

## **PSR** – Reactor coolant pump for boiling water reactors



### Applications:

- Reactor coolant recirculation in boiling water reactors

More information: [www.ksb.com/products](http://www.ksb.com/products)

# PSR – Reactor coolant pump for boiling water reactors

## High safety and structural integrity

- Self-contained cooling and lubrication through integrated impeller and external cooler
- Hermetically sealed, no shaft seals
- No leakage, sealless wet motor design
- Elimination of circulating pipes
- Significant reduction of pipe welding seams in the primary system
- Motor or impeller inspection without draining of the pressure vessel

## Increased lifetime

- Low winding temperatures
- Wear-resistant bearings
- Plating of wear surfaces

## Smooth operation

- Optimized bearings
- Cellular surface wear rings

## Low life cycle costs (LCC)

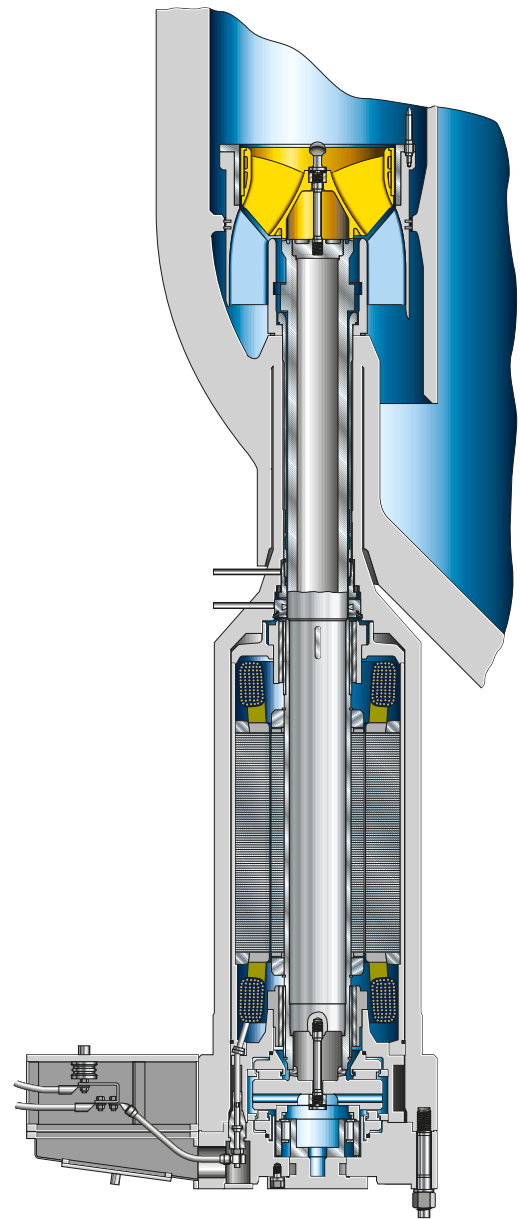
- Low circulation pressure drop improves natural circulation and decreases auxiliary power demand

## Reduced radiation exposure and enhanced environmental protection

- Zero leakage
- Long inspection intervals
- Asbestos-free bearings
- Compact containment design
- Components located outside the pressure vessel

## Quick replacement and maintenance

- Hirth-type serrations for shaft connections
- Pull-out design



### Technical data\*

Size	up to DN 600
Capacity	up to 9,000 m <sup>3</sup> /h
Head	up to 45 m
Operating pressure	up to 75 bar
Temperature	up to +300 °C
Speed	up to 2,000 min <sup>-1</sup>
Frequency	available in 50/60 Hz

\*Higher ratings on request