

# Type **TVR400**

**WEH<sup>®</sup> Screw-in valve**

of stainless steel



## General

## DESCRIPTION


**Features**

- Soft-sealing ➔ high leak tightness, low leakage
- Compact and space-saving
- Flow in direction of screw rotation
- Use at high temperatures and pressure peaks up to 250 bar
- High flow rate
- Easy installation

The screw-in valves of the WEH® TVR400 Series are mechanical shut-off valves which allow the media to flow in the direction of screw rotation and which shut off the flow of the media in the other direction. Their compact design means that they have a small footprint and are thus very cost-effective. Unlike valve concepts with metallic sealing, the TVR400 screw-in valves are soft-sealing. They are sealed by means of a spring-loaded sealing cone with an o-ring. The WEH® Valves therefore excel by a high degree of leak tightness, combined with a high flow rate.

Simply screw the WEH® TVR400 Valves into internally threaded bores using an allen key. TVR400 valves are manufactured from high-quality stainless steel and are thus particularly durable and wear-resistant. They are especially low-noise in operation.

WEH® TVR400 Screw-in valves are equipped with a FKM seal. Other sealing materials on request. It is the customer's responsibility to clarify the media compatibility.

**Application**

Screw-in valve for hydraulic and pneumatic applications in plant and machinery construction, in the medical, pharmaceutical and chemical industries as well as in the material handling sectors.

## TECHNICAL DATA

| Characteristics                      | Basic version                                  | Options                             |
|--------------------------------------|--|-------------------------------------|
| Nominal bore DN                      | 3.6 up to 7 mm, acc. to design                 | On request                          |
| Max. allowable operating pressure PS | 250 bar  | Other pressures on request          |
| Cracking pressure PC                 | 0.5 bar ± 0.2 bar                              | On cracking pressures request       |
| Temperature range                    | -20 °C up to max. +200 °C                      | Up to max. +300 °C peak temperature |
| Leak rate                            | Max. $1 \times 10^{-3}$ mbar x l/s (gas-tight) | On request                          |
| Material                             | Stainless steel                                | On request                          |
| Spring material                      | Stainless steel                                | On request                          |
| Sealing material                     | FKM  | NBR, EPDM, FFKM                     |
| Sealing concept                      | Cone sealing with internal o-ring              | On request                          |
| Flow direction                       | In direction of screw rotation                 |                                     |

## General / Ordering

## Flow values

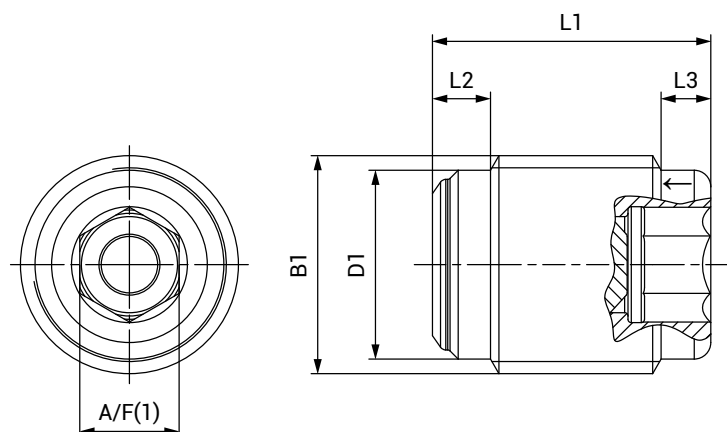
Please find in the table below flow rates for various nominal bores of the WEH® TVR400 Stainless steel screw-in valves.

| Nominal bore DN | Kv (Cv) Value | Nominal bore DN | Kv (Cv) Value | Nominal bore DN | Kv (Cv) Value |
|-----------------|---------------|-----------------|---------------|-----------------|---------------|
| 3.6 mm          | 0.286 (0.331) | 6 mm            | 0.640 (0.743) | 7 mm            | 1.203 (1.395) |

The flow curves were determined on the basis of the standards DIN/EN 60534-2 with water and refer to a cavitation free flow. The curves relate to unrestricted inlet and outlet.

**ORDERING** | WEH® TVR400 Screw-in valve

approx. dimensions (mm)



| Part No.         | DN  | B1<br>(external thread) | PS<br>(bar) | PC<br>(bar) | L1   | L2  | L3  | D1   | A/F(1) |
|------------------|-----|-------------------------|-------------|-------------|------|-----|-----|------|--------|
| <b>C1-109260</b> | 3.6 | G1/8"                   | 250         | 0.5 ± 0.2   | 15.5 | 3.0 | 2.0 | 8.5  | 5      |
| <b>C1-136902</b> | 6   | G1/4"                   | 250         | 0.5 ± 0.2   | 17.0 | 3.5 | 3.0 | 11.5 | 6      |
| <b>C1-109268</b> | 7   | G3/8"                   | 250         | 0.5 ± 0.2   | 20.0 | 3.5 | 3.0 | 14.5 | 8      |
| <b>C1-109280</b> | 3.6 | M10x1.0                 | 250         | 0.5 ± 0.2   | 14.5 | 2.5 | 2.0 | 8.5  | 5      |
| <b>C1-109284</b> | 6   | M14x1.5                 | 250         | 0.5 ± 0.2   | 17.0 | 3.5 | 3.0 | 11.5 | 6      |
| <b>C1-109288</b> | 7   | M18x1.5                 | 250         | 0.5 ± 0.2   | 20.0 | 3.5 | 3.0 | 14.5 | 8      |

Other connection sizes and versions on request.

Required information for request / ordering see page 5, catalogue no. 45.

## Other products

## OTHER PRODUCTS

You will find more products in our current catalogue no. 45



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

**Illustrations**

The illustrations and/or images used in this 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.

**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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