

Type **TW01**

WEH[®] Connector for pressure and vacuum testing
of straight tubes and bores (sealing the internal tube diameter)



General

DESCRIPTION



Features

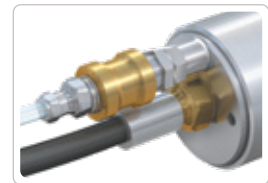
- Connection in seconds
- No hand tightening required
- Sealing irregular or rough surfaces
- Stroke limitation
- Simple seal replacement
- Ergonomic design
- High-grade materials

The WEH® TW01 Quick connector reliably and quickly seals inside bores, irregular or rough holes and female 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.

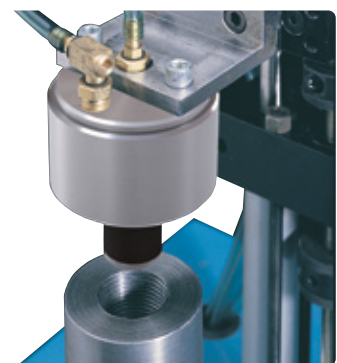
Components: vessels, plastic vessels, medical components, valves, pumps, filter, pressure vessels, tube connections, etc.

TECHNICAL DATA

Characteristics	Basic version
Max. allowable operating pressure PS	Vacuum up to 9 bar
Pilot pressure	Body size 01: 6 - 9 bar compressed air Body size 1 - 8: 6 - 12 bar compressed air
Temperature range	+5 °C up to +80 °C
Leak rate	1 x 10 ⁻³ mbar x l/s
Material	Housing, piston and spacer: aluminum
Sealing material	Main seal of chloroprene / o-rings of NBR Urethane seals for high-wear applications are optional.

Other designs on request

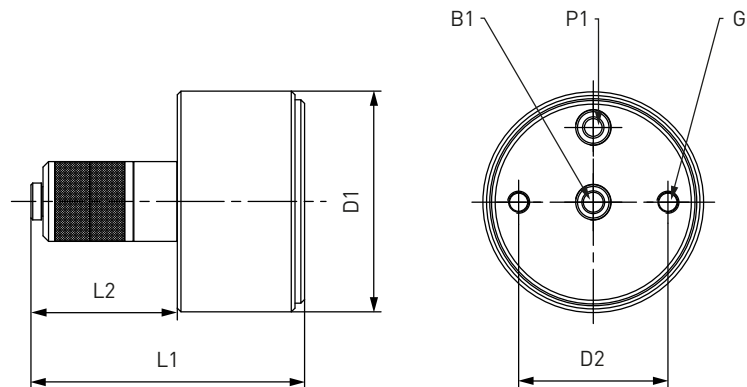
Example of use:



Ordering

ORDERING | WEH® TW01 Quick connector

approx. dimensions (mm)



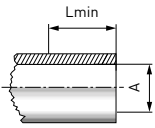
Body size	B1 (female thread)	P1 (female thread)	G**	D1	D2	L1	L2
01	M5	M5	M5	32.0	20.2	55.5	22.0
1	G1/8"	G1/8"	M6	40.0	26.0	70.5	28.0
2	G1/8"	G1/8"	M6	40.0	26.0	66.5	23.5
3	G1/8"	G1/8"	M6	60.0	41.0	74.5	40.0
4	G1/8"	G1/8"	M6	60.0	41.0	71.5	37.0
5	G1/2"	G1/8"	M6	89.0	60.0	106.5	59.5
6	G1/2"	G1/8"	M6	89.0	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

Ordering

Straight tube, internal diameter



Part no. Connector	Part no. Main seal set	Part no. Replacement seals	Body size	Sealing range internal tube Ø 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 connection sizes on request

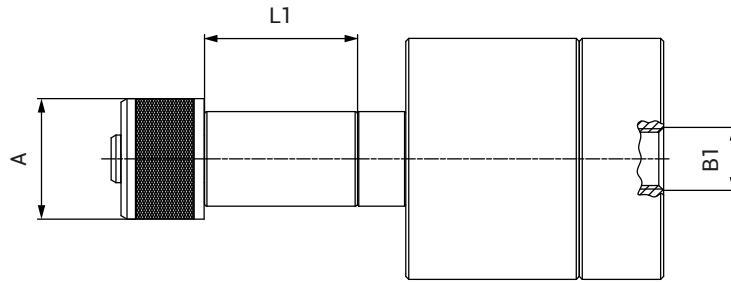
Other connection types on request.

Required information for ordering see page 7, catalog no. 35.

Ordering / Accessories

ORDERING | WEH® 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

ACCESSORIES

The following accessories are available for the WEH® TW01 Quick connector:

Screw plug for plug version

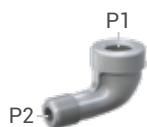
If the WEH® Connector is used as a plug, the media inlet 'B1' can be sealed with a screw plug of brass with a PVC sealing ring for low pressure range. It is recommended that the media compatibility of the seal be tested by the customer!



Part no.	Description	Connection (male thread)	Pressure range
E69-9200	Screw plug (low pressure)	G1/8"	0 - 50 bar
E69-9230	Screw plug (low pressure)	G1/2"	0 - 50 bar
W9338	Screw plug (low pressure)	G3/4"	0 - 50 bar

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
E69-9500	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

Accessories for manual actuation of the pilot pressure:

Pneumatic coupling and control/venting fitting

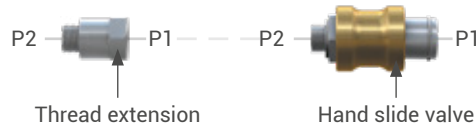
We offer a pneumatic coupling with control/venting fitting for manual actuation of the pilot pressure. Both are equipped with an integrated check valve. Connection 'P2' of the fitting is connected to the pilot pressure port 'P1' of the connector and connection 'P1' of the pneumatic coupling is connected 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 (female thread)	P2 (male thread)
W136484	Control/venting fitting	-	G1/8"
W9326	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 (female thread)	P2 (male thread)
C1-48091	Hand slide valve	G1/8"	G1/8"
E69-96824	Thread extension	G1/8"	G1/8"

Seal sets



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

SPECIAL SOLUTIONS

Example:



TW01 with spacer for straight tubes

Technical explanations

TECHNICAL EXPLANATIONS

Abbreviations/Definitions

For explanation of abbreviations, definitions of terms and further explanations, see the applicable Technical Appendix of the corresponding catalog or visit www.weh.com

Illustrations

The illustrations and/or images used in these data sheet are particularly provided for illustrative purposes only and may differ in some details from the actual product. For binding information, please refer to your individual orders.

Safe product selection

Our WEH® Products are designed to be operated by qualified professional users (insofar as WEH® Products are also designed to be operated by other users in individual cases, this is explicitly stated in the corresponding operating instructions). Please note that WEH does not know your system and therefore - also due to the large number of different potential applications of WEH® Products - cannot perform tests on all potential types of application. You alone are responsible for the selection, configuration and suitability of WEH® Products, especially according to the requirements of your system. Before purchasing WEH® Products, please particularly ensure that our products are compatible with your intended use, your performance data, your material and fluids, your system concept and your system limits according to our product specifications. Please also consider your technical and legal requirements for operation, handling and maintenance. The quality and safety of WEH® Products is our highest priority. For this reason, WEH® Products may not be used outside the specifications in the relevant data sheets and product descriptions. If you are not sure whether the WEH® Product is suitable for your system and intended use, please contact us in advance. We also strongly recommend that you refrain from using third-party spare parts or a combination of WEH® Products with unsuitable third-party products. You alone are responsible for reviewing the suitability of third-party products. WEH® Products and WEH® Spare parts comply with our quality and safety standards.

Service life

WEH® Products are generally products which may be subject to wear and fatigue during operation and depending on your individual application/use. For details - in particular regarding the corresponding minimum inspection and maintenance intervals – please refer to the respective operating instructions for the WEH® Product.

Explanation on the Pressure Equipment Directive

These WEH® Products are generally classified as pressure accessories in accordance with Article 2 (5) of the Pressure Equipment Directive 2014/68/EU and are considered to be similar to piping. These WEH® Products may not be used as safety accessories. Furthermore, it is pointed out, that these WEH® Products are designed and placed on the market in accordance with the requirements of Article 4 (3) of the Pressure Equipment Directive 2014/68/EU. The assessment with regard to a different classification can, however, be made on request.

External change management

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More questions? – Great! Don't hesitate to contact our experts.

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