

Type **TW241**

WEH[®] Connector for pressure and vacuum testing

of components with straight tube connection (external tube Ø 6.0 mm - 44.0 mm)



General

DESCRIPTION



Features

- For connection onto straight tubes, sealing on the external diameter
- Available for small and large tube diameters
- Extremely high flow rates (body sizes 4 - 7)
- Self-retaining up to max. 1,015 psi
- 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 44.0 mm. The connector is available in seven body sizes and 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 19 mm
Operating pressure PS	Vacuum up to max. 1,015 psi
Temperature range	+41 °F up to +176 °F
Leak rate	1×10^{-3} mbar x l/s
Surface finish of test piece	Roughness \leq Rz8 μ m
Material hardness of test piece	Max. hardness 28 HRC
Materials	Clamping jaws: Corrosion-resistant stainless steel, hardened Housing: Anodized aluminium
Sealing materials	Front seal of chloroprene

Other designs on request

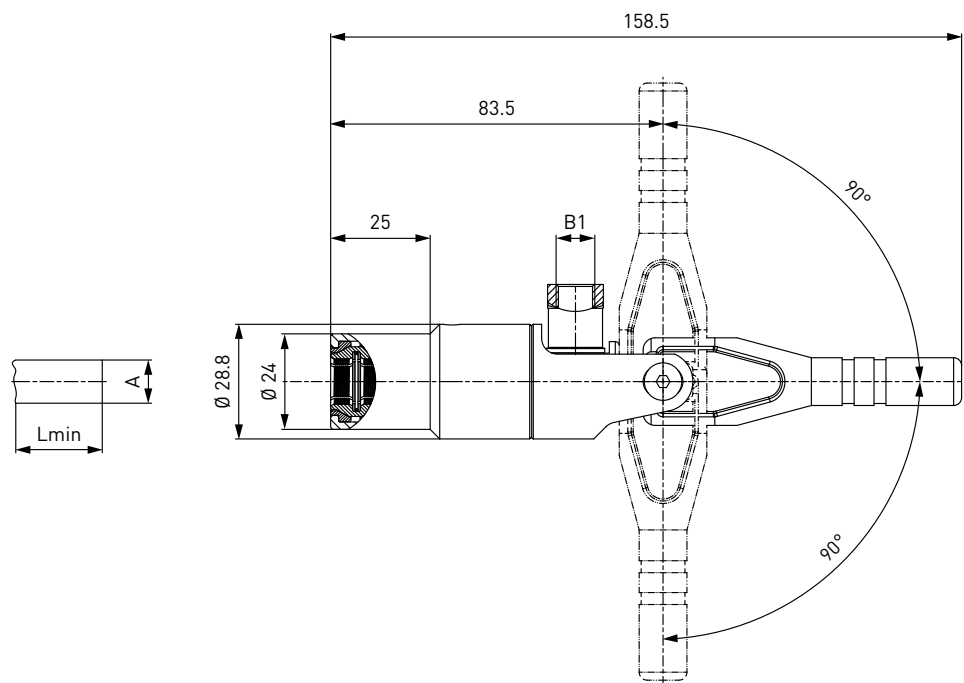
Example of use:



Ordering

ORDERING | WEH® TW241 Quick connector – body size 1

approx. dimensions (mm)



Part No.	Body size	Sealing range external tube Ø A ± 0.25	Inlet B1 (female thread)	Lmin*	Replacement seal set (consisting of 5 front seals)
C1-130646	1	6.0	G1/8"	26.5	B202B-130704
C1-130647	1	6.35 [1/4"]	G1/8"	26.5	B202B-130705
C1-130654	1	7.9 [5/16"]	G1/8"	26.5	B202B-130713
C1-130655	1	8.0	G1/8"	26.5	B202B-130714
C1-130661	1	9.5 [3/8"]	G1/8"	26.5	B202B-130720
C1-130663	1	10.0	G1/8"	26.5	B202B-130722

* Lmin: minimum insertion length of test piece

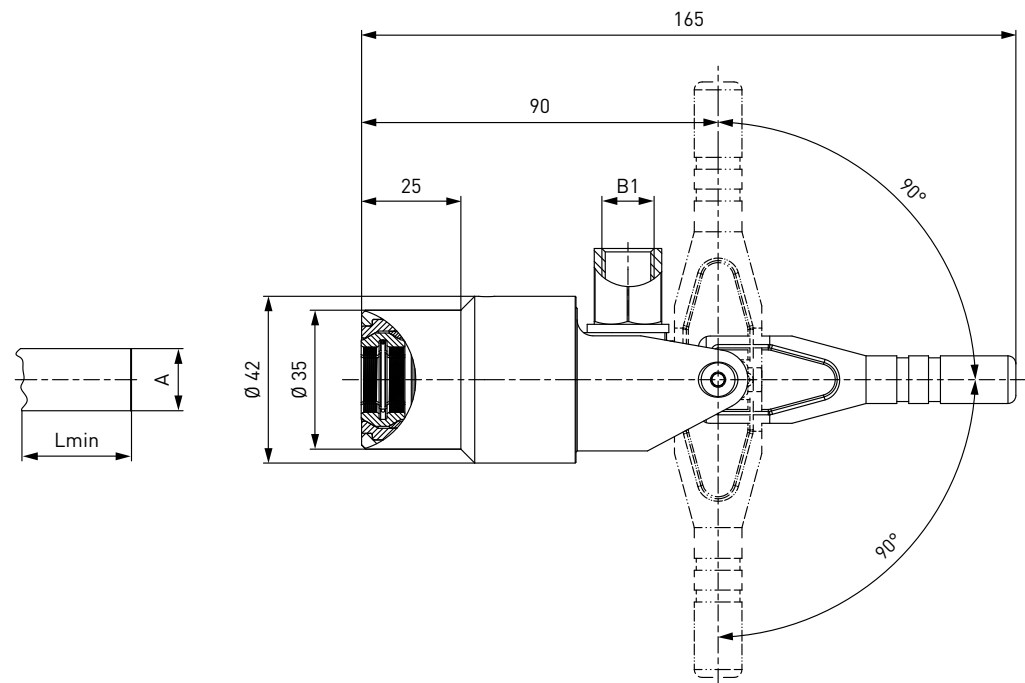
When ordering, please state if testing reinforced fibre glass or plastic test pieces.

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

Ordering

ORDERING | WEH® TW241 Quick connector – body size 2

approx. dimensions (mm)



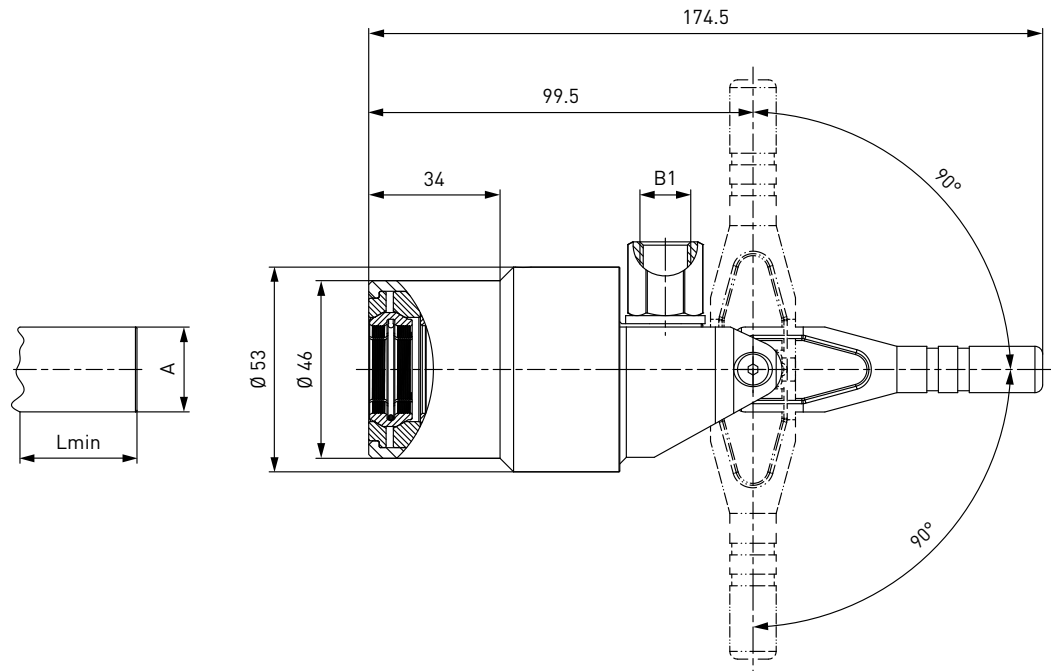
Part No.	Body size	Sealing range external tube Ø A ± 0.25	Inlet B1 (female thread)	Lmin*	Replacement seal set (consisting of 5 front seals)
C1-130672	2	12.0	G1/4"	26.5	B202B-130732
C1-130674	2	12.7 (1/2")	G1/4"	26.5	B202B-130734
C1-130685	2	15.9 (5/8")	G1/4"	26.5	B202B-130745
C1-130686	2	16.0	G1/4"	26.5	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

Ordering

ORDERING | WEH® TW241 Quick connector – body size 3

approx. dimensions (mm)



Part No.	Body size	Sealing range external tube Ø A ± 0.25	Inlet B1 (female thread)	Lmin*	Replacement seal set (consisting of 5 front seals)
C1-130691	3	19.05 (3/4")	G1/4"	26.5	B202B-130752
C1-130694	3	22.0	G1/4"	26.5	B202B-130755
C1-130695	3	22.2 (7/8")	G1/4"	26.5	B202B-130756

* Lmin: minimum insertion length of test piece

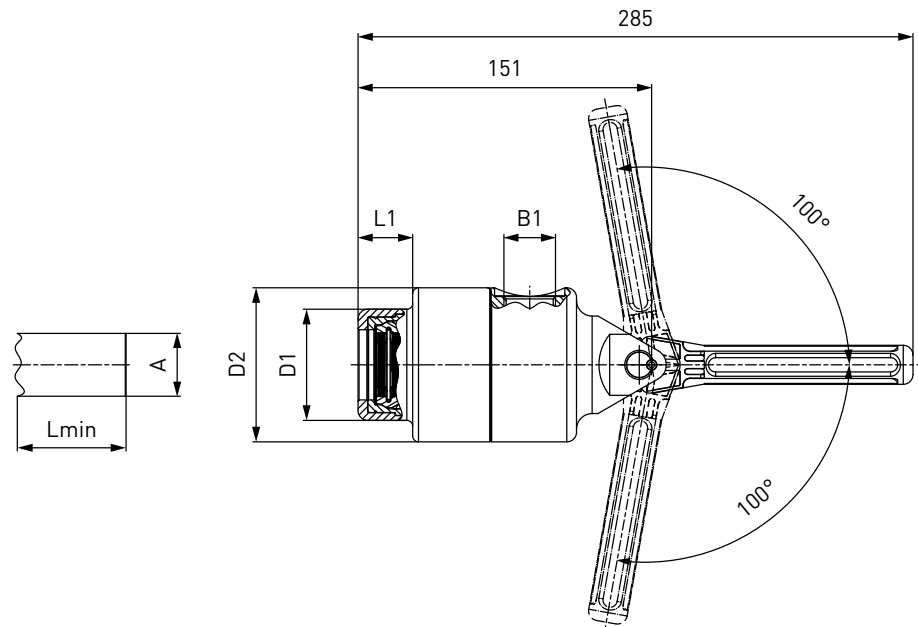
When ordering, please state if testing reinforced fibre glass or plastic test pieces.

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

Ordering

ORDERING | WEH® TW241 Quick connector – body size 4 - 7

approx. dimensions [mm]



Part No.	Body size	Sealing range external tube Ø $A \pm 0.2$	Inlet B1 (female thread)	L1	D1	D2	Lmin*	Replacement seal set (consisting of 5 front seals)
C1-108200	4	24.0	G3/4"	28	52	74	39	B202B -145689
C1-145909	4	25.0	G3/4"	28	52	74	39	B202B -145934
C1-108201	4	25.4 (1")	G3/4"	28	52	74	39	B202B-145690
C1-108202	4	26.0	G3/4"	28	52	74	39	B202B-145691
C1-108203	4	28.0	G3/4"	28	52	74	39	B202B-145692
C1-108204	4	28.5 (1 1/8")	G3/4"	28	52	74	39	B202B-145693
C1-108205	5	30.0	G3/4"	28	57	79	39	B202B-145694
C1-108206	5	31.75 (1 1/4")	G3/4"	28	57	79	39	B202B-145695
C1-108207	5	32.0	G3/4"	28	57	79	39	B202B-145696
C1-108208	5	34.0	G3/4"	28	57	79	39	B202B-145697
C1-108209	5	34.9 (1 3/8")	G3/4"	28	57	79	39	B202B-145698
C1-145910	5	35.0	G3/4"	28	57	79	39	B202B-145935
C1-108210	6	36.0	G3/4"	29	62	84	39	B202B-145699
C1-108211	6	38.0	G3/4"	29	62	84	39	B202B-145700
C1-108212	6	38.10 (1 1/2")	G3/4"	29	62	84	39	B202B-145701
C1-108213	7	40.0	G3/4"	29	67	89	39	B202B-145702
C1-108214	7	42.0	G3/4"	29	67	89	39	B202B-145703
C1-108215	7	44.0	G3/4"	29	67	89	39	B202B-145704

* Lmin: minimum insertion length of test piece

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

Other connector sizes and versions on request.

Required information for ordering see page 9, catalog no. 35.

Accessories

ACCESSORIES

The following accessories are available for the WEH® TW241:

Screw plug

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. G-thread*	Description	Connection (male thread)	Pressure range
E69-9200	Screw plug (low pressure)	G1/8"	0 - 725 psi (0 - 50 bar)
E69-9210	Screw plug (low pressure)	G1/4"	0 - 725 psi (0 - 50 bar)
W9338	Screw plug (low pressure)	G3/4"	0 - 725 psi (0 - 50 bar)
W9329	Screw plug (high pressure)	G1/8"	725 - 5,000 psi (50 - 350 bar)
W9330	Screw plug (high pressure)	G1/4"	725 - 5,000 psi (50 - 350 bar)
W9333	Screw plug (high pressure)	G3/4"	725 - 5,000 psi (50 - 350 bar)

* NPT-thread on request

Lever extension

As standard the body sizes 1 - 3 of the TW241 quick connector have a short lever for easy connection to components at difficult-to-access ports. For these 3 body sizes 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 (body size 1 - 3)

Accessories

Suspension attachment

For applications with balancers, WEH offers a suspension attachment for the body sizes 4 - 7 of the TW241 quick connector.



Part No.	Description	Connection
W115291	Suspension attachment for TW241 (body size 4 - 7)	G3/4" female thread / G3/4" male thread

Other products

OTHER PRODUCTS

You will find more products in our current catalog 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.

© All rights reserved, WEH GmbH. Any unauthorized use is strictly forbidden. Subject to alteration.
No liability will be assumed for any content. Herewith previous versions are no longer valid.

» Contacting

For queries and further information, please do not hesitate to contact us.

Manufacturer:

WEH GmbH Precision Connectors

Josef-Henle-Str. 1
89257 Illertissen / Germany

Phone: +49 7303 9609-0
Fax: +49 7303 9609-9999

Email: sales@weh.com
www.weh.com