

Type **TSA1 H₂**

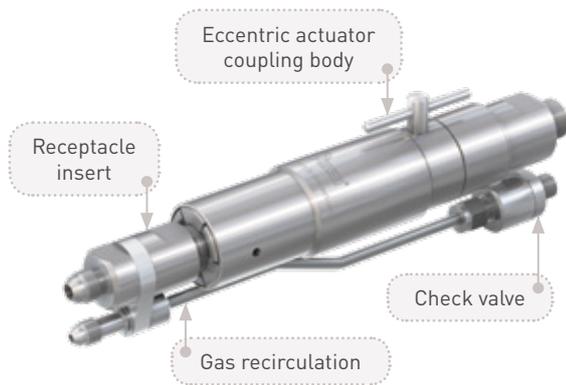
WEH[®] Breakaway coupling

for car fueling stations



General

DESCRIPTION



Features

- Re-usable without factory reservicing
- Installation at the dispenser
- Small compact design
- Integrated cleanable filter (40 resp. 20 micron)
- Check valve at venting line
- No additional tool necessary

The WEH® TSA1 H₂ Breakaway coupling offers additional safety for your car fueling station. The breakaway is installed between the dispenser and the filling hose resp. filling and venting hose. In the event of accidental deployment, e.g. driving a vehicle from the dispenser with the nozzle remaining in the vehicle fuel port, the coupling will separate the connections between dispenser and hose sealing both ends. This protects largely the receptacle, the fueling nozzle and the dispenser against damage. The detached coupling can be easily reattached and placed back in service after having been function tested. The integrated filter provides clean hydrogen and is easy to maintain.

The WEH® Breakaway coupling consists of a coupling body, a receptacle insert and a gas recirculation with check valve. The breakaway is also available without gas recirculation.

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 a fueling nozzle, a hose set and a breakaway coupling.

Application

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

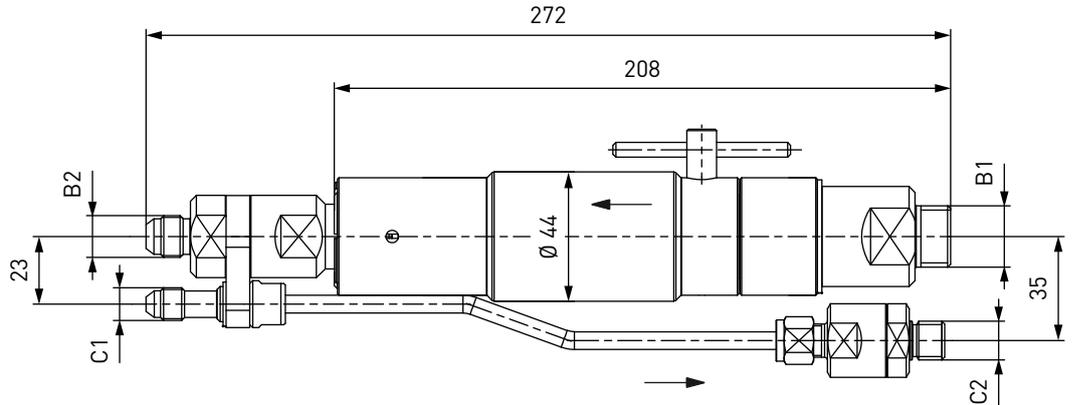
TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	Max. 8 mm, depending on design	On request
Pressure range	PN = 35 MPa (5,000 psi) PS = 45 MPa	
Temperature range	-40 °C up to +85 °C (-40 °F up to +185 °F)	On request
Breakaway force	300 - 600 N	On request
Material	Corrosion resistant stainless steel, aluminium	On request
Sealing material	Hydrogen resistant	On request
Design	With resp. without gas recirculation With filter (40 resp. 20 micron) Incl. dispenser mounting and data cable (only for breakaways for fueling nozzles with data interface)	On request

Ordering

ORDERING | WEH® TSA1 H₂ Breakaway coupling with gas recirculation, male thread

approx. dimensions (mm)

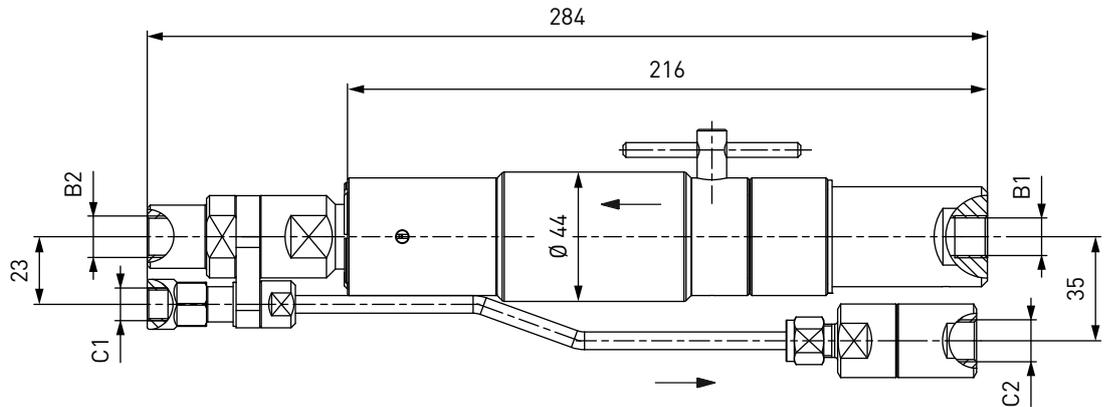


Part No.	Description	DN	Pressure (PN)	B1 (male thread)	B2 (male thread)	C1 (male thread)	C2 (male thread)
C1-18834-X7-X01	TSA1 H ₂ with filter (40 micron)	8	35 MPa / 5,000 psi	G1/2"	UNF 9/16" -18*	UNF 7/16" -20*	G1/4"
C1-67741-X1-X01	TSA1 H ₂ with filter (20 micron)	8	35 MPa / 5,000 psi	G1/2"	UNF 9/16" -18*	UNF 7/16" -20*	G1/4"

* acc. to SAE J514, 37°

ORDERING | WEH® TSA1 H₂ Breakaway coupling with gas recirculation, female thread

approx. dimensions (mm)



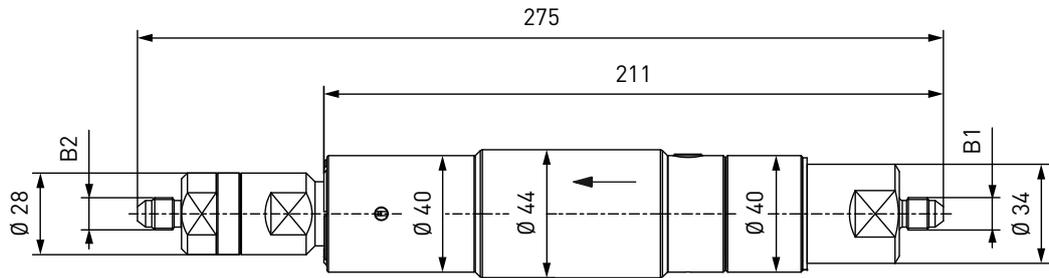
Part No.	Description	DN	Pressure (PN)	B1/B2 (female thread)	C1 (female thread)	C2 (female thread)
C1-99345-X01	TSA1 H ₂ with filter (40 micron)	5	35 MPa / 5,000 psi	UNF 9/16" -18*	UNF 7/16" -20*	UNF 9/16" -18*

* 60° cone, MP-fitting

Ordering

ORDERING | WEH® TSA1 H₂ Breakaway coupling without gas recirculation, male thread

approx. dimensions (mm)

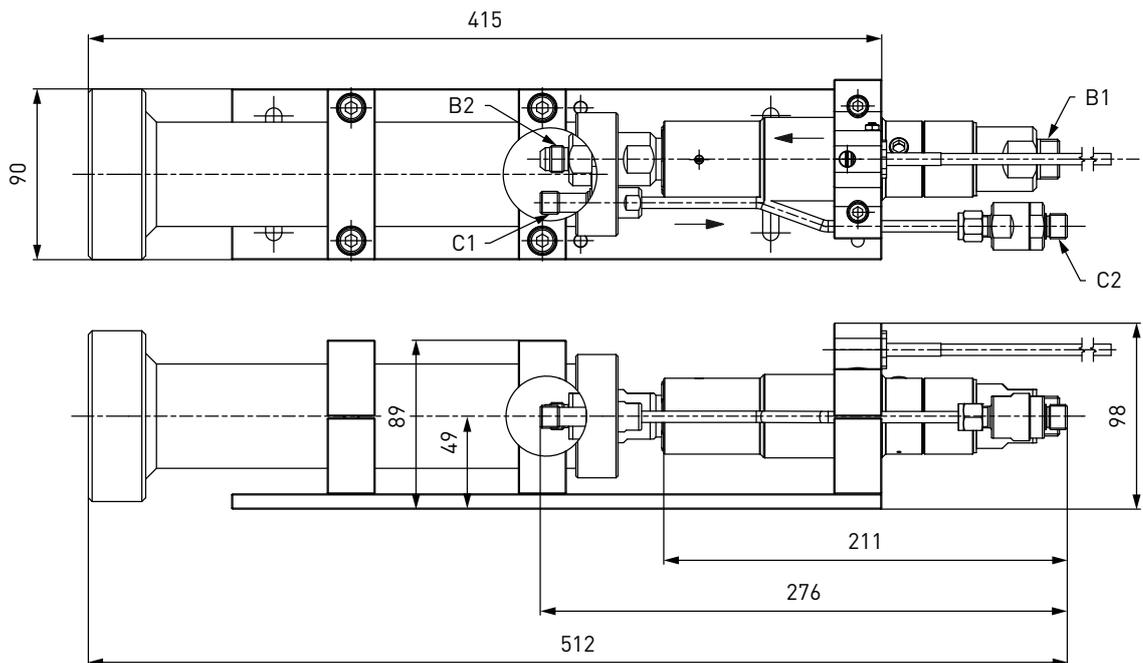


Part No.	Description	DN	Pressure (PN)	B1 (male thread)	B2 (male thread)
C1-111068-X01	TSA1 H ₂ with filter (40 micron)	4	35 MPa / 5,000 psi	UNF 7/16"-20*	UNF 7/16"-20*

* acc. to SAE J514, 37°

ORDERING | WEH® TSA1 H₂ Breakaway coupling with gas recirculation, for data interface

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1 (male thread)	B2 (male thread)	C1 (male thread)	C2 (male thread)
C1-90679-X01	TSA1 H ₂ with filter (40 micron)	4	35 MPa / 5,000 psi	G1/2"	UNF 9/16"-18*	M12x1.5**	G1/4"

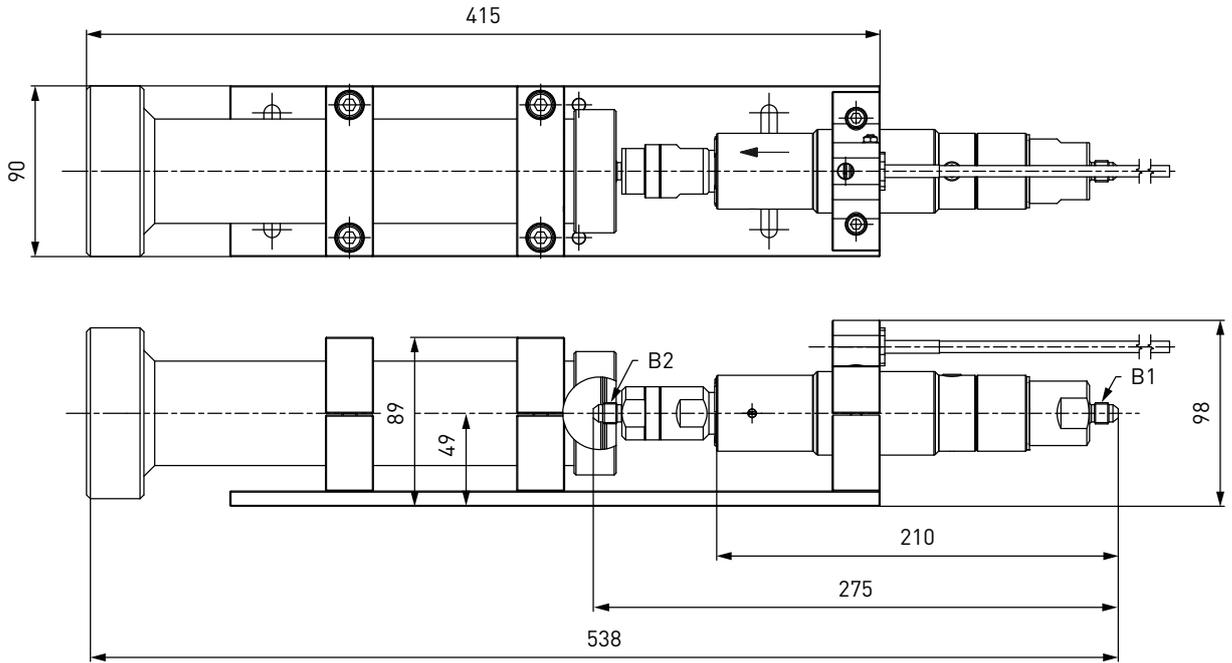
* acc. to SAE J514, 37°

** 24° inner cone

Ordering

ORDERING | WEH® TSA1 H₂ Breakaway coupling without gas recirculation, for data interface

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1 (male thread)	B2 (male thread)
C1-111069-X01	TSA1 H ₂ with filter (40 micron)	4	35 MPa / 5,000 psi	UNF 7/16"-20*	UNF 7/16"-20*

* acc. to SAE J514, 37°

Accessories

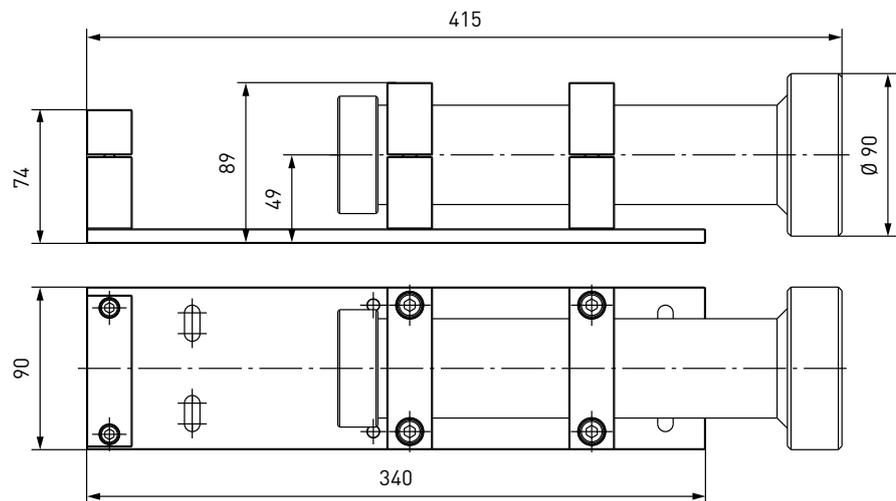
ACCESSORIES

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

Dispenser mounting for breakaway coupling

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. The dispenser mounting can be used instead of a return pulley (hose pulley).

approx. dimensions (mm)



Part No.	Description
C1-69275	Dispenser mounting for TSA1 H ₂ in combination with TK16 H ₂ or TK17 H ₂ 35 MPa

Filling and venting hoses

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

Fittings

Stainless steel fittings for connecting port 'B2' to the filling hose resp. port 'C1' to the venting hose are available on request.

Spare parts

SPARE PARTS

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

Part No.	Description
W94249	Receptacle insert for TSA1 H ₂ with gas recirculation (C1-18834, C1-67741)
W108401	Receptacle insert for TSA1 H ₂ with gas recirculation (C1-99345)
W74608	Receptacle insert for TSA1 H ₂ without gas recirculation (C1-111068, C1-111069)
W108154	Receptacle insert for TSA1 H ₂ with gas recirculation (C1-90679)
C1-119056	Spare seal set for receptacle insert W94249, W108401, W108154
C1-119054	Spare seal set for receptacle insert W74608
E69-9061	Wire filter insert 40 micron (incl. spring and o-ring)
E69-67754	Wire filter insert 20 micron (incl. spring and o-ring)
E69-46414	Copper disc for G1/4" male thread (port C2)
E69-45950	Copper disc for G1/2" male thread (port B1)

Technical explanations

TECHNICAL EXPLANATIONS

Abbreviations/Definitions

For explanation of abbreviations and definitions of terms see 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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