

# Type **TW18**

**WEH<sup>®</sup> Connector for pneumatic and hydraulic pressure and function testing**

of components with male thread



## General

### DESCRIPTION



#### Features

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

The WEH® TW18 Quick connector establishes pressure-tight connections to components with male thread within seconds. Only place the connector onto the thread of the test piece, the clamping jaws grip on the thread and a pressure-tight connection is made.

The WEH® TW18 Connector is available with different actuations:

**TW18H** - Manual actuation via lever

**TW18V** - Pneumatic actuation via valve head

**TW18P** - 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.

#### Application

Quick connector for pneumatic and hydraulic pressure and function testing of components with male 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 <sup>-3</sup> 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

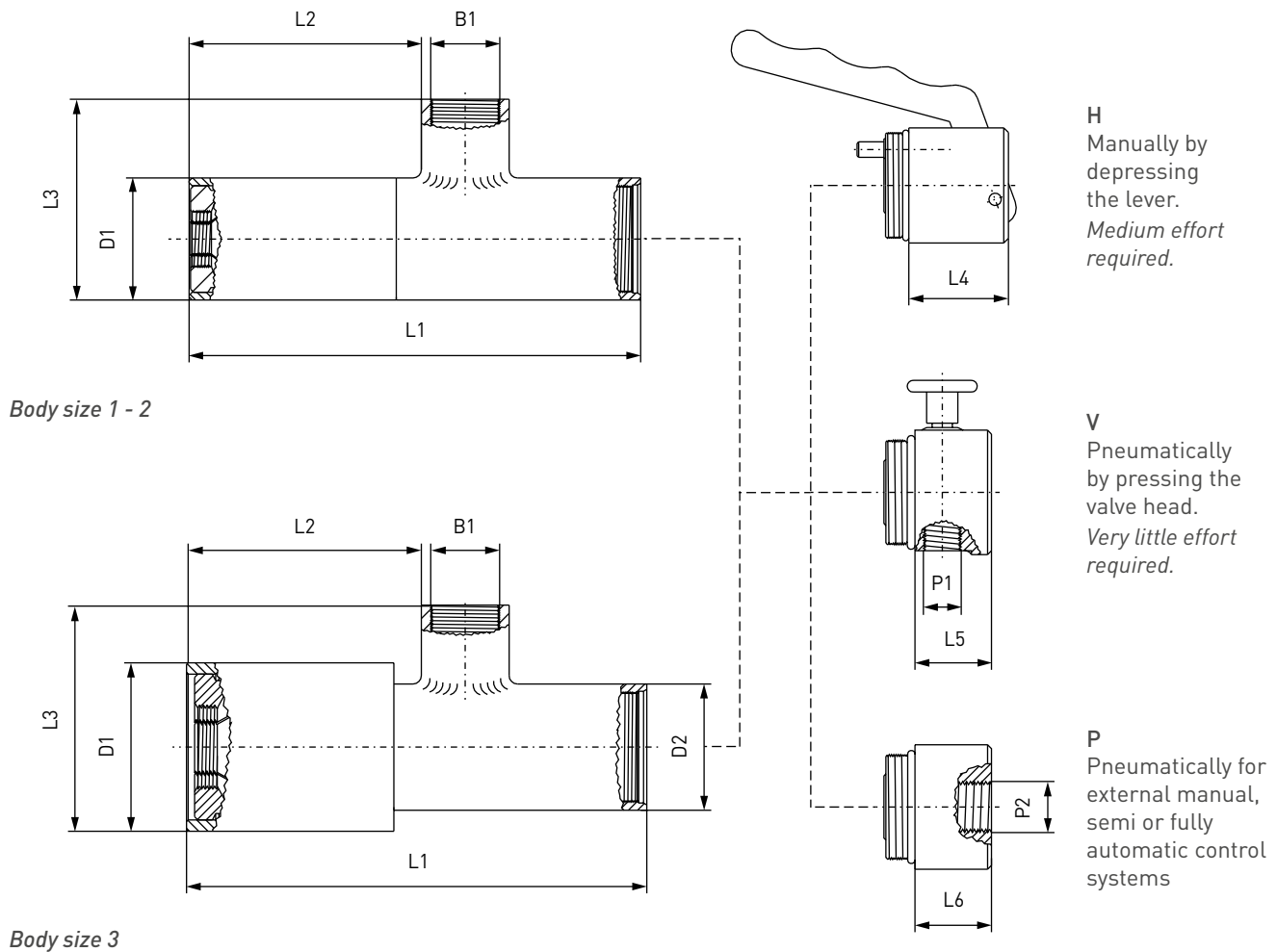
#### Example of use:



## Ordering

### ORDERING | WEH® TW18 Quick connector

approx. dimensions (mm)

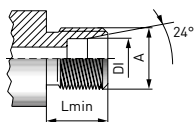


Body size	Inlet B1 (female thread)	D1	D2	L1	L2	L3	L4	L5	L6
1	G1/2"*	32.0	-	134.0	65.0	57.5	25.0	18.0	18.0
2	G1/2"*	39.0	-	142.0	71.0	64.5	32.0	18.0	18.0
3	G1/2"*	52.0	39.0	142.0	70.5	64.5	32.0	18.0	18.0

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

## Ordering

### Tube fitting to ISO 8434-1

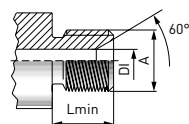


Part No.	Body size	Thread A (male thread)	Max. operating pressure**	DI max.	Series	Lmin*
<b>TW18...-W8133-085</b>	1	M8x1.0	1,450 psi	4.0	LL	8.0
<b>TW18...-W8134-085</b>	1	M10x1.0	1,450 psi	6.0	LL	8.0
<b>TW18...-W8135-085</b>	1	M12x1.0	1,450 psi	8.0	LL	9.0
<b>TW18...-W8136-085</b>	1	M12x1.5	3,600 psi	6.0	L	10.0
<b>TW18...-W8137-085</b>	1	M14x1.5	3,600 psi	8.0	L	10.0
<b>TW18...-W8138-085</b>	1	M16x1.5	3,600 psi	10.0	L	11.0
<b>TW18...-W8139-085</b>	2	M18x1.5	3,600 psi	12.0	L	11.0
<b>TW18...-W8140-085</b>	2	M22x1.5	3,600 psi	15.0	L	12.0
<b>TW18...-W8141-085</b>	3	M26x1.5	2,320 psi	18.0	L	12.0
<b>TW18...-W8142-085</b>	3	M30x2.0	2,320 psi	22.0	L	14.0

\* Lmin: minimum thread length

\*\* acc. to ISO 8434-1

### Threaded stem to DIN 7631 / DIN 7647 - Plane surface burr free

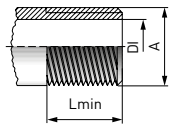


Part No.	Body size	Thread A (male thread)	DI max.	Lmin*
<b>TW18...-W8151-085</b>	1	M10x1.0	3.0	8.0
<b>TW18...-W8152-085</b>	1	M12x1.5	4.0	10.0
<b>TW18...-W8153-085</b>	1	M14x1.5	6.0	10.0
<b>TW18...-W8154-085</b>	1	M16x1.5	8.0	11.0
<b>TW18...-W8155-085</b>	2	M18x1.5	10.0	11.0
<b>TW18...-W8214-085</b>	2	M20x1.5	11.0	11.0
<b>TW18...-W8156-085</b>	2	M22x1.5	12.0	12.0
<b>TW18...-W8157-085</b>	3	M26x1.5	15.0	12.0
<b>TW18...-W8158-085</b>	3	M30x1.5	19.0	14.0

\* Lmin: minimum thread length

## Ordering

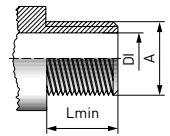
Whitworth tube thread to DIN EN ISO 228-1 - Plane surface burr free



Part No.	Body size	Thread A (male thread)	DI max.	Lmin*
<b>TW18...-W8127-085</b>	1	G1/8"	5.0	12.0
<b>TW18...-W8128-085</b>	1	G1/4"	6.0	12.0
<b>TW18...-W8129-085</b>	1	G3/8"	9.0	12.0
<b>TW18...-W8130-085</b>	2	G1/2"	14.5	12.0
<b>TW18...-W8131-085</b>	3	G3/4"	18.0	12.0
<b>TW18...-W8132-085</b>	3	G1"	18.0	12.0

\* Lmin: minimum thread length

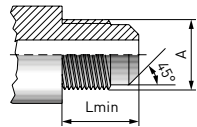
NPT thread [ANSI/ASME B1.20.1-1983] - acc. to SAE J476a, plane surface smooth and burr free



Part No.	Body size	Thread A (male thread)	DI max.	Lmin*
<b>TW18...-W8208-085</b>	1	1/8" NPT	5.0	10.0
<b>TW18...-W8207-085</b>	1	1/4" NPT	7.0	14.0
<b>TW18...-W8209-085</b>	1	3/8" NPT	10.5	14.0
<b>TW18...-W8210-085</b>	2	1/2" NPT	14.0	19.0
<b>TW18...-W8211-085</b>	3	3/4" NPT	18.0	19.0
<b>TW18...-W8212-085</b>	3	1" NPT	18.0	20.5

\* Lmin: minimum thread length

SAE J512 (45° cone), SAE J513

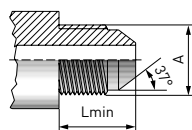


Part No.	Body size	Thread A (UNF/UN male thread)	Lmin*
<b>TW18...-W8100-085</b>	1	-2 (5/16"-24)	11.0
<b>TW18...-W8101-085</b>	1	-3 (3/8"-24)	11.5
<b>TW18...-W8102-085</b>	1	-4 (7/16"-20)	13.0
<b>TW18...-W8103-085</b>	1	-5 (1/2"-20)	14.5
<b>TW18...-W8104-085</b>	1	-6 (5/8"-18)	16.0
<b>TW18...-W8105-085</b>	2	-7 (1 1/16"-16)	17.5
<b>TW18...-W8106-085</b>	2	-8 (3/4"-16)	19.0
<b>TW18...-W8107-085</b>	2	-10 (7/8"-14)	22.5
<b>TW18...-W8108-085</b>	3	-12 (1 1/16"-14)	25.5

\* Lmin: minimum thread length

## Ordering

SAE J514 JIC 37°



Part No.	Body size	Thread A (UNF/UN male thread)	Lmin*
<b>TW18...-W8117-085</b>	1	-2 (5/16"-24)	11.5
<b>TW18...-W8118-085</b>	1	-3 (3/8"-24)	12.5
<b>TW18...-W8119-085</b>	1	-4 (7/16"-20)	14.0
<b>TW18...-W8120-085</b>	1	-5 (1/2"-20)	14.0
<b>TW18...-W8121-085</b>	1	-6 (9/16"-18)	14.5
<b>TW18...-W8122-085</b>	2	-8 (3/4"-16)	17.0
<b>TW18...-W8123-085</b>	2	-10 (7/8"-14)	19.5
<b>TW18...-W8124-085</b>	3	-12 (1 1/16"-12)	22.0

\* Lmin: minimum thread length

Other connector sizes and versions on request.

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

When ordering WEH® TW18 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: TW18H-W8133-085

### 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: TW18H-W8133-085/HP

## Accessories

### ACCESSORIES

The following accessories are available for WEH® TW18:

#### 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



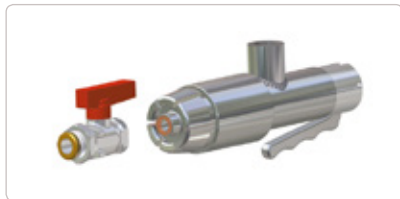
High pressure

Part No. G-thread*	Description	Connection (male thread)	Pressure range
<b>E69-9230</b>	Screw plug (low pressure)	G1/2"	0 - 725 psi (0 - 50 bar)
<b>W9332</b>	Screw plug (high pressure)	G1/2"	725 - 5,000 psi (50 - 350 bar)

\* NPT-thread on request

### SPECIAL SOLUTIONS

Examples:



TW18H with extended clamping jaws  
for testing of ball valves



TW18Z with pneumatic actuation,  
central flow and  
lateral pressure support

## Other products

### OTHER PRODUCTS

You will find more products in our current catalog no. 35



Further information on our homepage  
[www.weh.com](http://www.weh.com)

#### Abbreviations/Definition

Explanation of abbreviations see technical appendix in the catalogue or [www.weh.com](http://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

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