

Type **TW02**

WEH[®] Connector for pressure and vacuum testing

of straight tubes, hoses and components with bead or collar (sealing on external tube diameter)



General

DESCRIPTION



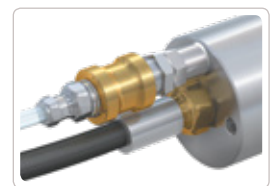
Features

- 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 x 10 ⁻³ mbar x l/s
Material	Housing, piston and seal housing: Aluminium
Sealing material	Main seal of chloroprene / o-rings of NBR For body size 001 main seal and o-rings of NBR. 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.

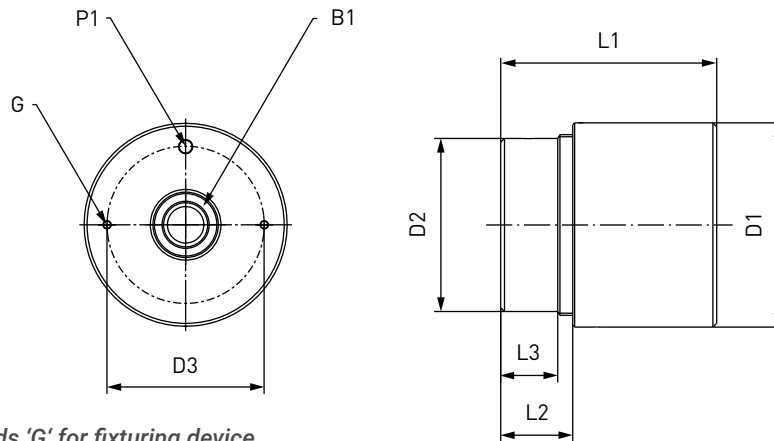
Example of use:



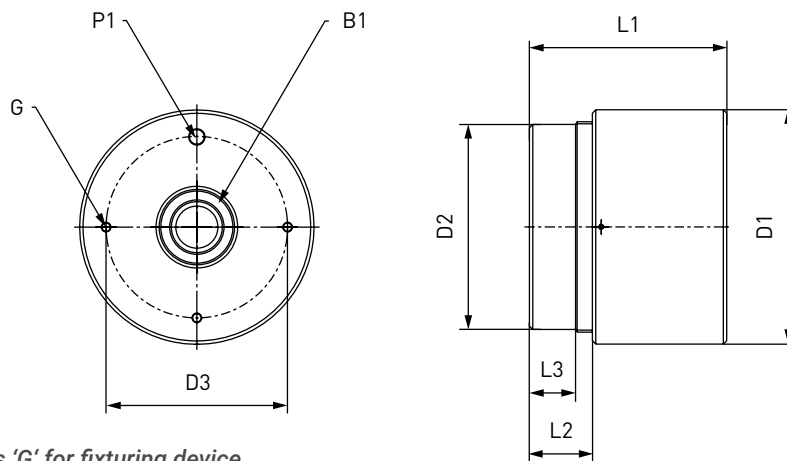
Ordering

ORDERING | WEH® TW02 Quick connector

approx. dimensions (mm)



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



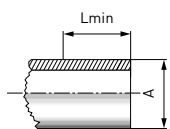
Baugröße 4 - 6: 3 threads 'G' for fixturing device

Body size	B1 (internal thread)	P1 (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

Ordering

Straight tube, external diameter



Part no. Connector	Part no. Main seal set	Part no. Replacement seals	Body size	Sealing range external tube Ø 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, catalogue no. 35.

Accessories

ACCESSORIES

The following accessories are available for the WEH® TW02:

Screw plug for plug version

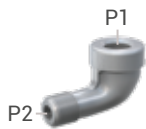
If the WEH® Connector is to be used as a plug, the media inlet 'B1' will be sealed with a screw plug of brass (PVC sealing ring) for low pressure range. It is recommended that the media compatibility of the seal be tested by the customer!



Part no.	Description	Connection (external thread)	Pressure range
E69-9200	Screw plug (low pressure)	G1/8"	0 - 50 bar
E69-9210	Screw plug (low pressure)	G1/4"	0 - 50 bar
E69-9230	Screw plug (low pressure)	G1/2"	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 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 TW02 connector. Once actuated, the pneumatic coupling can be disconnected. The integrated check valve of the control/venting fitting ensures that the TW02 connector remains properly connected to the test piece and prevents any escape of the pilot medium. To disconnect the TW02 connector, actuate the check valve of the fitting manually, thus venting the pilot pressure applied.



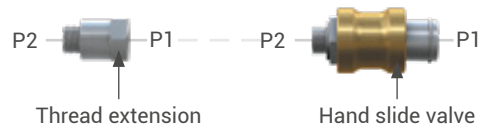
Part no.	Description	P1 (internal thread)	P2 (external thread)
W136484	Control/venting fitting	-	G1/8"
W9326	Pneumatic coupling	G1/8"	-

Accessories / Special solutions

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 (internal thread)	P2 (external 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) and back-up washers for one seal replacement.



Replacement seal sets contain five complete main seals.

SPECIAL SOLUTIONS

Example:



TW02 for rubber hose testing

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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