

Type **TN1 H₂ High-Flow**

WEH[®] Receptacle for hydrogen refueling / filling

of buses, trucks and fork-lift trucks or other industrial applications



General

DESCRIPTION



Features

- Low-noise refueling
- Integrated self-cleaning particle filter (40 µm)
- Integrated high-flow check valve
- Sealing-friendly design
- Coding for pressure range / gas type (acc. to table below)

The WEH® TN1 H₂ High-Flow Receptacle was developed to fit the WEH® TK16 H₂ High-Flow Fueling nozzle. This enables buses and trucks to be refueled from now on at car fueling stations.

Refueling is done either with a TK16 H₂ or with a TK16 H₂ High-Flow fueling nozzle with increased flow rate. Due to the aerodynamic design of the internal shapes of the receptacle, noise during refueling process is mostly eliminated, while at the same time maximum flow rate is enabled. The internal seals are arranged to largely prevent damage to the sealing components. That is why the WEH® TN1 H₂ High-Flow proves to be extremely robust and durable, minimizing downtimes due to low maintenance.

The receptacle is equipped with an integrated check valve and has a coding for pressure range / gas type.

Enhanced safety by integrated particle filter

The use of an integrated particle filter prevents the ingress of dirt particles from the outside and therefore leakage at the receptacle is almost eliminated.

Application

Receptacle for hydrogen refueling / filling of buses, trucks and fork-lift trucks or other industrial applications, to be used with WEH® Fueling nozzles acc. to opposite table.

| | | TK17 H ₂ / TK16 H ₂ | | | |
|------------------------|--------|---|--------|------------|--------|
| | | 25 MPa | 35 MPa | 35 MPa HF* | 70 MPa |
| TN1 H ₂ HF* | 35 MPa | ✔ | ✔ | ✔ | |

* HF = High-Flow

TECHNICAL DATA

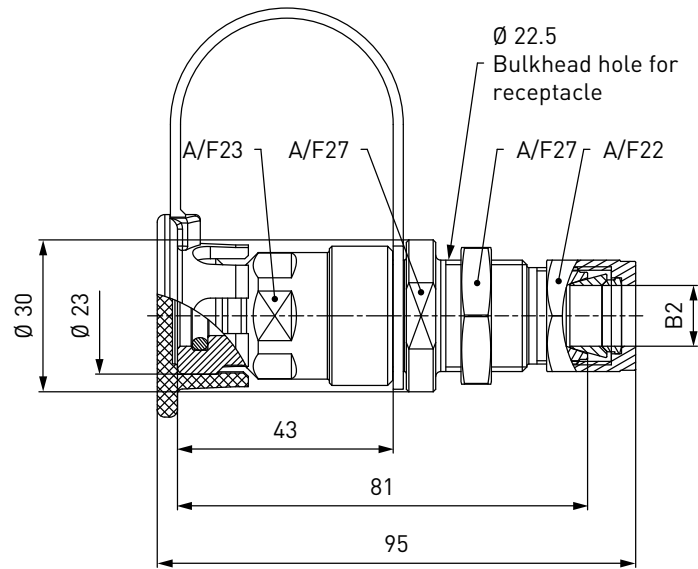
| Characteristics | Basic version |
|--------------------------------|---|
| Nominal bore (DN) | Depending on design |
| Pressure range | PN = 35 MPa PS = 45 MPa |
| Temperature range | -40 °C up to +85 °C |
| Material | Corrosion resistant |
| Sealing material | Hydrogen resistant |
| Design | With protection cap, integrated particle filter (40 µm), integrated check valve and fittings (only for receptacles with tube fitting) |
| Conformity / Tests / Approvals | 00 0003 (Regulation (EC) No. 79/2009) |

Other designs on request

Ordering

ORDERING | WEH® TN1 H₂ High-Flow Receptacle with tube fitting

approx. dimensions (mm)



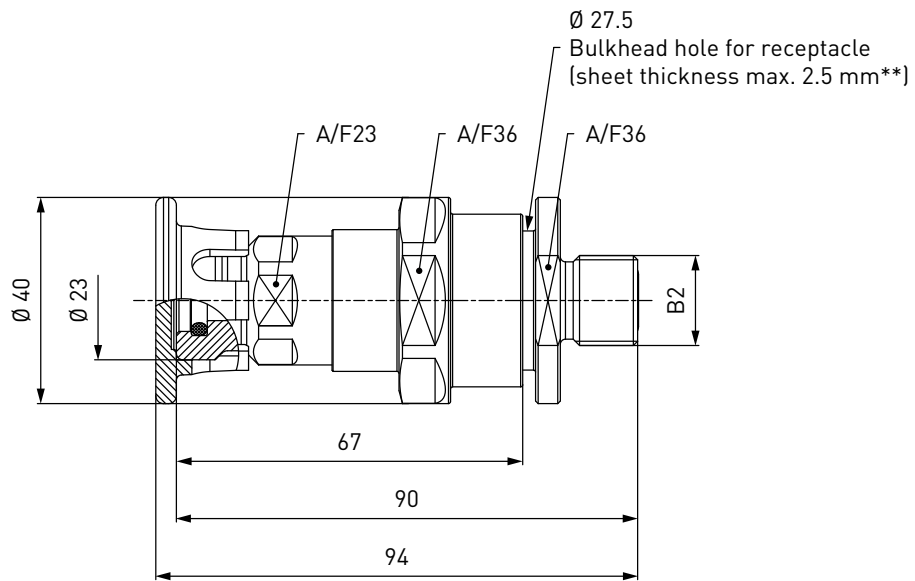
| Part No. | Description | DN | Pressure (PS) | B2 |
|-----------------|-------------------------------------|----|---------------|------------|
| C1-85040 | TN1 H ₂ High-Flow (EC79) | 8 | 45 MPa | Tube Ø 12* |

* double ferrule fitting

Ordering

ORDERING | WEH® TN1 H₂ High-Flow Receptacle with male thread, prepared for data interface

approx. dimensions (mm)



| Part No. | Description | DN | Pressure (PS) | B2 (male thread) |
|------------------|-------------------------------------|----|---------------|--|
| C1-94306 | TN1 H ₂ High-Flow (EC79) | 6 | 45 MPa | UN 11/16"-16 for sealing with O-Lok® Face Seal* for tube Ø 10 (3/8") |
| C1-112679 | TN1 H ₂ High-Flow (EC79) | 8 | 45 MPa | UN 13/16"-16 for sealing with O-Lok® Face Seal* for tube Ø 12.7 (1/2") |

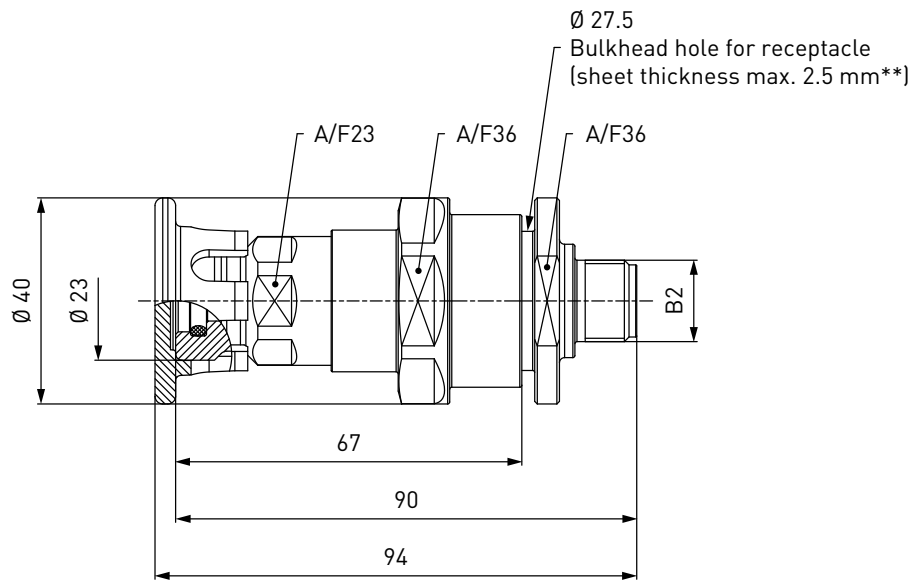
* Face Seal acc. to SAE J1453

** Please indicate when ordering if thicker sheet metals are needed!
Data interface not included!

Ordering / Spare parts

ORDERING | WEH® TN1 H₂ High-Flow Receptacle with tube fitting, prepared for data interface

approx. dimensions (mm)



| Part No. | Description | DN | Pressure (PS) | B2 |
|------------------|-------------------------------------|----|---------------|------------|
| C1-105920 | TN1 H ₂ High-Flow (EC79) | 6 | 45 MPa | Tube Ø 10* |

* double ferrule fitting

** Please indicate when ordering if thicker sheet metals are needed!
Data interface and fittings not included!

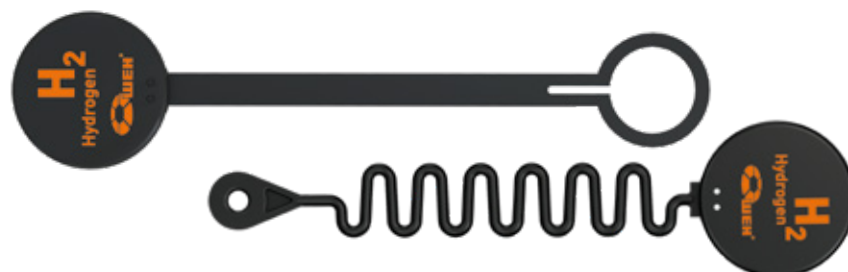
Other connection sizes and types (e.g. Cone and Thread Fittings or VOSSLok⁴⁰) on request.

SPARE PARTS

Various parts are available as spares for the WEH® TN1 H₂ High-Flow Receptacle.

Protection cap

Protection cap with a strap to protect the receptacle from dirt ingress.



| Part No. | Description |
|---------------|--|
| W87803 | Protection cap |
| W85984 | Protection cap for receptacles prepared for data interface |

Technical explanations

TECHNICAL EXPLANATIONS

Abbreviations/Definitions

For explanation of abbreviations and definitions of terms see applicable 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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