



WEH®-Filling Rig

Type TS200 and TS250



**Radial Filling Rigs for
Small Gas Cylinders**

For your safety – WEH

Type TS200/TS250
Special

Filling Rigs

Date: 07/00; Rev.: 2005/06/00112-1-3

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WEH® is a registered trademark of the WEH GmbH Precision Connectors.

WEH®-Products for your application

The WEH-Connector for filling high pressure gas cylinders

Starting in 1983 WEH have been developing technically advanced quick connectors for filling gas cylinders. WEH-Connectors are used for applications where gas cylinders have to be filled, tested and transported. They are an excellent choice for each application where continuous connecting and disconnecting is necessary. Filling of gas cylinders is effected in different cylinder filling stands by means of WEH Connectors that can be connected to a large variety of cylinder valves. The ergonomic fast connection and filling of gas cylinders means that the WEH Connector offers a cost effective investment. WEH can offer connectors for many filling applications. On enquiry special types will be developed for your specific needs.

Look to the future

The latest launch is a complete filling rig that is designed for economical filling of gas cylinders. The whole filling procedure has been optimized thus reducing connecting and filling times. Another feature is the ergonomic handling being a key attribute in daily use.



WEH – a useful connection

Continuous development of new applications for our customers offers you leading-edge technology in connection design. We can

offer you today a radial filling rig for small cylinders with our patented connectors in combination with innovative filling technology that we make under licence.



WEH®-Filling rig

Type TS200 and TS250

Radial filling rig for small cylinders (RKF)

1 to 10 small gas cylinders for compressed gases with standard valves can be filled simultaneously at up to 300 bar. The size of these cylinders may vary between 0.5 l and 10.0 l nominal volume. The filling rig is also suitable for gas valves with internal or external threads and PIN-Index valves.



Connecting procedure:
1. Place the cylinder in the cylinder holder.



2. Press the cylinder down if necessary onto the spring balanced receiver until the lateral connection of the cylinder valve is opposite the WEH Connector.



3. Insert the cylinder valve into the WEH Connector.



4. Connecting is effected by lowering the safety loop. Rotate the distribution head to the next position for connecting the next cylinder.

WEH®-Filling rig Type TS200 and TS250

Technical Data:

Application:

Rotating rig for filling of small cylinders.

Operating pressure PB:

From vacuum to max. 300 bar
 The pressure range of the WEH-Connector used has to be observed!

Temperature range:

+ 5°C up to + 95°C
 see page

Medium:

Compressed gases

Design:

TS200:
 Version to receive small cylinders up to a max. height of approx. 580 mm.

TS250:

Version for cylinders with a height between 532 mm and 830 mm.

10 WEH quick connectors to suit the appropriate valve (see page 8).

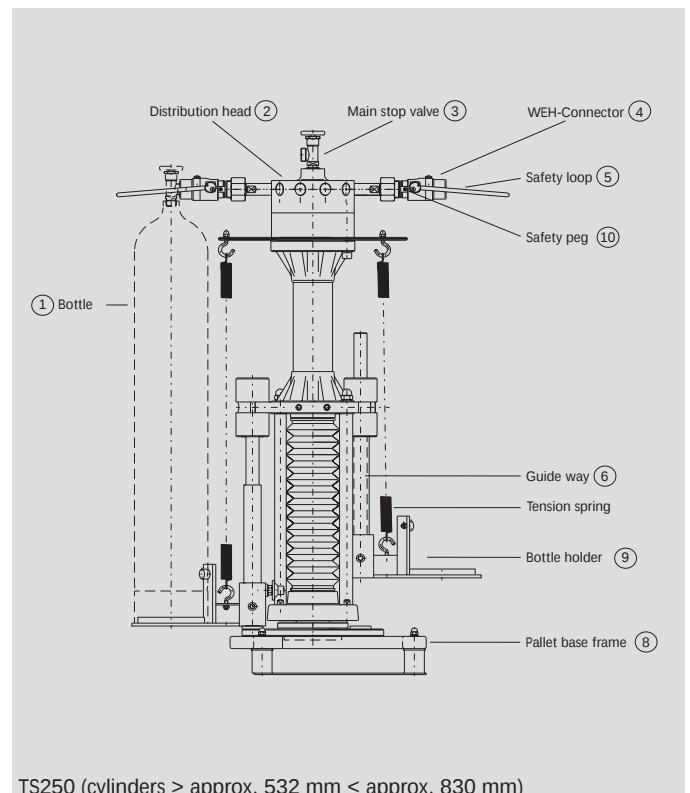
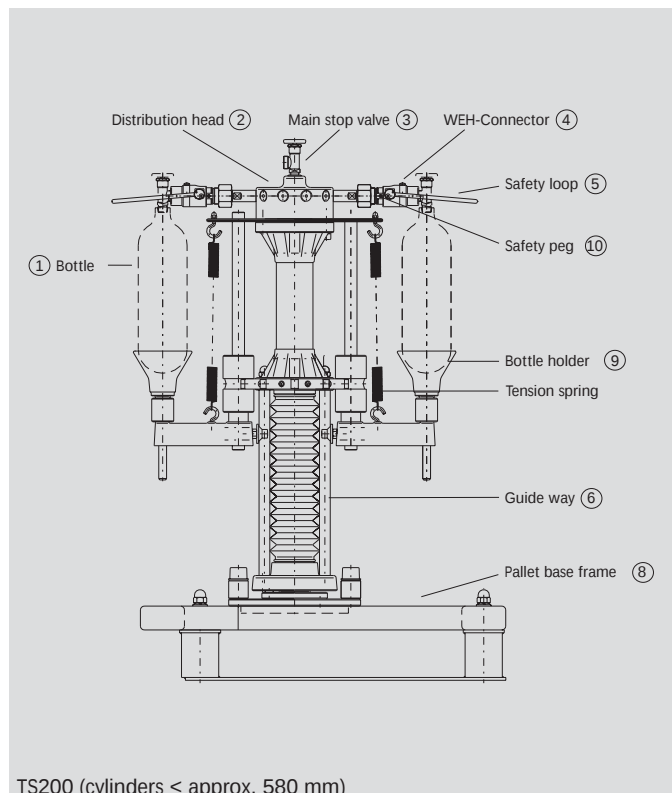
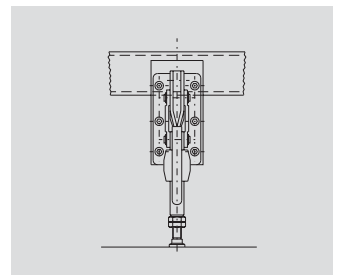
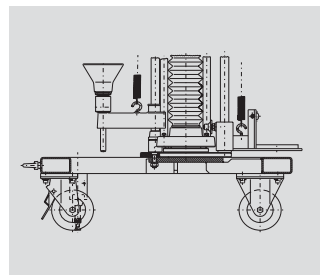
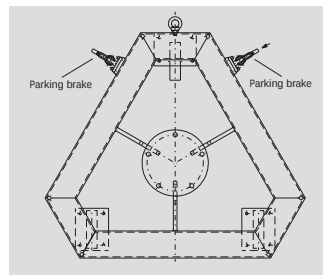
Load bearing central column in steel, lacquered, distribution head in corrosion resistant stainless steel, cylinder holder in lacquered aluminium. All other parts in corrosion resistant material. Pallet base frame in galvanised steel.

Weight:

approx. 180 kg

Option:

Mobile ground frame with wheels and parking brake





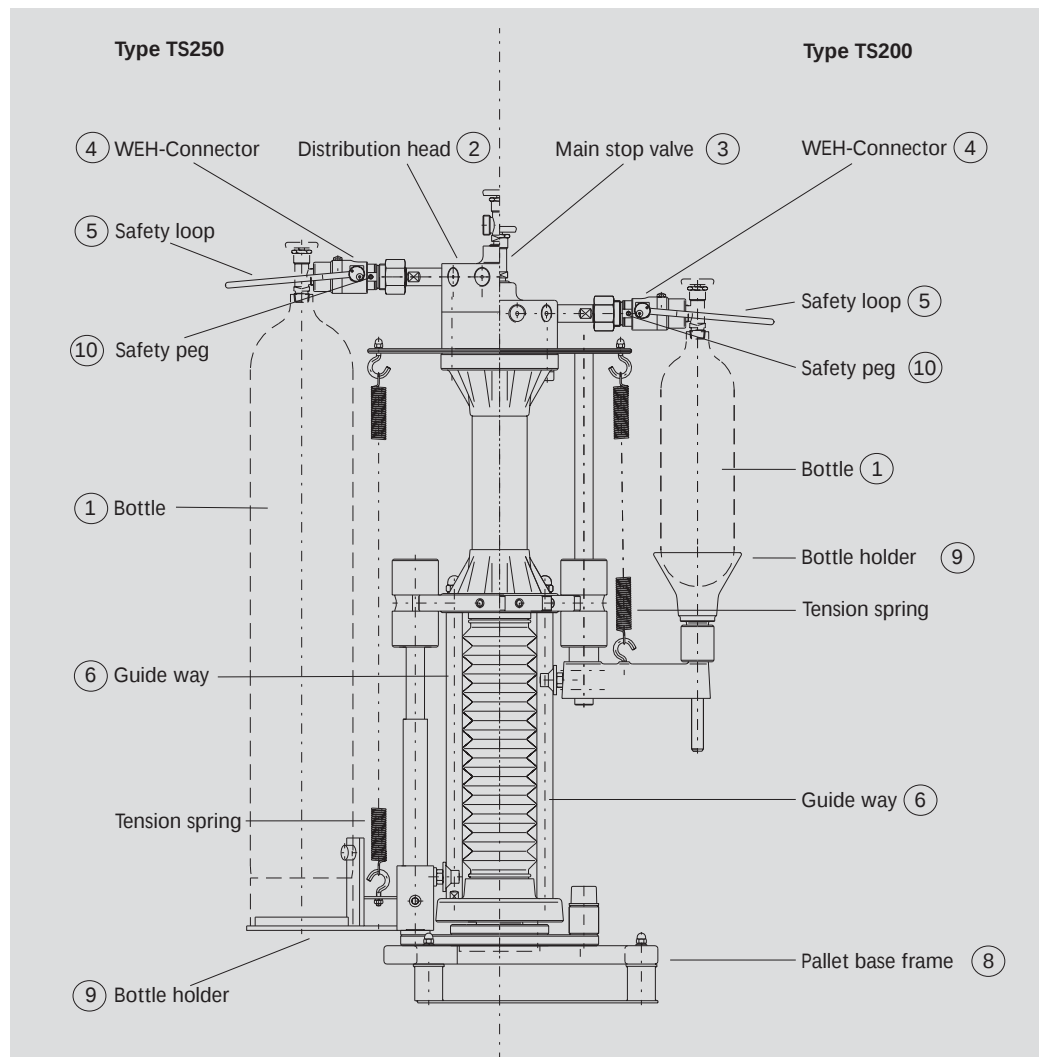
WEH®-Filling rig

Type TS200 and TS250

The filling rig is connected by means of a flexible hose to the central main stop valve (Pos. 3) which has the same termination as the cylinder valve. The gas flow is distributed to ten single cylinders (Pos. 1) via the radial bores of the rotating distribution head (Pos. 2) and the rigid cylinder connectors (Pos. 4). Equalization of the different heights and weights of the

cylinders is effected by specific cylinder holders (Pos. 9) and by the centering system (Pos. 6). The distributor head (Pos. 2) engages at every cylinder position and the holder system (Pos. 6 and 9) facilitate the loading of the filling rig with small cylinders. The safety loop (Pos. 5) at the quick connector (Pos. 4) enables safe filling. The safety peg (Pos. 10) pre-

vents disconnection while the filling line is still pressurized thus offering additional safety. The filling rig for small cylinders can be easily transported with the pallet ground frame by means of a fork-lift. On request type TS200/TS250 is also available with a mobile ground frame.





WEH®-Overview

Type TS200 and TS250

- Small 'Footprint' only 0.64 m².
- Rotating head means that it can be loaded from one position, even if situated in a corner
- Easy to transport which means that the filling rig can be stored away from the filling point when not in use.
- The filling rig can be easily connected to existing filling points without additional and expensive tubing.
- The combination of WEH-Connectors and the counterbalance system of the cylinder holder ensures ease of connection with minimum effort.
- Varying cylinder sizes can be filled without additional pedestals, plug-ins, mountings that are necessary for other filling rigs.
- Filling hoses are not required as rigid filling connectors (Pos. 4) are used, therefore, the costs for these flexible filling hoses subject to wear and tear can be spared.
- The safety loop (Pos. 5) of the quick connector prevents disconnection of the cylinder and the valve during the filling procedure.

WEH®-Connectors for Type **Type TS200 and TS250**

WEH Connectors offer the best in connection design. No need for time consuming and expensive hand threading of connection lines. Pressure-tight connections are made in seconds with WEH Connectors.

Easy connection means no straining of muscles and joints contrary to conventional screw connection fittings so that filling can be effected rapidly and easily. WEH offers filling connectors for a large variety of valves. Please find set out

below 3 of our range of connectors For further details on connectors see our gas industry catalogue.

WEH-Connector **Type TW54 and TW57**



Application:

Filling gaseous media:
 TW54: for internal threads
 TW57: for external threads

Thread size A:

- Connections acc. to the corresponding national standard, e.g. DIN 477, CGA etc.
- Special connections available
- Also for residual pressure valves

Pressure range:

Max. 200 bar, vacuum. Other pressure ranges on request.

Nominal pressure:

Max. 250 bar

Temperature range:

See page 11

Design:

Brass and corrosion resistant steel. Different designs available, e.g. operating loop, wire etc.

Sealing material:

Dependant on media

Adiabatic oxygen approval:

Type TW57: BAM
 Tgb.-Nr. 4-3455/94
 Type TW54: Air Liquide
 93/JPS57.124

WEH-Connector **Type TW49**



Application:

Filling gas cylinders with medical oxygen at Pin Index connection system.

Pressure range:

Max. 250 bar

Temperature range:

See page 11

Medium:

Medical oxygen, other media on request.

Design:

Housing brass, all other parts corrosion-resistant steel. The location pins code gas medium and prevent use with the wrong media. On request all parts in contact with the gas flow can be made out of brass.

Sealing material:

Dependant on media.

Adiabatic oxygen approval:

Air Liquide 94/JPS20

WEH®-Product line

Other WEH-Product line

Catalogue 35:

Quick connectors for leak-testing on components with threads, tubes, etc.



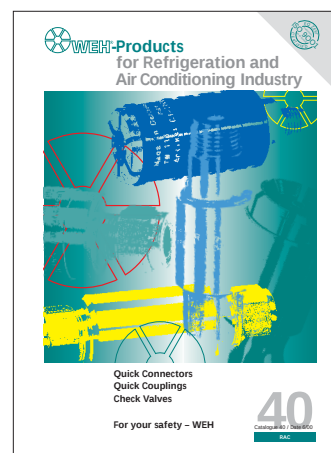
Catalogue 20:

Quick connectors for the gas industry, Check valves, swivel joints, etc.



Catalogue 40

Quick Connectors and Couplings for refrigerating and air conditioning industry and Check valves.



On request WEH will also develop special connectors for your specific needs. Describe your application and we will try to solve it. Ask us!

Technical Information

Pressure definition:

Abbreviation	Pressure type	Description/Explanation
PN	Nominal pressure	This is a standardised term
PS	Operating pressure	The max. pressure to which the component is subjected (1.25 x PN)
PT	Test pressure	The pressure to which the component is tested by the manufacturer ('once only' test, 1.43 – 1.5 x PS)
P1, P2, P3	Pilot pressure	For pneumatically actuated connectors. P1 – P3 is normally air pressure.

Admissible operating pressure:

The admissible operating pressure has been determined as follows: 100,000 x cycles impacting the component with 125 % of PN.

The pressure wave is sinusoidal.

Pressure/Temperature:

For higher temperatures the max. operating pressure needs to be reduced dependant on the application.

Possible values therefore are: 50 °C – 5 %, 100 °C – 10 %, 150 °C – 20 %.

Notice:

Maximum care has been taken compiling this catalogue based on many years of experience.

However we must point out, that all catalogue data is only valid, if it was expressly confirmed in the individual order. We cannot guarantee the veracity of the data and the introductions in individual cases due to the large variety of applications for WEH products, and the unknown parameters and conditions of use. We have to refer to the individual order.

The limits of use for pressure, temperature etc. in this catalogue are theoretical data calculated on the basis of tests. Because of different operating conditions we cannot guarantee that the data do accord with the special use of the client. It has to be considered, that in the practical use interactive interferences of data parameters can cause the change of the maximum values. Especially if the operating conditions are extreme, the WEH Company must be consulted before the use of the products.

Therefore the requested values should be stated in the individual order, especially for extreme operating conditions.

Furthermore we point out, that we cannot guarantee for misprints, uncompleted data or misinterpretation. The illustration of the products is for demonstration only.

The exact form and design of the product is only defined by the individual order. The brochure is only an integral part of the contract, if it is agreed expressly. Dimensions and other technical data in this catalogue are without obligation.

Technical Information

Temperature ranges:

Standard range:
+5 °C up to +80 °C,
special range: -100 °C up to +200 °C

The temperatures stated as standard cover most common applications. The seal material used has higher or lower temperature limits dependant on material (e.g. NBR -30 °C up to +100 °C, FKM -20 °C up to +200 °C, EPDM -40 °C up to +150 °C).

Under such extreme temperature conditions the suitability of WEH products to the application has to be checked specifically. If necessary, we can develop special solutions.

Fax reply

Type TS200/TS250

Please make a copy of this form
and fax it to:

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Originator	_____	Position	_____
Company	_____	Department	_____
Address	_____	Telephone	_____
Postcode/City	_____	Telefax	_____

We are manufacturers of: _____

Yes, I want to have more details

- ☐ Main Catalogue Quick Connectors
- ☐ Gas Catalogue
- ☐ Connectors
for Refrigeraton and Air Conditioning
- ☐ Please contact us
- ☐ Offer
- ☐ Details of other
WEH products
(Please indicate your application)

Please detail the following when requesting an offer:

Type of gas / _____
Medium

Pressure range _____

Vacuum _____

Cylinder valve _____
(connection dimensions;
please send drawing and sample or specify if to DIN standard)

Cylinder size _____
(mm) from to

with optional
mobile base frame ☐ Yes ☐ No

Valve protection ☐ Yes ☐ No

(if yes, which one? Please
send drawing and sample)

Remarks _____