

Type **TW17**

WEH[®] Connector for pneumatic and hydraulic pressure and function testing
of components with female thread



General

DESCRIPTION



Features

- Connection in seconds
- No hand tightening required
- WEH® Jaw locking mechanism
- Modified clamping jaws for increased flow
- Ergonomic design
- High-grade materials
- Different actuations
- Automation possible
- Testing devices are eliminated

The WEH® TW17 Quick connector is designed for sealing standardized female thread applications. The higher the test pressure the tighter the WEH® Connector will clamp itself into the thread of the test piece and provides a pressure-tight connection in seconds. The front o-ring reliably seals the connection and no additional clamping devices are required. Time-consuming and expensive testing devices are eliminated.

Bores have been added as standard to the clamping jaws for body sizes 5 - 8 of the WEH® TW17 Connector to increase flow rates.

This modification is also available on request for body sizes 1 - 4. Please contact us!



TW17 with bores
for increased flow

The WEH® TW17 Connector is available with different actuations:

TW17H - Manual actuation via lever

TW17V - Pneumatic actuation via valve head

TW17P - Pneumatic actuation for external manual, semi or fully automatic control systems

The actuation can be easily changed at any time by simply unscrewing the rear part of the connector and replacing it with the chosen actuation.

Special versions, e.g. connectors in longer or shorter versions, as a plug or with hydraulic actuation etc. are possible (see special solutions).

Application

Quick connector for pneumatic and hydraulic pressure and function testing of components with female thread, e.g. engines, cylinders, pressure vessels, hoses, fixtures, etc.

Note: For using the WEH® Connectors with pneumatic actuation and clamping jaws in an automated system please observe the technical note on page 89 in catalog no. 35.

TECHNICAL DATA

Characteristics	Basic version
Operating pressure PS	Vacuum up to max. 5,000 psi
Pilot pressure	90 - 175 psi compressed air
Pilot pressure port P1	1/8" NPT female thread
Pilot pressure port P2	1/4" NPT female thread
Temperature range	+41 °F up to +176 °F
Leak rate	1 x 10 ⁻³ mbar x l/s
Actuation	H = manual actuation via lever V = pneumatic actuation via valve head P = pneumatic actuation for external manual, semi or fully automatic control systems
Material	Corrosion resistant stainless steel, anodized aluminium
Sealing material	NBR

Other designs on request

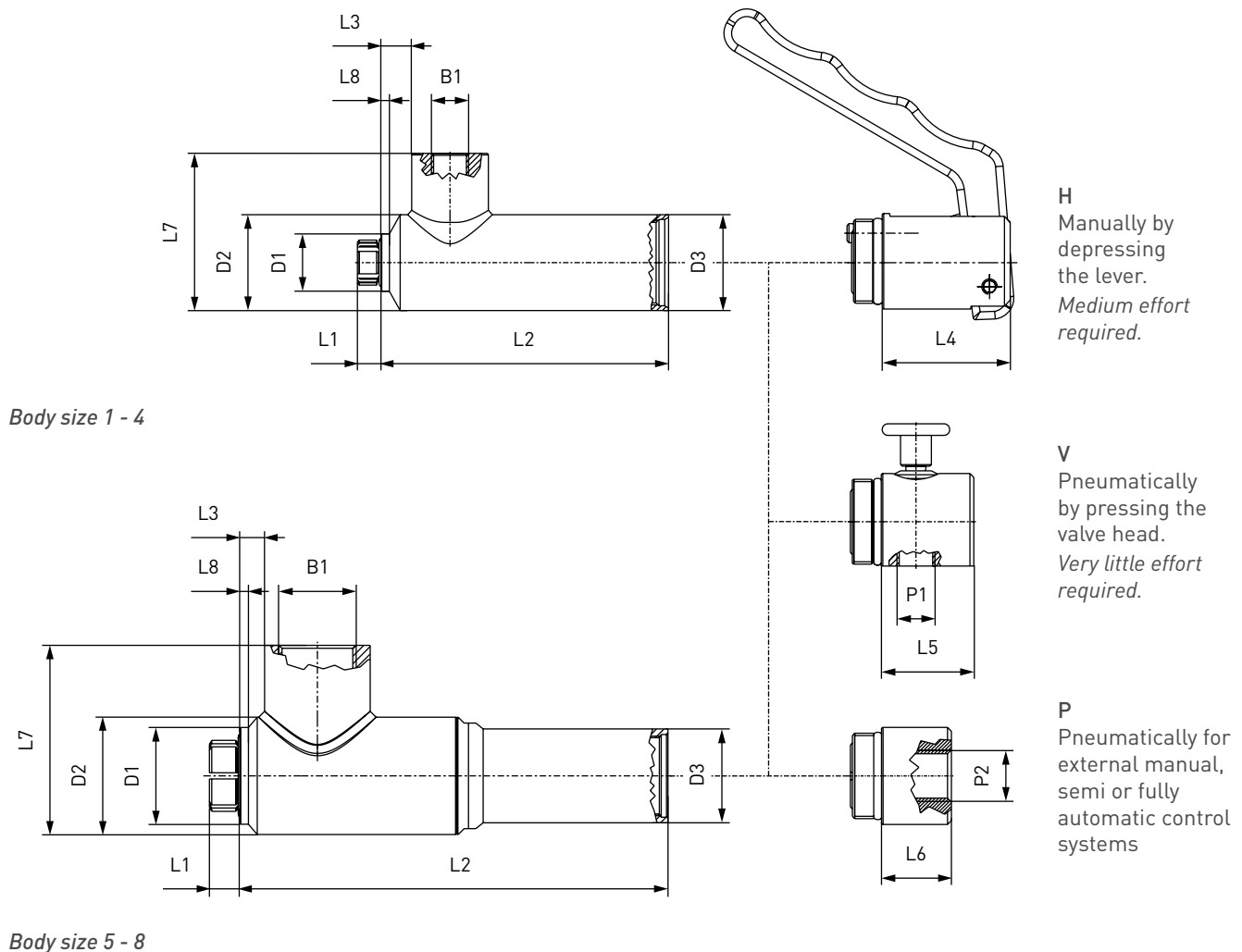
Example of use:



Ordering

ORDERING | WEH® TW17 Quick connector

approx. dimensions (mm)



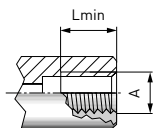
Body size	Inlet B1** (female thread)	D1	D1*	D2	D2*	D3	L1	L2	L3	L4	L5	L6	L7	L8	L8*
1	1/8" NPT	15.0	15.0	25.0	25.0	25.0	8.0	75.0	8.0	33.5	24.0	18.0	44.0	2.5	2.5
2	1/4" NPT	19.0	20.5	27.0	27.0	27.0	9.0	75.0	9.0	32.0	18.0	18.0	40.0	2.5	5.0
3	3/8" NPT	23.0	26.0	32.0	32.0	32.0	12.0	88.0	9.5	35.0	18.0	18.0	50.0	2.0	4.0
4	1/2" NPT	27.0	29.0	37.0	37.0	37.0	12.0	88.0	8.0	35.0	18.0	18.0	55.0	3.0	4.0
5	3/4" NPT	33.0	40.5	40.0	45.0	32.0	14.0	145.0	8.0	35.0	18.0	18.0	68.5	3.0	8.0
6	1" NPT	40.0	46.5	49.0	49.0	32.0	14.0	168.0	18.0	35.0	18.0	18.0	77.0	3.0	5.0
7	1" NPT	52.0	-	59.0	-	32.0	11.0	185.5	18.0	35.0	18.0	18.0	84.0	3.0	-
8	1" NPT	58.0	-	65.0	-	32.0	9.0	148.5	13.5	35.0	18.0	18.0	90.5	4.0	-
8	1" NPT	70.0	-	77.0	-	32.0	10.5	148.5	13.5	35.0	18.0	18.0	102.0	4.0	-

* applies to SAE J1926

** metric threads (G) available on request

Ordering

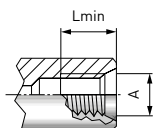
Metric ISO thread to DIN 13 - acc. to DIN 3852 part 1, form X and Y



Part No.	Body size	Thread A (female thread)	Lmin*
TW17...-W9031-021	1	M10x1.0	7.0
TW17...-W9033-041	2	M12x1.0	9.5
TW17...-W9034-041	2	M12x1.5	9.5
TW17...-W9035-041	2	M14x1.5	9.5
TW17...-W9036-061	3	M16x1.5	10.5
TW17...-W9037-061	3	M18x1.5	10.5
TW17...-W9038-081	4	M20x1.5	10.5
TW17...-W9039-081	4	M22x1.5	10.5
TW17...-W9040-121	5	M24x1.5	11.0
TW17...-W9043-121	5	M26x1.5	11.0
TW17...-W9044-121	5	M27x2.0	11.0
TW17...-W9045-161	6	M28x1.5	12.5
TW17...-W9046-161	6	M30x1.5	12.5
TW17...-W9070-161	6	M33x2.0	12.5
TW17...-W9071-161	7	M36x2.0	12.5

* Lmin: minimum thread length

Metric ISO thread to DIN 13 - acc. to ISO 6149-1

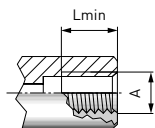


Part No.	Body size	Thread A (female thread)	Lmin*
TW17...-W9082-021	1	M10x1.0	7.0
TW17...-W9083-041	2	M12x1.5	9.5
TW17...-W9084-041	2	M14x1.5	9.5
TW17...-W9085-061	3	M16x1.5	10.5
TW17...-W9086-061	3	M18x1.5	10.5
TW17...-W9133-081	4	M20x1.5	10.5
TW17...-W9087-081	4	M22x1.5	10.5
TW17...-W9092-121	5	M27x2.0	11.0
TW17...-W9115-161	6	M30x2.0	12.5

* Lmin: minimum thread length

Ordering

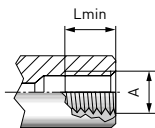
Whitworth tube thread to DIN EN ISO 228-1 - acc. to DIN 3852 part 2, form X and Y



Part No.	Body size	Thread A (female thread)	Lmin*
TW17...-W9000-021	1	G1/8"	7.0
TW17...-W9001-041	2	G1/4"	9.5
TW17...-W9002-061	3	G3/8"	10.5
TW17...-W9003-081	4	G1/2"	10.5
TW17...-W9004-081	4	G5/8"	10.5
TW17...-W9005-121	5	G3/4"	11.0
TW17...-W9006-161	6	G1"	12.5
TW17...-W9058-161	7	G1 1/4"	11.0
TW17...-W9059-161	8	G1 1/2"	11.0
TW17...-W9094-161	8	G2"	11.0

* Lmin: minimum thread length

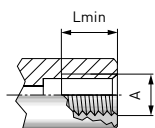
BSPT (tapered Whitworth tube thread) - acc. to DIN 3852 part 2, form X and Y



Part No.	Body size	Thread A (female thread)	Lmin*
TW17...-W9024-021	1	1/8" BSPT	7.0
TW17...-W9025-041	2	1/4" BSPT	9.5
TW17...-W9026-061	3	3/8" BSPT	10.5
TW17...-W9027-081	4	1/2" BSPT	10.5
TW17...-W9028-081	4	5/8" BSPT	10.5
TW17...-W9029-121	5	3/4" BSPT	11.0
TW17...-W9030-161	6	1" BSPT	12.5

* Lmin: minimum thread length

NPT thread (ANSI/ASME B1.20.1-1983) - acc. to SAE J476a

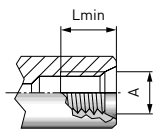


Part No.	Body size	Thread A (female thread)	Lmin*
TW17...-W9007-021	1	1/8" NPT	7.0
TW17...-W9008-041	2	1/4" NPT	9.5
TW17...-W9009-061	3	3/8" NPT	10.5
TW17...-W9010-081	4	1/2" NPT	10.5
TW17...-W9012-121	5	3/4" NPT	11.0
TW17...-W9013-161	6	1" NPT	12.5

* Lmin: minimum thread length

Ordering

SAE-O-Ring Boss - acc. to SAE J1926 / ISO 11926



Part No.	Body size	Thread A (UNF/UN female thread)	Lmin*
TW17...-W9078-021	1	-3 (3/8"-24)	7.0
TW17...-W9047-021	1	-4 (7/16"-20)	7.0
TW17...-W9048-041	2	-5 (1/2"-20)	9.5
TW17...-W9049-041	2	-6 (9/16"-18)	9.5
TW17...-W9052-061	3	-8 (3/4"-16)	10.5
TW17...-W9053-081	4	-10 (7/8"-14)	10.5
TW17...-W9055-121	5	-12 (1 1/16"-12)	11.0
TW17...-W9057-161	6	-14 (1 3/16"-12)	11.0
TW17...-W9056-161	6	-16 (1 5/16"-12)	11.0

* Lmin: minimum thread length

Other connector sizes and versions on request.

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

When ordering WEH® TW17 please indicate in addition to the details requested on page 9 in catalog no. 35 the following information:

1. Part No.

Please insert within the part no. the letter corresponding to the desired type of actuation (H, V or P) in place of the position indicator (...)

Example: TW17H-W9031-021

2. Pressure range

Please add LP = low pressure version (up to 725 psi) or HP = high pressure version (up to 5,000 psi) at the end of the part number.

Example: TW17H-W9031-021/HP

3. Media port (Inlet B1)

The termination thread profile is determined in the part no., see example below:

Example: TW17H-W9031-021

The following standard thread profiles are available:

021 = 1/8" NPT	025 = G1/8"
041 = 1/4" NPT	045 = G1/4"
061 = 3/8" NPT	065 = G3/8"
081 = 1/2" NPT	085 = G1/2"*
121 = 3/4" NPT	125 = G3/4"
161 = 1" NPT	165 = G1"

*G1/2" is compatible to 1/2" NPT

Accessories

ACCESSORIES

The following accessories are available for the WEH® TW17:

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



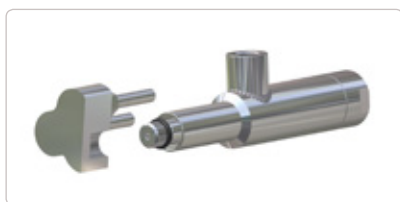
High pressure

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)
E69-9220	Screw plug (low pressure)	G3/8"	0 - 725 psi (0 - 50 bar)
E69-9230	Screw plug (low pressure)	G1/2"	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)
W9331	Screw plug (high pressure)	G3/8"	725 - 5,000 psi (50 - 350 bar)
W9332	Screw plug (high pressure)	G1/2"	725 - 5,000 psi (50 - 350 bar)
W9333	Screw plug (high pressure)	G3/4"	725 - 5,000 psi (50 - 350 bar)
W9334	Screw plug (high pressure)	G1"	725 - 5,000 psi (50 - 350 bar)

* NPT-thread on request

SPECIAL SOLUTIONS

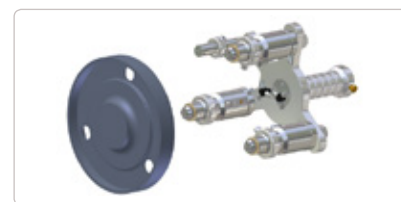
Examples:



TW17P with extension



TW17V twin connector



TW17V multiple connector

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.

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» Contacting

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

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