

Type **TSF2 H₂** WEH[®] Filter

for installation onboard hydrogen vehicles and in hydrogen fueling stations



General

DESCRIPTION



Features

- For hydrogen free of impurities
- Filter insert can be cleaned
- For installation onboard H₂ vehicles and in H₂ fueling stations
- Also suitable as prefilter for inline breakaways

Contaminants in the gas flow can enter the vehicle’s storage tank during refueling. These dirt particles in the hydrogen fuel may cause damage to the sealing components. WEH, therefore, offers the WEH® TSF2 H₂ Filter Series for clean hydrogen. Solid particles are captured reliably.

The filter element can be removed and is re-usable after having been cleaned.

The WEH® TSF2 H₂ Filter is mainly used for fueling stations and dispensers.

In order to meet the different requirements of the dispenser manufacturers, WEH offers a wide variety of connection configurations - tube fitting / female thread on both ends or female and male thread.

For use as a prefilter in the WEH® TSA2 H₂ Inline breakaway coupling, WEH offers a special design with male and female thread.

Application

Filter for installation onboard hydrogen vehicles (e1 approval) and in hydrogen fueling stations.

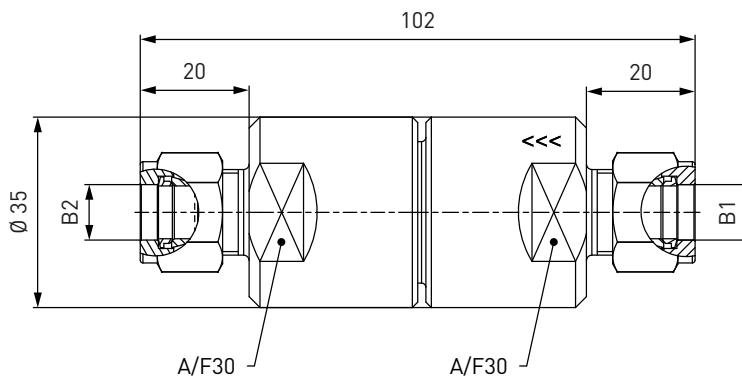
TECHNICAL DATA

Characteristics	Basic version	Options
Nominal bore (DN)	Max. 8 mm, depending on design	On request
Pressure range	PN = 30 MPa (4,350 psi) PS = 40 MPa 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
Material	Corrosion resistant stainless steel	On request
Sealing material	Hydrogen resistant	On request
Filter element	40 resp. 20 micron	On request
Design	Incl. fittings (only for filters with tube fitting)	On request
Conformity / Tests / Approvals	e1 approval on request	

Ordering

ORDERING | WEH® TSF2 H₂ Filter with tube fitting on both sides

approx. dimensions (mm)

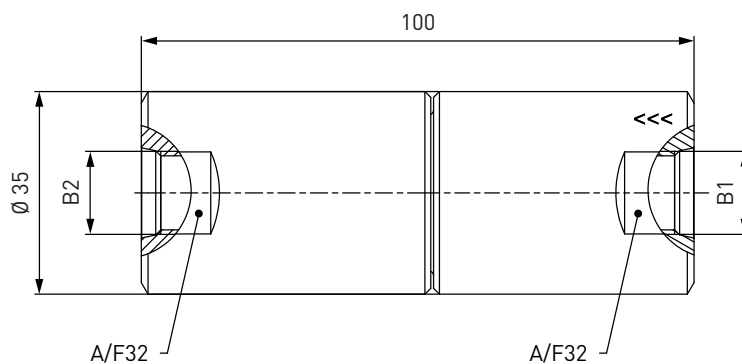


Part No.	Description	Filter (micron)	DN	Pressure (PN)	B1	B2
C1-54095-X01	TSF2 H ₂	40	4	35 MPa / 5,000 psi	Tube Ø 1/4"*	Tube Ø 1/4"*
C1-18487-X01	TSF2 H ₂	40	8	35 MPa / 5,000 psi	Tube Ø 3/8"*	Tube Ø 3/8"*
C1-36033-X01	TSF2 H ₂	40	8	35 MPa / 5,000 psi	Tube Ø 10*	Tube Ø 10*

* double ferrule fitting

ORDERING | WEH® TSF2 H₂ Filter with female thread on both sides

approx. dimensions (mm)



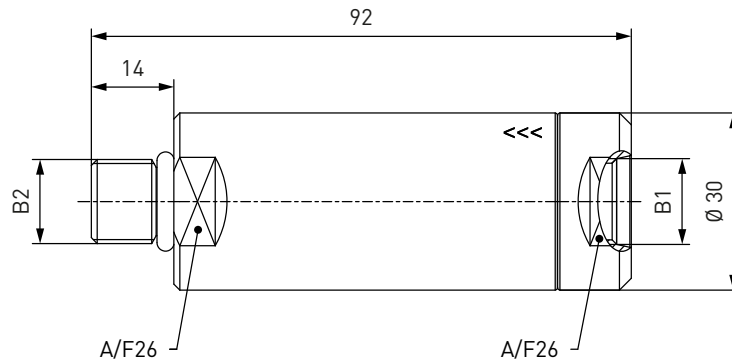
Part No.	Description	Filter (micron)	DN	Pressure (PN)	B1 (female thread)	B2 (female thread)
C1-34576-X01	TSF2 H ₂	40	8	35 MPa / 5,000 psi	UNF 9/16"-18*	UNF 9/16"-18*

* acc. to SAE J1926

Ordering

ORDERING | WEH® TSF2 H₂ Filter with female and male thread

approx. dimensions (mm)

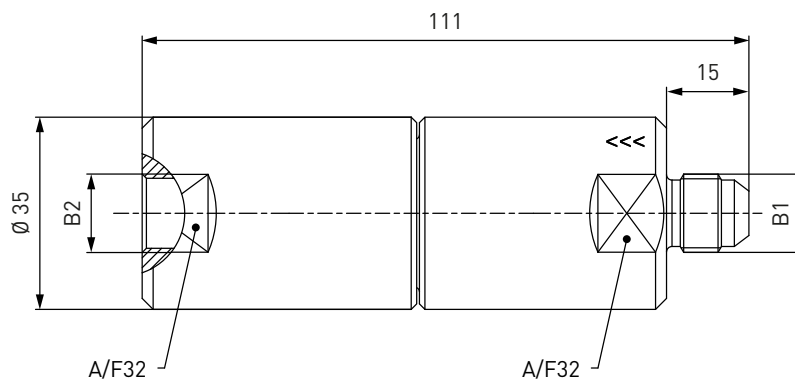


Part No.	Description	Filter (micron)	DN	Pressure (PN)	B1 (female thread)	B2 (male thread)
C1-17011-X01	TSF2 H ₂	40	8	30 MPa / 4,350 psi	UNF 9/16"-18*	UNF 9/16"-18*

* acc. to SAE J1926

ORDERING | WEH® TSF2 H₂ Filter with male and female thread (also suitable as prefilter for TSA2 H₂)

approx. dimensions (mm)



Part No.	Description	Filter (micron)	DN	Pressure (PN)	B1 (male thread)	B2 (female thread)
C1-134710-X01	TSF2 H ₂	40	8	35 MPa / 5,000 psi	UNF 9/16"-18*	UNF 9/16"-18*
C1-134711-X01	TSF2 H ₂	20	8	35 MPa / 5,000 psi	UNF 9/16"-18*	UNF 9/16"-18*

* acc. to SAE J514, 37°

Spare parts

SPARE PARTS

Various parts are available as spares for the WEH® TSF2 H₂ Filter.

Part No.	Description
E69-9061	Wire filter insert 40 micron (incl. spring and o-ring)
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® 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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