

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

Shore A hardness	62 ± 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°C $\leq 20\%$ 24h / 70°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 ≤ 8 Tear strength $\geq 9 \text{ MPa}$ 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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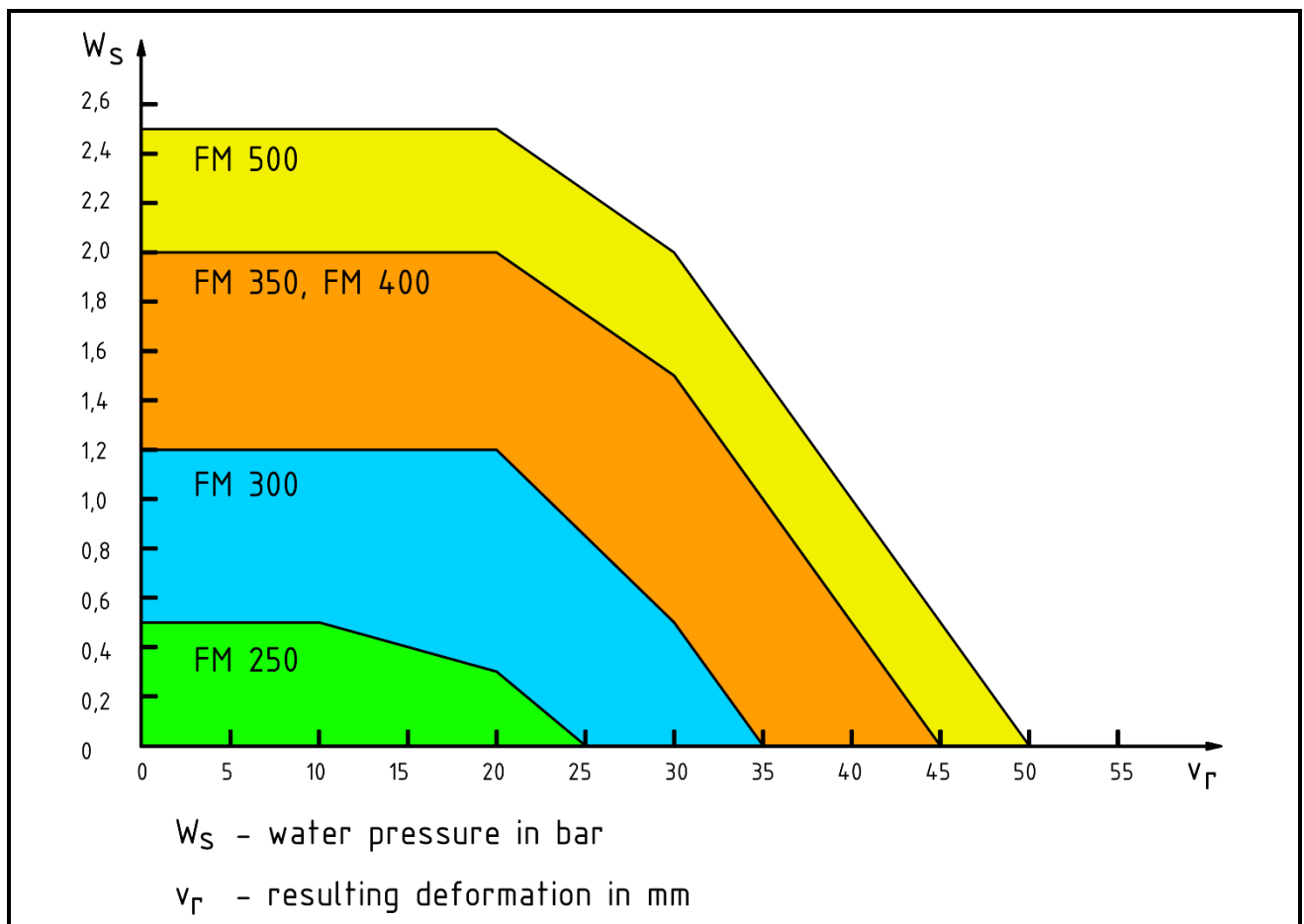
Performance after conditioning in hot bitumen	Residual deformation $< 20\%$ Tear strength $\geq 7 \text{ MPa}$ Elongation at break $\geq 300\%$
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Performance after ozone ageing	No cracks
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Selection diagram for waterstops acc. to DIN 7865

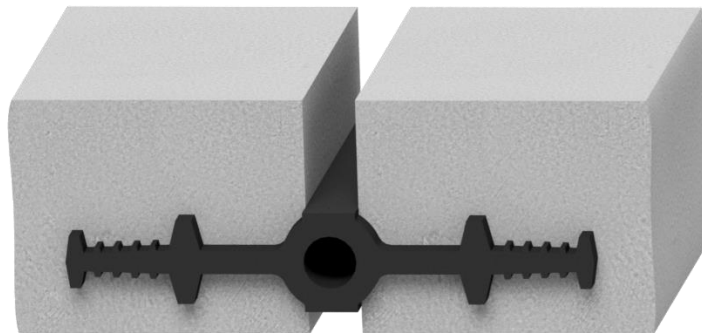
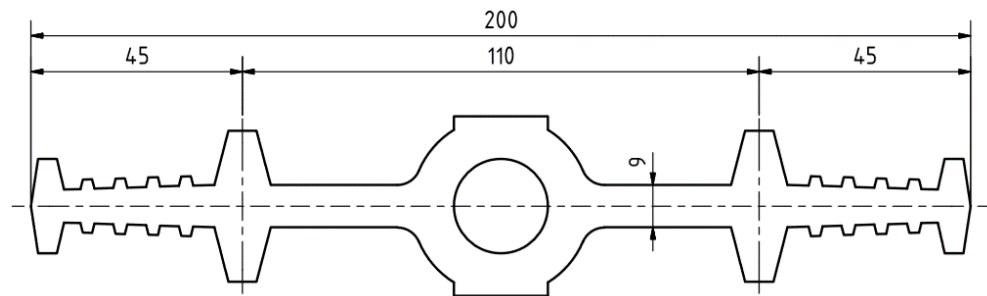


excerpt from DIN 18197:2018-01

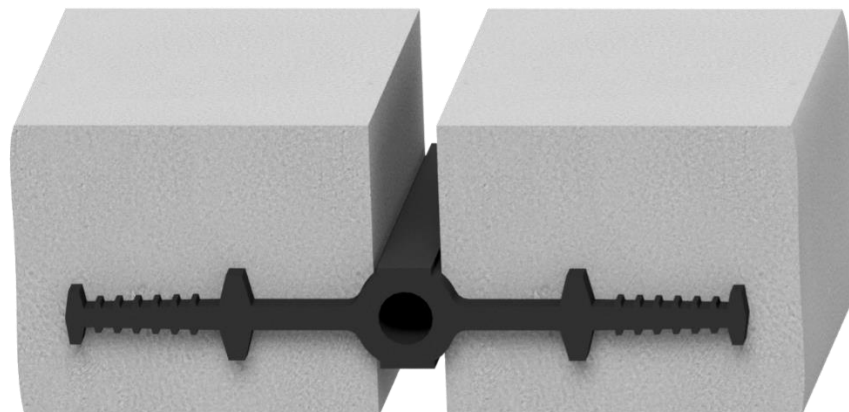
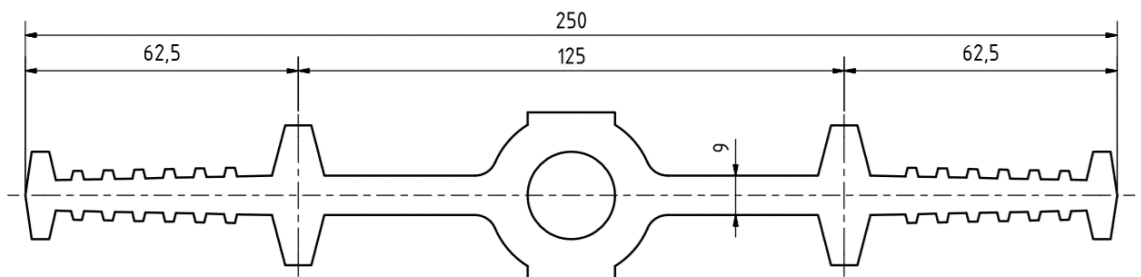
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FM 200



FM 250

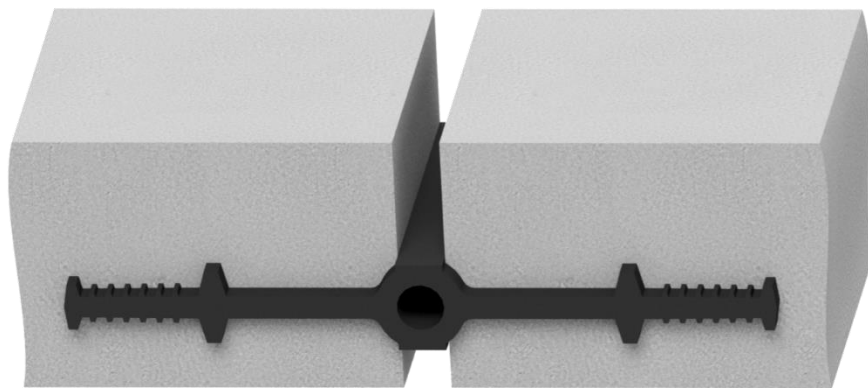
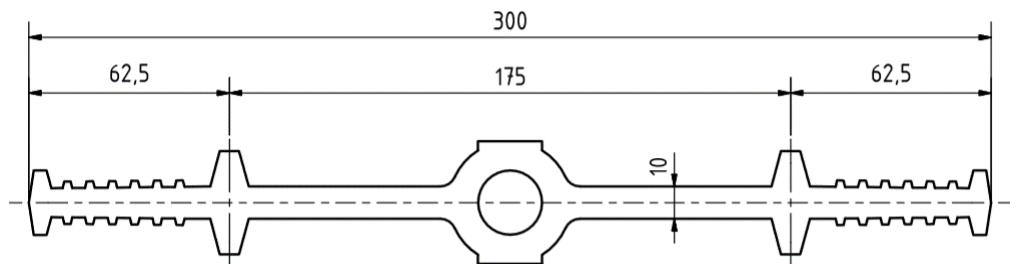


All dimensions in mm

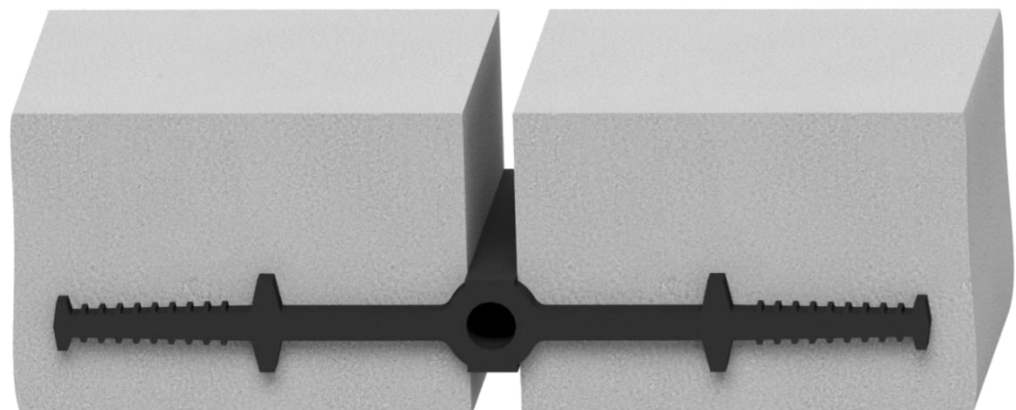
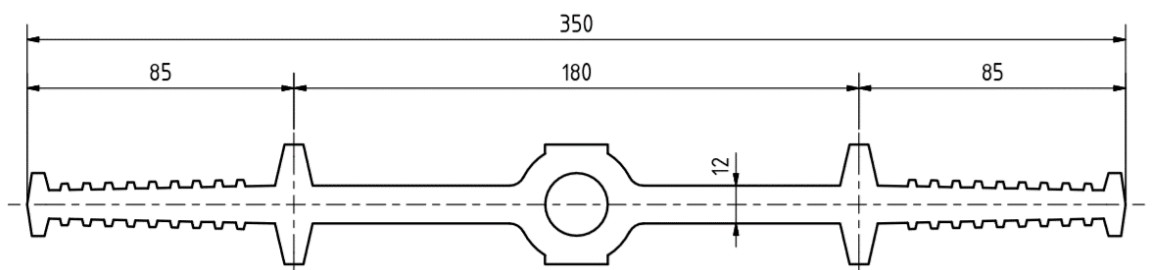
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FM 300



FM 350

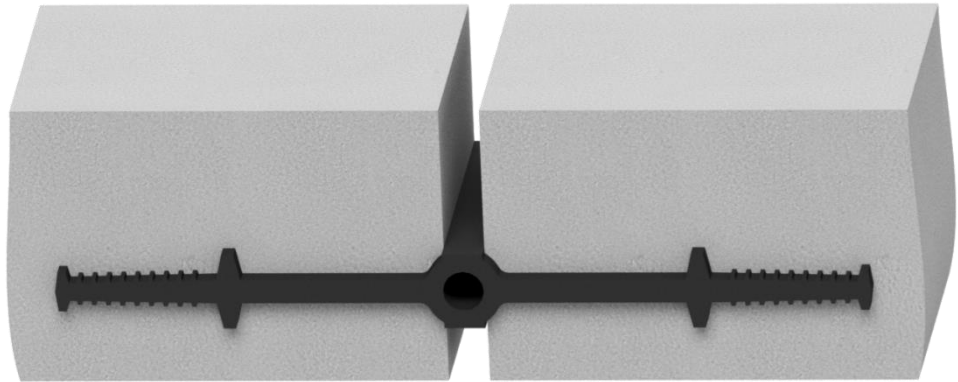
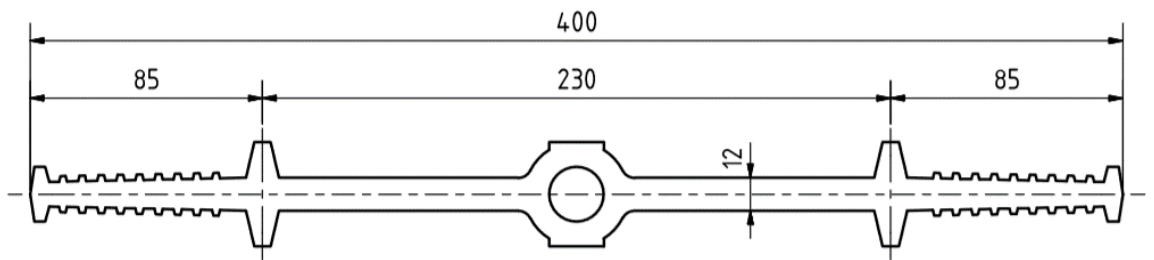


All dimensions in mm

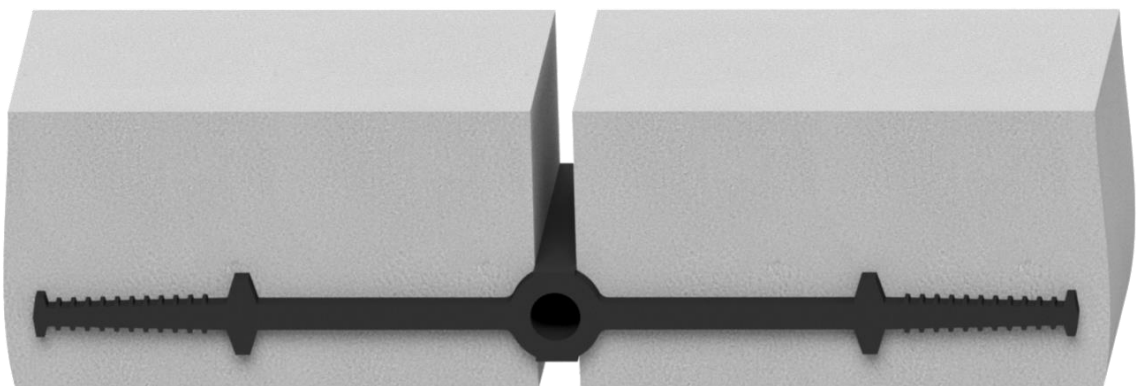
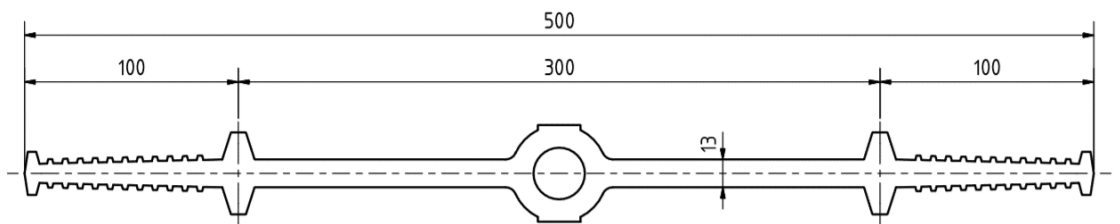
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FM 400



FM 500



All dimensions in mm