

Type **TW241**

WEH[®] Connector for pressure and vacuum testing

of components with straight tube connection (external tube \varnothing 6.0 mm - 22.2 mm)



General

DESCRIPTION



Merkmale

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

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

The WEH® TW241 seals external diameters of straight tubes within seconds and bridges large tube tolerances of up to ± 0.25 mm (required roundness of external tube diameter max. 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 x 10 ⁻³ mbar x l/s |
| Max. allowable surface finish of test piece | Rz8 µm |
| Max. allowable material hardness of test piece | 28 HRC |
| Material | Clamping jaws: Corrosion-resistant stainless steel, hardened Housing: Anodized aluminium |
| Sealing material | Front seal of Chloropren |

Other designs on request

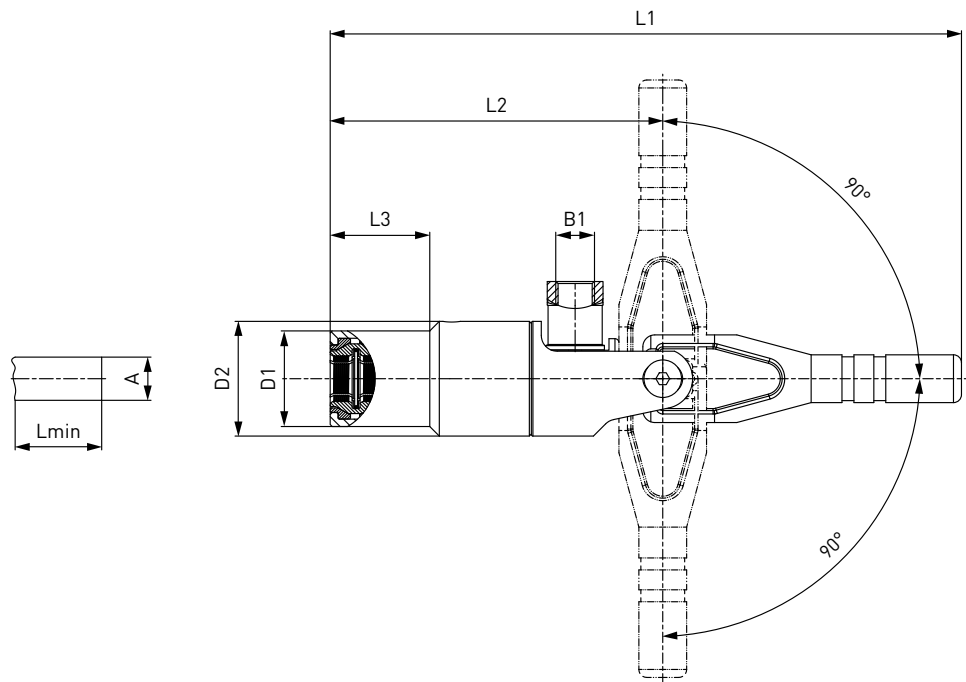
Example of use:



Ordering

ORDERING | WEH® 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) |
|------------------|-----------|--|----------------------|----|------|-------|------|----|-------|--|
| C1-130646 | 1 | 6.0 | G1/8" | 24 | 28.8 | 158.5 | 83.5 | 25 | 26.5 | B202B-130704 |
| C1-130647 | 1 | 6.35 (1/4") | G1/8" | 24 | 28.8 | 158.5 | 83.5 | 25 | 26.5 | B202B-130705 |
| C1-130654 | 1 | 7.9 (5/16") | G1/8" | 24 | 28.8 | 158.5 | 83.5 | 25 | 26.5 | B202B-130713 |
| C1-130655 | 1 | 8.0 | G1/8" | 24 | 28.8 | 158.5 | 83.5 | 25 | 26.5 | B202B-130714 |
| C1-130661 | 1 | 9.5 (3/8") | G1/8" | 24 | 28.8 | 158.5 | 83.5 | 25 | 26.5 | B202B-130720 |
| C1-130663 | 1 | 10.0 | G1/8" | 24 | 28.8 | 158.5 | 83.5 | 25 | 26.5 | B202B-130722 |

* Lmin: minimum insertion length of test piece

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

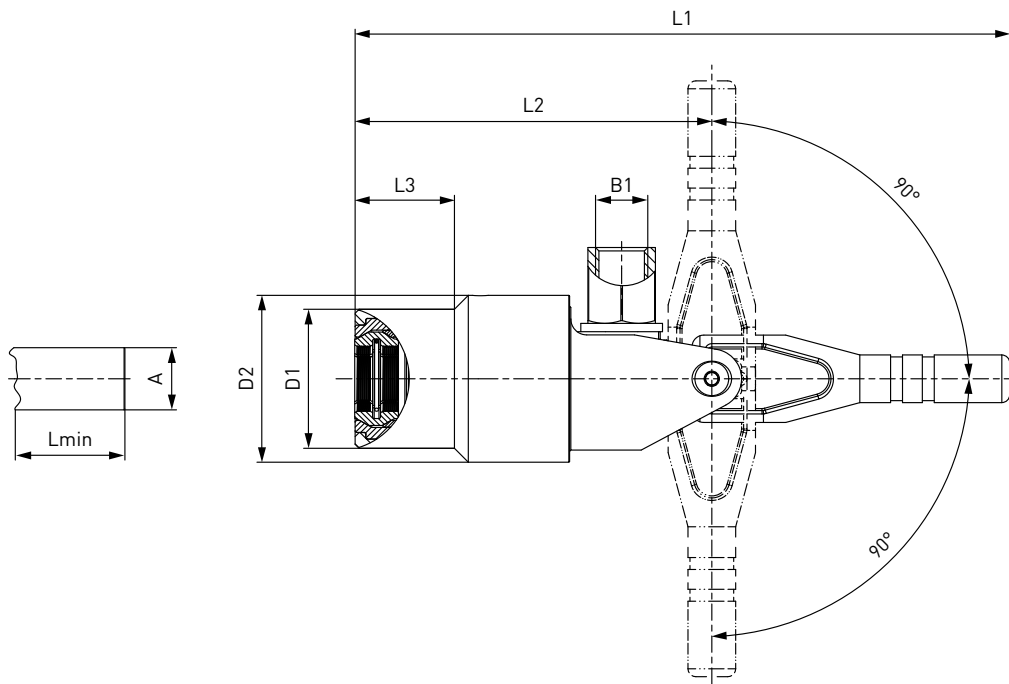
Note: required roundness of external tube diameter max. 0.25 mm

Other connector sizes on request

Ordering

ORDERING | WEH® TW241 Quick connector – body size 2

approx. dimensions (mm)



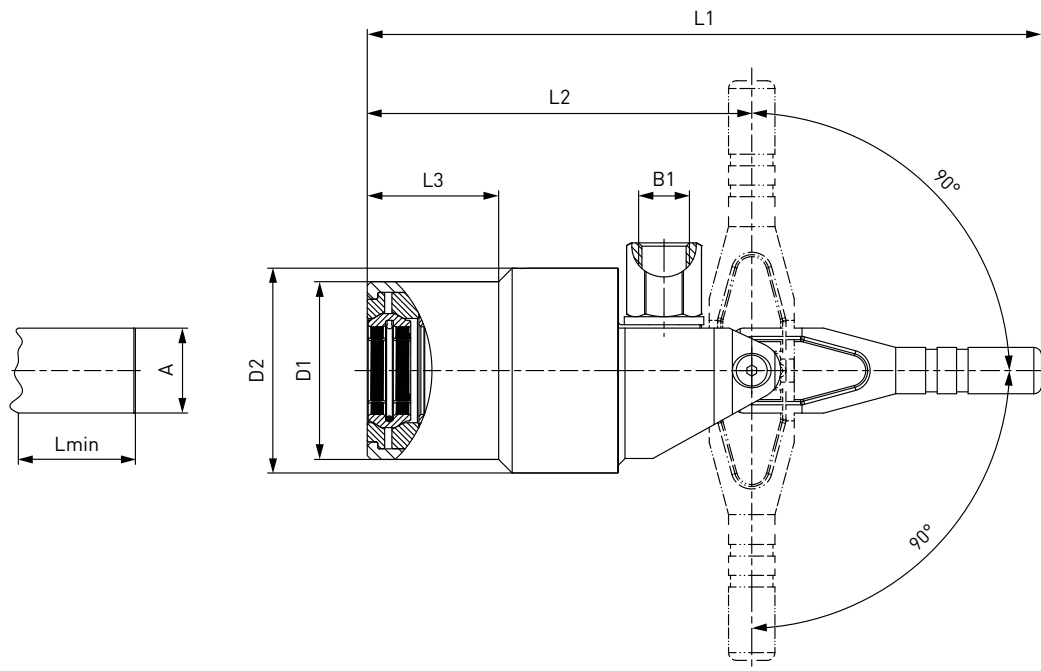
| Part no. | Body size | Sealing range external tube Ø A ± 0.25 | B1 (internal thread) | D1 | D2 | L1 | L2 | L3 | Lmin* | Replacement seal set (consisting of 5 front seals) |
|------------------|-----------|--|----------------------|----|----|-----|----|----|-------|--|
| C1-130672 | 2 | 12.0 | G1/4"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

* Lmin: minimum insertion length of test piece
 When ordering, please state if testing reinforced fibre glass or plastic test pieces.
 Note: required roundness of external tube diameter max. 0.25 mm
 Other connector sizes on request

Ordering

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) |
|------------------|-----------|---|-------------------------|----|----|-----|-----|----|-------|---|
| C1-130691 | 3 | 19.05 (3/4") | G1/4" | 46 | 53 | 175 | 100 | 34 | 26 | B202B-130752 |
| C1-130694 | 3 | 22.0 | G1/4" | 46 | 53 | 175 | 100 | 34 | 26 | B202B-130755 |
| C1-130695 | 3 | 22.2 (7/8") | G1/4" | 46 | 53 | 175 | 100 | 34 | 26 | B202B-130756 |

* 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, catalogue no. 35.

Accessories

ACCESSORIES

The following accessories are available for the WEH® TW241:

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 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!



| Part no. | Description | Connection (external thread) | Pressure range |
|--------------|----------------------------|------------------------------|----------------|
| W9329 | Screw plug (high pressure) | G1/8" | 50 - 350 bar |
| W9330 | Screw plug (high pressure) | G1/4" | 50 - 350 bar |

Lever extension

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



| Part no. | Description |
|-------------------|---------------------------|
| E67-137059 | Lever extension for TW241 |

Other products**OTHER PRODUCTS**

You will find more products in our current catalogue no. 35



Further information on our homepage
www.weh.com

Abbreviations/Definition

Explanation of abbreviations see technical appendix in the catalogue or www.weh.com

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

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. These WEH® Products may not be used (i) as safety accessories or (ii) for vessels as defined by the Pressure Equipment Directive 2014/68/EU. Therefore, the application of these WEH® Products must comply with their classification as pressure accessories for piping. The assessment with regard to a different classification can, however, be made on request.

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.

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» Contact

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