



**NPP**  
Nuclear Power  
Plants

**seitz**valve

# Sampling Valve

Isolation valve for analysis of reactor water.

- **Optimized opening and closing characteristics to prevent water hammers**
- **Hermetically sealed design**
- **No elastomers**

Seitz provides spare parts, replacement solenoids and maintenance service for the Sampling Valve.

No preventative maintenance required throughout the qualified lifetime of 30 years in operation.



## Qualifications

<b>Safety class</b>	2
<b>Seismic category</b>	I
<b>Radiation</b>	1x10 <sup>5</sup> rad
<b>Qualified lifetime</b>	30 years
<b>Seismic</b>	6 g; 2 to 100 Hz
<b>Qualification and design bases</b>	KTA 3504 Edition 9/88; NEER-G/2006/en/1540, Rev. B; NEER-G/2007/en/1189, Rev. B

## Specifications

<b>Solenoid type 15A82</b>	
<b>Rated voltage</b>	207 V DC (other voltages available)
<b>Tolerance</b>	-20% / +10%
<b>Rated power</b>	14 W
<b>Ingress degree</b>	IP 67 (NEMA 6/6P)
<b>Weight</b>	0.65 kg (1.43 lbs)

## Specifications

<b>Valve type 2936</b>	
<b>Operating system</b>	Direct acting
<b>Function</b>	2-way, NC
<b>Fluid</b>	Reactor water
<b>Seat diameter</b>	2.5 mm (0.1 in)
<b>Nominal diameter</b>	6 mm (0.24 in) or 8 mm (1/4 in)
<b>Ambient temperature</b>	4 to 100 °C (39 to 212 °F)
<b>Pressure range</b>	0 to 12 bar (0 to 174 psig)
<b>Internal leakage</b>	Class B according to EN 12266-1 6 mm (0.24 in) 0.0036 scc/min 8 mm (1/4 in) 0.0048 scc/min
<b>Weight</b>	2.45 kg (5.4 lbs)
<b>Material</b>	Body: 316Ti (EN 1.4571)
<b>Max. differential pressure</b>	6 bar (87 psig)
<b>Max. back pressure</b>	1 bar (14.5 psig)
<b>Design pressure</b>	12 bar (174 psig)
<b>Design temperature</b>	100 °C (212 °F)
<b>Flow rate</b>	> 15 l/h (4 gal/h) at Δp = 0.5 bar (7 psig), > 150 l/h (39.6 gal/h) at Δp = 1 bar (14.5 psig)
<b>Max. opening and closing time</b>	1 to 6 s (rated voltage) 1 to 20 s (min. voltage)

## NPP references

<b>Olkiluoto 3</b>	Finland
<b>Taishan 1 &amp; 2</b>	China