

Date: 04/2021



# Type **TSA1** H<sub>2</sub> **70** MPa WEH<sup>®</sup> Breakaway coupling

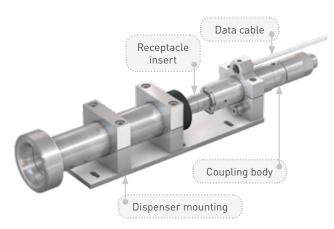
for car fueling stations



# TSA1 H, 70 MPa | WEH<sup>®</sup> Breakaway coupling

## General

# DESCRIPTION



## Features

- Re-usable without factory reservicing
- Installation at the dispenser
- Small compact design
- Integrated cleanable filter (20 micron)
- Incl. dispenser mounting

The WEH® TSA1 H, 70 MPa Breakaway coupling was developed specifically for 700 bar technology. The breakaway is installed directly at the dispenser of the car fueling station. 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.

WEH<sup>®</sup> Breakaway coupling consists of a coupling body, a receptacle insert and a dispenser mounting.

The TSA1 H<sub>2</sub> 70 MPa for fueling nozzles with data interface additionally contain a 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.

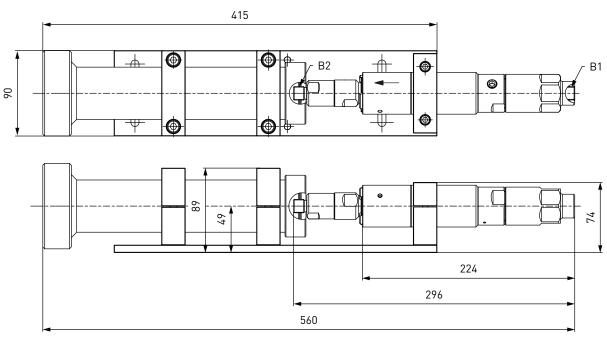
Characteristics	Basic version	Options	
Nominal bore (DN)	4 mm	On request	
Pressure range	PN = 70 MPa (10,000 psi)   PS = 87.5 MPa		
Temperature range	-40 °C up to +85 °C (-40 °F up to +185 °F)	On request	
Breakaway force	300 - 600 N	On request	
Material	Corrosion resistant stainless steel	On request	
Sealing material Hydrogen resistant		On request	
Design With filter (20 micron) and dispenser mounting Incl. data cable (only for breakaways for fueling nozzles with data interface)		On request	

# **TECHNICAL DATA**

# Ordering

# ORDERING | WEH $^{\textcircled{8}}$ TSA1 H $_{2}$ 70 MPa Breakaway coupling without gas recirculation

approx. dimensions (mm)





Part No.	Description	Pressure (PN)	B1 (female thread)	B2 (male thread)
C1-93837-X01	TSA1 H <sub>2</sub> 70 MPa with filter (20 micron)	70 MPa / 10,000 psi	UNF 9/16"-18*	UNF 9/16"-18**

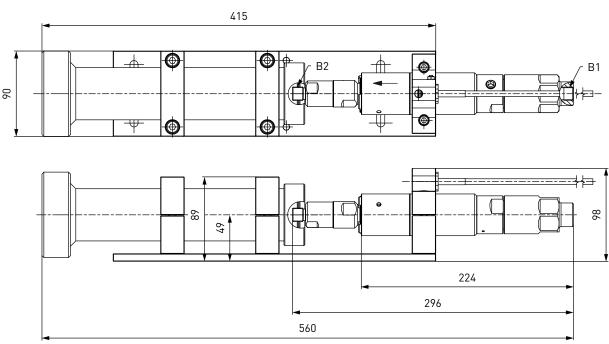
\* 60° cone, MP-fitting

\*\* 60° inner cone

# Ordering

# ORDERING | WEH $^{\odot}$ TSA1 H<sub>2</sub> 70 MPa Breakaway coupling without gas recirculation, for data interface

approx. dimensions (mm)





Part No.	Description	Pressure (PN)	B1 (female thread)	B2 (male thread)
C1-96938-X01	TSA1 H <sub>2</sub> 70 MPa with filter (20 micron)	70 MPa / 10,000 psi	UNF 9/16"-18*	UNF 9/16"-18**

\* 60° cone, MP-fitting \*\* 60° inner cone



Accessories / Spare parts

# ACCESSORIES

The following accessories are available for the WEH<sup>®</sup> TSA1 H<sub>2</sub> 70 MPa Breakaway coupling:

## Filling hoses

Suitable filling hose for the TSA1  $H_2$  70 MPa breakaway coupling are available on request.

### Fittings

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

## **SPARE PARTS**

Various parts are available as spares for the WEH $^{\odot}$  TSA1 H $_2$  70 MPa Breakaway coupling.

Part No.	Description	
W92182	Receptacle insert for TSA1 H <sub>2</sub> 70 MPa (C1-93837, C1-96938)   7 Spare seal set for receptacle insert W92182	
C1-123477		
E69-67754	Wire filter insert 20 micron (incl. spring and o-ring)	

## **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<sup>®</sup> Products are designed to be operated by qualified professional users (insofar as WEH<sup>®</sup> 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<sup>®</sup> Products - cannot perform tests on all potential types of application. You alone are responsible for the selection, configuration and suitability of WEH<sup>®</sup> Products, especially according to the requirements of your system. Before purchasing WEH<sup>®</sup> 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<sup>®</sup> Products is our highest priority. For this reason, WEH<sup>®</sup> 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<sup>®</sup> Products with unsuitable third-party products. You alone are responsible for reviewing the suitability of third-party products. WEH<sup>®</sup> Products and WEH<sup>®</sup> Products and WEH<sup>®</sup> Products.

#### Service life

WEH<sup>®</sup> 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<sup>®</sup> Product.

#### Explanation on the Pressure Equipment Directive

These WEH<sup>®</sup> 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<sup>®</sup> Products may not be used as safety accessories. Furthermore, it is pointed out, that these WEH<sup>®</sup> 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.

© All rights reserved, WEH GmbH. Any unauthorized use is strictly forbidden. Subject to alteration. No liability will be assumed for any content. Herewith previous versions are no longer valid.

#### Contact

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

#### Manufacturer:

#### WEH GmbH Gas Technology

Josef-Henle-Str. 1 89257 Illertissen / Germany

Phone: +49 7303 95190-0 E-Mail: h2sales@weh.com Website: www.weh.com