

## Technical datasheet - RedEx®

### 1 General information

The RedEx® internal pipe sealing system is suitable for accessible pipes with a nominal pipe range of DN 800 - 6000 and as a liner end sleeves from DN 190. The system comprises

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|--|---|
| <ul style="list-style-type: none"> <li>- An EPDM seal sleeve</li> <li>- Two supporting straps incl. coupling pieces</li> <li>- Two bearing plates</li> <li>- Four adjusting pieces</li> <li>- Plastic backing tape (optional)</li> </ul> | <div style="border-left: 1px solid black; padding-left: 10px;">             (per seal sleeve), stainless steel<br/>             Qualities 1.4307/1.4404/1.4571           </div> |
|--|---|

The procedure is carried out by hand: the rubber sleeve is positioned at the point undergoing repair. Using a hydraulic expander, the seal sleeve is pressed continuously onto the pipe wall with the stainless steel rings.



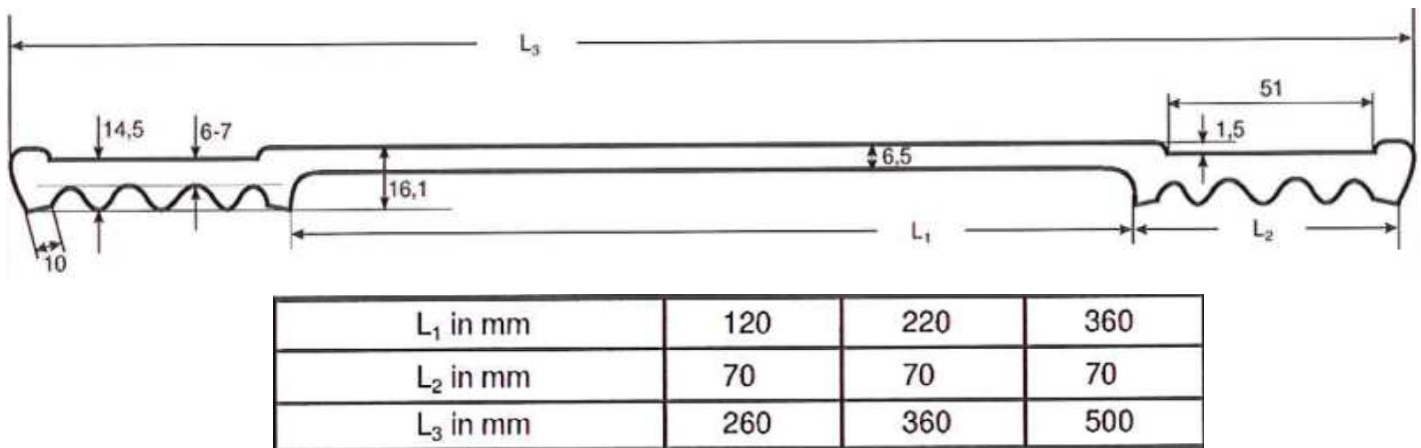
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|---------------------|---|
| Application media:  | Potable water, process water, waste water<br>Salt water, gas, lyes, acids, oil on request   |
| Pressure/vacuum:    | Internal pipe pressure max. 25 bar, external pipe pressure max. 8 bar (infiltration), suitable and adapted for negative pressure/vacuum |
| Temperature ranges: | -20°C to 140°C (EPDM), deviating temperature ranges on request  |
| Pipe materials:     | Concrete, reinforced concrete, stoneware, fibre cement, GFK, PVC-U, PE-HD, cast iron  |
| Pipe profiles:      | Circular profile, different profiles on request   |

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### 2 Properties of RedEx® components

a) EPDM (ethylene propylene diene monomer (M-class) rubber) seal sleeve

Sleeve profile: 260, 360, 500 mm, RedEx® Connect (special width/series offset)



EPDM parameters in accordance with DIN EN 681-1

Density: min. 1.17 kg/dm<sup>3</sup>  
 Hardness: 70 ± 5 Shore A  
 Tensile strength: >9 Mpa  
 Elongation at break: >200%

- Special mixtures on request

b) Stainless steel components: steel belts incl. coupling pieces, bearing plates, adjusting pieces

- Stainless steel 1.4307 (potable water only)/1.4404/1.4571

Steel cross-sections:

DN 190 - 450 50 x 3 mm  
 DN 500 - 2500 50 x 5 mm  
 From DN 2500 50 x 8 mm

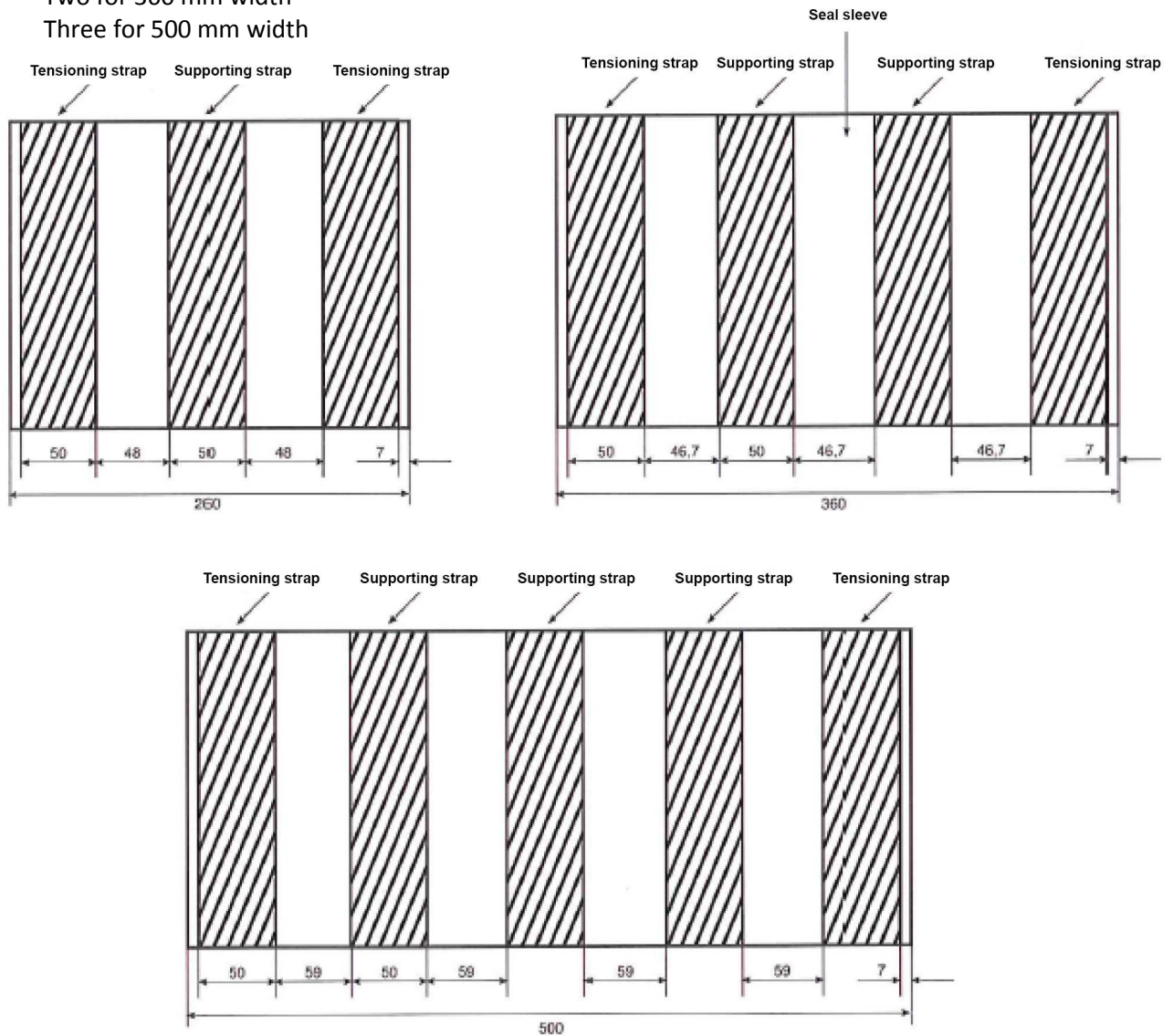
Steel parameters in accordance with DIN 10088-1

0.2% elongation limit: 200 - 240 N/mm<sup>2</sup>  
 Tensile strength: 500/700 N/mm<sup>2</sup>  
 Elongation at break, lengthways: 40%

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The scope of delivery includes two tensioning straps, bearing plates and adjusting pieces per sleeve.  
Additional supporting straps are required in accordance with DIBt:

One for 260 mm width  
Two for 360 mm width  
Three for 500 mm width



With deviating sleeve widths, the distance between two straps must allow for a maximum clearance of 59 mm.

### c) Plastic backing tape/PE tape

- Use with pressing ground water
- Width dependent on sleeve width: 10 cm for 260 mm, 20 cm for 360 mm and 30 cm for 500 mm width
- With very high pressures or significant damage, a plate may also be placed underneath.

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