

# Type **TK17 H<sub>2</sub> 70 MPa ENR**

**WEH<sup>®</sup>** Fueling nozzle with exchangeable data interface (ENR) for hydrogen fast filling of cars at self-service fueling stations



## General

## DESCRIPTION



## Features

- Type C nozzle acc. to SAE J2600:2002, paragraph 5.2
- Left or right single-handed operation
- Compatible with WEH® TN1 H<sub>2</sub> 70 MPa Receptacle profile
- Exchangeable data interface (ENR)
- Integrated purging line for nitrogen purging
- Prepared for dispenser mounting with purging system
- WEH® EASY-TURN 250° swivel joint
- Increased robustness in case of improper handling
- Easy operation
- High flow rate ➔ short filling times
- Protection 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<sub>2</sub> 70 MPa ENR fueling nozzle with exchangeable data interface (ENR = exchangeable nozzle receiver) was developed for refueling cars with compressed hydrogen (CGH<sub>2</sub>). The fueling nozzle provides the same proven characteristics as the already known TK17 H<sub>2</sub> 70 MPa.

The new TK17 H<sub>2</sub> 70 MPa ENR is additionally equipped with a purging line, that allows purging with nitrogen during and after fueling process. This can prevent ingress of moisture and formation of ice crystals when filling with pre-cooled hydrogen. Removing the fueling nozzle from the receptacle is thus facilitated even in unfavorable climatic conditions. The efficiency of the purging line has been successfully tested in compliance with the freezing test 7.26 from the draft version of ISO 17268.

The WEH® TK17 H<sub>2</sub> 70 MPa ENR offers optimum safety for the operator thanks to the locking mechanism. The fueling nozzle remains connected to the receptacle until the locking lever is released by the operator.

## Application

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

		RECEPTACLE - pressure range/coding			
NOZZLE - pressure range/coding		25 MPa	35 MPa	35 MPa HF*	70 MPa
	25 MPa	✓	✓	✓	✓
	35 MPa		✓	✓	✓
	35 MPa HF*			✓	
	70 MPa				✓

\* HF = High-Flow

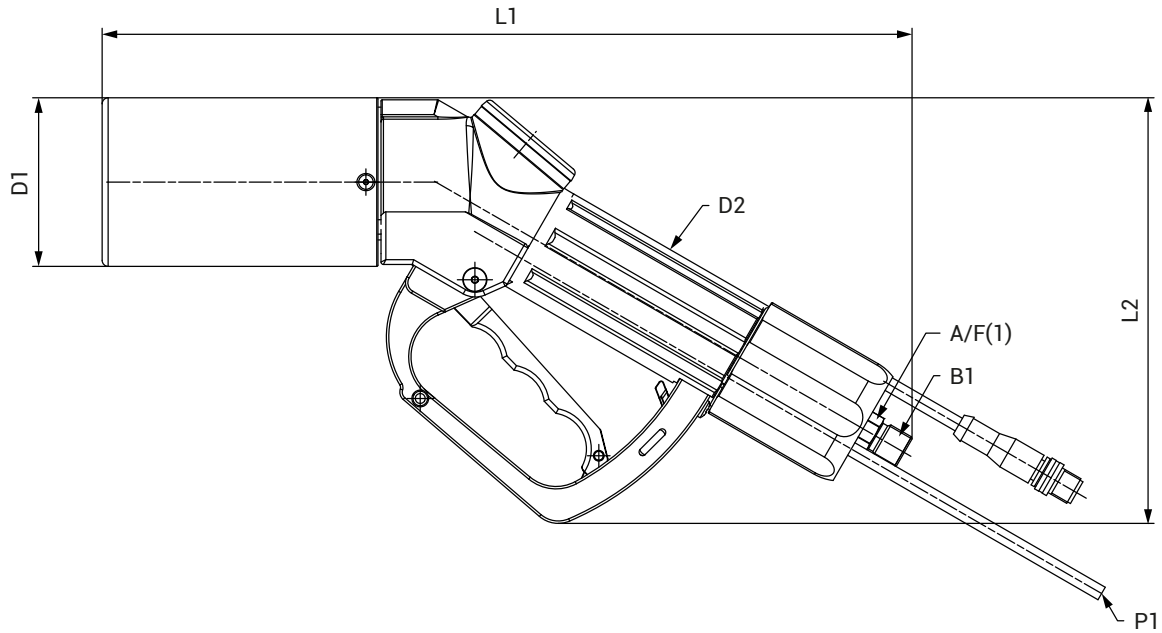
## TECHNICAL DATA

Characteristics	Basic version
Nominal bore (DN)	4 mm
Pressure range	PN = 70 MPa   PS = 87.5 MPa   PT = 125.5 MPa
Temperature range	-40 °C up to +85 °C (-40 °F up to +185 °F)
Material	Corrosion resistant
Sealing material	Hydrogen compatible
Nozzle type	Type C acc. to SAE J2600:2002, paragraph 5.2
Design	With plastic thermal protection, cold protection, hand grip with magnet, exchangeable data interface acc. to SAE J2799 and integrated purging line
Weight	Approx. 2.2 kg (4.85 lbs.)
Medium for purging	Nitrogen
Nominal bore DN of purging line	4 mm
Media temperature range of purging medium	-20 °C up to +85 °C (-4 °F up to +185 °F)
Flow rate during purging	500 l/h
Conformity / Tests / Approvals	Fueling nozzle: SAE TIR J2799, tests acc. to SAE J2600:2002 IR data interface: ATEX, NEC or KTL

## Ordering / Accessories

**ORDERING** | WEH® TK17 H<sub>2</sub> 70 MPa ENR Fueling nozzle

approx. dimensions (mm)



Part no.	Description	Pressure (PN)	B1 (male thread)	P1	L1	L2	D1	D2	A/F(1)
<b>C1-160702-X01</b>	TK17 H <sub>2</sub> 70 MPa ENR (ATEX IR data interface)	70 MPa	UNF 9/16"-18*	Ø 6	339	175	70	46	14
<b>C1-160701-X01</b>	TK17 H <sub>2</sub> 70 MPa ENR (NEC IR data interface)	70 MPa	UNF 9/16"-18*	Ø 6	339	175	70	46	14
<b>C1-164846</b>	TK17 H <sub>2</sub> 70 MPa ENR (KTL IR data interface)	70 MPa	UNF 9/16"-18*	Ø 6	339	175	70	46	14

\* 60° inner cone

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

**ACCESSORIES**

The following accessories are available for the WEH® TK17 H<sub>2</sub> 70 MPa ENR Fueling nozzle:

**Hose set**

Hose set for connecting fueling nozzle and TSA1 H<sub>2</sub> 70 MPa breakaway coupling, complete with high pressure filling hose (suitable for pre-cooled hydrogen), data cable, purging line and braided protection hose as cover.

Design of high pressure filling hose: max. operating pressure PS: 87.5 MPa / nominal bore DN: 4.5 mm



Part no.	B1/B2 (female thread)	P1/P2	Hose length
<b>E68-161886</b>	UNF 9/16"-18*	Ø 6	3 m
<b>E68-161887</b>	UNF 9/16"-18*	Ø 6	4 m
<b>E68-161888</b>	UNF 9/16"-18*	Ø 6	5 m

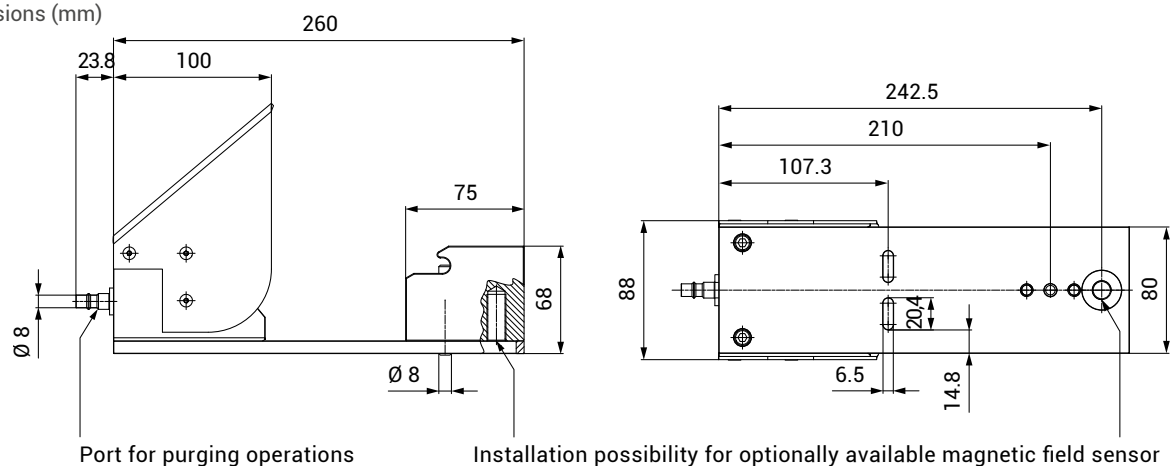
\* DKJ 58°

## Accessories

## Dispenser mounting

Mounting for safe attachment of the fueling nozzle to the dispenser. The mounting is equipped with a port for purging operations, that allows purging of the fueling nozzle whilst not in use. Optionally a magnetic field sensor can be installed.

approx. dimensions (mm)



Part no.	Description
<b>C1-122121</b>	Mounting (switch actuated) with weather protection, special cover for impact protection sleeve and purging system
<b>E68-123980</b>	Magnetic field sensor with 2 m cable, explosion-proof acc. to ATEX

## Data cable

Part no.	Description	Hose length
<b>E68-96194</b>	Data cable suitable for 4 m hose set	4.45 m
<b>E68-96193</b>	Data cable for connecting with the converter	3.45 m

Other lengths on request

TNS1 H<sub>2</sub> 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
<b>C1-148079</b>	TNS1 H <sub>2</sub> Service receptacle incl. protection cap

## Spare parts

### SPARE PARTS

Various parts are available as spares for the WEH® TK17 H<sub>2</sub> 70 MPa ENR Fueling nozzle.



Part no.	Description
<b>W137968</b>	1 Impact protection sleeve (incl. 3 countersunk screws)
<b>W137969</b>	2 ATEX IR data interface (incl. 3 cylinder screws, 3 countersunk screws and o-ring)
<b>W140915</b>	2 NEC IR data interface (incl. 3 cylinder screws, 3 countersunk screws and o-ring)
<b>W166319</b>	2 KTL IR data interface (incl. 3 cylinder screws, 3 countersunk screws and o-ring)
<b>E80-84030</b>	3 Locking lever
<b>E69-161748</b>	4 Logo cap
<b>E80-162272</b>	5 Plastic thermal protection (cold protection)
<b>E99-44923</b>	Maintenance spray

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

## Other products

## OTHER PRODUCTS

You will find more products in our current catalogue no. 50

Further information on our homepage  
[www.weh.com](http://www.weh.com)



### Abbreviations/Definition

Explanation of abbreviations see technical appendix in the catalogue or [www.weh.com](http://www.weh.com)

### 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). You alone are responsible for the selection of WEH® Products and their configuration according to the requirements of your system. In doing so, please particularly consider your intended use, your performance data, your material compatibility, your system concept and your system limits as well as 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. 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.

### Explanation on the Pressure Equipment Directive

These WEH® Products are generally and exclusively classified as pressure accessories for piping in accordance with Article 2 (5) of the Pressure Equipment Directive 2014/68/EU. These WEH® Products may not be used (i) as safety accessories or (ii) for vessels as defined by the Pressure Equipment Directive 2014/68/EU. Therefore, the application of these WEH® Products must comply with their classification as pressure accessories for piping. 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

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