

# Data sheet - series FM



## **PRODUCT‘ SPECIFICATION**

SK H2O protec expansion waterstop series FM according to DIN 7865, part 1 and 2, is a permanently flexible sealing profile with middle tube made of elastomer, SBR or EPDM, that is used to seal expansion joints in waterproof concrete structures with high water pressures.

## **Characteristics / Advantages**

- high tensile strength and elongation at break
- high permanent flexibility and high-load bearing capacity
- suitable for water pressure and large settlements
- resistant to all natural media acting aggressively to concrete
- resistant to a wide range of chemical substances (tests required for each additional specific situation)
- resistant to bitumen
- supply of systems for easy handling on site
- vulcanizable by using butt joints on site

## **Application**

- joint sealing in concrete structures
- expansion joint sealing system for in-situ concrete
- press joints according to ZTV-ING

### Typical structures

- bridges, trough and bridge constructions
- rail tunnels and road tunnels
- water construction plants

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## **Standards / Directives**

- DIN 18197
- DIN 7865, part 2
- WU-Directives DAfStb
- ZTV-ING, Riz-Ing
- Vulcanizing instructions

## **Test certificate / Approvals**

- latest manufacturer's test certificate
- certificate of conformity – DIN 7865
- external monitoring by MPA NRW
- internal monitoring

## **PRODUCT DATA**

### **Material**

- SBR elastomer (styrene butadiene rubber)
- EPDM elastomer (ethylene-propylene-diene monomer)

### **Colour**

- black

### **Packaging**

- supplied as standard rolls (25 m)

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## MECHANICAL PROPERTIES according to DIN 7865, part 2

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|                  |            |
|------------------|------------|
| Shore A hardness | $62 \pm 5$ |
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|---------------|-----------------------|
| Tear strength | $\geq 10 \text{ MPa}$ |
|---------------|-----------------------|

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|---------------------|---------------|
| Elongation at break | $\geq 380 \%$ |
|---------------------|---------------|

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|                 |   |
|-----------------|---|
| Compression set | 168h / $23^{\circ}\text{C} \leq 20\%$<br>24h / $70^{\circ}\text{C} \leq 35\%$ |
|-----------------|---|

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|                             |                       |
|-----------------------------|-----------------------|
| Tear propagation resistance | $\geq 8 \text{ kN/m}$ |
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|                               |  |
|-------------------------------|--|
| Performance after heat ageing | Shore A hardness change $\leq 8$<br>Tear strength $\geq 9 \text{ MPa}$<br>Elongation at break $\geq 300\%$ |
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|                             |                           |
|-----------------------------|---------------------------|
| Low temperature performance | $\leq 90 \text{ Shore A}$ |
|-----------------------------|---------------------------|

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|             |             |
|-------------|-------------|
| Tension set | $\leq 20\%$ |
|-------------|-------------|

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|---|---|
| Performance after conditioning in hot bitumen | Residual deformation $< 20\%$<br>Tear strength $\geq 7 \text{ MPa}$<br>Elongation at break $\geq 300\%$ |
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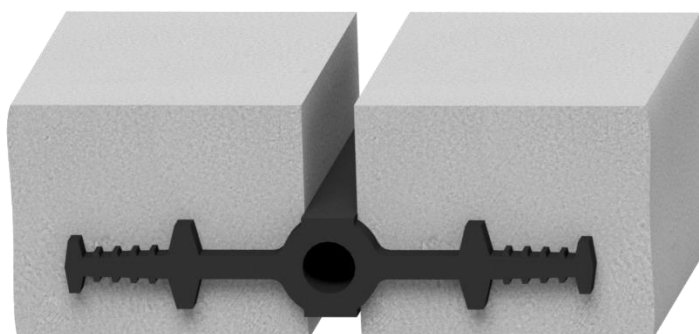
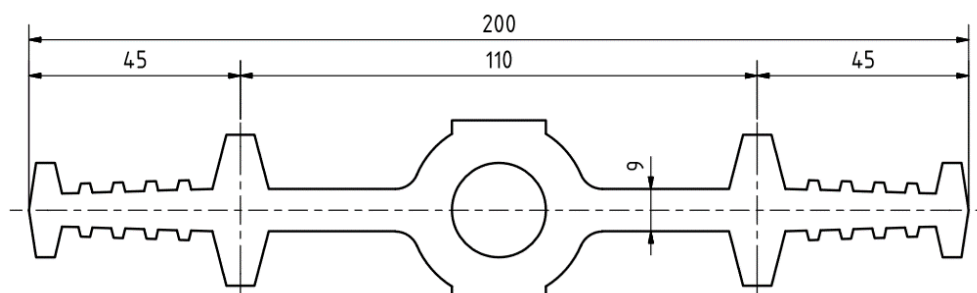
|                                |           |
|--------------------------------|-----------|
| Performance after ozone ageing | No cracks |
|--------------------------------|-----------|

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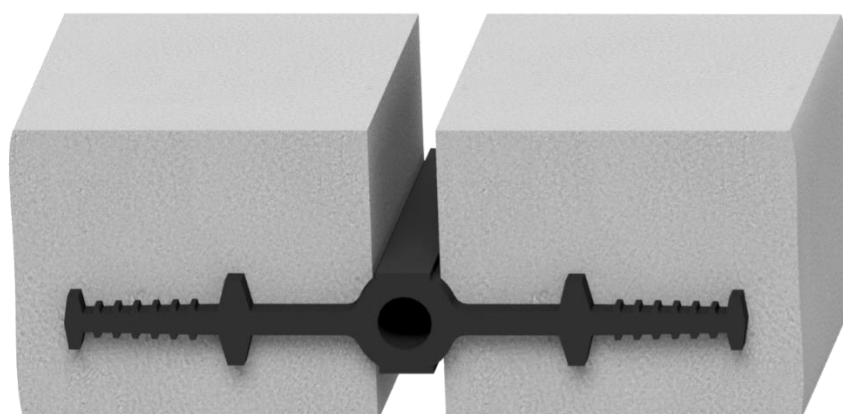
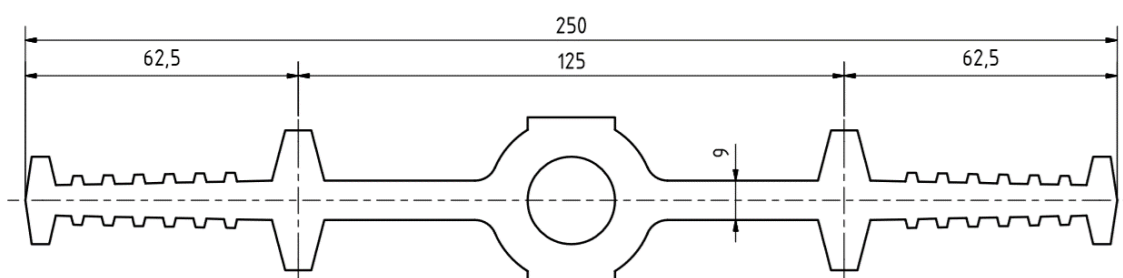
# Data sheet - series FM



FM 200



FM 250

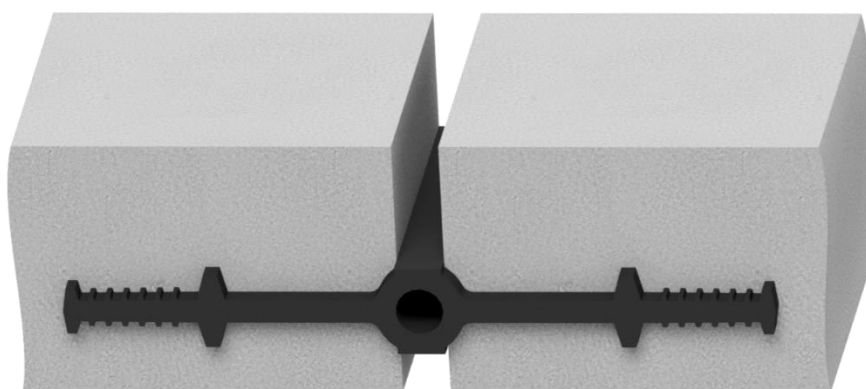
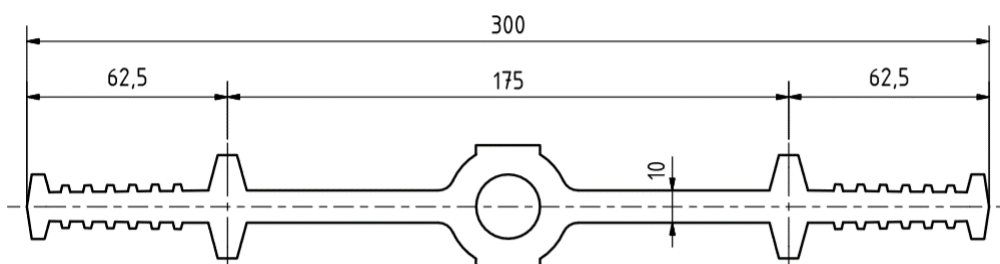


All dimensions in mm

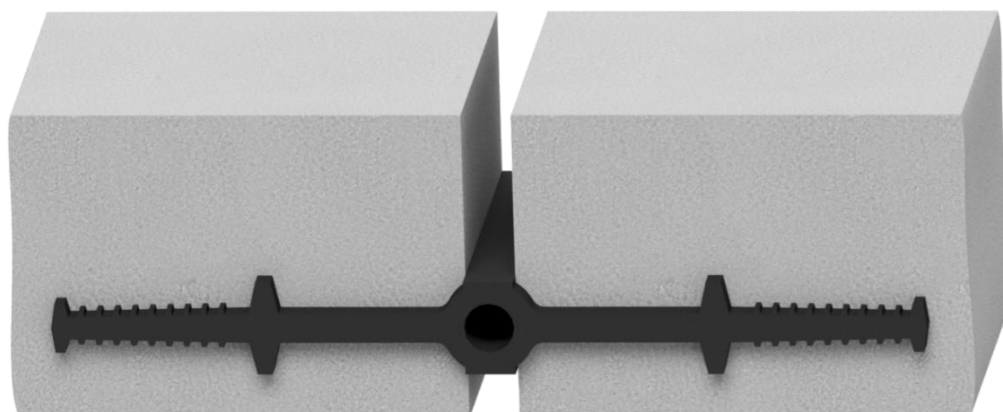
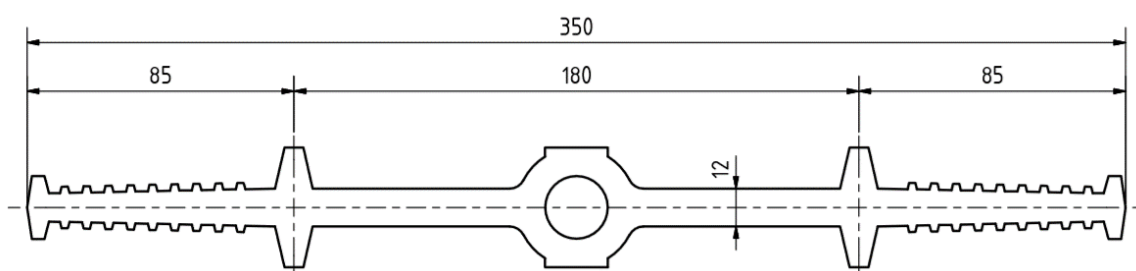
# Data sheet - series FM



FM 300



FM 350

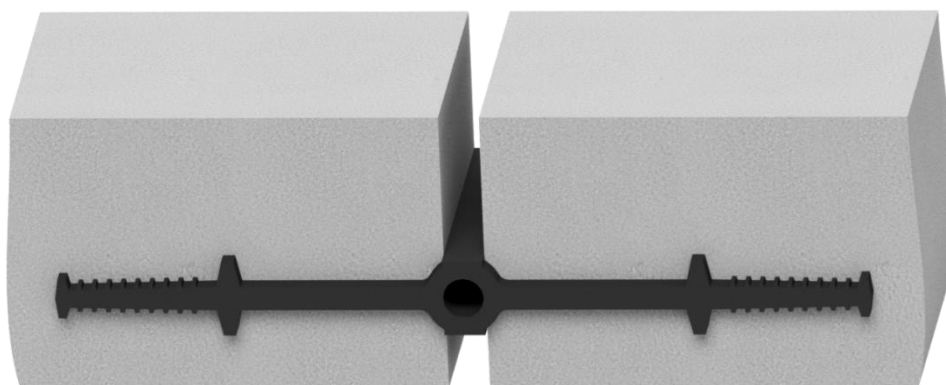
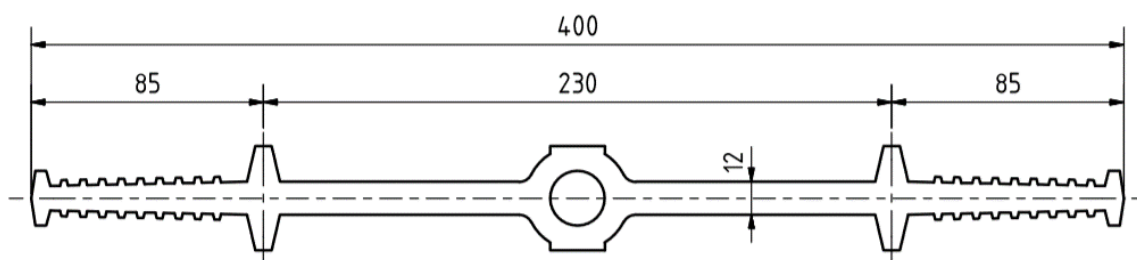


All dimensions in mm

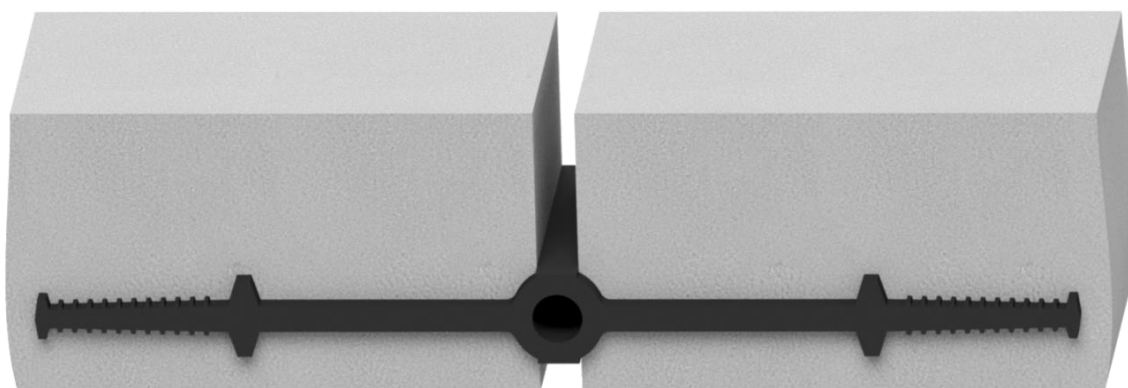
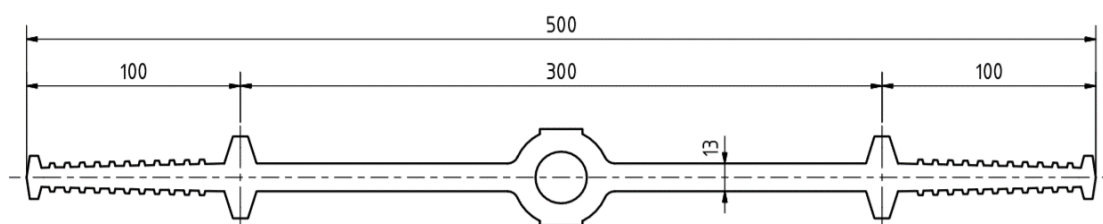
# Data sheet - series FM



FM 400



FM 500



All dimensions in mm