

Type TK17 H₂ 35 MPa WEH® Fueling nozzle for hydrogen fast filling

of cars at self-service fueling stations



DESCRIPTION



Features

- Type C nozzle acc. to SAE J2600:2002, paragraph 5.2
- Left or right single-handed operation
- Compatible with WEH® TN1 H_a Receptacle profile
- WEH® EASY-TURN 250° swivel joint
- Easy operation
- High flow rate → short filling times
- Protecion against impact and cold
- Plastic thermal protection
- Hand grip with magnet
- WEH® Jaw locking mechanism
- High-grade materials
- Coding for pressure range / gas type

The WEH® TK17 H, 35 MPa Fueling nozzle was developed for refueling cars with compressed, gaseous hydrogen (CGH₂).

It is equipped with the same outstanding features as all other WEH® TK17 H, Fueling nozzles:

The integrated swivel joint allows a free rotation of the coupling by approx. 250° and the hand grip has a magnet for actuation of the magnet switch for activation of the dispenser.

The internal coding for pressure range and gas type ensures that the TK17 H₂ 35 MPa can be connected to the compatible WEH® Receptacles according to the opposite table and also prevents the risk of confusion with natural gas.

The WEH® TK17 H₂ 35 MPa offers optimum safety for the operator thanks to the locking mechanism. The fueling nozzle remains connected to the receptacle until the locking mechanism is released by the operator.



HF = High-Flow

Application

Fueling nozzle for hydrogen fast filling of cars at self-service fueling stations.

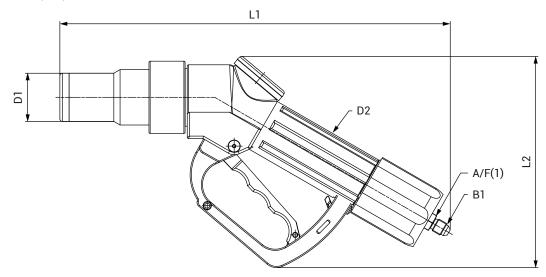
TECHNICAL DATA

| Characteristics | Basic version |
|--------------------------------------|--|
| Nominal bore (DN) | 4 mm |
| 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) |
| Medium note | Suitable for pre-cooled hydrogen |
| Material | Corrosion resistant |
| Sealing material | Hydrogen resistant |
| Nozzle type | Type C acc. to SAE J2600:2002, paragraph 5.2 |
| Design | With plastic thermal protection, cold protection and hand grip with magnet |
| Weight | Approx. 1.8 kg (3.97 lbs.) |
| Conformity / Tests / Approvals | Tests acc. to SAE J2600:2002 |

Ordering / Accessories

ORDERING | WEH® TK17 H₂ 35 MPa Fueling nozzle

approx. dimensions (mm)



| Part no. | Description | Pressure (PN) | B1 (male thread) | L1 | L2 | D1 | D2 | A/F(1) |
|-----------|----------------------------|-----------------------|---------------------|-----|-----|----|----|--------|
| C1-162700 | TK17 H ₂ 35 MPa | 35 MPa / 5,000 psi | UNF 7/16"-20* | 333 | 175 | 40 | 46 | 14 |

^{*} acc. to SAE J514, 37° cone

Fueling assemblies consisting of fueling nozzle, hose set and breakaway coupling are available on request.

ACCESSORIES

The following accessories are available for the WEH $^{\scriptsize (B)}$ TK17 H $_2$ 35 MPa Fueling nozzle:

Hose set

Hose set for connecting fueling nozzle and TSA1 H_2 breakaway coupling, complete with filling hose (for pre-cooled hydrogen) and braided protection hose as cover.

Design filling hose: max. operating pressure PS: 45 MPa / nominal bore (DN): 6 mm / temperature range: -40 °C up to +65 °C (-40 °F up to +149 °F)



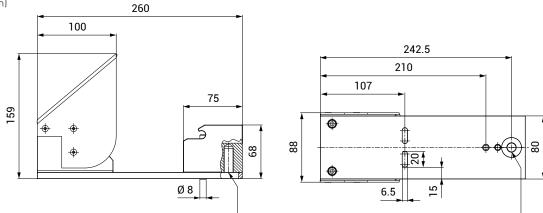
| Part no. | B1/B2 (female thread) | Hose length |
|------------|--------------------------|-------------|
| E68-162705 | UNF 7/16"-20* | 3 m |
| E68-162706 | UNF 7/16"-20* | 4 m |
| E68-162707 | UNF 7/16"-20* | 5 m |

^{*} acc. to SAE JIC, 37° sealing cone

Dispenser mounting

Mounting for safe attachment of the fueling nozzle to the dispenser. Optionally a magnetic field sensor can be installed.

approx. dimensions (mm)



Mounting possibility for optionally available magnetic field sensor



| Part no. | Description |
|------------|--|
| C1-143641 | Dispenser mounting (switch actuated) with weather protection and special cover for impact protection |
| E68-123980 | Magnetic field sensor with 2 m cable, explosion-proof acc. to ATEX |

TNS1 H₂ Service receptacle

To prevent damage in the fueling nozzle while purging or leak testing during maintenance in the course of which pressure is applied, we recommend the use of a service receptacle. The receptacle also protects the fueling nozzle from dirt ingress whilst not in use.



| Part no. | Description |
|-----------|---|
| C1-148079 | TNS1 H ₂ Service receptacle incl. protection cap |

Spare parts

SPARE PARTS

Various parts are available as spares for the WEH $^{\rm @}$ TK17 $\rm H_2$ 35 MPa Fueling nozzle.



| Part No. | Description | |
|------------|--|--|
| E80-80187 | 1 Impact protection | |
| E80-84030 | 2 Locking lever | |
| E69-161748 | 3 Logo cap | |
| E80-59738 | 3 Label plate | |
| E80-162272 | 4 Plastic thermal protection (cold protection) | |
| E99-44923 | Maintenance spray | |

When ordering please specify the part no. engraved on the fueling nozzle.

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

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^{\otimes} Products are designed to be operated by qualified professional users (insofar as WEH^{\otimes} 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 $types of application. You alone are responsible for the selection, configuration and suitability of WEH^{\otimes} Products, especially according to the require$ ments 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.

 $WEH^{@}$ 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 $^{\odot}$ 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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