

# Type **TW02**

**WEH<sup>®</sup> Connector for pressure and vacuum testing**

of straight tubes, hoses and components with bead or collar



**General**

**DESCRIPTION**



**Features**

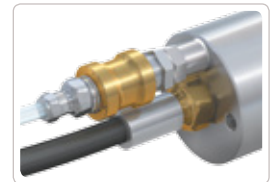
- Connection in seconds
- No hand tightening required
- Sealing irregular or rough surfaces
- Simple seal replacement
- Ergonomic design
- High-grade materials

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 (see special solutions).



TW02 with hand slide valve

**Application**

Quick connector for pressure and vacuum testing of straight tubes, hoses and components with bead or collar.

**TECHNICAL DATA**

Characteristics	Basic version
Operating pressure PS	Vacuum up to max. 35 bar
Pilot pressure	4 - 12 bar compressed air
Temperature range	+5 °C up to +80 °C
Leak rate	1 x 10 <sup>-3</sup> 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.
Registration	PED 2014/68/EU

**Example of use:**



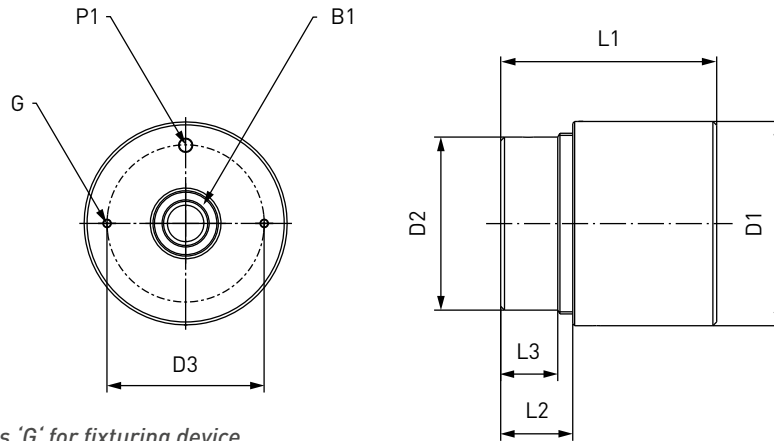
Other designs on request

**Note:** For pressurised applications the TW02 must be secured by a fixturing device.

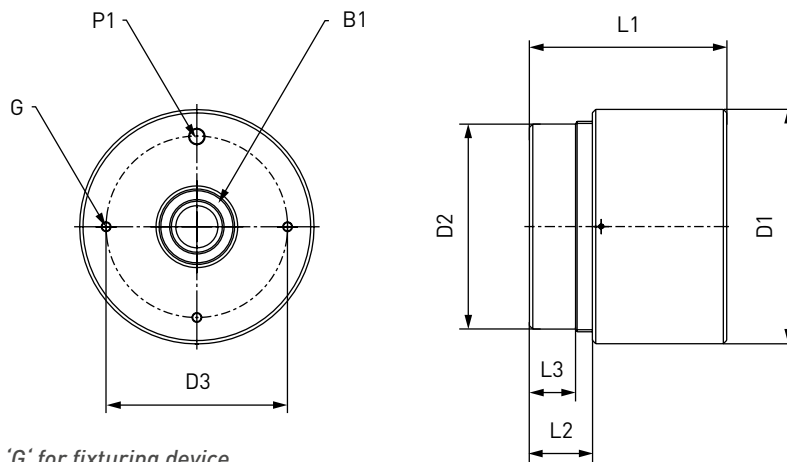
On vacuum applications the TW02 does not need to be secured. For operating pressures above 10 bar we recommend urethane seals.

**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*

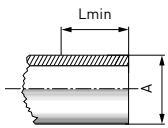
Body size	Inlet B1 (internal thread)	Pilot pressure port P1 (internal thread)	Mounting G**	D1	D2	D3	L1	L2	L3
001*	G1/8"	M5	M3	21.5	-	16.0	44.0	-	-
01	G1/8"	M5	M5	38.0	32.5	28.0	52.5	10.0	9.0
1	G1/4"	G1/8"	M6	56.5	47.0	41.5	69.5	10.0	8.5
2	G1/2"	G1/8"	M6	79.0	69.0	63.5	89.0	23.0	14.5
3	G1"	G1/8"	M6	107.5	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 and versions on request.

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

**Accessories**

**ACCESSORIES**

The following accessories are available for WEH® TW02:

**Screw plug**

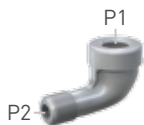
If the WEH® Connector is to be used as a plug, the media inlet 'B1' will be sealed with a screw plug of brass (PVC sealing ring) for low pressure range. It is recommended that the media compatibility of the seal be tested by the customer!



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>E69-9230</b>	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	Connection P1	Connection 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	Connection P1 (internal thread)	Connection P2 (external thread)
<b>W9325</b>	Control/venting fitting	-	G1/8"
<b>W9326</b>	Pneumatic coupling	G1/8"	-

**Accessories**

**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	Connection P1 (internal thread)	Connection P2 (external thread)
<b>C1-48091</b>	Hand slide valve	G1/8"	G1/8"
<b>E69-96824</b>	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**

Examples:



TW02 for rubber hose testing



TW02 with extension for plastic hose nozzles



TW02 twin connector