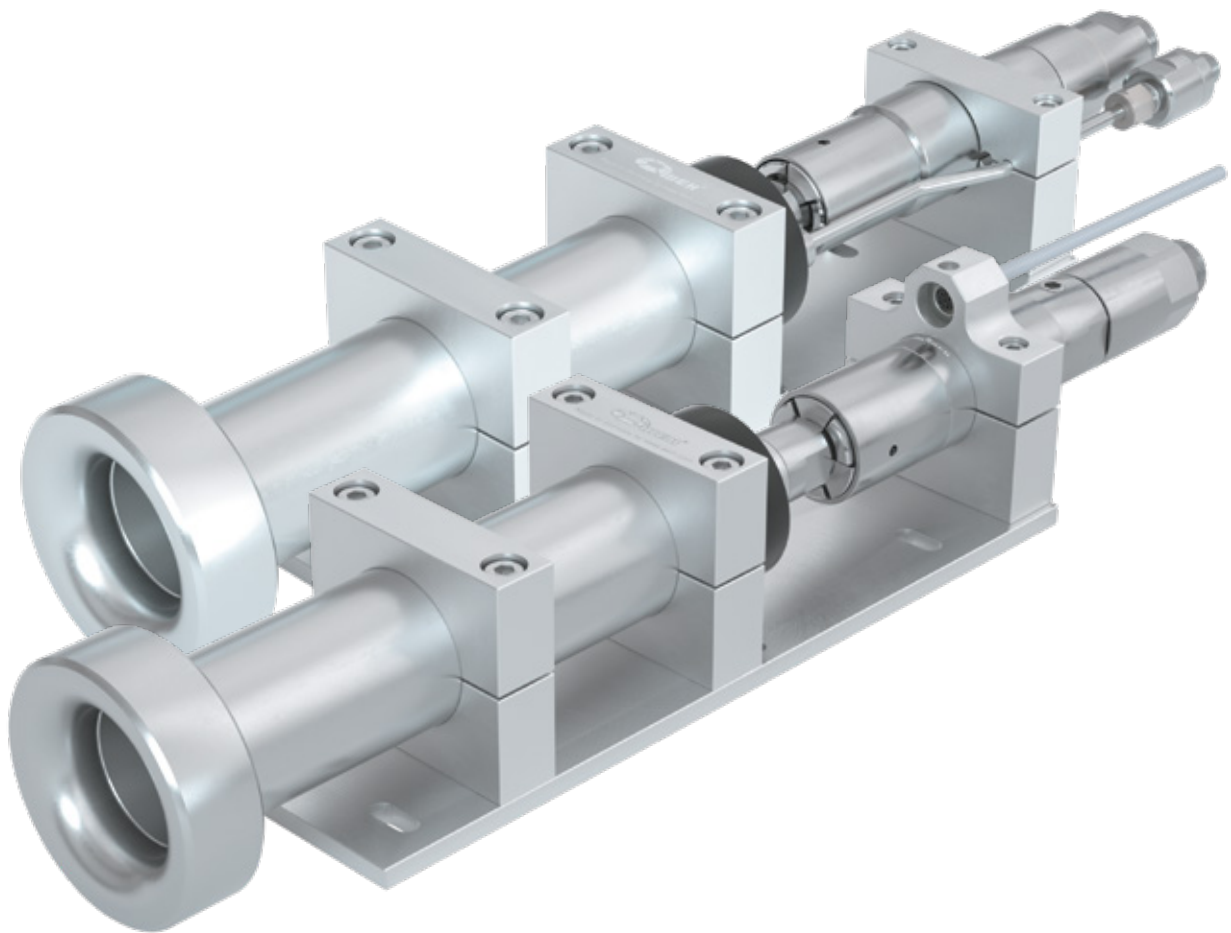


Type **TSA1 H₂**

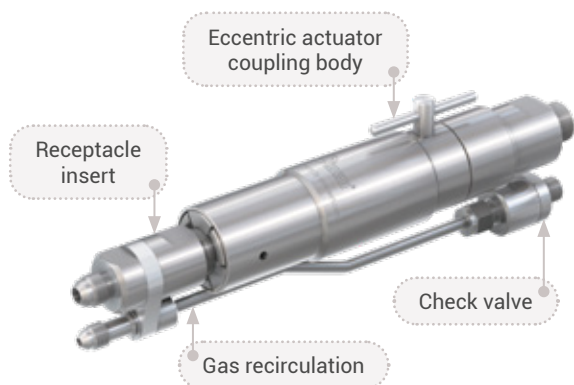
WEH[®] Breakaway coupling

for car hydrogen fueling stations for direct installation at the dispenser



General

DESCRIPTION



Features

- Reusable without factory servicing
- Installation at the dispenser
- Small compact design
- Version with and without gas recirculation
- Integrated cleanable filter (20 µm or 40 µm)
- Check valve at venting line
- No additional tool necessary

The WEH® TSA1 H₂ Breakaway coupling provides additional safety for your car fueling station. The breakaway is installed between the dispenser and the filling hose or dispenser and filling/venting hose.

In the event of unexpected tensile forces, e.g. a vehicle driving away with a connected fueling nozzle, the breakaway separates the connections between dispenser and hose(s) in a controlled manner while sealing both ends.

Damage to the vehicle's receptacle, the fueling nozzle and the dispenser can thus be prevented as far as possible.

The breakaway coupling can be reused after a functional test.

The integrated filter cleans the hydrogen from dirt ingress and can be cleaned easily and quickly during maintenance.

The WEH® TSA1 H₂ Breakaway coupling consists of a coupling body, a receptacle insert and, depending on the version, of a gas recirculation with check valve.

The TSA1 H₂ for fueling nozzles with data interface additionally contain a dispenser mounting incl. data cable for the data interface.

On request we also offer fueling assemblies consisting of fueling nozzle, hose set and breakaway coupling.

Application

Breakaway coupling for car hydrogen fueling stations for direct installation at the dispenser.

TECHNICAL DATA

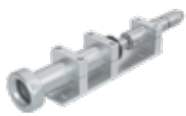
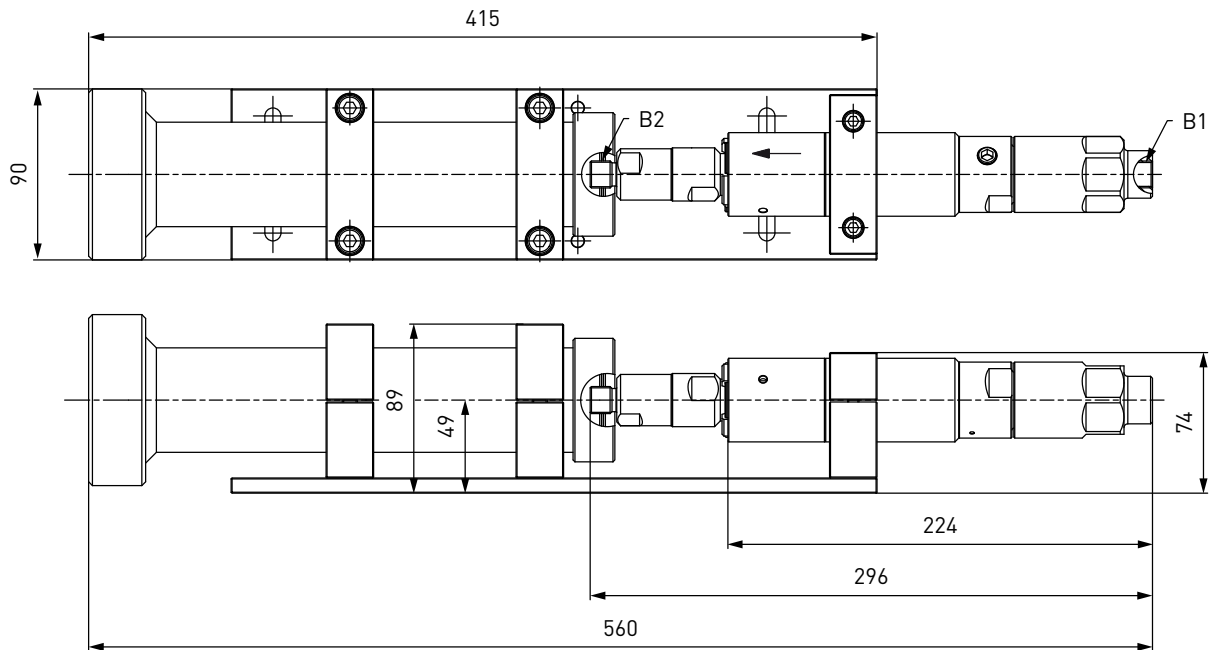
Characteristics	Basic version
Nominal bore (DN)	Depending on design
Pressure range	PN = 35 MPa PS = 45 MPa
Media temperature range	TSA1 H ₂ for TK17 H ₂ fueling nozzles: -40 °C up to +85 °C TSA1 H ₂ for TK16 H ₂ fueling nozzles: -20 °C up to +85 °C
Ambient temperature range	-40 °C up to +85 °C
Breakaway force	222 - 667 N
Material	Corrosion resistant stainless steel, aluminum
Sealing material	Hydrogen resistant
Design	Depending on design: With filter (20 µm or 40 µm) With or without gas recirculation With or without dispenser mounting With dispenser mounting and data cable (only versions for fueling nozzles with data interface)

Other designs on request

Ordering

ORDERING | WEH® TSA1 H₂ Breakaway coupling (with dispenser mounting) for TK17 H₂ 35 MPa

approx. dimensions (mm)

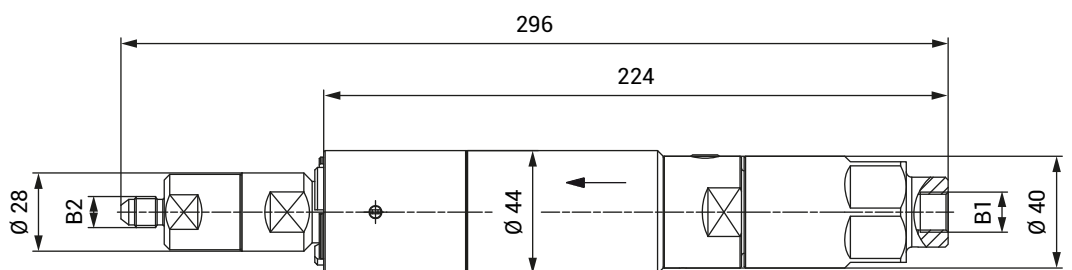


Part No.	Description	DN	Pressure (PS)	B1 (female thread)	B2 (male thread)
C1-174446	TSA1 H ₂ with filter (20 µm)	4	49 MPa	UNF 9/16"-18*	UNF 7/16"-20**

* MP-fitting, 60° inner cone
 ** acc. to SAE J514, 37° cone

ORDERING | WEH® TSA1 H₂ Breakaway coupling for TK17 H₂ 35 MPa

approx. dimensions (mm)



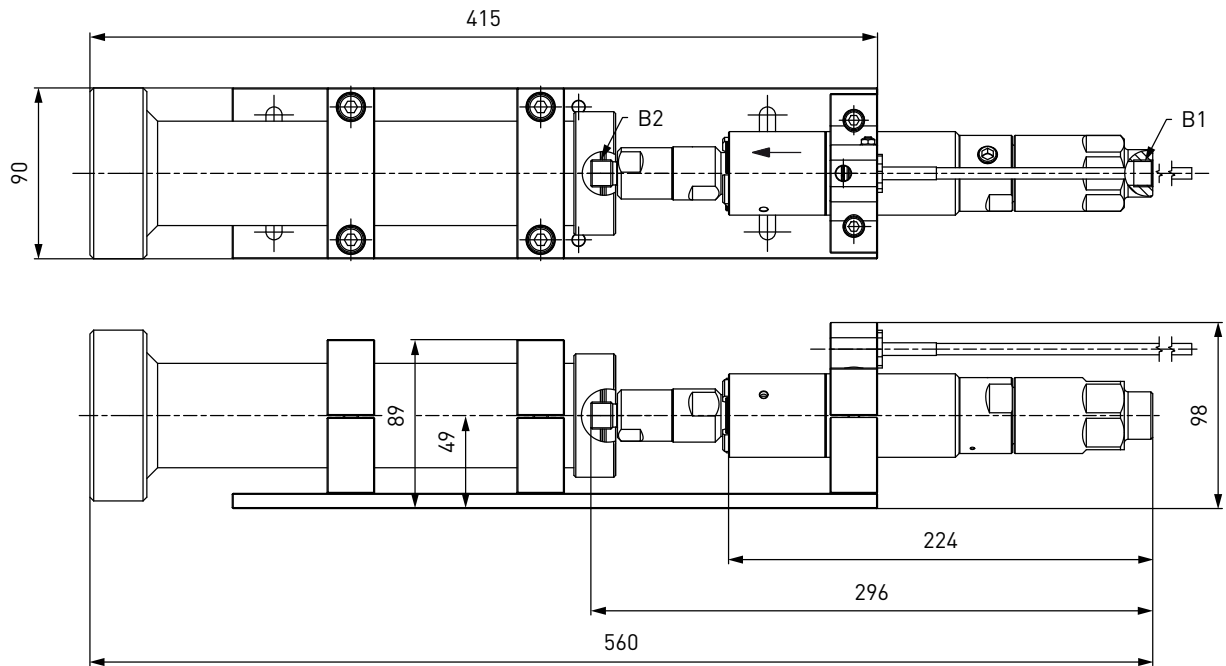
Part No.	Description	DN	Pressure (PS)	B1 (female thread)	B2 (male thread)
C1-174444	TSA1 H ₂ with filter (20 µm)	4	49 MPa	UNF 9/16"-18*	UNF 7/16"-20**

* MP-fitting, 60° inner cone
 ** acc. to SAE J514, 37° cone

Ordering

ORDERING | WEH® TSA1 H₂ Breakaway coupling for TK17 H₂ 35 MPa ENR

approx. dimensions (mm)



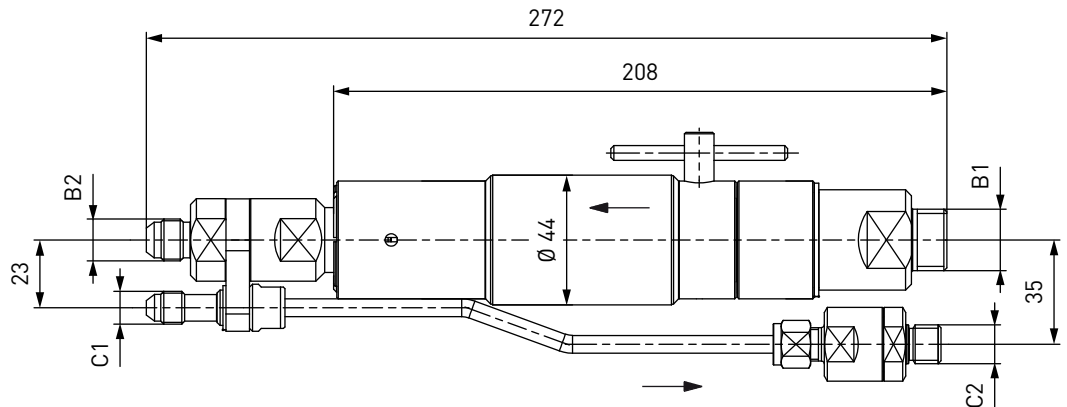
Part No.	Description	DN	Pressure (PS)	B1 (female thread)	B2 (male thread)
C1-174456	TSA1 H ₂ with filter (20 µm)	4	49 MPa	UNF 9/16"-18*	UNF 7/16"-20**

* MP-fitting, 60° inner cone
 ** acc. to SAE J514, 37° cone

Ordering

ORDERING | WEH® TSA1 H₂ Breakaway coupling with male thread for TK16 H₂ + High-Flow

approx. dimensions (mm)



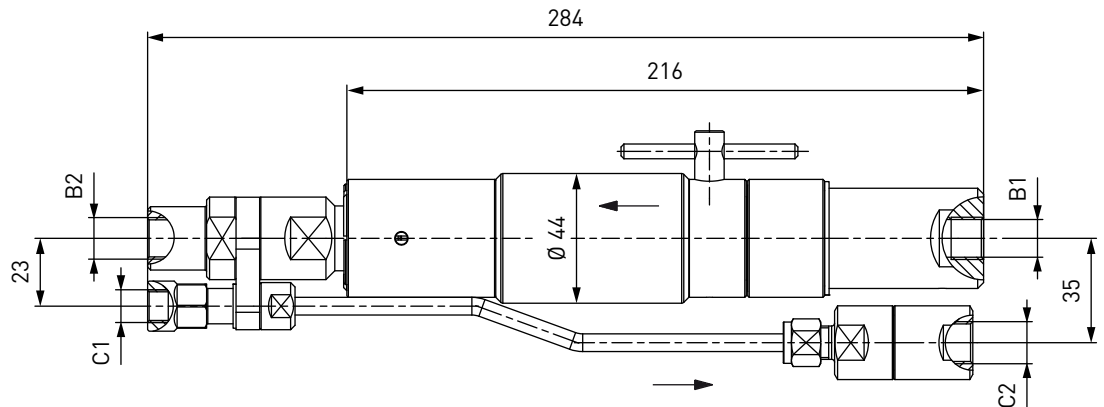
Part No.	Description	DN	Pressure (PS)	B1 (male thread)	B2 (male thread)	C1 (male thread)	C2 (male thread)
C1-18834-X7-X01	TSA1 H ₂ with filter (40 µm)	8	45 MPa	G1/2"*	UNF 9/16"-18**	UNF 7/16"-20**	G1/4"**
C1-67741-X1-X01	TSA1 H ₂ with filter (20 µm)	8	45 MPa	G1/2"*	UNF 9/16"-18**	UNF 7/16"-20**	G1/4"**

* acc. to DIN EN ISO 228-1

** acc. to SAE J514, 37° cone

ORDERING | WEH® TSA1 H₂ Breakaway coupling with female thread for TK16 H₂ + High-Flow

approx. dimensions (mm)



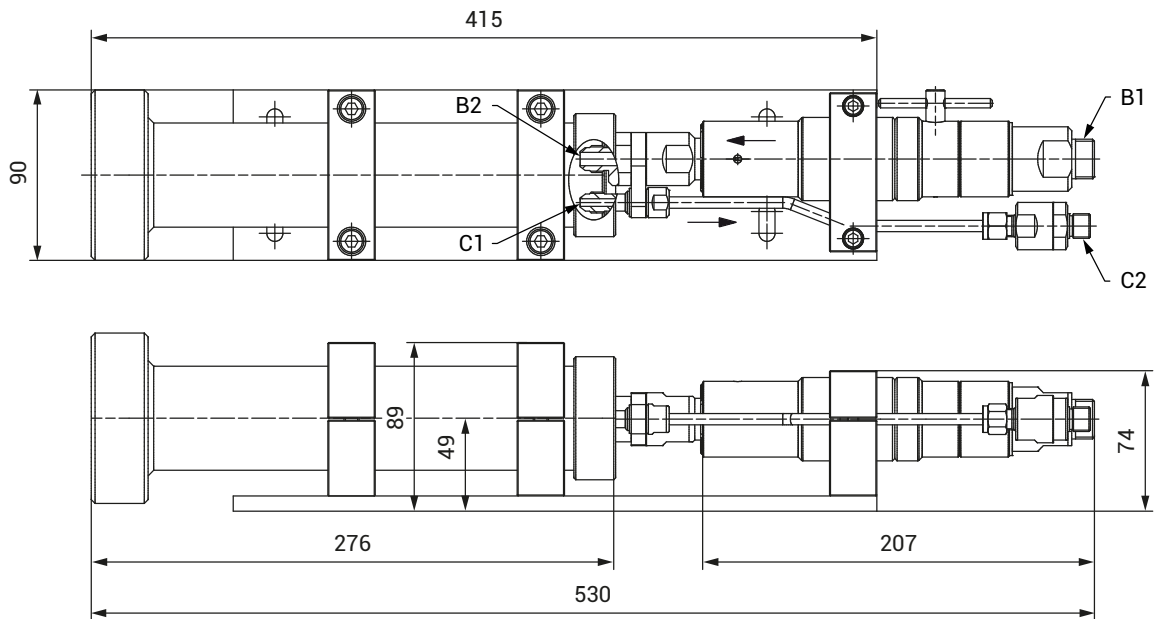
Part No.	Description	DN	Pressure (PS)	B1/B2 (female thread)	C1 (female thread)	C2 (female thread)
C1-99345-X01	TSA1 H ₂ with filter (40 µm)	5	45 MPa	UNF 9/16"-18*	UNF 7/16"-20*	UNF 9/16"-18*

* MP-fitting, 60° inner cone

Ordering

ORDERING | WEH® TSA1 H₂ Breakaway coupling (with dispenser mounting) for TK16 H₂ + High-Flow

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PS)	B1 (male thread)	B2 (male thread)	C1 (male thread)	C2 (male thread)
C1-129553-X01	TSA1 H ₂ with filter (40 µm)	8	45 MPa	G1/2"*	UNF 9/16"-18**	UNF 7/16"-20**	G1/4"*
C1-150775-X01	TSA1 H ₂ with filter (20 µm)	8	45 MPa	G1/2"*	UNF 9/16"-18**	UNF 7/16"-20**	G1/4"*

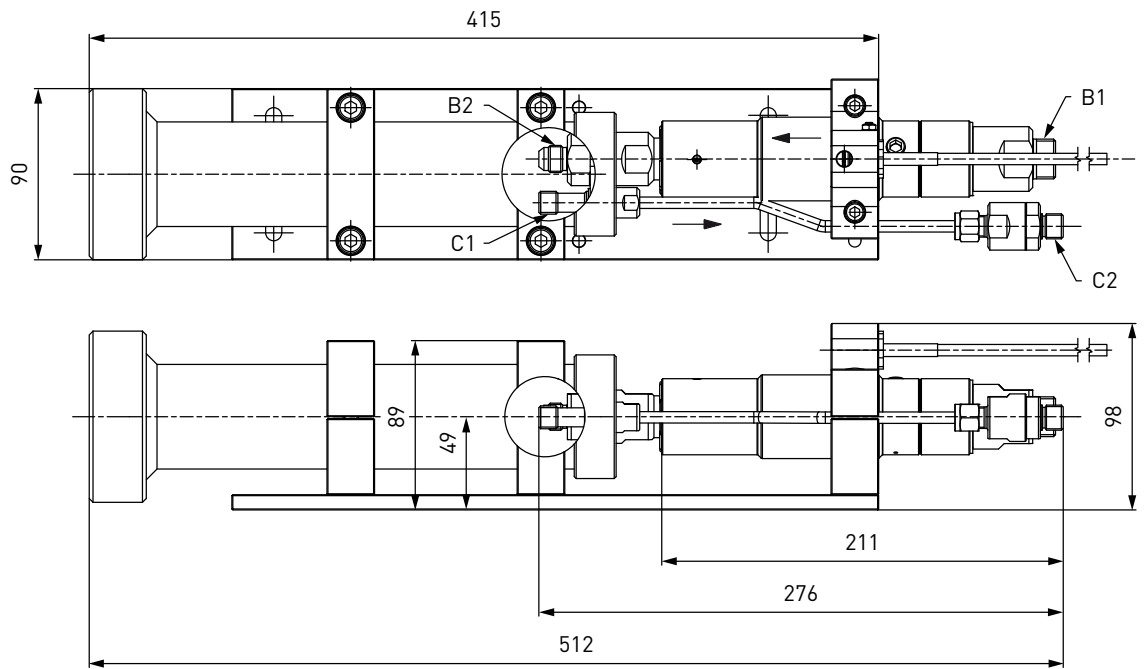
* acc. to DIN EN ISO 228-1

** acc. to SAE J514, 37° cone

Ordering

ORDERING | WEH® TSA1 H₂ Breakaway coupling for TK16 H₂ with data interface + High-Flow

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PS)	B1 (male thread)	B2 (male thread)	C1 (male thread)	C2 (male thread)
C1-90679-X01	TSA1 H ₂ with filter (40 µm)	8	45 MPa	G1/2"*	UNF 9/16"-18**	M12x1.5***	G1/4"**

* acc. to DIN EN ISO 228-1
 ** acc. to SAE J514, 37° cone
 *** 24° inner cone

Accessories

ACCESSORIES

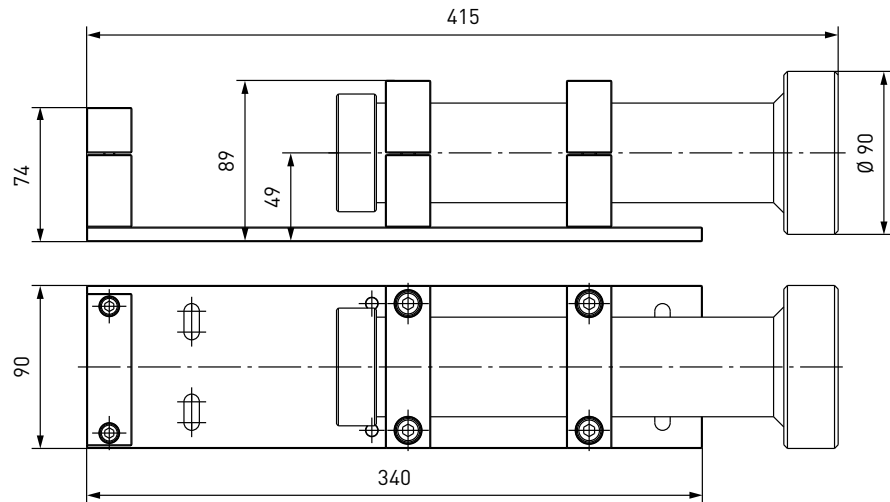
The following accessories are available for the WEH® TSA1 H₂ Breakaway coupling:

Dispenser mounting

The breakaway coupling can also be used with a dispenser mounting. The mounting is firmly attached to the dispenser. The integrated guide tube provides a straight pull-off force.

Dispenser mounting for fueling nozzles without data interface

approx. dimensions (mm)



Part No.	Description
C1-69275	Dispenser mounting for TSA1 H ₂ for fueling nozzles TK16 H ₂ without data interface
C1-93824	Dispenser mounting for TSA1 H ₂ for fueling nozzles TK17 H ₂ without data interface

Hoses

Suitable hoses for the TSA1 H₂ breakaway coupling are available on request.

Mounting for braided protection hose

Mounting for attachment of the braided protection hose to the TSA1 H₂ without gas recirculation.

Part No.	Description
C1-171845	Mounting for braided protection hose (suitable for C1-174444, C1-174446, C1-174456)

Spare parts

SPARE PARTS

Various parts are available as spares for the WEH® TSA1 H₂ Breakaway coupling.

Part No.	Description
W159176	Receptacle insert for TSA1 H ₂ without gas recirculation (C1-174444, C1-174446, C1-174456)
W94249	Receptacle insert for TSA1 H ₂ with gas recirculation (C1-18834-X7-X01, C1-67741-X1-X01)
W108401	Receptacle insert for TSA1 H ₂ with gas recirculation (C1-99345-X01)
W108154	Receptacle insert for TSA1 H ₂ with gas recirculation (C1-90679-X01)
B200B-123477	Spare seals set for receptacle insert W159176
B200B-119056	Spare seals set for receptacle insert W94249, W108401, W108154
W139032	Spare parts set consisting of a gas recirculation tube (length: approx. 195 mm) and a firmly mounted check valve (C1-18834-X7-X01, C1-67741-X1-X01, C1-90679-X01)
W140024	Spare parts set consisting of a gas recirculation tube (length: approx. 195 mm) and a firmly mounted check valve (C1-99345-X01)
E69-9061	Wire filter insert 40 µm (incl. spring and o-ring)
W67754	Wire filter insert 20 µm (incl. spring and o-ring)

Technical explanations

TECHNICAL EXPLANATIONS

Abbreviations/Definitions

For explanation of abbreviations and definitions of terms see applicable Technical Appendix of the corresponding catalog or www.weh.com

Illustrations

The illustrations and/or images used in these data sheet are particularly provided for illustrative purposes only and may differ in some details from the actual product. For binding information, please refer to your individual orders.

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). Please note that WEH does not know your system and therefore - also due to the large number of different potential applications of WEH® Products - cannot perform tests on all potential types of application. You alone are responsible for the selection, configuration and suitability of WEH® Products, especially according to the requirements of your system. Before purchasing WEH® Products, please particularly ensure that our products are compatible with your intended use, your performance data, your material and fluids, your system concept and your system limits according to our product specifications. Please also consider 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. If you are not sure whether the WEH® Product is suitable for your system and intended use, please contact us in advance. 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.

Service life

WEH® Products are generally products which may be subject to wear and fatigue during operation and depending on your individual application/use. For details - in particular regarding the corresponding minimum inspection and maintenance intervals - please refer to the respective operating instructions for the WEH® Product.

Explanation on the Pressure Equipment Directive

These WEH® Products are generally classified as pressure accessories in accordance with Article 2 (5) of the Pressure Equipment Directive 2014/68/EU and are considered to be similar to piping. These WEH® Products may not be used as safety accessories. Furthermore, it is pointed out, that these WEH® Products are designed and placed on the market in accordance with the requirements of Article 4 (3) of the Pressure Equipment Directive 2014/68/EU. 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

More questions? – Great! Don't hesitate to contact our experts.

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