

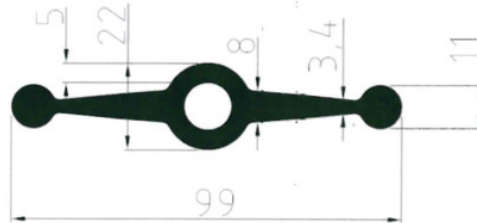
# PRODUCT DATA SHEET

## DB 3 x 100 diaphragm wall waterbar

Thermoplastic PVC-P Waterbar for sealing lamellae joints in diaphragm walls

### PRODUCT DESCRIPTION

The DB 3 x 100 diaphragm wall waterbar is a joint sealing profile made from thermoplastic PVC-P material, designed specifically for the sealing of lamellae joints in diaphragm walls.



### DESIGNATION

DB 3 x 100 diaphragm wall waterbar

### CHARACTERISTICS / ADVANTAGES

- High mechanical resistance
- Resistant to natural substances corrosive to concrete
- Resistant to a broad spectrum of chemical agents (Testing required in each case)
- Robust section for handling on construction sites
- Suitable for welding

### USES

Waterbar for sealing the lamellae joints in diaphragm walls

### PRODUCT DATA

#### MATERIAL

PVC-P (SFA-WN-NB)

#### FORM/COLOUR

Black

#### PACKAGING

40 m rolls on Euro or disposable pallets  
Blanks on Euro or disposable pallets

---

**STORAGE**

- To be stored on the pallet as supplied or on a sound, flat base
  - Long-term indoor storage  $\geq 6$  months:  
The storage area should be cool, dry, low in dust and moderately ventilated. Thermoplastic waterbars must be protected from heat sources and strong artificial light with a high UV content.
  - Short-term indoor storage  $> 6$  weeks and  $< 6$  months:  
As for long-term storage.  
On construction sites, outdoors:
    - Protected by suitable covers from direct sunlight, dirt and snow and ice
    - Store separately from any potentially harmful or damaging materials, plant or equipment such as structural steel, steel reinforcement or fuel tank installations.
    - Store away from trafficked areas and roads on site
    - In dry storage conditions
  - Short-term storage  $\leq 6$  weeks  
On construction sites, outdoors:
    - Protected from dirt or damage
    - Protected from damp and wetness
    - Protected by suitable covers from strong sunlight (summer) or snow and ice (winter)
- 

**MECHANICAL PROPERTIES**

---

<b>SHORE-A HARDNESS</b>	84 $\pm$ 5 Shore-A	DIN 53505
<b>TENSILE STRENGTH</b>	$\geq 10$ MPa	DIN EN ISO 527-2
<b>ELONGATION AT MAXIMUM FORCE</b>	$\geq 260\%$	DIN EN ISO 527-2
<b>REACTION IN FIRE</b>	Construction material class B2	DIN 4102-1

---

**SPECIAL STRESSES DUE TO CHEMICALS OR TEMPERATURES** Separate tests are always required for any special stress or exposure due to temperature and/or chemical agents other than those defined in DIN 4033.

---

**SYSTEM DATA**

---

**DOCUMENTATION** Manufacturer's test certificate (any other testing and certification by agreement)

---

**HANDLING AND INSTALLATION** According to the detailed product Method Statement

- Careful handling and use on site
- Installation only at waterbar material temperatures  $\geq 0^\circ$
- Check carefully for any damage before, during and after installation

---

**JOINTING ON SITE** According to the welding instructions

Requirement: Minimum ambient temperature of  $+ 5^\circ\text{C}$  and dry weather

---

**SITE JOINT WELDING** Under DIN 18197, site welding must be carried out by trained personnel. Welding training certificates must not be more than 2 years old. Welding training courses are run by Sika Deutschland GmbH, Structural Waterproofing, Illertissen.

---

---

The steps for on-site jointing to comply with the welding instructions are:

- 1) Cut the waterbar ends, straight and square
- 2) Butt joint welding with welding machine SG 320 L, or in special situations with an axe-shaped welding tool

The welding process:

Align

Heat/melt

Change around/join together

Cool (in ambient temperature – Do not use coolant)

- 3) Inspect and protect the welded seams as necessary

After air cooling for about half an hour the joint is normally finished and may be used / exposed to stress. These steps are described in full for all types of waterbar in the detailed welding instructions, which are supplied with every machine or can be obtained on request. Comply with all local health and safety regulations when carrying out welding work.

---

#### **JOINTING**

Each welded site joint takes about half an hour to complete and must therefore be scheduled and completed promptly before any follow-on works. Butt welds with axe-type welding tools always need two people.

---

#### **WELDING MACHINES**

Welding machine SG 320 L

Clamping bars DB 3 x 100

The welding machines are electrical devices subject to Standard safety checks for use on construction sites and so all local regulations must be observed by the user.

The operating instructions for the welding machines describes all of the steps required for welding the waterbars in detail and these must be followed precisely for the entire jointing process.

---

#### **TOOLS AND EQUIPMENT**

Cutting                   Tape measure, metre rule, angle, marker pen  
                                  Knives and /or straight and crescent-shaped blades

Weld protection

with welding cord  $\varnothing$  ca. 4 mm   Scissors

  Pointed welding iron 50 W

  Wire brush

Tools and equipment

Weld inspection   High frequency spark tester

---

#### **WELDING MATERIAL**

Welding cord  $\varnothing$  ca. 4 mm

Pack ca. 2.3 kg

---

---

## **IMPORTANT INFORMATION**

---

### **VALUE BASE**

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

---

### **LOCAL RESTRICTIONS**

Please note that as a result of specific local regulations the performance of the product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

---

### **HEALTH AND SAFETY INFORMATION**

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

---

### **LEGAL NOTES**

This information and, in particular, the suggestions relating to the application and end-use of our products, are based on our knowledge and experience in normal use, providing the products have been properly stored and applied. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of results achieved or liability arising out of any legal relationship whatsoever, can be inferred either from this information or from any advice offered by spoken word, unless we have been deliberately at fault or guilty of gross negligence. The user shall be required to prove that he has duly and in full extent submitted to Sika in writing all information necessary for Sika to make a fair and proper assessment. The user must test the products' suitability for the intended application and purpose. Sika reserves the right to change the product specifications. The proprietary rights of third parties must be observed. Orders are accepted subject to our current terms and conditions of sale and delivery. The most recent edition of the Product Data Sheet shall apply, copies of which should be requested from us.

#### **Product Data Sheet**

DB 3 x 100 diaphragm wall waterbar

Valid from: 30.09.2015

Code: E 4012