

Type **TW18**

WEH[®] Connector for pneumatic and hydraulic pressure and function testing
of components with external 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 external 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 external 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 69 in catalogue no. 35.

TECHNICAL DATA

Characteristics	Basic version
Max. allowable operating pressure PS	Vacuum up to 350 bar
Pilot pressure	6 - 12 bar compressed air
Pilot pressure port P1	G1/8" internal thread
Pilot pressure port P2	G1/4" internal thread
Temperature range	+5 °C up to +80 °C
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	Front seal of NBR

Other designs on request

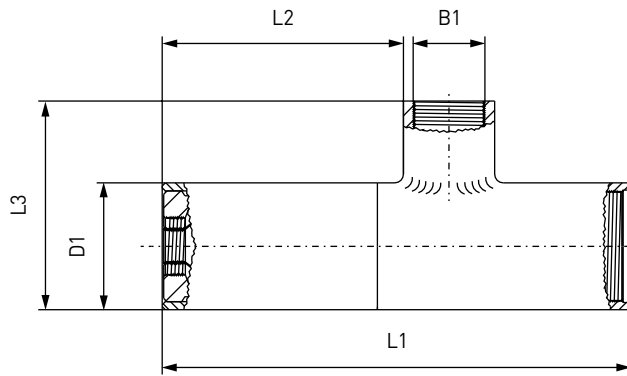
Example of use:



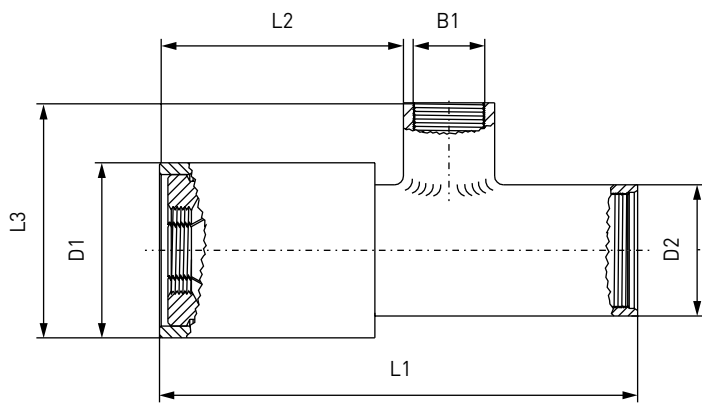
Ordering

ORDERING | WEH® TW18 Quick connector

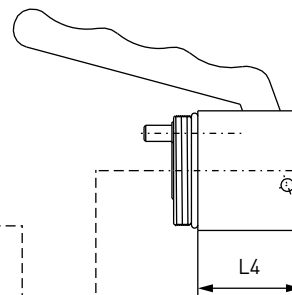
approx. dimensions (mm)



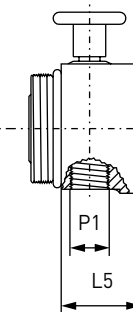
Body size 1 - 2



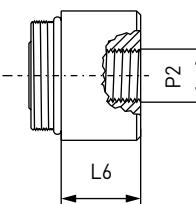
Body size 3



H
Manually by depressing the lever.
Medium effort required.



V
Pneumatically by pressing the valve head.
Very little effort required.

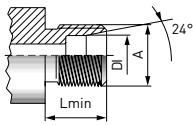


P
Pneumatically for external manual, semi or fully automatic control systems

Body size	B1 (internal 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

Ordering

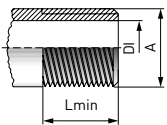
Tube fitting acc. to ISO 8434-1



Part no.	Body size	Thread A (external thread)	Max. operating pressure PS**	DI max.	Series	Lmin*
TW18...-W8134-085	1	M10x1.0	100 bar	6.0	LL	8.0
TW18...-W8135-085	1	M12x1.0	100 bar	8.0	LL	9.0
TW18...-W8136-085	1	M12x1.5	250 bar	6.0	L	10.0
TW18...-W8137-085	1	M14x1.5	250 bar	8.0	L	10.0
TW18...-W8138-085	1	M16x1.5	250 bar	10.0	L	11.0
TW18...-W8139-085	2	M18x1.5	250 bar	12.0	L	11.0
TW18...-W8140-085	2	M22x1.5	250 bar	15.0	L	12.0

* Lmin: minimum thread length
 ** acc. to ISO 8434-1
 Other connector sizes on request

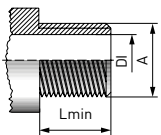
Whitworth tube thread to ISO 7/1 or DIN EN ISO 228-1 - Plane surface smooth and burr free



Part no.	Body size	Thread A (external thread)	DI max.	Lmin*
TW18...-W8130-085	2	G1/2"	14.5	12.0
TW18...-W8131-085	3	G3/4"	18.0	12.0

* Lmin: minimum thread length
 Other connector sizes on request

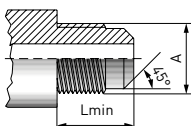
NPT thread (ANSI/ASME B1.20.1-1983) - acc. to SAE J476a, plane surface smooth and burr free



Part no.	Body size	Thread A (external thread)	DI max.	Lmin*
TW18...-W8208-085	1	NPT 1/8"	5.0	10.0
TW18...-W8207-085	1	NPT 1/4"	7.0	14.0
TW18...-W8209-085	1	NPT 3/8"	10.5	14.0
TW18...-W8210-085	2	NPT 1/2"	14.0	19.0

* Lmin: minimum thread length
 Other connector sizes on request

SAE J512 (45° cone), SAE J513

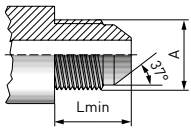


Part no.	Body size	Thread A	Lmin*
On request	On request	On request	On request

* Lmin: minimum thread length

Ordering / Accessories / Special solutions

SAE J514 JIC 37°



Part no.	Body size	Thread A (external thread)	Lmin*
TW18...-W8119-085	1	UNF 7/16"-20	14.0
TW18...-W8120-085	1	UNF 1/2"-20	14.0
TW18...-W8121-085	1	UNF 9/16"-18	14.5
TW18...-W8122-085	2	UNF 3/4"-16	17.0
TW18...-W8123-085	2	UNF 7/8"-14	19.5

* Lmin: minimum thread length
Other connector sizes on request

Other connector versions on request.

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

When ordering WEH® TW18 please indicate in addition to the details requested on page 7 in catalogue 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-W8134-085*

2. Pressure range

Please add LP = low pressure version (up to 50 bar) or HP = high pressure version (up to 350 bar) at the end of the part number.

Example: *TW18H-W8134-085/HP*

ACCESSORIES

The following accessories are available for the WEH® TW18:

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 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!



Part no.	Description	Connection (external thread)	Pressure range
W9332	Screw plug (high pressure)	G1/2"	50 - 350 bar

SPECIAL SOLUTIONS

Example:



TW18Z with pneumatic actuation,
central flow and
lateral pressure support

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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