
- WEH® Jaw locking mechanism
- Modified clamping jaws for increased flow
- Ergonomic design
- High-grade materials
- Different actuations
- Automation possible
- Testing devices are eliminated

The WEH® TW17 Quick connector is designed for sealing standardized internal thread applications. The higher the test pressure the tighter the WEH® Connector will clamp itself into the thread of the test piece and provides a pressure-tight connection in seconds. The front o-ring reliably seals the connection and no additional clamping devices are required. Time-consuming and expensive testing devices are eliminated.

Bores have been added as standard to the clamping jaws for body sizes 5 - 6 of the WEH® TW17 Connector to increase flow rates.

The WEH® TW17 Connector is available with different actuations:

TW17H - Manual actuation via lever

TW17V - Pneumatic actuation via valve head

TW17P - Pneumatic actuation for external manual, semi or fully automatic control systems

The actuation can be easily changed at any time by simply unscrewing the rear part of the connector and replacing it with the chosen actuation.



TW17 with bores for increased flow

Special versions, e.g. connectors in longer or shorter versions, as a plug or with hydraulic actuation etc. are possible (see special solutions).

#### Application

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

**Note:** For using the WEH® Connectors with pneumatic actuation and clamping jaws in an automated system please observe the technical note on page 69.

### TECHNICAL DATA

| Characteristics                      | Basic version  |
|--------------------------------------|--|
| Max. allowable operating pressure PS | Vacuum up to 350 bar   |
| Pilot pressure                       | 6 - 12 bar compressed air  |
| Pilot pressure port P1               | G1/8" internal thread  |
| Pilot pressure port P2               | G1/4" internal thread  |
| Temperature range                    | +5 °C up to +80 °C   |
| Leak rate                            | $1 \times 10^{-3}$ mbar x l/s  |
| Actuation                            | H = manual actuation via lever<br>V = pneumatic actuation via valve head<br>P = pneumatic actuation for external manual, semi or fully automatic control systems |
| Material                             | Corrosion resistant stainless steel, anodized aluminium  |
| Sealing material                     | Front seal of NBR  |

Other designs on request

#### Example of use:

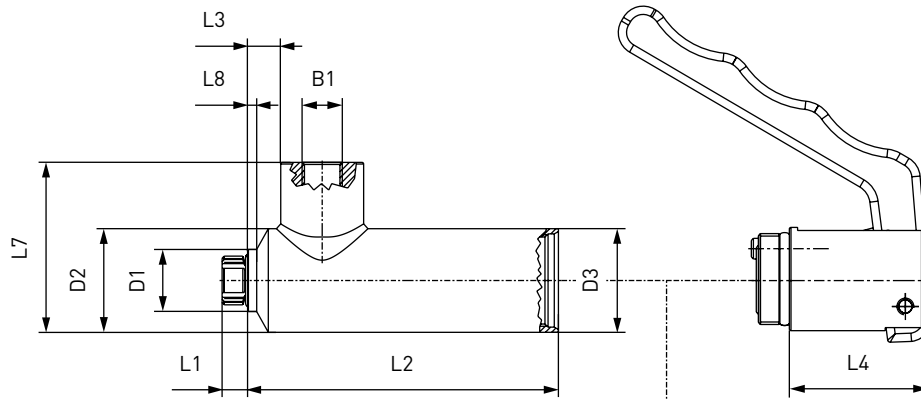




# » WEH<sup>®</sup> Connector TW17

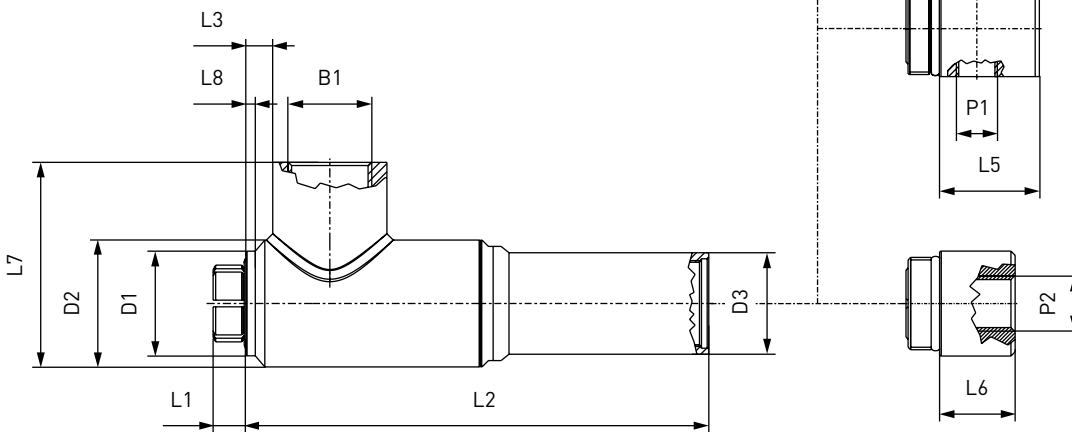
## ORDERING | WEH<sup>®</sup> TW17 Quick connector

approx. dimensions (mm)



**H**  
Manually by depressing the lever.  
*Medium effort required.*

### Body size 1 - 4



**V**  
Pneumatically by pressing the valve head.  
*Very little effort required.*

**P**  
Pneumatically for external manual, semi or fully automatic control systems

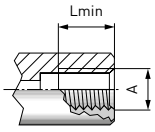
### Body size 5 - 6

| Body size | B1 (internal thread) | D1   | D1*  | D2   | D2*  | D3   | L1   | L2    | L3   | L4   | L5   | L6   | L7   | L8  | L8* |
|-----------|----------------------|------|------|------|------|------|------|-------|------|------|------|------|------|-----|-----|
| 1         | G1/8"                | 15.0 | 15.0 | 25.0 | 25.0 | 25.0 | 8.0  | 75.0  | 8.0  | 33.5 | 24.0 | 18.0 | 44.0 | 2.5 | 2.5 |
| 2         | G1/4"                | 19.0 | 20.5 | 27.0 | 27.0 | 27.0 | 9.0  | 75.0  | 9.0  | 32.0 | 18.0 | 18.0 | 40.0 | 2.5 | 5.0 |
| 3         | G3/8"                | 23.0 | 26.0 | 32.0 | 32.0 | 32.0 | 12.0 | 88.0  | 9.5  | 35.0 | 18.0 | 18.0 | 50.0 | 2.0 | 4.0 |
| 4         | G1/2"                | 27.0 | 29.0 | 37.0 | 37.0 | 37.0 | 12.0 | 88.0  | 8.0  | 35.0 | 18.0 | 18.0 | 55.0 | 3.0 | 4.0 |
| 5         | G3/4"                | 33.0 | 40.5 | 40.0 | 45.0 | 32.0 | 14.0 | 145.0 | 8.0  | 35.0 | 18.0 | 18.0 | 68.5 | 3.0 | 8.0 |
| 6         | G1"                  | 40.0 | 46.5 | 49.0 | 49.0 | 32.0 | 14.0 | 168.0 | 18.0 | 35.0 | 18.0 | 18.0 | 77.0 | 3.0 | 5.0 |

\* applies to SAE J1926

## » WEH® Connector TW17

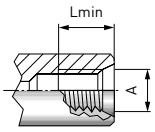
Metric ISO thread to DIN 13 - acc. to DIN 3852 part 1, form X and Y



| Part no.                 | Body size | Thread A<br>(internal thread) | Lmin* |
|--------------------------|-----------|-------------------------------|-------|
| <b>TW17...-W9031-025</b> | 1         | M10x1.0                       | 7.0   |
| <b>TW17...-W9033-045</b> | 2         | M12x1.0                       | 9.5   |
| <b>TW17...-W9034-045</b> | 2         | M12x1.5                       | 9.5   |
| <b>TW17...-W9035-045</b> | 2         | M14x1.5                       | 9.5   |
| <b>TW17...-W9036-065</b> | 3         | M16x1.5                       | 10.5  |
| <b>TW17...-W9037-065</b> | 3         | M18x1.5                       | 10.5  |
| <b>TW17...-W9038-085</b> | 4         | M20x1.5                       | 10.5  |
| <b>TW17...-W9039-085</b> | 4         | M22x1.5                       | 10.5  |
| <b>TW17...-W9040-125</b> | 5         | M24x1.5                       | 11.0  |
| <b>TW17...-W9043-125</b> | 5         | M26x1.5                       | 11.0  |

\* Lmin: minimum thread length  
Other connector sizes on request

Metric ISO thread to DIN 13 - acc. to ISO 6149-1

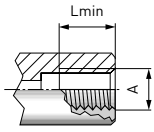


| Part no.                 | Body size | Thread A<br>(internal thread) | Lmin* |
|--------------------------|-----------|-------------------------------|-------|
| <b>TW17...-W9082-025</b> | 1         | M10x1.0                       | 7.0   |
| <b>TW17...-W9083-045</b> | 2         | M12x1.5                       | 9.5   |
| <b>TW17...-W9084-045</b> | 2         | M14x1.5                       | 9.5   |
| <b>TW17...-W9085-065</b> | 3         | M16x1.5                       | 10.5  |
| <b>TW17...-W9086-065</b> | 3         | M18x1.5                       | 10.5  |
| <b>TW17...-W9133-085</b> | 4         | M20x1.5                       | 10.5  |
| <b>TW17...-W9087-085</b> | 4         | M22x1.5                       | 10.5  |
| <b>TW17...-W9092-125</b> | 5         | M27x2.0                       | 11.0  |

\* Lmin: minimum thread length  
Other connector sizes on request

## » WEH<sup>®</sup> Connector TW17

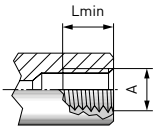
Whitworth tube thread to DIN EN ISO 228-1 - acc. to DIN 3852 part 2, form X and Y



| Part no.          | Body size | Thread A<br>(internal thread) | Lmin* |
|-------------------|-----------|-------------------------------|-------|
| TW17...-W9000-025 | 1         | G1/8"                         | 7.0   |
| TW17...-W9001-045 | 2         | G1/4"                         | 9.5   |
| TW17...-W9002-065 | 3         | G3/8"                         | 10.5  |
| TW17...-W9003-085 | 4         | G1/2"                         | 10.5  |
| TW17...-W9005-125 | 5         | G3/4"                         | 11.0  |
| TW17...-W9006-165 | 6         | G1"                           | 12.5  |

\* Lmin: minimum thread length  
Other connector sizes on request

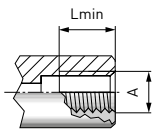
BSPT (tapered Whitworth tube thread) - acc. to DIN 3852 part 2, form X and Y



| Part no.          | Body size | Thread A<br>(internal thread) | Lmin* |
|-------------------|-----------|-------------------------------|-------|
| TW17...-W9024-025 | 1         | BSPT 1/8"                     | 7.0   |
| TW17...-W9025-045 | 2         | BSPT 1/4"                     | 9.5   |
| TW17...-W9026-065 | 3         | BSPT 3/8"                     | 10.5  |
| TW17...-W9027-085 | 4         | BSPT 1/2"                     | 10.5  |
| TW17...-W9029-125 | 5         | BSPT 3/4"                     | 11.0  |
| TW17...-W9030-165 | 6         | BSPT 1"                       | 12.5  |

\* Lmin: minimum thread length  
Other connector sizes on request

NPT thread (ANSI/ASME B1.20.1-1983) - acc. to SAE J476a

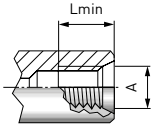


| Part no.          | Body size | Thread A<br>(internal thread) | Lmin* |
|-------------------|-----------|-------------------------------|-------|
| TW17...-W9007-025 | 1         | NPT 1/8"                      | 7.0   |
| TW17...-W9008-045 | 2         | NPT 1/4"                      | 9.5   |
| TW17...-W9009-065 | 3         | NPT 3/8"                      | 10.5  |
| TW17...-W9010-085 | 4         | NPT 1/2"                      | 10.5  |
| TW17...-W9012-125 | 5         | NPT 3/4"                      | 11.0  |
| TW17...-W9013-165 | 6         | NPT 1"                        | 12.5  |

\* Lmin: minimum thread length  
Other connector sizes on request

## » WEH® Connector TW17

SAE-O-Ring Boss - acc. to SAE J1926 / ISO 11926



| Part no.                 | Body size | Thread A<br>(internal thread) | Lmin* |
|--------------------------|-----------|-------------------------------|-------|
| <b>TW17...-W9047-025</b> | 1         | UNF 7/16"-20                  | 7.0   |
| <b>TW17...-W9048-045</b> | 2         | UNF 1/2"-20                   | 9.5   |
| <b>TW17...-W9049-045</b> | 2         | UNF 9/16"-18                  | 9.5   |
| <b>TW17...-W9052-065</b> | 3         | UNF 3/4"-16                   | 10.5  |
| <b>TW17...-W9053-085</b> | 4         | UNF 7/8"-14                   | 10.5  |
| <b>TW17...-W9055-125</b> | 5         | UN 1 1/16"-12                 | 11.0  |
| <b>TW17...-W9056-165</b> | 6         | UN 1 5/16"-12                 | 11.0  |

\* Lmin: minimum thread length  
Other connector sizes on request

Other connector versions on request.

Required information for ordering see page 7.

When ordering WEH® TW17 please indicate in addition to the details requested on page 7 the following information:

### 1. Part no.

Please insert within the part no. the letter corresponding to the desired type of actuation (H, V or P) in place of the position indicator (...)

Example: TW17H-W9031-025

### 2. Pressure range

Please add LP = low pressure version (up to 50 bar) or HP = high pressure version (up to 350 bar) at the end of the part number.

Example: TW17H-W9031-025/HP

# » WEH® Connector TW17

## ACCESSORIES

The following accessories are available for the WEH® TW17:

### Screw plug for plug version

If the WEH® Connector is to be used as a plug, the media inlet 'B1' will be sealed with a screw plug of brass (PVC sealing ring) for low pressure range or alternatively of stainless steel (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!

Low pressure

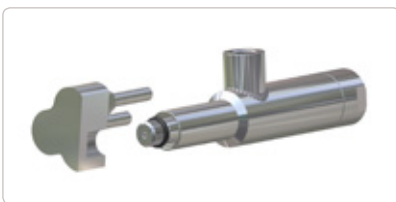


High pressure

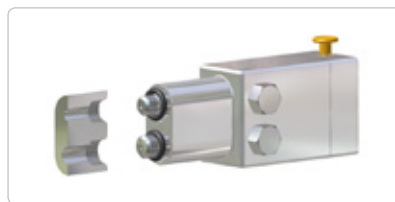
| Part no.        | Description                | Connection (external thread) | Pressure range |
|-----------------|----------------------------|------------------------------|----------------|
| <b>E69-9200</b> | Screw plug (low pressure)  | G1/8"                        | 0 - 50 bar     |
| <b>E69-9210</b> | Screw plug (low pressure)  | G1/4"                        | 0 - 50 bar     |
| <b>E69-9220</b> | Screw plug (low pressure)  | G3/8"                        | 0 - 50 bar     |
| <b>E69-9230</b> | Screw plug (low pressure)  | G1/2"                        | 0 - 50 bar     |
| <b>W9338</b>    | Screw plug (low pressure)  | G3/4"                        | 0 - 50 bar     |
| <b>W9329</b>    | Screw plug (high pressure) | G1/8"                        | 50 - 350 bar   |
| <b>W9330</b>    | Screw plug (high pressure) | G1/4"                        | 50 - 350 bar   |
| <b>W9331</b>    | Screw plug (high pressure) | G3/8"                        | 50 - 350 bar   |
| <b>W9332</b>    | Screw plug (high pressure) | G1/2"                        | 50 - 350 bar   |
| <b>W9333</b>    | Screw plug (high pressure) | G3/4"                        | 50 - 350 bar   |
| <b>W9334</b>    | Screw plug (high pressure) | G1"                          | 50 - 350 bar   |
| <b>W9335</b>    | Screw plug (high pressure) | G1 1/4"                      | 50 - 350 bar   |

## SPECIAL SOLUTIONS

Examples:



TW17P with extension



TW17V twin connector

## » WEH® Connector TW19

### DESCRIPTION



#### Features

- Connection in seconds
- No hand tightening required
- WEH® Jaw locking mechanism
- High-grade materials

The WEH® TW19 Quick connector is especially designed for sealing hydraulic components with internal thread in high and low pressure applications.

The clamping lever actuated connector safely grips into the test piece, even in case of high lateral forces, e.g. heavy or rigid hoses. The higher the test pressure the tighter the WEH® Connector will clamp itself into the thread of the test piece.

The front o-ring reliably seals the connection and no additional clamping devices are required.

Having only one seal in the interior of the connector, ease of maintenance is provided.

#### Application

Quick connector for pneumatic and oil-hydraulic pressure and function testing of components with internal thread, e.g. hydraulic aggregates.

### TECHNICAL DATA

| Characteristics                      | Basic version                       |
|--------------------------------------|-------------------------------------|
| Max. allowable operating pressure PS | Vacuum up to 350 bar                |
| Temperature range                    | +5 °C up to +80 °C                  |
| Leak rate                            | $1 \times 10^{-3}$ mbar x l/s       |
| Actuation                            | Manual actuation via clamping lever |
| Material                             | Corrosion resistant stainless steel |
| Sealing material                     | Front seal of NBR                   |

Other designs on request

**Note:** Please contact us when using corrosive media or water!

#### Example of use:

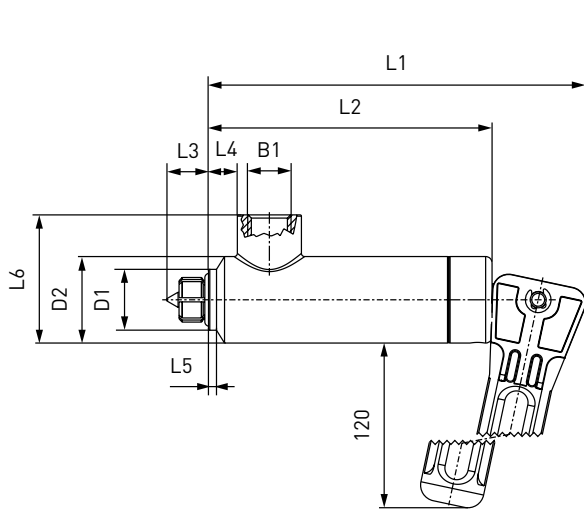




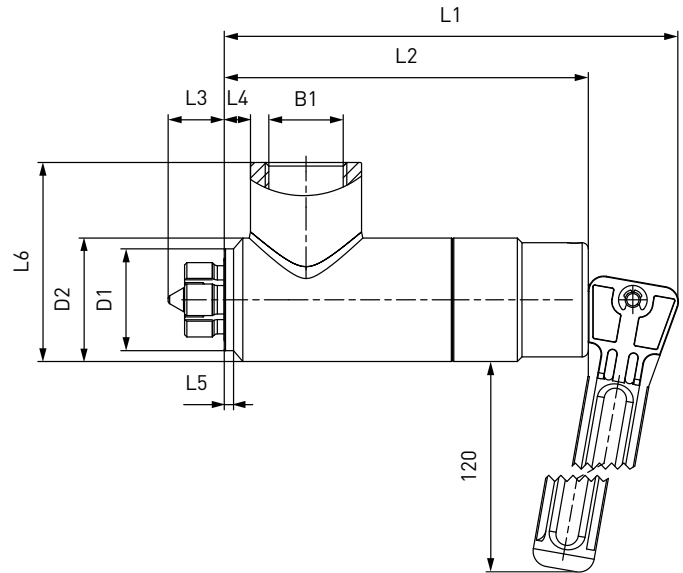
# » WEH® Connector TW19

## ORDERING | WEH® TW19 Quick connector

approx. dimensions (mm)



Body size 2 - 4

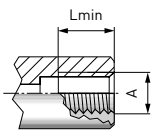


Body size 5 - 6

| Body size | B1<br>(internal thread) | D1   | D1*  | D2   | D2*  | L1    | L2    | L3   | L4   | L5  | L5* | L6   |
|-----------|-------------------------|------|------|------|------|-------|-------|------|------|-----|-----|------|
| 2         | G1/4"                   | 19.0 | 20.5 | 27.0 | 27.0 | 118.0 | 88.5  | 13.0 | 9.0  | 2.5 | 5.0 | 40.0 |
| 3         | G3/8"                   | 23.0 | 26.0 | 32.0 | 32.0 | 131.0 | 101.5 | 16.0 | 9.5  | 2.0 | 4.0 | 50.0 |
| 4         | G1/2"                   | 27.0 | 29.0 | 37.0 | 37.0 | 131.0 | 101.5 | 17.0 | 8.0  | 3.0 | 4.0 | 55.0 |
| 5         | G3/4"                   | 33.0 | 40.5 | 40.0 | 45.0 | 146.0 | 117.0 | 19.5 | 8.0  | 3.0 | 8.0 | 69.0 |
| 6         | G1"                     | 40.0 | 46.5 | 49.0 | 49.0 | 170.0 | 140.0 | 17.0 | 18.0 | 3.0 | 8.0 | 74.0 |

\* applies to SAE J1926

### Metric ISO-thread to DIN 13 - acc. to DIN 3852 part 1, form X and Y

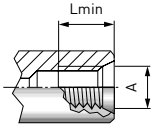


| Part no.        | Body size | Thread A<br>(internal thread) | Lmin* |
|-----------------|-----------|-------------------------------|-------|
| <b>C1-16484</b> | 2         | M12x1.5                       | 9.5   |
| <b>C1-16483</b> | 2         | M14x1.5                       | 9.5   |
| <b>C1-16590</b> | 3         | M16x1.5                       | 10.5  |
| <b>C1-16459</b> | 3         | M18x1.5                       | 10.5  |
| <b>C1-18404</b> | 4         | M20x1.5                       | 10.5  |
| <b>C1-16460</b> | 4         | M22x1.5                       | 10.5  |
| <b>C1-12860</b> | 5         | M24x1.5                       | 11.0  |
| <b>C1-17260</b> | 5         | M26x1.5                       | 11.0  |

\* Lmin: minimum thread length  
Other connector sizes on request

## » WEH® Connector TW19

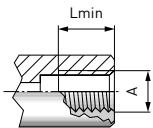
Metric ISO thread to DIN 13 - acc. to ISO 6149-1



| Part no.         | Body size | Thread A<br>(internal thread) | Lmin* |
|------------------|-----------|-------------------------------|-------|
| <b>C1-35915</b>  | 2         | M12x1.5                       | 9.5   |
| <b>C1-14940</b>  | 2         | M14x1.5                       | 9.5   |
| <b>C1-48588</b>  | 3         | M16x1.5                       | 10.5  |
| <b>C1-35916</b>  | 3         | M18x1.5                       | 10.5  |
| <b>C1-119114</b> | 4         | M20x1.5                       | 10.5  |
| <b>C1-33703</b>  | 4         | M22x1.5                       | 10.5  |
| <b>C1-41186</b>  | 5         | M27x2.0                       | 11.0  |

\* Lmin: minimum thread length  
Other connector sizes on request

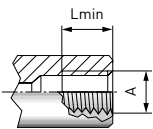
Whitworth tube thread to DIN EN ISO 228-1 - acc. to DIN 3852 part 2, form X and Y



| Part no.        | Body size | Thread A<br>(internal thread) | Lmin* |
|-----------------|-----------|-------------------------------|-------|
| <b>C1-16494</b> | 2         | G1/4"                         | 9.5   |
| <b>C1-16493</b> | 3         | G3/8"                         | 10.5  |
| <b>C1-16888</b> | 4         | G1/2"                         | 10.5  |
| <b>C1-15161</b> | 5         | G3/4"                         | 11.0  |
| <b>C1-18191</b> | 6         | G1"                           | 12.5  |

\* Lmin: minimum thread length  
Other connector sizes on request

BSPT (tapered Whitworth tube thread) - acc. to DIN 3852 part 2, form X and Y

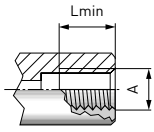


| Part no.         | Body size | Thread A<br>(internal thread) | Lmin* |
|------------------|-----------|-------------------------------|-------|
| <b>C1-14544</b>  | 2         | BSPT 1/4"                     | 9.5   |
| <b>C1-18648</b>  | 3         | BSPT 3/8"                     | 10.5  |
| <b>C1-17275</b>  | 4         | BSPT 1/2"                     | 10.5  |
| <b>C1-164842</b> | 5         | BSPT 3/4"                     | 11.0  |
| <b>C1-16180</b>  | 6         | BSPT 1"                       | 12.5  |

\* Lmin: minimum thread length  
Other connector sizes on request

## » WEH<sup>®</sup> Connector TW19

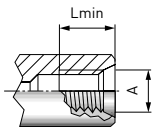
NPT thread (ANSI/ASME B1.20.1-1983) - acc. to SAE J476a



| Part no.         | Body size | Thread A<br>(internal thread) | Lmin* |
|------------------|-----------|-------------------------------|-------|
| <b>C1-16565</b>  | 2         | NPT 1/4"                      | 9.5   |
| <b>C1-44258</b>  | 3         | NPT 3/8"                      | 10.5  |
| <b>C1-72165</b>  | 4         | NPT 1/2"                      | 10.5  |
| <b>C1-164869</b> | 5         | NPT 3/4"                      | 11.0  |
| <b>C1-16874</b>  | 6         | NPT 1"                        | 12.5  |

\* Lmin: minimum thread length  
Other connector sizes on request

SAE-O-Ring Boss - acc. to SAE J1926 / ISO 11926



| Part no.         | Body size | Thread A<br>(internal thread) | Lmin* |
|------------------|-----------|-------------------------------|-------|
| <b>C1-164843</b> | 2         | UNF 1/2"-20                   | 9.5   |
| <b>C1-16485</b>  | 2         | UNF 9/16"-18                  | 9.5   |
| <b>C1-17618</b>  | 3         | UNF 3/4"-16                   | 10.5  |
| <b>C1-18242</b>  | 4         | UNF 7/8"-14                   | 10.5  |
| <b>C1-18394</b>  | 5         | UN 1 1/16"-12                 | 11.0  |
| <b>C1-16461</b>  | 6         | UN 1 5/16"-12                 | 11.0  |

\* Lmin: minimum thread length  
Other connector sizes on request

Other connector versions on request.

Required information for ordering see page 7.

### ACCESSORIES

The following accessories are available for the WEH<sup>®</sup> TW19:

Screw plug for plug version (see page 13)

## » WEH® Connector TW05

### DESCRIPTION



#### Features

- Connection in seconds
- No hand tightening required
- WEH® Jaw locking mechanism
- Simple seal replacement
- Ergonomic design
- Compact design
- High-grade materials
- Automation possible

With the WEH® TW05 Quick connector pneumatic components are tested faster than ever before. Connecting and pressure impacting of the test piece is accomplished in one operation by simple actuation of the sliding sleeve. In this way, costly testing times are shortened and the quick connector pays for itself in a very short time.

#### Application

Quick connector for pneumatic pressure and function testing of components with internal thread, e.g. cylinders, valves, fixtures, pivot drives etc.

**Note:** For using the WEH® Connectors with pneumatic actuation and clamping jaws in an automated system please observe the technical note on page 69.

### TECHNICAL DATA

| Characteristics                      | Basic version   |
|--------------------------------------|---|
| Max. allowable operating pressure PS | 5 - 12 bar compressed air   |
| Temperature range                    | +5 °C up to +80 °C  |
| Leak rate                            | $1 \times 10^{-3}$ mbar x l/s   |
| Material                             | Clamping jaws: Corrosion-resistant stainless steel<br>Outer parts: Anodized aluminium |
| Sealing material                     | Front seal of NBR   |

Other designs on request

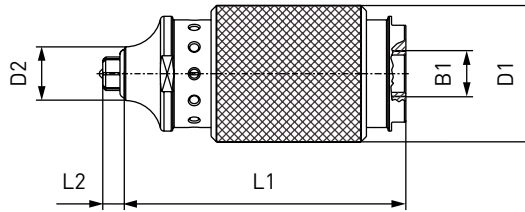
#### Example of use:



# » WEH<sup>®</sup> Connector TW05

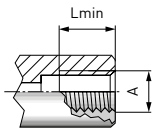
## ORDERING | WEH<sup>®</sup> TW05 Quick connector

approx. dimensions (mm)



| Body size | B1<br>(internal thread) | D1   | D2   | D3 | L1   | L2  |
|-----------|-------------------------|------|------|----|------|-----|
| 1         | G1/4"                   | 38.0 | 15.0 | -  | 78.5 | 6.0 |
| 2         | G1/4"                   | 38.0 | 19.0 | -  | 78.5 | 6.0 |
| 3         | G1/2"                   | 48.0 | 23.5 | -  | 82.5 | 6.5 |
| 4         | G1/2"                   | 48.0 | 27.0 | -  | 83.0 | 6.0 |

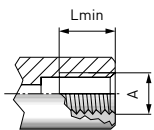
Whitworth tube thread to DIN EN ISO 228-1 - acc. to DIN 3852 part 2, form X and Y



| Part no.              | Body size | Thread A<br>(internal thread) | Lmin* |
|-----------------------|-----------|-------------------------------|-------|
| <b>TW05-W8000-045</b> | 1         | G1/8"                         | 7.0   |
| <b>TW05-W8001-045</b> | 2         | G1/4"                         | 9.5   |
| <b>TW05-W8002-085</b> | 3         | G3/8"                         | 10.5  |
| <b>TW05-W8003-085</b> | 4         | G1/2"                         | 10.5  |

\* Lmin: minimum thread length  
Other connector sizes on request

NPT thread (ANSI/ASME B1.20.1-1983) - acc. to SAE J476a



| Part no.              | Body size | Thread A<br>(internal thread) | Lmin* |
|-----------------------|-----------|-------------------------------|-------|
| <b>TW05-W8006-045</b> | 1         | NPT 1/8"                      | 7.0   |
| <b>TW05-W8007-045</b> | 2         | NPT 1/4"                      | 9.5   |
| <b>TW05-W8008-085</b> | 3         | NPT 3/8"                      | 10.5  |
| <b>TW05-W8009-085</b> | 4         | NPT 1/2"                      | 10.5  |

\* Lmin: minimum thread length  
Other connector sizes on requeste

Other connector versions on request.

Required information for ordering see page 7.

## » WEH® Connector TW03

### DESCRIPTION



#### Features

- Pressure-tight connections by hand-tightening
- Simple seal replacement
- Ergonomic design
- High-grade materials

The WEH® TW03 Quick connector is especially designed for testing components with internal threads. Only hand-tighten the connector into the thread until the o-ring seal contacts the test piece. The TW03 seals without wrenches, sealants or tape. NBR seals meet most industrial requirements. In addition to our standard version, we also offer customer-tailored solutions, as for example TW03 with swivel joint, for sealing on round surfaces or for higher pressure ranges up to 700 bar. Please contact us!

#### Application

Quick connector for pressure and vacuum testing of components with internal thread, e.g. fittings, fixtures, tubes, boilers, tanks, radiators, etc.

### TECHNICAL DATA

| Characteristics                      | Basic version                       |
|--------------------------------------|-------------------------------------|
| Max. allowable operating pressure PS | Vacuum up to 345 bar                |
| Temperature range                    | +5 °C up to +80 °C                  |
| Leak rate                            | $1 \times 10^{-3}$ mbar x l/s       |
| Material                             | Corrosion resistant stainless steel |
| Sealing material                     | Front seal of NBR                   |

Other designs on request

#### Example of use:

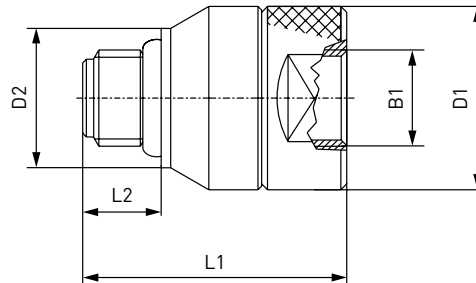




## » WEH<sup>®</sup> Connector TW03

### ORDERING | WEH<sup>®</sup> TW03 Quick connector

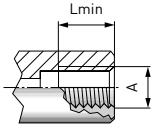
approx. dimensions (mm)



| Body size | B1<br>(internal thread) | D1   | D2   | L1   | L2   |
|-----------|-------------------------|------|------|------|------|
| 1         | G1/8"                   | 20.5 | 15.0 | 33.0 | 10.5 |
| 2         | G1/4"                   | 25.0 | 19.0 | 36.0 | 11.0 |
| 3         | G3/8"                   | 30.0 | 22.0 | 39.5 | 11.0 |
| 4         | G1/2"                   | 35.0 | 28.0 | 47.5 | 14.5 |
| 5         | G3/4"                   | 43.0 | 38.0 | 50.5 | 16.0 |
| 6         | G1"                     | 50.0 | 44.0 | 60.0 | 18.0 |

## » WEH® Connector TW03

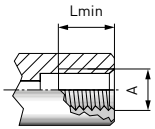
Whitworth tube thread to DIN EN ISO 228-1 - acc. to DIN 3852 part 2, form X and Y



| Part no.        | Body size | Thread A<br>(internal thread) | Max. operating<br>pressure PS | Lmin* |
|-----------------|-----------|-------------------------------|-------------------------------|-------|
| <b>C1-11821</b> | 1         | G1/8"                         | 345 bar                       | 7.0   |
| <b>C1-11824</b> | 2         | G1/4"                         | 345 bar                       | 9.5   |
| <b>C1-11827</b> | 3         | G3/8"                         | 276 bar                       | 10.5  |
| <b>C1-11830</b> | 4         | G1/2"                         | 276 bar                       | 10.5  |
| <b>C1-11833</b> | 5         | G3/4"                         | 276 bar                       | 11.0  |
| <b>C1-11836</b> | 6         | G1"                           | 276 bar                       | 12.5  |

\* Lmin: minimum thread length  
Other connector sizes on request

NPT thread (ANSI/ASME B1.20.1-1983) - acc. to SAE J476a



| Part no.        | Body size | Thread A<br>(internal thread) | Max. operating<br>pressure PS | Lmin* |
|-----------------|-----------|-------------------------------|-------------------------------|-------|
| <b>C1-12224</b> | 1         | NPT 1/8"                      | 345 bar                       | 7.0   |
| <b>C1-12233</b> | 2         | NPT 1/4"                      | 345 bar                       | 9.5   |
| <b>C1-12235</b> | 3         | NPT 3/8"                      | 276 bar                       | 10.5  |
| <b>C1-12239</b> | 4         | NPT 1/2"                      | 276 bar                       | 10.5  |
| <b>C1-12240</b> | 5         | NPT 3/4"                      | 276 bar                       | 11.0  |
| <b>C1-12242</b> | 6         | NPT 1"                        | 276 bar                       | 12.5  |

\* Lmin: minimum thread length  
Other connector sizes on request

Other connector versions on request.

Required information for ordering see page 7.

## » WEH® Connector TW03

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### ACCESSORIES

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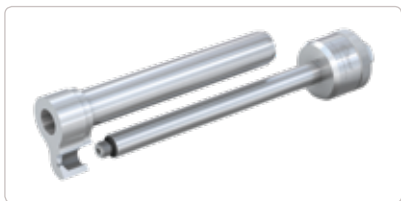
The following accessories are available for the WEH® TW03:

Screw plug for plug version (see page 13)

### SPECIAL SOLUTIONS

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Examples:



TW03 with extension



TW03 for round surfaces

## » WEH® Connector TW18

### DESCRIPTION



#### Features

- Connection in seconds
- No hand tightening required
- WEH® Jaw locking mechanism
- Ergonomic design
- High-grade materials
- Different actuations
- Automation possible
- Testing devices are eliminated

The WEH® TW18 Quick connector establishes pressure-tight connections to components with external thread within seconds. Only place the connector onto the thread of the test piece, the clamping jaws grip on the thread and a pressure-tight connection is made.

The WEH® TW18 Connector is available with different actuations:

TW18H - Manual actuation via lever

TW18V - Pneumatic actuation via valve head

TW18P - Pneumatic actuation for external manual, semi or fully automatic control systems

The actuation can be easily changed at any time by simply unscrewing the rear part of the connector and replacing it with the chosen actuation.

#### Application

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

**Note:** For using the WEH® Connectors with pneumatic actuation and clamping jaws in an automated system please observe the technical note on page 69.

### TECHNICAL DATA

| Characteristics                      | Basic version  |
|--------------------------------------|--|
| Max. allowable operating pressure PS | Vacuum up to 350 bar   |
| Pilot pressure                       | 6 - 12 bar compressed air  |
| Pilot pressure port P1               | G1/8" internal thread  |
| Pilot pressure port P2               | G1/4" internal thread  |
| Temperature range                    | +5 °C up to +80 °C   |
| Leak rate                            | $1 \times 10^{-3}$ mbar x l/s  |
| Actuation                            | H = manual actuation via lever<br>V = pneumatic actuation via valve head<br>P = pneumatic actuation for external manual, semi or fully automatic control systems |
| Material                             | Corrosion resistant stainless steel, anodized aluminium  |
| Sealing material                     | Front seal of NBR  |

Other designs on request

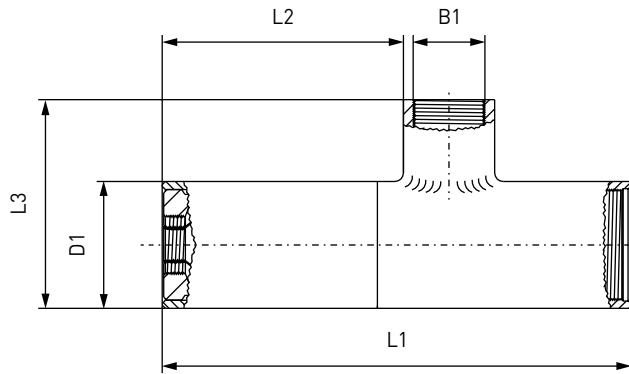
#### Example of use:



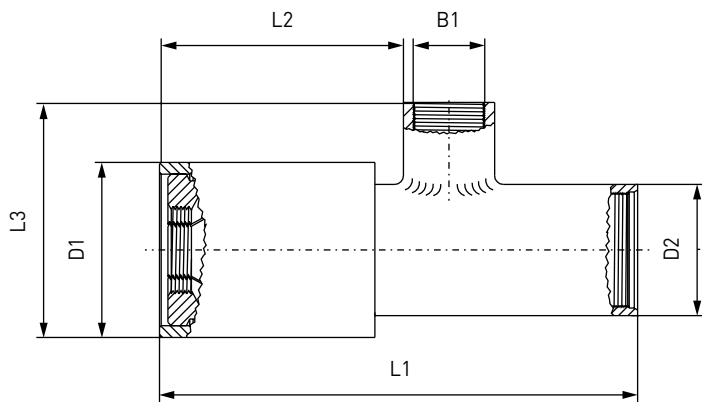
# » WEH<sup>®</sup> Connector TW18

## ORDERING | WEH<sup>®</sup> TW18 Quick connector

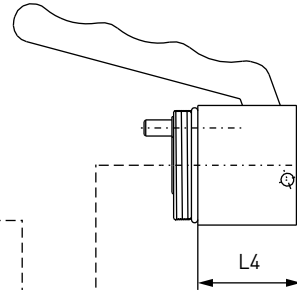
approx. dimensions (mm)



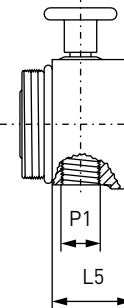
Body size 1 - 2



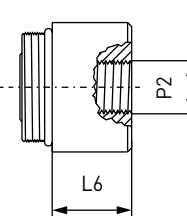
Body size 3



**H**  
Manually by depressing the lever.  
*Medium effort required.*



**V**  
Pneumatically by pressing the valve head.  
*Very little effort required.*

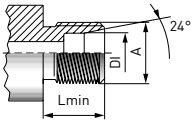


**P**  
Pneumatically for external manual, semi or fully automatic control systems

| Body size | B1 (internal thread) | D1   | D2   | L1    | L2   | L3   | L4   | L5   | L6   |
|-----------|----------------------|------|------|-------|------|------|------|------|------|
| 1         | G1/2"                | 32.0 | -    | 134.0 | 65.0 | 57.5 | 25.0 | 18.0 | 18.0 |
| 2         | G1/2"                | 39.0 | -    | 142.0 | 71.0 | 64.5 | 32.0 | 18.0 | 18.0 |
| 3         | G1/2"                | 52.0 | 39.0 | 142.0 | 70.5 | 64.5 | 32.0 | 18.0 | 18.0 |

## » WEH® Connector TW18

### Tube fitting acc. to ISO 8434-1



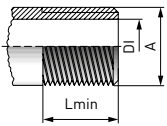
| Part no.                 | Body size | Thread A (external thread) | Max. operating pressure PS** | DI max. | Series | Lmin* |
|--------------------------|-----------|----------------------------|------------------------------|---------|--------|-------|
| <b>TW18...-W8134-085</b> | 1         | M10x1.0                    | 100 bar                      | 6.0     | LL     | 8.0   |
| <b>TW18...-W8135-085</b> | 1         | M12x1.0                    | 100 bar                      | 8.0     | LL     | 9.0   |
| <b>TW18...-W8136-085</b> | 1         | M12x1.5                    | 250 bar                      | 6.0     | L      | 10.0  |
| <b>TW18...-W8137-085</b> | 1         | M14x1.5                    | 250 bar                      | 8.0     | L      | 10.0  |
| <b>TW18...-W8138-085</b> | 1         | M16x1.5                    | 250 bar                      | 10.0    | L      | 11.0  |
| <b>TW18...-W8139-085</b> | 2         | M18x1.5                    | 250 bar                      | 12.0    | L      | 11.0  |
| <b>TW18...-W8140-085</b> | 2         | M22x1.5                    | 250 bar                      | 15.0    | L      | 12.0  |

\* Lmin: minimum thread length

\*\* acc. to ISO 8434-1

Other connector sizes on request

### Whitworth tube thread to ISO 7/1 or DIN EN ISO 228-1 - Plane surface smooth and burr free

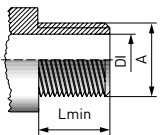


| Part no.                 | Body size | Thread A (external thread) | DI max. | Lmin* |
|--------------------------|-----------|----------------------------|---------|-------|
| <b>TW18...-W8130-085</b> | 2         | G1/2"                      | 14.5    | 12.0  |
| <b>TW18...-W8131-085</b> | 3         | G3/4"                      | 18.0    | 12.0  |

\* Lmin: minimum thread length

Other connector sizes on request

### NPT thread (ANSI/ASME B1.20.1-1983) - acc. to SAE J476a, plane surface smooth and burr free

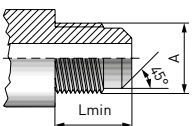


| Part no.                 | Body size | Thread A (external thread) | DI max. | Lmin* |
|--------------------------|-----------|----------------------------|---------|-------|
| <b>TW18...-W8208-085</b> | 1         | NPT 1/8"                   | 5.0     | 10.0  |
| <b>TW18...-W8207-085</b> | 1         | NPT 1/4"                   | 7.0     | 14.0  |
| <b>TW18...-W8209-085</b> | 1         | NPT 3/8"                   | 10.5    | 14.0  |
| <b>TW18...-W8210-085</b> | 2         | NPT 1/2"                   | 14.0    | 19.0  |

\* Lmin: minimum thread length

Other connector sizes on request

### SAE J512 (45° cone), SAE J513



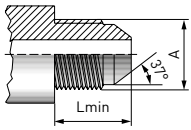
| Part no.          | Body size  | Thread A   | Lmin*      |
|-------------------|------------|------------|------------|
| <b>On request</b> | On request | On request | On request |

\* Lmin: minimum thread length



# » WEH® Connector TW18

SAE J514 JIC 37°



| Part no.          | Body size | Thread A<br>(external thread) | Lmin* |
|-------------------|-----------|-------------------------------|-------|
| TW18...-W8119-085 | 1         | UNF 7/16"-20                  | 14.0  |
| TW18...-W8120-085 | 1         | UNF 1/2"-20                   | 14.0  |
| TW18...-W8121-085 | 1         | UNF 9/16"-18                  | 14.5  |
| TW18...-W8122-085 | 2         | UNF 3/4"-16                   | 17.0  |
| TW18...-W8123-085 | 2         | UNF 7/8"-14                   | 19.5  |

\* Lmin: minimum thread length  
Other connector sizes on request

Other connector versions on request.

Required information for ordering see page 7.

When ordering WEH® TW18 please indicate in addition to the details requested on page 7 the following information:

**1. Part no.**

Please insert within the part no. the letter corresponding to the desired type of actuation (H, V or P) in place of the position indicator (...)

Example: TW18H-W8134-085

**2. Pressure range**

Please add LP = low pressure version (up to 50 bar) or HP = high pressure version (up to 350 bar) at the end of the part number.

Example: TW18H-W8134-085/HP

## ACCESSORIES

The following accessories are available for the WEH® TW18:

Screw plug for plug version (see page 13)

## SPECIAL SOLUTIONS

Example:



TW18Z with pneumatic actuation,  
central flow and  
lateral pressure support

## » WEH® Connector TW04

### DESCRIPTION



#### Features

- Pressure-tight connections by hand-tightening
- Simple seal replacement
- Ergonomic design
- High-grade materials

The WEH® TW04 Quick connector provides fast leak tight connections to components with external threads for testing, filling, plugging and venting.

Only hand-tighten the connector onto the thread until the o-ring seal contacts the test piece. The TW04 seals without wrenches, sealants or tape. NBR seals meet most industrial requirements.

#### Application

Quick connector for pressure and vacuum testing of components with external thread, e.g. fittings, fixtures, tubes, boilers, tanks, radiators, etc.

### TECHNICAL DATA

| Characteristics                      | Basic version                       |
|--------------------------------------|-------------------------------------|
| Max. allowable operating pressure PS | Vacuum up to 50 bar                 |
| Temperature range                    | +5 °C up to +80 °C                  |
| Leak rate                            | $1 \times 10^{-3}$ mbar x l/s       |
| Material                             | Corrosion resistant stainless steel |
| Sealing material                     | Front seal of polyurethane or NBR   |

Other designs on request

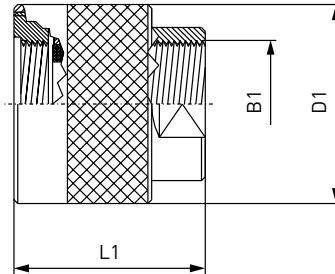
#### Example of use:



## » WEH<sup>®</sup> Connector TW04

### ORDERING | WEH<sup>®</sup> TW04 Quick connector

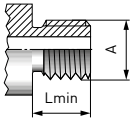
approx. dimensions (mm)



| Body size | B1<br>(internal thread) | D1   | L1   |
|-----------|-------------------------|------|------|
| 1         | G1/8"                   | 22.0 | 35.5 |
| 2         | G1/4"                   | 27.0 | 40.5 |
| 3         | G3/8"                   | 32.0 | 38.0 |
| 5         | G1/2"                   | 37.0 | 51.0 |
| 6         | G3/4"                   | 44.0 | 52.0 |
| 7         | G1"                     | 52.0 | 60.0 |

## » WEH® Connector TW04

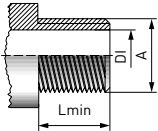
Whitworth tube thread to ISO 7/1 or DIN EN ISO 228-1 - Plane surface smooth and burr free



| Part no.        | Body size | Thread A<br>(external thread) | Lmin* |
|-----------------|-----------|-------------------------------|-------|
| <b>C1-12405</b> | 1         | G1/8"                         | 12.0  |
| <b>C1-12412</b> | 2         | G1/4"                         | 12.0  |
| <b>C1-12421</b> | 3         | G3/8"                         | 12.0  |
| <b>C1-12429</b> | 5         | G1/2"                         | 12.0  |
| <b>C1-12438</b> | 6         | G3/4"                         | 12.0  |
| <b>C1-12446</b> | 7         | G1"                           | 12.0  |

\* Lmin: minimum thread length  
Other connector sizes on request

NPT thread (ANSI/ASME B1.20.1-1983) - acc. to SAE J476a, plane surface smooth and burr free



| Part no.        | Body size | Thread A<br>(external thread) | DI max. | Lmin* |
|-----------------|-----------|-------------------------------|---------|-------|
| <b>C1-12404</b> | 1         | NPT 1/8"                      | 5.0     | 10.0  |
| <b>C1-12411</b> | 2         | NPT 1/4"                      | 7.0     | 14.0  |
| <b>C1-12420</b> | 3         | NPT 3/8"                      | 10.5    | 14.0  |
| <b>C1-12428</b> | 5         | NPT 1/2"                      | 14.0    | 19.0  |
| <b>C1-12437</b> | 6         | NPT 3/4"                      | 18.0    | 19.0  |
| <b>C1-12445</b> | 7         | NPT 1"                        | 24.0    | 20.5  |

\* Lmin: minimum thread length  
Other connector sizes on request

Other connector versions on request.

Required information for ordering see page 7.

## » WEH<sup>®</sup> Connector TW04

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### ACCESSORIES

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The following accessories are available for the WEH<sup>®</sup> TW04:

Screw plug for plug version (*see page 13*)

## » WEH® Connector TW800

### DESCRIPTION



#### Features

- Connection in seconds
- No hand tightening required
- WEH® Jaw locking mechanism
- High-grade materials
- Special versions possible

The WEH® TW800 Quick connector simplifies work procedures, shortens test times and improves productivity. Therefore the connector is ideal for pressure and function testing of components with a bead, rim, collar, flange, stub or external thread. In the automotive industry WEH® TW800 is also used for testing of fuel connections, connections for cold and hot water and other supply lines as well as air conditioning components.

By using high quality stainless steel the connectors meet the stringent requirements of industrial testing. The TW800 quick connector is designed for a pressure range up to max. 50 bar.

#### Application

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

**Note:** For using the WEH® Connectors with pneumatic actuation and clamping jaws in an automated system please observe the technical note on page 69.

### TECHNICAL DATA

| Characteristics                       | Basic version                       |
|---------------------------------------|-------------------------------------|
| Max. allowable operating pressure PS* | Vacuum up to 50 bar                 |
| Temperature range                     | +5 °C up to +80 °C                  |
| Leak rate                             | $1 \times 10^{-3}$ mbar x l/s       |
| Material                              | Corrosion resistant stainless steel |
| Sealing material                      | Front seal of NBR                   |

\* depending on application

Other designs on request

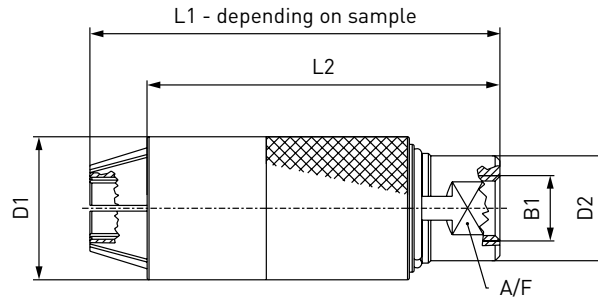
#### Example of use:



# » WEH® Connector TW800

## ORDERING | WEH® TW800 Quick connector

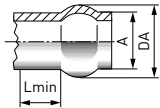
approx. dimensions (mm)



| Body size | B1<br>(internal thread) | D1   | D2   | L2   | A/F |
|-----------|-------------------------|------|------|------|-----|
| 1         | G1/8"                   | 22.0 | 14.0 | 74.0 | 13  |
| 2         | G1/8"                   | 25.0 | 17.0 | 75.0 | 15  |
| 3         | G1/4"                   | 30.0 | 22.0 | 74.0 | 19  |
| 4         | G3/8"                   | 35.0 | 27.0 | 79.0 | 24  |
| 5         | G1/2"                   | 40.0 | 30.0 | 79.0 | 27  |
| 6         | G3/4"                   | 45.0 | 33.0 | 90.0 | 30  |

Other body sizes on request

## Beads for hose connections

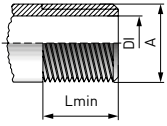


| Part no.          | Body size  | External tube Ø A | Max. operating pressure (PS) | DA<br>+ 0.5 / - 0 | Lmin*      |
|-------------------|------------|-------------------|------------------------------|-------------------|------------|
| <b>On request</b> | On request | On request        | On request                   | On request        | On request |

\* Lmin: min. required length after bead for clamping

## » WEH® Connector TW800

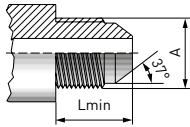
Whitworth tube thread to ISO 7/1 or DIN EN ISO 228-1 - Plane surface smooth and burr free



| Part no.                | Body size | Thread A<br>(external thread) | Max. operating<br>pressure PS | DI max. | Lmin* |
|-------------------------|-----------|-------------------------------|-------------------------------|---------|-------|
| <b>TW800G-W8375-085</b> | 5         | G1/2"                         | 20 bar                        | 14.5    | 12.0  |
| <b>TW800G-W8376-125</b> | 6         | G3/4"                         | 20 bar                        | 20.0    | 12.0  |

\* Lmin: minimum thread length  
Other connector sizes on request

SAE J514 JIC 37°



| Part no.                | Body size | Thread A<br>(external thread) | Max. operating<br>pressure PS | Lmin* |
|-------------------------|-----------|-------------------------------|-------------------------------|-------|
| <b>TW800G-W8320-025</b> | 2         | UNF 7/16"-20                  | 50 bar                        | 14.0  |
| <b>TW800G-W8321-045</b> | 3         | UNF 1/2"-20                   | 50 bar                        | 14.0  |
| <b>TW800G-W8322-045</b> | 3         | UNF 9/16"-18                  | 50 bar                        | 14.5  |
| <b>TW800G-W8323-085</b> | 5         | UNF 3/4"-16                   | 50 bar                        | 17.0  |
| <b>TW800G-W8324-085</b> | 5         | UNF 7/8"-14                   | 50 bar                        | 19.5  |

\* Lmin: minimum thread length  
Other connector sizes on request

Other connector versions on request.

Required information for ordering see page 7.



## » WEH<sup>®</sup> Connector TW800

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### ACCESSORIES

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The following accessories are available for the WEH<sup>®</sup> TW800:

Screw plug for plug version (*see page 13*)

## » WEH® Connector TW850

### DESCRIPTION



#### Features

- Connection in seconds
- No hand tightening required
- WEH® jaw locking mechanism
- High-grade materials
- Special versions possible

The WEH® TW850 Quick connector simplifies work procedures, shortens test times and improves productivity. Therefore the connector is ideal for high pressure and function testing of components with a bead, rim, collar, flange, stub or external thread.

By using high quality stainless steel the connectors meet the stringent requirements of industrial testing. The TW850 quick connector is designed for a pressure range up to max. 630 bar.

#### Application

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

**Note:** For using the WEH® Connectors with pneumatic actuation and clamping jaws in an automated system please observe the technical note on page 69.

### TECHNICAL DATA

| Characteristics                       | Basic version                       |
|---------------------------------------|-------------------------------------|
| Max. allowable operating pressure PS* | Vacuum up to 630 bar                |
| Temperature range                     | +5 °C up to +80 °C                  |
| Leak rate                             | $1 \times 10^{-3}$ mbar x l/s       |
| Material                              | Corrosion resistant stainless steel |
| Sealing material                      | Front seal of NBR                   |

\* depending on application

Other designs on request

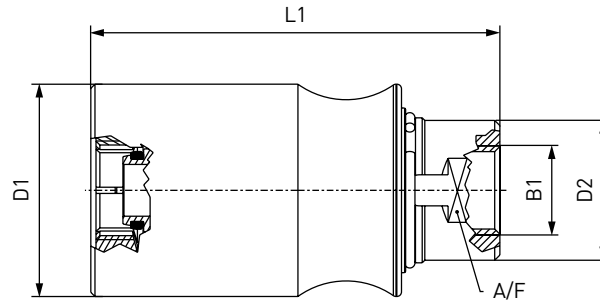
#### Example of use:



# » WEH® Connector TW850

## ORDERING | WEH® TW850 Quick connector

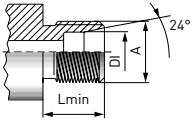
approx. dimensions (mm)



| Body size | B1<br>(internal thread) | D1   | D2   | L1    | A/F |
|-----------|-------------------------|------|------|-------|-----|
| 1         | G1/8"                   | 36.0 | 22.0 | 75.0  | 19  |
| 2         | G3/8"                   | 41.0 | 27.0 | 80.0  | 24  |
| 3         | G3/8"                   | 46.0 | 30.0 | 80.0  | 27  |
| 4         | G1/2"                   | 52.0 | 33.0 | 120.0 | 30  |

Other body sizes on request

## Tube fitting acc. to ISO 8434-1



| Part no.          | Body size  | Thread A   | Max. operating pressure PS** | DI max.    | Series     | Lmin*      |
|-------------------|------------|------------|------------------------------|------------|------------|------------|
| <b>On request</b> | On request | On request | On request                   | On request | On request | On request |

\* Lmin: minimum thread length

\*\* acc. to ISO 8434-1

Other connector versions on request.

Required information for ordering see page 7.

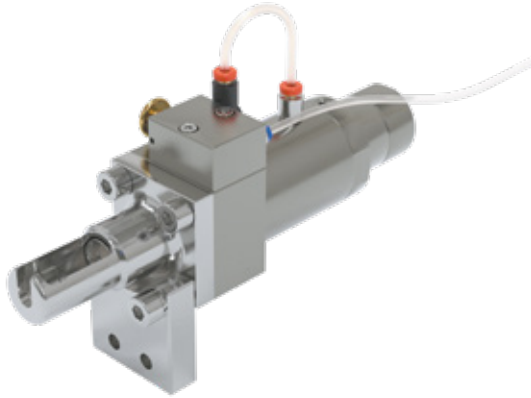
## ACCESSORIES

The following accessories are available for the WEH® TW850:

Screw plug for plug version (see page 13)

## » WEH® Connector TW130

### DESCRIPTION



#### Features

- Connection in seconds
- No hand tightening required
- Testing of high quantities
- Suitable for automated testing
- Robust construction

The WEH® TW130 Quick connector has been developed specially for testing components with banjo tube connections, hose and tube connections with sleeve nuts and similar configurations.

The compact design and ease of operation enables cost-effective testing, even for high quantities. The connector is equipped with pneumatic valve actuation, a customer-tailored steel test piece holder and if required a retaining plate.

The WEH® TW130 is rated for a pressure range up to max. 350 bar. Automation is possible. Special versions, e.g. multi-connectors etc. are also available on request.

#### Application

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

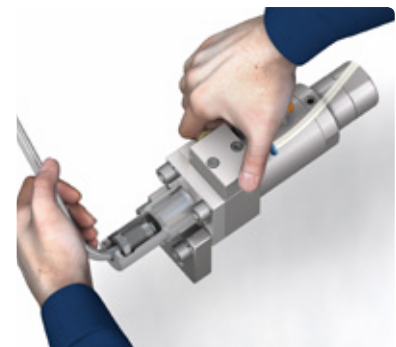
### TECHNICAL DATA

| Characteristics                      | Basic version   |
|--------------------------------------|---|
| Max. allowable operating pressure PS | 350 bar   |
| Pilot pressure                       | Max. 6 - 8 bar  |
| Pilot pressure port P1               | G1/8" internal thread   |
| Temperature range*                   | -10 °C up to +80 °C   |
| Actuation                            | Pneumatic actuation via valve head.<br>Automation possible            |
| Material                             | Base unit:<br>Corrosion resistant stainless steel, anodized aluminium |
| Sealing material                     | Front seal of NBR   |

\* The values of the temperature ranges quoted apply for common hydraulic oils, for other media please contact us!

Other designs on request

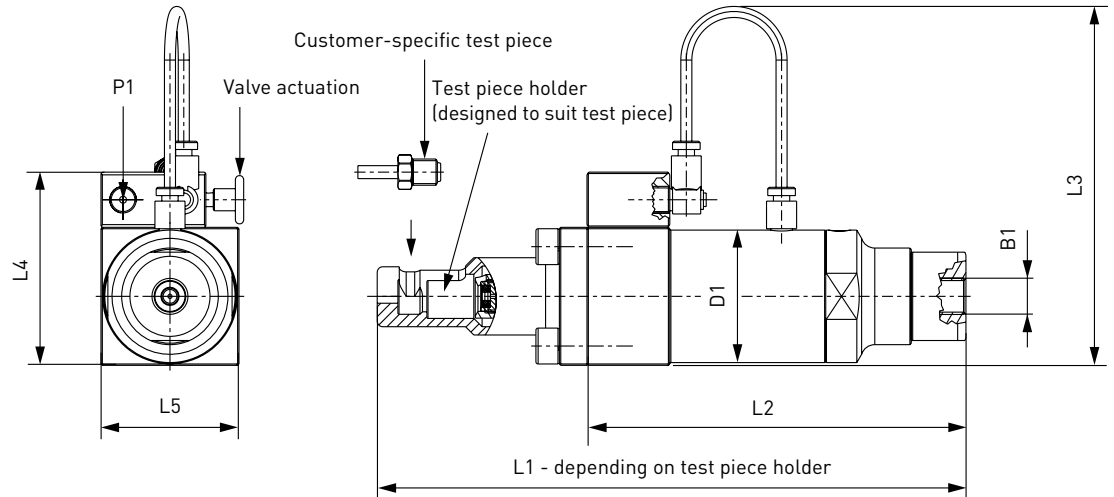
#### Example of use:



# » WEH<sup>®</sup> Connector TW130

## ORDERING | WEH<sup>®</sup> TW130 Quick connector

approx. dimensions (mm)



| Part no.    | Body size | Inlet B1<br>(internal thread) | D1   | L2    | L3    | L4   | L5   |
|-------------|-----------|-------------------------------|------|-------|-------|------|------|
| Auf Anfrage | 1         | G1/4"                         | 48.0 | 137.5 | 130.0 | 70.0 | 50.0 |
| Auf Anfrage | 2         | G1/4"                         | 62.0 | 137.5 | 140.0 | 84.0 | 64.0 |

Please send us your enquiry together with the corresponding test piece!  
Other connector sizes on request

Other connector versions on request.

Required information for ordering see page 7.

## ACCESSORIES

The following accessories are available for the WEH<sup>®</sup> TW130:

### Fixturing parts

A retaining plate is also available for ease of clamping the TW130 to test bench. Please contact us!

## » WEH® Connector TW141

### DESCRIPTION



#### Features

- Connection in seconds
- No hand tightening required
- For connection onto straight tubes, sealing on the external diameter
- No lateral 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, steel or aluminium and has earned a reputation for ease of operation.

The TW141 is a lever-actuated connector, which creates no lateral 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 components with straight tube connection (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                                      | $1 \times 10^{-3}$ mbar x l/s   |
| Actuation                                      | Manual actuation via hand lever   |
| 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<br>Housing: Anodized aluminium |
| Sealing material                               | Front seal of NBR   |

Other designs on request

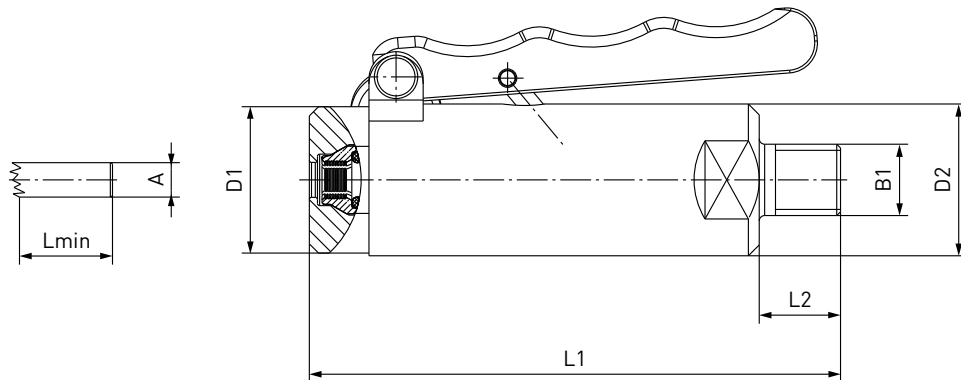
#### Example of use:



## » WEH<sup>®</sup> Connector TW141

### ORDERING | WEH<sup>®</sup> TW141 Quick connector – body size 1

approx. dimensions (mm)



| Part no. | Body size | Sealing range<br>external tube $\varnothing$ A | Tolerance | B1<br>(external thread) | D1 | D2 | L1  | L2 | Lmin* |
|----------|-----------|--|-----------|-------------------------|----|----|-----|----|-------|
| C1-14967 | 1         | 6.0  | $\pm 0.2$ | NPT 1/4"                | 27 | 28 | 100 | 15 | 19    |
| C1-17606 | 1         | 6.35 (1/4")                                    | $\pm 0.2$ | NPT 1/4"                | 27 | 28 | 100 | 15 | 19    |
| C1-17750 | 1         | 7.9 (5/16")                                    | $\pm 0.2$ | NPT 1/4"                | 27 | 28 | 100 | 15 | 19    |
| C1-14968 | 1         | 8.0  | $\pm 0.2$ | NPT 1/4"                | 27 | 28 | 100 | 15 | 19    |

\* Lmin: minimum insertion length of test piece

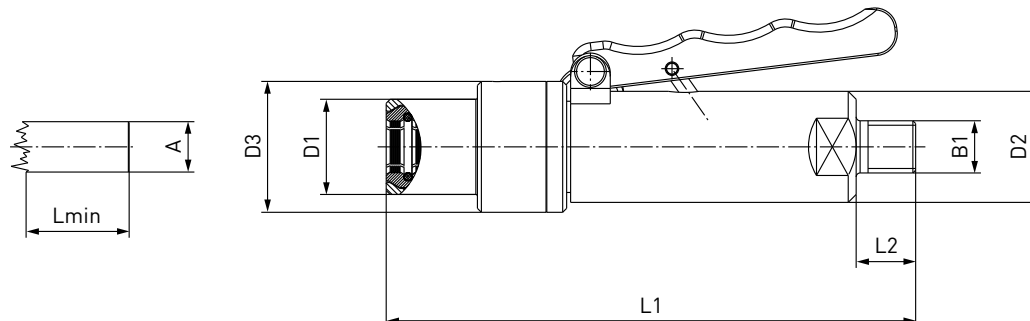
Note: required roundness of external tube diameter max. 0.25 mm

Other connector sizes on request

## » WEH® Connector TW141

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

approx. dimensions (mm)



| Part no. | Body size | Sealing range<br>external tube Ø A | Tolerance | B1<br>(external 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

Note: required roundness of external tube diameter max. 0.25 mm

Other connector sizes on request

Other connector versions on request.

Required information for ordering see page 7.



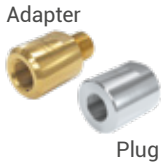
## » WEH® Connector TW141

### ACCESSORIES

The following accessories are available for the WEH® TW141:

#### Adaptor / Plug

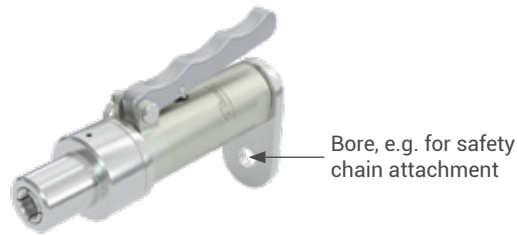
For the TW141 different adaptors for other media inlets are available. If the connector is to be used as a plug, the media inlet 'B1' can be sealed.



| Part no.          | Description | Connection   |
|-------------------|-------------|--|
| <b>E29-30810</b>  | Adapter     | NPT 1/4" internal thread - G1/4" internal thread     |
| <b>E201-30366</b> | Adapter     | NPT 1/4" internal thread - G1/4" external thread     |
| <b>E29-934P</b>   | Adapter     | NPT 1/4" internal thread - UNF 7/16" external thread |
| <b>E29-900P</b>   | Plug        | NPT 1/4" internal 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            |
|------------------|------------------------|
| <b>E29-45285</b> | Anchor plate for TW141 |

### SPARE PARTS

Various parts are available as spares for the TW141 quick connector:

| Part no.          | Description |
|-------------------|-------------|
| <b>On request</b> | 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                                   | $1 \times 10^{-3}$ mbar x l/s       |
| Max. allowable surface finish of test piece | Rz8 µm                              |
| Material                                    | Body size 1 + 2: Anodized aluminium |
| Sealing material                            | Front seal of SBR                   |

Other designs on request

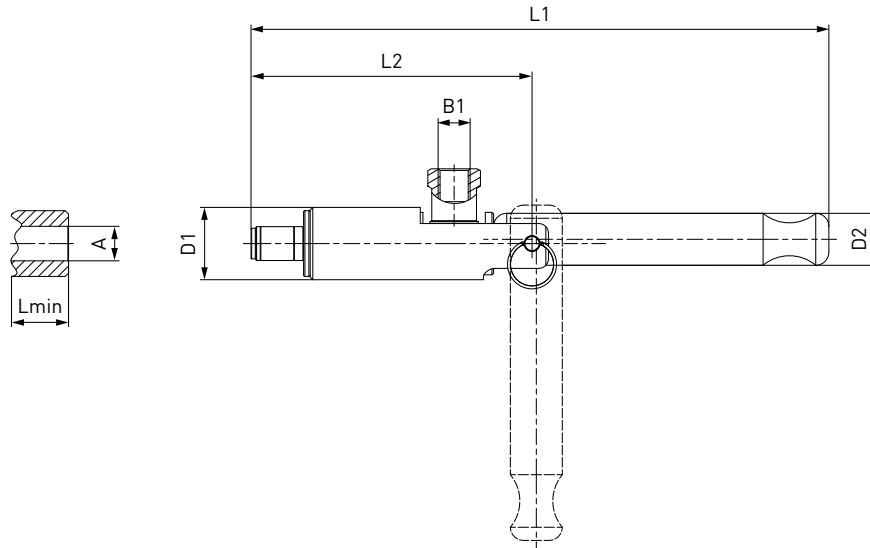
#### Example of use:



# » WEH® Connector TW221

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

approx. dimensions (mm)



| Part no. | Body size | Sealing range<br>internal tube Ø<br>A | B1<br>(internal thread) | D1 | D2 | L1  | L2 | Lmin* | Replacement<br>seal set**<br>(consisting of 5 front seals<br>+ 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-89737   |
| 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 connector sizes on request

Other connector versions on request.

Required information for ordering see page 7.

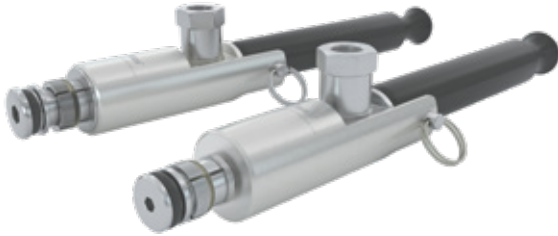
## ACCESSORIES

The following accessories are available for the WEH® TW221:

Screw plug for plug version (see page 13)

## » 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  $\pm 0.25$  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 bridges tube tolerances of up to  $\pm 0.25$  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

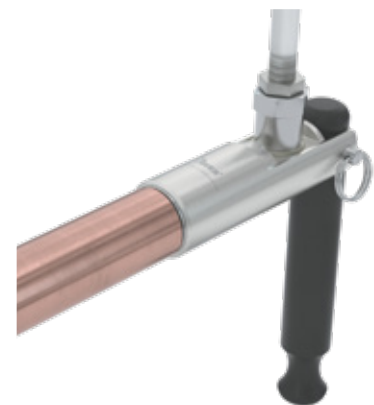
Quick connector for pressure and vacuum testing of straight tubes and bores (sealing the internal tube diameter), as for example heat exchangers, pressure vessels, valves, transducers, compressors, condensers, evaporation coils, component and tubing systems, air conditioners, heating systems etc.

### 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                                      | $1 \times 10^{-3}$ mbar x l/s   |
| Max. allowable surface finish of test piece    | Rz8 $\mu$ m   |
| Max. allowable material hardness of test piece | 28 HRC  |
| Material                                       | Clamping jaws: Corrosion-resistant stainless steel, hardened<br>Housing: Anodized aluminium |
| Sealing material                               | Front seal of NBR   |

Other designs on request

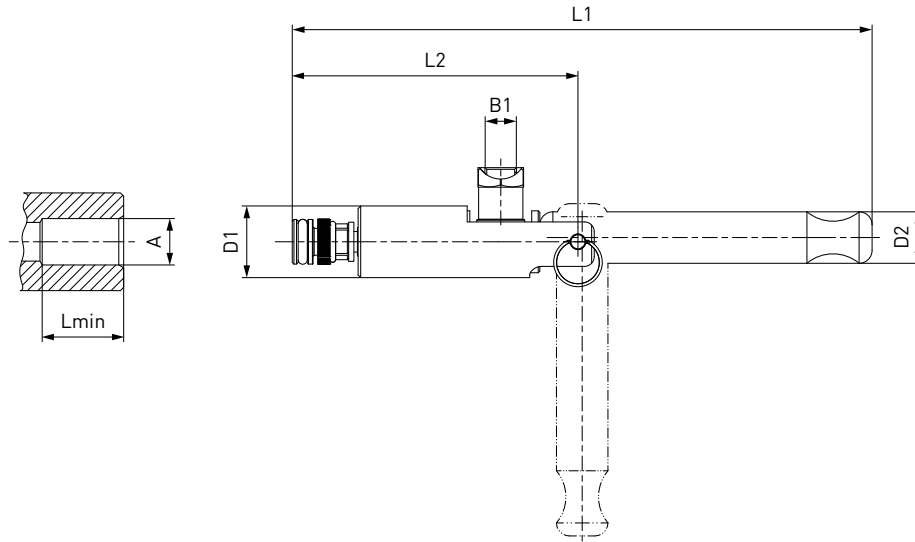
#### Example of use:



# » WEH<sup>®</sup> Connector TW230

## ORDERING | WEH<sup>®</sup> TW230 Quick connector – body size 1

approx. dimensions (mm)



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

\* Lmin: minimum insertion length of test piece

When ordering, please state if testing reinforced fibre glass or plastic test pieces.

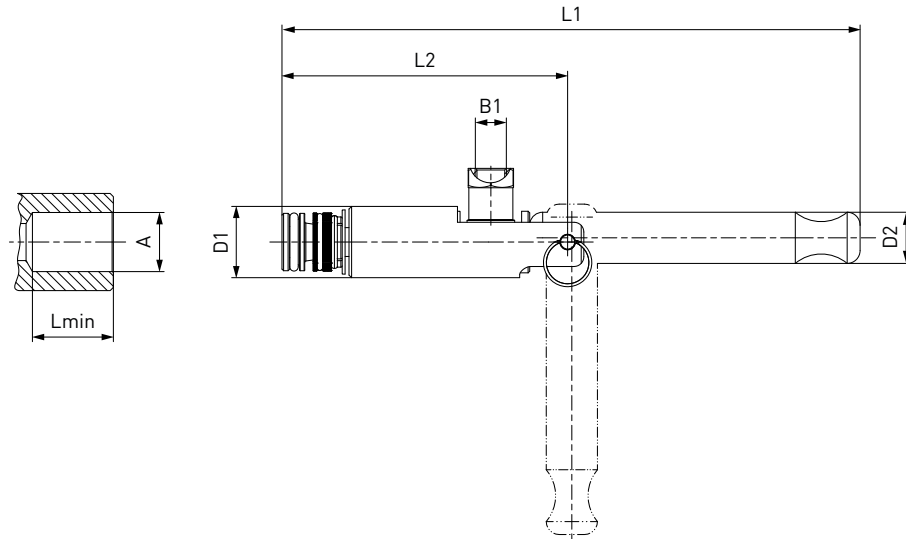
**Note:** required roundness of internal tube diameter max. 0.25 mm

Other connector sizes on request

## » WEH® Connector TW230

### ORDERING | WEH® TW230 Quick connector – body size 2

approx. dimensions (mm)



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

\* 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.

Note: required roundness of internal tube diameter max. 0.25 mm

Other connector sizes on request

Other connector versions on request.

Required information for ordering see page 7.

## » WEH<sup>®</sup> Connector TW230

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### ACCESSORIES

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The following accessories are available for the WEH<sup>®</sup> TW230:

Screw plug for plug version (*see page 13*)

## » 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  $\pm 0.25$  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  $\pm 0.25$  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 components with straight tube connection (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                                      | $1 \times 10^{-3}$ mbar x l/s   |
| Max. allowable surface finish of test piece    | Rz8 $\mu$ m   |
| Max. allowable material hardness of test piece | 28 HRC  |
| Material                                       | Clamping jaws: Corrosion-resistant stainless steel, hardened<br>Housing: Anodized aluminium |
| Sealing material                               | Front seal of Chloropren  |

Other designs on request

#### Example of use:

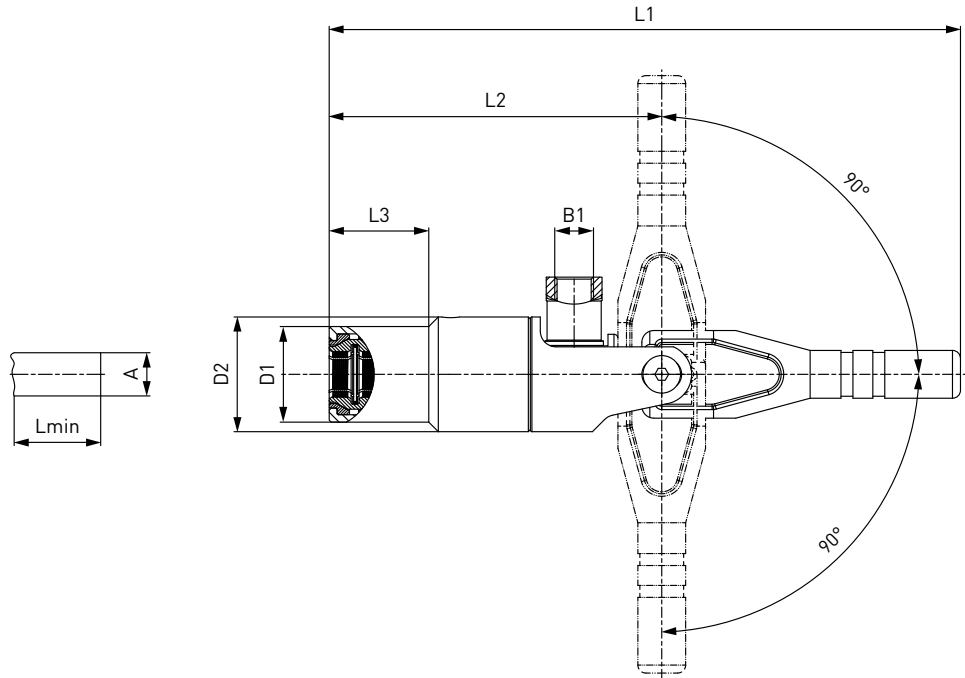




# » WEH<sup>®</sup> Connector TW241

## ORDERING | WEH<sup>®</sup> TW241 Quick connector – body size 1

approx. dimensions (mm)



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

\* Lmin: minimum insertion length of test piece

When ordering, please state if testing reinforced fibre glass or plastic test pieces.

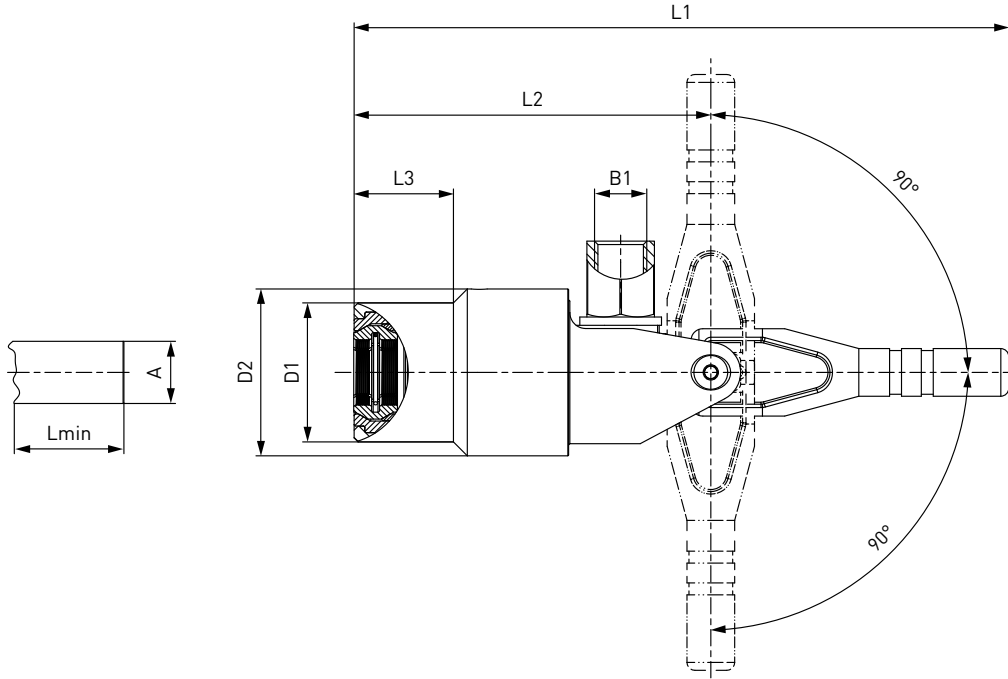
**Note:** required roundness of external tube diameter max. 0.25 mm

Other connector sizes on request

## » WEH® Connector TW241

### ORDERING | WEH® TW241 Quick connector – body size 2

approx. dimensions (mm)



| Part no.         | Body size | Sealing range<br>external tube $\varnothing$<br>$A \pm 0.25$ | B1<br>(internal<br>thread) | D1 | D2 | L1  | L2 | L3 | Lmin* | Replacement<br>seal set<br>(consisting of<br>5 front seals) |
|------------------|-----------|--|----------------------------|----|----|-----|----|----|-------|---|
| <b>C1-130672</b> | 2         | 12.0   | G1/4"                      | 35 | 42 | 165 | 90 | 25 | 26.5  | <b>B202B-130732</b>   |
| <b>C1-130674</b> | 2         | 12.7 (1/2")  | G1/4"                      | 35 | 42 | 165 | 90 | 25 | 26.5  | <b>B202B-130734</b>   |
| <b>C1-130685</b> | 2         | 15.9 (5/8")  | G1/4"                      | 35 | 42 | 165 | 90 | 25 | 26.5  | <b>B202B-130745</b>   |
| <b>C1-130686</b> | 2         | 16.0   | G1/4"                      | 35 | 42 | 165 | 90 | 25 | 26.5  | <b>B202B-130746</b>   |

\* Lmin: minimum insertion length of test piece

When ordering, please state if testing reinforced fibre glass or plastic test pieces.

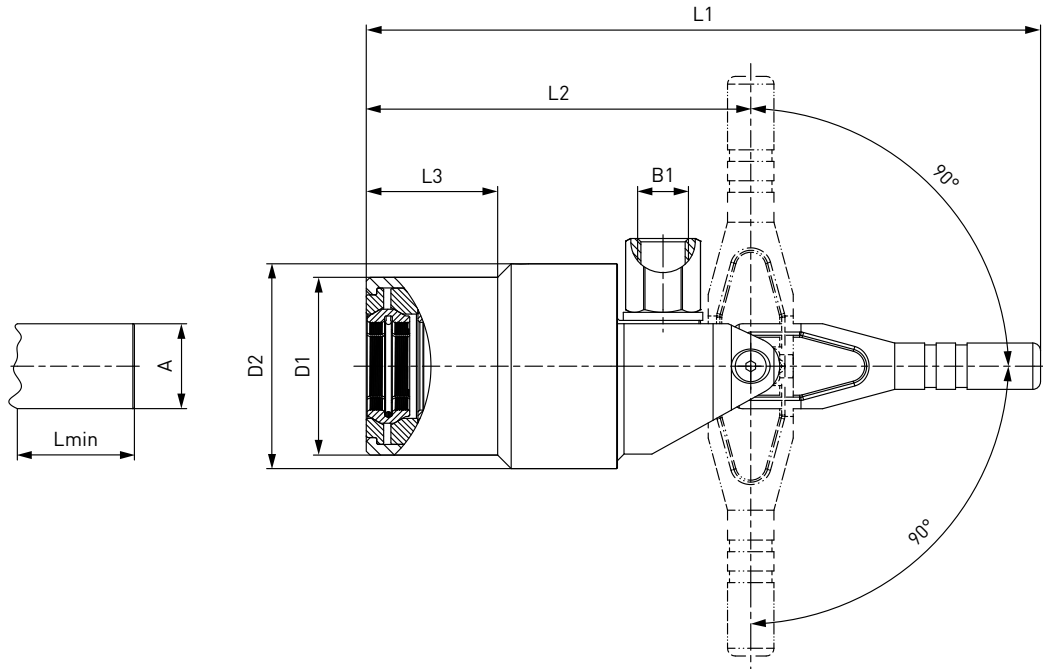
Note: required roundness of external tube diameter max. 0.25 mm

Other connector 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 (internal thread) | D1 | D2 | L1    | L2   | L3 | Lmin* | Replacement seal set (consisting of 5 front seals) |
|------------------|-----------|--|----------------------|----|----|-------|------|----|-------|--|
| <b>C1-130691</b> | 3         | 19.05 (3/4")                           | G1/4"                | 46 | 53 | 174.5 | 99.5 | 34 | 26.5  | <b>B202B-130752</b>                                |
| <b>C1-130694</b> | 3         | 22.0                                   | G1/4"                | 46 | 53 | 174.5 | 99.5 | 34 | 26.5  | <b>B202B-130755</b>                                |
| <b>C1-130695</b> | 3         | 22.2 (7/8")                            | G1/4"                | 46 | 53 | 174.5 | 99.5 | 34 | 26.5  | <b>B202B-130756</b>                                |

\* Lmin: minimum insertion length of test piece

When ordering, please state if testing reinforced fibre glass or plastic test pieces.

Note: required roundness of external tube diameter max. 0.25 mm

Other connector sizes on request

Other connector versions on request.

Required information for ordering see page 7.

## » WEH® Connector TW241

### ACCESSORIES

The following accessories are available for the WEH® TW241:

Screw plug for plug version (see page 13)

#### 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<sup>®</sup> Connector TW241

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## » WEH® Connector TW01

### DESCRIPTION



#### Features

- Connection in seconds
- No hand tightening required
- Sealing irregular or rough surfaces
- Stroke limitation
- Simple seal replacement
- Ergonomic design
- High-grade materials

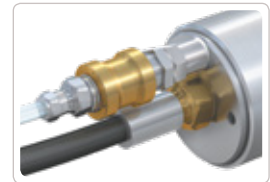
The WEH® TW01 Quick connector reliably and quickly seals inside bores, irregular or rough holes and internally threaded components. Fitted with elastomer seals ideal for sealing out of round and rough surfaces and clearing large tolerances on the test piece. The connector only clamps itself firmly over the sealing rubber of the test piece, but does not have any retaining function. Therefore a fixture must be used.

As a standard WEH® TW01 is equipped with a stroke limitation. Because of the pneumatic actuation, the connector is particularly well suited for automation of test procedures.

A number of accessories are available for manual actuation of the pilot pressure, e.g. hand slide valve or pneumatic coupling with control/venting fitting (see accessories).

For WEH® TW01 Connectors standard shaft extensions of 1" (25.4 mm) or 2" (50.8 mm) are available to seal surfaces which are inaccessible to standard TW01 connectors.

Special versions, e.g. twin connectors for sealing ports in close proximity to each other are available on request.



TW01 with hand slide valve

#### Application

Quick connector for pressure and vacuum testing of straight tubes and bores (sealing the internal tube diameter).

Leak testing: Pressure decay, underwater / helium tests.

Other applications: Filling, pressure and function tests, flushing, etc.

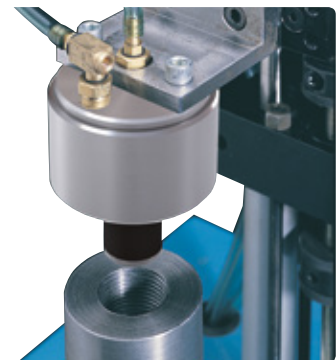
Components: Vessels, plastic vessels, medical components, valves, pumps, filter, pressure vessels, tube connections, etc.

### TECHNICAL DATA

| Characteristics                      | Basic version  |
|--------------------------------------|--|
| Max. allowable operating pressure PS | Vacuum up to 9 bar   |
| Pilot pressure                       | 4 - 12 bar compressed air  |
| Temperature range                    | +5 °C up to +80 °C   |
| Leak rate                            | $1 \times 10^{-3}$ mbar x l/s  |
| Material                             | Housing, piston and spacer: Aluminium  |
| Sealing material                     | Main seal of chloroprene / o-rings of NBR<br>Urethane seals for high-wear applications are optional. |

Other designs on request

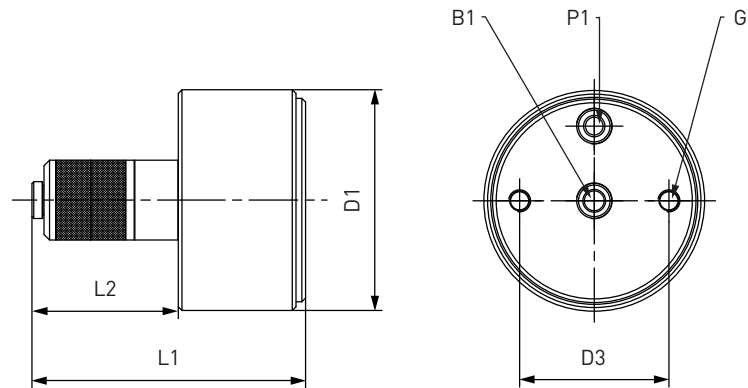
#### Example of use:



## » WEH<sup>®</sup> Connector TW01

### ORDERING | WEH<sup>®</sup> TW01 Quick connector

approx. dimensions (mm)



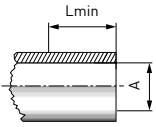
| Body size | B1<br>(internal thread) | P1<br>(internal thread) | G** | D1    | D2   | L1    | L2   |
|-----------|-------------------------|-------------------------|-----|-------|------|-------|------|
| 01        | M5                      | M5                      | M5  | 32.0  | 20.5 | 55.5  | 22.0 |
| 1         | G1/8"                   | G1/8"                   | M6  | 40.0  | 26.0 | 70.5  | 28.0 |
| 2         | G1/8"                   | G1/8"                   | M6  | 40.0  | 26.0 | 66.5  | 23.5 |
| 3         | G1/8"                   | G1/8"                   | M6  | 60.0  | 41.0 | 74.5  | 40.0 |
| 4         | G1/8"                   | G1/8"                   | M6  | 60.0  | 41.0 | 71.5  | 37.0 |
| 5         | G1/2"                   | G1/8"                   | M6  | 89.0  | 60.0 | 106.5 | 59.5 |
| 6         | G1/2"                   | G1/8"                   | M6  | 89.0  | 60.0 | 101.0 | 54.0 |
| 7         | G3/4"                   | G1/8"                   | M6  | 107.0 | 76.5 | 94.0  | 57.5 |
| 8         | G3/4"                   | G1/8"                   | M6  | 107.0 | 76.5 | 94.0  | 57.5 |

\* on request

\*\* thread for fixturing device

## » WEH® Connector TW01

### Straight tube, internal diameter



| Part no.<br>Connector | Part no.<br>Main seal set | Part no.<br>Replacement seals | Body size | Sealing range<br>internal tube Ø<br>A | Lmin* |
|-----------------------|---------------------------|-------------------------------|-----------|---------------------------------------|-------|
| C1-139903             | B200B-141363              | B200B-141298                  | 01        | 7.7 - 8.3                             | 13.5  |
| C1-141179             | B200B-141364              | B200B-141299                  | 01        | 8.4 - 10.0                            | 13.5  |
| C1-141180             | B200B-141365              | B200B-141300                  | 1         | 10.0 - 12.0                           | 15.0  |
| C1-141181             | B200B-141366              | B200B-141301                  | 1         | 12.0 - 14.0                           | 15.0  |
| C1-141182             | B200B-141367              | B200B-141302                  | 1         | 14.0 - 16.0                           | 15.0  |
| C1-141183             | B200B-141369              | B200B-141303                  | 2         | 16.0 - 18.0                           | 15.0  |
| C1-141184             | B200B-141370              | B200B-141304                  | 2         | 18.0 - 20.0                           | 15.0  |
| C1-141185             | B200B-141371              | B200B-141305                  | 2         | 20.0 - 22.0                           | 15.0  |
| C1-141186             | B200B-141372              | B200B-141306                  | 3         | 22.0 - 24.0                           | 28.0  |
| C1-141187             | B200B-141373              | B200B-141307                  | 3         | 24.0 - 26.0                           | 28.0  |
| C1-141188             | B200B-141374              | B200B-141308                  | 3         | 26.0 - 28.0                           | 28.0  |
| C1-141189             | B200B-141375              | B200B-141309                  | 4         | 28.0 - 30.0                           | 28.0  |
| C1-141190             | B200B-141376              | B200B-141310                  | 4         | 30.0 - 32.0                           | 28.0  |
| C1-141191             | B200B-141377              | B200B-141312                  | 4         | 32.0 - 34.0                           | 28.0  |
| C1-141192             | B200B-141378              | B200B-141313                  | 5         | 34.0 - 37.0                           | 41.0  |
| C1-141193             | B200B-141379              | B200B-141314                  | 5         | 37.0 - 40.0                           | 41.0  |
| C1-141194             | B200B-141380              | B200B-141315                  | 5         | 40.0 - 43.0                           | 41.0  |
| C1-141195             | B200B-141381              | B200B-141316                  | 6         | 43.0 - 47.0                           | 41.0  |
| C1-141196             | B200B-141383              | B200B-141317                  | 6         | 47.0 - 51.0                           | 41.0  |
| C1-141197             | B200B-141386              | B200B-141318                  | 6         | 51.0 - 55.0                           | 41.0  |
| C1-141198             | B200B-141387              | B200B-141319                  | 7         | 55.0 - 58.5                           | 41.5  |
| C1-141199             | B200B-141391              | B200B-141321                  | 7         | 58.5 - 62.1                           | 41.5  |
| C1-141200             | B200B-141392              | B200B-141322                  | 7         | 62.1 - 65.6                           | 41.5  |
| C1-141201             | B200B-141393              | B200B-141323                  | 8         | 65.6 - 69.2                           | 41.5  |
| C1-141202             | B200B-141394              | B200B-141324                  | 8         | 69.2 - 72.7                           | 41.5  |
| C1-141203             | B200B-141395              | B200B-141325                  | 8         | 72.7 - 76.0                           | 41.5  |

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

Other connector versions on request.

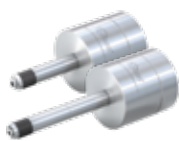
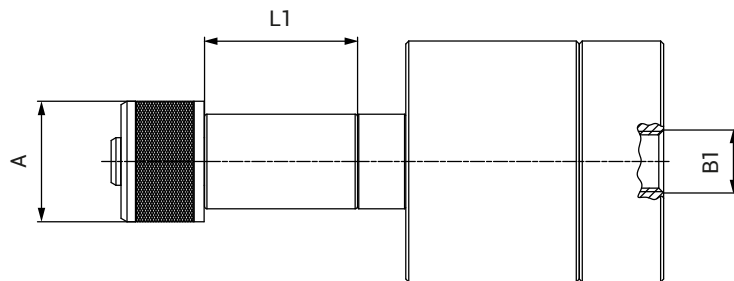
Required information for ordering see page 7.



## » WEH<sup>®</sup> Connector TW01

### ORDERING | WEH<sup>®</sup> TW01 Quick connector with shaft extension

approx. dimensions (mm)



| Part no.   | Description            | A          | B1         | L1   |
|------------|------------------------|------------|------------|------|
| On request | TW01 with 1" extension | On request | On request | 25.4 |
| On request | TW01 with 2" extension | On request | On request | 50.8 |

Shaft extensions in other lengths on request

## » WEH® Connector TW01

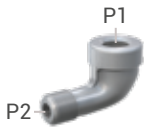
### ACCESSORIES

The following accessories are available for the WEH® TW01:

Screw plug for plug version (see page 13)

#### Angle piece 90°

A 90° angle piece is available for applications requiring a 90° inlet for the pilot pressure. Connection 'P2' of the angle piece is connected to the pilot pressure port 'P1' of the connector and connection 'P1' of the angle piece is connected to the pilot pressure hose, hand slide valve or control/venting fitting.



| Part no.        | Description     | P1     | P2    |
|-----------------|-----------------|--------|-------|
| <b>E69-9500</b> | Angle piece 90° | RP1/8" | R1/8" |

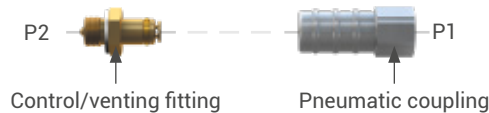
\* cylindrical Whitworth tube thread acc. to DIN EN ISO 228-1

\*\* conical Whitworth tube thread acc. to DIN EN 10226

#### Accessories for manual actuation of the pilot pressure:

##### Pneumatic coupling and control/venting fitting

We offer a pneumatic coupling with control/venting fitting for manual actuation of the pilot pressure. Both are equipped with an integrated check valve. Connection 'P2' of the fitting is connected to the pilot pressure port 'P1' of the connector and connection 'P1' of the pneumatic coupling is connected to the pilot pressure hose. The pneumatic coupling is placed and held onto the control/venting fitting for manual actuation of the pilot pressure thus generating a short pressure impulse onto the fitting for actuation of the TW01 connector. Once actuated, the pneumatic coupling can be disconnected. The integrated check valve of the control/venting fitting ensures that the TW01 connector remains properly connected to the test piece and prevents any escape of the pilot medium. To disconnect the TW01 connector, actuate the check valve of the fitting manually, thus venting the pilot pressure applied.



| Part no.       | Description             | P1<br>(internal thread) | P2<br>(external thread) |
|----------------|-------------------------|-------------------------|-------------------------|
| <b>W136484</b> | Control/venting fitting | -                       | G1/8"                   |
| <b>W9326</b>   | Pneumatic coupling      | G1/8"                   | -                       |

##### Hand slide valve and thread extension

Alternatively we also offer a hand slide valve for manual actuation of the pilot pressure. Connection 'P2' of the hand slide valve is connected to the pilot pressure port 'P1' of the connector and connection 'P1' of the hand slide valve is connected to the pilot pressure hose. The pilot pressure is applied or vented by actuating the sliding sleeve.

For small sizes and applications with restricted access where the hand slide valve cannot be connected directly to the pilot pressure port 'P1' of the connector, we also offer a thread extension.



| Part no.         | Description      | P1<br>(internal thread) | P2<br>(external thread) |
|------------------|------------------|-------------------------|-------------------------|
| <b>C1-48091</b>  | Hand slide valve | G1/8"                   | G1/8"                   |
| <b>E69-96824</b> | Thread extension | G1/8"                   | G1/8"                   |

## » WEH<sup>®</sup> Connector TW01

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### Seal sets

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Main seal sets contain the elastomer main seal(s), two back-up washers and a retaining ring for one seal replacement.



Replacement seal sets contain five complete main seals with retaining rings.

### SPECIAL SOLUTIONS

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Example:



TW01 with spacer for straight tubes

## » WEH® Connector TW02

### DESCRIPTION



#### Features

- Connection in seconds
- No hand tightening required
- Sealing irregular or rough surfaces
- Simple seal replacement
- Ergonomic design
- High-grade materials

The WEH® TW02 Quick connector reliably and quickly seals tubes, hoses and externally threaded components. Fitted with elastomer seals, the TW02 is ideal for sealing out of round and rough surfaces and clearing large tolerances on the test piece. The connector only clamps itself firmly over the sealing rubber of the test piece, but does not have any retaining function. Therefore a fixture must be used.

When using hose connections, WEH® TW02 is additionally equipped with a counterholder. Because of the pneumatic actuation, the connector is particularly well suited for automation of test procedures.

A number of accessories are available for manual actuation of the pilot pressure, e.g. hand slide valve or pneumatic coupling with control/venting fitting (see accessories). Special versions, e.g. twin connectors for sealing ports in close proximity to each other are available on request.



TW02 with hand slide valve

#### Application

Quick connector for pressure and vacuum testing of straight tubes, hoses and components with bead or collar (sealing on external tube diameter).

### TECHNICAL DATA

| Characteristics                      | Basic version   |
|--------------------------------------|---|
| Max. allowable operating pressure PS | Vacuum up to 35 bar   |
| Pilot pressure                       | 4 - 12 bar compressed air   |
| Temperature range                    | +5 °C up to +80 °C  |
| Leak rate                            | $1 \times 10^{-3}$ mbar x l/s   |
| Material                             | Housing, piston and seal housing: Aluminium   |
| Sealing material                     | Main seal of chloroprene / o-rings of NBR<br>For body size 001 main seal and o-rings of NBR.<br>Urethane seals for high-wear applications are optional. |

Other designs on request

**Note:** For pressurised applications the TW02 must be secured by a fixturing device.  
On vacuum applications the TW02 does not need to be secured. For operating pressures above 10 bar we recommend urethane seals.

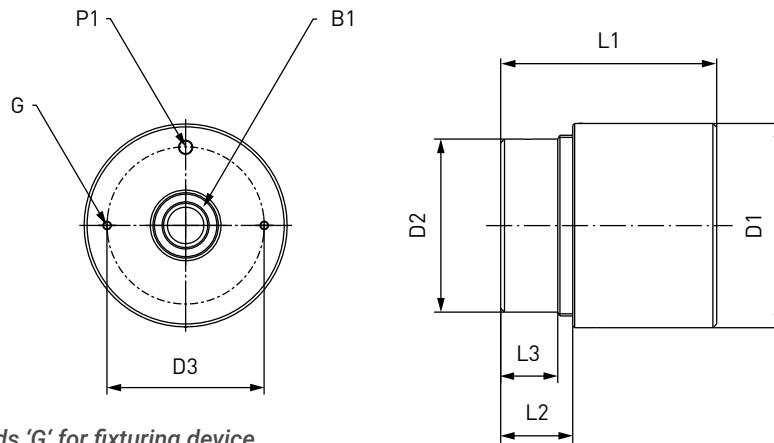
#### Example of use:



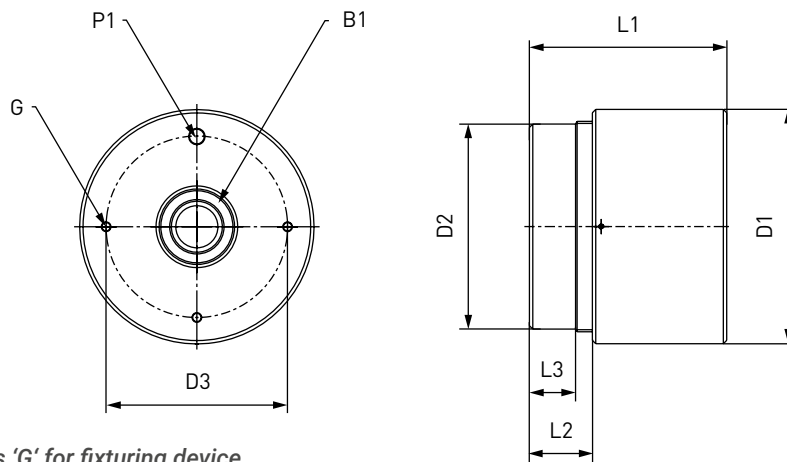
# » WEH<sup>®</sup> Connector TW02

## ORDERING | WEH<sup>®</sup> TW02 Quick connector

approx. dimensions (mm)



*Baugröße 001 - 3: 2 threads 'G' for fixturing device*



*Baugröße 4 - 6: 3 threads 'G' for fixturing device*

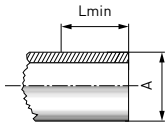
| Body size | B1<br>(internal thread) | P1<br>(internal thread) | G** | D1    | D2    | D3    | L1    | L2   | L3   |
|-----------|-------------------------|-------------------------|-----|-------|-------|-------|-------|------|------|
| 001*      | G1/8"                   | M5                      | M3  | 21.5  | –     | 16.0  | 44.0  | –    | –    |
| 01        | G1/8"                   | M5                      | M5  | 38.0  | 32.5  | 28.0  | 52.5  | 10.0 | 9.0  |
| 1         | G1/4"                   | G1/8"                   | M6  | 56.5  | 47.0  | 41.5  | 69.5  | 10.0 | 8.5  |
| 2         | G1/2"                   | G1/8"                   | M6  | 79.0  | 69.0  | 63.5  | 89.0  | 23.0 | 14.5 |
| 3         | G1"                     | G1/8"                   | M6  | 107.5 | 91.0  | 82.5  | 114.0 | 38.0 | 29.5 |
| 4         | G1 1/2"                 | G1/8"                   | M6  | 139.5 | 122.0 | 108.0 | 117.0 | 38.0 | 28.0 |
| 5         | G2"                     | G1/8"                   | M10 | 177.5 | 162.0 | 140.0 | 117.0 | 35.5 | 35.5 |
| 6         | G2 1/2"                 | G1/8"                   | M10 | 190.0 | 174.5 | 155.5 | 126.5 | 35.5 | 35.5 |

\* for body size 001, 'P1' is located on the diameter of the connector instead of on the face

\*\* thread for fixturing device

## » WEH® Connector TW02

### Straight tube, external diameter



| Part no.<br>Connector | Part no.<br>Main seal set | Part no.<br>Replacement seals | Body size | Sealing range<br>external tube Ø<br>A | Lmin* |
|-----------------------|---------------------------|-------------------------------|-----------|---------------------------------------|-------|
| C1-141938             | B200B-142085              | B200B-142358                  | 001       | 0.80 - 1.30                           | 4.0   |
| C1-141948             | B200B-142090              | B200B-142359                  | 001       | 1.30 - 2.00                           | 4.0   |
| C1-141949             | B200B-142091              | B200B-142360                  | 001       | 2.00 - 3.30                           | 4.0   |
| C1-141950             | B200B-142092              | B200B-142361                  | 01        | 2.50 - 4.60                           | 15.0  |
| C1-141952             | B200B-142094              | B200B-142362                  | 01        | 4.60 - 6.60                           | 15.0  |
| C1-141953             | B200B-142095              | B200B-142363                  | 01        | 6.60 - 8.60                           | 15.0  |
| C1-141954             | B200B-142096              | B200B-142364                  | 01        | 8.60 - 10.7                           | 15.0  |
| C1-141955             | B200B-142097              | B200B-142365                  | 01        | 10.7 - 13.0                           | 15.0  |
| C1-141956             | B200B-142098              | B200B-142366                  | 1         | 11.0 - 13.0                           | 15.5  |
| C1-141957             | B200B-142099              | B200B-142367                  | 1         | 13.0 - 15.0                           | 15.5  |
| C1-141958             | B200B-142100              | B200B-142368                  | 1         | 15.0 - 17.0                           | 15.5  |
| C1-141959             | B200B-142101              | B200B-142369                  | 1         | 17.0 - 19.0                           | 15.5  |
| C1-141960             | B200B-142102              | B200B-142370                  | 1         | 19.0 - 21.0                           | 15.5  |
| C1-141964             | B200B-142120              | B200B-142371                  | 2         | 20.0 - 22.0                           | 27.0  |
| C1-141966             | B200B-142121              | B200B-142372                  | 2         | 22.0 - 24.0                           | 27.0  |
| C1-141967             | B200B-142122              | B200B-142373                  | 2         | 24.0 - 26.0                           | 27.0  |
| C1-141968             | B200B-142123              | B200B-142374                  | 2         | 26.0 - 28.0                           | 27.0  |
| C1-141969             | B200B-142124              | B200B-142375                  | 2         | 28.0 - 30.0                           | 27.0  |
| C1-141970             | B200B-142125              | B200B-142376                  | 2         | 30.0 - 32.0                           | 27.0  |
| C1-141971             | B200B-142126              | B200B-142377                  | 2         | 32.0 - 34.0                           | 27.0  |
| C1-141972             | B200B-142127              | B200B-142378                  | 2         | 34.0 - 36.0                           | 27.0  |
| C1-141973             | B200B-142128              | B200B-142379                  | 2         | 36.0 - 38.0                           | 27.0  |
| C1-141974             | B200B-142129              | B200B-142380                  | 3         | 38.0 - 41.0                           | 42.0  |
| C1-141975             | B200B-142130              | B200B-142381                  | 3         | 41.0 - 44.0                           | 42.0  |
| C1-141976             | B200B-142131              | B200B-142382                  | 3         | 44.0 - 47.0                           | 42.0  |
| C1-141977             | B200B-142132              | B200B-142383                  | 3         | 47.0 - 49.8                           | 42.0  |
| C1-141978             | B200B-142133              | B200B-142384                  | 4         | 49.8 - 53.0                           | 42.0  |
| C1-141980             | B200B-142134              | B200B-142385                  | 4         | 53.0 - 56.0                           | 42.0  |
| C1-141981             | B200B-142135              | B200B-142386                  | 4         | 56.0 - 59.0                           | 42.0  |
| C1-141982             | B200B-142136              | B200B-142387                  | 4         | 59.0 - 62.0                           | 42.0  |
| C1-141983             | B200B-142137              | B200B-142388                  | 4         | 62.0 - 65.0                           | 42.0  |
| C1-141984             | B200B-142138              | B200B-142389                  | 4         | 65.0 - 68.0                           | 42.0  |
| C1-141985             | B200B-142139              | B200B-142390                  | 4         | 68.0 - 71.0                           | 42.0  |
| C1-141986             | B200B-142140              | B200B-142391                  | 4         | 71.0 - 74.0                           | 42.0  |
| C1-141987             | B200B-142141              | B200B-142392                  | 4         | 74.0 - 77.0                           | 42.0  |

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

Other connector versions on request.

Required information for ordering see page 7.

## » WEH<sup>®</sup> Connector TW02

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### ACCESSORIES

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The following accessories are available for the WEH<sup>®</sup> TW02:

Screw plug for plug version (see page 13)

Angle piece 90° (see page 60)

**Accessories for manual actuation of the pilot pressure:**

Pneumatic coupling and control/venting fitting (see page 60)

Hand slide valve and thread extension (see page 60)

### Seal sets

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Main seal sets contain the elastomer main seal(s) and back-up washers for one seal replacement.



Replacement seal sets contain five complete main seals.

### SPECIAL SOLUTIONS

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Example:



TW02 for rubber hose testing

## » Fuel Connectors for the automotive industry

The WEH® Connectors enjoy an international reputation in the automotive industry and are used world-wide. They have been successfully used on engine test facilities for fast and efficient pressure and leak tests on fuel lines while maintaining production rates.

### TW710

Quick connector with lateral test port for tubes with bead or collar (very short version)



### TW711

Quick connector with central test port for tubes with bead or collar



### TW712

Quick connector with lateral test port for tubes with bead or collar



### TW713

Quick connector with central test port for tubes with bead or collar and pneumatic actuation for automated application



### TW723

Quick connector with central test port for tubes with bead, collar or external thread



### TW850

Quick connector for testing of diesel injectors up to 2600 bar



We will also develop a suitable solution for your specific needs, please contact us!



## » Customer-tailored solutions

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In addition to their extensive range of products, WEH - a world specialist in connection technology - can also meet customer's special requirements with innovative solutions. Wherever pressure-tight connections have to be established and testing procedures automated, we can supply the right solution for your application. Working in collaboration with our customers on demanding applications is our speciality. Our portfolio of advanced connector solutions provides ample evidence of the innovative technology of WEH® Products.

The following application provides an exemplary insight into the world of our special developments:

### TW751

Testing of pressure gauges  
up to 1000 bar



We will also develop a suitable solution for your specific needs, please contact us!

## » Technical appendix

### Definitions

| Abbreviation                   | Definition  |  |
|--------------------------------|---|--|
| <b>Pressure specifications</b> |   |  |
| PN                             | Nominal pressure  | Nominal pressure after temperature compensation at 15 °C   |
| 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 pressure  | Actuation pressure for hydraulic and pneumatic components  |
| PC                             | Cracking pressure   | Pressure at which the check valve opens and the first indication of flow occurs  |
| 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. |
| <b>Dimensions</b>              |   |  |
| L1, L2, L3 ...                 | Length specification  |  |
| D1, D2, D3 ...                 | Diameter specification  |  |
| A/F(1), A/F(2) ...             | Wrench size specification   |  |
| <b>Ports</b>                   |   |  |
| 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  |  |
| M                              | Measuring port  |  |
| Q                              | Drain port filter   |  |
| G                              | Mounting bores  |  |
| <b>Others</b>                  |   |  |
| DN                             | Nominal bore  |  |
| µm                             | Max. diameter of the filtered particle  |  |
| Kv                             | Is the discharge of water in m <sup>3</sup> /h at a pressure drop of 1 bar, 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)  |  |
| 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 appendix

### Technical explanations

| Term                              | Definition  |
|-----------------------------------|---|
| Temperature range                 | Is the temperature range in which the WEH® Product can be used.   |
| 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 leak rate, which the WEH® Product max. exhibits under intended use.  |
| Max. side load                    | Is the max. allowable sum of all external forces that may act on the device under intended use.<br><b>Note:</b><br>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.<br>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.<br>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.   |
| Storage / life time of components | There are certain requirements for every WEH® Product. These are described in the corresponding product documentation.  |

### Further explanations

| Subject   | Definition  |
|---|---|
| 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). You alone are responsible for the selection of WEH® Products and their configuration according to the requirements of your system. In doing so, please particularly consider your intended use, your performance data, your material compatibility, your system concept and your system limits as well as 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. 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. These WEH® Products are generally and exclusively classified as pressure accessories for piping in accordance with Article 2 (5) of the Pressure Equipment Directive 2014/68/EU. Based on the conducted classification, the conformity with the Pressure Equipment Directive 2014/68/EU is generally established under Article 4 (3) of the Pressure Equipment Directive 2014/68/EU. In these cases, the application of WEH® Products must correspond to their classification as pressure accessories for piping, and they may not be used either (i) as safety accessories or (ii) for vessels within the meaning of the Pressure Equipment Directive 2014/68/EU.<br><br>For some products a different classification and/or categorisation is required or can be conducted on request. In these cases, a conformity assessment procedure in accordance with Annex III of the Pressure Equipment Directive 2014/68/EU can and will be conducted (if legally required) 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. |

## » Technical appendix

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### Further explanations

| Subject                    | Definition  |
|----------------------------|---|
| 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

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

All information/recommendations in this catalogue 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 catalogue 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 catalogue (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. Product images are particularly provided for illustrative purposes only. Moreover, dimensions and other technical details in this catalogue 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 catalogue only become integral part of the contract if they have been expressly contractually agreed.

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

In case of deliveries and other services, our General Terms and Conditions and the Know-How Protection and Quality Assurance Agreement shall apply unless otherwise expressly agreed.

As a general rule, please appreciate that we cannot accept the General Terms and Conditions of our customers or third parties. Thank you for your understanding.



## » Design and production

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