

Type **TVR1 H₂**

WEH[®] Check valve

for cars and fueling stations



General

DESCRIPTION



Features

- Robust construction
- Low-noise opening and closing
- Corrosion resistant stainless steel
- High leak tightness

With the TVR1 H₂ WEH offers a high performance check valve for use with hydrogen. The check valve system is designed to minimize the effect of dirt particles on the sealing components within the unit. The WEH® TVR1 H₂ Check valve is constructed of corrosion-resistant stainless steel achieving a very durable unit due to its robust internal structure.

Application

Check valve for cars (e1 approval), also suitable for installation in fueling stations.

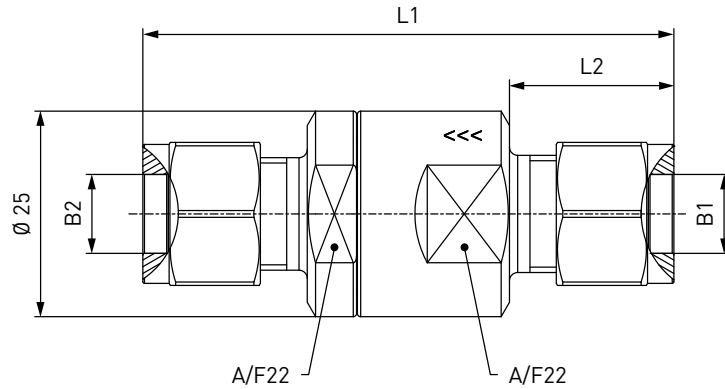
TECHNICAL DATA

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
Material	Corrosion resistant stainless steel (inner components partially made of brass: C1-18485)	On request
Sealing material	Hydrogen resistant	On request
Design	Incl. fittings (only for check valves with tube fitting)	With integrated particle filter
Conformity / Tests / Approvals	e1 00 0005 (Regulation (EC) No. 79/2009)	

Ordering

ORDERING | WEH® TVR1 H₂ Check valve with tube fitting on both sides

approx. dimensions (mm)



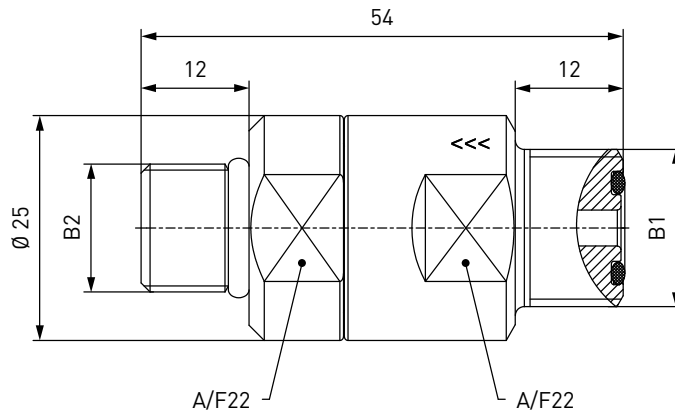
Part No.	Description	DN	Pressure (PN)	B1	B2	L1	L2
C1-42741	TVR1 H ₂ (e1)	5	35 MPa / 5,000 psi	Tube Ø 6*	Tube Ø 6*	63.0	18.0
C1-33824-X01	TVR1 H ₂	5	35 MPa / 5,000 psi	Tube Ø 6*	Tube Ø 6*	63.0	18.0
C1-35547	TVR1 H ₂ (e1)	5	35 MPa / 5,000 psi	Tube Ø 1/4"*	Tube Ø 1/4"*	64.5	18.5
C1-133820-X01	TVR1 H ₂	5	35 MPa / 5,000 psi	Tube Ø 1/4"*	Tube Ø 1/4"*	64.5	18.5
C1-133821	TVR1 H ₂ (e1)	6	35 MPa / 5,000 psi	Tube Ø 8*	Tube Ø 8*	66.0	20.5
C1-43260-X01	TVR1 H ₂	6	35 MPa / 5,000 psi	Tube Ø 8*	Tube Ø 8*	66.0	20.5
C1-18485	TVR1 H ₂ (e1)	8	35 MPa / 5,000 psi	Tube Ø 3/8"*	Tube Ø 3/8"*	65.0	20.0
C1-81898-X01	TVR1 H ₂	8	35 MPa / 5,000 psi	Tube Ø 3/8"*	Tube Ø 3/8"*	65.0	20.0
C1-43215	TVR1 H ₂ (e1)	8	35 MPa / 5,000 psi	Tube Ø 10*	Tube Ø 10*	65.0	20.0
C1-133822-X01	TVR1 H ₂	8	35 MPa / 5,000 psi	Tube Ø 10*	Tube Ø 10*	65.0	20.0

* double ferrule fitting

Ordering

ORDERING | WEH® TVR1 H₂ Check valve with male thread on both sides

approx. dimensions (mm)



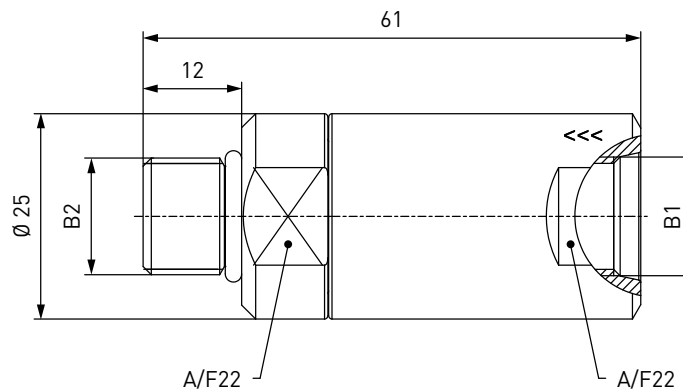
Part No.	Description	DN	Pressure (PN)	B1 (male thread)	B2 (male thread)
C1-108879	TVR1 H ₂ (e1)	4	35 MPa / 5,000 psi	UN 11/16"-16 for sealing with O-Lok® Face Seal** for tube Ø 10 (3/8")	UNF 9/16"-18*

* acc. to SAE J1926

** Face Seal acc. to SAE J1453

ORDERING | WEH® TVR1 H₂ Check valve with female and male thread

approx. dimensions (mm)



Part No.	Description	DN	Pressure (PN)	B1 (female thread)	B2 (male thread)
C1-34575-X2-X01	TVR1 H ₂	8	35 MPa / 5,000 psi	UNF 9/16"-18*	UNF 9/16"-18*

* acc. to SAE J1926

Other connection sizes and versions on request.

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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